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October 1, 2020

VIA E-MAIL

Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350

**Re: In the Matter of the Verified Petition of Jersey Central Power & Light Company For the Review and Approval of Costs Incurred For Environmental Remediation of Manufactured Gas Plant Sites Pursuant to the Remediation Adjustment Clause of Its Filed Tariff (“2019 RAC Filing”)
BPU Docket No. _____**

Dear Secretary Camacho-Welch:

On behalf of the Petitioner, Jersey Central Power & Light Company (“JCP&L” or the “Company”), enclosed herewith for filing with the Board of Public Utilities (“Board”) is an electronic copy of JCP&L’s Verified Petition and supporting Attachments in its above-captioned “2019 RAC Filing”, relating to the Company’s Remediation Adjustment Clause (“RAC”), which is a component of the Societal Benefits Charge (“SBC”) of JCP&L’s filed Tariff.¹ Also enclosed is an electronic version of the voluminous Minimum Filing Requirements (“MFRs”) required by the 2004 RAC Filing Stipulation dated as of November 15, 2005, as modified by the 2006-2008 RAC Filing Stipulation dated February 8, 2011. Please note that MFR-10, which contains confidential information, has been omitted from this filing, pending execution of an appropriate confidentiality agreement.

As noted in the Verified Petition (at ¶3), the purpose of this filing is to provide the Board, its Staff and the Division of Rate Counsel with the opportunity to conduct a review of all actual costs and expenditures incurred by JCP&L relating to the period from January 1, 2019 through December 31, 2019.

¹ In accordance with the March 19, 2020 Order of the Board in Docket No. EO20030254, which directed that all submissions to the Board or to the Division of Rate Counsel (“Rate Counsel”), this Petition and the attachments hereto are being sent by electronic mail only.

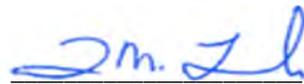
As noted in ¶36 of the Verified Petition, the Company proposes to defer costs related to Natural Resource Damage (“NRD”) issues and incentive compensation costs for 2019, but not to recover such NRD-related and incentive compensation costs until there is a final resolution of the issue concerning the appropriateness of recovery thereof.

As noted in ¶¶ 36 and 37 of the Verified Petition, the incremental expenses incurred in connection with JC&L’s MGP remediation program in the 2019 period are \$11.215 million. Carrying costs accrued during the 2019 period are \$1.716 million, leaving a net balance of unrecovered 2019 MGP costs on December 31, 2019 of \$12.931 million. After subtracting the deferred incentive compensation costs of \$14,062 and applying the combined *over*-recovery of \$8.578 million from other components of Rider SBC and the Storm Recovery Charge (“SRC”), the resulting net incremental MGP costs incurred during calendar year 2019, the total recoverable MGP remediation expense for the 2019 period is \$4.339 million. When combined with the 2019 *over*-recovered deferred RAC balance of \$2.231 million and the remaining amortization of prior RAC expenditures previously approved for recovery, the resultant *decrease* to JCP&L’s Rider RAC charge is \$0.000107 per kWh (before SUT), which would reduce revenues by \$2.1 million annually. The Company is proposing that the new rate of \$0.000704 per kWh (before SUT) become effective on January 1, 2021.

I hereby confirm that this letter and the enclosed Verified Petition and supporting Attachments are this day being duly served by electronic delivery upon the Director, Division of Rate Counsel, and upon the Department of Law & Public Safety, Division of Law, as set forth in ¶39 of the Verified Petition.

If you have any questions, please feel free to contact me.

Very truly yours,



Lauren M. Lepkoski

kbw

Enclosures

cc: Certificate of Service

SERVICE LIST
JERSEY CENTRAL POWER & LIGHT COMPANY
2019 RAC Filing
BPU Docket No. _____

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JCP&L

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**STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES**

In the Matter of the Verified Petition of Jersey	:	BPU Docket No.
Central Power & Light Company for the	:	
Review and Approval of Costs Incurred for	:	
Environmental Remediation of Manufactured	:	
Gas Plant Sites Pursuant to the Remediation	:	VERIFIED PETITION
Adjustment Clause of Its Filed Tariff	:	
(“2019 RAC Filing”)	:	

TO THE HONORABLE BOARD OF PUBLIC UTILITIES:

Petitioner, Jersey Central Power & Light Company (the “Petitioner”, the “Company” or “JCP&L”), an electric public utility company of the State of New Jersey subject to the regulatory jurisdiction of the Board of Public Utilities (the “Board”), and maintaining offices at 300 Madison Avenue, Morristown, New Jersey 07962-1911, and 101 Crawford Corners Road, Building 1, Suite 1-511, Holmdel, New Jersey 07733, in support of its above-captioned Verified Petition, respectfully shows:

1. JCP&L is a New Jersey electric public utility primarily engaged in the purchase, transmission, distribution and sale of electric energy and related utility services to more than 1,000,000 residential, commercial and industrial customers located within 13 counties and 236 municipalities of the State of New Jersey.

2. Copies of all correspondence and other communications relating to this proceeding should be addressed to:

**Lauren Lepkoski, Esq.
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Legal Department
2800 Pottsville Pike
Reading, PA 19612-6001**

- and -

**Mark A. Mader
Frank D. Lawson
Jennifer Spricigo
James E. O'Toole
Jersey Central Power & Light Company
300 Madison Avenue
Morristown, New Jersey 07962-1911**

Purpose of Filing

3. The purpose of this 2019 RAC Filing is to provide the Board, the Board's Staff ("Staff") and the Division of Rate Counsel ("Rate Counsel"), with the opportunity to conduct a review of all actual costs and expenditures incurred by JCP&L relating to the environmental remediation of its former manufactured gas plant ("MGP") sites for the period from January 1, 2019 through December 31, 2019, pursuant to the Remediation Adjustment Clause ("RAC") of JCP&L's filed Tariff. As explained in detail in this Petition, JCP&L is requesting a decrease in its Rider RAC charge to reduce recovery by \$2.1 million annually.

Procedural History

4. By Order dated July 30, 1997 in Docket No. ER95120634 (the "1997 RAC Order"), the Board adopted in its entirety a Stipulation of Settlement dated June 24, 1997 among JCP&L, Staff and Rate Counsel. The 1997 RAC Order established Rider RAC to JCP&L's filed tariff, which was intended to allow JCP&L to recover all prudently incurred costs and expenses, including associated transaction and carrying costs and net of insurance and other third-party

recoveries, related to the environmental remediation of various former MGP sites. That Order also approved the scope and reasonableness of all such MGP remediation costs and expenses previously incurred by JCP&L through December 31, 1995.

5. The Board's Final Decision and Order dated March 7, 2001, in Docket Nos. EO97070458, EO97070459, EO97070460 (the "Restructuring Order"), which concluded JCP&L's rate unbundling, stranded costs and restructuring filings, established a new Tariff Rider designated as the Societal Benefits Charge ("SBC"). The SBC, as approved by the Board, is designed to include Rider RAC for the recovery of costs related to MGP remediation.

6. On March 13, 2002, JCP&L filed with the Board a Verified Petition, under Docket No. ER02030173 (the "2002 RAC Filing"), in order to provide the Board, its Staff and Rate Counsel with the opportunity to conduct a review of all actual and projected MGP-related costs and expenditures, including related insurance recoveries, incurred by JCP&L for the period from January 1, 1996 through July 31, 2003. Following extensive discovery and both public and evidentiary hearings thereon, the 2002 RAC Filing was resolved by a Stipulation of Settlement of Remediation Adjustment Clause dated June 10, 2003 (the "2002 RAC Filing Stipulation") by and among JCP&L, Staff and Rate Counsel (collectively, the "Parties"). The 2002 RAC Filing Stipulation was approved by the Board at its July 25, 2003 Agenda Meeting, as reflected in both the Board's Summary Order dated August 1, 2003 (at 3) and its Final Order dated May 17, 2004 (at 14-15), which were issued in several consolidated dockets including Docket No. ER02030173.

7. Among other things, the 2002 RAC Filing Stipulation, as approved by the Board, resolved all issues relating to JCP&L's MGP costs and related insurance recoveries for the period from January 1, 1996 through December 31, 2002. The 2002 RAC Filing Stipulation determined that JCP&L had a net unrecovered deferred RAC balance of \$678,396 as of

December 31, 2002, which was to be carried forward by JCP&L for future recovery without any immediate adjustment to its RAC factor, but subject to the agreed-upon subsequent write-off by JCP&L of \$2.5 million in principal amount from the deferred RAC account balance. The 2002 RAC Filing Stipulation also prospectively modified the interest rate and changed the method and timing of the interest calculation for deferred RAC balances, including the annual compounding of interest thereon.

8. On December 22, 2003, JCP&L filed its 2003 Annual RAC Filing under Docket No. ER03121020, seeking the review and approval of its actual MGP remediation costs and expenditures incurred for the period of January 1 through December 31, 2003. Following extensive discovery and conferences, the 2003 RAC proceeding was resolved by a Stipulation of Settlement of Remediation Adjustment Clause dated September 10, 2004 (the “2003 RAC Filing Stipulation”), by and among JCP&L, Staff and Rate Counsel. In the 2003 RAC Filing Stipulation, the Parties agreed and recommended to the Board that, subject to the application of the previously agreed-upon \$2.5 million write-off, JCP&L’s deferred RAC balance at December 31, 2003, of \$5,765,342, be approved by the Board for future recovery through Rider RAC of the Company’s Tariff. The Parties also agreed upon certain prospective modifications, namely, to move the effective date for interest compounding and interest rate resetting to January 1 (instead of August 1) of each year, commencing January 1, 2005. The 2003 RAC Filing Stipulation was approved by the Board’s Decision and Order Approving Stipulation, dated October 5, 2004.

9. At its Agenda meeting held on September 13, 2004, under Docket No. EM02060377, the Board approved the proposed transfer of certain MGP-related properties pursuant to a Separation Agreement dated September 22, 2000, by and between JCP&L and New Jersey Natural Gas Company (“NJNG”), in order to achieve certain efficiencies with respect to the

remediation of MGP sites for which responsibility had previously been shared by those two companies. As a result of the Separation Agreement, JCP&L no longer shares in the remediation costs for the Long Branch and Toms River MGP sites, but now has full financial responsibility for the continued remediation of the remaining eight sites previously shared with NJNG.

10. On December 28, 2004, JCP&L filed its 2004 Annual RAC Filing under Docket No. ER04121758, seeking the review and approval of its actual MGP remediation costs and expenditures incurred for the period of January 1 through December 31, 2004. Following extensive discovery and conferences, the 2004 Annual RAC proceeding was resolved by a Stipulation of Settlement of 2004 Remediation Adjustment Clause Filing dated as of November 15, 2005 (the “2004 RAC Filing Stipulation”), by and among JCP&L, Staff and Rate Counsel. In paragraph 3(b) of the 2004 RAC Filing Stipulation, the Parties agreed and recommended to the Board that JCP&L’s deferred RAC net balance at December 31, 2004, of \$6,257,042, be approved by the Board as eligible for future recovery through Rider RAC and/or through current application of other provisions of Rider SBC of the Company’s Tariff. The Parties also agreed in the 2004 RAC Filing Stipulation upon various additional record-keeping requirements and information to be provided in future annual RAC filings and to provide specific responses in such annual filings to the agreed-upon minimum filing requirements as set forth in Exhibit A thereto. The Parties further agreed to have the Staff’s Audit Division perform a RAC audit to review the Company’s RAC-related transactions and to verify that the Company has followed all applicable Board-approved RAC procedures and related Board Orders. The 2004 RAC Filing Stipulation was approved by the Board at its March 16, 2006 Agenda Meeting.

11. On March 31, 2006, JCP&L filed its 2005 Annual RAC Filing under Docket No. ER06030258, seeking the review and approval of its actual MGP remediation costs and

expenditures incurred for the period of January 1 through December 31, 2005. This filing had been delayed from its anticipated filing in December 2005 pending Board approval of the 2004 RAC Filing Stipulation, which, as noted above, occurred on March 16, 2006. Following extensive discovery and conferences, the 2005 Annual RAC proceeding was resolved by a Stipulation of Settlement of 2005 Remediation Adjustment Clause Filing dated as of April 2, 2009 (the “2005 RAC Filing Stipulation”), by and among JCP&L, Staff and Rate Counsel. In paragraph 3(b) of the 2005 RAC Filing Stipulation, the Parties agreed and recommended to the Board that JCP&L’s deferred RAC net balance at December 31, 2005 of \$2,576,903, be approved by the Board as eligible for future recovery through Rider RAC and/or through current application of other provisions of Rider SBC of the Company’s Tariff. The 2005 RAC Filing Stipulation also acknowledged that JCP&L had deferred an additional \$62,856 of costs related to Natural Resource Damage (“NRD”) issues from 2005. The Parties agreed in the 2005 RAC Filing Stipulation that, while it was appropriate for JCP&L to defer these NRD-related costs, they should not be recovered until there was a final Board determination as to whether NRD-related costs are within the scope of the Board’s RAC recovery authorization. The Parties reserved all of their respective rights with respect to the issue of whether it is appropriate for JCP&L to recover these 2005 NRD-related costs, as well as a total of approximately \$76,000 of NRD-related costs from 2003 and 2004. The 2005 RAC Filing Stipulation was approved by Board Order dated April 27, 2009.

12. On March 9, 2009, JCP&L filed its 2006-2008 RAC Filing under Docket No. ER09030194, seeking the review and approval of its actual MGP remediation costs and expenditures incurred for the period of January 1, 2006 through December 31, 2008, i.e., covering calendar years 2006, 2007 and 2008. Following extensive discovery and conferences, the 2006-2008 RAC Filing was resolved by a Stipulation of Settlement of 2006-2008 Remediation

Adjustment Clause Filing dated as of February 8, 2011 (the “2006-2008 RAC Filing Stipulation”), by and among JCP&L, Staff and Rate Counsel. The 2006-2008 RAC Filing Stipulation was approved by a Board Order dated March 9, 2011.

13. On February 19, 2010, JCP&L filed its 2009 SBC/SCC and RAC Filing under Docket No. ER10020130, the RAC portion of which sought the review and approval of its actual MGP remediation costs and expenditures incurred for the period of January 1, 2009 through December 31, 2009 (“2009 RAC Filing”). In the RAC portion of that filing, the Company requested an increase in its Rider RAC charge to recover an additional \$1.8 million annually. Although there was extensive discovery and numerous conferences among JCP&L, Staff and Rate Counsel in connection with the 2009 RAC Filing, the matter remained pending in early March 2011.

14. On March 15, 2011, the Company filed its 2010 RAC Petition (“2010 RAC Filing”) even though the 2009 RAC Filing remained pending. The 2010 RAC Filing, which was assigned Docket No. ER11030141, sought an increase in JCP&L’s Rider RAC charge to recover an additional \$1.1 million annually. On June 15, 2011, the Board issued an order approving a Stipulation of Settlement for the 2009 RAC Filing, and the Company implemented the revised rates effective July 1, 2011.

15. On March 12, 2012, the Board issued an order approving a Stipulation of Settlement resolving the Company’s 2010 RAC Filing. In that Stipulation of Settlement, the parties agreed that the Company’s ending recoverable deferred RAC balance at December 31, 2010 was an under-recovered balance of \$20,379,454, after application of over-recoveries of \$7,847,211 from other components of Rider SBC, subject to the Parties’ reservation of their rights to challenge the recovery of expenditures that might be found to have been recorded in error or

improperly accounted for in the pending Board Staff audit of RAC expenditures for 2005. In addition to the deferred RAC net balance at December 31, 2010 of \$20,379,454 referred to above, the parties agreed that JCP&L has deferred (i) \$435,073 of costs related to NRD issues from 2005 through 2010, and (ii) \$103,751 of incentive compensation paid to personnel who worked on RAC matters from 2006 through 2010. The Parties agreed that it is appropriate for such NRD-related and incentive compensation costs to be deferred. The Parties also agreed that the Board should make no determination in the 2010 RAC Filing as to the reasonableness, or the recoverability under the Company's RAC filings, of NRD damages or related costs or of incentive compensation amounts, if any. The Parties reserved all of their respective rights with respect to the issue of whether such recovery is appropriate. On April 1, 2012, JCP&L implemented the revised Rider RAC rates.

16. On August 15, 2012, the Company filed its 2011 RAC Petition ("2011 RAC Filing"). The 2011 RAC Filing, which was assigned Docket No. ER12080751, the Verified Petition demonstrated a calculated increase to JCP&L's Rider RAC charge of 0.062 mills/kWh, which would have recovered an additional \$1.32 million annually. However, rather than implementing a small Rider RAC charge increase, JCP&L proposed to leave the current rate (0.130 mills/kWh not including sales and use tax ("SUT")) in place.

17. On November 21, 2014, the Board issued an order approving a Stipulation of Settlement resolving the Company's 2011 RAC Filing. In that Stipulation, the parties agreed that the Company's ending recoverable deferred RAC balance at December 31, 2011 was an under-recovered balance of \$28,510,182, subject to the Parties' reservation of their rights to challenge the recovery of expenditures that might be found to have been recorded in error or improperly accounted for in the pending Board Staff audit of RAC expenditures for 2005. The parties also

agreed that JCP&L's Rider RAC would remain \$0.000130 per kWh (not including SUT). In addition to the deferred RAC net balance at December 31, 2011 of \$28,510,182 referred to above, the parties agreed that JCP&L has deferred (i) \$468,477 of costs related to NRD issues from 2005 through 2011, and (ii) \$114,625 of incentive compensation paid to personnel who worked on RAC matters from 2006 through 2011. The Parties agreed that it is appropriate for such NRD-related and incentive compensation costs to be deferred. The Parties also agreed that the Board should make no determination in this proceeding as to the reasonableness, or the recoverability under the Company's RAC filings, of NRD damages or related costs or of incentive compensation amounts, if any. The Parties reserved all of their respective rights with respect to the issue of whether such recovery is appropriate.

18. On April 30, 2015, JCP&L filed its 2012-2014 RAC Petition with the Board ("2012-2014 RAC Filing"). The 2012-2014 RAC Filing requested a calculated increase to JCP&L's Rider RAC charge of \$0.000306/kWh (not including SUT), which would recover an additional \$6.457 million annually. The Company proposed that the new rate become effective on October 1, 2015. The matter was transmitted to the Office of Administrative Law and assigned to ALJ Richard McGill.

19. On July 29, 2016, the Board issued an Order approving an Initial Decision-Settlement, which in turn had recommended approval of a Stipulation of Settlement among the parties to the 2012-2014 RAC Filing. In that Stipulation, the Parties agreed that the Company's ending recoverable deferred RAC balance at December 31, 2014 was an under-recovered balance of \$64,428,766, subject to the Parties' reservation of their rights to challenge the recovery of expenditures that might be found to have been recorded in error or improperly accounted for in the pending Board Staff audit of RAC expenditures for 2005. In addition, the Parties also agreed that

JCP&L has deferred (i) \$651,070 of costs related to NRD issues from 2005 through 2014, and (ii) \$143,077 of incentive compensation paid to personnel who worked on RAC matters from 2006 through 2014. The Parties agreed that it is appropriate for such NRD-related and incentive compensation costs to be deferred. The Parties also agreed that the Board should make no determination in this proceeding as to the reasonableness, or the recoverability under the Company's RAC filings, of NRD damages or related costs or of incentive compensation amounts, if any. The Parties reserved all of their respective rights with respect to the issue of whether such recovery is appropriate. Pursuant to the Board's July 29, 2016 Order, the Company's Rider RAC was increased by \$0.000306 per kWh (not including SUT) to \$0.000436 per kWh (not including SUT), effective for service rendered on and after August 8, 2016. As a result of this rate change, the Company's revenues under its RAC are expected to increase by approximately \$6.457 million annually.

20. On September 30, 2016, JCP&L filed its 2015 RAC Petition with the Board ("2015 RAC Filing"). The 2015 RAC Filing requested a calculated increase to JCP&L's Rider RAC charge of \$0.000080/kWh (not including SUT), which would recover an additional \$1.617 million annually. The Company proposed that the new rate become effective on January 1, 2017.

21. On October 6, 2017, JCP&L filed a fully executed Stipulation of Settlement with the Board to resolve the 2015 RAC Filing. In that Stipulation, the Parties agreed that the Company's ending recoverable deferred RAC balance at December 31, 2015 was an under-recovered balance of \$73,052,760, subject to the Parties' reservation of their rights to challenge the recovery of expenditures that might be found to have been recorded in error or improperly accounted for in the pending Board Staff audit of RAC expenditures for 2005. In addition, the Parties also agreed that JCP&L has deferred (i) \$749,686 of costs related to NRD issues from 2005

through 2015, and (ii) \$156,325 of incentive compensation paid to personnel who worked on RAC matters from 2006 through 2015. The Parties agreed that it is appropriate for such NRD-related and incentive compensation costs to be deferred. The Parties also agreed that the Board should make no determination in this proceeding as to the reasonableness, or the recoverability under the Company's RAC filings, of NRD damages or related costs or of incentive compensation amounts, if any. The Parties reserved all of their respective rights with respect to the issue of whether such recovery is appropriate. On November 21, 2017, the Board issued an Order approving the October 6, 2017 Stipulation. Pursuant to the Board's November 21, 2017 Order, the Company's Rider RAC was increased by \$0.000080/kWh (not including SUT) to \$0.000516 per kWh (not including SUT), effective for service rendered on and after December 1, 2017. As a result of this rate change, the Company's revenues under its RAC were increased by approximately \$1.617 million annually.

22. On November 28, 2017, JCP&L filed its 2016 RAC Petition with the Board ("2016 RAC Filing"). The 2016 RAC Filing requested a calculated increase to JCP&L's Rider RAC charge of \$0.000100 per kilowatt-hour ("kWh") (before SUT), which would recover an additional \$2.031 million annually. The Company proposed that the new rate become effective on March 1, 2018.

23. On June 4, 2018, JCP&L filed a fully executed Stipulation of Settlement with the Board to resolve the 2016 RAC Filing. In that Stipulation, the Parties agreed that the Company's ending recoverable deferred RAC balance at December 31, 2016 was an under-recovered balance of \$87,624,589, subject to the Parties' reservation of their rights to challenge the recovery of expenditures that might be found to have been recorded in error or improperly accounted for in the pending Board Staff audit of RAC expenditures for 2005. In addition, the Parties also agreed that JCP&L has deferred (i) \$801,633 of costs related to NRD issues from 2005

through 2016, and (ii) \$169,876 of incentive compensation paid to personnel who worked on RAC matters from 2006 through 2016. The Parties agreed that it is appropriate for such NRD-related and incentive compensation costs to be deferred. The Parties also agreed that the Board should make no determination in this proceeding as to the reasonableness, or the recoverability under the Company's RAC filings, of NRD damages or related costs or of incentive compensation amounts, if any. The Parties reserved all of their respective rights with respect to the issue of whether such recovery is appropriate. On June 22, 2018, the Board issued an Order approving the June 4, 2018 Stipulation. Pursuant to the Board's June 22, 2018 Order, the Company's Rider RAC was increased by \$0.000100 per kWh (before SUT) to \$0.000616 per kWh (before SUT), effective for service rendered on and after July 1, 2018. As a result of this rate change, the Company's revenues under its RAC were increased by approximately \$2.031 million annually.

24. On August 29, 2018, JCP&L filed its 2017 RAC Petition, assigned Docket No. ER18080965 ("2017 RAC Filing"), with the Board. The 2017 RAC Filing requested a calculated increase to JCP&L's Rider RAC charge of \$0.000195/kWh (before SUT), which would recover an additional \$3.95 million annually. The Company proposed that the new rate become effective on December 1, 2018.

25. On October 4, 2019, Board Staff and JCP&L executed a Stipulation of Settlement to resolve the 2017 RAC Filing. In that Stipulation, the Parties agreed that the Company's ending recoverable deferred RAC balance at December 31, 2017 was an under-recovered balance of \$115,039,883, subject to the Parties' reservation of their rights to challenge the recovery of expenditures that might be found to have been recorded in error or improperly accounted for in the pending Board Staff audit of RAC expenditures for 2005. In addition, the Parties also agreed that JCP&L has deferred (i) \$804,850 of costs related to NRD issues from 2005

through 2017, and (ii) \$182,598 of incentive compensation paid to personnel who worked on RAC matters from 2006 through 2017. The Parties agreed that it is appropriate for such NRD-related and incentive compensation costs to be deferred. The Parties also agreed that the Board should make no determination in this proceeding as to the reasonableness, or the recoverability under the Company's RAC filings, of NRD damages or related costs or of incentive compensation amounts, if any. The Parties reserved all of their respective rights with respect to the issue of whether such recovery is appropriate. Furthermore, the Parties agreed that the Company would file its next annual RAC Filing for the period January 1, 2018 through December 31, 2018 no later than October 4, 2019.

26. On October 4, 2019, JCP&L filed its 2018 RAC Petition, assigned Docket No. ER19101332 ("2018 RAC Filing"). The 2018 RAC Filing supported an increase to JCP&L's Rider RAC charge of \$0.000214/kWh (before SUT) to \$0.000830 per kWh (before SUT), which was calculated to increase Rider RAC revenues by approximately \$4.285 million annually. However, the Company proposed no change be made to the Rider RAC Tariff Rate beyond the \$3.951 million increase stipulated to in the fully executed Stipulation of Settlement in the 2017 RAC Filing filed October 4, 2019 pending Board approval.

27. On October 25, 2019, the Board issued an Order in the 2017 Rider RAC Filing adopting the October 4, 2019 Stipulation as its own and ordering that the Company's RAC rate be set at \$0.000811 per kWh, excluding SUT, for services rendered on or after November 1, 2019. The Board's order increased the Rider RAC Tariff Rate by \$0.000195 per kWh (excluding SUT), a change expected to increase the Company's RAC revenues by approximately \$3.951 million annually.

28. On April 2, 2020, JCP&L filed a fully executed Stipulation of Settlement with

the Board to resolve the 2018 RAC Filing. In the 2018 Stipulation, the Parties agreed that the Company's ending recoverable deferred RAC balance at December 31, 2018 was an under-recovered balance of \$116,380,196, subject to the Parties' reservation of their rights to challenge the recovery of expenditures that might be found to have been recorded in error or improperly accounted for in the pending Board Staff audit of RAC expenditures for 2005. In addition, the Parties also agreed that JCP&L has deferred (i) \$803,654 of costs related to NRD issues from 2005 through 2018, and (ii) \$192,520 of incentive compensation paid to personnel who worked on RAC matters from 2006 through 2018. The Parties agreed that it is appropriate for such NRD-related and incentive compensation costs to be deferred. The Parties also agreed that the Board should make no determination in this proceeding as to the reasonableness, or the recoverability under the Company's RAC filings, of NRD damages or related costs or of incentive compensation amounts, if any. The Parties reserved all their respective rights with respect to the issue of whether such recovery is appropriate. In addition, JCP&L agreed to file its next annual RAC Filing for the period January 1, 2019 through December 31, 2019 no later than October 1, 2020.

29. On May 5, 2020, the Board issued an Order adopting the 2018 Stipulation, filed April 2, 2020, as its own and ordered that the Company's RAC rate maintained at \$0.000811 per kwh, excluding SUT, and remain in effect until further Order of the Board. The Board directed the Company to file revised tariff sheets by June 1, 2020.

2019 RAC Review

30. During calendar year 2019, JCP&L has continued to perform its MGP remediation activities in compliance with the regulatory requirements established pursuant to the Site Remediation Reform Act ("SRRA") and, Administrative Consent Orders ("ACOs") or Memorandums of Agreement ("MOAs") executed with the New Jersey Department of

Environmental Protection (“NJDEP”) for these sites. All such activities were conducted in accordance with those controlling NJDEP documents and other governing regulatory and environmental rules, regulations and guidance.

31. A summary of some of the remediation activities performed during the 2019 period is presented below:

- a. Remedial investigation activities were performed at the following sites:
 - Asbury Park, Boonton, Lambertville, Newton I, Ocean City, and Phillipsburg.
- b. Remedial action selection-related activities were performed at the following sites:
 - Asbury Park, Boonton, Lambertville, Newton I, Ocean City, Phillipsburg, Red Bank, and Wildwood.
- c. Remedial action work plan and design-related activities were performed at the following sites:
 - Asbury Park, Boonton, Lambertville, Newton I, Newton II, Ocean City, Phillipsburg, and Wildwood.
- d. Remedial implementation activities were performed at the following sites:
 - Asbury Park, Belmar, Dover, Newton II, Ocean City, Phillipsburg, and Wildwood.

32. In addition to engineering and environmental services provided by remedial consultants and contractors, other activities directly supporting the MGP remediation program included specialized communication and legal services. Henry & Germann Public Affairs, L.L.C. (“Henry & Germann”) provided services such as: direct communications with affected property owners; conducting site visits; attending meetings with key stakeholders (e.g., municipal officials); preparing written work products such as project updates; coordinating community outreach open house events; and strategic planning assistance. The law firm Schenck, Price, Smith & King (“SPSK”) provided legal services such as: negotiation of access and deed notice agreements;

acquisition of impacted properties; assisting with settlement of natural resource damage liabilities alleged by NJDEP; and preparation of property transfers pursuant to the September 22, 2000 Separation Agreement between JCP&L and NJNG. A by-site listing of charges for the services of Henry & Germann and SPSK are included in Attachment D.

33. The Company has continued to apply various budget development and expenditure tracking mechanisms to all its MGP activities. MGP budgets are developed by the Company project managers and Supervisor of Site Remediation, based on information provided by environmental engineering consultants. All remediation expenses are processed through the Company's formal accounting system of record. Unique orders are established for each MGP site and for general program management. Charges are captured by cost element to distinguish the nature of the charges (e.g., outside contractor, professional). Expenditures are reviewed and tracked on an ongoing basis and, if needed, correcting journal entries are made. Attachment B summarizes the actual expenses from January 1, 2019 through December 31, 2019. Attachment C provides a detailed breakdown of expenses by quarter. A listing of expenditures by vendor, and a description of the services provided, is included in Attachment D. The 2019 budget and the actual expenses through December 31, 2019, together with variances from budget, are presented in Attachment E. A summary of all actual expenses to date for the MGP program and the estimated future expenses are presented in Attachment F.

34. The Company requires monthly submittals from the primary consultants, including progress reports, invoices and a budget and expenditure analysis broken down on a per-task basis. These submittals are reviewed by the Company project managers on a regular basis. The Company requires that invoice submittals include detailed supporting documentation, including (but not limited to) time records, expense records, subcontractor invoices and other

relevant and supporting data. The Company has established surcharge rates with the consultants for subcontracted services, and these surcharges are clearly identified in the invoice package. The nature of these projects requires that the Company must be flexible to ensure that contracted services can quickly respond to unforeseeable changes, such as new field conditions. Competitive unit rates are established for repetitive tasks during the bidding process and undergo periodic comparisons with other firms. The invoices identify these unit costs to facilitate comparison to the contract rate structure. Where changes in the work scope are required, the primary consultants are required to promptly bring such matters to the attention of the assigned Company project manager. The consultant then documents the work scope changes and related costs in the monthly progress reports and other written correspondence. Change orders to the contract contain documentation prepared by the Company project manager. The primary consultants and remediation contractors have been pre-qualified via competitive bidding, taking into consideration the relevant technical, cost and commercial factors. Individual projects are also subject to bidding based on consideration of various factors including regulatory deadlines and other emergency considerations, economies of scale that take into account the institutional knowledge of the incumbent contractor and project-specific demands, and the unique requirements of the work scope required. The Company pursues joint procurement of remediation services with other utilities, as with the sites shared between the Company and Elizabethtown Gas Company. The Company maintains documentation for all expenses, which is available for review by Staff and Rate Counsel.

Results of 2019 RAC Review

35. As discussed in paragraph 29 above, the BPU Order adopted the Stipulation in the 2018 RAC Filing that established JCP&L's ending recoverable deferred RAC balance at December 31, 2018 to be an under-recovered balance of \$116,380,196 exclusive of NRD-related

and incentive compensation costs. This 2019 RAC Filing includes actual MGP data for the period from January 1, 2019 through December 31, 2019.

36. As set forth in greater detail in certain of the Attachments hereto, the incremental expenses incurred in connection with JCP&L's MGP remediation program during calendar year 2019 are \$11.215 million (*see* Attachment A-1, line 45). As shown in Attachment A-1, line 46 and Attachment G, carrying costs accrued in 2019 are \$1.716 million, leaving a net balance of unrecovered MGP costs including carrying costs at December 31, 2019 of \$12.931 million before application of over-recoveries from the Rider Storm Recovery Charge ("SRC") and the other components of Rider SBC. *See* Attachment A-1, lines 45 and 46. After application of *over-recoveries* of \$8.578 million (*see* Attachment A-1, lines 47 and 48) from Rider SRC and the other components of Rider SBC, the resulting net incremental MGP costs incurred during calendar year 2019 are \$4.353 million. *See* Attachment A-1, line 49. The above-identified incremental expense amounts for 2019 do not include any costs related to NRD issues but does include charges of \$14,062 related to incentive compensation. *See* Attachment A-1, lines 50 and 51, respectively). JCP&L proposes to continue to defer NRD-related and incentive compensation costs, but not to recover such NRD-related and incentive compensation costs until there is a final resolution of the issue concerning the appropriateness of recovery thereof.

37. After subtracting the incentive compensation costs, the total recoverable MGP remediation expense for 2019 is \$4.339 million. *See* Attachment A-1, Line 52. When combined with the 2019 *over-recovered* deferred RAC balance of \$2.231 million (Attachment A-1, line 56) and the remaining amortization of prior RAC expenditures previously approved for recovery, the result is a *decrease* of \$0.000107 kWh (before SUT) in JCP&L's Rider RAC charge to a proposed rate of \$0.000704 kWh (before SUT) from the current rate of \$0.000811 kWh (before

SUT) that would reduce revenues by \$2.1 million annually. *See* Attachment A-1, lines 63, 61, 62 and 64. The Company is proposing that the new rate become effective on January 1, 2021.

Attachments

38. Attached hereto and made a part of this Verified Petition are the following

Attachments:

- Attachment A-1 Derivation of MGP Remediation Adjustment Charge
- Attachment A-2 Manufactured Gas Plant Remediation Adjustment Deferred Accounting
- Attachment B Summary of MGP Incremental Remediation Expenses for 2019
- Attachment C JCP&L MGP Sites – Quarterly Reports for 2019 – Summary by Site
- Attachment D JCP&L MGP Sites – Summary of Vendor Charges By Site – 1/1/19 through 12/31/19
- Attachment E 2019 Remediation Expenditures – Summary vs. Budget
- Attachment F Summary of Actual and Estimated Remediation Expenses - Total Project Cost
- Attachment G Calculation of Interest on Deferred MGP Remediation Expenses Under/(Over) Recovery
- Attachment H Current and Proposed Tariff Sheets for Rider RAC

Service of Petition

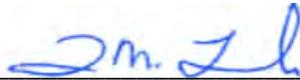
39. Copies of this Verified Petition, and all supporting Attachments thereto, have been or will be duly served by electronic mail to Director, Division of Rate Counsel, and the Department of Public Law and Safety, Division of Law.

Conclusion

WHEREFORE, the Petitioner, Jersey Central Power & Light Company, respectfully requests that the Board issue a final decision and order:

- (1) approving the reasonableness and prudence of all costs and expenditures incurred by the Petitioner from January 1, 2019 through December 31, 2019, relating to the environmental remediation of its former MGP sites;
- (2) approving a reduction in the Rider RAC Charge to \$0.000704 per kWh (before SUT), which will result in a decrease in annual collections of approximately \$2.1 million;
- (3) authorizing the continued deferral by the Petitioner of the net deferred RAC balance at December 31, 2019, with the continuing accrual of interest on the unamortized balance (net of deferred taxes), all in accordance with and subject to the terms of Petitioner's Rider RAC and related Rider SBC; and
- (4) granting such other and further relief as the Board shall deem just, lawful and proper.

Respectfully submitted,



Lauren M. Lepkoski
FirstEnergy Service Company
2800 Pottsville Pike
Reading, Pennsylvania 19612-6001
610-921-6203

Dated: October 1, 2020

Counsel for Jersey Central Power & Light Company

AFFIDAVIT
OF
VERIFICATION

Frank D. Lawson, being duly sworn upon his oath, deposes and says:

1. I am employed by FirstEnergy Service Company as Supervisor - Remediation and New Jersey Environmental Services in the Remediation, Beneficial Use and Environmental Services Group in the Environment Department and support Jersey Central Power & Light Company ("JCP&L"), the Petitioner named in the foregoing Verified Petition, and I am duly authorized to make this Affidavit of Verification on its behalf.

2. I have read the contents of the foregoing Verified Petition by JCP&L for review and approval of costs and expenses incurred in 2019 for the environmental remediation of manufactured gas plant ("MGP") sites, and I hereby verify that the statements of fact and other information contained therein, other than the data and calculations set forth in Attachments A, G and H thereto, are true and correct to the best of my knowledge, information and belief.

3. I hereby further attest and verify that all costs and expenses summarized in the foregoing Verified Petition, and more particularly as set forth in Attachments B, C, D, E and F thereto, are all related to the remediation of MGP sites.



Frank D. Lawson

Sworn to and subscribed before me
this 1st day of October 2020



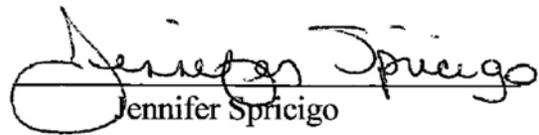
Lauren M. Lepkoski
An Attorney-at-Law licensed to practice in the State of New Jersey
Attorney ID: 002322005

AFFIDAVIT
OF
VERIFICATION

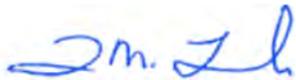
Jennifer Spricigo, being duly sworn upon her oath, deposes and says:

1. I am employed by First Energy Service Company as Rates Analyst in Rates & Regulatory Affairs-New Jersey for Jersey Central Power & Light Company ("JCP&L"), the Petitioner named in the foregoing Verified Petition, and I am duly authorized to make this Affidavit of Verification on its behalf.

2. I have read the contents of the foregoing Verified Petition by JCP&L for review and approval of costs and expenses incurred in 2019 for the environmental remediation of manufactured gas plant sites, and I hereby verify that the data and calculations set forth in Attachments A, G and H thereto are true and correct to the best of my knowledge, information and belief.


Jennifer Spricigo

Sworn to and subscribed before me
this 1st day of October 2020



Lauren M. Lepkoski
An Attorney-at-Law licensed to practice in the State of New Jersey
Attorney ID: 002322005

JERSEY CENTRAL POWER & LIGHT COMPANY
Derivation of Manufactured Gas Plant (MGP) Remediation Adjustment Charge (RAC)
For Tariff Rider Effective January 1, 2021

Line No.	Through 12/31/2018 (1)	Year 2019 (2)	Total as of 12/31/2019 (3)	Data Sources
MGP Remediation Costs				
1	\$ 50,166,335			
2	(150,892)			
3	(29,097,165)			Footnote (b)
4	\$ 20,918,278			Line Nos. 1 through 3
5	435,073			Footnote (c)
6	103,751			Footnote (d)
7	\$ 20,379,454			ER10020130 (6/15/11) & ER11030141 (3/12/12)
8	\$ 7,700,028			ER12080751 (11/21/2014)
9	474,978			ER12080751 (11/21/2014)
10	\$ 8,175,006			Line Nos. 8 + 9
11	33,404			Footnote (c)
12	10,874			Footnote (d)
13	\$ 8,130,728			ER12080751 (11/21/2014)
14	\$ 34,539,907			ER15040499
15	1,589,722			ER15040499
16	36,129,629			Line Nos. 14 + 15
17	182,593			Footnote (c)
18	28,452			Footnote (d)
19	\$ 35,918,584			ER15040499 (07/29/2016)
20	\$ 7,883,897			ER16090922
21	851,961			ER16090922
22	\$ 8,735,858			Line Nos. 20 + 21
23	98,616			Footnote (c)
24	13,248			Footnote (d)
25	\$ 8,623,994			ER16090922 (11/21/17)
26	\$ 13,621,248			ER17111191
27	1,016,079			ER17111191
28	\$ 14,637,327			Line Nos. 26 + 27
29	51,947			Footnote (c)
30	13,551			Footnote (d)
31	\$ 14,571,829			ER17111191 (06/22/18)
32	\$ 26,063,647			ER18080965 (Attmt B Revised)
33	1,367,586			ER18080965 (Attmt G Revised)
34	\$ 27,431,233			Line Nos. 32 + 33
35	3,217			Footnote (c)
36	12,722			Footnote (d)
37	\$ 27,415,294			ER18080965 (10/25/19)
38	\$ 16,629,984			ER19101332
39	1,975,403			ER19101332
40	(17,256,349)			Footnote (b)
41	\$ 1,349,038			Line Nos. 38 + 39 + 40
42	(1,196)			Footnote (c)
43	9,922			Footnote (d)
44	\$ 1,340,313			ER19101332 (05/15/20)
45		\$ 11,214,216		Attachment B
46		1,716,401		Attachment G
47		(3,947,992)		Footnote (e)
48		(4,629,843)		Footnote (b)
49		\$ 4,352,782		Line Nos. 45 + 46 + 47
50		-		Footnote (c)
51		14,062		Footnote (d)
52		\$ 4,338,720		Line Nos. 49 less 50 & 51
53	\$ 116,380,196	\$ 4,338,720	\$ 120,718,916	Columns (1) through (3)

JERSEY CENTRAL POWER & LIGHT COMPANY
Derivation of Manufactured Gas Plant (MGP) Remediation Adjustment Charge (RAC)
For Tariff Rider Effective January 1, 2021

Derivation of Tariff Rider RAC:					
54	Total recoverable MGP remediation expenses	\$ 116,380,196	\$ 4,338,720	\$ 120,718,916	Line 53
55	Less: Fully Amortized Layer (Line 7) at 12/31/2019	\$ (20,379,454)		\$ (20,379,454)	
56	Ending under-recovered deferred RAC balances		(2,230,742)	(2,230,742)	Attachment A-2 p.2 (22)
57	Total recoverable MGP remediation costs incl. under-recovery	\$ 96,000,742	\$ 2,107,978	\$ 98,108,720	Line Nos. 54 + 55 + 56
58	RAC recovery period (years)	7	7	7	ER91121820J 12/16/94 Order
59	Net annual recoverable MGP expenses	<u>\$ 13,714,392</u>	<u>\$ 301,140</u>	<u>\$ 14,015,531</u>	Line 57 divided by Line 58
60	Retail Sales forecasted (MWh)			19,906,396	12 mos. Ended 12/31/21
61	Calculated RAC factor (\$ per kWh) before SUT			\$ 0.000704	Line 59 divided by Line 60
62	RAC factor currently in effect (\$ per kWh)			\$ 0.000811	Rider RAC effective 11/1/19
63	Calculated increase/(decrease) in RAC Factor (\$ per kWh) before SUT			<u>\$ (0.000107)</u>	Line 61 - Line 62
64	Proposed Rider RAC revenue decrease effective 1/1/21			<u>\$ (2,129,984)</u>	Line 60 x Line 63

JERSEY CENTRAL POWER & LIGHT COMPANY
Derivation of Manufactured Gas Plant (MGP) Remediation Adjustment Charge (RAC)
For Tariff Rider Effective January 1, 2021

FOOTNOTES:

- (a) Total cost incurred is net of:
 (1) Write-off in accordance with RAC Stipulation and BPU Order ER03121020 (\$2,500,000);
 (2) Insurance proceeds received (\$36,100,000);
 (3) MGP revenue previously collected through base rates (\$16,877,403).

- (b) Application of over-recovered SBC components at year-end in accordance with Tariff Rider SBC:

	Annual	Cumulative
2004	\$ (6,424,026)	
2005	(2,639,759)	
2006	(2,401,577)	
2007	(5,621,172)	
2008	(2,640,262)	
2009	(1,523,158)	
2010	(7,847,211)	\$ (29,097,165)
2011	-	(29,097,165)
2012	-	(29,097,165)
2013	-	(29,097,165)
2014	-	(29,097,165)
2015	-	(29,097,165)
2016	-	(29,097,165)
2017	-	(29,097,165)
2018	(17,256,349)	(46,353,513)
2019	(4,629,843)	(50,983,356)

- (c) NRD Expenses incurred by year:

	Annual	Cumulative
2005	\$ 62,856	
2006	157,594	
2007	53,434	
2008	18,046	
2009	89,580	
2010	53,563	\$ 435,073
2011	33,404	468,477
2012	83,412	551,889
2013	5,116	557,005
2014	94,065	651,070
2015	98,616	749,686
2016	51,947	801,633
2017	3,217	804,850
2018	(1,196)	803,654
2019	-	803,654

- (d) ICP Costs by year:

	Annual	Cumulative
2006	\$ 27,479	
2007	32,141	
2008	30,346	
2009	-	
2010	13,785	\$ 103,751
2011	10,874	114,625
2012	11,328	125,953
2013	10,259	136,212
2014	6,865	143,077
2015	13,248	156,325
2016	13,551	169,876
2017	12,722	182,598
2018	9,922	192,520
2019	14,062	206,582

- (e) Per the BPU's Order in Docket No.ER20010089, dated May 20, 2020, that adopted the Stipulation of Settlement ("SOS") in JCP&L's final annual filing with respect to its Storm Recovery Charge Rider ("Final 2019 SRC Filing") in its entirety, and incorporated the terms and conditions of the SOS as though fully set forth in its Order. In the BPU-approved SOS, it was agreed that JCP&L's Final 2019 SRC Filing was the final true-up of the Rider SRC balance and that the ending deferred balance in Rider SRC at December 31, 2019, was an over-recovery of \$3,947,992, including carrying costs of \$302,742. The Parties further agreed that, in accordance with the July 2019 Order, the ending deferred balance in Rider SRC was applied to Rider RAC, which was the largest under-recovered component of the Company's SBC deferred balance at the time of the filing of the Company's January 2020 Petition.

JERSEY CENTRAL POWER & LIGHT COMPANY
Manufactured Gas Plant Remediation Adjustment Clause (MGP RAC) Deferred Accounting

	Unamortized 12/31/2009 Recoverable Balance (a)	7 Yrs 84 Mos	Amortization 12/31/2009 Recoverable Balance (i)	Unamortized 2010 Recoverable Costs (b)	7 Yrs 84 Mos	Amortization 2010 Recoverable Costs (h)	Unamortized 2011 Recoverable Costs (c)	7 Yrs 84 Mos	Amortization 2011 Recoverable Costs	Unamortized 2012 to 2014 Recoverable Costs (d)	7 Yrs 84 Mos	Amortization 2012 to 2014 Recoverable Costs (g)	Unamortized 2015 Recoverable Costs (e)	7 Yrs 84 Mos	Amortization 2015 Recoverable Costs	Unamortized 2016 Recoverable Costs (f)	7 Yrs 84 Mos	Amortization 2016 Recoverable Costs	Unamortized 2017 Recoverable Costs (g)	7 Yrs 84 Mos	Amortization 2017 Recoverable Costs	Unamortized 2018 Recoverable Costs (h)	7 Yrs 84 Mos	Amortization 2018 Recoverable Costs	Unamortized 2019 Recoverable Costs (i)	7 Yrs 84 Mos	Amortization 2019 Recoverable Costs	Total Unamortized Balance at 12/31/2019	Total Amortization Recorded	RAC Tariff Rider Revenue (k)	Current Month Under/(Over) Deferred							
	(1)		(2)	(3)		(4)	(5)		(6)	(7)		(8)	(9)		(10)	(11)		(12)	(13)		(14)	(15)		(16)	(17)		(18)	(19)	(20)	(21)	(22)							
Net Remediation Costs	12,808,809			8,109,469			8,175,006			36,129,629			8,735,858			14,637,327			\$ 27,431,233			\$ 1,349,038			\$ 4,352,782			=(1)+(3)+(5)+(7)	=(2)+(4)+(6)+(8)									
NRD Costs	(381,510)			(53,563)			(33,404)			(182,593)			(98,616)			(51,947)			(3,217)			1,196			-			+(9)+(11)+(13)+	+(10)+(12)+(14)									
ICP Costs	(89,966)			(13,785)			(10,874)			(28,452)			(13,248)			(13,551)			(12,722)			(9,922)			(14,062)			(15)+(17)	+(16)+(18)									
Approved for Recovery	12,337,333			8,042,121			8,130,728			35,918,584			8,623,994			14,571,829			27,415,294			1,340,313			4,338,720							=(20)-(21)						
Jul-11	12,287,396	1	49,937	8,042,121	-	-	8,130,728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,460,245	49,937	55,209	(5,272)			
Aug-11	12,143,460	2	143,936	8,042,121	-	-	8,130,728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,316,309	143,936	191,012	(47,076)		
Sep-11	11,996,587	3	146,873	8,042,121	-	-	8,130,728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,169,436	146,873	166,100	(19,227)		
Oct-11	11,849,714	4	146,873	8,042,121	-	-	8,130,728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,022,563	146,873	128,656	18,217		
Nov-11	11,702,841	5	146,873	8,042,121	-	-	8,130,728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,875,690	146,873	122,758	24,115		
Dec-11	11,555,968	6	146,873	8,042,121	-	-	8,130,728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,728,817	146,873	123,349	23,524		
Total Through Dec-11			781,365																															781,365	787,084	(5,719)		
Jan-12	11,409,095	7	146,873	8,042,121	-	-	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63,500,528	146,873	136,811	10,062	
Feb-12	11,262,222	8	146,873	8,042,121	-	-	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63,353,655	146,873	134,669	12,204	
Mar-12	11,115,349	9	146,873	8,042,121	-	-	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63,206,782	146,873	129,137	17,736	
Apr-12	10,968,476	10	146,873	8,010,527	1	31,594	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63,028,315	178,467	144,699	33,768	
May-12	10,821,603	11	146,873	7,918,617	2	91,910	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62,789,532	238,783	195,184	43,599	
Jun-12	10,674,730	12	146,873	7,822,877	3	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62,546,919	242,613	227,032	15,581	
Jul-12	10,527,857	13	146,873	7,727,137	4	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62,304,306	242,613	274,891	(32,278)	
Aug-12	10,380,984	14	146,873	7,631,397	5	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62,061,693	242,613	303,330	(60,717)	
Sep-12	10,234,111	15	146,873	7,535,657	6	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61,819,080	242,613	265,912	(23,299)	
Oct-12	10,087,238	16	146,873	7,439,917	7	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61,576,467	242,613	212,922	29,691	
Nov-12	9,940,365	17	146,873	7,344,177	8	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61,333,854	242,613	188,471	54,142	
Dec-12	9,793,492	18	146,873	7,248,437	9	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61,091,241	242,613	178,007	64,606	
YTD Through Dec-12			1,762,476			793,684																													2,556,160	2,391,066	165,094	
Cumulative through Dec 2012			2,543,841			793,684																													3,337,625	3,178,150	159,375	
Jan-13	9,646,619	19	146,873	7,152,697	10	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60,848,628	242,613	237,579	5,034
Feb-13	9,499,746	20	146,873	7,056,957	11	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60,606,015	242,613	223,013	19,600	
Mar-13	9,352,873	21	146,873	6,961,217	12	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60,363,402	242,613	217,116	25,497	
Apr-13	9,206,000	22	146,873	6,865,477	13	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60,120,789	242,613	202,198	40,415	
May-13	9,059,127	23	146,873	6,769,737	14	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59,878,176	242,613	187,194	55,419	
Jun-13	8,912,254	24	146,873	6,673,997	15	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59,635,563	242,613	223,075	19,538	
Jul-13	8,765,381	25	146,873	6,578,257	16	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59,392,950	242,613	289,351	(46,738)	
Aug-13	8,618,508	26	146,873	6,482,517	17	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59,150,337	242,613	294,334	(51,721)	
Sep-13	8,471,635	27	146,873	6,386,777	18	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58,907,724	242,613	243,313	(700)	
Oct-13	8,324,762	28	146,873	6,291,037	19	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58,665,111	242,613	211,106	31,507	
Nov-13	8,177,889	29	146,873	6,195,297	20	95,740	8,130,728	-	-	35,918,584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58,422,498	242,613	189,690	52,923	
Dec-13	8,031,016	30	146,873	6,099,557	21	95,740	8,130,728	-																														

JERSEY CENTRAL POWER & LIGHT COMPANY
Manufactured Gas Plant Remediation Adjustment Clause (MGP RAC) Deferred Accounting

	Unamortized	7	Amortization	Unamortized	7	Amortization	Unamortized	7	Amortization	Unamortized	7	Amortization	Unamortized	7	Amortization	Unamortized	7	Amortization	Unamortized	7	Amortization	Unamortized	7	Amortization	Total	Total	RAC	Current					
	12/31/2009	Yrs	12/31/2009	2010	Yrs	2010	2011	Yrs	2011	2012 to 2014	Yrs	2012 to 2014	2015	Yrs	2015	2016	Yrs	2016	2017	Yrs	2017	2018	Yrs	2018					2019	Yrs	2019	Unamortized	Amortization
	Recoverable	84	Recoverable	Recoverable	84	Recoverable	Recoverable	84	Recoverable	Recoverable	84	Recoverable	Recoverable	84	Recoverable	Recoverable	84	Recoverable	Recoverable	84	Recoverable	Recoverable	84	Recoverable	Balance	Recorded	Rider	Under/(Over)					
	(a)	Mos	(i)	(b)	Mos	(h)	(c)	Mos	(g)	(d)	Mos	(f)	(e)	Mos	(10)	(11)	Mos	(9)	(12)	(13)	Mos	(14)	(15)	Mos	(16)	(17)	Mos	(18)	(19)	(20)	(21)	(22)	
Jan-19				259,417	82	95,740	3,291,028	50	96,794	23,453,986	30	427,602	7,186,656	14	102,667	13,357,511	7	173,474	27,415,294					1,340,313		4,338,720							
Feb-19				163,677	83	95,740	3,194,234	51	96,794	23,026,384	31	427,602	7,083,989	15	102,667	13,184,037	8	173,474	27,415,294					1,340,313		4,338,720							
Mar-19				67,937	84	95,740	3,097,440	52	96,794	22,598,782	32	427,602	6,981,322	16	102,667	13,010,563	9	173,474	27,415,294					1,340,313		4,338,720							
Apr-19				-	85	67,937	3,000,646	53	96,794	22,171,180	33	427,602	6,878,655	17	102,667	12,837,089	10	173,474	27,415,294					1,340,313		4,338,720							
May-19							2,903,852	54	96,794	21,743,578	34	427,602	6,775,988	18	102,667	12,663,615	11	173,474	27,415,294					1,340,313		4,338,720							
Jun-19							2,807,058	55	96,794	21,315,976	35	427,602	6,673,321	19	102,667	12,490,141	12	173,474	27,415,294					1,340,313		4,338,720							
Jul-19							2,710,264	56	96,794	20,888,374	36	427,602	6,570,654	20	102,667	12,316,667	13	173,474	27,415,294					1,340,313		4,338,720							
Aug-19							2,613,470	57	96,794	20,460,772	37	427,602	6,467,987	21	102,667	12,143,193	14	173,474	27,415,294					1,340,313		4,338,720							
Sep-19							2,516,676	58	96,794	20,033,170	38	427,602	6,365,320	22	102,667	11,969,719	15	173,474	27,415,294					1,340,313		4,338,720							
Oct-19							2,419,882	59	96,794	19,605,568	39	427,602	6,262,653	23	102,667	11,796,245	16	173,474	27,415,294					1,340,313		4,338,720							
Nov-19							2,323,088	60	96,794	19,177,966	40	427,602	6,159,986	24	102,667	11,622,771	17	173,474	27,088,921					1,340,313		4,338,720							
Dec-19							2,226,294	61	96,794	18,750,364	41	427,602	6,057,319	25	102,667	11,449,297	18	173,474	26,762,548					1,340,313		4,338,720							
YTD Through Dec-19				-		355,157			1,161,528	5,131,224		5,131,224			1,232,004		2,081,688					326,373											
Cumulative through Dec 2019				12,337,333		8,042,121			5,904,434	17,168,220		17,168,220			2,566,675		3,122,532					652,746											

FOOTNOTES:

- (a) Approved for recovery effective July 1, 2011, BPU Docket No. ER10020130 dated 6/15/2011. \$ 12,337,333
 - (b) Approved for recovery effective April 1, 2012, BPU Docket No. ER11030141 dated 03/12/2012. 8,042,121
 - (c) Approved for recovery effective December 1, 2014, BPU Docket No. ER12080751 dated 11/21/2014. 8,130,728
 - (d) Approved for recovery effective August 8, 2016, BPU Docket No. ER15040499 dated 07/29/2016. 35,918,584
 - (e) Approved for recovery effective December 1, 2017, BPU Docket No. ER16090922 dated 11/21/17. 8,623,994
 - (f) Approved for recovery effective July 1, 2018, BPU Docket No. ER17111191 dated 06/22/18. 14,571,829
 - (g) Approved for recovery effective November 1, 2019, BPU Docket No. ER18080965 dated 10/25/19. 27,415,294
 - (h) Approved for recovery effective June 1, 2020, BPU Docket No. ER19101332 dated May 5, 2020. 1,340,313
- Total approved for recovery \$ 116,380,196

(i) July 2011, August 2011, April 2012, May 2012, August 2016 and September 2016 amortization prorated based on billing cycle revenues.

(j) Attachment A-1, Columns 2, Lines 52, respectively.

(k) Sales volumes (billed units) that recovered the RAC factor provided pursuant to paragraph 12, Stipulation of Settlement, Docket ER11030141:

Jan-19	1,847,630,682
Feb-19	1,697,403,098
Mar-19	1,592,680,560
Apr-19	1,411,427,322
May-19	1,375,625,076
Jun-19	1,590,493,151
Jul-19	2,067,979,457
Aug-19	2,280,172,410
Sep-19	1,969,312,461
Oct-19	1,585,728,175
Nov-19	1,393,529,851
Dec-19	1,613,800,848

**Jersey Central Power & Light Company
Summary of Manufactured Gas Plant Incremental Remediation Expenses**

Incremental Expenses for the Period 2019

Site Name	Actual 01/2019-12/2019
Asbury Park	745,942
Belmar	385,470
Boonton	531,981
Cape May	1,468,857
Dover	549,157
Flemington	116,679
Lakewood	290,296
Lambertville/LaRochemere	231,144
Long Branch	-
Newton I	245,220
Newton II	2,790,134
Ocean City	1,301,765
Phillipsburg	403,805
Red Bank	117,553
Sea Isle City	739,720
Toms River	-
Tuckerton	3,503
Washington	188,963
Wildwood	964,988
General	139,038
Total Incremental Expense (Excluding NRD):	11,214,216
2019 NRD:	0
Total Incremental Expense (Including NRD):	11,214,216

JCP&L Manufactured Gas Plant Sites
Quarterly Report
Summary by Site

January 1 through December 31

Asbury Park	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	458	1,223	713	306	2,700
Professional Services	98,742	71,265	18,778	(5,909)	182,876
Remediation	4,855	39,059	385,589	108,883	538,385
Legal	2,549	1,728	3,336	10,457	18,070
NJDEP Fees	2,430	-	-	-	2,430
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	366	390	-	725	1,482
Total	109,400	113,664	408,416	114,462	745,942

Belmar	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	828	2,165	1,732	1,630	6,355
Professional Services	-	-	-	2,587	2,587
Remediation	114,276	67,987	78,513	98,891	359,666
Legal	(2,451)	3	6,643	9,585	13,780
NJDEP Fees	-	-	-	-	0
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	682	770	-	1,630	3,082
Total	113,335	70,926	86,888	114,322	385,470

Boonton	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	76	459	357	153	1,044
Professional Services	-	-	-	-	0
Remediation	25,297	233,924	48,174	223,542	530,937
Legal	-	-	-	-	0
NJDEP Fees	-	-	-	-	0
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	-	-	-	-	0
Total	25,373	234,382	48,531	223,695	531,981

Cape May	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	1,439	2,242	4,381	4,279	12,342
Professional Services	-	-	-	-	0
Remediation	281,345	271,917	138,606	629,408	1,321,276
Legal	9,350	34,483	29,193	54,151	127,177
NJDEP Fees	7,260	-	-	550	7,810
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	1	1	183	68	253
Total	299,395	308,642	172,363	688,457	1,468,857

**JCP&L Manufactured Gas Plant Sites
Quarterly Report
Summary by Site**

January 1 through December 31

Dover	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	433	968	204	306	1,910
Professional Services	-	18,914	1,469	2,792	23,175
Remediation	34,334	186,141	168,693	60,136	449,303
Legal	8,648	(961)	6,687	2,665	17,039
NJDEP Fees	-	2,430	-	-	2,430
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	13,113	13,123	263	28,800	55,299
Total	56,527	220,615	177,316	94,699	549,157

Flemington	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	204	357	204	102	866
Professional Services	-	-	-	-	0
Remediation	12,624	81,146	24,680	55,679	174,129
Legal	539	36	-	-	575
NJDEP Fees	-	4,860	-	-	4,860
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	-	(63,751)	-	-	(63,751)
Total	13,366	22,648	24,883	55,781	116,679

Lakewood	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	76	408	51	102	637
Professional Services	-	-	-	-	0
Remediation	81,678	62,519	50,722	78,290	273,209
Legal	-	52	-	-	52
NJDEP Fees	51	-	-	-	51
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	3,918	3,935	-	8,493	16,347
Total	85,724	66,914	50,773	86,886	290,296

Lambertville/LaRoche	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	76	153	153	459	841
Professional Services	-	-	-	-	0
Remediation	6,562	12,665	21,984	184,572	225,783
Legal	-	-	-	-	0
NJDEP Fees	3,970	-	550	-	4,520
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	-	-	-	-	0
Total	10,608	12,818	22,687	185,031	231,144

JCP&L Manufactured Gas Plant Sites
Quarterly Report
Summary by Site

January 1 through December 31

Newton I	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	4,840	2,038	3,668	1,630	12,176
Professional Services	114,767	79,603	15,350	52,855	262,575
Remediation	8,367	1,588	-	-	9,954
Legal	34,895	10,213	1,356	2,116	48,579
NJDEP Fees	4,860	-	-	-	4,860
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	(20,181)	(48,060)	(20,857)	(3,826)	(92,925)
Total	147,548	45,380	(483)	52,775	245,220

Newton II	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	178	357	1,528	13,501	15,564
Professional Services	1,695	2,202	734	27,835	32,466
Remediation	351,213	194,647	98,794	2,084,536	2,729,190
Legal	(3,398)	-	1,157	5,253	3,012
NJDEP Fees	-	-	-	-	0
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	2,419	2,419	23	5,040	9,902
Total	352,108	199,625	102,237	2,136,164	2,790,134

Ocean City	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	522	509	2,038	2,802	5,872
Professional Services	95,598	33,161	134,049	12,755	275,563
Remediation	21,285	37,545	38,588	903,873	1,001,291
Legal	2,195	(527)	4,835	(1,965)	4,538
NJDEP Fees	11,330	-	3,117	-	14,447
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	-	-	-	55	55
Total	130,930	70,688	182,626	917,521	1,301,765

Phillipsburg	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	3,055	8,276	4,585	10,800	26,717
Professional Services	28,536	36,768	41,088	58,486	164,878
Remediation	-	665	-	208,086	208,750
Legal	-	-	-	-	0
NJDEP Fees	3,320	-	-	-	3,320
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	-	51	-	89	141
Total	34,911	45,760	45,673	277,461	403,805

JCP&L Manufactured Gas Plant Sites
Quarterly Report
Summary by Site

January 1 through December 31

Red Bank	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	76	357	255	102	790
Professional Services	-	-	-	-	0
Remediation	13,152	32,732	2,228	68,651	116,763
Legal	-	-	-	-	0
NJDEP Fees	-	-	-	-	0
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	-	-	-	-	0
Total	13,229	33,088	2,483	68,753	117,553

Sea Isle City	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	1,146	1,477	1,477	459	4,560
Professional Services	-	-	-	-	0
Remediation	105,935	43,473	272,260	191,378	613,046
Legal	27,242	12,477	16,965	6,033	62,717
NJDEP Fees	-	-	-	-	0
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	14,670	14,670	-	30,057	59,398
Total	148,993	72,098	290,702	227,926	739,720

Tuckerton	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	76	153	-	-	229
Professional Services	-	-	-	-	0
Remediation	-	600	400	500	1,500
Legal	-	-	-	-	0
NJDEP Fees	-	-	-	-	0
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	591	591	-	591	1,774
Total	668	1,344	400	1,091	3,503

Washington	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	191	1,312	204	102	1,808
Professional Services	81,231	19,423	31,082	38,200	169,936
Remediation	(10,200)	1,603	-	3,024	(5,573)
Legal	1,008	-	-	2,247	3,255
NJDEP Fees	4,870	-	-	-	4,870
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	3,650	3,815	-	7,202	14,667
Total	80,750	26,153	31,285	50,775	188,963

**JCP&L Manufactured Gas Plant Sites
Quarterly Report
Summary by Site**

January 1 through December 31

Wildwood	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	115	713	459	3,821	5,107
Professional Services	88	-	-	-	88
Remediation	52,295	68,124	96,164	727,821	944,403
Legal	(3,059)	7	-	3,474	421
NJDEP Fees	2,430	-	-	-	2,430
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	2,999	2,999	-	6,541	12,539
Total	54,866	71,842	96,622	741,657	964,988

General	Q1	Q2	Q3	Q4	Total
Payroll/Salaries	17,853	26,605	17,627	17,882	79,967
Professional Services	3,000	-	-	-	3,000
Remediation	1,087	3,402	1,064	-	5,552
Legal	(7,402)	1,081	(328)	2,218	(4,431)
NJDEP Fees	-	-	-	-	0
RI/RA Financial Trust Fund	-	-	-	-	0
Miscellaneous Other	14,494	12,755	13,291	14,409	54,949
Total	29,032	43,843	31,654	34,508	139,038

Notes:

Figures in parentheses are negative amounts resulting from credits or corrections.

Professional Services includes outside engineering, environmental and other supporting consultants.

Remediation includes remedial construction and waste removal, transportation and disposal, engineering and property controls, and remediation O&M.

Legal includes outside counsel fees and expenses.

NJDEP Fees include oversight costs, permit fees, LSRP annual fees, and any other fees billed by the NJDEP.

RI/RA Financial Trust Fund includes charges associated with financial assurance trust funds for RI extensions and RA permits.

Miscellaneous Other includes minor expenses not included in one of the above categories.

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Asbury Park</i>			
	CITY OF ASBURY PARK	1,457	Property tax payments
	ENVIRO-AIR TECHNOLOGIES, INC.	1,220	Remediation services
	GEI CONSULTANTS, INC.	47,452	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	12,870	Community relations and communications services
	K&M CONTRACTING INCORPORATED	327,570	Parking lot construction
	LANGAN ENGINEERING & ENVIRONMENTAL	403,603	Environmental and engineering consulting services
	SCHENCK, PRICE, SMITH & KING	12,070	Legal services
	TREASURER - STATE OF NEW JERSEY	2,430	LSRP Annual Fee and other permitting costs
	VEOLIA ENVIRONMENTAL SERVICES	4,313	Waste handling, transport, disposal and treatment services
<i>Belmar</i>			
	ARCADIS US INCORPORATED	100,645	Environmental and engineering consulting services
	BOROUGH OF BELMAR	2,971	Property tax payments
	BROWN AND CALDWELL	151,882	O&M services for the ground water remediation system
	EVOQUA WATER TECHNOLOGIES, LLC	6,525	O&M services for the ground water remediation system
	GEI CONSULTANTS, INC.	44,919	Environmental and engineering consulting services

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Belmar (cont'd)</i>			
	HALEY & ALDRICH INCORPORATED	18,961	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	11,221	Community relations and communications services
	SCHENCK, PRICE, SMITH & KING	13,580	Legal services
	TRC ENGINEERS INCORPORATED	(45,319)	Perimeter air monitoring services
	TREASURER - STATE OF NEW JERSEY	4,730	LSRP Annual Fee and other permitting costs
	VEOLIA ENVIRONMENTAL SERVICES	118,814	Waste handling, transport, disposal and treatment services
<i>Boonton</i>			
	ARCADIS US INCORPORATED	309,448	Environmental and engineering consulting services
	H2M ASSOCIATES INCORPORATED	37,175	Project management services
	HANDEX OF NEW JERSEY, INC.	16,318	O&M services for the ground water remediation system
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	1,039	Community relations and communications services
	TREASURER - STATE OF NEW JERSEY	2,430	LSRP Annual Fee
	VEOLIA ENVIRONMENTAL SERVICES	5,571	Waste handling, transport, disposal and treatment services
<i>Cape May</i>			
	ARCADIS US INCORPORATED	849,771	Environmental and engineering consulting services

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Cape May (cont'd)</i>			
	ATLANTIC CITY ELECTRIC	9,780	Electric utility - groundwater treatment system
	CAPE MAY HOUSING AUTHORITY	23,407	Reimbursement for legal and environmental services
	CITY OF CAPE MAY	235	Utilities - Water/sewer & property tax payments
	GEI CONSULTANTS, INC.	68,411	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	33,726	Community relations and communications services
	SCHENCK, PRICE, SMITH & KING	102,235	Legal services
	SCHENCK, PRICE, SMITH & KING - ATTORNEY TRUST ACCOUNT	350,000	Escrow account for City site improvements
	TETRA TECH INCORPORATED	4,309	Environmental and engineering consulting services
	TREASURER - STATE OF NEW JERSEY	10,110	LSRP Annual Fee and other permitting costs
	VEOLIA ENVIRONMENTAL SERVICES	10,228	Waste handling, transport, disposal and treatment services
	VIASANT, LLC	51,638	Remediation services
	WESTERLAND LANDSCAPING, INC.	300	Landscaping and property maintenance services
<i>Dover</i>			
	ANALAN, INC.	6,000	Settlement agreement/deed notice for remediation of Analan property
	COMPREHENSIVE FIRE TECHNOLOGIES, INC.	417	Fire suppression system service/repair at Neptune Building

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Dover (cont'd)</i>			
	DOVER & ROCKAWAY RIVER RAILROAD	910	Annual occupancy usage fee related to subsurface containment wall intersecting footprint of rail line
	DOVER WATER COMMISSION	302	Utilities - Water
	HALEY & ALDRICH INCORPORATED	45,148	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	14,161	Community relations and communications services
	K&M CONTRACTING INCORPORATED	21,844	Construction and property maintenance services
	NEW JERSEY NATURAL GAS	(2,095)	Utilities - Gas & relocation of gas line during remediation credit
	ROCKAWAY TOWNSHIP	26,155	Utilities - Sewer & property tax payments
	SCHENCK, PRICE, SMITH & KING	20,339	Legal services
	TOWN OF DOVER	28,143	Utilities - Water & property tax payments
	TRC ENGINEERS INCORPORATED	48,134	Perimeter air monitoring services
	TREASURER - STATE OF NEW JERSEY	2,430	LSRP Annual Fee and other permitting costs
	URS CORPORATION	455,247	Environmental and engineering consulting services
	VEOLIA ENVIRONMENTAL SERVICES	1,427	Waste handling, transport, disposal and treatment services
	VERIZON NEW JERSEY INCORPORATED	1,151	Building fire suppression system upgrade at Neptune Products

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Flemington</i>			
	ELIZABETHTOWN GAS COMPANY (AKA SOUTHERN COMPANY)	(63,751)	Cost sharing agreement reimbursement for remedial costs
	GEI CONSULTANTS, INC.	136,556	Environmental and engineering consulting services
	HALEY & ALDRICH INCORPORATED	13,595	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	2,584	Community relations and communications services
	SCHENCK, PRICE, SMITH & KING	575	Legal services
	TREASURER - STATE OF NEW JERSEY	4,860	LSRP Annual Fee and other permitting costs
<i>General</i>			
	CHEMISTRY COUNCIL OF NEW JERSEY	3,000	Membership dues & expenses
	HALEY & ALDRICH INCORPORATED	1,065	Project management services
	NEW JERSEY NATURAL GAS	51,319	Property tax payments - Toms River
	SCHENCK, PRICE, SMITH & KING	1,269	Legal services
	TRC ENVIRONMENTAL CORPORATION	4,487	Store & maintain air monitoring equipment
<i>Lakewood</i>			
	ARCADIS US INCORPORATED	257,315	Environmental and engineering consulting services
	H2M ASSOCIATES INCORPORATED	34,098	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	1,327	Community relations and communications services

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Lakewood (cont'd)</i>			
	SCHENCK, PRICE, SMITH & KING	52	Legal services
	TOWNSHIP OF LAKEWOOD	16,329	Property tax payments
	TREASURER - STATE OF NEW JERSEY	4,021	LSRP Annual Fee and other permitting costs
	VEOLIA ENVIRONMENTAL SERVICES	1,347	Waste handling, transport, disposal and treatment services
<i>Lambertville</i>			
	H2M ASSOCIATES INCORPORATED	30,047	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	6,219	Community relations and communications services
	THE ELM GROUP, INC.	52,780	Environmental and engineering consulting services
	TREASURER - STATE OF NEW JERSEY	4,520	LSRP Annual Fee and other permitting costs
	VEOLIA ENVIRONMENTAL SERVICES	3,286	Waste handling, transport, disposal and treatment services
<i>Newton I</i>			
	ELIZABETHTOWN GAS COMPANY (AKA SOUTHERN COMPANY)	(93,042)	Cost sharing agreement reimbursement for remedial costs
	H2M ASSOCIATES INCORPORATED	73,769	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	3,062	Community relations and communications services
	LANGAN ENGINEERING & ENVIRONMENTAL	206,551	Environmental and engineering consulting services

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Newton I (cont'd)</i>			
	SCHENCK, PRICE, SMITH & KING	50,879	Legal services
	TREASURER - STATE OF NEW JERSEY	4,860	LSRP Annual Fee and other permitting costs
	VEOLIA ENVIRONMENTAL SERVICES	1,588	Waste handling, transport, disposal and treatment services
<i>Newton II</i>			
	BROWN AND CALDWELL	580,741	Environmental and engineering consulting services
	HALEY & ALDRICH INCORPORATED	91,264	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	38,325	Community relations and communications services
	K&M CONTRACTING INCORPORATED	5,362	Construction services and property maintenance
	LAND REMEDIATION INCORPORATED	508,422	Remediation services
	SCHENCK, PRICE, SMITH & KING	5,312	Legal services
	SUSSEXPRESS, LLC	3,267	Shuttle service for Davita Renal Center
	TOWN OF NEWTON	10,260	Property tax payments & permit review fees
	TREASURER - STATE OF NEW JERSEY	3,320	LSRP Annual Fee and other permitting costs
<i>Ocean City</i>			
	ATLANTIC CITY ELECTRIC	(7,800)	Settlement agreement
	CLEANLAND OCEAN CITY, INC.	78,000	Settlement agreement

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Ocean City (cont'd)</i>			
	EMILCOTT ASSOCIATES INCORPORATED	24,566	Perimeter air monitoring services
	GEI CONSULTANTS, INC.	46,699	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	23,178	Community relations and communications services
	HYLAND DESIGN GROUP, INC.	4,661	Residential reconstruction support
	MID-ATLANTIC ENVIRONMENTAL	167,732	Groundwater treatment system services
	PANTHER TECHNOLOGIES INCORPORATED	427,942	Remediation services
	SCHENCK, PRICE, SMITH & KING	12,738	Legal services
	TETRA TECH INCORPORATED	463,606	Environmental and engineering consulting services
	TREASURER - STATE OF NEW JERSEY	14,447	LSRP Annual Fee and other permitting costs
	VEOLIA ENVIRONMENTAL SERVICES	7,968	Waste handling, transport, disposal and treatment services
<i>Phillipsburg</i>			
	BLESSED HOPE CHURCH OF THE NAZARENE	500	License agreement payment
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	4,999	Community relations and communications services
	THE ELM GROUP, INC.	279,553	Environmental and engineering consulting services
	TREASURER - STATE OF NEW JERSEY	3,320	LSRP Annual Fee and other permitting costs
	VEOLIA ENVIRONMENTAL SERVICES	33,576	Waste handling, transport, disposal and treatment services

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Red Bank</i>			
	BROWN AND CALDWELL	32,574	Environmental and engineering consulting services
	HALEY & ALDRICH INCORPORATED	16,258	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	3,420	Community relations and communications services
	LANGAN ENGINEERING & ENVIRONMENTAL	59,990	Environmental and engineering consulting services
	TREASURER - STATE OF NEW JERSEY	2,430	LSRP Annual Fee
<i>Sea Isle City</i>			
	ATLANTIC CITY ELECTRIC	1,960	Utilities - Electric
	CITY OF SEA ISLE CITY	66,663	Utilities - Water/sewer & property tax payments
	FOR-SHORE WEED CONTROL, INC.	798	Landscaping and property maintenance services
	GEI CONSULTANTS, INC.	296,897	Project management services & environmental and engineering consulting services
	GERRY'S LAWN CARE	1,479	Landscaping and property maintenance services
	GLENN R. WATTS	(112,783)	Settlement agreement
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	12,797	Community relations and communications services
	RAS ASSOCIATES	900	Property appraisal
	SCHENCK, PRICE, SMITH & KING	56,717	Legal services

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
<i>Sea Isle City (cont'd)</i>			
	SOUTH JERSEY GAS COMPANY	1,910	Utilities - Gas
	STUDIO ONE ARCHITECTS	4,500	Residential reconstruction design services
	T.O.P.S. CONSTRUCTION INCORPORATED	430,024	Residential construction services
	THOMAS H. HEIST INSURANCE AGENCY	3,775	Property insurance (218 39th Street)
	TREASURER - STATE OF NEW JERSEY	3,260	LSRP Annual Fee
	VEOLIA ENVIRONMENTAL SERVICES	1,905	Waste handling, transport, disposal and treatment services
<i>Tuckerton</i>			
	BOROUGH OF TUCKERTON	1,774	Property tax payments
	HOME TURF YARD & HOME MAINT., LLC	1,500	Landscaping and property maintenance services
<i>Washington</i>			
	BOROUGH OF WASHINGTON	15,095	Utilities - Sewer & Property tax payments
	ELIZABETHTOWN GAS COMPANY	503	Utilities - Gas
	GEI CONSULTANTS, INC.	125,654	Environmental and engineering consulting services
	H2M ASSOCIATES INCORPORATED	41,993	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	898	Community relations and communications services
	JONY'S LANDSCAPING	1,280	Landscaping and property maintenance services

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site****January 1 through December 31**

Project	Vendor Name	Total	Services Provided
<i>Washington (cont'd)</i>			
	NEW JERSEY AMERICAN WATER COMPANY	214	Utilities - Water
	SCHENCK, PRICE, SMITH & KING	3,255	Legal services
	TREASURER - STATE OF NEW JERSEY	4,870	LSRP Annual Fee & Remediation Cost Review Fee
	VEOLIA ENVIRONMENTAL SERVICES	1,603	Waste handling, transport, disposal and treatment services
<i>Wildwood</i>			
	ATLANTIC CITY ELECTRIC	6,375	Utilities - Electric
	CITY OF WILDWOOD	12,451	Property tax payments
	EMILCOTT ASSOCIATES INCORPORATED	10,610	Perimeter air monitoring services
	ENVIRO-AIR TECHNOLOGIES, INC.	251,529	Remediation services
	GEI CONSULTANTS, INC.	34,646	Project management services
	HENRY & GERMANN PUBLIC AFFAIRS, LLC	11,527	Community relations and communications services
	LANGAN ENGINEERING & ENVIRONMENTAL	215,014	Environmental and engineering consulting services
	ONE CALL CONCEPTS INCORPORATED	39	Underground utility mark-out request
	SCHENCK, PRICE, SMITH & KING	3,321	Legal services
	TETRA TECH INCORPORATED	88	Environmental and engineering consulting services
	TREASURER - STATE OF NEW JERSEY	2,430	LSRP Annual Fee and other permitting costs

**JCP&L Manufactured Gas Plant Sites
Summary of Vendor Charges by Site**

January 1 through December 31

Project	Vendor Name	Total	Services Provided
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Wildwood (cont'd)

VEOLIA ENVIRONMENTAL SERVICES		12,728	Waste handling, transport, disposal and treatment services
WESTERLAND LANDSCAPING, INC.		5,117	Landscaping and property maintenance services

JCP&L Manufactured Gas Plant Financial Report

2019 Remediation Expenditures - Summary

SITE NAME	2019 INCREMENTAL	2019 BUDGET ESTIMATE	VARIANCE
Asbury Park	\$745,942	\$664,000	\$81,942
Belmar	385,470	482,000	(96,530)
Boonton	531,981	228,000	303,981
Cape May	1,468,857	881,000	587,857
Dover	549,157	668,000	(118,843)
Flemington	116,679	242,000	(125,321)
Lakewood	290,296	193,000	97,296
Lambertville/LaRoche	231,144	375,000	(143,856)
Long Branch	-	-	-
Newton I	245,220	907,000	(661,780)
Newton II	2,790,134	3,504,000	(713,866)
Ocean City	1,301,765	1,806,000	(504,235)
Phillipsburg	403,805	560,000	(156,195)
Red Bank	117,553	432,000	(314,447)
Sea Isle City	739,720	605,000	134,720
Toms River	-	-	-
Tuckerton	3,503	5,000	(1,497)
Washington	188,963	150,000	38,963
Wildwood	964,988	552,000	412,988
General Program	139,038	-	139,038
Total	\$11,214,216	\$12,254,000	(\$1,039,784)

Summary of Actual and Estimated Remediation Expenses

SITE NAME	PROJECT EXPENSE TO DATE	ADDITIONAL TO COMPLETE PROJECT	TOTAL PROJECT COST
Asbury Park	\$ 7,207,435	\$ 4,218,000	\$ 11,425,435
Belmar	15,732,420	10,930,000	26,662,420
Boonton	5,943,130	3,768,000	9,711,130
Cape May	30,878,176	6,200,000	37,078,176
Dover	26,812,784	10,208,000	37,020,784
Flemington	8,132,939	816,000	8,948,939
Lakewood	17,822,730	735,000	18,557,730
Lambertville/LaRochere	3,917,771	1,185,000	5,102,771
Long Branch	4,162,580	-	4,162,580
Newton I	2,772,762	3,598,000	6,370,762
Newton II	7,949,278	8,867,000	16,816,278
Ocean City	5,184,362	8,995,000	14,179,362
Phillipsburg	2,976,199	750,000	3,726,199
Red Bank	1,864,117	1,765,000	3,629,117
Sea Isle City	39,412,563	3,205,000	42,617,563
Toms River	2,245,527	-	2,245,527
Tuckerton	5,910,846	75,000	5,985,846
Washington	9,477,723	965,000	10,442,723
Wildwood	9,380,363	2,390,000	11,770,363
General Program	7,320,227	-	7,320,227
Total	\$ 215,103,931	\$ 68,670,000	\$ 283,773,931

Notes to Attachment F:

Project expenses include only incremental costs.

- Future cost estimates are revised at the mid-year and end-of-year periods.

In general, the future costs are projected using the following assumptions:

- Unimpeded access to sites.
- No litigation.
- Third party property purchased where feasible or institutional controls are granted at reasonable cost.
- Generally, the remedial technology to be deployed is limited excavation, capping, and pumping and treating the ground water.
- Operational period of treatment system, where deployed, is 15 years.
- In general, only limited soil "hot-spot" removal is necessary except where determined on a case-by-case basis that more significant soil removal may preclude the need for ground water treatment system, significantly reduce operational period of treatment and/or reduce long-term liability.
- Projections are generally not "engineering estimates" derived through a rigorous, dedicated application of established engineering precepts and cost factors, but rather are current "reasonable estimates" for the activity scenario. However, depending upon the status of the project, individual activities may have progressed to the point where such "engineering estimates" have been prepared by the Company's consultants. In such instances these "engineering estimates" would be used as part of the overall project cost projection.
- No future expenses have been established for General Program expenses. These expenses will be variable and dependent upon factors such as regulatory initiatives and other issues which could have a programmatic impact.
- In general, the projected costs are in current dollars and are not adjusted for inflation or present value.
- Remedial Investigation and Remedial Action implementation activities for the Red Bank site are "To Be Determined".

JERSEY CENTRAL POWER & LIGHT COMPANY
Calculation of Interest on Deferred Manufactured Gas Plant (MGP) Remediation Expenses Under/(Over) Recovery

Account #	Beginning January 2019	Ending January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	YTD 2019
182199	\$ (691,288.00)	\$ (911,582.70)	\$ (1,050,365.28)	\$ (1,124,782.20)	\$ (1,113,243.89)	\$ (1,148,039.97)	\$ (1,315,650.66)	\$ (1,778,566.85)	\$ (2,371,943.73)	\$ (2,773,708.60)	\$ (2,939,714.78)	\$ (2,755,358.38)	\$ (2,922,030.40)	
182318	30,443,754.10	30,761,943.99	31,815,089.25	32,149,786.23	32,662,152.32	32,875,682.82	33,810,219.20	34,317,356.95	34,791,675.59	35,585,276.25	36,639,752.72	11,767,676.57	10,665,864.47	
182319														
182336	48,444,874.44	47,548,597.44	46,652,320.44	45,756,043.44	44,887,569.44	44,087,032.44	43,286,495.44	42,485,958.44	41,685,421.44	40,884,884.44	40,084,347.44	66,000,821.44	64,873,911.44	
Total Dfd. Balances	\$ 78,197,340.54	\$ 77,398,958.73	\$ 77,417,044.41	\$ 76,781,047.47	\$ 76,436,477.87	\$ 75,814,675.29	\$ 75,781,063.98	\$ 75,024,748.54	\$ 74,105,153.30	\$ 73,696,452.09	\$ 73,784,385.38	\$ 75,013,139.63	\$ 72,617,745.51	
Tax Rate	28.11%	28.11%	28.11%	28.11%	28.11%	28.11%	28.11%	28.11%	28.11%	28.11%	28.11%	28.11%	28.11%	
Dfd Taxes	\$ 21,981,272.43	\$ 21,756,847.30	\$ 21,761,931.18	\$ 21,583,152.44	\$ 21,486,293.93	\$ 21,311,505.22	\$ 21,302,057.08	\$ 21,089,456.81	\$ 20,830,958.59	\$ 20,716,072.68	\$ 20,740,790.73	\$ 21,086,193.55	\$ 20,412,848.26	
Dfd Bal Excl Tax	\$ 56,216,068.11	\$ 55,642,111.43	\$ 55,655,113.23	\$ 55,197,895.03	\$ 54,950,183.94	\$ 54,503,170.07	\$ 54,479,006.90	\$ 53,935,291.73	\$ 53,274,194.71	\$ 52,980,379.41	\$ 53,043,594.65	\$ 53,926,946.08	\$ 52,204,897.25	
Avg.Dfd.Bal Excl Tax		\$ 55,929,089.77	\$ 55,648,612.33	\$ 55,426,504.13	\$ 55,074,039.49	\$ 54,726,677.01	\$ 54,491,088.49	\$ 54,207,149.32	\$ 53,604,743.22	\$ 53,127,287.06	\$ 53,011,987.03	\$ 53,485,270.37	\$ 53,065,921.67	
Interest Rate		3.16%	3.16%	3.16%	3.16%	3.16%	3.16%	3.16%	3.16%	3.16%	3.16%	3.16%	3.16%	
Interest Income		\$ 147,280.00	\$ 146,541.00	\$ 145,956.00	\$ 145,028.00	\$ 144,114.00	\$ 143,493.00	\$ 142,745.00	\$ 141,159.00	\$ 139,902.00	\$ 139,598.00	\$ 140,845.00	\$ 139,740.00	\$ 1,716,401.00

Attachment H

Current and Proposed Tariff Sheets

JERSEY CENTRAL POWER & LIGHT COMPANY

BPU No. 12 ELECTRIC - PART III

5th Rev. Sheet No. 46

Superseding 4th Rev. Sheet No. 46

**Rider RAC
Remediation Adjustment Clause**

APPLICABILITY: Rider RAC determines a Remediation Adjustment in accordance with the formula set forth below. The factor is included in the Societal Benefits Charge applicable to all KWH usage of any Full Service Customer or Delivery Service Customer.

The calculated RAC rate shall be prepared by the Company and filed with the BPU annually by the end of December with a requested effective date of June 1 of the subsequent year. Rider RAC provides for the recovery of manufactured gas plant remediation costs (net of insurance and other recoveries) over rolling seven year periods, including carrying costs on the unamortized balance. Carrying cost is calculated on a monthly basis at an interest rate equal to the rate on seven-year constant maturity Treasuries, as shown in the Federal Reserve Statistical Release on or closest to January 1 of each year, plus sixty basis points, compounded annually as of January 1 of each year.

CALCULATION OF THE REMEDIATION ADJUSTMENT CLAUSE FACTOR:

- 1) By using the following formula:

$$\text{RAC} = \text{Recoverable Cost} / \text{Sales}$$

- 2) Where the terms are defined as follows:

RAC = The Remediation Adjustment Clause factor in cents per KWH to be applied to all applicable retail KWH sales.

Recoverable Cost = Manufactured Gas Plant remediation expenses (net of insurance and other recoveries) amortized over rolling seven year periods. The cost includes carrying costs on any unamortized balance of remediation costs, net of associated deferred tax balance, at an annual interest rate stated above.

Sales = The Company's forecasted retail KWH sales.

- 3) Effective November 1, 2019, the RAC computation is as follows (\$ Millions):

$$\text{RAC} = \$16.434 / 20,263,615 \text{ MWH} = \$0.000811 \text{ per KWH} \\ (\$0.000865 \text{ per KWH including SUT})$$

Issued: **May 15, 2020**

Effective: **June 1, 2020**

Filed pursuant to **Secretary's Letter** of Board of Public Utilities
Docket No. ER19101332 dated May 8, 2020

Issued by James V. Fakult, President
300 Madison Avenue, Morristown, NJ 07962-1911

JERSEY CENTRAL POWER & LIGHT COMPANY

XX Rev. Sheet No. 46

BPU No. 12 ELECTRIC - PART III

Superseding XX Rev. Sheet No. 46

**Rider RAC
Remediation Adjustment Clause**

APPLICABILITY: Rider RAC determines a Remediation Adjustment in accordance with the formula set forth below. The factor is included in the Societal Benefits Charge applicable to all KWH usage of any Full Service Customer or Delivery Service Customer.

The calculated RAC rate shall be prepared by the Company and filed with the BPU annually by the end of December with a requested effective date of June 1 of the subsequent year. Rider RAC provides for the recovery of manufactured gas plant remediation costs (net of insurance and other recoveries) over rolling seven year periods, including carrying costs on the unamortized balance. Carrying cost is calculated on a monthly basis at an interest rate equal to the rate on seven-year constant maturity Treasuries, as shown in the Federal Reserve Statistical Release on or closest to January 1 of each year, plus sixty basis points, compounded annually as of January 1 of each year.

CALCULATION OF THE REMEDIATION ADJUSTMENT CLAUSE FACTOR:

- 1) By using the following formula:

$$\text{RAC} = \text{Recoverable Cost} / \text{Sales}$$

- 2) Where the terms are defined as follows:

RAC = The Remediation Adjustment Clause factor in cents per KWH to be applied to all applicable retail KWH sales.

Recoverable Cost = Manufactured Gas Plant remediation expenses (net of insurance and other recoveries) amortized over rolling seven year periods. The cost includes carrying costs on any unamortized balance of remediation costs, net of associated deferred tax balance, at an annual interest rate stated above.

Sales = The Company's forecasted retail KWH sales.

- 3) Effective **January 1, 2021**, the RAC computation is as follows (\$ Millions):

$$\text{RAC} = \frac{\$14.021}{19,906,396} \text{ MWH} = \$0.000704 \text{ per KWH}$$

(\$0.000751 per KWH including SUT)

Issued:

Effective:

Filed pursuant to Order of Board of Public Utilities
Docket No. dated

Issued by James V. Fakult, President
300 Madison Avenue, Morristown, NJ 07962-1911

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

1. The Company currently provides a vendor summary as Attachment D with its annual filing. This Attachment provides a summary of the expenditures incurred by vendor by site for the twelve-month RAC period. Hereafter, the Attachment will be supplemented with a general description of the services provided by each vendor. The data noting expenditures incurred through November are submitted to the Parties by December 31 of the filing period. The data are updated with the expenditures incurred through December and submitted to the Parties by January 31 of the year following the filing period.

Response:

See Attachment D.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

4. For each of the same three MGP sites, provide expense documentation for any contractor or supplier whose invoices for the RAC period exceed \$250,000 in aggregate. The expense documentation should include descriptions of services rendered, applicable invoices, and any tracking of invoiced charges vs. budgets. The expense detail need not include expense reports or time sheets, but it should include supporting documentation for any subcontractor and third party expenses totaling \$100,000 or more for the period.

Response:

Contractors or suppliers for the Cape May, Newton II and Ocean City MGP sites whose invoices for the 2019 RAC period exceeded \$250,000 in aggregate were as follows:

- **Cape May – Arcadis US, Inc.** invoices totaling \$849,770.94 for the 2019 RAC period are provided in **Attachment MFR-4a(1)**. These packages include the monthly invoice, budget tracking table and project schedule for the work being performed during the invoice period. Descriptions of the services performed are noted in these materials.
- **Cape May – Schenk, Price, Smith & King, LLP Escrow Account** funding totaling \$350,000.00 for the 2019 RAC period is provided in **Attachment MFR-4a(2)**. This information includes a description of the purpose of the funds placed in escrow and a copy of the escrow agreement.
- **Newton II – Brown and Caldwell** invoices totaling \$580,741.28 for the 2019 RAC period are provided in **Attachment MFR-4b(1)**. These packages include the monthly invoice with backup and a budget tracking table for the work being performed during the invoice period. Descriptions of the services performed are noted in these materials.
- **Newton II – Land Remediation, Inc.** invoices totaling \$508,421.56 for the 2019 RAC period are provided in **Attachment MFR-4b(2)**. These packages include the monthly invoice with backup and a budget tracking table for the work being performed during the invoice period. Descriptions of the services performed are noted in these materials.
- **Ocean City – Tetra Tech, Inc.** invoices totaling \$463,606.37 for the 2019 RAC period are provided in **Attachment MFR-4c(1)**. These packages include the monthly invoice with backup and a budget tracking table for the work being performed during the invoice period. Descriptions of the services performed are noted in these materials.
- **Ocean City – Panther Technologies, Inc.** invoices totaling \$427,942.10 for the 2019 RAC period are provided in **Attachment MFR-4c(2)**. These packages include the monthly invoice with backup and a budget tracking table for the work being performed during the invoice period. Descriptions of the services performed are noted in these materials.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-4a(1)

RECEIVED

FEB 8 2019

Environmental Department



INVOICE

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
ACH: 071000039 | Wire: 026009593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: February 4, 2019
Project No: MD000776.0002
Invoice No: 0954693
Payment Terms: 45 Days
Invoice Due Date: March 21, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from September 24, 2018 to December 30, 2018

Task 00001 PROJECT MANAGEMENT

Professional Personnel

	Hours	Rate	Amount
PROJECT DIRECTOR SAWYERS, DOUGLAS	2.80 ✓	184.00 ✓	515.20
PROJECT ADVISOR/SENIOR EXPERT CABALLERO, DAVID	4.00 ✓	162.00 ✓	648.00
PRINCIPAL SCIENTIST/ENGINEER II SCILLIERI, DARREN	47.00 ✓	138.00 ✓	6,486.00
PROJECT MANAGER/SENIOR ENGINEER II CIJCCUINI, JEREMY	82.00 ✓	127.00 ✓	10,414.00
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	3.00 ✓	115.00 ✓	345.00
PROJECT SCIENTIST/ENGINEER I MURRAY, JESSIE	2.00 ✓	102.00 ✓	204.00
SR. TECHNICIAN/SCIENTIST/ENGINEER I FAHEY, JAMES	1.00 ✓	61.00 ✓	61.00
CLERICAL/ADMINISTRATION/WORD PROCESSOR COLLINS, LISA	13.00 ✓	43.00 ✓	559.00
FULTON, AMANDA	12.70 ✓	43.00 ✓	546.10
SANTOS, LEONELA	.70 ✓	43.00 ✓	30.10
SLOCUM, CATARINA	2.30 ✓	43.00 ✓	98.90
Totals	170.50 ✓		19,907.30
Total Labor			19,907.30

Reimbursable Expenses

POSTAGE,SHIP,& MESSENGER	54.11 ✓
OUTSIDE REPRODUCTIONS	93.78 ✓
Total Reimbursables	147.89

Total this Task \$20,055.19 ✓

*77 2019
See page 6 for
Approval*

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0954693
Task	00005	CONSTRUCTION OVERSIGHT		
Professional Personnel				
		Hours	Rate	Amount
PROJECT ADVISOR/SENIOR EXPERT				
CABALLERO, DAVID		71.50 ✓	162.00	11,583.00
PRINCIPAL SCIENTIST/ENGINEER II				
SCILLIERI, DARREN		4.00 ✓	138.00	552.00
PRINCIPAL SCIENTIST/ENGINEER I				
PARTRIDGE, DOUGLAS		17.00 ✓	132.00	2,244.00
PROJECT MANAGER/SENIOR ENGINEER II				
CUCCUINI, JEREMY		124.50 ✓	127.00	15,811.50
SIDOTI, JOHN		1.00 -	127.00	127.00
PROJECT MANAGER/SENIOR ENGINEER I				
MASTROCOLA, KRISTA		210.50 -	115.00	24,207.50
PROJECT SCIENTIST/ENGINEER II				
STEINBERGER, GEORGE		102.50 ✓	109.00	11,172.50
PROJECT SCIENTIST/ENGINEER I				
BURDEN, JOSEPH		.50 -	102.00	51.00
MURRAY, JESSIE		76.70 -	102.00	7,823.40
STAFF SCIENTIST/ENGINEER I				
BANDA, MADEEM		23.00 -	90.00	2,070.00
HAGAN, MARCUS		190.00 -	90.00	17,100.00
TRACY, JONATHAN		14.50 -	90.00	1,305.00
ULM, ETHAN		71.00 ✓	90.00	6,390.00
SCIENTIST/ENGINEER II				
KANE, RALEIGH		17.50 ✓	71.00	1,242.50
NOONAN, ROBERT		19.00 ✓	71.00	1,349.00
SENIOR DRAFTSPERSON				
DAVIS, KATHI		.50 -	65.00	32.50
STOWELL, GERALD		.70 ✓	65.00	45.50
WASILEWSKI, MACIEJ		20.60 ✓	65.00	1,339.00
CLERICAL/ADMINISTRATION/WORD PROCESSOR				
IRIZARRY, ALEXCIA		.20 -	43.00	8.60
SLOCUM, CATARINA		.10 -	43.00	4.30
		Totals		
		965.30		104,458.30
		Total Labor		104,458.30
Consultants				
SUB COSTS - LAB SERVICES				
10/21/2018	VERITECH [HAMPTON-CLARKE]		160.50 ✓	
10/21/2018	VERITECH [HAMPTON-CLARKE]		1,119.22 ✓	
11/12/2018	VERITECH [HAMPTON-CLARKE]		980.66 ✓	
11/12/2018	VERITECH [HAMPTON-CLARKE]		1,119.22 ✓	
	Total Consultants		3,379.60 ✓	3,379.60
Reimbursable Expenses				
	CAR RENTAL		1,358.90 ✓	
	TOLLS,PARKING,TRANSPORT,GAS		1,222.69 ✓	
	LODGING AND APART RENTAL		3,615.49 ✓	

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0954693
MEALS			1,143.10 ✓	
PER DIEM			13.08 ✓	
TELEPHONE			56.51 ✓	
POSTAGE,SHIP,& MESSENGER			69.06 ✓	
FIELD EXPENSES			44.52 ✓	
REIMB EMPLOYEE MILEAGE			2,621.46 ✓	
Total Reimbursables			10,144.81 ✓	10,144.81

Unit Billing

Field Truck

495.00 ✓

Total this Task

\$118,477.71 ✓

Task 00006 REMEDIAL ACTION REPORT
Professional Personnel

	Hours	Rate	Amount
PROJECT ADVISOR/SENIOR EXPERT CABALLERO, DAVID	2.00 ✓	162.00	324.00
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	7.00 ✓	115.00	805.00
STAFF SCIENTIST/ENGINEER I BANDA, NADEEM	12.00 ✓	90.00 ✓	1,080.00
Totals	21.00 ✓		2,209.00
Total Labor			2,209.00
Total this Task			\$2,209.00 ✓

Task 00009 O&M
Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER II SCILLIERI, DARREN	6.50 ✓	138.00	897.00
PRINCIPAL SCIENTIST/ENGINEER I BOWE, LISA	3.80 ✓	132.00	501.60
FULLER, ANDREW	115.00 ✓	132.00	15,180.00
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	32.00 ✓	127.00	4,064.00
PROJECT MANAGER/SENIOR ENGINEER I JAMISON, CHRISTOPHER	40.50 ✓	115.00	4,657.50
PROJECT SCIENTIST/ENGINEER II KALAPATI, RAGA	11.00 ✓	109.00	1,199.00
SANCHEZ, ADRIANA	88.50 ✓	109.00	9,646.50
PROJECT SCIENTIST/ENGINEER I ERICKSON, KEVIN	8.90 ✓	102.00	907.80
STAFF SCIENTIST/ENGINEER I CATCHPOLE, DANIEL	.80 ✓	90.00	72.00
JACOBSON, ALEXANDER	49.00 ✓	90.00	4,410.00
MCCONNELL, KEITH	106.90 ✓	90.00	9,621.00

ADD →

SANCHEZ, ADRIANA

20.00 109.00 2,180.00 - FROM TASK 15

Project	MDD00776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0954693
---------	---------------	--------------------------------	---------	---------

SCIENTIST/ENGINEER II				
ONEILL, PAUL	3.20	71.00	227.20	
SR. TECHNICIAN/SCIENTIST/ENGINEER I				
FOOS, PATRICK	12.00	61.00	732.00	
SENIOR DRAFTSPERSON				
SANCHEZ, ADRIAN	1.50	65.00	97.50	
Totals	479.60		52,213.10	
Total Labor			2,180.00	

$52,213.10$
 $+ 2,180.00$
54,393.10 ✓
~~52,213.10~~
~~54,393.10~~ ✓

Consultants

SUBCONTRACTOR COSTS			
10/10/2018	ACT ELECTRICAL CONTRACTING LLC		2,829.08
10/15/2018	ACT ELECTRICAL CONTRACTING LLC		668.75
SUBCONTRACTOR COSTS			
11/19/2018	TIGG CORPORATION (EPAY)		9,202.00
SUB COSTS - LAB SERVICES			
10/17/2018	VERITECH [HAMPTON-CLARKE]		1,748.11
10/17/2018	VERITECH [HAMPTON-CLARKE]		654.84
11/12/2018	VERITECH [HAMPTON-CLARKE]		1,748.11
11/18/2018	VERITECH [HAMPTON-CLARKE]		469.73
11/27/2018	VERITECH [HAMPTON-CLARKE]		1,748.11
12/16/2018	VERITECH [HAMPTON-CLARKE]		1,748.11
Total Consultants			20,816.84

Reimbursable Expenses

CAR RENTAL		791.63	
TOLLS, PARKING, TRANSPORT, GAS		588.20	
COMPANY VEHICLE EXPENSE, GAS		21.12	
LODGING AND APART RENTAL		1,011.42	
MEALS		172.56	
TELEPHONE		89.25	
POSTAGE, SHIP, & MESSENGER		109.62	
FIELD SERVICES		8,600.00	
EQUIPMENT RENTAL		774.03	
FIELD EXPENSES		1,048.60	
MATERIAL & EQUIPMENT		1,296.90	
REIMB EMPLOYEE MILEAGE		136.25	
Total Reimbursables			14,639.58

Unit Billing

Field Truck

247.50 ✓
 Total this Task ~~87,817.02~~ 90,097.02 ✓

Task	00010	TECHNICAL SUPPORT
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Project MD000776.0002 JCPL CAPE MAY MANUFACTURED GAS Invoice 0954693

Professional Personnel

	Hours	Rate	Amount
PROJECT ADVISOR/SENIOR EXPERT			
CABALLERO, DAVID	4.00 ✓	162.00	648.00
PROJECT MANAGER/SENIOR ENGINEER II			
CUCCUINI, JEREMY	2.50 ✓	127.00	317.50
SENIOR DRAFTSPERSON			
DAVIS, KATHI	6.00 ✓	65.00	390.00
Totals	12.50		1,355.50
Total Labor			1,355.50
Total this Task			\$1,355.50 ✓

Task 00015 GW Monitoring & Reporting

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER II			
KLADIAS, MICHAEL	4.00 ✓	138.00	552.00
PROJECT MANAGER/SENIOR ENGINEER II			
CUCCUINI, JEREMY	9.00 ✓	127.00	1,143.00
PROJECT SCIENTIST/ENGINEER II			
RAPP, JAYME	.50 ✓	109.00	54.50
SANCHEZ, ADRIANA	20.00	109.00	2,180.00
WANG, ZHAOWEI	9.50 ✓	109.00	1,035.50
STAFF SCIENTIST/ENGINEER I			
HILINSKI, MATT	79.00 ✓	90.00	7,110.00
JACOBSON, ALEXANDER	22.00 ✓	90.00	1,980.00
TRACY, JONATHAN	.50 ✓	90.00	45.00
SCIENTIST/ENGINEER II			
KANE, RALEIGH	102.30 ✓	71.00	7,263.30
SR. TECHNICIAN/SCIENTIST/ENGINEER I			
FOOS, PATRICK	1.50 ✓	61.00	91.50
MANSILLA, MAXWELL	79.80 ✓	61.00	4,867.80
SENIOR DRAFTSPERSON			
SANCHEZ, ADRIAN	3.30 ✓	65.00	214.50
Totals	331.40		26,537.10
Total Labor			26,537.10

*Move to task
00009-07M*

*- 2180 -
24,357.10 ✓*

*26,537.10
24,357.10 ✓*

Consultants

SUB COSTS - LAB SERVICES			
10/21/2018	VERITECH [HAMPTON-CLARKE]		8,446.58 ✓
10/26/2018	VERITECH [HAMPTON-CLARKE]		7,796.02 ✓
10/31/2018	VERITECH [HAMPTON-CLARKE]		3,652.98 ✓
12/16/2018	VERITECH [HAMPTON-CLARKE]		667.68 ✓
Total Consultants			20,563.26

Reimbursable Expenses

CAR RENTAL	911.21 ✓
TOLLS, PARKING, TRANSPORT, GAS	283.55 ✓
COMPANY VEHICLE EXPENSE, GAS	111.74 ✓

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0954693
	LODGING AND APART RENTAL		1,966.79 ✓	
	MEALS		516.32 ✓	
	EQUIPMENT RENTAL		4,282.65 ✓	
	FIELD EXPENSES		56.33 ✓	
	REIMB EMPLOYEE MILEAGE		152.60 ✓	
	Total Reimbursables		8,281.19	8,281.19
			Total this Task	\$55,381.55 53,201.55 ✓

Task 00016 Restoration Monitoring & Mgmt.

Professional Personnel

	Hours	Rate	Amount	
PRINCIPAL SCIENTIST/ENGINEER II SCILLIERI, DARREN	1.00 ✓	138.00	138.00	
PRINCIPAL SCIENTIST/ENGINEER I PARTRIDGE, DOUGLAS	9.50 ✓	132.00	1,254.00	
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	4.50 ✓	127.00	571.50	
PROJECT MANAGER/SENIOR ENGINEER I MARKIEWICZ, GARY	19.00 ✓	115.00	2,185.00	
PROJECT SCIENTIST/ENGINEER II RAPP, JAYME	2.00 ✓	109.00	218.00	
PROJECT SCIENTIST/ENGINEER I MURRAY, JESSIE	64.50 ✓	102.00	6,579.00	
STAFF SCIENTIST/ENGINEER I MILLER-DANNELONGUE, GWENDOLINE	6.00 ✓	90.00	540.00	
SENIOR DRAFTSPERSON WASILEWSKI, MACIEJ	5.10 ✓	65.00	331.50	
Totals	111.60		11,817.00	
Total Labor				11,817.00

Reimbursable Expenses

CAR RENTAL	104.17 ✓		
TOLLS, PARKING, TRANSPORT, GAS	147.67 ✓		
MEALS	38.02 ✓		
EQUIPMENT RENTAL	125.61 ✓		
FIELD EXPENSES	110.59		
REIMB EMPLOYEE MILEAGE	89.38 ✓		
Total Reimbursables	615.44		615.44 ✓

Unit Billing

AquaNeat			
CideKick II			
Field Truck			
Sprayer, Backpack			125.67 ✓
	Total this Task		\$12,558.11 ✓

Total this Invoice \$297,954.08 ✓

*OK ATTS
C29632
2/25/19
See Approval
Stamp Next Page →
Page 6*

- 0954693-1 Line Item 1 - Project Management \$ 20,055.19 *7/2-2-25-19*
SES 1117766607 FAX 38046067

- 0954693-2 Line Item 5 - Construction Oversight \$ 118,477.71 *7/2-2-25-19*
SES 1117766625 FAX 38046076

- 0954693-3 Line Item 6 - Remedial Action Report \$ 2,209.00 *7/2-2-25-19*
SES 1117766661 FAX 38046082

- 0954693-4 Line Item 9 - OM&M \$ 90,097.02 *7/2-2-25-19*
SES 1117766671 FAX 38046084

- 0954693-5 Line Item 10 - Technical Support \$ 1,355.50 *7/2-2-25-19*
SES 1117766672 FAX 38046089

- 0954693-6 Line Item 15 - Groundwater Monitoring \$ 53,201.55 *7/2-2-25-19*
And Reporting
SES 1117766685 FAX 38046092

- 0954693-7 Line Item 16 - Restoration Monitoring \$ 12,558.11 *7/2-2-25-19*
And Reporting
SES 1117766859 FAX 38046095

APPROVAL STAMP	
P.O. NO. <u>5511471B</u>	INV. NO. <u>0954693</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO. <u>197</u>

2-25-19



RECEIVED
FEB 8 2019
Environmental Department

Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – October - December 2018
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 24 September 2018 and ending 30 December 2018. There are also incurred charges associated with the Task 5 Oversight of Phase 3 activities for the May and June periods, as well as incurred office-based engineering support that date back to May 2018 included with this pending invoice and report, which were presented in the 11 January 2019 Arcadis Change Order request. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
30 January 2019

Contact:
Jeremy Cucchini

Phone:
609 860 0590

Email:
jeremy.cucchini@arcadis-us.com

Section 1: Work Performed

Our ref:
MD000776.0002

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, client updates and staff management.
- Field oversight and office-based engineering support of Phase 3 remedial action efforts through June 2018.
- Oversight of Phase 2 restoration activities within the uplands area (June 2018).
- Lot 40 drainage evaluations, alternatives analysis and re-design of the surface grading features of the adjacent access path.
- Office-based engineering support to review final as-built surface conditions within the Phase 2 and Phase 3 remedial action areas including: surface elevation overlay of pre-construction vs final as-built conditions, cut/fill volume analysis of areas in excess or below targeted elevations, follow-up communications with JCP&L project management and the remediation contractor (Viasant, LLC), and development of a grading plan to adjust elevations in areas surface grading did not



Ms. Anna Sullivan
30 January 2019

meet the initial survey tolerance, or where plant survivability was less than 25%.

- Field oversight and office-based engineering support of all final grading activities within the Phase 2, Phase 3 and Lot 40 areas. Process laboratory subcontractor charges for sampling of cut/fill materials. Complete associated construction completion reporting for NJDEP submission concurrent with the Year-1 restoration monitoring report.
- Restoration monitoring and evaluation of the Phase 2 and Phase 3 area, and oversight of the Phase 2 upland area warranty plantings (October 2018).
- Continued development of the Remedial Action Report (RAR), detailing Phase 1, Phase 2 and Phase 3 remedial action activities.
- Perform routine O&M activities on the groundwater treatment system including: perform monthly site inspection, OM&M checklist items and maintenance of system components, evaluate monthly pumping and extraction performance, perform the required monthly permit-by-rule (PBR) sampling and associated data management of sampling results, continued evaluation of system performance associated with the aeration pump shut down, associated evaluation of additional iron filtration options (design implementation scope and costs), sludge disposal coordination, carbon backwashing and change-outs, generation of the September thru November monthly system performance dashboard updates, coordination and process laboratory subcontractor invoicing for monthly PBR sampling, carbon changeout replacement, and rental equipment charges.
- Charges to the OM&M (Task 9) also include non-routine items including: subcontractor charges associated with additional waste characterization sampling for sludge disposal within the equalization tank (\$654.84), electrical subcontractor charges to complete system upgrades (surge protector/sump disconnect Nema 4 protection) in October 2018 (\$2,829.08), as well as subsequent charges associated with the inspection and VFD electrical testing of transfer pump 201 (\$688.75). In addition, out of scope charges include materials charges associated with replacement costs for transfer pump TP-201 (\$883.10) and replacement VFD (\$766.62). As such, the total costs for out-of-scope subcontractor and materials is **\$5,802.39**.
- Additionally, charges to the OM&M (Task 9) also include 21.5 hours of out-of-scope office-based engineering support associated with finalization and receipt of the air permitting associated with the equalization tank vent discharge, 14.5 hours of out-of-scope engineering support and manufacturer contacts to troubleshoot decreased flowrates and lagging performance at transfer pump 201 (October and early November 2018), an additional 12.3 hours to cover a field visit in November



Ms. Anna Sullivan
30 January 2019

2018 to clean, inspect and diagnose transfer pump 201 with a licensed electrician, and 4 additional hours of out of scope office-based engineering support in mid November 2018 to coordinate transfer pump 201 replacement, and 37 hours for repair preparation and field time for replacement of the transfer pump 201, line cleanouts, leak testing and system re-start. Accordingly, the total costs for out-of-scope labor charges total 85.3 hours for the period of September-December 2018, totaling \$11,225. Total Task 9 out-of-scope charges for this period are \$17,027.39.

- Technical Support tasks including attending a meeting with JCP&L Project Management and representatives of the City of Cape May and their planning consultant (Mott MacDonald) to discuss future property redevelopment options, as well as review and response to an NJDEP inquiry regarding the number of Areas of Concern (AOC) identified on the Case Inventory Document (CID), as well as subsequent edits to the CID and follow-up.
- Completion of the Q3 and Q4 2018 groundwater sampling events and field expenses. Process rental equipment charges and laboratory subcontractor invoicing for the Q3 event. Data management and reporting. Address JCP&L Project Management comments to the First Semi-Annual Remedial Progress Report and subsequent edits.
- Review Q1/Q2 2018 groundwater sampling results with project Licensed Site Remediation Professional (LSRP) to review potential data gaps and well replacement options.
- Completion of Task 16 Restoration and Management including seasonal site inspection and assessments of plant survivability per wetland permit requirements, coordination and perform a site inspection with the planting subcontractor (Enviroscapes) regarding alternative species within the Phase 2 and Phase 3 wetland areas, completion of the final invasive species management (spraying) event, and completion and submittal of the Year-1 restoration monitoring report.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.



Ms. Anna Sullivan
30 January 2019

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

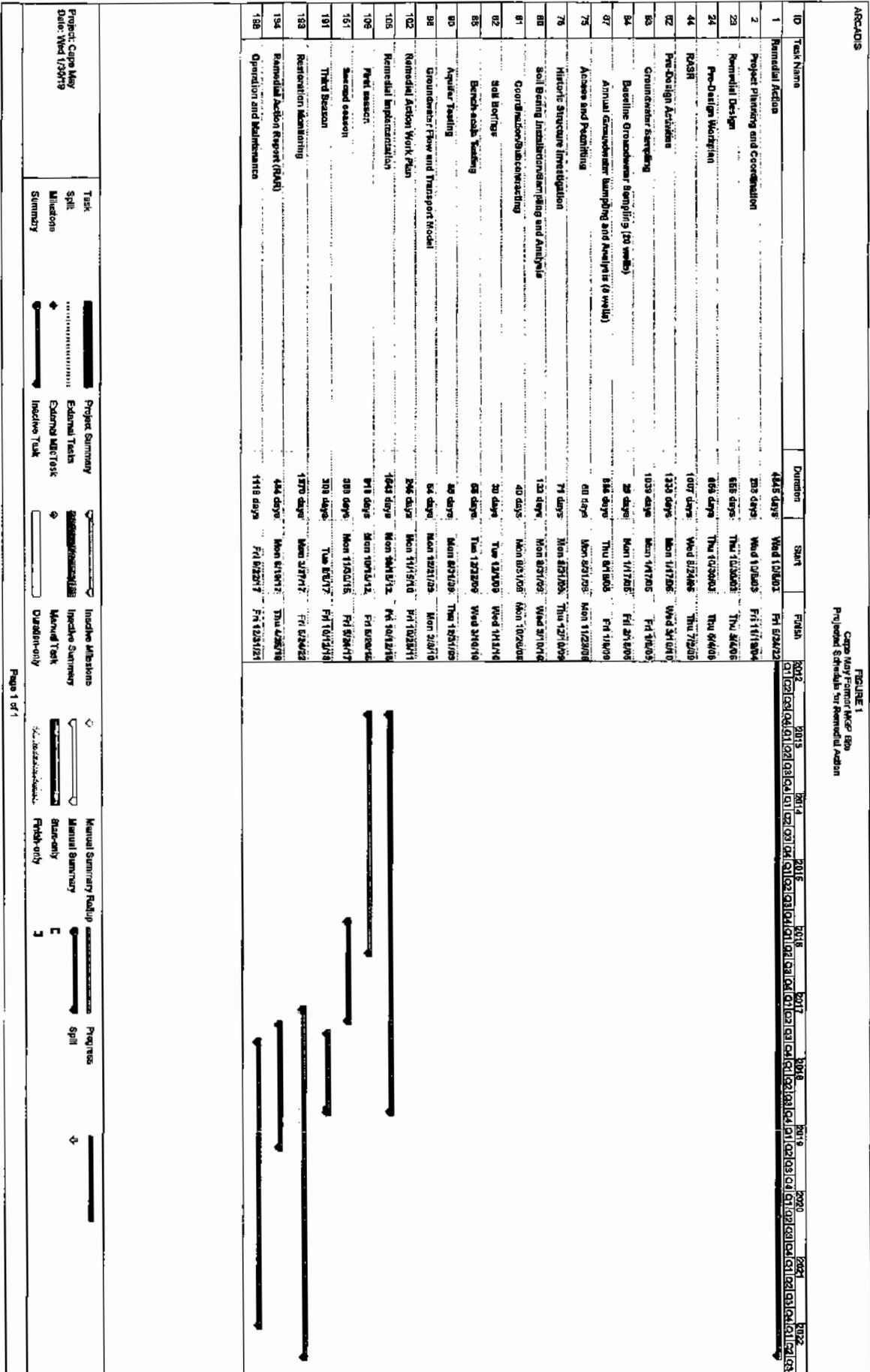
Sincerely,
Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cuccuini'.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

FIGURE 1
Cape May Project MFR 820
Proposed Schedule for Remedial Action



Project Cape May
Date: Wed 1/24/01

Task
Spill
Missions
Summary

Project Summary
External Tasks
External Milestone
Inchove Task

Inchove Milestones
Inchove Summary
Manual Task
Duration only

Manual Summary Rollup
Manual Summary
Share-only
Finish-only

Progress
Spill

RECEIVED

FEB 8 2019

Environmental Department

INVOICE



Design & Consultancy
for natural and
built assets

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: 00FAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: February 5, 2019
Project No: MD000776.0002
Invoice No: 0954757
Payment Terms: 45 Days
Invoice Due Date: March 22, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from September 24, 2018 to December 30, 2018

Task 00011 LSRP SERVICES

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER I			
THOMPSON, DAVID	43.50	132.00	5,742.00
Totals	43.50		5,742.00
Total Labor			5,742.00
		Total this Task	\$5,742.00
		Total this Invoice	\$5,742.00

*JAATS
C29632
2-25-19*

SES 1117766598 fax 38046.064

Line Item 11 - LSRP Services

APPROVAL STAMP	
PO. NO. <u>55114718</u>	INV. NO. <u>0954757</u>
COMPANY CODE.: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

2-25-19

Project MD000776.0002 JCPL CAPE MAY MANUFACTURED GAS Invoice 0954757

Billing Backup

Tuesday, February 5, 2019

ARCADIS INC.

Invoice 0954757 Dated 2/5/2019

6:13:15 AM

Task 00011 LSRP SERVICES

Professional Personnel

			Hours	Rate	Amount	
	PRINCIPAL SCIENTIST/ENGINEER I					
14254	THOMPSON, DAVID	10/7/2018	1.00	132.00	132.00	
	Weekly status Status and follow up					
14254	THOMPSON, DAVID	10/21/2018	2.50	132.00	330.00	
	Weekly status call. Respond to NJDEP inquiry regarding the SSJ RAO. Discuss number of AOCs					
14254	THOMPSON, DAVID	10/21/2018	3.50	132.00	462.00	
	Discuss and respond to NJDEP inquiry regarding the SSJ Property RAO and potential amendment					
14254	THOMPSON, DAVID	10/28/2018	.50	132.00	66.00	
	Weekly status call					
14254	THOMPSON, DAVID	10/28/2018	.50	132.00	66.00	
	ARRCS revisions and requirements					
14254	THOMPSON, DAVID	11/4/2018	2.50	132.00	330.00	
	Develop potential alternatives to respond to NJDEP request. Discuss approach for response to NJDEP. Weekly status call					
14254	THOMPSON, DAVID	11/4/2018	10.00	132.00	1,320.00	
	Historical AOC review					
14254	THOMPSON, DAVID	11/11/2018	2.50	132.00	330.00	
	Identify potential historical AOCs.					
14254	THOMPSON, DAVID	11/18/2018	6.50	132.00	858.00	
	AOC List					
14254	THOMPSON, DAVID	11/18/2018	2.50	132.00	330.00	
	Discuss AOC List status. Identify historical AOCs					
14254	THOMPSON, DAVID	11/18/2018	3.00	132.00	396.00	
	Weekly status call and follow-up. AOC List					
14254	THOMPSON, DAVID	12/2/2018	2.50	132.00	330.00	
	Cape May AOC summary for ARF calculation					
14254	THOMPSON, DAVID	12/2/2018	3.00	132.00	396.00	
	Finalize AOC summary and forward to NJDEP					
14254	THOMPSON, DAVID	12/9/2018	2.50	132.00	330.00	
	Weekly status call. Review response from NJDEP. Update ARF Form					
14254	THOMPSON, DAVID	12/16/2018	.50	132.00	66.00	
	Weekly Status call					
	Totals		43.50		5,742.00	
	Total Labor					5,742.00
				Total this Task		\$5,742.00
				Total this Project		\$5,742.00
				Total this Report		\$5,742.00



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FEB 8 2019
Environmental Department

Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 690.880.0590
Fax 609.880.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – October-December 2018
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning on 24 September 2018 and ending 30 December 2018. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
January 30, 2019

Contact:
Jeremy Cuccuini

Phone:
609 860 0590

Email:
jeremy.cuccuini@arcadis-us.com

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls and discussions.
- Discuss and respond to NJDEP inquiry regarding former SSJ Property RAO.
- Review NJDEP inquiry regarding the number of Areas of Concern (AOCs) listed in site Case Inventory Document (CID). Review historical AOCs to develop a response. Share findings with JCP&L Project Management, revise CID to reflect current AOC listings and respond to NJDEP accordingly.

Our ref:
MD000776.0002



Ms. Anna Sullivan
30 January 2019

If you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cuccuini', written over a faint horizontal line.

Jeremy Cuccuini
Certified Project Manager

Copies:

J. McLaughlin, Arcadis
D. Scillieri, Arcadis

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INVOICE

MAR 04 2019

Environmental Department

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS3N
Remittance info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: February 27, 2019
Project No: MDD00776.0002
Invoice No: 0959321
Payment Terms: 45 Days
Invoice Due Date: April 13, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from December 31, 2018 to January 27, 2019

Task 00001 PROJECT MANAGEMENT
Professional Personnel

	Hours	Rate	Amount
PROJECT ADVISOR/SENIOR EXPERT			
CABALLERO, DAVID	1.00 ✓	162.00	162.00
PRINCIPAL SCIENTIST/ENGINEER II			
SCILLIERI, DARREN	6.50 ✓	138.00	897.00
PROJECT MANAGER/SENIOR ENGINEER II			
CUCCUINI, JEREMY	12.00 ✓	127.00	1,524.00
CLERICAL/ADMINISTRATION/WORD PROCESSOR			
COLLINS, USA	2.00 ✓	43.00	86.00
FULTON, AMANDA	.10 ✓	43.00	4.30
Totals	21.60		2,673.30
Total Labor			2,673.30
Total this Task			\$2,673.30

Task 00005 CONSTRUCTION OVERSIGHT
Professional Personnel

	Hours	Rate	Amount
CLERICAL/ADMINISTRATION/WORD PROCESSOR			
SLOCUM, CATARINA	.70 ✓	43.00	30.10
Totals	.70		30.10
Total Labor			30.10
Total this Task			\$30.10

Task 00006 REMEDIAL ACTION REPORT

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0959321
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Professional Personnel

	Hours	Rate	Amount	
PROJECT SCIENTIST/ENGINEER I				
MURRAY, JESSIE	.80 ✓	102.00	81.60	
STAFF SCIENTIST/ENGINEER I				
BANDA, NADEEM	63.00 ✓	90.00	5,670.00	
SCIENTIST/ENGINEER II				
NOONAN, ROBERT	1.00 ✓	71.00	71.00	
SENIOR DRAFTSPERSON				
SANCHEZ, ADRIAN	3.00 ✓	65.00	195.00	
STOWELL, GERALD	.40 ✓	65.00	26.00	
Totals	68.20		6,043.60	
Total Labor				6,043.60
		Total this Task		\$6,043.60

Task	00009	O&M
------	-------	-----

Professional Personnel

	Hours	Rate	Amount	
PROJECT ADVISOR/SENIOR EXPERT				
CABALLERO, DAVID	4.00 ✓	162.00	648.00	
PRINCIPAL SCIENTIST/ENGINEER II				
SCILLIERI, DARREN	1.00 ✓	138.00	138.00	
PRINCIPAL SCIENTIST/ENGINEER I				
FULLER, ANDREW	35.00 ✓	132.00	4,620.00	
PROJECT MANAGER/SENIOR ENGINEER II				
CUCCUINI, JEREMY	4.00 ✓	127.00	508.00	
PROJECT SCIENTIST/ENGINEER II				
SANCHEZ, ADRIANA	37.00 ✓	109.00	4,033.00	
PROJECT SCIENTIST/ENGINEER I				
ERICKSON, KEVIN	.60 ✓	102.00	61.20	
STAFF SCIENTIST/ENGINEER I				
BITTER, RALPH	21.80 ✓	90.00	1,962.00	
JACOBSON, ALEXANDER	21.00 ✓	90.00	1,890.00	
MCCONNELL, KEITH	16.50 ✓	90.00	1,485.00	
SR. TECHNICIAN/SCIENTIST/ENGINEER I				
FOOS, PATRICK	2.50 ✓	61.00	152.50	
FIELD SUPERVISOR				
HERRERA GARCIA, CAROLINA	2.50 ✓	79.00	197.50	
Totals	145.90		15,695.20	
Total Labor				15,695.20

Consultants

SUB COSTS - LAB SERVICES			
1/27/2019	VERITECH (HAMPTON-CLARKE)		1,768.18 ✓
1/27/2019	VERITECH (HAMPTON-CLARKE)		706.20 ✓
	Total Consultants		2,474.38

Reimbursable Expenses

CAR RENTAL	152.38 ✓	<i>Need one receipt</i>
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Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0959321
TOLLS,PARKING,TRANSPORT,GAS			136.90 ✓	
COMPANY VEHICLE EXPENSE, GAS			35.33 ✓	
LODGING AND APART RENTAL			107.75 ✓	
MEALS			13.64 ✓	
TELEPHONE			89.67 ✓	
FIELD SERVICES			8,600.00 ✓	
EQUIPMENT RENTAL			183.38 ✓	
FIELD EXPENSES			4,381.52 ✓	
MATERIAL & EQUIPMENT			-5,125.00 ✓	
Total Reimbursables			8,575.57	8,575.57
			Total this Task	\$26,745.15

Task 00010 TECHNICAL SUPPORT

Professional Personnel

	Hours	Rate	Amount	
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	9.50 ✓	127.00	1,206.50	
Totals	9.50		1,206.50	
Total Labor				1,206.50

Reimbursable Expenses

OUTSIDE REPRODUCTIONS			83.12 ✓	
Total Reimbursables			83.12	83.12
			Total this Task	\$1,289.62

Task 00015 GW Monitoring & Reporting

Professional Personnel

	Hours	Rate	Amount	
PRINCIPAL SCIENTIST/ENGINEER II KLADIAS, MICHAEL	6.50 ✓	138.00	897.00	
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	.50 ✓	127.00	63.50	
PROJECT SCIENTIST/ENGINEER II WANG, ZHAOWEI	14.00 ✓	109.00	1,526.00	
STAFF SCIENTIST/ENGINEER I JACOBSON, ALEXANDER	2.00 ✓	90.00	180.00	
SCIENTIST/ENGINEER II KANE, RALEIGH	.20 ✓	71.00	14.20	
SR. TECHNICIAN/SCIENTIST/ENGINEER I FOOS, PATRICK	4.50 ✓	61.00	274.50	
SENIOR DRAFTSPERSON STOWELL, GERALD	4.80 ✓	65.00	312.00	
Totals	32.50		3,267.20	
Total Labor				3,267.20

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0959321
Consultants				
SUB COSTS - LAB SERVICES				
1/2/2019	VERITECH [HAMPTON-CLARKE]		3,101.93 ✓	
1/2/2019	VERITECH [HAMPTON-CLARKE]		6,214.03 ✓	
1/2/2019	VERITECH [HAMPTON-CLARKE]		5,329.67 ✓	
1/2/2019	VERITECH [HAMPTON-CLARKE]		2,832.29 ✓	
	Total Consultants		17,477.92 ✓	17,477.92
Reimbursable Expenses				
	EQUIPMENT RENTAL		2,065.96 ✓	
	Total Reimbursables		2,065.96	2,065.96
		Total this Task		\$22,811.08

Task	00016	Restoration Monitoring & Mgmt.			
Professional Personnel					
			Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II					
CUCCUINI, JEREMY			.50 ✓	127.00	63.50
PROJECT SCIENTIST/ENGINEER I					
MURRAY, JESSIE			2.40 ✓	102.00	244.80
Totals			2.90 ✓		308.30
	Total Labor				308.30
Reimbursable Expenses					
	POSTAGE, SHIP, & MESSENGER				14.69 ✓
	Total Reimbursables				14.69
		Total this Task			\$322.99
		Total this Invoice			\$59,915.84

*OTL AFS
029632
3/22/19
See attached
Statement
page →*

0959321-1	Line Item 1 - Project Management	\$ 2,673.30	OK JJ 3-27-19
SES 1117918048 fax 38042794			
0959321-2	Line Item 5 - Construction Oversight	\$ 30.10	OK JJ 3-27-19
SES 1117918052 fax 38042795			
0959321-3	Line Item 6 - Remedial Action Report	\$ 6,043.60	OK JJ 3-27-19
SES 1117918055 fax 38042798			
0959321-4	Line Item 9 - OM&M	\$ 26,745.15	OK JJ 3-27-19
SES 1117918064 fax 38042799			
0959321-5	Line Item 10 - Technical Support	\$ 1,289.62	OK JJ 3-27-19
SES 1117918073 fax 38042801			
0959321-6	Line Item 15 - Groundwater Monitoring And Reporting	\$ 22,811.08	OK JJ 3-27-19
SES 1117918119 fax 38042804			
0959321-7	Line Item 16 - Restoration Monitoring And Reporting	\$ 322.99	OK JJ 3-27-19
SES 1117918421 fax 38042805			

APPROVAL STAMP	
PO. NO. <u>55114718</u>	INV. NO. <u>0959321</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>5503002</u>	
ORDER: <u>3001018</u>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <u>JJ</u>	EMEND: <u>297</u>

3-27-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

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MAR 04 2019

Environmental Department

Subject:
Monthly Progress Report (MPR) – January 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 31 December 2018 and ending 27 January 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
27 February 2019

Contact:
Jeremy Cuccuini

Phone:
609 880 0590

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, client updates and staff management.
- Continued development of the Remedial Action Report (RAR), detailing Phase 1, Phase 2 and Phase 3 remedial action activities.
- Perform routine O&M activities on the groundwater treatment system including: perform monthly site inspection, OM&M checklist items and maintenance of system components, evaluate monthly pumping and extraction performance, perform the required monthly permit-by-rule (PBR) sampling and associated data management of sampling results, continued evaluation of system performance associated with the aeration pump shut down, associated evaluation of additional iron filtration options (design implementation scope and costs), carbon backwashing and change-outs, generation of the December 2018 monthly treatment system performance dashboard update, coordination and process laboratory subcontractor invoicing for monthly PBR sampling, carbon changeout replacement, and rental equipment charges.
- Charges to the OM&M (Task 9) also include non-routine items including: laboratory subcontractor charges associated with additional non-routine metals analysis within the groundwater treatment system process chain (\$706) and an additional 6 hours of office-based engineering support for data management and evaluation of



Ms. Anna Sullivan
27 February 2019

results to determine potential system enhancements (e.g. filtration) to address metals fouling (\$792). In addition, out of scope charges include an additional 9 hours of office-based engineering support in January 2019 to evaluate the cause of pre-mature contaminant mass carbon breakthrough (\$1,188), including vendor discussions, coordination with the laboratory subcontractor for full VOC and SVOC system sampling results and subsequent evaluation. Accordingly, the total costs for out-of-scope OM&M charges for this period are \$2,686.

- Technical Support items including review and response to an NJDEP inquiry regarding the number of Areas of Concern (AOC) identified on the Case Inventory Document (CID), as well as subsequent edits to the CID, LSRP discussions and follow-up.
- Process rental equipment charges and laboratory subcontractor invoicing for the 4Q 2018 groundwater monitoring event. Data management and reporting. Address JCP&L Project Management comments to the First Semi-Annual Remedial Progress Report and subsequent edits.
- Task 16 Restoration and Management including development of 2019 restoration schedule for submittal to JCP&L Project Management.
- The MPR for September-December 2018 was submitted on 30 January 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in



Ms. Anna Sullivan
27 February 2019

each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cucchini', written over a horizontal line.

Jeremy Cucchini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

ARCADIS
Cups May Former MGP Site
Remedial Schedule for Remedial Action

ID	Task Name	Duration	Start	Finish	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1	Remedial Action	4445 days	Wed 10/20/10	Fri 5/24/27	01	02	03	04	05	06	07	08	09	10	11
2	Project Planning and Coordination	283 days	Wed 10/20/10	Fri 1/11/10											
23	Remedial Design	680 days	Thu 10/20/10	Thu 5/10/16											
24	Pre-Design Workshop	680 days	Thu 10/20/10	Thu 5/10/16											
44	NAAR	1907 days	Wed 02/24/05	Thu 7/20/06											
42	Pre-Design Activities	1339 days	Mon 01/10/05	Wed 2/10/10											
53	Groundwater Sampling	1008 days	Mon 1/17/06	Fri 1/18/09											
64	Baseline Groundwater Sampling (20 wells)	30 days	Mon 1/17/06	Fri 2/1/06											
67	Annual Groundwater Sampling and Analytic (5 wells)	816 days	Thu 01/19/06	Fri 1/20/09											
75	Access and Permitting	60 days	Mon 03/19/06	Mon 11/23/06											
76	Historic Structure Investigation	71 days	Mon 03/19/06	Thu 12/18/06											
80	Soil Borings Installation/Drilling and Analysis	133 days	Mon 04/10/06	Wed 01/10/08											
81	Coordination/Outreach	40 days	Mon 06/19/06	Mon 10/09/06											
82	Soil Borings	30 days	Thu 1/18/06	Mon 1/13/08											
88	Batch-scale Testing	60 days	Tue 10/23/06	Wed 01/03/08											
89	Aquifer Testing	68 days	Mon 02/19/06	Thu 12/28/06											
88	Groundwater Flow and Transport Model	64 days	Mon 10/23/06	Mon 2/19/08											
102	Remedial Action Work Plan	246 days	Mon 1/16/06	Fri 10/20/11											
108	Remedial Implementation	1443 days	Mon 10/16/06	Fri 10/12/16											
109	Finalization	918 days	Mon 10/16/06	Fri 02/01/15											
157	850000 season	380 days	Mon 11/20/16	Fri 02/24/17											
161	Third Season	360 days	Tue 04/17/17	Fri 10/18/18											
183	Remedial Monitoring	1376 days	Mon 02/17/17	Fri 02/24/22											
184	Remedial Action Report (2021)	464 days	Mon 01/16/17	Thu 02/23/18											
188	Operation and Maintenance	1116 days	Fri 02/23/17	Fri 12/01/21											

Project: Cups May
Date: 1/20/15

Task Legend:
 - **Project Summary**: [Bar with arrow]
 - **External Task**: [Bar with arrow]
 - **External Milestone**: [Bar with diamond]
 - **Inactive Task**: [Bar with slash]
 - **Inactive Milestone**: [Bar with slash and diamond]
 - **Manual Summary Rollup**: [Bar with arrow]
 - **Manual Summary**: [Bar with arrow]
 - **Self-only**: [Bar with arrow]
 - **Rollup-only**: [Bar with arrow]

Page 7 of 11

Table 1
Budget Status for Site Remediation through 27 January 2018
Cape May Former MCP Site
Cape May, New Jersey
Purchase Order No. 55114718

TASK NO.	TASK DESCRIPTION	ORIGINAL TASK BUDGET	CURRENT TASK BUDGET	CURRENT INVOICE AMOUNT	OUT OF SCOPE WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST CO	PREVIOUS AMOUNT INVOICED	CUMULATIVE AMOUNT INVOICED	BUDGET BALANCE	PROJECT SCOPE % COMPLETE	FINANCIAL % COMPLETE
1	Robot Management Fee	6,320	180,942	2,679	0	0	187,471	194,144	5,708	NA	97%
2	Remedial Action Work Plan	143,624	648,289	0	0	0	548,218	548,318	0	100%	100%
3	Removal and Assessment	100,000	148,827	0	0	0	108,440	108,240	527	100%	100%
4	Remedial Action	90,000	340,410	0	0	0	340,244	340,244	378	99%	100%
5	Remedial Action Oversight	258,274	4,182,853	0	0	0	1,382,280	1,382,280	289	99%	100%
6	Remedial Action Report	27,961	87,787	0,644	0	0	14,289	20,412	7,449	99%	100%
7	Risk Management	12,700	12,700	0	0	0	12,711	12,711	79	99%	100%
8	Site Map	32,280	84,007	0	0	0	83,811	83,811	489	100%	100%
9	Site Map	189,749	480,077	29,746	2,888	30,711	58,387	62,535	77,942	100%	100%
10	Technical Support	10,000	149,438	1,200	0	0	147,002	144,265	1,833	100%	100%
11	601 Laboratory Demo Support	36,422	36,422	0	0	0	36,142	36,142	1,280	100%	100%
12	Water Characterization Sampling	22,418	96,716	0	0	0	64,219	64,219	4,489	100%	100%
13	SRI Definition	27,818	41,289	0	0	0	36,943	36,943	1,346	100%	100%
14	Background Investigation/Remedial Investigation Reporting	47,204	47,204	0	0	0	46,535	46,535	669	100%	100%
15	Water Remediation Investigation	21,804	40,510	0	0	0	32,197	32,197	8,313	100%	100%
16	Groundwater Monitoring and Reporting	388,451	388,451	22,811	0	11,800	198,490	208,247	180,214	64%	64%
17	Remedial Action Monitoring and Management	37,897	37,897	923	0	0	41,223	41,223	4,149	100%	100%
TOTALS (9):		1,442,114	4,250,180	68,917	2,888	44,374	3,949,243	4,009,100	290,020		93%
LBRP Services (14)		15,348	190,022	2,910	0	0	180,144	182,454	3,546	NA	NA
TOTALS (9):		15,348	190,022	2,910	0	0	180,144	182,454	3,546	NA	NA

Notes:

- Work authorized by Purchase Order Number 55114718 dated 4/12/12 in accordance with the Arcadis Technical Proposal dated 3/16/12 (Total = \$450,333).
- Task 11 (5/15/12) authorized based on the Arcadis proposal dated 6/21/12 and approved by Change Order #1 dated 12/18/2012 (Total = \$805,680).
- Task 12 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 12/21/13. Also increased Task 1 by \$10,000 (see PO and contractor's e-mail from Ken Sekurowski dated 10/28/13) (Total = \$815,680).
- Task 13 increased by \$15,010 and Task 11 increased by \$15,324 based on Arcadis proposal dated 10/28/13 and approved by Change Order #3 dated 11/4/13 (Total = \$831,004).
- Task 10 increased by \$19,000 based on the Arcadis proposal dated 12/18/13 and after approval email dated 12/18/13 (Total = \$850,004).
- Task 1 increased by \$21,000, Task 2 increased by \$120,000, Task 4 increased by \$1,010, and Task 11 increased by \$15,650 by Change Order #8 dated 11/11/14 (Total = 1,016,004).
- Task 1 increased by \$25,000, Task 2 increased by \$125,000, Task 4 increased by \$55,000, and Task 10 increased by \$20,000 by Change Order #9 dated 3/22/15 (Total = 1,236,004).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/27/15 and approved by Change Order #10 dated 8/11/15 (Total = 1,261,004).
- Task 17 authorized based on the Arcadis proposal dated 6/27/15 and approved by Change Order #11 dated 8/11/15 (Total = 1,286,004).
- Task 10 increased by \$25,000 based on the Arcadis proposal dated 6/27/15 and approved by Change Order #12 dated 8/11/15 (Total = 1,311,004).
- Task 10 increased by \$25,000 and Task 11 increased by \$21,450 based on the Arcadis proposal dated 6/27/15 and approved by Change Order #13 dated 8/11/15 (Total = 1,336,004).
- Task 2 increased by \$26,122, Task 3 increased by \$28,746, Task 4 increased by \$23,746, Task 6 increased by \$19,022, Task 10 increased by \$21,390, Task 13 increased by \$66,274 and Task 14 increased by \$21,894 based on the Arcadis proposal dated 8/22/16 (Total = 1,482,276).
- Task 6 increased by \$76,577 based on the Arcadis proposal dated 8/22/16, and approved by Change Order #15 dated 10/27/16.
- Task 10 increased by \$17,810 and Task 14 increased by \$16,679 based on the Arcadis proposal dated 10/27/16 and approved by Change Order #16 dated 11/7/17.
- Task 4 increased by \$78,478 based on the Arcadis proposal dated 8/24/17 and approved by Change Order #18 dated 8/27/17.
- Task 1, 2, 3, 4, 6, 10 and 11 increased by \$225,282 based on the Arcadis proposal dated 7/27/17 and approved by Change Order #19 dated 8/1/17.
- Task 6 increased by \$328,328 based on Arcadis proposal dated 1/6/2018 and approved by Change Order #20 dated 2/12/2018.
- Task 1 increased by \$233,281, Task 16 created in the amount of \$588,249, and Task 18 created in the amount of \$67,697 based on the Arcadis proposal dated 2/12/2018.
- Task 1 increased by \$15,000 based on the Arcadis proposal dated July 5, 2018, and approved by Change Order #22 dated 8/16/18.
- Task 1 increased by \$28,272 and Task 9 increased by \$14,438 based on the Arcadis proposal dated January 11, 2018, and approved by Change Order #23 (total of \$146,711) dated 2/4/2018.

SAP

1117918048 Change Entry Sheet

1117918048 Change Entry Sheet

Entry Sheet: 1117918048
 Billing Order: 95314718 1
 Billing Date: 095821-1
 Account: ARCADIS US INCOOR.
 Net 45 Days

Accept Date: 03/27/2019
 Posting Date: 03/27/2019
 Reference: Doc. Text

Line	D	C	U	Service No.	Short Text	Quantity	Unit	Gross Price	Qty	Unit	Cost Control
1					Project Management - Cape May HGP	0.000	EA	2,673.30	0.00		
2						0.000		0.00	0.00		
3						0.000		0.00	0.00		
4						0.000		0.00	0.00		
5						0.000		0.00	0.00		
6						0.000		0.00	0.00		
7						0.000		0.00	0.00		
8						0.000		0.00	0.00		
9						0.000		0.00	0.00		
10						0.000		0.00	0.00		
11						0.000		0.00	0.00		
12						0.000		0.00	0.00		
13						0.000		0.00	0.00		
14						0.000		0.00	0.00		
15						0.000		0.00	0.00		
16						0.000		0.00	0.00		

Line 1

Displaying FE Entry Sheet "Header for entry sheet" ...

Business Workshop
 SAP Logon 7.0
 User: jshim, Password: jshim

SAP

1117918073 Change Entry Sheet

1117918073 Change Entry Sheet

Company Code: 1117918073
 Plant: 55114718
 Net. 45 Days
 ARCADIS US INCO.
 Account: 0995321-5

Doc: 03/27/2019
 Posting: 03/27/2019
 Reference:
 Doc. Text:



Line	D	P	C	U	Service No.	Short Text	Quantity	Unit	Base Price	Net U.	Cost Center
1						EA	1	EA	1,289.42		
2							0.000		0.00		
3							0.000		0.00		
4							0.000		0.00		
5							0.000		0.00		
6							0.000		0.00		
7							0.000		0.00		
8							0.000		0.00		
9							0.000		0.00		
10							0.000		0.00		
11							0.000		0.00		
12							0.000		0.00		
13							0.000		0.00		
14							0.000		0.00		
15							0.000		0.00		
16							0.000		0.00		

UM 1

Displaying FE Entry Sheet "Handler for entry sheet"

Navigation icons: Home, Back, Forward, Refresh, Print, etc.

System status: SAP Logon 750, SAP Logon 750, SAP Logon 750, SAP Logon 750

Time: 3:27 PM, 03/27/2019

SAP

1117918119 Change Entry Sheet

1117918119 Change Entry Sheet

Entry Sheet: 1117918119
 Purchase Order: 55114710 35
 Status: Net 45 Days

Accept. Data

03/27/2019
 03/27/2019

Line	D	P	C	U	Service No.	Short Text	Quantity	UoM	Base Price	Crp	Unit	Cost Center
1						GW Monitor & Rpt. Caps May MBP	1	EA	24,611.08	USD		
2							0.000		0.00	USD		
3							0.000		0.00	USD		
4							0.000		0.00	USD		
5							0.000		0.00	USD		
6							0.000		0.00	USD		
7							0.000		0.00	USD		
8							0.000		0.00	USD		
9							0.000		0.00	USD		
10							0.000		0.00	USD		
11							0.000		0.00	USD		
12							0.000		0.00	USD		
13							0.000		0.00	USD		
14							0.000		0.00	USD		
15							0.000		0.00	USD		
16							0.000		0.00	USD		

Line 1

Displaying RE Entry Sheet "handler for entry sheet"

Navigation icons: Home, Back, Forward, Refresh, Print, etc.

System status: 3:28 PM 03/27/2019

User: Inbar - Lawson, P.

Session: 1117918119 Chan...

SAP

1117918421 Change Entry Sheet

1117918421 Change Entry Sheet

Entry Sheet: 1117918421
 Purchase Order: 55114718 16
 Short Text: 09593217
 Account: ARCADIS US INCOR.
 Net 45 Days

Doc. 03/27/2019
 Posting 03/27/2019
 Reference
 Doc. Text

Line	Q	P	C	U	Service No.	SHUCK Text	Quantity	Unit	Issue Price	Org	ISSU	Cost Center
1						Restoration Monitor & Rep Cape May	1	EA	322.98	0000		
2							0.000		0.00	0000		
3							0.000		0.00	0000		
4							0.000		0.40	0000		
5							0.000		0.00	0000		
6							0.000		0.00	0000		
7							0.000		0.60	0000		
8							0.000		0.00	0000		
9							0.000		0.00	0000		
10							0.000		0.00	0000		
11							0.000		0.00	0000		
12							0.000		0.00	0000		
13							0.000		0.00	0000		
14							0.000		0.00	0000		
15							0.000		0.40	0000		
16							0.000		0.00	0000		

Line 1

Deploying FE Entry Sheet "Handler for entry sheet"

03/27/2019 3:28 PM
 Desktop
 Inbox - flow.sar.2
 1117918421 Flow
 Business Workplace
 SAP Logon ID

1117918052 Change Entry Sheet

1117918052 Change Entry Sheet

Entry Sheet: 1117918052
 For Purchase Order: 54114718 5
 Sheet Text: 0959321-2

ARCADIS US INCOR.
 Net 45 Days

Line	Doc	Plant	U	C	U	Service No.	Short Text	Quantity	Unit	Price	Price	Unit	Net V.	Net V.	Net V.
1							Consuectrain Overseight Cape May M.	0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
2								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
3								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
4								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
5								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
6								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
7								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
8								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
9								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
10								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
11								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
12								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
13								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
14								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
15								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00
16								0.000	EA	0.00	0.00	0.00	USD	0.00	0.00

Unit 1

Displaying PE Entry Sheet. Handler for entry sheet...

SAP

1117918055 Change Entry Sheet

1117918055 Change Entry Sheet

ARCADIS US INCORP. Accounts Payable
Net 45 Days

1117918055
83114716
09593213

Account Data

Doc. 03/27/2019
Posting 03/27/2019
Reference
Doc. Text

Line	D	P	C	U	Service No.	Short Text	Quantity	Un. Gross Price	Per U.	Qty	Cost Center
1						Remedial Action Report Case May M	0.000	EA 6,044.60	USD	0	
2							0.000	0.00	USD	0	
3							0.000	0.00	USD	0	
4							0.000	0.00	USD	0	
5							0.000	0.00	USD	0	
6							0.000	0.00	USD	0	
7							0.000	0.00	USD	0	
8							0.000	0.00	USD	0	
9							0.000	0.00	USD	0	
10							0.000	0.00	USD	0	
11							0.000	0.00	USD	0	
12							0.000	0.00	USD	0	
13							0.000	0.00	USD	0	
14							0.000	0.00	USD	0	
15							0.000	0.00	USD	0	
16							0.000	0.00	USD	0	

Displaying FE Entry Sheet. Header for entry sheet...

1117918055 SAP Logon 750

Business Workspk

1117918055 SAP

3:26 PM 3/27/2019

Wednesday, March 27, 2019 3:26:34 PM - Greenshot

SAP

1117918064 Change Entry Sheet

1117918064 Change Entry Sheet

Entry Sheet: 1117918064 CO: AcceptCard
 For Purchase Order: 53114718 9
 Short Text: 10659321-4

APCADIS US INCCR. S
 NET 45 Days

Doc: 03/27/2019
 Posting: 03/27/2019
 Reference:
 Doc Text:

Accept. Data History

Line	Doc	U	Service No.	Short Text	Quantity	Unit	Gross Price	Net Price	Net U.	Cost Center
1				GWTS ONSM Cape May MCP	1	EA	26,715.15		USD	
2					0.000		0.00		USD	
3					0.000		0.00		USD	
4					0.000		0.00		USD	
5					0.000		0.00		USD	
6					0.000		0.00		USD	
7					0.000		0.00		USD	
8					0.000		0.00		USD	
9					0.000		0.00		USD	
10					0.000		0.00		USD	
11					0.000		0.00		USD	
12					0.000		0.00		USD	
13					0.000		0.00		USD	
14					0.000		0.00		USD	
15					0.000		0.00		USD	
16					0.000		0.00		USD	

Line 1

Displaying FE Entry Sheet Handler for entry sheet...

SAP - report 7/0 Business Workload 11:29:06/4 (1:11) 03/27/2019 3:25 PM



INVOICE

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 818093937
ACH: 071000039 | Wire: 026009593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62698 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: February 27, 2019
Project No: MD000776.0002
Invoice No: 0959327
Payment Terms: 45 Days
Invoice Due Date: April 13, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from December 31, 2018 to January 27, 2019

Task 00011 LSRP SERVICES

Professional Personnel

	Hours	Rate	Amount	
PRINCIPAL SCIENTIST/ENGINEER I				
THOMPSON, DAVID	17.50	132.00	2,310.00	
Totals	17.50		2,310.00	
Total Labor				2,310.00
		Total this Task		\$2,310.00
		Total this Invoice		\$2,310.00

*FR. MS
029632
3/7/19*

SES 1117807291 fax 38048254

Line Item 11 - LSRP Services

APPROVAL STAMP	
PO# NO. <u>55114718</u>	INV. NO. <u>0959327</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WB# <u>✓</u>
APPROVED BY: <i>[Signature]</i>	EMR. NO. <u>297</u>

3-7-19

Project MD000776.0002 JCPL CAPE MAY MANUFACTURED GAS Invoice 0959327

Billing Backup

Wednesday, February 27, 2019

ARCADIS INC.

Invoice 0959327 Dated 2/27/2019

10:37:58 AM

Task 00011 LSRP SERVICES

Professional Personnel

			Hours	Rate	Amount	
	PRINCIPAL SCIENTIST/ENGINEER I					
14254	THOMPSON, DAVID	1/6/2019	.50	132.00	66.00	
	Weekly status call					
14254	THOMPSON, DAVID	1/13/2019	1.00	132.00	132.00	
	Public inquiry phone call and summary					
14254	THOMPSON, DAVID	1/20/2019	3.50	132.00	462.00	
	Review draft deed notice and historical data					
14254	THOMPSON, DAVID	1/20/2019	1.00	132.00	132.00	
	Weekly status call and follow-up					
14254	THOMPSON, DAVID	1/20/2019	2.50	132.00	330.00	
	Review draft deed notice for the CMHA property					
14254	THOMPSON, DAVID	1/27/2019	2.50	132.00	330.00	
	Cape May Housing Authority Deed Notice - comments and discussion					
14254	THOMPSON, DAVID	1/27/2019	3.50	132.00	462.00	
	Deed notice revisions					
14254	THOMPSON, DAVID	1/27/2019	1.50	132.00	198.00	
	Deed notice revisions and discussions					
14254	THOMPSON, DAVID	1/27/2019	1.00	132.00	132.00	
	Review draft deed notice and exhibits					
14254	THOMPSON, DAVID	1/27/2019	.50	132.00	66.00	
	Weekly status call and follow-up					
	Totals		17.50		2,310.00	
	Total Labor					2,310.00
				Total this Task		\$2,310.00
				Total this Project		\$2,310.00
				Total this Report		\$2,310.00



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

RECEIVED

MAR 04 2019

Environmental Department

Subject:
Monthly Progress Report (MPR) – January 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning on 31 December 2018 and ending 27 January 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
27 February 2019

Contact:
Jeremy Cuccuini

Phone:
609 860 0590

Email:
jeremy.cuccuini@arcadis-us.com

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls and discussions.
- Review of offsite Draft Deed notice for the Cape May Housing Authority (CMHA) Lafayette Street property, development of Deed Notice exhibits, and client follow-up and discussions.

Our ref:
MD000776.0002

if you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

SAP

1117807291 Change Entry Sheet

1117807291 Change Entry Sheet

ARCADIS US INVOIC...
Net 45 Days

COB Accepted

1117807291
ES114719
00599327

Doc. #1
03/07/2019
Posting
Reference
Doc. Text

Line	Q	P	C	U	Service No.	Short Text	Quantity	Unit	Gross Price	Qty	Per U.	Cost Center
1								EA	2,310.00			
2							0.000		0.00	0.00		
3							0.000		0.00	0.00		
4							0.000		0.00	0.00		
5							0.000		0.00	0.00		
6							0.000		0.00	0.00		
7							0.000		0.00	0.00		
8							0.000		0.00	0.00		
9							0.000		0.00	0.00		
10							0.000		0.00	0.00		
11							0.000		0.00	0.00		
12							0.000		0.00	0.00		
13							0.000		0.00	0.00		
14							0.000		0.00	0.00		
15							0.000		0.00	0.00		
16							0.000		0.00	0.00		

Displaying FE Entry Sheet Handler for entry sheet...

Desktop 2:40 PM 3/7/2019

RECEIVED

APR 8 2019

Environmental Department



INVOICE

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acc. No. 8188093937
ACH: 071000039 | Wire: 026009593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: March 19, 2019
Project No: MD000776.0002
Invoice No: 0963438
Payment Terms: 45 Days
Invoice Due Date: May 3, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from January 28, 2019 to February 24, 2019

Task 00001 PROJECT MANAGEMENT

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER II SCILLIERI, DARREN	3.50 ✓	138.00 ✓	483.00
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	7.50 ✓	127.00 ✓	952.50
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	1.00 ✓	115.00 ✓	115.00
CLERICAL/ADMINISTRATION/WORD PROCESSOR FULTON, AMANDA	14.20 ✓	43.00	610.60
Totals	26.20		2,161.10
Total Labor			2,161.10
Total this Task			\$2,161.10

Task 00005 CONSTRUCTION OVERSIGHT

Professional Personnel

	Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	.50	127.00 ✓	63.50
Totals	.50		63.50
Total Labor			63.50
Total this Task			\$63.50

Task 00006 REMEDIAL ACTION REPORT

Professional Personnel

	Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	.50	127.00 ✓	63.50

See page 4

Project	MID000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0963438
STAFF SCIENTIST/ENGINEER I				
	BANDA, NADEEM	6.00 ✓	90.00 ✓	540.00
	Totals	6.50		603.50
	Total Labor			603.50
			Total this Task	\$603.50

Task 00009 O&M

Professional Personnel

	Hours	Rate	Amount	
PRINCIPAL SCIENTIST/ENGINEER II				
SCILLIERI, DARREN	5.50 ✓	138.00 ✓	759.00	
PRINCIPAL SCIENTIST/ENGINEER I				
FULLER, ANDREW	43.50 ✓	132.00 ✓	5,742.00	
PROJECT MANAGER/SENIOR ENGINEER II				
CUCCUINI, JEREMY	4.00 ✓	127.00 ✓	508.00	
PROJECT SCIENTIST/ENGINEER II				
SANCHEZ, ADRIANA	36.50 ✓	109.00 ✓	3,978.50	
STAFF SCIENTIST/ENGINEER I				
JACOBSON, ALEXANDER	49.50 ✓	90.00 ✓	4,455.00	
MCCONNELL, KEITH	35.80 ✓	90.00 ✓	3,222.00	
SR. TECHNICIAN/SCIENTIST/ENGINEER I				
FOOS, PATRICK	3.00 ✓	61.00 ✓	183.00	
Totals	177.80		18,847.50	
Total Labor				18,847.50

Consultants

SUB COSTS - LAB SERVICES			
2/15/2019	VERITECH [HAMPTON-CLARKE]		540.35 ✓
2/18/2019	VERITECH [HAMPTON-CLARKE]		1,724.04 ✓
2/24/2019	VERITECH [HAMPTON-CLARKE]		80.25 ✓
2/24/2019	VERITECH [HAMPTON-CLARKE]		80.25 ✓
2/24/2019	VERITECH [HAMPTON-CLARKE]		80.25 ✓
2/24/2019	VERITECH [HAMPTON-CLARKE]		280.88 ✓
2/24/2019	VERITECH [HAMPTON-CLARKE]		80.25 ✓
2/24/2019	VERITECH [HAMPTON-CLARKE]		80.25 ✓
	Total Consultants		2,946.52
			2,946.52

Reimbursable Expenses

CAR RENTAL	214.12 ✓
TOLLS,PARKING,TRANSPORT,GAS	203.35 ✓
LODGING AND APART RENTAL	325.71 ✓
MEALS	56.19 ✓
TELEPHONE	49.80 ✓
POSTAGE,SHIP,& MESSENGER	12.44 ✓
EQUIPMENT RENTAL	469.16 ✓
FIELD EXPENSES	110.23 ✓
MATERIAL & EQUIPMENT	17,200.00 ✓

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0963438
	REIMB EMPLOYEE MILEAGE		127.60 ✓	
	Total Reimbursables		18,768.60	18,768.60
		Total this Task		\$40,562.62

Task 00015 GW Monitoring & Reporting

Professional Personnel

	Hours	Rate	Amount	
PRINCIPAL SCIENTIST/ENGINEER II				
KLADIAS, MICHAEL	7.50 ✓	138.00 ✓	1,035.00	
PROJECT MANAGER/SENIOR ENGINEER II				
CUCCUINI, JEREMY	4.50 ✓	127.00 ✓	571.50	
PROJECT SCIENTIST/ENGINEER II				
WANG, ZHAOWEI	26.00 ✓	109.00 ✓	2,834.00	
STAFF SCIENTIST/ENGINEER I				
JACOBSON, ALEXANDER	1.00 ✓	90.00 ✓	90.00	
SR. TECHNICIAN/SCIENTIST/ENGINEER I				
FOOS, PATRICK	2.50 ✓	61.00 ✓	152.50	
FIELD SUPERVISOR				
HERRERA GARCIA, CAROLINA	2.00 ✓	79.00 ✓	158.00	
SENIOR DRAFTSPERSON				
SANCHEZ, ADRIAN	.50 ✓	65.00 ✓	32.50	
STOWELL, GERALD	8.60 ✓	65.00 ✓	559.00	
Totals	52.60		5,432.50	
Total Labor				5,432.50

Reimbursable Expenses

IH-FIELD VEHICLE	28.10		
Total Reimbursables	28.10	28.10	

*Facit
LDR
15*

Total this Task	\$5,460.60
Total this Invoice	\$48,851.32

SES 1118042737 - FAX 38048428
0963438-1 Line Item 1 - Project Management \$ 2,161.10 JJ 4-24-19

SES 1118042750 FAX 38048432
0963438-2 Line Item 5 - Construction Oversight \$ 63.50 JJ
4-24-19

SES 1118042754 FAX 38048435
0963438-3 Line Item 6 - Remedial Action Report \$ 603.50 JJ
4-24-19

SES 1118042759 FAX 38048438
0963438-4 Line Item 9 - OM&M \$ 40,562.62 JJ
4-24-19

SES 1118042761 FAX 38048439
0963438-5 Line Item 15 - Groundwater Monitoring
And Reporting \$ 5,460.60 JJ
4-24-19

APPROVAL STAMP	
P.O. NO. <u>5514718</u>	INV. NO. <u>0963438</u>
COMPANY CODE: <u>8000</u>	COST CENTER <u>502702</u>
COST ELEMENT (OL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>JJ</u>	EMP. NO. <u>297</u>

4-24-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

RECEIVED
APR 2 2019
Environmental Department

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – February 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 28 January 2019 and ending 24 February 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
19 March 2019

Contact:
Jeremy Cuccuini

Phone:
809 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Continued development of the Remedial Action Report (RAR), detailing Phase 1, Phase 2 and Phase 3 remedial action activities.
- Perform routine O&M activities on the groundwater treatment system including: perform monthly site inspection, OM&M checklist items and maintenance of system components, evaluate monthly pumping and extraction performance, perform the required monthly permit-by-rule (PBR) sampling and associated data management of sampling results, continued evaluation of system performance and associated evaluation of additional iron filtration options (design implementation scope and costs), generation of the January 2019 monthly treatment system performance dashboard update, coordination and process laboratory subcontractor invoicing for monthly PBR sampling and rental equipment charges.
- Charges to the OM&M (Task 9) also include non-routine items including: laboratory subcontractor charges totaling \$1,221.25 associated with non-routine metals analysis within the groundwater treatment system process chain to better evaluate iron concentrations pre and post sand filtration, comparisons of iron results within the equalization tank with aeration both on and off, and comparisons of iron concentrations pre and post filtration through the bag filter assembly servicing the



Ms. Anna Sullivan
19 March 2019

settling tank, and an additional 11 hours of office-based engineering support for data management and evaluation of results to determine potential system enhancements (e.g. filtration) to address metals fouling (\$1,452 – week of 2/17). In addition, out of scope charges include subcontractor costs for carbon changeout materials for the January and February changeouts (\$17,200) and an additional 22 hours of field support to mobilize to the site on 2/20 and 2/21 to oversee and manage carbon changeout activities (\$2,025). Accordingly, the total costs for out-of-scope OM&M charges for this period are \$21,898.25.

- Data management and reporting associated with the Q4 2018 groundwater sampling event.
- Finalize addressing JCP&L Project Management comments to the First Semi-Annual Remedial Progress Report and return for final review. Continue generation of the Q3/Q4 Semi-Annual Remedial Progress Report, including updates to the report text, tables, figures and appendices, including groundwater treatment system performance data tracking.
- The MPR for January 2019 was submitted on 27 February 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.



Ms. Anna Sullivan
19 March 2019

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cuccuini'.

Jeremy Cuccuini
Certified Project Manager

Copies:

J. McLaughlin, Arcadis
D. Scillieri, Arcadis

ARCADE
Cape May Project MFCP Site
Project Schedule for Remedial Action

ID	Task Name	Duration	Start	Finish	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	
1	Remedial Action	4146 days	Wed 10/21/03	Fri 8/24/22																	
2	Project Planning and Coordination	293 days	Wed 10/21/03	Fri 1/19/04																	
23	Remedial Design	456 days	Thu 10/23/03	Thu 8/4/04																	
24	Pre-Design Workplan	409 days	Thu 10/23/03	Thu 8/4/04																	
44	ROSR	1067 days	Wed 8/26/03	Thu 7/2/04																	
62	Pre-Design Activities	1324 days	Mon 11/17/03	Wed 9/16/04																	
63	Groundwater Sampling	1029 days	Mon 11/17/03	Fri 1/6/04																	
64	Baseline Groundwater Sampling (20 weeks)	26 days	Mon 11/17/03	Fri 2/11/04																	
67	Annual Groundwater Sampling and Analysis (2 weeks)	646 days	Thu 9/18/03	Fri 1/9/04																	
75	Access and Paving	60 days	Mon 8/21/03	Mon 11/23/03																	
76	Hydroic Sitewide Investigation	71 days	Mon 8/21/03	Thu 1/21/04																	
80	Soil Boring Installation/Drilling and Analysis	123 days	Mon 8/21/03	Wed 9/16/04																	
81	Construction/Contracting	49 days	Mon 8/21/03	Mon 10/26/03																	
82	Soil Borings	30 days	Tue 12/16/03	Wed 1/11/04																	
89	Geotechnical Testing	45 days	Tue 12/22/03	Wed 9/16/04																	
90	Aggr. Testing	26 days	Mon 8/21/03	Thu 1/29/04																	
98	Groundwater Flow and Transport Model	44 days	Mon 12/22/03	Mon 2/24/04																	
102	Remedial Action Work Plan	246 days	Mon 11/16/03	Fri 10/28/04																	
108	Remedial Implementation	1824 days	Mon 10/15/03	Fri 10/12/04																	
109	First season	938 days	Mon 10/15/03	Fri 8/20/04																	
151	Second season	288 days	Mon 11/20/03	Fri 8/21/04																	
191	Third Season	306 days	Tue 8/26/03	Fri 10/12/04																	
193	Remediation Monitoring	1370 days	Mon 9/22/03	Fri 8/24/04																	
194	Remedial Action Report (RAR)	484 days	Mon 9/1/03	Thu 4/29/04																	
198	Operations and Maintenance	1116 days	Fri 8/22/03	Fri 1/29/04																	

Project Cape May
Diner-Wed 10/21/03

Task
Geotech
Milestone
Summary

Project Summary
External Task
External Mile Task
Inspection Task

Inspection Milestone
Inspection Summary
Manual Task
Dumbe-only

Manual Summary Review
Manual Summary
Start-only
Finish-only

Progress
SFB
3

Page 1 of 1

Table 4
Budget Status for Site Remediation through 24 February 2019
Cape May Former MGP Site
Cape May, New Jersey
Purchase Order No. 55114718

TASK NO.	TASK DESCRIPTION	ORIGINAL TASK BUDGET	CURRENT TASK BUDGET	CURRENT INVOICE AMOUNT	OUT OF SCOPE WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST CO	PREVIOUS INVOICE AMOUNT	CUMULATIVE AMOUNT INVOICED	BUDGET BALANCE	PROJECT SCOPE % COMPLETE	FINANCIAL % COMPLETE
1	Project Management/Task 11	9,200	168,342	2,161	0	0	164,144	166,306	3,637	NA	89%
2	Remedial Action Work Plan ^a	156,024	546,329	0	0	0	546,319	546,319	0	100%	100%
3	Procurement Assistance	100,401	155,867	0	0	0	155,640	155,640	327	100%	100%
4	Remedial Action Work Plan	80,057	340,419	0	0	0	340,044	340,044	375	89%	100%
5	Construction Oversight	239,214	1,582,685	604	0	0	1,582,390	1,582,254	232	89%	100%
6	Remedial Action Report	27,661	27,661	604	0	0	20,412	21,016	6,548	75%	75%
7	CAI Manual	8,776	16,787	0	0	0	16,711	16,711	76	99%	100%
8	Site Up Testing	35,290	99,097	0	0	0	99,561	99,561	456	100%	100%
9	CAI	199,746	490,677	40,663	0	56,594	403,635	444,199	36,679	NA	92%
10	Technical Support ^a	10,000	149,439	0	0	0	149,255	149,255	184	NA	100%
11	801 Logistics Staff Demo Support ^b	28,422	36,422	0	0	0	35,142	35,142	1,280	NA	89%
12	Vehicle Characterization Sampling	32,418	86,715	0	0	0	84,249	84,249	4,466	100%	99%
13	Soil Detection	27,810	41,263	0	0	0	39,643	39,643	1,620	100%	97%
14	Background Investigation/Remedial Investigation Reporting	47,034	47,034	0	0	0	50,635	50,635	(3,601)	100%	107%
14A	Vapor Intrusion Investigation	27,934	40,510	0	0	0	32,517	32,187	8,323	100%	78%
15	Groundwater Monitoring and Reporting	309,461	309,461	5,480	0	11,593	206,237	275,787	174,754	59%	59%
16	Resuspension Monitoring and Management	37,997	37,997	0	0	0	41,648	41,648	(4,149)	100%	117%
TOTALS (\$):		1,442,114	4,289,190	48,551	21,998	89,447	4,002,169	4,059,011	231,169	NA	85%
LSRP Cleanup Invoiced Separately											
11	LSRP Services ^{a,c}	15,348	108,002	752	0	0	102,454	103,246	2,758	NA	NA
TOTALS (\$):		15,348	108,002	752	0	0	102,454	103,246	2,758	NA	NA

Notes:
 1. Work authorized by Purchase Order Number 65114718 dated 4/12/12 in accordance with the Arcadis Technical Proposal dated 5/16/12 (Total of \$480,332).
 2. Task #1 (915,348) authorized based on the Arcadis proposal dated 5/21/12 and approved by Change Order #3 dated 10/18/2012 (Total = \$835,680).
 3. Task #2 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 12/27/12. Also increased Task 1 by \$10,000 (See PO and confirmatory e-mail from Ken Seaborn dated 10/29/12) (Total = \$845,680).
 4. Task #1 increased by \$15,018 and Task #11 increased by \$15,324 based on Arcadis proposal dated 10/29/12 and approved by Change Order #3 dated 11/14/13 (Total = \$860,992).
 5. Task #10 increased by \$15,000 based on the Arcadis proposal dated 12/18/12 and client approved email dated 1/27/13 (Total = \$875,992).
 6. Task #1 increased by \$5,000, Task #2 increased by \$30,000, Task #10 increased by \$10,000, and Task #11 increased by \$25,000 by Change Order #4 dated 3/20/2015 (Total = 1,015,992).
 7. Task #1 increased by \$25,000, Task #2 increased by \$125,000, Task #4 increased by \$53,000, and Task #10 increased by \$19,000, and Task #16 increased by \$15,000 by Change Order #5 dated 5/20/2015 (Total = 1,200,292).
 8. Task #14 and #15 authorized based on the Arcadis proposal dated 4/29/15 and approved by Change Order #6 dated 5/19/15 (Total = \$120,446,75).
 9. Task #14 authorized based on the Arcadis proposal dated 5/27/2015 and approved via email correspondence by CCRAL dated 5/11/14 (Total = \$14,959).
 10. Task #15 authorized based on the Arcadis proposal dated 5/27/2015 and approved via email correspondence by CCRAL dated 5/11/14 (Total = \$14,959).
 11. Task #1 increased by \$25,000 and Task #11 increased by \$15,000 based on the Arcadis proposal dated 10/11/2015, and approved by Change Order #7 dated 2/22/16.
 12. Task #1 increased by \$25,000 and Task #11 increased by \$21,588 based on the Arcadis proposal dated 10/11/2015, and approved by Change Order #8 dated 2/22/16.
 13. Task #1 increased by \$25,122, Task #2 increased by \$28,716, Task #3 increased by \$12,232, Task #10 increased by \$12,190, Task #13 increased by \$60,234 and Task #14 increased by \$21,534 based on the Arcadis proposal dated 3/22/2016, and approved by Change Order #9 dated 10/27/16.
 14. Task #1 increased by \$21,517 based on the Arcadis proposal dated 6/29/2016, and approved by Change Order #10 dated 11/7/17.
 15. Task #1 increased by \$21,517 based on the Arcadis proposal dated 6/29/2016, and approved by Change Order #11 dated 11/7/17.
 16. Task #4 increased by \$73,478 based on the Arcadis proposal dated 5/24/17 and approved by Change Order #17 dated 7/27/17.
 17. Task #1, #2, #4, #5, #6 and #11 increased by \$225,395 based on the Arcadis proposal dated 7/27/17 and approved by Change Order #18 dated 8/21/17.
 18. Task #5 (526,585), Task #6 (263,717) and Task #9 (58,068) increased by a total of \$108,290 based on Arcadis proposal dated 9/27/2017 and approved by Change Order #19 dated 11/22/2018.
 19. Task #5 increased by \$398,329 based on Arcadis proposal dated 11/22/2018 and approved by Change Order #20 dated 3/7/2019.
 20. Task #5 increased by \$235,881, Task #9 increased by \$26,401, and Task #10 increased by the amount of \$26,401 based on the Arcadis proposal dated 1/11/2019, and approved by Change Order #21 dated 2/11/2019.
 21. Task #5 increased by \$235,881, Task #9 increased by \$26,401, and Task #10 increased by the amount of \$26,401 based on the Arcadis proposal dated February 20, 2019, and approved by Change Order #21 (total of \$720,090) dated 4/23/2019.
 22. Task #1 increased by \$29,272 and Task #5 increased by \$112,439 based on the Arcadis proposal dated January 11, 2019, and approved by Change Order #23 (total of \$140,711) dated 2/6/2019.

RECEIVED

APR 8 2019



INVOICE

Environmental Department

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: March 19, 2019
Project No: MD000776.0002
Invoice No: 0963445
Payment Terms: 45 Days
Invoice Due Date: May 3, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from January 28, 2019 to February 24, 2019

Task 00011 LSRP SERVICES
Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER I THOMPSON, DAVID	6.00	132.00	792.00
Totals	6.00		792.00
Total Labor			792.00
Total this Task			\$792.00
Total this Invoice			\$792.00

DR APB
C29632
4/23/19

SES 1118042735 TAX 38048426

Line 1 for 11 - LSRP Services

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>0963445</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>552300</u>	
ORDER: <u>3001018</u>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <i>[Signature]</i>	EMP. NO.: <u>297</u>

4-24-19

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0963445
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Billing Backup

Tuesday, March 19, 2019

ARCADIS INC.

Invoice 0963445 Dated 3/19/2019

1:41:36 PM

Task 00011 LSRP SERVICES

Professional Personnel

			Hours	Rate	Amount	
	PRINCIPAL SCIENTIST/ENGINEER.I					
14254	THOMPSON, DAVID	2/3/2019	1.00	132.00	132.00	
	CMHA Deed Notice options and requirements					
14254	THOMPSON, DAVID	2/3/2019	1.00	132.00	132.00	
	CMHA Deed Notice options revisions					
14254	THOMPSON, DAVID	2/3/2019	2.00	132.00	264.00	
	Review Deed Notice revisions. Discuss alternative approached to Deed Notice exhibits					
14254	THOMPSON, DAVID	2/10/2019	.50	132.00	66.00	
	Weekly status call					
14254	THOMPSON, DAVID	2/17/2019	1.00	132.00	132.00	
	Weekly status call and follow-up					
14254	THOMPSON, DAVID	2/24/2019	.50	132.00	66.00	
	Weekly status call					
	Totals		6.00		792.00	
	Total Labor					792.00
				Total this Task		\$792.00
				Total this Project		\$792.00
				Total this Report		\$792.00



RECEIVED
APR 2 2019
Environmental Department

Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.880.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – February 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning on 28 January 2019 and ending 24 February 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
19 March 2019

Contact:
Jeremy Cuccuini

Phone:
609 860 0590

Email:
jeremy.cuccuini@arcadis-us.com

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls and discussions.
- Review of offsite Draft Deed notice for the Cape May Housing Authority (CMHA) Lafayette Street property, development of Deed Notice exhibits, and client follow-up and discussions.

Our ref:
MD000776.0002

If you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis



INVOICE

Remit Payments To:
 Arcadis US, Inc.
 Bank of America | Acct. No. 8188093937
 ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS3N
 Remittance Info: remit-mailbox@arcadis-us.com
 62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
 Attention: Anna Sullivan
 300 Madison Avenue
 Morristown, NJ 07962-1911

Invoice Date: April 18, 2019
 Project No: MD000776.0002
 Invoice No: 0969077
 Payment Terms: 45 Days
 Invoice Due Date: June 2, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
 PO# 55114718

Professional Services from February 25, 2019 to March 24, 2019

Task 00001 PROJECT MANAGEMENT

Professional Personnel

	Hours	Rate	Amount
PROJECT DIRECTOR			
SAWYERS, DOUGLAS	2.00	184.00	368.00
PRINCIPAL SCIENTIST/ENGINEER II			
SCILLERI, DARREN	8.00 ✓	138.00 ✓	1,104.00
PROJECT MANAGER/SENIOR ENGINEER II			
CUCCUINI, JEREMY	10.50 ✓	127.00 ✓	1,333.50
CLERICAL/ADMINISTRATION/WORD PROCESSOR			
COLLINS, LISA	5.00 ✓	43.00	215.00
FULTON, AMANDA	8.20 ✓	43.00	352.60
Totals	33.70		3,373.10
Total Labor			3,373.10
		Total this Task	\$3,373.10

Task 00005 CONSTRUCTION OVERSIGHT

Professional Personnel

	Hours	Rate	Amount
PROJECT ADVISOR/SENIOR EXPERT			
CABALLERO, DAVID	1.50 ✓	162.00 ✓	243.00
PROJECT MANAGER/SENIOR ENGINEER II			
CUCCUINI, JEREMY	22.50 ✓	127.00 ✓	2,857.50
PROJECT MANAGER/SENIOR ENGINEER I			
MASTROCOLA, KRISTA	.50 ✓	115.00 ✓	57.50
PROJECT SCIENTIST/ENGINEER I			
MURRAY, JESSIE	8.00 ✓	102.00 ✓	816.00
STAFF SCIENTIST/ENGINEER I			
JACOBSON, ALEXANDER	5.00 ✓	90.00	450.00

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0969077
SENIOR DRAFTSPERSON				
	WASILEWSKI, MACIEJ	3.80 ✓	65.00 ✓	247.00
	Totals	41.30		4,671.00
	Total Labor			4,671.00
Reimbursable Expenses				
	TOLLS,PARKING,TRANSPORT,GAS			27.00 ✓
	MEALS			23.22 ✓
	FIELD EXPENSES			552.83 ✓
	REIMB EMPLOYEE MILEAGE			435.00 ✓
	Total Reimbursables		1,038.05	1,038.05
Total this Task				\$5,709.05

Task	00006	REMEDIAL ACTION REPORT	Hours	Rate	Amount
Professional Personnel					
STAFF SCIENTIST/ENGINEER I					
	BANDA, NADEEM	10.00 ✓	90.00 ✓	900.00	
SENIOR DRAFTSPERSON					
	SANCHEZ, ADRIAN	2.50 ✓	65.00 ✓	162.50	
	Totals	12.50		1,062.50	
	Total Labor				1,062.50
Total this Task					\$1,062.50

Task	00009	O&M	Hours	Rate	Amount
Professional Personnel					
PRINCIPAL SCIENTIST/ENGINEER II					
	SCILLIERI, DARREN	4.00 ✓	138.00 ✓	552.00	
PRINCIPAL SCIENTIST/ENGINEER I					
	FULLER, ANDREW	43.50 ✓	132.00 ✓	5,742.00	
PROJECT MANAGER/SENIOR ENGINEER II					
	CUCCUINI, JEREMY	4.50 ✓	127.00 ✓	571.50	
PROJECT SCIENTIST/ENGINEER II					
	SANCHEZ, ADRIANA	45.00 ✓	109.00 ✓	4,905.00	
STAFF SCIENTIST/ENGINEER I					
	JACOBSON, ALEXANDER	23.50 ✓	90.00 ✓	2,115.00	
	MCCONNELL, KEITH	43.00 ✓	90.00 ✓	3,870.00	
SCIENTIST/ENGINEER II					
	SOTO CASTANEDA, ROQUE	3.70 ✓	71.00 ✓	262.70	
SR. TECHNICIAN/SCIENTIST/ENGINEER I					
	FOOS, PATRICK	1.50 ✓	61.00 ✓	91.50	
SENIOR DRAFTSPERSON					
	SANCHEZ, ADRIAN	6.00 ✓	65.00 ✓	390.00	
	Totals	174.70		18,499.70	
	Total Labor				18,499.70

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0969077
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Consultants

SUB COSTS - LAB SERVICES

3/15/2019	VERITECH [HAMPTON-CLARKE]	219.35	
	Total Consultants	219.35	219.35

Reimbursable Expenses

TOLLS,PARKING,TRANSPORT,GAS	321.19	- 27.50 = 293.69
LODGING AND APART RENTAL	221.24	
MEALS	103.36	
TELEPHONE	52.34	
FIELD EXPENSES	126.75	
REIMB EMPLOYEE MILEAGE	120.64	
Total Reimbursables	945.52	918.02
	Total this Task	\$19,654.57 19,637.07

Task 00010 TECHNICAL SUPPORT

Professional Personnel

	Hours	Rate	Amount
PROJECT ADVISOR/SENIOR EXPERT			
CABALLERO, DAVID	.50 /	162.00	81.00
PRINCIPAL SCIENTIST/ENGINEER II			
SCILLIERI, DARREN	9.00 /	138.00	1,242.00
PROJECT MANAGER/SENIOR ENGINEER II			
CUCCUINI, JEREMY	19.00 /	127.00	2,413.00
PROJECT MANAGER/SENIOR ENGINEER I			
MAZA, DAVID	1.40 /	115.00	161.00
STAFF SCIENTIST/ENGINEER I			
BANDA, NADEEM	13.00 /	90.00	1,170.00
SENIOR DRAFTSPERSON			
FATTO, TRACEY	4.00 /	65.00	260.00
WASILEWSKI, MACIEJ	32.00 /	65.00	2,080.00
CLERICAL/ADMINISTRATION/WORD PROCESSOR			
SLOCUM, CATARINA	1.00 /	43.00	43.00
Totals	79.90		7,450.00
Total Labor			7,450.00
	Total this Task		\$7,450.00

Task 00015 GW Monitoring & Reporting

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER II			
KLADIAS, MICHAEL	3.00 /	138.00 ✓	414.00
PROJECT MANAGER/SENIOR ENGINEER II			
CUCCUINI, JEREMY	7.50 /	127.00 ✓	952.50
PROJECT MANAGER/SENIOR ENGINEER I			
MASTROCOLA, KRISTA	18.00 ✓	115.00	2,070.00

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0969077
STAFF SCIENTIST/ENGINEER I				
BANDA, NADEEM	38.00 ✓	90.00 ✓	3,420.00	
HILINSKI, MATT	43.50 ✓	90.00 ✓	3,915.00	
JACOBSON, ALEXANDER	3.00 ✓	90.00 ✓	270.00	
SCIENTIST/ENGINEER II				
KANE, RALEIGH	59.10 ✓	71.00 ✓	4,196.10	
SR. TECHNICIAN/SCIENTIST/ENGINEER I				
FOOS, PATRICK	2.00 ✓	61.00 ✓	122.00	
ISOM, DEANNO	40.00 ✓	61.00 ✓	2,440.00	
SENIOR DRAFTSPERSON				
SANCHEZ, ADRIAN	10.50 ✓	65.00 ✓	682.50	
STOWELL, GERALD	.20 ✓	65.00 ✓	13.00	
Totals	224.80		18,495.10	
Total Labor				18,495.10
Reimbursable Expenses				
TOLLS, PARKING, TRANSPORT, GAS			11.00 ✓	
COMPANY VEHICLE EXPENSE, GAS			75.50	
LODGING AND APART RENTAL			811.26	
MEALS			156.07	
FIELD EXPENSES			5.75	
REIMB EMPLOYEE MILEAGE			156.60	
Total Reimbursables			1,216.18	1,216.18
			Total this Task	\$19,711.28

Task 00016 Restoration Monitoring & Mgmt.

Professional Personnel

	Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II			
CUCCUINI, JEREMY	2.00 ✓	127.00 ✓	254.00
PROJECT MANAGER/SENIOR ENGINEER I			
MARKIEWICZ, GARY	5.00 ✓	115.00 ✓	575.00
PROJECT SCIENTIST/ENGINEER I			
MURRAY, JESSIE	4.50 ✓	102.00 ✓	459.00
Totals	11.50		1,288.00
Total Labor			1,288.00

Reimbursable Expenses

FEES, PERMITS & LICENSES			153.85
Total Reimbursables			153.85
			Total this Task
			\$1,441.85

Total this Invoice **\$58,412.35**

- 27.50
\$ 58,384.85
ON AFS 029632
5/22/19
See Attachment
Stamp Next
page →

SES 1118159071 FAX 38044555
0969077-1 Line Item 1 - Project Management \$ 3,373.10 ✓ JZ 5-22-19

SES 1118159074 FAX 38044556
0969077-2 Line Item 5 - Construction Oversight \$ 5,709.05 ✓ JZ 5-22-19

SES 1118159076 FAX 38044558
0969077-3 Line Item 6 - Remedial Action Report \$ 1,062.50 ✓ JZ 5-22-19

SES 1118159083 FAX 38044559
0969077-4 Line Item 9 - OM&M \$ 19,637.07 ✓ JZ 5-22-19

SES 1118159089 FAX 38044560
0969077-5 Line Item 10 - Technical Support \$ 7,450.00 ✓ JZ 5-22-19

SES 1118159090 FAX 38044563
0969077-6 Line Item 15 - Groundwater Monitoring
And Reporting \$ 19,711.28 ✓ JZ 5-22-19

SES 1118159093 FAX 38044564
0969077-7 Line Item 16 Restoration Monitoring
And Management \$ 1,441.85 ✓ JZ 5-22-19

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>0969077</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>802702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>JZ</u>	EMP. NO.: <u>297</u>

5-22-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

RECEIVED

APR 22 2019

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel: 609.860.0590
Fax: 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – March 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

Environmental Department

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 25 February 2019 and ending 24 March 2019. This also includes incurred charges for 2019 work completed under Task 5, Task 10 and Task 16 as approved in Change Order #24, dated April 12, 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
17 April 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Continued development of the Remedial Action Report (RAR), detailing Phase 1, Phase 2 and Phase 3 remedial action activities.
- Process 2019 incurred costs to Task 5 completed from January through March 24, 2019 including erosion and sediment control inspections for January and February 2019, purchase and management of time lapse cameras for site tidal inundation evaluations, time lapse camera data management and inundation summary table generation, and Phase 2/3 restoration planting preparation and subcontractor coordination communications.
- Perform routine O&M activities on the groundwater treatment system including: perform monthly site inspection, OM&M checklist items and maintenance of system components, evaluate monthly pumping and extraction performance, perform the required monthly permit-by-rule (PBR) sampling and associated data management of sampling results, continued evaluation of system performance and associated evaluation of additional iron filtration options (design implementation scope and costs), retrieval of groundwater elevation transducer data and



Ms. Anna Sullivan
17 April 2019

evaluation of results regarding system hydraulic capture and elevation gradient differences in the vicinity of the primary and secondary containment walls, generation of the February 2019 monthly treatment system performance dashboard update, coordination and process laboratory subcontractor invoicing for monthly PBR sampling and rental equipment charges.

- Charges to the OM&M (Task 9) also include non-routine items including: approximately 6 hours of office-based engineering support to support finalization of the system filtration optimization recommendations, revisions to process flow figures and client communications (**\$792 – week of 3/10**). In addition, out of scope charges include a non-routine site visit with the system operator (Keith McConnell, 12 hours) and lead Engineer (Andrew Fuller, 9 hours) on March 14, 2019 to review proposed system filtration design enhancements with JCP&L Project Management and a third party consultant (**\$2,268- week of 3/17**) Accordingly, the total costs for out-of-scope OM&M charges for this period are **\$3,060**.
- Completion of the Q1 2019 quarterly groundwater monitoring and sampling event and process associated field expenses.
- Completion of all final text, tables, figures and appendices for the DRAFT 3Q/4Q Groundwater Remedial Progress Report and submission to JCP&L Project Management for review and comment.
- Process 2019 incurred costs for Task 10 associated with revisions to the Cape May Housing Authority (CMHA) proposed Deed Notice area and associated exhibits and text. Retrieve information regarding historical operations per requests from the CMHA.
- Process 2019 incurred costs for Task 16 associated with restoration monitoring scheduling and preparation, as well as 2019 invasive species management events, Draft notifications and license fees (e.g. 2019 adaptive management preparation).
- The MPR for February 2019 was submitted on 19 March 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.



Ms. Anna Sullivan
17 April 2019

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cucchini'.

Jeremy Cucchini
Certified Project Manager

Copies:

J. McLaughlin, Arcadis
D. Scilleri, Arcadis

AFRC/ADIS Capa May Former MCP Site
Projected Schedule for Remedial Action

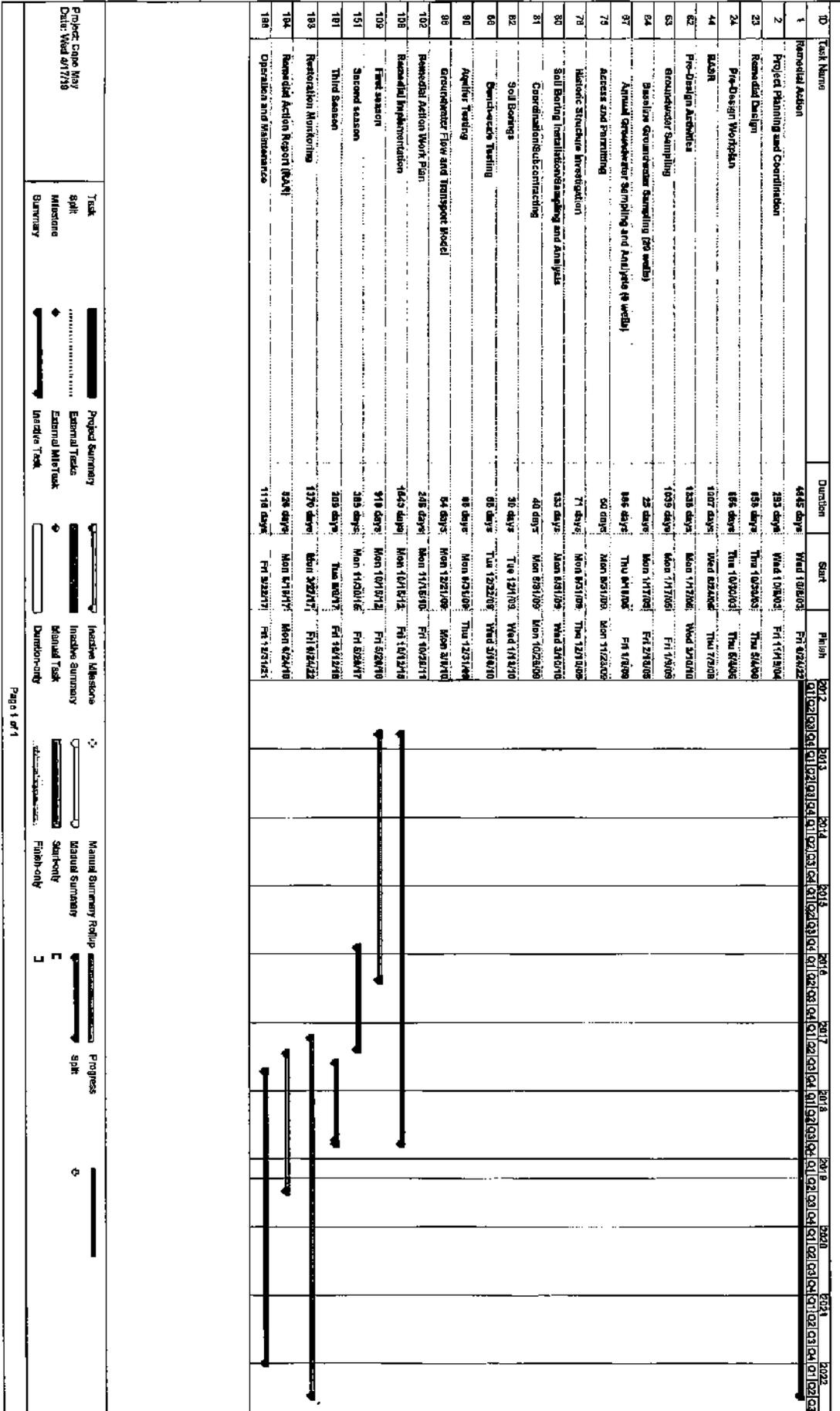


Table 1
Budget Status for Site Remediation through 24 March 2019
Cape May Former MGP Site
Cape May, New Jersey
Purchase Order No. 53114718

TASK NO.	TASK DESCRIPTION	ORIGINAL TASK BUDGET	CURRENT TASK BUDGET	CURRENT AMOUNT	WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST CO	PREVIOUS AMOUNT INVOICED	CUMULATIVE AMOUNT INVOICED	BUDGET BALANCE	PROJECT SCORE	FINANCIAL % COMPLETE
Phase 1, Site Remediation											
1	Project Management	6,300	180,042	3,378	0	0	166,305	166,879	264	NA	100%
2	Remedial Action Work Plan ¹	165,624	646,326	0	0	0	646,318	646,318	0	100%	100%
3	Procurement Assistance	100,401	156,987	0	0	0	156,940	156,940	327	100%	100%
4	Permit Acquisition	90,007	307,187	0	0	0	340,044	340,044	17,183	89%	85%
5	Construction Oversight	1,817,236	1,817,236	5,768	0	0	1,582,444	1,582,443	25,002	69%	69%
6	Remedial Action Report	27,981	27,981	1,083	0	0	22,078	22,078	5,703	79%	79%
7	QA/QC Manual	8,779	16,787	0	0	0	18,711	18,711	78	100%	100%
8	Start Up Training	36,280	99,007	0	0	0	98,551	98,551	466	100%	100%
9	QA/QC	186,746	462,708	19,865	3,060	61,689	444,199	463,883	28,945	NA	NA
10	Technical Support ²	10,000	176,773	7,460	0	0	148,255	158,705	19,207	NA	89%
11	901 Laboratory Shield Demo Support ³	36,422	36,422	0	0	0	36,142	36,142	1,280	NA	95%
12	Waste Characterization Sampling	28,478	88,729	0	0	0	84,246	84,246	4,483	100%	97%
13	Soil Definition	27,976	41,289	0	0	0	39,249	39,249	1,980	100%	97%
14	Background Investigation/Remedial Investigation Reporting	47,034	47,034	0	0	0	43,535	43,535	3,291	100%	100%
14a	Vapor Intrusion Investigation and Reporting	21,594	42,034	0	0	0	32,187	32,187	9,213	100%	79%
15	Contaminant Monitoring and Management	259,481	388,461	0	0	19,711	219,707	238,419	150,043	63%	63%
16	Remediation Monitoring and Management	57,487	80,633	1,442	0	0	80,637	81,159	29,514	NA	56%
TOTALS (\$)		1,444,114	4,407,799	68,412	3,000	73,832	4,061,893	4,110,276	297,514		69%
LRRP Change Invoiced Separately											
11	LRRP Services ^{4,5}	15,348	100,082	330	0	0	103,948	103,978	2,430	NA	NA
TOTALS (\$)		15,348	100,082	330	0	0	103,948	103,978	2,430	NA	NA

Notes:
 1. Work authorized by Purchase Order Number 55114718 dated 4/2/12. In accordance with the Arcadis Technical Proposal dated 3/18/12 (Total \$850,322).
 2. Task 11 (\$16,849) authorized based on the Arcadis proposal dated 6/21/12 and approved by Change Order #1 dated 10/18/2012 (Total = \$85,891).
 3. Task 12 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 4/23/13. Also Increase Task 1 by \$18,000 (See PO and confirmatory e-mail from Ken Saborowski dated 1/28/13) (Total = \$812,102).
 4. Task 1 increased by \$15,018 and Task 11 increased by \$15,324 based on Arcadis proposal dated 10/29/12 and approved by Change Order #3 dated 1/14/13 (Total = \$942,442).
 5. Task 10 increased by \$15,000 based on the Arcadis proposal dated 12/16/13 and their approval email dated 12/19/13 (Total = \$657,442).
 6. Task 1 increased by \$5,000, Task 2 increased by \$30,000, Task 10 increased by \$10,000, and Task 11 increased by \$15,450 by Change Order #4 dated 1/17/14 (Total = 1,018,022).
 7. Task 1 increased by \$25,000, Task 2 increased by \$192,000, Task 4 increased by \$10,000, and Task 10 increased by \$25,000 by Change Order #5 dated 5/8/2015 (Total = 1,200,270).
 8. Task 13, 14 and 15 authorized based on the Arcadis proposal dated 5/27/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 9. Task 17 authorized based on the Arcadis proposal dated 6/23/15 and approved by Change Order #6 dated 10/16/2016 (Total = \$29,316).
 10. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 11. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 12. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 13. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 14. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 15. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 16. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 17. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 18. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 19. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 20. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 21. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 22. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 23. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 24. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).
 25. Task 1 increased by \$25,000 based on the Arcadis proposal dated 6/23/15 and approved via email correspondence by JCP&L dated 01/14/16 (Total = \$14,800).



INVOICE

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
ACH: 071000039 | Wire: 026009593 | SWIFT: BOFAUS33
Remittance info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: April 18, 2019
Project No: MD000776.0002
Invoice No: 0969084
Payment Terms: 45 Days
Invoice Due Date: June 2, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from February 25, 2019 to March 24, 2019

Task 00011 LSRP SERVICES
Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER I THOMPSON, DAVID	2.50	132.00	330.00
Totals	2.50		330.00
Total Labor			330.00
		Total this Task	\$330.00
		Total this Invoice	\$330.00

SBS 1118159096 FAX 38044565

JR-APS
029632
5/22/19

Line Item 11 - LSRP Services

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>0969084</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

5-22-19

Project MDD00776.0002 ICPL CAPE MAY MANUFACTURED GAS Invoice 0969084

Billing Backup

Thursday, April 18, 2019

ARCADIS INC.

Invoice 0969084 Dated 4/18/2019

7:38:20 AM

Task 00011 LSRP SERVICES

Professional Personnel

			Hours	Rate	Amount	
	PRINCIPAL SCIENTIST/ENGINEER I					
14254	THOMPSON, DAVID	3/3/2019	.50	132.00	66.00	
	Weekly status call					
14254	THOMPSON, DAVID	3/10/2019	.50	132.00	66.00	
	Weekly status call					
14254	THOMPSON, DAVID	3/17/2019	.50	132.00	66.00	
	Weekly status report					
14254	THOMPSON, DAVID	3/24/2019	1.00	132.00	132.00	
	Weekly status call					
	Totals		2.50		330.00	
	Total Labor					330.00

Total this Task \$330.00

Total this Project \$330.00

Total this Report \$330.00

*OK AFS
024632
4/23/19*



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

RECEIVED

APR 22 2019

Environmental Department

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – March 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning on 25 February 2019 and ending 24 March 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
17 April 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls and discussions.

If you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis



ARCADIS
 Arcadis USA, Inc.
 Bank of America | Acct. No. 8168093937
 ACH: 021000039 | Wire: 026009593 | SWIFT: BOFAUS33
 Remittance: info@arcadis-usa.com
 62638 Collections Center Drive | Chicago, IL 60633-0626

INVOICE

Jersey Central Power And Light Company
 Attention: Anna Sullivan
 300 Madison Avenue
 Morristown, NJ 07962-1911

Invoice Date: June 17, 2019
 Project No: MD000776.0002
 Invoice No: 0925326A
 Invoice Due Date: June 17, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
 PO# 55114718

Professional Services from June 25, 2018 to July 22, 2018

Task 00016 Restoration Monitoring & Mgmt.

Professional Personnel

	Hours	Rate	Amount	
PRINCIPAL SCIENTIST/ENGINEER I PARTRIDGE, DOUGLAS	23.50 ✓	132.00 ✓	3,102.00	
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	11.00 ✓	127.00 ✓	1,397.00	
PROJECT MANAGER/SENIOR ENGINEER I MARKIEWICZ, GARY	17.50 ✓	115.00 ✓	2,012.50	
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	11.00 ✓	115.00 ✓	1,265.00	
PROJECT SCIENTIST/ENGINEER II STEINBERGER, GEORGE	1.50 ✓	109.00 ✓	163.50	
PROJECT SCIENTIST/ENGINEER I MURRAY, JESSIE	30.50 ✓	102.00 ✓	3,111.00	
STAFF SCIENTIST/ENGINEER I IVES, KATHRYN	1.00 ✓	90.00 ✓	90.00	
FIELD INSPECTOR DAVIS, JAMES	8.00 ✓	74.00 ✓	592.00	
Totals	104.00		11,733.00	
Total Labor				11,733.00

Reimbursable Expenses

CAR RENTAL			158.86 ✓	
TOLLS, PARKING, TRANSPORT, GAS			153.55 ✓	
MEALS			13.65 ✓	
FIELD EXPENSES			5.86 ✓	
REIMB EMPLOYEE MILEAGE			89.38 ✓	
Total Reimbursables			421.30	421.30

Unit Billing

AquaNeat
 CideKick II
 Field Truck
 Sprayer, Backpack

128.41 ✓

Total this Invoice \$12,282.71

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0925326
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Task 00016 Restoration Monitoring & Mgmt.

Professional Personnel

			Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER I					
11551	PARTRIDGE, DOUGLAS	7/1/2018	1.50	132.00	198.00
	planning for site visit				
11551	PARTRIDGE, DOUGLAS	7/1/2018	2.00	132.00	264.00
	review memo as it pertains to adjacent property				
11551	PARTRIDGE, DOUGLAS	7/1/2018	15.00	132.00	1,980.00
	site visit with Viasent and Enviroscapes				
11551	PARTRIDGE, DOUGLAS	7/15/2018	1.00	132.00	132.00
	Restoration Call				
11551	PARTRIDGE, DOUGLAS	7/15/2018	2.50	132.00	330.00
	Restoration Memo				
11551	PARTRIDGE, DOUGLAS	7/22/2018	1.50	132.00	198.00
	restoration support				
PROJECT MANAGER/SENIOR ENGINEER II					
11783	CUCCUINI, JEREMY	7/1/2018	10.00	127.00	1,270.00
11783	CUCCUINI, JEREMY	7/22/2018	1.00	127.00	127.00
	review findings of mortality assessments and discussion with technical team members regarding next steps				
PROJECT MANAGER/SENIOR ENGINEER I					
11342	MARKIEWICZ, GARY	7/1/2018	1.00	115.00	115.00
	fieldwork coordination				
11342	MARKIEWICZ, GARY	7/8/2018	1.50	115.00	172.50
	fieldwork coordination/prep				
11342	MARKIEWICZ, GARY	7/8/2018	2.00	115.00	230.00
	herbicide maximum dose calculations				
11342	MARKIEWICZ, GARY	7/15/2018	12.00	115.00	1,380.00
	invasive species control				
11342	MARKIEWICZ, GARY	7/22/2018	1.00	115.00	115.00
	herbicide treatment records				
12981	MASTROCOLA, KRISTA	7/22/2018	11.00	115.00	1,265.00
	Phase 2 Wetlands Evaluation				
PROJECT SCIENTIST/ENGINEER II					
11085	STEINBERGER, GEORGE	7/8/2018	1.50	109.00	163.50
	Export shapefiles for Jessie Murray				

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS			Invoice	0925326
PROJECT SCIENTIST/ENGINEER I						
17088	MURRAY, JESSIE	7/1/2018	11.50	102.00	1,173.00	
	plant inspection w/ Enviroscapes					
17088	MURRAY, JESSIE	7/8/2018	1.00	102.00	102.00	
	plant survival memo					
17088	MURRAY, JESSIE	7/8/2018	2.00	102.00	204.00	
	plant survival memo; calls w/ client for City planning					
17088	MURRAY, JESSIE	7/15/2018	14.50	102.00	1,479.00	
	plant survival memo					
17088	MURRAY, JESSIE	7/22/2018	1.50	102.00	153.00	
	project coordination restoration/grading; team call discuss grading/restoration memo					
STAFF SCIENTIST/ENGINEER I						
19363	IVES, KATHRYN	7/15/2018	1.00	90.00	90.00	
	plant survival memo					
FIELD INSPECTOR						
17362	DAVIS, JAMES	7/15/2018	8.00	74.00	592.00	
	invasive species control /spray					
	Totals		104.00		11,733.00	
	Total Labor					11,733.00
Reimbursable Expenses						
CAR RENTAL						
EX 0980558	6/27/2018	PARTRIDGE, DOUGLAS / site visit - car			158.86	
TOLLS,PARKING,TRANSPORT,GAS						
EX 0981864	6/27/2018	MURRAY, JESSIE / tolls / meeting w/ Enviroscapes - review plant survival			9.00	
EX 0980558	6/27/2018	PARTRIDGE, DOUGLAS / gas			13.14	
EX 0980558	6/27/2018	PARTRIDGE, DOUGLAS / gas			36.12	
EX 0980558	6/27/2018	PARTRIDGE, DOUGLAS / parking at car rental/airport			60.00	
EX 0980558	6/27/2018	PARTRIDGE, DOUGLAS / tolls			35.29	
MEALS						
EX 0981864	6/27/2018	MURRAY, JESSIE / lunch / meeting w/ Enviroscapes - review plant survival			13.65	
FIELD EXPENSES						
EX 0980558	6/27/2018	PARTRIDGE, DOUGLAS / lunch			5.86	
REIMB EMPLOYEE MILEAGE						
EX 0981864	6/27/2018	MURRAY, JESSIE / mileage / meeting w/ Enviroscapes - review plant survival / 164.00 miles @ 0.545			89.38	
	Total Reimbursables				421.30	421.30
Unit Billing						
AquaNeat						
	MAKIEWICZ 7/11/18 -mi-18-009327		9.8 ounces @ 0.50		4.90	
CideKick II						
	MAKIEWICZ 7/11/18 -mi-18-009327		1.3 ounces @ 0.78		1.01	
Field Truck						
	LP0938 MARKIEWICZ 7/12/18 -mi-18-009332		1.0 day @ 82.50		82.50	

Project MD000776.0002 JCPL CAPE MAY MANUFACTURED GAS Invoice 0925326

Sprayer, Backpack

MAKIEWICZ 7/11/18 -mi-18-009327

2.0 days @ 20.00

40.00

128.41

Total this Task

\$12,282.71

*OR #13
C29632
6/25/19*

SES 1118306799 Inv 38040941

Line Item 16 - Restraining Monitor + Manager

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>0925326</u>
COMPANY CODE.: SCOO	COST CENTER <u>50202</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>287</u>

6-26-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel: 609.860.0590
Fax: 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – July 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 17 June 2019 and ending 28 July 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
26 August 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Perform a final erosion control site inspection with Cape Atlantic Soil Conservation district and obtain permit compliance documentation.
- Continued permitting of proposed wetland replacement wells including compiling and submitting permit application for New Jersey Department of Transportation (NJDOT) access for offsite monitoring well replacements.
- Perform routine O&M activities on the groundwater treatment system including: evaluate monthly pumping and extraction performance, data management and technical evaluation of permit-by-rule (PBR) sampling results, evaluation of system hydraulic capture and elevation gradient differences in the vicinity of the primary and secondary containment walls, review, evaluation and data management of the monthly permit-by-rule effluent sampling results, generation of the June 2019 monthly treatment system performance dashboard update, evaluation and troubleshooting of prior carbon breakthrough and relationship with total organic carbon (TOC) and oxidation within the equalization tank, complete the June and July 2019 permit-by-rule compliance sampling and complete the routine July 2019 site maintenance and carbon changeout activities, and process laboratory subcontractor invoicing for monthly PBR sampling, and June 2019



Ms. Anna Sullivan
26 August 2019

carbon changeout costs.

- Continued development and submittal of the Annual Permit-By-Rule Monitoring and complete the Q2 2019 site-wide groundwater monitoring event
- Continued follow-up with JCP&L Project management regarding City of Cape May redevelopment plans, and specifics regarding the primary and secondary containment wall depths and alignment.
- Continued development of the DRAFT Semi-Annual Groundwater Remedial Progress Report. Process field expenses and laboratory subcontractor invoicing associated with the Q2 2019 groundwater sampling event.
- Complete the formal spring 2019 site restoration inspection and documentation for year-end NJDEP restoration progress reporting.
- The MPR for June 2019 was submitted on 10 July 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.



Ms. Anna Sullivan
26 August 2019

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

Table 1
Budget Status for Site Remediation through 26 July 2019
Cape May Former MGP Site
Cape May, New Jersey
Purchase Order No. 55114718

TASK NO. (ARCADIS)	TASK NO. (JCP&L)	DESCRIPTION	ORIGINAL TASK BUDGET	CURRENT TASK BUDGET	CURRENT INVOICE AMOUNT	OUT OF SCOPE WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST CO	PREVIOUS AMOUNT INVOICED	CUMULATIVE AMOUNT INVOICED	BUDGET BALANCE	PROJECT SCORE % COMPLETE	FINANCIAL % COMPLETE
Phase 1, Site Remediation												
1	1	Project Management ^{1,2,3,4,5,6,7,8,9,10}	9,300	169,942	0	0	0	169,973	169,973	69	NA	100%
2	1	Remedial Action Work Plan ⁶	155,624	546,326	0	0	0	546,319	546,319	9	100%	100%
3	3	Procurement Assistance	100,491	185,967	0	0	0	185,540	185,540	327	100%	100%
4	4	Permit Acquisition	80,057	357,167	934	0	0	345,980	346,914	10,253	95%	97%
5	5	Construction Oversight	206,274	1,617,225	1,369	0	0	1,610,998	1,612,387	4,858	99%	98%
6	6	Remedial Action Report	27,883	27,861	4,541	0	0	22,112	28,653	1,208	79%	98%
7	7	O&M Manual	8,779	16,787	0	0	0	16,711	16,711	76	99%	100%
8	8	Start Up Testing	35,290	99,007	0	0	0	99,551	99,551	468	100%	100%
9	9	O&M	186,746	731,721	28,972	0	0	628,973	628,973	223,776	NA	71%
10	10	Technical Support ^{8,9}	10,000	175,772	1,537	0	0	161,157	182,894	13,079	NA	93%
12	12	601 Lafayette Street Demo Support ⁸	38,422	36,422	0	0	0	35,142	35,142	1,280	NA	98%
13	13	Waste Characterization Sampling	32,416	96,715	0	0	0	94,248	94,248	4,466	100%	95%
14	14	Soil Delineation	27,816	41,329	0	0	0	39,943	39,943	1,386	100%	97%
15	15	Background Investigation/Remedial Investigation Reporting	47,034	47,034	0	0	0	50,535	50,535	(3,501)	100%	107%
14A	14A	Vapor Intrusion Investigation	21,934	40,510	0	0	0	32,197	32,197	8,313	100%	100%
15	15	Groundwater Monitoring and Reporting	388,461	388,461	21,161	0	11,863	269,931	291,092	97,369	70%	75%
16	16	Restoration Monitoring and Management	37,697	66,653	3,762	0	0	43,511	47,273	19,380	NA	71%
TOTALS (\$):			1,442,114	4,898,902	62,276	0	11,863	4,251,722	4,313,998	382,804		92%
LSRP Charges Invoiced Separately												
11	11	LSRP Services ^{2,4,6}	15,248	106,002	396	0	0	104,566	104,962	1,040	NA	NA
TOTALS (\$):			15,248	106,002	396	0	0	104,566	104,962	1,040	NA	NA

Notes:
 1. Work authorized by Purchase Order Number 55114718 dated 4/12/12 in accordance with the Arcadis Technical Proposal dated 3/16/12 (Total = \$850,332).
 2. Task 11 (\$15,346) authorized based on the Arcadis proposal dated 5/21/12 and approved by Change Order #1 dated 10/16/2012 (Total = \$665,650).
 3. Task 12 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 1/22/13. Also increased Task 1 by \$10,000 (See PO and confirmatory e-mail from Ken Soborowski dated 10/28/13). (Total = \$912,102).
 4. Task 1 increased by \$15,015 and Task 11 increased by \$15,324 based on Arcadis proposal dated 10/28/13 and approved by Change Order #3 dated 11/4/13 (Total = \$942,442).
 5. Task 10 increased by \$18,000 based on the Arcadis proposal dated 12/18/13 and Grant approval email dated 12/19/13 (Total = \$957,442).
 6. Task 1 increased by \$5,000, Task 2 increased by \$30,000, Task 10 increased by \$15,000, and Task 11 increased by \$15,000 by Change Order #4 dated 11/11/14 (Total = 1,018,992).
 7. Task 1 increased by \$25,000, Task 2 increased by \$125,000, Task 4 increased by \$18,000, and Task 10 increased by \$18,000 by Change Order #5 dated 3/9/2016 (Total = 1,200,270).
 8. Task 13 authorized based on the Arcadis proposal dated 4/20/15 and approved by Change Order #6 dated 6/11/14 (Total = \$120,845.75).
 9. Task 17 authorized based on the Arcadis proposal dated 6/27/15 and approved by Change Order #7 dated 6/11/14 (Total = \$14,959).
 10. Task 10 increased by \$25,000 based on the Arcadis proposal dated 9/30/15 and approved by Change Order #8 dated 10/13/2016 (Total = \$89,318).
 11. Task 1 increased by \$35,000 and Task 11 increased by \$15,000 based on the Arcadis proposal dated 04/10/2016, and approved by Change Order #9 dated 4/22/2016.
 12. Task 2 increased by \$38,122, Task 2 increased by \$21,558 based on the Arcadis proposal dated 04/10/2016, and approved by JCP&L on April 3, 2016.
 13. Task 1 increased by \$28,122, Task 2 increased by \$28,716, Task 4 increased by \$75,232, Task 10 increased by \$21,386, Task 13 increased by \$60,234 and Task 14A created for \$21,394 based on the Arcadis proposal dated 9/22/2016, and as approved by Change Order #14, dated 9/27/16.
 14. Task 1 increased by \$57,810 based on the Arcadis proposal dated 9/29/2016, and approved by Change Order #15 dated 10/27/16.
 15. Task 1 increased by \$57,810 based on the Arcadis proposal dated 9/29/2016, and approved by Change Order #16, dated 1/17/17.
 16. Task 4 increased by \$78,478 based on the Arcadis proposal dated 5/24/17 and approved by Change Order #17, dated 7/12/17.
 17. Tasks 1, 2, 3, 4, 5, 10 and 11 increased by \$225,364 based on the Arcadis proposal dated 7/12/17 and approved by Change Order #18, dated 8/21/17.
 18. Tasks 6 (\$36,365), Task 8 (\$65,717) and Task 9 (\$85,008) increased by a total of \$186,290 based on the Arcadis proposal dated 9/27/2017, and approved by Change Order #19, dated 11/22/2018.
 19. Task 5 increased by \$358,329 based on the Arcadis proposal dated 11/10/2018 and as approved by JCP&L change order #20 dated 2/12/2019.
 20. Task 1 increased by \$13,000 based on the Arcadis proposal dated July 3, 2019, and as approved by Change Order #22 dated 8/16/19.
 21. Task 1 increased by \$13,000 based on the Arcadis proposal dated July 3, 2019, and as approved by Change Order #22 dated 8/16/19.
 22. Task 1 increased by \$28,272 and Task 5 increased by \$118,439 based on the Arcadis proposal dated January 11, 2019, and as approved by Change Order #23 (total of \$146,711) dated 2/4/2019.
 23. Task 4 increased by \$16,748, Task 5 increased by \$34,340, Task 9 increased by \$12,051, Task 10 increased by \$26,334, and Task 16 increased by \$28,656 based on the Arcadis proposal dated 3/24/19, and as approved by Change Order #24 (total \$118,609) dated 4/12/19.
 24. Task 9 increased by \$285,013 based on the Arcadis proposal dated 4/9/19, and as approved by Change Order #25 dated 7/15/19.

RECEIVED

MAY 24 2019

INVOICE

Environmental Department



Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188099937
ACH: 071.000.039 | Wire: 026005 593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: May 24, 2019
Project No: MD000776.0002
Invoice No: 0975577
Payment Terms: 45 Days
Invoice Due Date: July 8, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from March 25, 2019 to April 28, 2019

Task 00001 PROJECT MANAGEMENT

Professional Personnel

	Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	1.50 ✓	127.00 ✓	190.50
CLERICAL/ADMINISTRATION/WORD PROCESSOR FULTON, AMANDA	.10 ✓	43.00 ✓	4.30
Totals	1.60		194.80
Total Labor			194.80
Total this Task			\$194.80

Task 00005 CONSTRUCTION OVERSIGHT

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER II SCILLIERI, DARREN	.50 ✓	138.00	69.00
PRINCIPAL SCIENTIST/ENGINEER I PARTRIDGE, DOUGLAS	.50 ✓	132.00	66.00
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	16.00 ✓	127.00	2,032.00
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	7.50 ✓	115.00 ✓	862.50
PROJECT SCIENTIST/ENGINEER I MURRAY, JESSIE	12.00 ✓	102.00	1,224.00
STAFF SCIENTIST/ENGINEER I JACOBSON, ALEXANDER	7.50 ✓	90.00	675.00

Project MD000776.0002 JCPL CAPE MAY MANUFACTURED GAS Invoice 0975577

SENIOR DRAFTSPERSON WASILEWSKI, MACIEJ	8.70	65.00	565.50	
Totals	52.70		5,494.00	
Total Labor				5,494.00

Reimbursable Expenses

TOLLS,PARKING,TRANSPORT,GAS	18.00			
MEALS	17.08			
REIMB EMPLOYEE MILEAGE	241.28			
Total Reimbursables	276.36		276.36	276.36

Total this Task \$5,770.36

Task 00006 REMEDIAL ACTION REPORT

Professional Personnel

	Hours	Rate	Amount	
SENIOR DRAFTSPERSON SANCHEZ, ADRIAN	.50	65.00	32.50	
Totals	.50		32.50	
Total Labor				32.50

Total this Task \$32.50

Task 00009 O&M

Professional Personnel

	Hours	Rate	Amount	
PRINCIPAL SCIENTIST/ENGINEER II SCILLIERI, DARREN	4.50	138.00	621.00	
PRINCIPAL SCIENTIST/ENGINEER I FULLER, ANDREW	32.50	132.00	4,290.00	
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	8.50	127.00	1,079.50	
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	6.50	115.00	747.50	
PROJECT SCIENTIST/ENGINEER II SANCHEZ, ADRIANA	43.50	109.00	4,741.50	
PROJECT SCIENTIST/ENGINEER I BANDA, NADEEM	6.00	102.00	612.00	
ERICKSON, KEVIN	18.20	102.00	1,856.40	
STAFF SCIENTIST/ENGINEER I JACOBSON, ALEXANDER	20.00	90.00	1,800.00	
MCCONNELL, KEITH	81.90	90.00	7,371.00	
SCIENTIST/ENGINEER II MAURER, BENJAMIN	25.50	71.00	1,810.50	
WISSNER, ADAM	12.00	71.00	852.00	
SR. TECHNICIAN/SCIENTIST/ENGINEER I FOOS, PATRICK	1.00	61.00	61.00	
Totals	260.10		25,842.40	
Total Labor				25,842.40

Project MD000776.0002 JCPL CAPE MAY MANUFACTURED GAS Invoice 0975577

Consultants

SUB COSTS - LAB SERVICES

3/25/2019	VERITECH [HAMPTON-CLARKE]	1,724.04 ✓	
4/16/2019	VERITECH [HAMPTON-CLARKE]	1,724.04	
4/17/2019	VERITECH [HAMPTON-CLARKE]	329.56	
	Total Consultants	3,777.64	3,777.64

Reimbursable Expenses

CAR RENTAL	83.56 ✓	
TOLLS,PARKING,TRANSPORT,GAS	496.79	
LODGING AND APART RENTAL	776.05	
MEALS	127.69	
TELEPHONE	32.50	
EQUIPMENT RENTAL	450.95	
FIELD EXPENSES	228.99	
REIMB EMPLOYEE MILEAGE	127.60	
Total Reimbursables	2,324.13	2,324.13

Total this Task \$31,944.17

Task 00015 GW Monitoring & Reporting

Professional Personnel

	Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	2.00 X	127.00 =	254.00 ✓
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	1.00	115.00	115.00 ✓
STAFF SCIENTIST/ENGINEER I JACOBSON, ALEXANDER	2.50	90.00	225.00 ✓
SR. TECHNICIAN/SCIENTIST/ENGINEER I FOOS, PATRICK	4.00	61.00	244.00 ✓
SENIOR DRAFTSPERSON SANCHEZ, ADRIAN	3.00	65.00	195.00 ✓
Totals	12.50		1,033.00
Total Labor			1,033.00 ✓

Consultants

SUB COSTS - LAB SERVICES

3/28/2019	VERITECH [HAMPTON-CLARKE]	3,971.84	
3/28/2019	VERITECH [HAMPTON-CLARKE]	6,682.69	
3/28/2019	VERITECH [HAMPTON-CLARKE]	5,437.21	
3/28/2019	VERITECH [HAMPTON-CLARKE]	2,764.88	
	Total Consultants	18,856.62	18,856.62 ✓

Reimbursable Expenses

EQUIPMENT RENTAL	3,161.01	
Total Reimbursables	3,161.01	3,161.01 ✓

Total this Task \$23,050.63

Project	MD000776.0002	JCPL CAPE MAY MANUFACTURED GAS	Invoice	0975577
Task	00016	Restoration Monitoring & Mgmt.		
Professional Personnel				
		Hours	Rate	Amount
PROJECT SCIENTIST/ENGINEER I				
MURRAY, JESSIE		5.00	102.00	510.00
Totals		5.00		510.00
Total Labor				510.00
Reimbursable Expenses				
TOLLS,PARKING,TRANSPORT,GAS				9.00
REIMB EMPLOYEE MILEAGE				96.28
Total Reimbursables				105.28
			Total this Task	\$615.28
			Total this Invoice	\$61,607.74

*OKAYS
C29632
7-16-19
See document
Stamp Next
page →*

SES 1118379066 FAX 38045091
0975577-1 Line Item 1 - Project Management \$ 194.80 JJ 7-17-19

SES 1118379069 FAX 38045093
0975577-2 Line Item 5 - Construction Oversight \$ 5,770.36 JJ 7-17-19

SES 1118379070 FAX 38045094
0975577-3 Line Item 6 - Remedial Action Report \$ 32.50 JJ
7-17-19

SES 1118379071 FAX 38045095
0975577-4 Line Item 9 - OM&M \$ 31,944.17 JJ 7-17-19

SES 1118379072 FAX 38045096
0975577-5 Line Item 15 - Groundwater Monitoring
And Reporting \$ 23,050.63 JJ
7-17-19

SES 1118379073 FAX 38045097
0975577-6 Line Item 16 Restoration Monitoring
And Management \$ 615.28 JJ
7-17-19

APPROVAL STAMP	
P.O. NO. <u>35114718</u>	INV. NO. <u>0975577</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

7-17-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – April 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 25 March 2019 and ending 28 April 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
22 May 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Preparation for and coordination of Phase 2 and Phase 3 wetland restoration plantings, including subcontractor coordination and communications, planting scope and schedule confirmation, client discussions and technical review of time lapse tidal inundation videos and subsequent evaluation of findings. Conduct a site meeting with Arcadis, Entact and JCP&L Project management to review scope, site conditions, review schedule and generally prepare for mobilization of planting materials and staff.
- Evaluate ponding water observed adjacent to rear of Lot 40 and develop remedy to address areas of settlement.
- Perform routine O&M activities on the groundwater treatment system including: perform monthly site inspection, OM&M checklist items and maintenance of system components, evaluate monthly pumping and extraction performance, perform the required monthly permit-by-rule (PBR) sampling and associated data management and technical evaluation of sampling results, continued evaluation of system performance and finalize scope of iron filtration enhancements (e.g. filtration prior to carbon vessels), retrieval of groundwater elevation transducer data and evaluation of results regarding system hydraulic capture and elevation



Ms. Anna Sullivan
22 May 2019

gradient differences in the vicinity of the primary and secondary containment walls, generation of the March 2019 monthly treatment system performance dashboard update, oversight of sludge cleanout and disposal and perform carbon changeout procedures, perform the treatment system filtration enhancements including moving the existing bag filter assembly and pressure transmitters to treatment chain prior to the GAC vessels, coordination and process laboratory subcontractor invoicing for monthly PBR sampling (March and April 2019) and rental equipment charges, and negotiate changes to effluent reporting requirements with New Jersey Department of Environmental Protection (NJDEP).

- Charges to the OM&M (Task 9) also include non-routine items including: approximately 14.5 hours of field efforts to address non-routine shut-down of transfer pump TP-201, including pump cleanout and reset of the VFD (**\$1,305 week of 4/7**), and 5-hours of associated office-based engineering support to troubleshoot the issue and coordinate field repairs (**\$545 week of 4/17**). Accordingly, the total costs for out-of-scope OM&M charges for this period are **\$1,850**.
- Process rental equipment charges and laboratory subcontractor invoicing associated with the Q1 2019 quarterly groundwater monitoring and sampling event. Perform associated data management and evaluation of results.
- Conduct a site visit with NJDEP Mitigation staff to review Phase 2/Phase 3 restoration conditions within the Phase 2/3 wetland and upland areas.
- The MPR for March 2019 was submitted on 17 April 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task



Ms. Anna Sullivan
22 May 2019

14A), Task 15 Groundwater Monitoring and Reporting, and Task 18 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cuccuini', written over a horizontal line.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

ARCADIS

Coastal Water Management
Prepared Schedule for Remedial Action

FIGURE 1

Task Name	Duration	Start	Finish	2018	2019	2020	2021	2022	2023
				Q1	Q2	Q3	Q4	Q1	Q2
1 Remedial Action	6254 days	Wed 10/2/02	Thu 2/1/14						
2 Project Planning and Coordination	243 days	Wed 10/2/02	Fri 11/7/02						
23 Remedial Design	466 days	Thu 10/30/02	Thu 8/4/03						
24 Pre-Design Workshop	630 days	Thu 10/30/02	Thu 3/4/03						
44 R46R	1407 days	Wed 8/28/02	Thu 7/2/03						
43 Pre-Design Activities	1329 days	Mon 11/7/02	Wed 2/6/03						
64 Groundwater Sampling (20 wells)	1439 days	Mon 11/7/02	Fri 7/18/03						
67 Annual Groundwater Sampling and Analysis (5 wells)	36 days	Thu 3/14/03	Fri 4/18/03						
75 Access and Permitting	60 days	Mon 8/21/03	Mon 11/23/03						
76 Historic Structure Investigation	71 days	Mon 8/21/03	Thu 12/4/03						
80 Soil Boring Installation/Sampling and Analysis	133 days	Mon 8/21/03	Wed 3/10/04						
81 Geotechnical/Structural Consulting	40 days	Mon 8/21/03	Mon 10/20/03						
82 Soil Borings	30 days	Thu 12/18/03	Wed 1/14/04						
86 Barge-scale Testing	66 days	Tue 12/22/03	Wed 3/11/04						
90 Aquifer Testing	80 days	Mon 8/21/03	Thu 1/23/04						
90 Groundwater Flow and Transport Model	54 days	Mon 12/27/03	Mon 3/8/04						
102 Remedial Action Work Plan	246 days	Mon 11/18/03	Fri 10/23/04						
100 Remedial Implementation	1543 days	Mon 10/13/03	Fri 10/13/04						
109 First Season	918 days	Mon 10/13/03	Fri 8/28/04						
151 Second Season	338 days	Mon 11/20/03	Fri 8/28/04						
191 Third Season	208 days	Tue 8/27/03	Fri 10/12/03						
183 Restoration Monitoring	1316 days	Mon 8/27/03	Fri 6/24/04						
194 Remedial Action Report (RAR)	250 days	Mon 11/6/03	Fri 11/17/03						
198 Operation and Maintenance	1680 days	Fri 8/22/03	Thu 5/12/04						

Project: Cape May
Date: Fri 5/27/15

Task: Spill Mitigation Summary

Project Summary: External Task

Include Milestones: Inactive Summary

Manual Summary: Bar-only

Progress: Spill

Table 1
Budget Status for Site Remediation through 28 April 2018
Cape May, New Jersey
Purchase Order No. 55114718

TASK NO.	TASK NO.	DESCRIPTION	ORIGINAL TASK BUDGET	CURRENT TASK BUDGET	CURRENT INVOICE AMOUNT	OUT OF SCOPE WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST CO	PREVIOUS AMOUNT INVOICED	CUMULATIVE AMOUNT INVOICED	BUDGET BALANCE	PROJECT SCOPE % COMPLETE	FINANCIAL % COMPLETE
1	1	Project Management ^{1,4,5} to	8,300	139,692	185	0	0	158,879	169,873	89	NA	100%
2	2	Remedial Action Work Plan ⁶	154,624	548,328	0	0	0	548,310	548,310	9	100%	100%
3	3	Procurement Assistance	180,401	163,887	0	0	0	165,540	165,540	327	100%	100%
4	4	Permit Acquisition	80,057	357,187	0	0	0	340,044	340,044	17,123	98%	98%
5	5	Construction Oversight	239,274	1,817,225	5,770	0	0	1,688,183	1,588,803	23,282	88%	88%
6	6	Remedial Action Report	27,851	18,787	0	0	0	23,079	23,112	5,750	79%	79%
7	7	QAM Manual	8,778	18,787	0	0	0	16,711	16,711	778	100%	100%
8	8	Soil Lip Testing	35,290	89,007	0	0	0	86,461	86,551	488	100%	100%
9	9	QAM	189,749	482,708	31,944	1,850	0	433,813	489,907	(3,689)	101%	101%
10	10	Technical Support ¹¹	10,800	175,272	0	0	0	158,708	158,708	18,887	NA	93%
12	12	801 Lafayette Street Demo Support ⁷	36,422	26,422	0	0	0	25,142	25,142	1,280	NA	95%
13	13	Waste Characterization Sampling	26,418	27,818	0	0	0	26,248	26,248	4,495	100%	100%
14	14	Soil Demolition	47,034	47,329	0	0	0	21,843	39,849	1,383	100%	97%
15	15	Background Investigation/Remedial Investigation Reporting	21,034	40,170	0	0	0	50,535	50,535	(3,501)	100%	107%
14a	14	Vapor Intrusion Investigation	398,481	284,481	32,051	0	0	32,197	32,197	6,313	100%	70%
16	16	Groundwater Monitoring and Reporting	37,887	69,883	678	0	0	233,418	238,409	131,802	65%	87%
		Remediation Monitoring and Management						37,138	37,725	28,538	NA	67%
		TOTAL (\$):	1,442,114	4,401,799	87,908	1,850	79,382	4,116,278	4,171,885	225,004		85%
11	11	LEAP Services ¹⁴	15,348	108,000	398	0	0	102,598	103,972	2,000	NA	NA
		TOTAL (\$):	15,348	108,000	398	0	0	102,598	103,972	2,000	NA	NA

Notes:

1. Work authorized by Purchase Order Number 55114718 dated 4/12/12 in accordance with the Arcadis Technical Proposal dated 3/18/12 (Total = \$850,353).
2. Task 11 (\$18,348) authorized based on the Arcadis proposal dated 5/27/12 and approved by Change Order #1 dated 10/18/2012 (Total = \$845,660).
3. Task 12 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 12/21/12. Also increased Task 1 by \$10,000 (See PO and configuration e-mail from Ken Stekornow dated 1/22/2013) (Total = \$912,102)
4. Task 10 increased by \$18,018 and Task 11 increased by \$15,328 based on Arcadis proposal dated 10/23/13 and approved by Change Order #5 dated 11/4/13 (Total = \$942,442).
5. Task 10 increased by \$15,000 based on the Arcadis proposal dated 12/19/13 and approved by Change Order #6 dated 1/17/14 (Total = 1,018,082).
6. Task 1 increased by \$4,000, Task 2 increased by \$84,000, Task 3 increased by \$10,000, and Task 11 increased by \$18,320 by Change Order #8 dated 1/17/14 (Total = 1,018,082).
7. Task 1 increased by \$20,000, Task 2 increased by \$20,000, Task 3 increased by \$20,000, and Task 11 increased by \$18,320 by Change Order #9 dated 1/17/14 (Total = 1,280,379).
8. Task 13, 14, and 15 authorized based on the Arcadis proposal dated 4/23/15 and approved by Change Order #10 dated 6/11/14 (Total = \$14,890).
9. Task 17 authorized based on the Arcadis proposal dated 5/27/15 and approved via email correspondence by ADPRL dated 6/11/14 (Total = \$14,890).
10. Task 11 increased by \$65,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #11 dated 7/22/15.
11. Task 10 increased by \$25,000 and Task 11 increased by \$15,000 based on the Arcadis proposal dated 09/01/2015 and approved by Change Order #11 dated 9/11/14 (Total = \$89,318).
12. Task 1 increased by \$25,000 and Task 3 increased by \$21,039 based on the Arcadis proposal dated 09/01/2015 and approved by Change Order #11 dated 9/11/14 (Total = \$110,357).
13. Task 1 increased by \$25,000 and Task 3 increased by \$21,039 based on the Arcadis proposal dated 09/01/2015 and approved by Change Order #11 dated 9/11/14 (Total = \$110,357).
14. Task 5 increased by \$878,577 based on the Arcadis proposal dated 8/25/2016 and approved by Change Order #15 dated 10/27/16.
15. Task 4 increased by \$17,210 and Task 14 increased by \$18,578 based on the Arcadis proposal dated 12/7/2016 and approved by Change Order #16 dated 1/27/17.
16. Task 4 increased by \$72,478 based on the Arcadis proposal dated 5/20/17 and approved by Change Order #17 dated 7/27/17.
17. Task 4, 5, 10, and 11 increased by \$223,283 based on the Arcadis proposal dated 7/12/17 and approved by Change Order #18 dated 8/27/17.
18. Task 4, 5, 10, and 11 increased by \$223,283 based on the Arcadis proposal dated 7/12/17 and approved by Change Order #18 dated 8/27/17.
19. Task 5 increased by \$50,829 based on Arcadis proposal dated 11/6/2018 and approved by ADPRL dated 1/2/2019.
20. Task 8 increased by \$23,831, Task 15 created in the amount of \$588,461, and Task 16 created in the amount of \$17,887 based on ADPRL dated 2/1/2019.
21. Task 11 increased by \$15,000 based on the Arcadis proposal dated July 5, 2018, and approved by Change Order #23 dated 8/23/2018.
22. Task 11 increased by \$259,272 and Task 5 increased by \$178,439 based on the Arcadis proposal dated January 11, 2019, and approved by Change Order #23 dated 2/1/2019.
23. Task 4 increased by \$15,146, Task 5 increased by \$85,354, and Task 16 increased by \$20,358 based on the Arcadis proposal dated 5/24/19, and approved by Change Order #24 dated 4/12/19.

RECEIVED

MAY 24 2019

Environmental Department



INVOICE

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
ACH: 071.000.099 | Wire: 026009593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: May 24, 2019
Project No: MD000776.0002
Invoice No: 0975596
Payment Terms: 45 Days
Invoice Due Date: July 8, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from March 25, 2019 to April 28, 2019

Task 00011 LSRP SERVICES

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER I			
THOMPSON, DAVID	3.00	132.00	396.00
Totals	3.00		396.00
Total Labor			396.00
Total this Task			\$396.00
Total this Invoice			\$396.00

SES1118379074 tax 38045098

MR AB
C29632
7-16-19

Line Item 11 - LSRP Services

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>0975596</u>
COMPANY CODE: <u>SC00</u>	COST CENTER <u>502712</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

7-17-19

Project MD000776.0002 JCPL CAPE MAY MANUFACTURED GAS Invoice 0975596

Billing Backup

Friday, May 24, 2019

ARCADIS INC

Invoice 0975596 Dated 5/24/2019

11:05:18 AM

Task 00011 LSRP SERVICES

Professional Personnel

			Hours	Rate	Amount
	PRINCIPAL SCIENTIST/ENGINEER I				
14254	THOMPSON, DAVID	4/7/2019	.50	132.00	66.00
	GW Status				
14254	THOMPSON, DAVID	4/21/2019	1.00	132.00	132.00
	Review groundwater sampling requirements for new compounds, PFAS, 1,4-dioxane, cresyl phosphates				
14254	THOMPSON, DAVID	4/28/2019	1.00	132.00	132.00
	Evaluate PFAS and new GWQS compounds				
14254	THOMPSON, DAVID	4/28/2019	.50	132.00	66.00
	Weekly Status call				
	Totals		3.00		396.00
	Total Labor				396.00
				Total this Task	\$396.00
				Total this Project	\$396.00
				Total this Report	\$396.00



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – April 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning on 25 March 2019 and ending 28 April 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
22 May 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls and discussions. Evaluate potential for groundwater analysis of non-routine sampling parameters.

Our ref:
MD000776.0002

If you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

RECEIVED

JUN 21 2019

Environmental Department

INVOICE



Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188099937
ACH: 071000039 | Wire: 026009593 | SWIFT: BOFAUS3M
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: June 17, 2019
Project No: MD000776.0004
Invoice No: 0980753
Payment Terms: 45 Days
Invoice Due Date: August 1, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from April 29, 2019 to May 26, 2019

Task 00004 Permit Acquisition

Professional Personnel

	Hours	Rate	Amount	
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	2.50	127.00	317.50	✓
PROJECT SCIENTIST/ENGINEER I MURRAY, JESSIE	15.60	102.00	1,591.20	✓
STAFF SCIENTIST/ENGINEER I CORBETT, DYLAN	1.50	90.00	135.00	✓
MILLER-DANNELONGUE, GWENDOLINE	24.00	90.00	2,160.00	✓
SENIOR DRAFTSPERSON FATTO, TRACEY	4.20	65.00	273.00	
Totals	47.80		4,476.70	
Total Labor				4,476.70

Reimbursable Expenses

PHOTOS, MAPS, PUBLICATIONS			70.00	✓
FEEES, PERMITS & LICENSES			20.00	✓
Total Reimbursables			90.00	

Total this Task \$4,566.70

Handwritten notes:
HOLD THE
P4-10-14

Task 00005 Construction Oversight

Professional Personnel

	Hours	Rate	Amount	
PROJECT ADVISOR/SENIOR EXPERT CABALLERO, DAVID	.50	162.00	81.00	✓
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	26.50	127.00	3,365.50	✓

Project	MD000776.0004	JCPL/CAPE MAY MANUFACTURED GAS PLANT	Invoice	0980753
PROJECT MANAGER/SENIOR ENGINEER I				
	MASTROCOLA, KRISTA	12.00	115.00	1,380.00 ✓
PROJECT SCIENTIST/ENGINEER I				
	MURRAY, JESSIE	84.00	102.00	8,568.00 ✓
STAFF SCIENTIST/ENGINEER I				
	JACOBSON, ALEXANDER	10.50	90.00	945.00 ✓
SENIOR DRAFTSPERSON				
	WASILEWSKI, MACIEJ	9.70	65.00	630.50 ✓
	Totals	143.20		14,970.00
	Total Labor			14,970.00
Reimbursable Expenses				
	CAR RENTAL			407.19 ✓
	TOLLS,PARKING,TRANSPORT,GAS			158.21 ✓
	LODGING AND APART RENTAL			545.80 ✓
	MEALS			192.10 ✓
	FIELD EXPENSES			74.75 ✓
	REIMB EMPLOYEE MILEAGE			145.00 ✓
	Total Reimbursables			1,523.05
				1,523.05
			Total this Task	\$16,493.05

\$ 16,493.05

Task 00009 O&M
Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER II			
	KLADIAS, MICHAEL	3.00 ✓	138.00
	SCILLIERI, DARREN	5.00 ✓	138.00
PRINCIPAL SCIENTIST/ENGINEER I			
	FULLER, ANDREW	20.00 ✓	132.00
PROJECT MANAGER/SENIOR ENGINEER II			
	CUCCUINI, JEREMY	7.00 ✓	127.00
PROJECT MANAGER/SENIOR ENGINEER I			
	MASTROCOLA, KRISTA	1.00 ✓	115.00
PROJECT SCIENTIST/ENGINEER I			
	BANDA, NADEEM	15.00 ✓	102.00
	ERICKSON, KEVIN	.30 ✓	102.00
STAFF SCIENTIST/ENGINEER I			
	CATCHPOLE, DANIEL	3.50 ✓	90.00
	JACOBSON, ALEXANDER	13.50 ✓	90.00
	KUNTE PANDURANGARAO, NAGESHRAO	7.00 ✓	90.00
	MCCONNELL, KEITH	27.10	90.00 ✓
SCIENTIST/ENGINEER II			
	MAURER, BENJAMIN	20.00 ✓	71.00
SR. TECHNICIAN/SCIENTIST/ENGINEER I			
	FOOS, PATRICK	.50 ✓	61.00
	Totals	122.90 ✓	12,358.10
	Total Labor		12,358.10

Project	MD000776.0004	JCPL/CAPE MAY MANUFACTURED GAS PLANT	Invoice	0980753
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Consultants

SUB COSTS - LAB SERVICES

5/21/2019	VERITECH (HAMPTON-CLARKE)	1,724.04	
	Total Consultants	1,724.04	1,724.04 ✓

Reimbursable Expenses

CAR RENTAL	327.70 ✓	
TOLLS,PARKING,TRANSPORT,GAS	56.16 ✓	
LODGING AND APART RENTAL	215.62 ✓	
MEALS	43.22 ✓	
TELEPHONE	160.03 ✓	
EQUIPMENT RENTAL	169.72 ✓	
FIELD EXPENSES	30.49 ✓	
MATERIAL & EQUIPMENT	105.19 ✓	
REIMB EMPLOYEE MILEAGE	127.60 ✓	
Total Reimbursables	1,235.73	1,235.73

Total this Task **\$15,317.87**

Task 00010 Technical Support

Professional Personnel

	Hours	Rate	Amount
PROJECT ADVISOR/SENIOR EXPERT CABALLERO, DAVID	1.00 ✓	162.00	162.00
PRINCIPAL SCIENTIST/ENGINEER II SCILLIERI, DARREN	2.00	138.00	276.00
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	5.50	127.00	698.50
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	1.00	115.00	115.00
SENIOR DRAFTSPERSON SANCHEZ, ADRIAN	5.50 ✓	65.00	357.50
CLERICAL/ADMINISTRATION/WORD PROCESSOR IRIZARRY, ALEXCIA	.50	43.00	21.50
Totals	15.50		1,630.50 ✓
Total Labor			1,630.50

\$ 15 075.10

Reimbursable Expenses

POSTAGE,SHIP,& MESSENGER	37.04	
Total Reimbursables	37.04	37.04

Total this Task **\$1,667.54**

Task 00015 GW Monitoring & Reporting

Professional Personnel

	Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	3.00 ✓	127.00	381.00

Project	MD000776.0004	JCPL/CAPE MAY MANUFACTURED GAS PLANT	Invoice	0980753
SR. TECHNICIAN/SCIENTIST/ENGINEER I				
	FOOS, PATRICK	.50	61.00	30.50
	Totals	3.50		411.50
	Total Labor			411.50
Reimbursable Expenses				
	CAR RENTAL			610.59
	TOLLS,PARKING,TRANSPORT,GAS			62.05
	MEALS			54.89
	PER DIEM			437.35
	FIELD EXPENSES			5.87
	Total Reimbursables		1,170.75	1,170.75
			Total this Task	\$1,582.25

Task 00016 Restoration Monitoring & Management

Professional Personnel

	Hours	Rate	Amount	
PROJECT MANAGER/SENIOR ENGINEER II				
CUCCUINI, JEREMY	2.00	127.00	254.00	
PROJECT MANAGER/SENIOR ENGINEER I				
MARKIEWICZ, GARY	1.00	115.00	115.00	
PROJECT SCIENTIST/ENGINEER I				
MURRAY, JESSIE	3.00	102.00	306.00	
Totals	6.00		675.00	
Total Labor				675.00
			Total this Task	\$675.00
			Total this Invoice	\$40,302.41

DNATS
C29632
7-16-19
See Appendix
Stamp Next
page →

SES 1118412879 FAX 38046530

0980753-1 Line Item ⁴ ~~7~~ - ~~Project Management~~ ^{Perma Acquisition} \$ 4,566.70

AFS
OK'd by 7/24/19
Hold by 7-23-19
#011 FOR FURNISH

SES 1118400427 FAX 38046044

0980753-2 Line Item 5 - Construction Oversight \$ 16,498.05

OK by 7-23-19

SES 1118400428 FAX 38046045

0980753-3 Line Item 9 - OM&M \$ 15,317.87

SES 1118^H00429 FAX 38046046

0980753-4 Line Item 10 - Technical Support \$ 1,667.54

SES 1118⁴⁰⁰⁴³⁰~~00430~~ FAX 38046047

0980753-5 Line Item 15 - Groundwater Monitoring
And Reporting \$ 1,582.25

SES 1118⁴⁰⁰⁴³²~~0040032~~ FAX 38046048

~~0975577-6~~ 0980753-6 Line Item 16 Restoration Monitoring
And Management \$ 675.00

↓
↓

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>0980753</u>
COMPANY CODE.: SCOO	COST CENTER <u>SP2702</u>
COST ELEMENT (GL ACCT.): <u>5</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>292</u>

7-23-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

RECEIVED
JUN 21 2019
Environmental Department

Subject:
Monthly Progress Report (MPR) – May 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 29 April 2019 and ending 26 May 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
13 June 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Preparation, mobilization and for and completion of Phase 2 and Phase 3 wetland restoration planting oversight, including subcontractor coordination and communications, planting oversight, client discussions and technical review of time-lapse tidal inundation videos and subsequent evaluation of findings. Conduct a site meeting with Arcadis, Entact and JCP&L Project management to review scope, site conditions, review schedule and generally prepare for mobilization of planting materials and staff.
- Evaluate ponding water observed adjacent to rear of Lot 40 and develop remedy to address areas of settlement. Oversight of Lot 40 work completed May 20, 2019.
- Initiate permitting of proposed wetland replacement wells including completion of appropriate NJDEP LURP form, attachments, evaluate permit requirements, and process NJDEP permitting fees.
- Perform routine O&M activities on the groundwater treatment system including: perform monthly site inspection, OM&M checklist items and maintenance of system components, cleanout of the PW-2 and PW-4 extraction lines, evaluate monthly pumping and extraction performance, perform the required monthly



Ms. Anna Sullivan
13 June 2019

permit-by-rule (PBR) sampling and associated data management and technical evaluation of sampling results, continued evaluation of system performance including retrieval of groundwater elevation transducer data and evaluation of results regarding system hydraulic capture and elevation gradient differences in the vicinity of the primary and secondary containment walls, reset PW-4 breaker based on overnight power loss in the building, generation of the April 2019 monthly treatment system performance dashboard update, evaluation and troubleshooting of carbon breakthrough and carbon supplier subcontractor discussions, and coordination and process laboratory subcontractor invoicing for monthly PBR sampling and rental equipment charges.

- Review of City of Cape May redevelopment plans, complete cost estimate for replacement of recreational features, and generation of CAD overlay of proposed development plans on existing site plan for meeting between JCP&L Project Management and City of Cape May.
- Process field expenses associated with prior Q1 groundwater sampling event. Plan and coordinate Q2 sampling event.
- Generation of invasive species management notifications on herbicide applications and generally planning of 2019 invasive species management event.
- The MPR for April 2019 was submitted on 22 May 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in



Ms. Anna Sullivan
13 June 2019

each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cuccuini', with a horizontal line underneath.

Jeremy Cuccuini
Certified Project Manager

Copies:

J. McLaughlin, Arcadis
D. Scillien, Arcadis

ARCADIS		Project: Schedule For Remedial Action		2018		2019		2020		2021		2022	
ID	Task Name	Duration	Start	Finish	2018	2019	2020	2021	2022	01	02	03	04
1	Remedial Action	6254 days	Wed 08/08/18	Thu 27/12/24									
2	Project Planning and Coordination	213 days	Wed 08/08/18	Fri 01/11/18									
23	Remedial Design	686 days	Thu 02/03/19	Thu 04/06/20									
24	Pre-Design Workshop	585 days	Thu 02/03/19	Thu 04/06/20									
44	RSAR	1007 days	Wed 02/03/19	Thu 07/20/20									
62	Pre-Design Activities	1328 days	Mon 1/7/19	Wed 31/10/19									
63	Groundwater Sampling	4039 days	Mon 1/7/19	Fri 1/8/20									
64	Baseline Groundwater Sampling (30 wells)	26 days	Mon 1/7/19	Fri 2/8/19									
67	Annual Groundwater Sampling and Analysis (3 weeks)	865 days	Thu 01/08/19	Fri 1/8/20									
75	Access and Permitting	60 days	Mon 02/10/18	Mon 11/23/18									
78	Historic Structure Investigation	71 days	Mon 02/10/18	Thu 12/13/18									
80	Soil Boring Installation, Sampling and Analysis	133 days	Mon 02/10/18	Wed 3/10/18									
81	Clear/Under/Subcontracting	40 days	Mon 02/10/18	Mon 10/28/18									
82	Soil Borings	30 days	Tue 12/18/18	Wed 1/19/19									
85	Baseline Testing	68 days	Thu 12/20/18	Wed 3/10/19									
86	Asphalt Testing	38 days	Mon 02/10/18	Thu 12/13/18									
88	Groundwater Flow and Transport Model	54 days	Mon 12/21/18	Mon 3/18/19									
102	Remedial Action Work Plan	248 days	Mon 11/19/18	Fri 10/28/19									
100	Remedial Implementation	1943 days	Mon 10/15/18	Fri 10/12/19									
109	First Season	918 days	Mon 10/15/18	Fri 02/09/19									
151	Second Season	388 days	Mon 11/20/18	Fri 02/01/19									
191	Third Season	309 days	Tue 08/14/19	Fri 10/12/19									
193	Restoration Monitoring	1375 days	Mon 3/12/19	Fri 02/01/20									
194	Remedial Action Report (RAR)	260 days	Mon 11/26/19	Fri 11/17/19									
198	Operation and Maintenance	1680 days	Fri 03/01/19	Thu 27/12/24									

INVOICE

RECEIVED
JUN 21 2019
Environmental Department



Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8186093937
ACH: 071000039 | Wire: 026009593 | SWIFT: BOFAUS33
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: June 17, 2019
Project No: MD000776.0004
Invoice No: 0980762
Payment Terms: 45 Days
Invoice Due Date: August 1, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from April 29, 2019 to May 26, 2019

Task 00011 LSRP Services

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER I THOMPSON, DAVID	3.00	132.00	396.00
Totals	3.00		396.00
Total Labor			396.00
		Total this Task	\$396.00

Total this Invoice \$396.00

JLATS
C29632
7/5/19

SES1118336842 FAX 38042825

Line Item 11 - LSRP Services

5-5114718

APPROVAL STAMP	
P.O. NO. <i>65117418</i>	INV. NO. <i>0980762</i>
COMPANY CODE: SCOO	COST CENTER <i>502702</i>
COST ELEMENT (GL ACCT.): <i>650300</i>	
ORDER: <i>3001018</i>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <i>[Signature]</i>	EMP. NO.: <i>297</i>

NOTE
paid
\$394

7-5-19

Project	MD000776.0004	JCPL/CAPE MAY MANUFACTURED GAS PLANT	Invoice	0980762
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Billing Backup

Monday, June 17, 2019

ARCADIS INC.

Invoice 0980762 Dated 6/17/2019

1:47:28 PM

Task 00011 LSRP Services

Professional Personnel

			Hours	Rate	Amount	
	PRINCIPAL SCIENTIST/ENGINEER I					
14254	THOMPSON, DAVID	5/5/2019	1.00	132.00	132.00	
	Weekly Status call and follow-up.					
14254	THOMPSON, DAVID	5/12/2019	.50	132.00	66.00	
	Weekly status call					
14254	THOMPSON, DAVID	5/19/2019	.50	132.00	66.00	
	RFS cost estimate and form					
14254	THOMPSON, DAVID	5/19/2019	.50	132.00	66.00	
	Weekly status call and follow-up					
14254	THOMPSON, DAVID	5/26/2019	.50	132.00	66.00	
	Weekly status call					
	Totals		3.00		396.00	
	Total Labor					396.00
				Total this Task		\$396.00
				Total this Project		\$396.00
				Total this Report		\$396.00

Sullivan, Anna

From: Sullivan, Anna F (Lawson, Frank D) <afsullivan@firstenergycorp.com>
Sent: Friday, July 5, 2019 2:59 PM
To: Sullivan, Anna
Subject: [EXTERNAL] FW: KCS delivery notification: SES 1118336842

print

-----Original Message-----

From: 38042825@femailfax.com <FAX@femailfax.com>
Sent: Friday, July 5, 2019 2:54 PM
To: Sullivan, Anna F (Lawson, Frank D) <afsullivan@firstenergycorp.com>
Subject: KCS delivery notification: SES 1118336842

KCS Delivery Notification

Message 00032170018 sent to 38042825@femailfax.com 38042825- Time sent: 19-07-05 14:54:06
Subject: SES 1118336842

Costs: for Costcenter DEVELOP

The information contained in this message is intended only for the personal and confidential use of the recipient(s) named above. If the reader of this message is not the intended recipient or an agent responsible for delivering it to the intended recipient, you are hereby notified that you have received this document in error and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify us immediately, and delete the original message.

INVOICE

RECEIVED
JUL 16 2019
Environmental Department



Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct No. 8188099937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: July 10, 2019
Project No: MD000776.0004
Invoice No: 0984702
Payment Terms: 45 Days
Invoice Due Date: August 24, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from May 27, 2019 to June 16, 2019

Task 00004 Permit Acquisition

Professional Personnel

	Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	1.00	127.00	127.00
PROJECT SCIENTIST/ENGINEER I MURRAY, JESSIE	1.50	102.00	153.00
STAFF SCIENTIST/ENGINEER I MILLER-DANNELONGUE, GWENDOLINE	7.00	90.00	630.00 ✓
SENIOR DRAFTSPERSON SANCHEZ, ADRIAN	3.00	65.00	195.00 ✓
CLERICAL/ADMINISTRATION/WORD PROCESSOR SANTOS, LEONELA	.80	43.00	34.40 ✓
Totals	13.30		1,139.40
Total Labor			1,139.40

Reimbursable Expenses

FEES, PERMITS & LICENSES			230.00
Total Reimbursables			230.00 ✓

Total this Task \$1,369.40

Task 00005 Construction Oversight

Professional Personnel

	Hours	Rate	Amount
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	4.50	127.00	571.50
Totals	4.50		571.50
Total Labor			571.50 ✓

Total this Task \$571.50

Project MD000776.0004 JCPL/CAPE MAY MANUFACTURED GAS PLANT Invoice 0984702

Task 00009 O&M

Professional Personnel

	Hours	Rate	Amount	
PRINCIPAL SCIENTIST/ENGINEER I FULLER, ANDREW	22.50	132.00	2,970.00	✓
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	2.00	127.00	254.00	✓
PROJECT SCIENTIST/ENGINEER II ERICKSON, KEVIN	1.70	109.00	185.30	✓
PROJECT SCIENTIST/ENGINEER I BANDA, NADEEM	7.00	102.00	714.00	✓
STAFF SCIENTIST/ENGINEER I JACOBSON, ALEXANDER	5.00	90.00	450.00	✓
TRACY, JONATHAN	1.00	90.00	90.00	✓
SCIENTIST/ENGINEER II MAURER, BENJAMIN	10.50	71.00	745.50	✓
Totals	49.70		5,408.80	
Total Labor				5,408.80

Consultants

SUBCONTRACTOR COSTS				
5/31/2019	TIGG CORPORATION (EPAY)	$8,600 \times 7 =$	9,202.00	✓
5/31/2019	TIGG CORPORATION (EPAY)	$535 \times 7 =$	572.45	✓
SUB COSTS - LAB SERVICES				
6/16/2019	VERITECH [HAMPTON-CLARKE]	$1,611.25 \times 7 =$	1,724.04	✓
	Total Consultants		11,498.49	11,498.49 ✓

Reimbursable Expenses

CAR RENTAL	189.45	✓
TOLLS, PARKING, TRANSPORT, GAS	20.60	
TELEPHONE *	185.51	
EQUIPMENT RENTAL -	353.31	
MATERIAL & EQUIPMENT -	191.42	
Total Reimbursables	940.29	940.29

Total this Task \$17,847.58

Task 00010 Technical Support

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER II SCILLIERI, DARREN	.50	138.00	69.00
PROJECT MANAGER/SENIOR ENGINEER II CUCCUINI, JEREMY	10.00	127.00	1,270.00
PROJECT MANAGER/SENIOR ENGINEER I MASTROCOLA, KRISTA	10.50	115.00	1,207.50

Project	MD000776.0004	JCPL/CAPE MAY MANUFACTURED GAS PLANT	Invoice	0984702
PROJECT SCIENTIST/ENGINEER II				
	STEINBERGER, GEORGE	2.00	109.00	218.00 ✓
	Totals	23.00		2,764.50
	Total Labor			2,764.50
Reimbursable Expenses				
	OUTSIDE REPRODUCTIONS			19.08
	Total Reimbursables		19.08	19.08
Total this Task				\$2,783.58

Task 00015 GW Monitoring & Reporting

Professional Personnel

	Hours	Rate	Amount	
PROJECT MANAGER/SENIOR ENGINEER II				
	CUCCUINI, JEREMY	2.50	127.00	317.50 ✓
STAFF SCIENTIST/ENGINEER II				
	HILINSKI, MATT	34.00	97.00	3,298.00 ✓
SCIENTIST/ENGINEER II				
	KANE, RALEIGH	37.80	71.00	2,683.80 ✓
SR. TECHNICIAN/SCIENTIST/ENGINEER I				
	FREED, BRIAN	28.00	61.00	1,708.00 ✓
	Totals	102.30 ✓		8,007.30
	Total Labor			8,007.30 ✓

Reimbursable Expenses

	CAR RENTAL			219.33 ✓
	TOLLS, PARKING, TRANSPORT, GAS			95.79
	LODGING AND APART RENTAL			576.78
	MEALS			127.18
	PER DIEM -			38.52
	EQUIPMENT RENTAL			2,658.04
	REIMB EMPLOYEE MILEAGE			156.60
	Total Reimbursables		3,872.24	3,872.24 ✓
Total this Task				\$11,879.54

Task 00015 Restoration Monitoring & Management

Professional Personnel

	Hours	Rate	Amount	
PROJECT MANAGER/SENIOR ENGINEER II				
	CUCCUINI, JEREMY	2.50	127.00	317.50 ✓
PROJECT MANAGER/SENIOR ENGINEER I				
	MARKIEWICZ, GARY	21.00	115.00	2,415.00 ✓
PROJECT SCIENTIST/ENGINEER I				
	MURRAY, JESSIE	4.50	102.00	459.00 ✓
STAFF SCIENTIST/ENGINEER II				
	LONG, MICHAEL	18.00	97.00	1,746.00 ✓
	Totals	46.00 ✓		4,937.50 ✓
	Total Labor			4,937.50 ✓

Project	MD000776.0004	JCPL/CAPE MAY MANUFACTURED GAS PLANT	Invoice	0984702
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Reimbursable Expenses

MEALS	53.19	
REIMB EMPLOYEE MILEAGE	90.48	
Total Reimbursables	143.67	143.67

Total this Task **\$5,081.17**

Total this Invoice **\$39,532.77**

*M T B
029632
7-24-19
See Appendix 1
Stamp Next
page →*

- Fax# 8046667 Doc.: 1118414920
✓ 0984702-1 Line Item 4 - Permit Acquisition \$ 1,369.40 JJ 7-26-19
- Fax# 8046669 Doc.: 1118414928
✓ 0984702-2 Line Item 5 - Construction Oversight \$ 571.50 JJ 7-26-19
- Fax# 8046676 Doc.: 1118414959
✓ 0984702-3 Line Item 9 - OM&M \$ 17,847.58 JJ 7-26-19
- Fax# 8046681 Doc.: 1118414964
✓ 0984702-4 Line Item 10 - Technical Support \$ 2,783.58 JJ 7-26-19
- Fax# 8046685 Doc.: 1118414980
✓ 0984702-5 Line Item 15 - Groundwater Monitoring And Reporting \$ 11,879.54 JJ 7-26-19
- Fax 8046688 Doc.: 1118414982
0984702-6 Line Item 16 Restoration Monitoring And Management \$ 5,081.17 JJ 7-26-19

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>0984702</u>
COMPANY CODE: <u>8000</u>	COST CENTER <u>802702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>JJ</u>	EMP. NO.: <u>297</u>

7-26-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 690.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – June 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 27 May 2019 and ending 16 June 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
10 July 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Subcontractor communications regarding final invoicing for the recently completed Phase 2 and Phase 3 wetland restoration plantings and client discussions.
- Continued permitting of proposed wetland replacement wells including compiling and submitting permit application for New Jersey Department of Transportation (NJDOT) access for offsite monitoring well replacements.
- Perform routine O&M activities on the groundwater treatment system including: evaluate monthly pumping and extraction performance, data management and technical evaluation of permit-by-rule (PBR) sampling results, evaluation of system hydraulic capture and elevation gradient differences in the vicinity of the primary and secondary containment walls, generation of the May 2019 monthly treatment system performance dashboard update, evaluation and troubleshooting of carbon breakthrough and carbon supplier subcontractor discussions, and process laboratory subcontractor invoicing for monthly PBR sampling, rental equipment charges and April 2019 carbon changeout costs.
- Review of City of Cape May redevelopment plans, complete cost estimate for replacement of recreational features, and generation of CAD overlay of proposed



Ms. Anna Sullivan
10 July 2019

development plans on existing site plan for meeting between JCP&L Project Management and City of Cape May. Review historical geotechnical sampling locations and results data for JCP&L Project Management.

- Plan and complete the Q2 2019 site-wide groundwater monitoring event. Process field expenses and rental equipment charges.
- Complete the spring 2019 invasive species monitoring and management activities (sprayings).
- The MPR for May 2019 was submitted on 13 June 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.



Ms. Anna Sullivan
10 July 2019

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

Table 1
Budget Status for Site Remediation through 16 June 2019
Cape May Former MGP Site
Cape May, New Jersey
Purchase Order No. 55114718

TASK NO. (ARCADIS) (JCP&L)	TASK NO. DESCRIPTION	ORIGINAL TASK BUDGET	CURRENT TASK BUDGET	CURRENT INVOICE AMOUNT	OUT OF SCOPE WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST CO	PREVIOUS AMOUNT INVOICED	CUMULATIVE AMOUNT INVOICED	BUDGET BALANCE	PROJECT SCOPE % COMPLETE	FINANCIAL % COMPLETE
Phase 1, Site Remediation											
1	Project Management ^{1,2,3,10}	9,300	169,942	0	0	0	169,873	169,873	69	NA	100%
2	Remedial Action Work Plan ⁴	155,624	545,328	0	0	0	546,319	546,319	9	100%	100%
3	Procurement Assistance	100,401	185,857	0	0	0	185,340	185,340	327	100%	100%
4	Permit Acquisition	80,057	357,157	1,359	0	0	344,611	345,980	11,197	96%	97%
5	Contribution Oversight	236,274	1,617,225	672	0	0	1,610,426	1,610,998	6,228	98%	99%
6	Remedial Action Report	27,881	27,881	0	0	0	22,112	22,112	5,749	79%	79%
7	O&M Manual	8,779	16,797	0	0	0	16,711	16,711	76	99%	100%
8	Start Up Testing	35,290	99,007	0	0	0	98,551	98,551	456	100%	100%
9	O&M	186,746	492,708	17,648	0	63,519	511,125	528,973	(36,265)	NA	107%
10	Technical Support ^{5,6}	10,000	175,772	2,784	0	0	156,373	161,157	14,615	NA	92%
12	601 Lafayette Street Demo Support ⁷	38,422	36,422	0	0	0	35,142	35,142	1,280	NA	95%
13	Waste Characterization Sampling	32,418	39,715	0	0	0	34,249	34,249	4,466	100%	99%
14	Soil Delineation	27,816	41,329	0	0	0	39,943	39,943	1,386	100%	97%
15	Background Investigation/Remedial Investigation Reporting	47,034	47,034	0	0	0	50,535	(3,501)	(3,501)	100%	107%
14A	Vapor Intrusion Investigation	21,934	40,510	0	0	0	32,197	32,197	8,313	100%	79%
15	Groundwater Monitoring and Reporting	389,461	398,461	11,880	0	11,863	268,051	268,931	118,530	70%	89%
16	Restoration Monitoring and Management	37,697	66,653	5,081	0	0	38,430	43,511	23,142	NA	65%
TOTALS (\$):		1,442,114	4,407,788	39,533	0	75,382	4,212,188	4,251,721	166,088		96%
LRRF Charges Invoiced Separately											
11	LRRF Services ^{11,6}	15,348	106,002	198	0	0	104,389	104,566	1,436	NA	NA
TOTALS (\$):		15,348	106,002	198	0	0	104,389	104,566	1,436	NA	NA

Notes:
1. Work authorized by Purchase Order Number 55114718 dated 4/12/12, in accordance with the Arcadis Technical Proposal dated 3/16/12 (Total = \$550,332).
2. Task 11 (\$15,348) authorized based on the Arcadis proposal dated 5/27/12 and approved by Change Order #1 dated 10/18/2012 (Total = \$953,660).
3. Task 12 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 1/29/13. Also increased Task 1 by \$10,000 (See PO and confirmatory e-mail from Ken Seborowski dated 10/29/13) (Total = \$912,102).
4. Task 1 increased by \$15,916 and Task 11 increased by \$15,924 based on Arcadis proposal dated 10/26/13 and approved by Change Order #3 dated 11/6/13 (Total = \$642,442).
5. Task 10 increased by \$15,000 based on the Arcadis proposal dated 12/16/13 and client approval email dated 12/19/13 (Total = \$527,442).
6. Task 1 increased by \$5,000, Task 2 increased by \$10,000, and Task 11 increased by \$15,000 by Change Order #4 dated 11/11/14 (Total = 1,018,092).
7. Task 1 increased by \$25,000, Task 2 increased by \$25,000, and Task 10 increased by \$79,815 by Change Order #7 dated 3/6/2015 (Total = 1,200,270).
8. Task 17 authorized based on the Arcadis proposal dated 5/28/15 and approved by email correspondence by JCP&L dated 6/11/14 (Total = \$14,969).
9. Task 10 increased by \$25,000, Task 11 increased by \$25,000, and Task 12 increased by \$10,000 by Change Order #8 dated 5/19/15 (Total = \$120,040,735).
10. Task 10 increased by \$25,000, Task 11 increased by \$25,000, and Task 12 increased by \$10,000 by Change Order #9 dated 5/19/15 (Total = \$120,040,735).
11. Task 1 increased by \$25,000, Task 2 increased by \$25,000, and Task 10 increased by \$79,815 by Change Order #10 dated 5/19/15 (Total = \$120,040,735).
12. Task 2 increased by \$25,000, Task 3 increased by \$25,000, and Task 10 increased by \$79,815 by Change Order #11 dated 5/19/15 (Total = \$120,040,735).
13. Task 1 increased by \$25,122, Task 2 increased by \$28,716, Task 3 increased by \$28,716, Task 4 increased by \$28,716, Task 10 increased by \$21,398, Task 13 increased by \$66,234 and Task 14A created for \$21,584 based on the Arcadis proposal dated 6/22/2016, and as approved by Change Order #14, dated 9/21/16.
14. Task 5 increased by \$676,577 based on the Arcadis proposal dated 6/20/2016, and approved by Change Order #15 dated 10/27/16.
15. Task 10 increased by \$17,810 and Task 14 increased by \$18,576 based on the Arcadis proposal dated 12/7/2016 and approved by Change Order #16, dated 11/7/17.
16. Task 4 increased by \$73,478 based on the Arcadis proposal dated 5/24/17 and approved by Change Order #17, dated 7/18/17.
17. Task 1 increased by \$1,000, Task 2 increased by \$1,000, and Task 10 increased by \$1,000 by Change Order #18, dated 8/21/17.
18. Task 5 increased by \$108,365, Task 8 increased by \$108,365, and Task 9 increased by \$108,365 by Change Order #19, dated 9/27/2018.
19. Task 5 increased by \$298,329 based on the Arcadis proposal dated 11/02/2018 and as approved by JCP&L change order #20 dated 2/1/2019, and approved by Change Order #19 dated 11/22/2018.
20. Task 9 increased by \$293,931, Task 15 created in the amount of \$37,697 based on the Arcadis proposal dated February 28, 2018, and as approved by Change Order #21 (total of \$720,090) dated 4/3/2018.
21. Task 11 increased by \$15,000 based on the Arcadis proposal dated July 5, 2018, and as approved by Change Order #22 dated 8/16/18.
22. Task 1 increased by \$28,272 and Task 5 increased by \$18,439 based on the Arcadis proposal dated January 11, 2019, and as approved by Change Order #23 (total of \$146,711) dated 2/4/2019.
23. Task 4 increased by \$16,746, Task 5 increased by \$34,340, Task 9 increased by \$12,081, Task 10 increased by \$26,334, and Task 16 increased by \$26,956 based on the Arcadis proposal dated 3/24/19, and as approved by Change Order #24 (total \$116,609) dated 4/12/19.



INVOICE

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188099937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS33M
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

Jersey Central Power And Light Company
Attention: Anna Sullivan
300 Madison Avenue
Morristown, NJ 07962-1911

Invoice Date: July 10, 2019
Project No: MD000776.0004
Invoice No: 0984720
Payment Terms: 45 Days
Invoice Due Date: August 24, 2019

CAPE MAY MANUFACTURED GAS PLANT SITE
PO# 55114718

Professional Services from May 27, 2019 to June 16, 2019

Task 00011 LSRP Services

Professional Personnel

	Hours	Rate	Amount
PRINCIPAL SCIENTIST/ENGINEER I			
THOMPSON, DAVID	1.50	132.00	198.00
Totals	1.50		198.00
Total Labor			198.00
		Total this Task	\$198.00
		Total this Invoice	\$198.00

SES 1118400426 FAX 38046043

Line item 11 - LSRP Services

*OK AFS
C 29432
7-22-19*

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>0984720</u>
COMPANY CODE: SC00	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001028</u>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <i>[Signature]</i>	EMP. NO.: <u>297</u>

7-23-19

Project	MD000776.0004	JCPL/CAPE MAY MANUFACTURED GAS PLANT	Invoice	0984720
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Billing Backup

Wednesday, July 10, 2019

ARCADIS INC.

Invoice 0984720 Dated 7/10/2019

1:25:43 PM

Task 00011 LSRP Services

Professional Personnel

			Hours	Rate	Amount	
	PRINCIPAL SCIENTIST/ENGINEER I					
14254	THOMPSON, DAVID	6/2/2019	.50	132.00	66.00	
	Weekly status call					
14254	THOMPSON, DAVID	6/9/2019	.50	132.00	66.00	
	Weekly status call and follow-up					
14254	THOMPSON, DAVID	6/16/2019	.50	132.00	66.00	
	Weekly status call					
	Totals		1.50		198.00	
	Total Labor					198.00

Total this Task	\$198.00
Total this Project	\$198.00
Total this Report	\$198.00



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

RECEIVED
JUL 15 2019
Environmental Department

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.660.0580
Fax 609.660.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – June 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning on 27 May 2019 and ending 16 June 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
10 July 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls, property redevelopment updates and discussions.

Our ref:
MD000776.0002

If you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis



INVOICE

Jersey Central Power and Light Company
Attn: Anna Sullivan
300 Madison Ave
Madison, NJ 07940-1868
United States

RECEIVED
SEP 10 2019
Environmental Department

Arcadis U.S., Inc.
Bank of America
Acct: 8188093937
ACH: 071 000 039 Wire: 026009 593
SWIFT: BOFAUS3N
Remit-mailbox@arcadis-us.com
62638 Collections Center Drive
Chicago, IL 60693-0626

Invoice Date	04-Sep-2019	Invoice Number	34119517
Payment Term	45 days	Due Date	19-Oct-2019
PO# 55114718			
Arcadis Reference Number	MD000776.0004	Project Number	30015903
Arcadis Reference Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	Project Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Services Through	28-Jul-2019	Project Manager	Jeremy Cucchini
		Client Contact	Anna Sullivan

Professional Services to 28-Jul-2019

Project 30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Task 00004 - Permit Acquisition
Contract Line 15 - MD000776.0004/00004

Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Miller-Dannelongue, Gwendoline	5.00	Hours	90.00	450.00	✓
Cucchini, Jeremy	1.00	Hours	127.00	127.00	✓
Murray, Jessie	3.50	Hours	102.00	357.00	✓
	<u>9.50</u>			<u>934.00</u>	✓
Total This Task				934.00	

Project 30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Task 00005 - Construction Oversight
Contract Line 16 - MD000776.0004/00005

Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Jacobson, Alexander	1.50	Hours	90.00	135.00	✓
Cucchini, Jeremy	7.50	Hours	127.00	952.50	✓
Mastrocola, Krista	1.00	Hours	115.00	115.00	✓
	<u>10.00</u>			<u>1,202.50</u>	
Reimbursable Expenses				166.94	✓
Total This Task				1,369.44	

Bank Name BANK OF AMERICA N.A. **Bank/Branch Code** BOFA-071000039
Account No. 8188093937 **SWIFT** BOFAUS3N
Remittance Address: Remit-Mailbox@arcadis-us.com
Please include the invoice number on all payments and include remittance copy with all postal payments. Late payments will be assessed according to contract terms.



Project
30015803 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED
GAS PLANT

Task
00006 - Remedial Action Report

Contract Line
17 - MD000776.0004/00006

Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Sanchez, Adrian	9.00	Hours	65.00	585.00	✓
Tucker, Maeve	3.70	Hours	71.00	262.70	✓
Mastrocola, Krista	18.00	Hours	115.00	2,070.00	✓
Wasilewski, Maciej	9.40	Hours	85.00	611.00	✓
Banda, Nadeem	14.00	Hours	102.00	1,428.00	✓
	<u>54.10</u>			<u>4,856.70</u>	
Total This Task				<u>4,856.70</u>	

Project
30015803 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED
GAS PLANT

Task
00009 - O&M

Contract Line
20 - MD000776.0004/00009

Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Catchpole, Daniel	0.50	Hours	90.00	45.00	✓
Maurer, Benjamin	18.50	Hours	71.00	1,313.50	✓
Jacobson, Alexander	33.50	Hours	90.00	3,015.00	✓
McConnell, Keith	58.20	Hours	90.00	5,238.00	✓
Cuccuini, Jeremy	13.50	Hours	127.00	1,714.50	✓
Fuller, Andrew	32.00	Hours	132.00	4,224.00	✓
Foos, Patrick	1.00	Hours	81.00	81.00	✓
Erickson, Kevin	1.90	Hours	109.00	207.10	✓
Banda, Nadeem	28.00	Hours	102.00	2,852.00	✓
Lepkowski, Kaitlin	4.00	Hours	97.00	388.00	✓
	<u>189.10</u>			<u>18,858.10</u>	
Subcontracting				9,560.45	✓
Reimbursable Expenses				635.16	
Total This Task				<u>29,053.71</u>	

Project
30015803 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED
GAS PLANT

Task
00010 - Technical Support

Contract Line
1 - MD000776.0004/00010

Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Steinberger, George	2.50	Hours	109.00	272.50	✓



Cucculini, Jeremy	2.00	Hours	127.00	254.00✓
Fuller, Andrew	2.00	Hours	132.00	264.00✓
Mastrocola, Krista	2.00	Hours	115.00	230.00✓
Wasilewski, Maciej	5.10	Hours	65.00	331.50✓
Caballero, David	1.60	Hours	162.00	243.00✓
	<u>15.10</u>			<u>1,595.00</u>
Total This Task				1,595.00

Project 30015903 - MD000776.0004- JCPL/CAPE MAY MANUFACTURED GAS PLANT	Task 00015 - GW Monitoring & Reporting	Contract Line 8 - MD000776.0004/00015		
Labor				
Employee Name	Quantity	UOM	Rate	This Invoice
Maurer, Benjamin	16.00	Hours	71.00	1,136.00✓
Jacobson, Alexander	19.00	Hours	90.00	1,710.00✓
Cucculini, Jeremy	11.50	Hours	127.00	1,480.50✓
Mastrocola, Krista	3.00	Hours	115.00	345.00✓
Foos, Patrick	3.50	Hours	61.00	213.50✓
Scillieri, Darren	1.00	Hours	138.00	138.00✓
	<u>54.00</u>			<u>5,003.00</u>
Subcontracting				15,205.78
Other Reimbursable Charges				277.53
Total This Task				20,486.31

Project 30015903 - MD000776.0004- JCPL/CAPE MAY MANUFACTURED GAS PLANT	Task 00016 - Restoration Monitoring & Management	Contract Line 7 - MD000776.0004/00016		
Labor				
Employee Name	Quantity	UOM	Rate	This Invoice
Partridge, Douglas	14.00	Hours	132.00	1,848.00✓
Markiewicz, Gary	0.50	Hours	115.00	57.50✓
Murray, Jeesie	17.00	Hours	102.00	1,734.00✓
	<u>31.50</u>			<u>3,639.50</u>
Reimbursable Expenses				64.88
Unit Billing				115.00
Total This Task				3,819.38
Total This Project				62,214.54
Total This Invoice				62,214.54 USD

OTL AT5
C29632
9/25/19
Approved Stamp →



Total This Invoice

62,214.54 USD

*OK 175
C 24632
9/25/19*

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>34119517</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER _____
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: _____
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>291</u>

Approval Stamp Next page →

9-27-19

SES# 1118659165 Fax# 8040205
34119517-1 Line Item 4 - Permit Acquisition \$ 934.00 ok FH
9-27-19

SES# 1118659170 Fax# 8040206
34119517-2 Line Item 5 - Construction Oversight \$ 1,369.44

SES# 1118659176 Fax# 8040208
34119517-3 Line Item 6 - Remedial Action Report \$ 4,956.70'

SES# 1118659180 Fax# 8040212
34119517-4 Line Item 9 - OM&M \$ 29,053.71'

SES# 1118659187 Fax# 8040214
34119517-5 Line Item 10 - Technical Support \$ 1,595.00'

SES# 1118659194 Fax# 8040217
34119517-6 Line Item 15 - Groundwater Monitoring
And Reporting \$ 20,486.31

SES# 1118659201 Fax# 8040220
34119517-7 Line Item 16 Restoration Monitoring
And Management \$ 3,819.38

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>34119517</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: _____
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

9-27-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Milstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – July 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 17 June 2019 and ending 28 July 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
4 September 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Perform a final erosion control site inspection with Cape Atlantic Soil Conservation district and obtain permit compliance documentation.
- Continued permitting of proposed wetland replacement wells including compiling and submitting permit application for New Jersey Department of Transportation (NJDOT) access for offsite monitoring well replacements.
- Perform routine O&M activities on the groundwater treatment system including: evaluate monthly pumping and extraction performance, data management and technical evaluation of permit-by-rule (PBR) sampling results, evaluation of system hydraulic capture and elevation gradient differences in the vicinity of the primary and secondary containment walls, review, evaluation and data management of the monthly permit-by-rule effluent sampling results, generation of the June 2019 monthly treatment system performance dashboard update, evaluation and troubleshooting of prior carbon breakthrough and relationship with total organic carbon (TOC) and oxidation within the equalization tank, complete the June and July 2019 permit-by-rule compliance sampling and complete the routine July 2019 site maintenance and carbon changeout activities, and process laboratory subcontractor invoicing for monthly PBR sampling, and June 2019



Ms. Anna Sullivan
26 August 2019

carbon changeout costs.

- Continued development and submittal of the Annual Permit-By-Rule Monitoring and complete the Q2 2019 site-wide groundwater monitoring event
- Continued follow-up with JCP&L Project management regarding City of Cape May redevelopment plans, and specifics regarding the primary and secondary containment wall depths and alignment.
- Continued development of the DRAFT Semi-Annual Groundwater Remedial Progress Report. Process field expenses and laboratory subcontractor invoicing associated with the Q2 2019 groundwater sampling event.
- Complete the formal spring 2019 site restoration inspection and documentation for year-end NJDEP restoration progress reporting.
- The MPR for June 2019 was submitted on 10 July 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.



Ms. Anna Sullivan
26 August 2019

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cucuini', with a horizontal line underneath.

Jeremy Cucuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

FIGURE 1
Cape May Fenwick MGP Site
Projected Schedule for Remedial Action

ID	Task Name	Duration	Start	Finish	Year															
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029				
1	Remedial Action	1864 days	Wed 10/09/18	Thu 2/12/24	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2	Project Planning and Coordination	232 days	Wed 10/09/18	Fri 11/16/18																
23	Remedial Design	456 days	Thu 10/09/18	Thu 04/06/19																
24	Pre-Design Workshop	481 days	Thu 10/09/18	Thu 04/06/19																
44	R2AR	1007 days	Wed 09/20/18	Thu 7/26/24																
42	Pre-Design Activities	1386 days	Mon 11/12/18	Wed 2/16/24																
63	Groundwater Sampling	1624 days	Mon 11/12/18	Fri 11/09/24																
64	Shallow Groundwater Sampling (20 wells)	20 days	Mon 11/12/18	Fri 11/16/18																
67	Annual Groundwater Sampling and Analysis (3 wells)	834 days	Thu 01/04/19	Fri 09/06/19																
75	Access and Permitting	80 days	Mon 03/10/19	Mon 11/23/19																
76	Neuroic Structure Investigation	71 days	Mon 03/10/19	Thu 12/16/19																
80	soil Boring Installation, Sampling and Analysis	133 days	Mon 03/10/19	Wed 07/03/19																
81	Construction Subcontracting	47 days	Mon 03/10/19	Mon 05/20/19																
82	soil Borings	90 days	Thu 12/11/19	Wed 11/13/19																
86	Batch-scale Testing	82 days	Tue 10/22/19	Wed 07/03/19																
90	Aquifer Testing	84 days	Mon 07/15/19	Thu 12/12/19																
88	Groundwater Flow and Transport Model	84 days	Mon 10/21/19	Mon 10/21/19																
102	Remedial Action Work Plan	246 days	Mon 11/18/19	Fri 10/20/21																
108	Remedial Implementation	1443 days	Mon 10/16/19	Fri 10/12/24																
109	Final season	318 days	Mon 10/16/19	Fri 02/01/20																
151	Second season	388 days	Mon 11/20/19	Fri 02/01/20																
151	Third Season	508 days	Tue 08/17/20	Fri 10/16/21																
182	Installation Monitoring	1370 days	Mon 02/27/21	Fri 02/04/22																
184	Remedial Action Report (RAR)	240 days	Mon 11/02/21	Fri 11/02/21																
185	Operation and Maintenance	1867 days	Fri 05/21/22	Thu 01/24/24																

Table 1
Budget Status for Site Remediation through 20 July 2018
Cape May Farmer MCP Sale
Cape May, New Jersey
Purchase Order No. 55114718

TASK NO.	TASK DESCRIPTION	ORIGINAL TASK BUDGET	CURRENT TASK BUDGET	CURRENT INVOICE AMOUNT	OUT OF SCOPE WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST QTR	PREVIOUS AMOUNT INCURRED	CUMULATIVE AMOUNT INCURRED	BUDGET BALANCE	PROJECT SCOPE % COMPLETE	FINANCIAL % COMPLETE
1	Project Management	9,300	188,842	0	0	0	169,873	169,873	169,873	0%	100%
2	Remedial Action Work Plan	158,824	546,328	0	0	0	546,319	546,319	546,319	0%	100%
3	Procedural Assistance	100,101	192,887	0	0	0	182,540	182,540	182,540	0%	100%
4	Permit Assistance	60,057	287,187	824	0	0	346,880	346,814	10,233	89%	82%
5	Construction Oversight	288,274	1,677,225	1,309	0	0	1,670,888	1,672,867	4,658	89%	82%
6	Remedial Action Report	27,681	27,981	4,907	0	0	22,712	27,209	782	78%	87%
7	QA/QC Manual	8,778	18,787	0	0	0	16,711	16,711	786	88%	100%
8	QA/QC Training	35,300	88,007	0	0	0	88,951	88,951	458	100%	100%
9	QA/QC	164,749	781,721	26,004	0	0	691,873	598,027	223,634	100%	100%
10	Technical Support	16,000	175,772	1,905	0	0	161,157	162,772	13,000	95%	87%
12	001 Lafayette Street Demo Support	36,422	36,422	0	0	0	36,142	36,142	1,280	99%	89%
13	Water Characterization Sampling	32,418	89,715	0	0	0	84,249	84,249	4,468	95%	87%
14	Soil Deliveries	27,816	41,229	0	0	0	38,843	38,843	1,286	100%	100%
15	Background Investigation Reporting	47,034	47,034	0	0	0	61,535	50,539	13,501	100%	87%
14A	Vapor Inhibition Investigation	21,854	40,510	0	0	0	32,197	32,197	4,313	100%	78%
15	Groundwater Monitoring and Reporting	284,461	348,481	20,489	0	11,083	209,151	290,417	88,644	79%	75%
16	Remediation Monitoring and Management	27,687	69,153	5,019	0	0	43,514	47,330	18,263	71%	71%
TOTALS:		1,442,114	4,599,802	52,215	0	11,083	4,251,722	4,313,937	392,885	NA	82%
LBRP Changes Involves Separately		15,348	109,032	393	0	0	104,595	104,882	1,040	NA	NA
TOTALS LBRP:		15,348	109,032	393	0	0	104,595	104,882	1,040	NA	NA

Notes:

- Work authorized by Purchase Order Number 55114718 dated 4/12/12 in accordance with the Arcadis' Technical Proposal dated 3/16/12. (Total = \$650,332).
- Task 11 (\$75,240) authorized based on the Arcadis proposal dated 5/21/12 and approved by Change Order #1 dated 10/19/2012. (Total = \$865,880).
- Task 12 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 1/22/13. Also increased Task 1 by \$10,000 (See PO and confirmatory e-mail from Ken Selboreweil dated 1/22/13). (Total = \$912,102)
- Task 1 increased by \$7,018 and Task 11 increased by \$15,024 based on Arcadis proposal dated 10/28/13 and approved by Change Order #3 dated 11/4/13. (Total = \$824,442).
- Task 10 increased by \$15,000 based on the Arcadis proposal dated 12/18/13 and approved by Change Order #4 dated 1/16/14. (Total = \$857,442).
- Task 10 increased by \$15,000, Task 2 increased by \$20,000, Task 10 increased by \$10,000, and Task 11 increased by \$15, 850 by Change Order #5 dated 1/11/14. (Total = 1,018,292).
- Task 1 increased by \$25,000, Task 2 increased by \$192,000, Task 4 increased by \$10,000, and approved by Change Order #6 dated 5/19/14. (Total = \$1,242,292).
- Task 1, 14, and 15 authorized based on the Arcadis proposal dated 4/20/15 and approved by Change Order #7 dated 5/19/15. (Total = \$1,242,292).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 04/11/15 and approved by Change Order #8 dated 5/19/15. (Total = \$1,267,292).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 02/01/15 and approved by Change Order #9 dated 11/13/2015. (Total = \$1,292,292).
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #10 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #11 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #12 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #13 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #14 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #15 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #16 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #17 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #18 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #19 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #20 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #21 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #22 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #23 dated 2/22/15.
- Task 1 increased by \$25,000 and Task 11 increased by \$21,500 based on the Arcadis proposal dated 2/8/15 and approved by Change Order #24 dated 2/22/15.



INVOICE

Jersey Central Power and Light Company
Attn. : Anna Sullivan
300 Madison Ave
Madison, NJ 07940-1868
United States

RECEIVED
SEP 10 2019
Environmental Department

Arcadis U.S., Inc.
Bank of America
Acct: 8188093937
ACH: 071 000 039 Wire: 026008 593
SWIFT: BOFAUS3N
Remit-mailbox@arcadis-us.com
62638 Collections Center Drive
Chicago, IL 60693-0626

Invoice Date	26-Aug-2019	Invoice Number	34118911
Payment Term	45 days	Due Date	12-Oct-2019
PO# 55114718			
Arcadis Reference Number	MD000776.0004	Project Number	30016803
Arcadis Reference Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	Project Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Services Through	28-Jul-2019	Project Manager	Jeremy Cuccuini
		Client Contact	Anna Sullivan

Professional Services to 28-Jul-2019

Project	Task	Contract Line			
30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	00011 - LSRP Services	2 - MD000776.0004/00011			
Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Thompson, David	3.00	Hours	132.00	396.00	
	3.00			396.00	
Total This Task				396.00	
Total This Project				396.00	
Total This invoice				396.00 USD	

SES: # 1118738275 Fax: # 8043181

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>34118911</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>—</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>—</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

Total This Invoice 396.00 USD

E. Comings 24939 10/10/19
10-11-19

Bank Name	BANK OF AMERICA N.A.	Bank/Branch Code	BOFA-071000039
Account No.	8188093937	SWIFT	BOFAUS3N
Remittance Address: Remit-Mailbox@arcadis-us.com			
Please include the invoice number on all payments and include remittance copy with all postal payments. Late payments will be assessed according to contract terms.			



Transaction Details - Invoice Number 34178911

Project 30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Task 00011 - LSRP Services
Contract Line 2 - MD000776.0004/00011

Labor

Employee No. and Name	Date	Hours	Rate	This Invoice
35155 - Thompson, David Remedial status	06/23/2019	0.50	132.00	66.00
35155 - Thompson, David Weekly status call and follow-up	06/23/2019	0.50	132.00	66.00
35155 - Thompson, David Weekly status call and follow-up	07/10/2019	0.50	132.00	66.00
35155 - Thompson, David Weekly status call and follow-up	07/17/2019	0.50	132.00	66.00
35155 - Thompson, David Weekly status call and follow-up	07/24/2019	1.00	132.00	132.00
Total Labor		3.00		396.00
Total This Task				396.00
Total This Project				396.00
Total This Invoice				396.00 USD

Total This Invoice 396.00 USD



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – July 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning on 17 June 2019 and ending 28 July 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
26 August 2019

Contact:
Jeremy Cuccuini

Phone:
609 386 9033

Email:
Jeremy.cuccuini@arcadis-us.com

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls, property redevelopment updates and discussions.

Our ref:
MD000776.0002

If you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:

J. McLaughlin, Arcadis
D. Scillieri, Arcadis



INVOICE

RECEIVED

NOV 13 2019

Jersey Central Power and Light Company
Attn: Anna Sullivan
300 Madison Ave
Madison, NJ 07940-1868
United States

Environmental Department

Arcadis U.S., Inc.
Bank of America
Acct: 8188093937
ACH: 071 000 039 Wire: 026009 593
SWIFT: BOFAUS3N
Remit-mailbox@arcadis-us.com
62638 Collections Center Drive
Chicago, IL 60693-0626

Invoice Date	04-Nov-2019	Invoice Number	34129005
Payment Term	45 days	Due Date	2019-12-19
PO# 55114718			
Arcadis Reference Number	MD000776.0004	Project Number	30015903
Arcadis Reference Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	Project Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Services Through	22-Sep-2019	Project Manager	Jeremy Cucuini
		Client Contact	Anna Sullivan

Professional Services to 22-Sep-2019

Project 30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Task 00001 - Project Management
Contract Line 12 - MD000776.0004/00001

Labor	Employee Name	Quantity	UOM	Rate	This Invoice
	Fulton, Amanda	13.20	Hours	43.00	567.60 ✓
	Cucuini, Jeremy	53.00	Hours	127.00	6,731.00 ✓
	Collins, Lisa	22.90	Hours	43.00	984.70 ✓
	Sawyers, Douglas	0.50	Hours	184.00	92.00 ✓
	Caballero, David	5.50	Hours	162.00	891.00 ✓
	Scillieri, Darren	48.00	Hours	138.00	6,624.00 ✓
		143.10			15,890.30
Other Reimbursable Charges					61.11
Total This Task					15,951.41

Project 30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Task 00004 - Permit Acquisition
Contract Line 15 - MD000776.0004/00004

Labor	Employee Name	Quantity	UOM	Rate	This Invoice
	Meyer, Julie	8.50	Hours	65.00	552.50
	Richards, James	3.00	Hours	65.00	195.00
	Fatto, Tracey	7.00	Hours	65.00	455.00

Bank Name BANK OF AMERICA N.A. Bank/Branch Code BOFA-071000039
Account No. 8188093937 SWIFT BOFAUS3N

Remittance Address: Remit-Mailbox@arcadis-us.com
Please include the invoice number on all payments and include remittance copy with all postal payments. Late payments will be assessed according to contract terms.



Miller-Dannelongue, Gwendoline	30.00	Hours	90.00	2,700.00 ✓
Rapp, Jayme	8.00	Hours	109.00	872.00 ✓
Cuccuini, Jeremy	4.00	Hours	127.00	508.00 ✓
Murray, Jessie	14.30	Hours	102.00	1,458.60 ✓
	<u>74.80</u>			<u>6,741.10</u>
Other Reimbursable Charges				15.16
Total This Task				<u>6,756.26</u>

Project 30015903 - MD000776.0004- JCPL/CAPE MAY MANUFACTURED GAS PLANT	Task 00005 - Construction Oversight	Contract Line 16 - MD000776.0004/00005		
Labor				
Employee Name	Quantity	UOM	Rate	This Invoice
Cuccuini, Jeremy	6.00	Hours	127.00	762.00 ✓
	<u>6.00</u>			<u>762.00</u>
Reimbursable Expenses				166.60
Total This Task				<u>928.60</u>

Project 30015903 - MD000776.0004- JCPL/CAPE MAY MANUFACTURED GAS PLANT	Task 00006 - Remedial Action Report	Contract Line 17 - MD000776.0004/00006		
Labor				
Employee Name	Quantity	UOM	Rate	This Invoice
Sanchez, Adrian	1.50	Hours	65.00 ?	97.50
Tucker, Maeva	38.70	Hours	71.00	2,747.70 ✓
Jacobson, Alexander	7.50	Hours	90.00	675.00 ✓
Steinberger, George	2.00	Hours	109.00	218.00 ✓
Cuccuini, Jeremy	0.50	Hours	127.00	63.50 ✓
Mastrocola, Krista	33.50	Hours	115.00	3,852.50 ✓
Murray, Jessie	2.25	Hours	102.00	229.50 ✓
Wasilewski, Maciej	18.10	Hours	65.00 ?	1,176.50
Banda, Nadeem	14.00	Hours	102.00	1,428.00 ✓
Cathcart, Eric	3.00	Hours	97.00	291.00 ✓
	<u>121.05</u>			<u>10,779.20</u>
Total This Task				<u>10,779.20</u>

Project 30015903 - MD000776.0004- JCPL/CAPE MAY MANUFACTURED	Task 00009 - O&M	Contract Line 20 - MD000776.0004/00009
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GAS PLANT

Labor

Employee Name	Quantity	UOM	Rate	This Invoice
Maurer, Benjamin	11.50	Hours	71.00	816.50 ✓
Jacobson, Alexander	53.00	Hours	90.00	4,770.00 ✓
McConnell, Keith	61.75	Hours	90.00	5,557.50 ✓
Cuccuini, Jeremy	12.00	Hours	127.00	1,524.00 ✓
Partridge, Douglas	5.00	Hours	132.00	660.00 ✓
Fuller, Andrew	26.00	Hours	132.00	3,432.00 ✓
Santos, Leonela	1.60	Hours	43.00	68.80 ✓
Foos, Patrick	2.00	Hours	61.00	122.00 ✓
Erickson, Kevin	3.40	Hours	109.00	370.60 ✓
Sanchez, Adriana	9.50	Hours	109.00	1,035.50 ✓
Banda, Nadeem	26.00	Hours	102.00	2,652.00 ✓
Lepkowski, Kaitlin	6.20	Hours	97.00	601.40 ✓
Caballero, David	1.00	Hours	162.00	162.00 ✓
Scillieri, Darren	5.00	Hours	138.00	690.00 ✓
	223.95			22,462.30
Subcontracting				1,937.84
Reimbursable Expenses				2,267.70
Other Reimbursable Charges				3,505.96
Total This Task				30,173.60

Project
30015903 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED
GAS PLANT

Task
00010 - Technical Support

Contract Line
1 - MD000776.0004/00010

Labor

Employee Name	Quantity	UOM	Rate	This Invoice
Meyer, Julie	1.00	Hours	65.00	65.00 ✓
Sanchez, Adrian	0.50	Hours	65.00	32.50 ✓
Tucker, Maeve	6.50	Hours	71.00	461.50 ✓
Jacobson, Alexander	5.00	Hours	90.00	450.00 ✓
Steinberger, George	2.00	Hours	109.00	218.00 ✓
Cuccuini, Jeremy	14.00	Hours	127.00	1,778.00 ✓
Mastrocola, Krista	19.00	Hours	115.00	2,185.00 ✓
Maza, David	0.50	Hours	115.00	57.50 ✓
Wasilewski, Maciej	14.30	Hours	65.00	929.50 ✓
Everett, Leslie	2.50	Hours	97.00	242.50 ✓



Caballero, David	4.00	Hours	162.00	648.00
Scillieri, Darren	2.00	Hours	138.00	276.00
	<u>71.30</u>			<u>7,343.50</u>
Total This Task				<u>7,343.50</u>

Project 30015903 - MD000776.0004- JCPL/CAPE MAY MANUFACTURED GAS PLANT	Task 00015 - GW Monitoring & Reporting	Contract Line 6 - MD000776.0004/00015		
Labor				
Employee Name	Quantity	UOM	Rate	This Invoice
Loving, Jeffrey Don	0.70	Hours	65.00	45.50✓
Kane, Raleigh	2.00	Hours	71.00	142.00✓
Jacobson, Alexander	0.50	Hours	90.00	45.00✓
O'Neill, Paul	2.00	Hours	71.00	142.00✓
Cuccuini, Jeremy	2.00	Hours	127.00	254.00✓
Foos, Patrick	8.00	Hours	61.00	488.00✓
Beynon, Catherine	1.50	Hours	97.00	145.50✓
Kladias, Michael	3.00	Hours	138.00	414.00✓
	<u>19.70</u>			<u>1,676.00</u>
Reimbursable Expenses				216.60
Total This Task				<u>1,892.60</u>

Project 30015903 - MD000776.0004- JCPL/CAPE MAY MANUFACTURED GAS PLANT	Task 00016 - Restoration Monitoring & Management	Contract Line 7 - MD000776.0004/00016		
Labor				
Employee Name	Quantity	UOM	Rate	This Invoice
Partridge, Douglas	10.50	Hours	132.00	1,386.00✓
Markiewicz, Gary	1.00	Hours	115.00	115.00✓
Murray, Jessie	16.25	Hours	102.00	1,657.50✓
Long, Michael	10.00	Hours	97.00	970.00✓
	<u>37.75</u>			<u>4,128.50</u>
Reimbursable Expenses				603.64
Other Reimbursable Charges				521.58
Total This Task				<u>5,253.72</u>
Total This Project				<u>79,078.89</u>
Total This Invoice				<u>79,078.89 USD</u>

PUTTS
 C29632
 11/18/19
 See Attachment 10 →
 1st of Page

- 34129005-1 SES# 1119255865 Fox# 8042142 Line Item 1 - Project Management \$ 15,951.41 ✓ } 2
- 34129005-2 SES# 1119255888 Fox# 8042145 Line Item 4 - Permit Acquisition \$ 6,756.25 ✓ } 2
- 34129005-3 SES# 1119255894 Fox# 8042147 Line Item 6 - Remedial Action Report \$ 10,779.20 ✓ } 2
- 34129005-4 SES# 1119256568 Fox# 8042153 Line Item 9 - OM&M \$ 30,173.60 ✓ } 2
- 34129005-5 SES# 1119256569 Fox# 8042154 Line Item 10 - Technical Support \$ 7,343.50 ✓ } 2
- 34129005-6 SES# 1119256571 Fox# 8042156 Line Item 15 - Groundwater Monitoring And Reporting \$ 1,892.60 ✓ } 2
- 34129005-7 SES# 1119256590 Fox# 8042161 Line Item 16 Restoration Monitoring And Management \$ 5,253.72 ✓ } 2

11-19-19

APPROVAL STAMP	
P.O. NO. <u>55114718</u>	INV. NO. <u>34129005</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>507702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

11-19-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.860.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – August-September 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 29 July 2019 and ending 25 September 2019. Note this MPR also details incurred charges generated under the Project Management Task 1 for the period from April 2019-September 2019, as authorized under Change Order #26, dated October 11, 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
1 November 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Section 1: Work Performed

The following work was performed during the reporting period:

Our ref:
MD000776.0002

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Perform a final post-remedial action site inspection with JCP&L Project Management and the project Licensed Site Remediation Professional (LSRP).
- Continued permitting of proposed wetland replacement wells including compiling and submitting permit application for New Jersey Department of Transportation (NJDOT) and New Jersey Transit (NJT) access for offsite monitoring well replacements.
- Perform routine O&M activities on the groundwater treatment system including: evaluate monthly pumping and extraction performance, data management and technical evaluation of permit-by-rule (PBR) sampling results, evaluation of system hydraulic capture and elevation gradient differences in the vicinity of the primary and secondary containment walls, review, evaluation and data management of the monthly permit-by-rule effluent sampling results, completion and submittal of the July and August 2019 monthly treatment system performance dashboard update, complete the August and September 2019 permit-by-rule



Ms. Anna Sullivan
1 November 2019

compliance sampling and complete the routine September and October 2019 site maintenance activities, sludge removal oversight (August) and hypochlorite tank refill, and process laboratory subcontractor invoicing for monthly July and August PBR sampling.

- Continued follow-up with JCP&L Project management regarding City of Cape May redevelopment plans.
- Review historical soil data at offsite Cape May Housing Authority (CMHA) and development of DRAFT Deed Notice Exhibits. Evaluate potential scope and costs for shallow soil excavation work. Evaluate offsite Deed Notice areas and additional areas where they will be required.
- Continued development of the DRAFT Semi-Annual Groundwater Remedial Progress Report and submit for JCP&L Project Management review. Prep for Q3 event and include process field expenses for Q3 2019 groundwater sampling lodging.
- Complete the annual post-remedial action restoration monitoring event for inspection and NJDEP annual reporting. Complete the final 2019 invasive species management and processing of field expenses.
- The MPR for July 2019 was submitted on 26 August 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in



Ms. Anna Sullivan
1 November 2019

each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:

J. McLaughlin, Arcadis
D. Scillieri, Arcadis

Table 1
Budget Status for Site Remediation through 25 September 2019
Cape May Former MGP Site
Cape May, New Jersey
Purchase Order No. 55114718

TASK NO. (ARCADIS) (JCP&L)	TASK NO.	DESCRIPTION	ORIGINAL TASK BUDGET ¹	CURRENT TASK BUDGET	CURRENT INVOICE AMOUNT	OUT OF SCOPE WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST CO	PREVIOUS AMOUNT INVOICED	CUMULATIVE AMOUNT INVOICED	BUDGET BALANCE	PROJECT SCOPE % COMPLETE	FINANCIAL % COMPLETE
Phase 1, Site Remediation												
1	1	Project Management ^{AAA, 10}	5,300	213,184	1,605	0	0	184,218	185,824	27,350	NA	87%
2	2	Remedial Action Work Plan ⁸	155,524	546,343	0	0	0	546,318	546,319	9	100%	100%
3	3	Procurement Assistance	100,401	185,867	0	0	0	185,540	185,540	327	100%	100%
4	4	Permit Acquisition	80,057	357,167	4,051	0	0	349,619	353,870	3,497	98%	99%
5	5	Construction Oversight	236,274	1,617,225	0	0	0	1,613,286	1,613,286	3,929	99%	99%
6	6	Remedial Action Report	27,861	47,789	5,255	0	0	32,553	37,848	9,941	79%	79%
7	7	O&M Manual	6,779	16,787	0	0	0	16,711	16,711	76	100%	100%
8	8	Start-Up Testing	35,290	99,007	0	0	0	98,551	98,551	456	100%	100%
9	9	O&M	196,746	781,721	16,545	0	0	766,575	766,520	105,201	NA	75%
10	10	Technical Support ^{4,5}	10,000	175,772	3,289	0	0	166,807	170,995	5,676	NA	97%
12	12	801 Lafayette Street Demo Support ⁸	36,422	35,422	0	0	0	35,142	35,142	1,280	NA	98%
13	13	Waste Characterization Sampling	32,418	98,715	0	0	0	94,249	94,249	4,466	100%	95%
14	13	Soil Delineation	41,329	41,329	0	0	0	39,943	39,943	1,386	100%	97%
15	13	Background Investigation/Remedial Investigation Reporting	47,034	47,034	0	0	0	50,535	50,535	(3,501)	100%	107%
14A	14	Vapor Intrusion Investigation	21,934	40,510	0	0	0	32,197	32,197	8,313	100%	79%
15	15	Groundwater Monitoring and Reporting	338,461	368,461	684	0	11,883	291,628	292,310	56,151	70%	75%
16	16	Restoration Monitoring and Management	37,697	66,653	4,075	0	0	47,905	52,584	14,069	NA	79%
TOTALS (\$):			1,442,114	4,759,972	38,509	0	11,863	4,354,826	4,361,334	388,637	NA	92%
LSRP Charges Invoiced Separately												
11	11	LSRP Services ^{4,8}	15,348	123,100	528	0	0	105,225	105,754	17,346	NA	NA
TOTALS (\$):			15,348	123,100	528	0	0	105,225	105,754	17,346	NA	NA

Notes:

1. Work authorized by Purchase Order Number 55114718 dated 4/12/12 in accordance with the Arcadis Technical Proposal dated 3/16/12 (Total = \$550,332).
2. Task 11 (\$15,348) authorized based on the Arcadis proposal dated 5/21/12 and approved by Change Order #1 dated 10/18/2012 (Total = \$655,680).
3. Task 12 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 1/22/13. Also increased Task 1 by \$10,000 (See PO and confirmatory e-mail from Ken Sebnowski dated 10/29/13) (Total = \$912,102).
4. Task 10 increased by \$15,016 and Task 11 increased by \$15,324 based on Arcadis proposal dated 10/29/13 and approved by Change Order #3 dated 11/4/13 (Total = \$957,442).
5. Task 10 increased by \$15,000 based on the Arcadis proposal dated 12/18/13 and client approval email dated 12/19/13 (Total = \$957,442).
6. Task 1 increased by \$5,000, Task 2 increased by \$30,000, Task 10 increased by \$10,000, and Task 11 increased by \$15,650 by Change Order #6 dated 11/11/14 (Total = 1,018,092).
7. Task 1 increased by \$25,000, Task 2 increased by \$125,000, Task 4 increased by \$53,000, and Task 10 increased by \$25,000 by Change Order #7 dated 3/9/2015 (Total = 1,200,270).
8. Task 13, 14 and 15 authorized based on the Arcadis proposal dated 4/30/15 and approved by Change Order #8 dated 5/19/15 (Total = \$120,845.75).
9. Task 17 authorized based on the Arcadis proposal dated 6/27/25 and approved via email correspondence by JCP&L dated 6/11/14 (Total = \$14,969).
10. Task 1 increased by \$25,000 based on the Arcadis proposal dated 9/30/15 and approved by Change Order #9 dated 10/13/2015 (Total = \$89,318).
11. Task 10 increased by \$25,000 and Task 11 increased by \$15,000 based on the Arcadis proposal dated 2/9/16 and approved by Change Order #11 dated 2/22/16.
12. Task 2 increased by \$95,960 and Task 2 increased by \$21,559 based on the Arcadis proposal dated 04/01/2016, and approved by JCP&L on April 3, 2016.
13. Task 1 increased by \$25,122, Task 2 increased by \$28,716, Task 3 increased by \$75,232, Task 4 increased by \$75,232, Task 10 increased by \$21,396, Task 13 increased by \$66,234 and Task 14 created for \$21,934 based on the Arcadis proposal dated 9/22/2016, and approved by JCP&L on 9/22/2016.
14. Task 5 increased by \$75,977 based on the Arcadis proposal dated 12/7/2016 and approved by Change Order #15 dated 11/7/17.
15. Task 4 increased by \$76,478 based on the Arcadis proposal dated 5/24/17 and approved by Change Order #17 dated 7/1/2017.
16. Task 1, 2, 3, 10 and 11 increased by \$25,850 based on the Arcadis proposal dated 7/27/17 and approved by Change Order #18 dated 8/27/17.
17. Task 1, 2, 3, 10 and 11 increased by \$25,850 based on the Arcadis proposal dated 7/27/17 and approved by Change Order #18 dated 8/27/17.
18. Task 1, 2, 3, 10 and 11 increased by \$25,850 based on the Arcadis proposal dated 7/27/17 and approved by Change Order #18 dated 8/27/17.
19. Task 5 increased by \$25,329 based on Arcadis proposal dated 11/02/2018 and approved by JCP&L Change Order #20 dated 2/12/2018.
20. Task 9 increased by \$25,931, Task 15 created in the amount of \$368,461, and Task 16 created in the amount of \$37,637 based on the Arcadis proposal dated 2/12/2018, and approved by Change Order #19 dated 11/22/2018.
21. Task 11 increased by \$15,000 based on the Arcadis proposal dated July 5, 2019, and as approved by Change Order #22 dated 8/16/19.
22. Task 4 increased by \$25,272 and Task 5 increased by \$18,436 based on the Arcadis proposal dated January 13, 2020, and approved by Change Order #23 (total of \$146,711) dated 2/12/2019.
23. Task 9 increased by \$28,015 based on the Arcadis proposal dated 4/9/19, and as approved by Change Order #23 dated 3/24/19, and as approved by Change Order #24 (total of \$118,609) dated 4/12/19.
24. Task 1 increased by \$43,242, Task 6 increased by \$19,528 and Task 11 increased by \$17,095 based on the Arcadis Change Order request proposal dated July 30, 2019, and as approved by Change Order #26, dated 10/6/2019.

FIGURE 1
Cape May Former MGP Site
Projected Schedule for Remedial Action

ID	Task Name	Duration	Start	Finish	2019	2020	2021	2022	2023			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Remedial Action	6254 days	Wed 10/8/03	Thu 2/12/10								
2	Project Planning and Coordination	293 days	Wed 10/8/03	Fri 11/18/04								
23	Remedial Design	666 days	Thu 10/23/03	Thu 5/4/06								
24	Pre-Design Workplan	666 days	Thu 10/23/03	Thu 5/4/06								
44	RASR	1007 days	Wed 8/24/05	Thu 7/2/09								
62	Pro-Design Activities	1338 days	Mon 1/17/06	Wed 3/10/10								
63	Groundwater Sampling	1039 days	Mon 1/17/06	Fri 1/9/09								
64	Baseline Groundwater Sampling (20 wells)	25 days	Mon 1/17/06	Fri 2/18/06								
67	Annual Groundwater Sampling and Analysis (8 wells)	895 days	Thu 8/18/06	Fri 1/9/09								
75	Access and Permitting	60 days	Mon 8/13/08	Mon 11/23/08								
76	Historic Structure Investigation	71 days	Mon 8/13/08	Thu 12/18/08								
80	Soil Boring Installation/Sampling and Analysis	133 days	Mon 8/13/08	Wed 3/18/10								
81	Coordination/Subcontracting	40 days	Mon 8/13/08	Mon 10/26/08								
82	Soil Borings	30 days	Tue 12/1/08	Wed 1/13/10								
88	Bench-scale Testing	55 days	Tue 12/22/08	Wed 3/18/10								
90	Aquifer Testing	85 days	Mon 8/24/08	Thu 12/31/08								
98	Groundwater Flow and Transport Model	54 days	Mon 11/21/08	Mon 2/9/10								
102	Remedial Action Work Plan	246 days	Mon 11/18/10	Fri 10/23/11								
108	Remedial Implementation	1543 days	Mon 10/15/12	Fri 10/12/15								
109	First season	916 days	Mon 10/15/12	Fri 8/20/16								
151	Second season	389 days	Mon 11/20/15	Fri 5/26/17								
191	Third Season	309 days	Tue 8/21/17	Fri 10/13/18								
193	Restoration Monitoring	1370 days	Mon 3/27/17	Fri 6/24/22								
194	Remedial Action Report (RAR)	260 days	Mon 11/6/18	Fri 11/1/19								
198	Operation and Maintenance	1650 days	Fri 9/22/17	Thu 2/1/24								



INVOICE

RECEIVED

Jersey Central Power and Light Company
Attn. : Anna Sullivan
300 Madison Ave
Madison, NJ 07940-1868
United States

NOV 13 2019

Environmental Depart

Arcadis U.S., Inc.
Bank of America
Acct: 8188093937
ACH: 071 000 039 Wire: 026009 593
SWIFT: BOFAUS3N
Remit-mailbox@arcadis-us.com
62638 Collections Center Drive
Chicago, IL 60693-0626

Invoice Date	04-Nov-2019	Invoice Number	34128974
Payment Term	45 days	Due Date	2019-12-19
PO# 55114718			
Arcadis Reference Number	MD000776.0004	Project Number	30015903
Arcadis Reference Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	Project Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Services Through	22-Sep-2019	Project Manager	Jeremy Cucculni
		Client Contact	Anna Sullivan

Professional Services to 22-Sep-2019

Project	Task	Contract Line			
30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	00011 - LSRP Services	2 - MD000776.0004/00011			
Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Thompson, David	6.00	Hours	132.00	792.00 ^Y	
	6.00			792.00	
Total This Task				792.00	
Total This Project				792.00	
Total This Invoice				792.00 USD	
Total This Invoice				792.00 USD	

next Page

Bank Name	BANK OF AMERICA N.A.	Bank/Branch Code	BOFA-071000039
Account No.	8188093937	SWIFT	BOFAUS3N
Remittance Address: Remit-Mailbox@arcadis-us.com			
Please include the invoice number on all payments and include remittance copy with all postal payments. Late payments will be assessed according to contract terms.			



Transaction Details - Invoice Number 34128974

Project
30015903 - MD000776.0004-JCPL/CAPE
MAY MANUFACTURED GAS PLANT

Task
00011 - LSRP Services

Contract Line
2 - MDC00776.0004/00011

Labor

Employee No. and Name	Date	Hours	Rate	This Invoice
35155 - Thompson, David Deed Notice options	08/02/2019	0.50	132.00	66.00
35155 - Thompson, David Deed Notice status	08/09/2019	0.50	132.00	66.00
35155 - Thompson, David Weekly status call and follow-up	08/14/2019	1.00	132.00	132.00
35155 - Thompson, David Weekly status call	08/28/2019	1.00	132.00	132.00
35155 - Thompson, David Weekly status call. Deed Notice	09/04/2019	1.00	132.00	132.00
35155 - Thompson, David Weekly status call	09/11/2019	1.00	132.00	132.00
35155 - Thompson, David Weekly status call and follow-up	09/18/2019	1.00	132.00	132.00
		<u>6.00</u>		<u>792.00</u>
Total Labor				792.00
Total This Task				792.00
Total This Project				792.00
Total This Invoice				792.00 USD

Line Item 11 - LSRP Services

Total This Invoice 792.00 USD

APPROVAL STAMP

P.O. NO. 55114718/11 INV. NO. 34128974

COMPANY CODE: SCOO ^{P50} COST CENTER 52202

COST ELEMENT (GL ACCT.): 550300

ORDER: 3001018 WBS: ✓

APPROVED BY: [Signature] EMP. NO.: 297

*OK 115
C29632
11/18/19*

11-20-19

SES: # 1119239193 Fax: # 8041435



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.880.0590
Fax 609.880.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – August-September 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning 29 July 2019 and ending 22 September 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
1 November 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls, property redevelopment updates and discussions. Evaluate and discuss offsite CMHA Deed Notice options with project team and JCP&L Project Management.

If you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis



INVOICE

Jersey Central Power and Light Company
Attn. : Anna Sullivan
300 Madison Ave
Madison, NJ 07940-1868
United States

RECEIVED
DEC 09 2019
Environmental Department

Arcadis U.S., Inc.
Bank of America
Acct: 8188093937
ACH: 071 000 038 Wire: 026009 593
SWIFT: BOFAUS3N
Remit-mailbox@arcadis-us.com
62638 Collections Center Drive
Chicago, IL 60693-0626

Invoice Date	09-Dec-2019	Invoice Number	34134527
Payment Term	45 days	Due Date	2020-01-23
PO# 55114718			
Arcadis Reference Number	MD000776.0004	Project Number	30015903
Arcadis Reference Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	Project Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Services Through	27-Oct-2019	Project Manager	Jeremy Cucculini
		Client Contact	Anna Sullivan

Professional Services to 27-Oct-2019

Project	Task	Contract Line			
30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	00001 - Project Management	12 - MD000776.0004/00001			
Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Fulton, Amanda	7.60	Hours	43.00	326.80 ✓	
Cucculini, Jeremy	11.00	Hours	127.00	1,397.00 ✓	
Collins, Lisa	4.00	Hours	43.00	172.00 ✓	
Caballero, David	0.50	Hours	162.00	81.00 ✓	
Scillieri, Darren	9.00	Hours	138.00	1,242.00 ✓	
	32.10			3,218.80	
Other Reimbursable Charges				14.72	
Total This Task				3,233.52	

Project	Task	Contract Line			
30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	00004 - Permit Acquisition	15 - MD000776.0004/00004			
Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Sanchez, Adrian	0.80	Hours	65.00	52.00 ✓	
Rapp, Jayme	4.50	Hours	109.00	490.50 ✓	
Cucculini, Jeremy	3.50	Hours	127.00	444.50 ✓	
Murray, Jessie	23.25	Hours	102.00	2,371.50 ✓	

Bank Name: BANK OF AMERICA N.A. Bank/Branch Code: BOFA-071000039
 Account No: 8188093937 SWIFT: BOFAUS3N
 Remittance Address: Remit-Mailbox@arcadis-us.com
 Please include the invoice number on all payments and include remittance copy with all postal payments. Late payments will be assessed according to contract terms.



<u>32.05</u>	<u>3,358.50</u>
Other Reimbursable Charges	<u>80.19</u>
Total This Task	<u>3,438.69</u>

Project
30015903 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED
GAS PLANT

Task
00006 - Remedial Action Report

Contract Line
17 - MD000776.0004/00006

Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Rivera, Victoria	1.24	Hours	43.00	53.32 ✓	
Sanchez, Adrian	11.50	Hours	65.00	747.50 ✓	
Rapp, Jayme	2.50	Hours	109.00	272.50 ✓	
Steinberger, George	28.50	Hours	108.00	3,105.50 ✓	
Cuccuini, Jeremy	2.50	Hours	127.00	317.50 ✓	
Rabah, Majda	9.60	Hours	132.00	1,267.20 ✓	
Murray, Jessie	2.00	Hours	102.00	204.00 ✓	
Mastrocola, Krista	27.00	Hours	115.00	3,105.00 ✓	
Cathcart, Eric	7.00	Hours	97.00	679.00 ✓	
	<u>91.84</u>			<u>9,752.52</u>	
Total This Task				9,752.52	

Project
30015903 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED
GAS PLANT

Task
00009 - O&M

Contract Line
20 - MD000776.0004/00009

Labor					
Employee Name	Quantity	UOM	Rate	This Invoice	
Catchpole, Daniel	1.00	Hours	90.00	90.00 ✓	
Meuk, James	12.50	Hours	71.00	887.50 ✓	
Maurer, Benjamin	2.50	Hours	71.00	177.50 ✓	
Jacobson, Alexander	7.00	Hours	90.00	630.00 ✓	
French, Christopher	27.00	Hours	90.00	2,430.00 ✓	
McConnell, Keith	60.25	Hours	90.00	5,422.50 ✓	
Cuccuini, Jeremy	7.00	Hours	127.00	889.00 ✓	
Fuller, Andrew	16.00	Hours	132.00	2,112.00 ✓	
Foos, Patrick	1.00	Hours	90.00	90.00 ✓	
Erickson, Kevin	4.60	Hours	109.00	501.40 ✓	
Sanchez, Adriana	45.00	Hours	109.00	4,905.00 ✓	
Banda, Nadeem	27.00	Hours	102.00	2,754.00 ✓	



Scillieri, Darren	1.00	Hours	138.00	138.00 ✓
	<u>211.85</u>			<u>21,026.90</u>
Subcontracting				3,437.38
Reimbursable Expenses				2,185.11
Other Reimbursable Charges				763.11
Total This Task				<u>27,392.50</u>

Project
30015903 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED
GAS PLANT

Task
00010 - Technical Support

Contract Line
1 - MD000776.0004/00010

Labor

Employee Name	Quantity	UOM	Rate	This Invoice
Meyer, Julie	2.50	Hours	65.00	162.50 ✓
Jacobson, Alexander	9.00	Hours	90.00	810.00 ✓
Steinberger, George	12.50	Hours	109.00	1,362.50 ✓
Cuccolini, Jeremy	0.50	Hours	127.00	63.50 ✓
Sueker, Julie	6.30	Hours	184.00	1,159.20 ✓
Mastrocola, Krista	10.50	Hours	115.00	1,207.50 ✓
Caballero, David	3.50	Hours	162.00	567.00 ✓
Scillieri, Darren	2.00	Hours	138.00	276.00 ✓
	<u>46.80</u>			<u>3,608.20</u>
Total This Task				<u>3,608.20</u>

Project
30015903 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED
GAS PLANT

Task
00015 - GW Monitoring & Reporting

Contract Line
6 - MD000776.0004/00015

Labor

Employee Name	Quantity	UOM	Rate	This Invoice
Kane, Raleigh	49.00	Hours	71.00	3,479.00 ✓
Freed, Brian	43.70	Hours	61.00	2,665.70 ✓
O'Neill, Paul	41.70	Hours	71.00	2,960.70 ✓
Cuccolini, Jeremy	3.50	Hours	127.00	444.50 ✓
Foos, Patrick	5.00	Hours	90.00	450.00 ✓
	<u>142.90</u>			<u>9,999.90</u>

Subcontracting	11,706.88
Reimbursable Expenses	1,732.07
Other Reimbursable Charges	2,980.77
Total This Task	<u>26,419.62</u>

Project
30015903 - MD000776.0004-
JCPL/CAPE MAY MANUFACTURED

Task
00016 - Restoration Monitoring &
Management

Contract Line
7 - MD000776.0004/00016



GAS PLANT

Labor

Employee Name	Quantity	UOM	Rate	This Invoice
Markiewicz, Gary	1.50	Hours	115.00	172.50 ✓
Murray, Jessie	4.75	Hours	102.00	484.50 ✓
	<u>6.26</u>			<u>657.00</u>

Other Reimbursable Charges

Unit Billing

Total This Task

34.55
115.00
806.55

Total This Project

76,651.60

Total This Invoice

76,651.60 USD

Total This Invoice 76,651.60 USD

SES:# 1119383540 - Fax:# 8048197
34134627-1 Line Item 1 - Project Management \$ 3,233.52 JJ 12-18-19

SES:# 1119383545 - Fax:# 8048198
34134627-2 Line Item 4 - Permit Acquisition \$ 3,438.69 JJ 12-18-19

SES:# 1119383546 - Fax:# 8048199
34134627-3 Line Item 6 - Remedial Action Report \$ 9,752.52 JJ 12-18-19

SES:# 1119383578 Fax:# 8048200
34134627-4 Line Item 9 - OM&M \$ 27,392.50 JJ 12-18-19

* 34134627-5 Line Item 10 - Technical Support
JJ 2-7-20

\$ 5,608.20 HOLD FOR
ADJUSTMENT/CREDIT *

SES:# 1119383609 Fax:# 8048203
34134627-6 Line Item 15 - Groundwater Monitoring
And Reporting \$ 26,419.62 JJ 12-18-19

SES:# 1119383652 Fax:# 8048205
34134627-7 Line Item 16 Restoration Monitoring
And Management \$ 806.55 JJ -12-18-19

APPROVAL STAMP	
P.O. NO. 55114718	INV. NO. 34134627
COMPANY CODE: SCOO	COST CENTER 502702
COST ELEMENT (GL ACCT.): 550300	
ORDER: 3001018	WBS: ✓
APPROVED BY: JJ	EMP. NO: 297

12-18-19



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

RECEIVED
JAN 07 2020
Environmental Department

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08520
Tel 609.860.0590
Fax 609.880.8007
www.arcadis-us.com

Subject:
Monthly Progress Report (MPR) – October 2019
Cape Mey Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light Company (JCP&L) as a summary of activities performed by Arcadis for the above referenced site during the period beginning on 26 September 2019 and ending 27 October 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
6 December 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadis-us.com

Our ref:
MD000776.0002

Section 1: Work Performed

The following work was performed during the reporting period:

- General project management activities, including project planning, budgeting, scheduling, coordination, accruals, client updates and staff management.
- Continued permitting of proposed wetland replacement wells including compiling and submitting permit application for New Jersey Department of Transportation (NJDOT) and New Jersey Transit (NJT) access for offsite monitoring well replacements. Finalize wetland NJDEP wetland permit application and submit for review and approval.
- Perform routine O&M activities on the groundwater treatment system including: evaluate monthly pumping and extraction performance, data management and technical evaluation of permit-by-rule (PBR) sampling results, evaluation of system hydraulic capture and elevation gradient differences in the vicinity of the primary and secondary containment walls, review, evaluation and data management of the monthly permit-by-rule effluent sampling results, completion and submittal of the September 2019 monthly treatment system performance dashboard update, complete the October 2019 permit-by-rule compliance sampling and routine site maintenance activities, pull and clean extraction pumps, and jet and cleanout extraction pump influent lines, and process laboratory subcontractor invoicing for monthly September PBR sampling.
- Perform non-routine O&M activities in response to extraction well alarms, which



Ms. Anna Sullivan
6 December 2019

included an additional site visit on October 15th by the system operator to inspect and clean pumps (13 hours, approximately \$1,192) and office-based engineering support to address and troubleshoot pumping well alarms, system operation and extraction pump functionality (4 hours Andy Fuller, 2.3 hours Kevin Erickson, 8 hours Adriana Sanchez, 1 hour Nadeem Banda), totaling approximately **\$2,944**.

- Continued follow-up with JCP&L Project management regarding City of Cape May redevelopment plans, including evaluation of proposed stormwater discharge locations and evaluation of potential site drainage impacts.
- Continued evaluation of on and offsite PAH soil data results, including re-screening all data against the most current NJDEP Site Remediation Standards (SRS), development of comprehensive text-box figure presenting results, and evaluation of potential statistical review of data trends and plots. Review soil PAH forensics and identification of compound signatures at on and offsite areas by depths.
- Review historical soil data at offsite Cape May Housing Authority (CMHA) and development of DRAFT Deed Notice Exhibits. Evaluate potential scope and costs for shallow soil excavation work. Evaluate offsite Deed Notice areas and additional areas where they will be required.
- Preparation and completion of the Q3 groundwater monitoring event and process field expenses and laboratory subcontractor and rental equipment invoicing.
- Begin preparation of annual restoration area completion reporting.
- The MPR for August/September 2019 was submitted on 1 November 2019.

Section 2: Projected Schedule

Figure 1 presents the current projected schedule, with near-term activities shown in detail, and future anticipated activities shown in outline through project completion. The schedule has been revised based upon discussions with JCP&L regarding Scope of Work alterations and schedule expectations.

Section 3: Project Budget

The overall project budget for the currently authorized Scope of Work (Task 0001, Project Management, Task 002 Remedial Action Work Plan, Task 003 Procurement Assistance, Task 004 Permit Acquisition, Task 005 Construction Oversight, Task 006 Remedial Action Report, Task 007 O&M Manual, Task 8 Start-up Testing, Task 009 O&M, Task 10 Technical Support, Task 12 801 Lafayette Street Demolition Support), Task 13 Waste Characterization, Soil Delineation (Arcadis Task 14), Background



Ms. Anna Sullivan
6 December 2019

Investigation (Arcadis Task 15), Task 14 Vapor Intrusion Investigation (Arcadis Task 14A), Task 15 Groundwater Monitoring and Reporting, and Task 16 Restoration Monitoring and Management. Table 1 provides a budget analysis by task and indicates any Out-of-Scope Work (OSW) performed during the period and to date; in each case, OSW has been performed at the specific direction, and only after the authorization of JCP&L.

If you have any questions about this Monthly Progress Report, please do not hesitate to contact the undersigned.

Sincerely,
Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Cuccuini', with a horizontal line extending to the right.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillieri, Arcadis

AROWS
FIGURE 1
Cape May Parcel MAP Site
Proposed Schedule for Remedial Action

ID	Task Name	Duration	Start	Finish	2018	2019	2020	2021	2022	2023
1	Remedial Action	5284 days	Wed 10/2/02	Thu 12/1/24	Q1	Q2	Q3	Q4	Q1	Q2
2	Project Planning and Coordination	289 days	Wed 10/2/02	Fri 11/16/06						
3	Remedial Design	846 days	Thu 10/24/02	Thu 8/4/06						
24	Pre-Design Workshop	850 days	Thu 10/24/02	Thu 8/4/06						
44	RASR	907 days	Wed 8/24/02	Thu 7/23/09						
62	Pre-Design Activities	1336 days	Mon 11/25/04	Wed 3/16/10						
63	Groundwater Sampling	5024 days	Mon 11/27/06	Fri 12/18/09						
64	Baseline Groundwater Sampling (26 wells)	26 days	Mon 11/27/06	Fri 2/16/08						
67	Annual Groundwater Sampling and Analysis (6 wells)	636 days	Thu 8/16/06	Fri 7/4/08						
73	Access and Permitting	60 days	Mon 8/21/06	Mon 11/23/06						
78	Historic Structure Investigation	71 days	Mon 8/21/06	Thu 11/16/06						
80	Soil Boring Installation, Sampling and Analysis	133 days	Mon 8/21/06	Wed 3/16/07						
81	Coordination/contracting	40 days	Mon 8/21/06	Mon 10/28/06						
82	Soil Borings	30 days	Thu 12/1/06	Wed 1/13/07						
86	Batch-scale Testing	60 days	Tue 12/26/06	Wed 3/14/07						
90	Aquifer Testing	46 days	Mon 8/14/06	Thu 12/14/06						
95	Groundwater Flow and Transport Model	64 days	Mon 12/21/06	Mon 2/19/07						
102	Remedial Action Work Plan	246 days	Mon 11/19/06	Fri 10/28/11						
108	Remedial Implementation	1643 days	Mon 10/16/12	Fri 10/12/19						
109	First season	918 days	Mon 10/16/12	Fri 8/26/16						
151	Second season	389 days	Mon 11/26/12	Fri 8/26/17						
191	Third season	309 days	Tue 8/14/17	Fri 10/12/19						
183	Restoration Monitoring	1378 days	Mon 8/27/17	Fri 8/26/22						
194	Remedial Action Report (RAR)	269 days	Mon 11/27/18	Fri 11/11/19						
188	Operation and Maintenance	1004 days	Fri 8/22/17	Thu 8/1/24						

Project: Cape May
Date: Fri 5/31/8

Task: Milestones Summary

Project Summary: External Tasks External Milestone Internal Task

Machine Milestones: Precision Summary Round Trip Duration-only

Manual Summary Rollup: Manual Summary Start-only End-only Finish-only

Progress: Start End

Table 1
Budget Status for Site Remediation through 27 October 2019
Cape May Former MGP Site
Cape May, New Jersey
Purchase Order No. 53114718

TASK NO.	TASK NO.	DESCRIPTION	ORIGINAL TASK BUDGET	CURRENT TASK BUDGET	CURRENT INVOICE AMOUNT	OUT OF SCOPE WORK PERFORMED THIS PERIOD	OUT OF SCOPE WORK PERFORMED SINCE LAST CO	PREVIOUS AMOUNT INVOICED	CUMULATIVE AMOUNT INVOICED	BUDGET BALANCE	PROJECT SCORE % COMPLETE	FINANCIAL % COMPLETE
1	1	Project Management	8,300	21,384	3,234	0	0	188,808	789,073	34,711	100%	100%
2	2	Remedial Action Work Plan	146,824	548,386	0	0	0	546,319	546,319	0	100%	100%
3	3	Remediation Assistance	100,407	108,987	0	0	0	108,540	108,540	17	100%	100%
4	4	Permit Assistance	365,187	365,187	0	0	0	343,870	267,109	58	99%	99%
5	5	Construction Oversight	238,374	1,817,235	2,439	0	0	1,613,296	1,613,296	1,038	100%	100%
6	6	Remedial Action Request	22,861	47,789	9,353	0	0	37,848	47,501	18	100%	100%
7	7	ODM Remedial	3,780	16,397	0	0	0	16,711	16,711	78	100%	100%
8	8	Start Up Training	35,290	98,007	0	0	0	89,561	98,561	45	100%	100%
9	9	ODM	186,746	781,171	21,390	2,844	0	566,620	613,573	167,899	78%	100%
10	10	Technical Support	10,000	176,772	6,808	0	0	170,088	173,704	88	100%	100%
12	12	BDI Lathrop Street Dermo Support	38,472	38,472	0	0	0	38,142	38,142	1,289	99%	99%
13	13	W3E Construction Sampling	27,418	82,715	0	0	0	84,288	94,249	1,486	100%	100%
14	14	Sediment Investigation	47,819	41,228	0	0	0	39,343	39,343	1,385	100%	100%
15	15	Background Investigation/Remedial Investigation Reporting	21,934	41,224	28,420	0	0	30,355	78,983	(23,220)	97%	97%
16A	16	Vapor Intrusion Investigation	21,934	40,310	0	0	0	32,137	32,137	8,219	100%	100%
17	17	Construction Monitoring and Reporting	388,483	88,481	0	0	0	282,082	282,082	92,988	73%	73%
18	18	Remediation Monitoring and Management	37,597	86,253	897	0	0	62,860	63,987	13,259	100%	100%
TOTALS (9):			1,442,114	4,739,872	78,662	2,944	11,983	4,301,742	4,457,794	282,178		94%
TOTALS (8):			18,348	123,100	728	0	0	108,278	108,642	17,748		NA
TOTALS (9):			18,348	123,100	726	0	0	108,226	108,932	17,748		NA

Notes:

- Task 1 authorized by Purchase Order Number 46114718 dated 4/17/17 in accordance with the Arcadis Technical Proposal dated 2/16/17 (Total - \$180,332).
- Task 11 (\$15,348) authorized based on the Arcadis proposal dated 5/21/17 and approved by Change Order #1 dated 10/20/17 (Total - \$68,800).
- Task 12 authorized based on the Arcadis proposal dated 12/17/12 and approved by Change Order #2 dated 12/27/13. Also increased Task 11 by \$10,000 (See PO and commentary e-mail from Kim Sedorewski dated 10/20/17) (Total - \$812,102)
- Task 1 increased by \$15,000 based on the Arcadis proposal dated 12/18/13 and approved by Change Order #3 dated 11/11/14 (Total - \$1018,092).
- Task 1 increased by \$15,000 based on the Arcadis proposal dated 10/28/13 and approved by Change Order #4 dated 11/11/14 (Total - \$1,033,092).
- Task 1 increased by \$15,000 based on the Arcadis proposal dated 10/28/13 and approved by Change Order #5 dated 11/11/14 (Total - \$1,048,092).
- Task 13 and 15 authorized based on the Arcadis proposal dated 4/20/15 and approved by Change Order #6 dated 5/19/15 (Total - \$1,063,092).
- Task 13 authorized based on the Arcadis proposal dated 5/27/15 and approved by Change Order #7 dated 6/11/14 (Total - \$1,078,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #8 dated 10/13/2018 (Total - \$1,103,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #9 dated 10/13/2018 (Total - \$1,128,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #10 dated 10/13/2018 (Total - \$1,153,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #11 dated 10/13/2018 (Total - \$1,178,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #12 dated 10/13/2018 (Total - \$1,203,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #13 dated 10/13/2018 (Total - \$1,228,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #14 dated 10/13/2018 (Total - \$1,253,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #15 dated 10/13/2018 (Total - \$1,278,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #16 dated 10/13/2018 (Total - \$1,303,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #17 dated 10/13/2018 (Total - \$1,328,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #18 dated 10/13/2018 (Total - \$1,353,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #19 dated 10/13/2018 (Total - \$1,378,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #20 dated 10/13/2018 (Total - \$1,403,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #21 dated 10/13/2018 (Total - \$1,428,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #22 dated 10/13/2018 (Total - \$1,453,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #23 dated 10/13/2018 (Total - \$1,478,092).
- Task 1 increased by \$25,000 based on the Arcadis proposal dated 5/27/15 and approved by Change Order #24 dated 10/13/2018 (Total - \$1,503,092).



INVOICE

Jersey Central Power and Light Company
Attn: Anna Sullivan
300 Madison Ave
Madison, NJ 07940-1868
United States

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DEC 09 2019
Environmental Department

Arcadis U.S., Inc.
Bank of America
Acct: 8188093937
ACH: 071 000 039 Wire: 026009 593
SWIFT: BOFAUS3N
Remit-mailbox@arcadis-us.com
62638 Collections Center Drive
Chicago, IL 60683-0828

Invoice Date	09-Dec-2019	Invoice Number	34134620
Payment Term	45 days	Due Date	2020-01-23
PO# 55114718			
Arcadis Reference Number	MD000776.0004	Project Number	30015903
Arcadis Reference Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	Project Name	MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Services Through	27-Oct-2019	Project Manager	Jeremy Cuccuini
		Client Contact	Anna Sullivan

Professional Services to 27-Oct-2019

Project: 30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT
Task: 00011 - LSRP Services
Contract Line: 2 - MD000776.0004/00011

Labor	Employee Name	Quantity	UOM	Rate	This Invoice
	Thompson, David	5.50	Hours	132.00 ✓	726.00
		5.50			726.00
	Total This Task				726.00
	Total This Project				726.00
	Total This Invoice				726.00 USD

Total This Invoice 726.00 USD

Line Item 11 - LSRP Services

APPR VAL STAMP

P.O. NO. 55114718 INV. NO. 34134620
 COMPANY CODE: SCOO COST CENTER 502702
 COST ELEMENT (OL ACCT.): 550300
 ORDER: 3001018 WBS: ✓
 APPROVED BY: [Signature] EMP. NO.: 299

SES: # 1119383697 Fax: # 8048213

*OK AS
C29632
12/18/19*

12-18-19

Bank Name	BANK OF AMERICA N.A.	Bank/Branch Code	BOFA-071000039
Account No.	8188093937	SWIFT	BOFAUS3N
Remittance Address: Remit-Mailbox@arcadis-us.com			
Please include the invoice number on all payments and include remittance copy with all postal payments. Late payments will be assessed according to contract terms.			



Transaction Details - Invoice Number 34134620

Project 30015903 - MD000776.0004-JCPL/CAPE MAY MANUFACTURED GAS PLANT	Task 00011 - LSRP Services	Contract Line 2 - MD000776.0004/00011
--	--------------------------------------	---

Labor

Employee No. and Name	Date	Hours	Rate	This Invoice
35155 - Thompson, David	09/25/2019	1.00	132.00	132.00
Weekly status call				
35155 - Thompson, David	10/02/2019	0.50	132.00	66.00
Weekly Status call				
35155 - Thompson, David	10/09/2019	1.00	132.00	132.00
Discuss compliance averaging and remedial options				
35155 - Thompson, David	10/14/2019	1.00	132.00	132.00
compliance averaging options / requirements				
35155 - Thompson, David	10/16/2019	1.00	132.00	132.00
Weekly status call, compliance averaging				
35155 - Thompson, David	10/23/2019	1.00	132.00	132.00
Weekly status call and follow-up				
		5.50		726.00
Total Labor				726.00
Total This Task				726.00
Total This Project				726.00
Total This Invoice				726.00 USD

Total This Invoice 726.00 USD



Anna Sullivan
Project Manager
Jersey Central Power & Light Company (JCP&L)
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Morristown, New Jersey 07962-1911

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Subject:
Monthly Progress Report (MPR) – October 2019
Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

ENVIRONMENT

Dear Ms. Sullivan:

The following information is provided to Jersey Central Power and Light (JCP&L) Company as a summary of LSRP activities performed by Arcadis for the above referenced site during the period beginning 26 September 2019 and ending 27 October 2019. This report is compliant with the requirements of Purchase Order Number 55114718 between JCP&L and Arcadis, and pursuant to the specified Scope of Work.

Date:
6 December 2019

Contact:
Jeremy Cuccuini

Phone:
609 366 9033

Email:
jeremy.cuccuini@arcadia-us.com

Section 1: Work Performed

The following work was performed during the reporting period:

- Participation in weekly project status calls, property redevelopment updates and discussions. Evaluate and discuss offsite CMHA Deed Notice options with project team and JCP&L Project Management. Review compliance averaging options to address remedial action reporting for soil in the wetland areas.

Our ref:
MD000776.0002

If you have any questions about this Monthly Progress Report for LSRP services, please do not hesitate to contact the undersigned.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:
J. McLaughlin, Arcadis
D. Scillfari, Arcadis

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-4a(2)



Environmental Affairs
Site Remediation

Memorandum

To: Frank Lawson

Date: December 16, 2019

From: Anna Sullivan

**Subject: Restoration Site Improvement Costs
City of Cape May and Affiliates
Cape May, New Jersey**

In early 2010 JCP&L and the City of Cape May entered into various agreements pursuant to which JCP&L has been conducting remediation at and about the site of the former manufactured gas plant (MGP) formerly located at Lafayette and St. John Streets in Cape May, New Jersey (the MGP Site). The former MGP Site was used as a municipal park by the City prior to JCP&L's MGP remediation construction phases and included basketball courts, tennis courts, sidewalks, lighting, fencing, benches, a gazebo, and grass surfaces (collectively "site improvements"). These site improvements were demolished during JCP&L's remediation efforts. Under the 2010 Agreements JCP&L is obligated to conduct or pay for certain repairs, replacements and other restoration work at and about the property of the City and its Affiliates resulting from its MGP Site remediation work (collectively "restoration").

JCP&L has substantially completed the construction phases of the MGP site remediation, pending deed notice agreement and engineered cap extension on the City affiliated Cape May Housing Authority (CMHA) property east of Lafayette Street and finalization of institutional controls on all affected properties. The City of Cape May is in the process of finalizing designs for the municipal park that will be reconstructed on the former MGP site and will include site improvements demolished during JCP&L's MGP site remediation.

JCP&L requested Arcadis, the engineering and environmental consultant for the MGP site remediation, provide an engineering cost estimate for the restoration of site improvements associated with the municipal park and the cap extension and deed notice for the CMHA. The cost for the park site improvements was estimated to be approximately \$256,000 and the cost for the CMHA cap extension was estimated to be approximately \$83,000 as detailed in the attached tables.

JCP&L has agreed to set aside the estimated costs for the City restoration in an attorney Trust Fund account, to be dispersed after negotiation with the City on final restoration costs and in accordance with the trust fund agreement with Schenck, Price, Smith & King (SPSK) and requires a wire transfer of \$350,000.00 to SPSK. Please sign the enclosed Wire Transfer Request and return to me for processing.

If there are any questions concerning this matter, please contact me at 860-575-0672.

Thank you.

Cc: Project File

SAP Accounts Payable Check Requisition Request Form

WIRE TRANSFER

POSTING DATE
CHECK #
PAYMENT DATE
ENCASHMENT
WIRE DATE
DATE LTR SENT

Amount of Check: \$350,000.00

Document Number: _____

A/P Fax Number: _____

Vendor Name: SCHENK, PRICE, SMITH & KING - ATTORNEY TRUST ACCOUNT

Vendor Address: 220 Park Avenue, Florham Park, NJ 07932-1012

SAP Vendor Number: 210030342
(if known)

Invoice Attached: YES (kr) NO (ok)

Reason for Check Request: (Please abbreviate, as SAP allows for only 48 characters of text)
Escrow City of Cape May Park Restoration - Cape May MGP Site

Accounting Distribution

G/L (Cost Element)	Cost Center	Order #/WBS	Resp. Ctr.	Requesting Employee Signature & Date
650300		3003018		<i>Alvin J. ...</i> 12/13/19 Requesting Employee Number C29632
				Approver Signature & Date <i>Frank D. Lawson</i> 12-17-19 Approver Employee Number 297
				Return Check to Requesting Employee Wire Transfer

Cape May Fenner MGP Site
Opinion of Probable Construction Costs Park Replacement Features

ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL COST	NOTES/ASSUMPTIONS
Site Layout					
Labor/Material - Surveyor	AC	2.1	\$ 3,080.00	\$ 6,468.00	RS Means (2019). Boundary and Survey Markers. Lot Location and lines, small quantities, maximum
Soil Erosion					
Labor/Material - 5ft Fence	SF	334	\$ 2.15	\$ 711.97	RS Means (2019). 5ft fence, install, maintain and remove
Concrete Sidewalk	SF	1,264	\$ 5.15	\$ 6,512.13	RS Means (2019). Concrete, 3000 psi with wire mesh - 4" thick.
Tennis Court					
Labor/Material - Small Tennis Court	SF	7,200	\$ 6.18	\$ 44,513.28	NC State (2013). Assume supplying on-court with net and fencing.
Basketball Courts					
Labor/Material - Large Basketball Court	SF	10,000	\$ 5.84	\$ 58,424.00	NC State (2013). Assume supplying two full courts with asphalt or concrete surfaces.
Fencing					
Labor/Material - Fence	EA	780	\$ 43.12	\$ 32,771.20	RS Means (2009). Tennis courts, 11 ga. Wht, 2-1/2" post set in concrete, 30' OC, 1-5/8" top rail, 10' high
Labor/Material - Gate	EA	3	\$ 610.40	\$ 1,851.20	RS Means (2019). Tennis courts, 11 ga. Add for gate 4' wide, 1-5/8" frame
Lighting					
Labor/Material - Light Pole	EA	8	\$ 3,052.00	\$ 24,416.00	RS Means (2019). Light pole, aluminum, 20' high, 1.87m bracket.
Labor/Material - Trenching Common Earth	LF	900	\$ 6.12	\$ 5,508.00	RS Means (2019). Trenching, common earth, no slope, 2' wide, 2' deep, 3/8 CY Bucket. Multiply by 2 for excavation and backfill.
Labor/Material - Feeder Installation	LF	300	\$ 9.28	\$ 2,785.44	RS Means (2019). Branch installation 600 V, including EMT conduit and THW wire, 20 AMP
Park Benches					
Material - Park Benches	EA	4	\$ 672.00	\$ 2,688.00	Belton Outdoor (2019). Assume Victorian Style Wood Park Bench (PE), 60 inch long for surface mount.
Labor - Park Benches	HR	16	\$ 102.00	\$ 1,632.00	Viasant (2019). Rate for Union Labor Steward. Assume two laborers for one day of work.
Gazebo					
Labor/Material - Gazebo	SF	319	\$ 104.24	\$ 33,152.56	RS Means (2019). Luxury Open Porch
			Subtotal	\$ 189,898.15	
			Sales Tax	6.25%	
			Permit & Compliance Fees	7.5%	
			Architect Design Fees	12%	
			PM/CM Fees	12%	
			Total	\$ 256,074.70	

Privileged and Confidential – Attorney Work Product
DRAFT - Rough Order of Magnitude Cost Estimate
Cape May Housing Authority - Remediation
Former Cape May Manufactured Gas Plant
Cape May, New Jersey

TASK NUMBER	TASK DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL COSTS	
Contractor Costs						
1	Mobilization and Demobilization	1	LS	\$5,000.00	\$5,000.00	
2	Utility Investigation and Surveying	1	LS	\$8,100.00	\$8,100.00	
3	Erosion and Sediment Controls	1	LS	\$2,700.00	\$2,700.00	
4	Health and Safety	1	LS	\$3,200.00	\$3,200.00	
5	Sidewalk Demolition	1	LS	\$1,250.00	\$1,250.00	
6	Excavation and Handling of Impacted Soils	60	CY	\$49.00	\$2,940.00	
7	Transportation and Disposal (Clean Earth)	110	TON	\$67.00	\$9,570.00	
8	Clean Fill and Compaction	90	TON	\$58.00	\$5,220.00	
9	Top Soil and Permanent Seed	1	LS	\$936.00	\$936.00	
10	Sidewalk Installation	1	LS	\$1,500.00	\$1,500.00	
					Contractor Costs	\$40,416.00
Vendor Costs						
11	Waste Classification Sample Analytical	1	LS	\$1,500.00	\$1,500.00	
12	Air Monitoring Equipment Rental	2	WKS	\$750.00	\$1,500.00	
					Vendor Costs	\$3,000.00
Arcadis Costs						
13	CM Oversight (During Pre Design Investigation and Construction)	110	HRS	\$90.00	\$9,900.00	
14	CM per Diem	11	EA	\$200.00	\$2,200.00	
15	Design and PM Fees	1	LS	\$19,784.00	\$19,784.00	
					Arcadis Costs	\$31,884.00
Subtotal			T&M	\$75,300.00		
Contingency			10%	\$7,530.00		
Total			T&M	\$82,830.00		
					Cost per Ton	\$684.55

Notes:

- Task 1 includes mobilization and demobilization of equipment, labor and materials to the site.
- Task 2 includes 1 day for locating and marking out utilities with 3 lines of evidence and assume a surveyor on Site 2 days a week for the duration of the remediation.
- Task 3 includes installation, maintaining and removal of all Erosion and Sediment Controls (perimeter controls and Inlet protection).
- Task 4 includes the use of off-duty police officers for crossing guards.
- Task 5 assumes concrete associated with sidewalk will need to be resized for disposal.
- Task 6 assumes all soils will be excavated to 2 feet below ground surface.
- Task 7 assumes waste characterization conducted before excavation commences and all material will be classified as non-hazardous for lead.
- Task 8 includes furnishing clean fill and all sampling necessary to confirm material meets NJ Clean Fill guidance.
- Task 9 includes furnishing topsoil and seed, along with any sampling necessary to confirm material meets NJ Clean Fill guidance and Cape May Soil Conservation District requirements
- Task 10 includes formwork, pouring and finishing of concrete sidewalk to replace the portions of sidewalk removed.
- Task 11 includes labor and analytical for a waste classification sample.
- Task 12 includes 3 perimeter air monitoring stations. Labor to be covered by the Construction Manager.
- Task 13 includes 1 employee completed 1 day trip for waste classification and conducting 2 weeks of oversight during the remediation.
- Task 14 includes daily per diem for lodging and food during the oversight.
- Task 15 includes cost for development of drawings, review of submittals and project management support for all phases of the work.

ESCROW AGREEMENT (12/10/2019)

This Escrow Agreement is being made by and among **SCHENCK, PRICE, SMITH & KING, LLP**, having an address at Attn: Richard J. Conway, Jr., 220 Park Avenue PO Box 991, Florham Park, New Jersey 07932 (fax: (973) 540-7300); e-mail address: rjc@spsk.com; phone: (973) 540-7328 ("Escrow Agent") and **JERSEY CENTRAL POWER & LIGHT COMPANY**, having an address at Attn: Frank Lawson, Supervisor- Site Remediation, 300 Madison Ave, P.O. Box 1911, Morristown, New Jersey 07962 (fax: (973) 644-4165); e-mail address: flawson@firstenergycorp.com; phone: (973) 401-8309 ("JCP&L").

RECITALS

A. In early 2010 JCP&L and the City of Cape May entered into various agreements, as amended from time to time thereafter (collectively the "2010 Agreements") pursuant to which JCP&L has been conducting remediation at and about the site of a former manufactured gas plant formerly located at Lafayette & Saint John Streets, Cape May, NJ (the "MGP Site").

B. Under the 2010 Agreements JCP&L is obligated to conduct or pay for certain repairs, replacements and other restoration work at and about the property of the City and its Affiliates (as defined in the 2010 Agreements) resulting from its MGP Site remediation work (collectively, "Restoration"). This Escrow Agreement is being made, and funds and potentially other property deposited, by JCP&L with Escrow Agent hereunder, so as to ensure and confirm, if and as JCP&L elects to City and its Affiliates, the availability of those funds and other property for the Restoration.

C. Escrow Agent presently serves as counsel to JCP&L and JCP&L has asked, and Escrow Agent has agreed, that Escrow Agent act for the benefit of City, City's Affiliates and JCP&L pursuant to all of the terms and conditions of this Escrow Agreement.

THEREFORE, for the purposes set forth above and in consideration of the recitals, which hereby are agreed to be part of this Agreement, and mutual promises herein contained, the receipt and sufficiency of which are hereby acknowledged, Escrow Agent and JCP&L agree as follows:

1. Appointment.

1.1 Escrow Agent. JCP&L designates and appoints Escrow Agent to serve in accordance with the terms and conditions of this Escrow Agreement. Escrow Agent hereby accepts such designation and appointment.

1.2 Property. The term "Property" shall be defined to be the funds, in the minimum amount of \$350,000.00, established and deposited with Escrow Agent, before or after the making of this Escrow Agreement, for use for the Restoration or other purposes hereafter designated by JCP&L consistent with this Escrow Agreement, and, if delivered after the making of this Escrow Agreement then acknowledged by Escrow Agent in writing to be subject to this Escrow Agreement. All funds so delivered and acknowledged shall be held in escrow in an account or with an institution consistent with this Escrow Agreement, and together with interest or earnings thereon, if any, shall be held until delivered by Escrow Agent in accordance with the terms of this Escrow Agreement. The Property may also include any other property (such as documents) similarly delivered into Escrow Agent's possession and acknowledged by Escrow Agent as subject hereto. JCP&L shall bear all income tax consequences associated with all interest and earnings paid or accruing on the Property. JCP&L hereby advises Escrow Agent that its federal tax identification number is 21-0485010. JCP&L promptly shall deliver to Escrow Agent such tax forms as Escrow Agent reasonably deems necessary or advisable for and by reason of the Property and this Escrow Agreement.

2. Delivery of Property.

2.1 Release of Property.

(a) Periodically funds from the Property may be disbursed, in whole or in part, either (i) to pay for then past or future Restoration by JCP&L, City or any of its or their Affiliates, including in advance for estimated costs, without obligation of Escrow Agent to review or determine the reasonableness of, or support for, the payments, expenses or estimates for same, or (ii) to pay estimated or actual compensation, damages, or reimbursement of losses, costs and expenses of City and its Affiliates for or in lieu of Restoration consistent with the 2010 Agreements, (iii) to compromise, settle, or otherwise satisfy or resolve claims, actions or measures for or by reason of Restoration, or (iv) to otherwise pay for, reimburse, fund or be used for use for other purposes hereafter designated by JCP&L consistent with this

Escrow Agreement. The procedure established in Section 2.1(c) shall apply to any request for every release or payment by the Escrow Agent of any of the Property held subject to this Section 2.1(a).

(b) Upon and after JCP&L determination that it has satisfied its then outstanding obligations for Restoration, or otherwise does not then need to retain some, any or all Property or funds with Escrow Agent in escrow under this Escrow Agreement, JCP&L shall have the right to demand the disbursement and return to it or its Affiliates of any then remaining Property or funds in the accounts of Escrow Agent. The procedure established in Section 2.1(c) shall apply to any request for a release or payment by the Escrow Agent of any of the Property held subject to this Section 2.1(b).

(c) (i) Upon and after the occurrence of such event or circumstance consistent with any or all of Section 2.1(a) or 2.1(b), JCP&L may make written demand upon the Escrow Agent for the release of the Property (including funds) or a portion thereof, if previously deposited with the Escrow Agent, to JCP&L, City or any of its or their Affiliates, as specified in such demand. At JCP&L or Escrow Agent's determination to do so, either JCP&L or Escrow Agent may promptly so notify the City in a manner permitted by the 2010 Agreements, but without obligation to do so.

(ii) If the Escrow Agent itself has no objection, and, if notice has been given to City, does not receive written objection to the demanded payment or delivery of such Property from the City, within approximately ten (10) days after the later of Escrow Agent's receipt of such demand or transmittal to City, if such occurs, (or such other later date as may be provided in this Agreement), the Escrow Agent is hereby authorized to make the demanded payment or delivery. If the Escrow Agent receives written objection from the City after notice made hereunder and within the aforesaid approximately ten (10) day period (or such later date as may be provided in this Agreement), or if for any other reason the Escrow Agent shall elect in good faith not to make such payment or delivery, the Escrow Agent shall continue to hold such Property pursuant to the terms and conditions of this Escrow Agreement until Escrow Agent receives either (x) a written authorization executed by all of JCP&L and City directing disposition of the Property, (y) such other assurances from JCP&L or City or both as Escrow Agent in its reasonable discretion deems satisfactory, or (z) a final, non-appealable judgment of a court of competent jurisdiction resolving the objection and determining the proper disposition of the Property, which judgment, if any, shall be complied with by the Escrow Agent forthwith. Without limitation of the foregoing, the Escrow Agent may, but is not obligated to do so, rely on its own good faith review or determination that a demand presented to it is improper or unsupported or inconsistent with this Escrow Agreement or otherwise deficient and determine not to make the demanded payment or delivery, advising the parties of the determination and a basis for possible cure of issue(s) or deficiency(ies), if any. Alternatively, it may, without obligation to do so, suspend its payment or delivery and request additional proofs, certifications and/or clarifications, consistent with this Agreement from either or both JCP&L or City, or any of its or their Affiliates, and its obligations to perform shall not recommence until ten (10) days after the response to the request from the parties.

(d) Except only if and to the extent otherwise expressly provided to the contrary in this Escrow Agreement, JCP&L shall have the sole power and authority under this Escrow Agreement to designate or determine the purposes for which JCP&L may hereafter elect to use the Property.

2.2 Conflicting Directions. In the event that the Escrow Agent receives conflicting directions from JCP&L or any of its Affiliates, perhaps inter se or on the one hand, and City or any of its Affiliates, perhaps inter se or on the other hand, (x) JCP&L's own instructions always being deemed to govern, control and suffice over any of its Affiliate's in the event of silence or conflict, even when the consent or approval of others is seemingly or expressly otherwise specified or required and (y) City's own instructions always being deemed to govern, control and suffice over any of its Affiliate's in the event of silence or conflict, even when the consent or approval of others is seemingly or expressly otherwise specified or required), and (z) JCP&L's instructions always being deemed to govern, control and suffice over any of City or its Affiliate's in the event of silence or conflict, even when the consent or approval of others is seemingly or expressly otherwise specified or required, all of (x) through (z) with respect to the disposition of the Property. In such event if Escrow Agent is unable to resolve such conflicting instructions, or otherwise if and as it elects, except as expressly provided in this Escrow Agreement to the contrary, the Escrow Agent may continue to hold same until such time as the Escrow Agent receives (a) joint written instructions properly executed by them both; or (b) such other assurances from JCP&L or City or both, if and as Escrow Agent in its reasonable discretion deems satisfactory, or (c) a final, non-appealable order or judgment of a court of competent jurisdiction instructing Escrow Agent as to the delivery of the Property; or (d) confirmation of its deposit of the then disputed Property with a court of competent jurisdiction for protection of the Property or resolution of the conflict; or (e) authorization to act in accordance with any other express provision of this Escrow Agreement, including Section 2.1(b) or (d). By way of clarification, Escrow Agent may rely on JCP&L's sole determination as to whether or not any of the Property should be delivered for Restoration or other purposes without further review or assessment of JCP&L determinations or instructions.

2.3 No Amendment. Notwithstanding anything in this Escrow Agreement to the contrary, the terms and provisions of this Escrow Agreement shall not be construed in any way as an amendment or modification of the terms and provisions of the 2010 Agreement, or any agreement or document contemplated by the 2010 Agreement. Except if and as expressly provided otherwise in this Escrow Agreement, City and its Affiliates have no rights hereunder, and Escrow Agent has no duties to City or its Affiliates hereunder. Escrow Agent's obligations are solely as provided for in this Escrow Agreement. City's and its Affiliates' sole rights are as specified in the 2010 Agreements. In the event of any conflict between this Escrow Agreement and the 2010 Agreements or any other agreement contemplated by the 2010 Agreement concerning the Property and the duties, rights, and obligations of the Escrow Agent, the terms and conditions of this Escrow Agreement shall control.

3. Fees and Expenses. Fees and expenses incurred by reason of this Escrow Agreement and handling of the Property, including by reason of any claims or disputes concerning same, and including those of Escrow Agent hereafter billed for its services by Escrow Agent to JCP&L in the ordinary course, shall be borne by JCP&L. Without limitation, JCP&L shall pay to Escrow Agent all reasonable disbursements of Escrow Agent, including reasonable attorneys' fees and expenses incurred by Escrow Agent in connection with any litigation or dispute of any nature arising under this Escrow Agreement. Exhaustion of the funds as part of the Property shall not excuse JCP&L of its obligations under this Escrow Agreement, the 2010 Agreements or any other agreement contemplated by the 2010 Agreements.

4. Rights and Responsibilities of Escrow Agent.

4.1 Conditional Acceptance. The acceptance by Escrow Agent of its duties under this Escrow Agreement is expressly subject to its terms and conditions, which shall govern and control with respect to Escrow Agent's rights, duties, liabilities and immunities, as well as to its actual receipt and collection of the Property subject to this Escrow Agreement.

4.2 Other Agreements. Except for this Escrow Agreement, Escrow Agent shall be under no duties or responsibilities to enforce any of the terms or conditions of any agreement between or among any or all of the parties hereto, including without limitation the 2010 Agreements. Escrow Agent shall not be responsible for the validity or sufficiency of any representations or warranties made, or obligations assumed by, any other party to this Escrow Agreement, the 2010 Agreements or any other agreement.

4.3 Value of Property. Escrow Agent shall not be responsible for the (i) validity, sufficiency or authenticity of any of the funds within the Property or other Property; or (ii) the value (present or future), terms, conditions, collectibility or enforceability of any of same. Escrow Agent shall have fulfilled its duty with regards to the safeguarding of the Property which consists of funds, cash, money or equivalent if it deposits such funds in an account or the like, interest bearing or not, with any bank or other institution which is authorized to hold Attorney Escrow or Trust Accounts in New Jersey, or other institution permissible for holding the Property subject hereto, without concern for the financial health of such institution, providing that the account is generally insured by the FDIC or equivalent, if and to the extent then provided by law for same, and without concern for the amount or rate of interest paid by such depository on such account, or the limitations of such insurance, if made in accordance with the terms governing such account.

4.4 Notices to Escrow Agent. Escrow Agent shall be under no duty or responsibility to make any inquiry or investigation as to the accuracy or adequacy, and shall be entitled to assume conclusively, the correctness and completeness, of any and all information given in any certificate, statement or other paper received by Escrow Agent under this Escrow Agreement. Escrow Agent shall be protected in acting upon any notice, request, certificate, approval, statement, consent or other paper reasonably believed by Escrow Agent to be genuine and to have been signed by the proper party or parties.

4.5 Receipt of Property. Nothing contained in this Escrow Agreement shall be deemed to obligate Escrow Agent to deliver any items of the Property, unless first actually received by Escrow Agent pursuant to this Escrow Agreement.

4.6 Non-Liability. Escrow Agent shall not be liable for any error of judgment, or for any act done or step taken or omitted by it in good faith, or for any mistake of fact or law, or for anything which it may do or refrain from doing in connection herewith, excepting only its own gross negligence or intentional and deliberate misconduct.

4.7 Advice of Counsel. Escrow Agent may consult with and obtain advice from counsel of its own choice, including attorneys of its own firm in the event of any bona fide question as to any of the provisions hereof, or its duties hereunder. The advice and opinion of such counsel shall be deemed to be full and complete authorization to the Escrow Agent to act in accordance therewith. Escrow Agent shall incur no liability whatsoever and shall be fully protected when acting in good faith in accordance with the opinion and advice of such counsel. JCP&L shall be liable hereunder and under Paragraphs 3 & 5.1 for all costs and fees incurred by Escrow Agent, or billed to JCP&L, for such counsel, actions taken in reliance thereon, and any proceeding resulting therefrom.

4.8 Escrow Agent's Uncertainty. (a) In the event of any disagreement between any or all of the parties to this Escrow Agreement, resulting in adverse claims or demands being made in connection with the subject matter of this Escrow Agreement or the Property, or in the event that Escrow Agent in good faith is in doubt as to what action it should take hereunder, then Escrow Agent may, at its option, refuse to comply with any claims or demands upon it, or refuse to take any other action hereunder, so long as any such disagreement, claim, demand or uncertainty continues or exists, and in any such event Escrow Agent shall not be or become liable in any way to any person for its failure to act.

(b) Escrow Agent shall be entitled to continue to so refrain from acting until (i) the doubts or disputes shall have been fully and finally adjudicated by a court of competent jurisdiction or (ii) all such doubts and disputes shall have been adjusted and resolved by written agreement among interested persons and Escrow Agent shall have been so notified in writing signed by all such persons or (iii) Escrow Agent receives such other assurances from JCP&L or City or both as Escrow Agent in its reasonable discretion deems satisfactory. Escrow Agent is expressly authorized to seek to obtain any of the foregoing at any time.

5. Indemnity.

5.1 Indemnity. To the maximum extent permitted by applicable law, JCP&L agrees to defend, indemnify and hold Escrow Agent harmless from and against any and all claims, actions, judgments, losses, liabilities, obligations, damages, charges, costs, and expenses of any nature whatsoever, including without limitation attorneys' fees and expenses incurred by Escrow Agent (including such fees and expenses incurred in any litigation by or against any of the parties to this Escrow Agreement under this Section 5.1), arising directly or indirectly from, out of or incident to this Escrow Agreement or the Property excepting only those accruing as a result of Escrow Agent's own gross negligence or intentional and deliberate misconduct.

6. Amendment; Resignation and Termination.

6.1 Amendment. This Escrow Agreement may be amended or terminated only by a written agreement signed by JCP&L and Escrow Agent, expressly referring to this Escrow Agreement. By way of clarification, the consent or agreement of City and any of its Affiliates is not required.

6.2 Resignation. Escrow Agent may at any time resign hereunder by giving at least five (5) days prior written notice thereof to JCP&L and, if Escrow Agent elects, City. Upon the effective date of such resignation, the Property then held by Escrow Agent hereunder shall be delivered to a joint designee of all of the other parties hereto. Upon arranging for such delivery, all obligations of Escrow Agent hereunder shall cease and terminate. If no such person shall have been designated by the date validly set hereunder for Escrow Agent's resignation, nevertheless, all obligations of Escrow Agent hereunder shall cease and terminate. Escrow Agent's sole responsibility thereafter shall be to arrange for the safekeeping of the Property then held by it and to deliver same to: (i) a person designated by all the parties hereto; or (ii) in accordance with the directions of a final order or judgment of a court of competent jurisdiction. By way of clarification, in the absence of Richard J. Conway, Jr., whether by reason of death, disability or full retirement, Escrow Agent may receive notices and exercise its rights hereunder through the actions or decisions of any of its then partners, without limitation expressly including Sean Monaghan.

6.3 Time Limit. JCP&L has no duty to use any or all of the Property at any time, or within any specific period. Unless otherwise terminated in accordance with Sections 6.1 or 6.2, the obligations and liabilities of Escrow Agent with respect to the Property under Escrow Agreement shall terminate upon the proper delivery hereunder by Escrow Agent of all of the Property.

6.4 Survival. Articles 3 and 5 of this Escrow Agreement shall survive the termination of this Escrow Agreement and the delivery of the Property.

7. Escrow Agent as Counsel.

Escrow Agent has acted and will continue to act as legal counsel to JCP&L and Affiliates in connection with the 2010 Agreement, this Escrow Agreement, and the transactions contemplated thereby, hereafter if and as JCP&L may request and Escrow Agent agrees, is merely acting as a stakeholder under this Escrow Agreement and is, therefore, hereby authorized to continue acting as counsel for JCP&L and its Affiliates including, without limitation, with regard to any dispute or controversy arising out of this Escrow Agreement, the 2010 Agreements, the transactions contemplated thereby, the Property or any other matter. It is a condition of the claim or exercise of any rights under this Escrow Agreement that City and its Affiliates thereby waive any claim or right to disqualify Escrow Agent as Escrow Agent or as JCP&L's or its Affiliates' counsel, and any claim for damages, by reason of Escrow Agent's dual roles and actions, inactions, or decisions made or taken by Escrow Agent in good faith in accordance with this Escrow Agreement. It is a condition of the claim or exercise of any rights under this Escrow Agreement that JCP&L and its Affiliates hereby waive any and every claim or right against Escrow Agent by reason of any duties, obligations or conflicts arising by reason of Escrow Agent's dual roles and actions, inactions, or decisions made or

taken by Escrow Agent in good faith in accordance with this Escrow Agreement. JCP&L acknowledges that it has been given the opportunity to consult with counsel of its choice, other than the attorneys of Escrow Agent, as to the making of this Escrow Agreement and the terms and conditions hereunder, without limitation including in-house counsel.

8. Miscellaneous.

8.1 Third Party Beneficiaries. Nothing in this Escrow Agreement is intended to or shall confer upon anyone, other than the parties hereto, expressly including the absence of rights to City and its Affiliates, who are not parties hereto, any legal or equitable right, remedy or claim against any of the parties hereto.

8.2 Notices. Any notice required to be given hereunder shall be given in writing by a party or its attorney, and may be served either by facsimile or e-mail (in each case with receipt acknowledged and either with hard copy sent by regular mail or with the burden upon the sender to prove actual delivery or receipt), in person, by receipted overnight delivery or by depositing such notice in the United States mail by registered or certified mail, (return receipt requested), with postage prepaid, properly addressed and directed to the party to receive the same at any address specified herein or in the 2010 Agreements (or at such other address as may hereafter be substituted by notice in writing given in accordance with the terms hereof), effective as provided therein.

8.3 Counterparts. This Escrow Agreement may be executed and delivered in counterparts, including electronic counterparts and images, each of which shall be deemed to be an original, but all of which counterparts collectively shall constitute one and the same instrument.

8.4 Governing Law. This Escrow Agreement shall be governed by and construed in accordance with the laws of the State of New Jersey. Each of the parties hereto consents to the exclusive jurisdiction of the Superior Court of the State of New Jersey and the United States District Court for the District of New Jersey over all matters arising out of this Agreement.

8.5 Assignment. This Escrow Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, distributees, legal representatives, successors, and permitted assigns. This Escrow Agreement, and the rights and obligations herein created, may not be delegated or assigned, except as expressly permitted in this Escrow Agreement, without the express permission in writing of all the other parties hereto, including Escrow Agent.

9. Definitions. UNLESS OTHERWISE INDICATED HEREIN, CAPITALIZED TERMS USED IN THIS ESCROW AGREEMENT WITHOUT DEFINITION SHALL HAVE THE RESPECTIVE MEANINGS SET FORTH IN THE RELEVANT 2010 AGREEMENTS.

NOTE: Balance of Page Intentionally Blank; Execution Page follows.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first written above.

:
Witness or Attest:

Daniel Kerr
Name: Daniel Kerr
Title: Adv. Env. Specialist

JERSEY CENTRAL POWER
& LIGHT COMPANY

By: *Frank Lawson* Date: 1-3-20
Name: Frank Lawson
Title: Supervisor- Site Remediation

Witness or Attest:

Name:
Title:

SCHENCK, PRICE, SMITH & KING, LLP

By: _____ Date: _____
Name: Richard J. Conway, Jr.
Title: Partner and Attorney-at-law

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first written above.

Witness or Attest:

**JERSEY CENTRAL POWER
& LIGHT COMPANY**

Name:
Title:

By: _____ Date:
Name: Frank Lawson
Title: Supervisor- Site Remediation

Witness or Attest:

SCHENCK, PRICE, SMITH & KING, LLP

Joyce M. Huff

Name: Joyce M. Huff
Title: Legal Assistant

By: *Richard J. Conway, Jr.* Date: *12/12/2019*
Name: Richard J. Conway, Jr.
Title: Partner and Attorney-at-law
funds received 12/18/19

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-4b(1)

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



January 4, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

141175.000

Subject: Progress Report Project October 26, 2018 through November 6, 2018
Newton II Former MGP Site
Laboratory Study
P.O. 55115731

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from October 26, 2018 through November 6, 2018. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 – Treatability Study

- No Activities this period

Phase 200 – Historic Data Review

- No Activities this period

Phase 300– Scoping and Project management

- Project management activities
- Scoping remedial approach to serve as a basis for reserve estimating
- Prepare update reserve estimate and project schedule

Phase 400– Pilot Test Preparations

- Prepare update reserve estimate and costs for remediation
- Prepare month by month estimate of Pilot Test spending..

Phase 500– Well Inventory

- No Activities this period

2. Project Schedule

The treatability study report was provided on April 12, 2018. The project has continued to proceed into preparation of a Pilot Study Workplan, approved on June 29, 2018.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.

Elaine Comings
First Energy Company
January 4, 2019
Page 2

- The overall project budget for current work tasks is provided on Table 2.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul W. Thorn". The signature is fluid and cursive, with the first name "Paul" being the most prominent.

Paul Thorn
Senior Scientist

Attachments

Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
100	Treatability Study Field Sampling	BC	12/31/2017	12/31/2017	12/11/2017	Completed
100	Treatability Lab Analysis	BC	3/1/2017	4/10/2018	4/10/2018	Completed
100	Treatability Study Report	BC	4/1/2018	4/12/2018	4/12/2018	Completed
200	Historic Data Review	BC	12/31/2017	3/1/2018	3/1/2018	Completed
400	Pilot Study Workplan	BC	8/29/2018	8/29/2018	8/20/2019	Completed

Table 2
Project Costs
October 26, 2018 to November 6, 2018

Phase	Task Description and Work Order	Invoiced this Period	Total Expended to Date	Original Task Budget	Revised Task Budget	Available Balance	Cumulative Budget Expended (%)
100	Treatability Study	\$ -	\$ 67,226	\$ 83,143	\$ 83,143	\$ 15,917	80.9%
200	Historic Data Review	\$ -	\$ 1,437	\$ 1,916	\$ 1,916	\$ 479	75.0%
300	Scoping and Project Management	\$ 2,758	\$ 30,987	\$ 19,329	\$ 20,907	\$ (10,080)	148.2%
400	Pilot Study Preparations	\$ 7,695	\$ 52,228	\$ -	\$ 45,353	\$ (6,865)	115.1%
500	Well Inventory	\$ -	\$ 1,722.90	\$ -	\$ 2,477	\$ 754	69.6%
Contract Totals:		\$ 10,451	\$ 153,601	\$ 104,388	\$ 153,808	\$ 205	99.9%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-837-9010, Fax: 925-837-9026

INVOICE

RECEIVED

JAN 11 2019

Environmental Department

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 151512

Invoice No : 28333451

Date : January 02, 2019

Subject : Newton Laboratory Study Contact : Paul J Thorn , PM
Billing Period : October 26, 2018 through November 06, 2018 Invoiced By : David G George
Progress Billing No : 12
Reference : Authorization Dated : 11/1/2017

Purchase Order Number :

Class/ Employee Name	Hours	Rate	Billing Amount
Vice President			
Peter Randazzo	5.50	\$ 179.00	984.50
Managing Engineer			
Jonathan D Howland	1.00	\$ 166.00	166.00
Marek Ostrowski	26.00	\$ 166.00	4,316.00
Patricia R Peirino	5.50	\$ 166.00	913.00
Engineer II			
Joshua C Muckelston	3.50	\$ 87.00	304.50
Engineer I			
Radhika Patel	6.00	\$ 70.00	420.00
Principal Scientist			
Paul J Thorn	20.50	\$ 141.00	2,890.50
Project Analyst I			
Nicolas Newsome	0.75	\$ 58.00	43.50
Sub-Total Labor	68.75		\$ 10,038.00
APC at \$8.00 per Hour	68.75		\$ 412.50
Total Labor			\$ 10,450.50
Amount Due this Invoice			\$ 10,450.50

SES# 117592962 Fax# 3-8048498

APPROVAL STAMP

P.O. NO. 55115731 INV. NO. 28333451

COMPANY CODE: SCOO COST CENTER

COST ELEMENT (GL ACCT): 550300

ORDER: 3001025 WBS:

APPROVED BY: EMP. NO.:

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

E. Comings 04939 1/15/19 Approved For \$10,450.50

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



January 25, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

152956

Subject: Progress Report Project November 23, 2018 through December 27, 2018
Newton II Former MGP Site
ISS Pilot Study
P.O. 55115731-C01

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from November 23, 2018 through December 27, 2018. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 - Management and Coordination

- Project management activities
- Coordination with client, subcontractors, disposal facilities, and other stakeholders

Phase 200 - Building Inspection

- Pre-pilot study building inspection completed

Phase 300 - ISS Installation

- No Activities this period

Phase 400 - Post Stabilization Coring

- No Activities this period

Phase 500 - Reporting

- No Activities this period

2. Project Schedule

The ISS pilot is proceeding as planned. Field mobilization occurred January 14th 2019 and is expected to continue through early February 2019. ISS Pilot Study Report is expected to be available for your review by April 15, 2019.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

Elaine Comings
First Energy Company
January 25, 2019
Page 2

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul Thom". The signature is fluid and cursive, with the first name "Paul" being more prominent than the last name "Thom".

Paul Thom
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

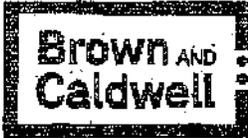
Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Pre Construction Inspection	BC	12/18/2018	12/18/2018	12/18/2018	Completed
200	Post Construction Inspection	BC	2/8/2018	2/8/2018		On Schedule
200	Building Inspection Report	BC	2/27/2018	2/27/2018		In Progress
300	ISS Pilot Study Completion	BC	3/7/2019	3/7/2019		On Schedule
400	Post Stabilization Coring	BC	3/11/2019	3/11/2019		On Schedule
500	ISS Pilot Study Report	BC	4/15/2019	4/15/2019		On Schedule

Table 2
Project Costs
November 23, 2018 to December 27, 2018

Phase	Task Description and Work Order	Invoiced this Period	Total Expended to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Expended (%)
100	Management and Coordination	\$ 2,524	\$ 2,524	\$ 16,764	\$ 16,764	\$ 14,240	15.1%
200	Building Inspection	\$ 808	\$ 808	\$ 7,143	\$ 7,143	\$ 6,335	11.3%
300	ISS Installation	\$ -	\$ -	\$ 319,175	\$ 319,175	\$ 319,175	0.0%
400	Post Stabilization Coring	\$ -	\$ -	\$ 22,877	\$ 22,877	\$ 22,877	0.0%
500	Reporting	\$ -	\$ -	\$ 42,382	\$ 42,382	\$ 42,382	0.0%
Contract Totals:		\$ 3,332	\$ 3,332	\$ 408,341	\$ 408,341	\$ 406,009	0.8%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

RECEIVED
FEB 5 2019
Environmental Department

Project No : 152956
Invoice No : 28335203
Date : January 23, 2019

Subject : First Energy Newton - Pilot Study
Billing Period : Project Inception through December 27, 2018
Progress Billing No : 1
Reference : Authorization Dated : 10/15/2018
Contact : Joshua C Muckelston , PM
Invoiced By : David G George

P.O. 55115731

Class/ Employee Name	Hours	Rate	Billing Amount
Vice President			
Peter Randazzo	2.25	\$ 179.00	402.75
Managing Engineer			
David Crawford	4.00	\$ 166.00	664.00
Engineer II			
Andrew B Weinstein	4.00	\$ 87.00	348.00
Joshua C Muckelston	11.50	\$ 87.00	1,000.50
Principal Scientist			
Paul J Thorn	3.50	\$ 141.00	493.50
Project Analyst I			
Nicolas Newsome	4.25	\$ 58.00	246.50
Sub-Total Labor	29.50		\$ 3,155.25
APC at \$6.00 per Hour	29.50		\$ 177.00
Total Labor			\$ 3,332.25
Amount Due this Invoice			\$ 3,332.25

SES # 1117773963

Fax 3-8046687

APPROVAL STAMP

P.O. NO. 55115731 Line 2 INV. NO. 28335203

COMPANY CODE: 8000 COST CENTER:

COST ELEMENT (CL ACCT): 650300

ORDER: 3001025 WBS:

APPROVED BY: EMP. NO.:

E. Connors 04939 2/6/19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice; interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



February 19, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

152956

Subject: Progress Report Project December 28, 2018 through January 24, 2019
Newton II Former MGP Site
ISS Pilot Study
P.O. 55115731-001

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from December 28, 2018 through January 24, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 - Management and Coordination

- Project management activities
- Coordination with client, subcontractors, disposal facilities, and other stakeholders

Phase 200 - Building Inspection

- Pilot study building inspection report preparation

Phase 300 - ISS Installation

- Field oversight of field activities
- Field equipment and supplies necessary for pilot installation

Phase 400 - Post Stabilization Coring

- No Activities this period

Phase 500 - Reporting

- No Activities this period

2. Project Schedule

The ISS pilot is proceeding as planned. Field mobilization occurred January 14th 2019 and is was completed on February 15th, 2019. ISS Pilot Study Report is expected to be available for your review by April 24, 2019.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.

Elaine Comings
First Energy Company
January 25, 2019
Page 2

- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul Thorn".

Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Pre Construction Inspection	BC	12/18/2018	12/18/2018	12/18/2018	Completed
200	Post Construction Inspection	BC	2/6/2018	2/21/2018		Tentative
200	Building Inspection Report	BC	2/27/2018	3/12/2018		In Progress
300	ISS Pilot Study Completion	BC	2/1/2019	2/15/2019		Completed
400	Post Stabilization Coring	BC	3/11/2019	3/18/2019		Scheduled
500	ISS Pilot Study Report	BC	4/15/2019	4/24/2019		In Progress

Table 2
Project Costs
December 28, 2018 to January 24, 2019

Phase	Task Description and Work Order	Invoiced this Period	Total Expended to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Expended (%)
100	Management and Coordination	\$ 4,582	\$ 7,106	\$ 16,764	\$ 16,764	\$ 9,658	42.4%
200	Building Inspection	\$ 458	\$ 1,266	\$ 7,143	\$ 7,143	\$ 5,877	17.7%
300	ISS Installation	\$ 9,822	\$ 9,822	\$ 319,175	\$ 319,175	\$ 309,353	3.1%
400	Post Stabilization Coring	\$ -	\$ -	\$ 22,877	\$ 22,877	\$ 22,877	0.0%
500	Reporting	\$ -	\$ -	\$ 42,382	\$ 42,382	\$ 42,382	0.0%
Contract Totals:		\$ 14,861	\$ 18,194	\$ 408,341	\$ 408,341	\$ 390,148	4.5%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

RECEIVED

FEB 25 2019

Environmental Department

To : First Energy
300 Madison Avenue
Morristown, NJ 07982-1911

Project No : 152956

Invoice No : 28337022

Date : February 19, 2019

Subject : First Energy Newton - Pilot Study
Billing Period : December 28, 2018 through January 24, 2019
Progress Billing No : 2
Reference : Authorization Dated : 10/15/2018
Contact : Joshua C Muckelston , PM
Invoiced By : David G George

P.O. 55115731

Class/ Employee Name	Hours	Rate	Billing Amount
Managing Engineer			
David Crawford	2.00	\$ 166.00 ✓	332.00
Kenneth J Snow	0.50	\$ 166.00 ✓	83.00
Kevin D Dyson	2.25	\$ 166.00 ✓	373.50
Marek Ostrowski	4.00	\$ 166.00 ✓	664.00
Engineer II			
Joshua C Muckelston	26.25	\$ 87.00 ✓	2,283.75
Radhika Patel	94.25	\$ 87.00 ✓	8,199.75
Principal Scientist			
Paul J Thorn	8.25	\$ 141.00 ✓	1,168.25
Administrative Coordinator			
Kimberly A Gloster	1.50	\$ 70.00 ✓	105.00
Terril E Reilly	0.25	\$ 70.00 ✓	17.50
Health & Safety Risk Mgr II			
Sarah R Everman	1.50	\$ 114.00 ✓	171.00
Project Analyst I			
Nicolas Newsome	9.75	\$ 58.00 ✓	565.50
Sub-Total Labor			\$ 13,958.25
APC at \$6.00 per Hour			\$ 908.00
Total Labor			\$ 14,866.25
Amount Due this Invoice			\$ 14,861.25

SES # 1117774289
Fax # 3-8046721
APPROVAL STAMP
P.O. NO. 55115731 Line 2 INV. NO. 28337022
COMPANY CODE: 8000 COST CENTER: -
COST ELEMENT (GL ACCT.): 550300
ORDER: 3001025 WBS: -
APPROVED BY: EMP. NO.:

E. Comings C4939 2/27/19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice; interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



March 21, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

152956

Subject: Progress Report Project January 25, 2019 through February 21, 2019
Newton II Former MGP Site
ISS Pilot Study
P.O. 55115731-C01

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from January 25, 2019 through February 21, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 – Management and Coordination

- Project management activities
- Coordination with client, subcontractors, disposal facilities, and other stakeholders

Phase 200 – Building Inspection

- No Activities this period

Phase 300– ISS Installation

- Field oversight of field activities
- Lodging, meals, and travel expenses from oversight efforts
- Land Remediation Subcontractor Costs

Phase 400– Post Stabilization Coring

- No Activities this period

Phase 500– Reporting

- Preparing pilot study report

2. Project Schedule

The ISS pilot is proceeding as planned. Field mobilization occurred January 14th 2019 and is was completed on February 15th, 2019. ISS Pilot Study Report is expected to be available for your review by April 24, 2019.

3. Action Plan

Elaine Comings
First Energy Company
March 21, 2019
Page 2

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul W. Thorn". The signature is fluid and cursive.

Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Pre Construction Inspection	BC	12/18/2018	12/18/2018	12/18/2018	Completed
200	Post Construction Inspection	BC	2/6/2019	2/29/2019		Scheduled
200	Building Inspection Report	BC	2/27/2019	3/29/2019		Scheduled
300	ISS Pilot Study Completion	BC	2/1/2019	2/15/2019	2/15/2019	Completed
400	Post Stabilization Coring	BC	3/11/2019	3/22/2019		In Progress
500	ISS Pilot Study Report	BC	4/15/2019	4/24/2019		In Progress

Table 2
Project Costs
January 25, 2019 to February 21, 2019

Phase	Task Description and Work Order	Receipts Period	Total Expended to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Exceeded (%)
100	Management and Coordination	\$ 1,324	\$ 8,429	\$ 16,764	\$ 16,764	\$ 8,335	50.3%
200	Building Inspection	\$ -	\$ 1,266	\$ 7,143	\$ 7,143	\$ 5,877	17.7%
300	JSS Installation	\$ 304,428	\$ 314,249	\$ 319,175	\$ 319,175	\$ 4,926	98.5%
400	Post Stabilization Coring	\$ -	\$ -	\$ 22,877	\$ 22,877	\$ 22,877	0.0%
500	Reporting	\$ 344	\$ 344.00	\$ 42,382	\$ 42,382	\$ 42,038	0.8%
Contract Totals:		\$ 306,095	\$ 324,289	\$ 408,341	\$ 408,341	\$ 84,052	79.4%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94598
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28339328

Date : March 21, 2019

Subject : First Energy Newton - Pilot Study
Billing Period : January 25, 2019 through February 21, 2019
Progress Billing No : 3
Reference : Authorization Dated : 10/15/2018

Contact : Joshua C Muckelston , PM
Invoiced By : David G George

P.O. 55115731

<u>Class/ Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Billing Amount</u>
Managing Engineer			
Jonathan D Howland	11.00	\$ 166.00 ✓	1,826.00 ✓
Marek Ostrowski	10.00	\$ 166.00 ✓	1,660.00 ✓
Engineer II			
Eric J Thornburg	10.00	\$ 87.00 ✓	870.00 ✓
Joshua C Muckelston	31.00	\$ 87.00 ✓	2,697.00 ✓
Radhika Patel	122.75	\$ 87.00 ✓	10,676.25 ✓
Principal Scientist			
Paul J Thom	4.00	\$ 141.00 ✓	564.00 ✓
Project Analyst I			
Nicolas Newsome	1.25	\$ 58.00 ✓	72.50 ✓
Sub-Total Labor	<u>190.00</u>		<u>\$ 18,368.75</u>
APC at \$6.00 per Hour	190.00		\$ 1,140.00 ✓
Total Labor			<u>\$ 19,508.75 ✓</u>

REGULAR EXPENSES

<u>Account / Vendor Name</u>	<u>Billing Amount</u>
Subconsultants	
O/S CONSULT-ENVIRONMENTAL	
LAND REMEDIATION INC	270,455.10
Sub-Total Subconsultants	<u>\$ 270,455.10 ✓</u>
Markup on Subconsultants @ 5.00%	\$ 13,522.76
Total Subconsultants	<u>\$ 283,977.86 ✓</u>
Other Direct Costs	
LODGING	
Radhika Patel	124.94

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9028

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28339328

Date : March 21, 2019

REGULAR EXPENSES

Account / Vendor Name	Billing Amount
LODGING	
Radhika Patel	124.94
BUSINESS & TRAVEL MEALS	
Jonathan D Howland	8.55
Radhika Patel	9.27
Radhika Patel	10.90
Radhika Patel	17.19
Radhika Patel	9.24
Radhika Patel	15.95
Radhika Patel	9.62
Radhika Patel	17.92
Radhika Patel	8.75
Radhika Patel	11.05
Radhika Patel	9.24
Radhika Patel	14.46
Radhika Patel	10.81
Radhika Patel	4.22
Radhika Patel	7.96
Radhika Patel	20.33
Radhika Patel	9.59
Radhika Patel	16.50
Radhika Patel	9.79

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9028

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 162956

Invoice No : 28339328

Date : March 21, 2019

REGULAR EXPENSES

Account / Vendor Name

Billing Amount

BUSINESS & TRAVEL MEALS

Radhika Patel	11.54
Radhika Patel	19.34
Radhika Patel	9.72
Radhika Patel	9.24
Radhika Patel	14.15
Radhika Patel	6.44
Radhika Patel	9.24
Radhika Patel	9.24

MILEAGE

Eric J Thornburg	117.16
Jonathan D Howland	172.84
Radhika Patel	24.94
Radhika Patel	12.76
Radhika Patel	13.92
Radhika Patel	12.76
Radhika Patel	13.92
Radhika Patel	12.76
Radhika Patel	13.92
Radhika Patel	12.76
Radhika Patel	28.68
Radhika Patel	24.94

PARKING & TOLLS

Eric J Thornburg	8.35
Jonathan D Howland	7.32

Sub-Total Other Direct Costs	\$ 2,484.32 ✓
Markup on Other Direct Costs @ 5.00%	\$ 124.22
Total Other Direct Costs	\$ 2,608.54 ✓
Total Regular Expenses	\$ 286,585.39

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 90 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 162656

Invoice No : 28339328

Date : March 21, 2019

Total Expenses

\$ 284,884.90

Amount Due this invoice

\$ 306,095.14 ✓

SES# 1118283685 Fax# 3-9049806

APPROVAL STAMP	
P.O. NO. <u>55115731 Line 2</u>	INV. NO. <u>28339328</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER: <u>---</u>
COST ELEMENT (GL ACCT): <u>550300</u>	
ORDER: <u>3001025</u>	WBS: <u>---</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

6-12-19

E. Conings C4939 6/13/19
Approved For \$306,095.14

[Signature] 334728

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



May 9, 2019

RECEIVED

MAY 20 2019

Environmental Department

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

152956

Subject: Progress Report Project February 22, 2019 through March 28, 2019
Newton II Former MGP Site
ISS Pilot Study
P.O. 55115731-C01

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from February 22, 2019 through March 28, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 - Management and Coordination

- Project management activities
- Preparing monthly accrual update
- Preparing project timeframe extension form for NJDEP
- Providing updated tax forms for Remedial Contractor
-

Phase 200 - Building Inspection

- No Activities this period

Phase 300 - ISS Installation

- Preparation of pilot test report
- Rental equipment, meals, and travel expenses from oversight efforts

Phase 400 - Post Stabilization Coring

- Conducting post stabilization coring program

Phase 500 - Reporting

- Preparing pilot study report

2. Project Schedule

The ISS pilot is proceeding as planned. The post stabilization coring was completed during the week of 3/18/2019. ISS Pilot Study Report is expected to be available for your review by May 15, 2019.

Elaine Comings
First Energy Company
May 9, 2019
Page 2

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul Thom".

Paul Thom
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Pre Construction Inspection	BC	12/18/2018	12/18/2018	12/18/2018	Completed
200	Post Construction Inspection	BC	2/6/2019	2/29/2019	4/4/2019	Completed
200	Building Inspection Report	BC	2/27/2019	3/29/2019	5/15/2019	In Progress
300	ISS Pilot Study Completion	BC	2/1/2019	2/15/2019	2/15/2019	Completed
400	Post Stabilization Coring	BC	3/11/2019	3/22/2019	3/20/2019	Completed
500	ISS Pilot Study Report	BC	4/15/2019	4/24/2019	5/15/2019	In Progress

Table 2
Project Costs
February 22, 2019 to March 28, 2019

Phase	Task Description and Work Order	Invoiced this Period	Total Expended to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Expended (%)
100	Management and Coordination	\$ 1,587	\$ 10,017	\$ 16,764	\$ 16,764	\$ 6,747	59.8%
200	Building Inspection	\$ -	\$ 1,266	\$ 7,143	\$ 7,143	\$ 5,877	17.7%
300	ISS Installation	\$ 9,722	\$ 323,971	\$ 319,175	\$ 319,175	\$ (4,796)	101.5%
400	Post Stabilization Coring	\$ 5,845	\$ 5,845	\$ 22,877	\$ 22,877	\$ 17,032	25.5%
500	Reporting	\$ 4,267	\$ 4,610.50	\$ 42,382	\$ 42,382	\$ 37,772	10.9%
	Contract Totals:	\$ 21,420	\$ 345,709	\$ 408,341	\$ 408,341	\$ 62,632	84.7%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28341418

Date : April 22, 2019

Subject : First Energy Newton - Pilot Study
Billing Period : February 22, 2019 through March 28, 2019
Progress Billing No : 4
Reference : Authorization Dated : 10/15/2018

Contact : Joshua C Muckelston , PM
Invoiced By : David G George

P.O. 55115731

<u>Class/ Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Billing Amount</u>
Vice President			
Peter Randazzo	1.50	\$ 179.00	268.50
Managing Engineer			
Jonathan D Howland	1.50	\$ 166.00	249.00
Kenneth J Snow	0.50	\$ 166.00	83.00
Kevin D Dyson	0.50	\$ 166.00	83.00
Marek Ostrowski	19.00	\$ 166.00	3,154.00
Engineer II			
Joshua C Muckelston	1.50	\$ 87.00	130.50
Radhika Patel	50.25	\$ 87.00	4,371.75
Supv Geol/Hydrogeologist			
James L Marolda	0.50	\$ 160.00	80.00
Principal Geol/Hydrogeologist			
Charles R Meyn	7.50	\$ 141.00	1,057.50
Geologist/Hydrogeologist II			
Tonya M Brubaker	53.25	\$ 87.00	4,632.75
Senior Designer			
Robert J Near	0.50	\$ 88.00	44.00
Principal Scientist			
Paul J Thorn	10.25	\$ 141.00	1,445.25
Administrative Coordinator			
Kimberly A Gloster	0.25	\$ 70.00	17.50
Project Analyst I			
Nicolas Newsome	2.00	\$ 58.00	116.00
Sub-Total Labor	149.00		\$ 15,732.75
APC at \$6.00 per Hour	149.00		\$ 894.00

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28341418

Date : April 22, 2019

Total Labor	\$ 16,626.75
REGULAR EXPENSES	
Account / Vendor Name	Billing Amount
Outside Services	
O/S SVS-EQUIPMENT RENTAL	
U.S. ENVIRONMENTAL	4,324.71
Sub-Total Outside Services	<u>\$ 4,324.71</u>
Markup on Outside Services @ 5.00%	\$ 216.24
Total Outside Services	<u>\$ 4,540.95</u>
Other Direct Costs	
BUSINESS & TRAVEL MEALS	
Joshua C Muckelston	4.92
Joshua C Muckelston	6.59
MILEAGE	
Joshua C Muckelston	106.14
Joshua C Muckelston	106.14
OVERNIGHT POSTAGE	
FEDEX	16.70
Sub-Total Other Direct Costs	<u>\$ 240.49</u>
Markup on Other Direct Costs @ 5.00%	\$ 12.02
Total Other Direct Costs	<u>\$ 252.51</u>
Total Regular Expenses	<u>\$ 4,793.46</u>
Total Expenses	<u>\$ 4,793.46</u>
Amount Due this Invoice	<u><u>\$ 21,420.21</u></u>

SFS# 1118322633 Fax# 3-8042117

APPROVAL STAMP	
P.O. NO. <u>55115731 Line 2</u>	INV. NO. <u>28341418</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u> </u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001025</u>	WBS: <u> </u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

7-2-19

E. Lomings C4939 7/1/19 Approved for \$21,420.21

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 2834141B

Date : April 22, 2019

Summary of Account

Invoiced To Date :	\$ 345,708.85	Contract Ceiling :	\$ 408,340.25
Total Paid To Date :	<u>\$(18,193.50)</u>	Invoiced To Date :	<u>\$ 345,708.85</u>
Balance Outstanding :	<u><u>\$ 327,515.35</u></u>	Remaining Balance :	<u><u>\$ 62,631.40</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
 201 North Civic Drive, Suite 300
 Walnut Creek, CA 94596
 Tel: 925-937-9010, Fax: 925-937-9026

RECEIVED
 MAY 10 2019
 Environmental Department

To : First Energy
 300 Madison Avenue
 Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28341428

Date : April 22, 2019

Subject : Newton RAWP Bid Package Prep
Billing Period : Project inception through March 28, 2019
Progress Billing No : 1
Reference : Authorization Dated : 1/24/2019

Contact : Scott Nelson, PM
Invoiced By : David G George

P.O. 55115731

Class/ Employee Name	Hours	Rate	Billing Amount
Vice President			
Peter Randazzo	11.75	\$ 179.00 ✓	2,109.25
Managing Engineer			
Jonathan D Howland	22.50	\$ 166.00 ✓	3,735.00
Marek Ostrowski	53.00	\$ 166.00 ✓	8,798.00
Patricia R Petrino	63.00	\$ 166.00 ✓	13,778.00
Principal Engineer			
Carla M Oliveira	17.75	\$ 141.00 ✓	2,502.75
Dawn M Anderson	3.00	\$ 141.00 ✓	423.00
Engineer II			
Joshua C Muckelston	1.50	\$ 110.00 \$ 70.00	135.00 165.00
Engineer I			
Eleanor G Beckwith	0.75	\$ 93.00 \$ 73.00	54.75 69.75
Principal Scientist			
Paul J Thorn	20.00	\$ 141.00 ✓	2,820.00
Administrative Coordinator			
Kimberly A Gloster	4.00	\$ 70.00 ✓	280.00
Project Analyst I			
Nicolas Newsome	3.00	\$ 58.00 ✓	174.00
Sub-Total Labor	220.25		34,803.75
APC at \$8.00 per Hour	220.25		\$ 1,321.50
Total Labor			36,125.25

~~\$ 34,803.75~~
~~\$ 1,321.50~~
\$ 36,125.25

REGULAR EXPENSES

Account / Vendor Name

Billing Amount

Outside Services

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
 201 North Civic Drive, Suite 300
 Walnut Creek, CA 94596
 Tel: 925-937-9010, Fax: 925-937-9026

To : First Energy
 300 Madison Avenue
 Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28341428

Date : April 22, 2019

REGULAR EXPENSES

Account / Vendor Name

Billing Amount

ANALYTICAL SERVICES

EUROFINS LANCASTER

959.00

Sub-Total Outside Services

\$ 959.00

Markup on Outside Services @ 5.00%

\$ 47.95

Total Outside Services

\$ 1,006.95

Total Regular Expenses

\$ 1,006.95

Total Expenses

\$ 1,006.95

Amount Due this Invoice

\$ 37,177.20

37,132.20

SES# 1118110278

Fax # 3-8042278

APPROVAL STAMP	
P.O. NO. 55115731	INV. NO. 28341428
COMPANY CODE: SCOO	COST CENTER —
COST ELEMENT (CL ACCT): 550300	
ORDER: 3001025	WBS: —
APPROVED BY:	EMP. NO.:

E. Cummings C4939 5/10/19 Approved for \$ 37,132.20

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607

RECEIVED
JUN 02 2019
Environmental Department



May 29, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

153508

Subject: Progress Report - March 29, 2019 through April 25, 2019
Newton II Former MGP Site
RAWP and Bid Package Preparation
P.O. 55115731, CO #6

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from March 29, 2019 through April 25, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 – Management and Coordination

- Project management activities
- Coordination of field activities and project kick off calls/planning
- Create project schedule of activities

Phase 200 – Utility Survey

- Contact Town of Newton for underground utility information
- Conduct geophysical and land survey work
- Review results from geophysical and land survey

Phase 300 – Geotechnical Data Collection

- Planning for geotechnical boring locations
- Preparation of field sampling plan
- Update health and safety plan

Phase 400 – Technical Meeting with NJDEP

- No Activities this period

Phase 500 – Remedial Action Workplan

- Begin preparation of RAW

Phase 600 - Bid Package

- Begin preparation of bid package

Phase 700 – Soil Erosion and Sediment Control Plan

Elaine Comings
First Energy Company
May 2, 2019
Page 2

- No Activities this period

Phase 800 – Waste Characterization

- Preparation of field sampling plan

Phase 850 – Project Planning and Scoping Activities

Previous activities conducted at the end of 2018 beyond the scope of the prior Treatability Study project and the efforts for planning and scoping of technical activities included in the RAW are included in this phase. These activities include:

- Communications and coordination with geotechnical contractors necessary for identifying and scoping investigative activities that will be necessary to identify mitigation measures that will stabilize the slope/retaining wall at the rear of the property near the former gas holder during the full-scale ISS activities.

2. Project Schedule

The utility survey, waste characterization sampling and geotechnical sampling were completed in May 2019. The RAWP and bid specifications are expected to be available for your review by August 2019.

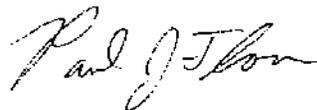
3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell



Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1: Action Plan
Newton II Former MGP Site
RAWF and Bid Specifications Prep

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Geophysical and Land Survey	BC	6/1/2019		04/26 & 04/29	Completed
300 & 800	Waste Characterization and Geotechnical Soil Sampling	BC	6/1/2019		05/03 & 05/08	Completed
500	Remedial Action Workplan Preparation	BC	8/5/2019			Scheduled
600	Bid Package Preparation	BC	8/5/2019			Scheduled
700	SESC Permitting	BC	10/28/2019			Scheduled

Table 2
Project Costs
March 29, 2019 to April 25, 2019

Phase	Task Description and Work Order	Invoiced this Period	Total Expended to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Expended (%)
100	Management and Coordination	\$ 3,257	\$ 3,904	\$ 11,308	\$ 11,308	\$ 7,404	34.5%
200	Utility Survey	\$ 1,944	\$ 1,944	\$ 12,551	\$ 12,551	\$ 10,607	15.5%
300	Geotechnical Data Collection	\$ 2,466	\$ 2,466	\$ 27,944	\$ 27,944	\$ 25,478	8.8%
400	Technical Meeting with NIDEP	\$ -	\$ -	\$ 8,828	\$ 8,828	\$ 8,828	0.0%
500	Remedial Action Workplan	\$ 179	\$ 179	\$ 49,399	\$ 49,399	\$ 49,220	0.4%
600	Bid Package	\$ 784	\$ 784	\$ 68,566	\$ 68,566	\$ 67,782	1.1%
700	Soil Erosion and Sediment Control Plan	\$ -	\$ -	\$ 3,432	\$ 3,432	\$ 3,432	0.0%
800	Waste Characterization	\$ 173	\$ 173	\$ 16,962	\$ 16,962	\$ 16,789	1.0%
850	Project Planning and Scoping Activities	\$ 1,896	\$ 38,425	\$ 37,781	\$ 37,781	\$ (644)	101.7%
	Contract Totals:	\$ 10,698	\$ 47,875	\$ 236,771	\$ 236,771	\$ 188,896	20.2%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9028

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28342795

Date : May 09, 2019

Subject : Newton RAWP Bid Package Prep
Billing Period : March 29, 2019 through April 25, 2019
Progress Billing No : 2
Reference : Authorization Dated : 1/24/2019

Contact : Scott Nelson , PM
Invoiced By : David G George

P.O. 55115731

<u>Class/ Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Billing Amount</u>
Vice President			
Peter Randazzo	3.50	\$ 186.00	851.00
Managing Engineer			
Jonathan D Howland	1.50	\$ 173.00	259.50
Karina J Tipton	1.00	\$ 173.00	173.00
Marek Ostrowski	5.00	\$ 166.00	830.00
Scott Nelson	21.50	\$ 173.00	3,719.50
Senior Engineer			
Adam S Gutta	1.50	\$ 119.00	178.50
Engineer II			
Radhika Patel	11.50	\$ 90.00	1,035.00
Geologist/Hydrogeologist II			
Andrew J Temples	0.50	\$ 90.00	45.00
Geologist/Hydrogeologist I			
Rachel Hojnacki	0.50	\$ 73.00	36.50
Senior Designer			
Alan Santiago	8.00	\$ 92.00	736.00
Principal Scientist			
Paul J Thorn	1.50	\$ 147.00	220.50
Senior Scientist			
Teresa M Caputi	11.50	\$ 119.00	1,368.50
Project Analyst I			
Nicolas Newsome	16.25	\$ 58.00	942.50
Sub-Total Labor	83.75		\$ 10,195.50
APC at \$8.00 per Hour	83.75		\$ 502.50
Total Labor			\$ 10,698.00

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9028

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28342795

Date : May 08, 2019

Amount Due this invoice

\$ 10,698.00

SES: # 1118738445 Fax: # 8043238

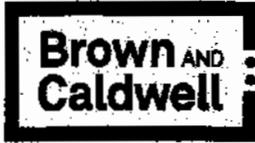
5511573 APPROVAL STAMP 28342795	
P.O. NO. 5511573 Line 1	INV. NO. 28342795
COMPANY CODE: SC00	COST CENTER: —
COST ELEMENT (GL ACCT.): 550300	
ORDER: 30010825	WBS: —
APPROVED BY: <i>[Signature]</i>	EMP. NO: 291

E. Comings C4939 10/10/19

10-11-19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell ,
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28342795

Date : May 09, 2019

Summary of Account

Invoiced To Date :	\$ 47,875.20	Contract Ceiling :	\$ 0.00
Total Paid To Date :	<u>\$ 0.00</u>	Invoiced To Date :	<u>\$ 47,875.20</u>
Balance Outstanding :	<u><u>\$ 47,875.20</u></u>	Remaining Balance :	<u><u>\$(47,875.20)</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607

RECEIVED

JUN 02 2019

Environmental Department



May 29, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

152956

Subject: Progress Report Project March 29, 2019 through April 25, 2019
Newton II Former MGP Site
ISS Pilot Study
P.O. 55115731-C01

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from March 29, 2019 through April 25, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 – Management and Coordination

- Project management activities
- Preparing monthly accrual update
- Coordination of waste characterization
- Coordination of confirmation drilling

Phase 200 – Building Inspection

- Site visit to conduct building inspection

Phase 300– ISS Installation

- Preparation of pilot test report

Phase 400– Post Stabilization Coring

- Equipment rental and field supplies expenses

Phase 500– Reporting

- Preparing pilot study report

2. Project Schedule

ISS Pilot Study Report is expected to be available for your review by May 30, 2019.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

Elaine Comings
First Energy Company
May 29, 2019
Page 2

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul Thorn". The signature is fluid and cursive, with the first name "Paul" being more prominent and the last name "Thorn" written in a more compact, connected style.

Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Pre Construction Inspection	BC	12/18/2018	12/18/2018	12/18/2018	Completed
200	Post Construction Inspection	BC	2/6/2019	2/29/2019	4/4/2019	Completed
200	Building Inspection Report	BC	2/27/2019	3/29/2019	5/30/2019	In Progress
300	ISS Pilot Study Completion	BC	2/1/2019	2/15/2019	2/15/2019	Completed
400	Post Stabilization Coring	BC	3/11/2019	3/22/2019	3/20/2019	Completed
500	ISS Pilot Study Report	BC	4/15/2019	4/24/2019	5/30/2019	In Progress

Table 2
Project Costs
March 28, 2019 to April 25, 2019

Phase	Task Description and Work Order	Invoiced this Period	Total Expended to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Expended (%)
100	Management and Coordination	\$ 1,593	\$ 11,609	\$ 16,764	\$ 16,764	\$ 5,155	69.3%
200	Building Inspection	\$ 688	\$ 1,954	\$ 7,143	\$ 7,143	\$ 5,189	27.4%
300	ISS Installation	\$ 1,674	\$ 325,645	\$ 319,175	\$ 319,175	\$ (6,470)	102.0%
400	Post Stabilization Coring	\$ 13,149	\$ 18,993	\$ 22,877	\$ 22,877	\$ 3,884	83.0%
500	Reporting	\$ 5,837	\$ 10,447.50	\$ 42,382	\$ 42,382	\$ 31,935	24.7%
	Contract Totals:	\$ 22,940	\$ 368,649	\$ 408,341	\$ 408,341	\$ 39,692	90.3%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152958

Invoice No : 28344066

Date : May 29, 2019

Subject : First Energy Newton - Pilot Study

Contact : Joshua C Muckelston , PM

Billing Period : March 29, 2019 through April 25, 2019

Invoiced By : David G George

Progress Billing No : 5

Reference : Authorization Dated : 10/15/2018

P.O. 55115731

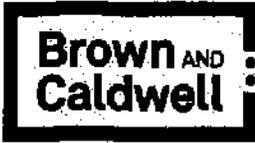
<u>Class/ Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Billing Amount</u>
Managing Engineer			
David Crawford	4.00	\$ 166.00	664.00
Jonathan D Howland	2.00	\$ 166.00	332.00
Kevin D Dyson	1.00	\$ 166.00	166.00
Marek Ostrowski	30.00	\$ 166.00	4,980.00
Engineer II			
Radhika Patel	18.00	\$ 87.00	1,566.00
Principal Geol/Hydrogeologist			
Charles R Meyn	3.00	\$ 141.00	423.00
Geologist/Hydrogeologist II			
Tonya M Brubaker	2.00	\$ 87.00	174.00
Principal Scientist			
Paul J Thom	7.00	\$ 141.00	987.00
Project Analyst I			
Nicolas Newsome	1.25	\$ 58.00	72.50
Sub-Total Labor	68.25		\$ 9,364.50
APC at \$6.00 per Hour	68.25		\$ 409.50
Total Labor			\$ 9,774.00

REGULAR EXPENSES

<u>Account / Vendor Name</u>	<u>Billing Amount</u>
Subconsultants	
O/S CONSULT - DRILLER	
PARRATT - WOLFF INC.	12,314.12
Sub-Total Subconsultants	\$ 12,314.12
Markup on Subconsultants @ 5.00%	\$ 615.71

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28344066

Date : May 29, 2019

REGULAR EXPENSES

Account / Vendor Name	Billing Amount
Total Subconsultants	\$ 12,629.83
Outside Services	
O/S SVS-EQUIPMENT RENTAL	
U.S. ENVIRONMENTAL	183.40
Sub-Total Outside Services	\$ 183.40
Markup on Outside Services @ 5.00%	\$ 9.17
Total Outside Services	\$ 192.57
Other Direct Costs	
FIELD SUPPLIES	
Tonya M Brubaker	14.36
Tonya M Brubaker	10.68
OVERNIGHT POSTAGE	
FedEx	16.70
Sub-Total Other Direct Costs	\$ 41.74
Markup on Other Direct Costs @ 5.00%	\$ 2.09
Total Other Direct Costs	\$ 43.83
Total Regular Expenses	\$ 13,166.22
Total Expenses	\$ 13,166.22
Amount Due this Invoice	\$ 22,940.22

SES # 1118322655 Fax# 3-8042119

APPROVAL STAMP	
P.O. NO. <u>55115731 Line 1</u>	INV. NO. <u>28344066</u>
COMPANY CODE.: <u>SCOO</u>	COST CENTER <u>-</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001025</u>	WBS: <u>-</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

7-2-19

E. Ommings C4939 7/1/2019 Approved for \$22,940.22

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94598
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28344066

Date : May 29, 2019

Summary of Account

Invoiced To Date :	\$ 368,649.07	Contract Ceiling :	\$ 408,340.25
Total Paid To Date :	<u>\$(18,193.50)</u>	Invoiced To Date :	<u>\$ 388,649.07</u>
Balance Outstanding :	<u><u>\$ 350,455.57</u></u>	Remaining Balance :	<u><u>\$ 39,691.18</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



June 28, 2019

Ms. Elaine Cornings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

152956

Subject: Progress Report Project April 26, 2019 through May 23, 2019
Newton II Former MGP Site
ISS Pilot Study
P.O. 55115731-C01

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from April 26, 2019 through May 23, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 – Management and Coordination

- Project management activities
- Preparing monthly accrual update
- Preparing update to project schedule for RAC filing
- Coordination of confirmation drilling

Phase 200 – Building Inspection

- Preparing inspection report

Phase 300– ISS Installation

- Uploading data logs from field event

Phase 400– Post Stabilization Coring

- Vehicle expenses from post-stabilization coring

Phase 500– Reporting

- Preparing pilot study report

2. Project Schedule

ISS Pilot Study Report was provided for review on May 30, 2019.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

Elaine Comings
First Energy Company
June 28, 2019
Page 2

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul Thorn". The signature is written in a cursive style with a large initial "P" and "T".

Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Pre Construction Inspection	BC	12/18/2018	12/18/2018	12/18/2018	Completed
200	Post Construction Inspection	BC	2/6/2019	2/29/2019	4/4/2019	Completed
200	Building Inspection Report	BC	2/27/2019	3/29/2019	5/30/2019	Completed
300	ISS Pilot Study Completion	BC	2/1/2019	2/15/2019	2/15/2019	Completed
400	Post Stabilization Coring	BC	3/11/2019	3/22/2019	3/20/2019	Completed
500	ISS Pilot Study Report	BC	4/15/2019	4/24/2019	5/30/2019	Completed

Table 2
Project Costs
April 26, 2019 to May 23, 2019

Phase	Task Description and Work Order	Invoiced this Period	Total Expended to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Expended (%)
100	Management and Coordination	\$ 1,587	\$ 12,387	\$ 16,764	\$ 16,764	\$ 4,377	73.9%
200	Building Inspection	\$ -	\$ 3,551	\$ 7,143	\$ 7,143	\$ 3,592	49.7%
300	ISS Installation	\$ -	\$ 325,738	\$ 319,175	\$ 319,175	\$ (6,563)	102.1%
400	Post Stabilization Coring	\$ 9,722	\$ 19,389	\$ 22,877	\$ 22,877	\$ 3,488	84.8%
500	Reporting	\$ -	\$ 15,723.50	\$ 42,382	\$ 42,382	\$ 26,659	37.1%
Contract Totals:		\$ 11,309	\$ 376,788	\$ 408,341	\$ 408,341	\$ 31,553	92.3%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28345899

Date : June 24, 2019

Subject : First Energy Newton - Pilot Study

Contact : Paul J Thorn , PM

Billing Period : April 26, 2019 through May 23, 2019

Invoiced By : David G George

Progress Billing No : 6

Reference : Authorization Dated : 10/15/2018

P.O. 55115731

<u>Class/ Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Billing Amount</u>
Vice President			
Peter Randazzo	3.00	\$ 179.00	537.00
Managing Engineer			
David Crawford	6.50	\$ 166.00	1,079.00
Jonathan D Howland	3.00	\$ 166.00	498.00
Kevin D Dyson	0.25	\$ 166.00	41.50
Marek Ostrowski	19.00	\$ 166.00	3,154.00
Engineer II			
Radhika Patel	3.00	\$ 87.00	261.00
Managing Geol/Hydrogeologist			
Robert L O'Neill	0.25	\$ 166.00	41.50
Geologist/Hydrogeologist II			
Tonya M Brubaker	2.00	\$ 87.00	174.00
Geologist/Hydrogeologist I			
Rachel Hojnacki	0.50	\$ 70.00	35.00
Principal Scientist			
Paul J Thom	10.00	\$ 141.00	1,410.00
Administrative Coordinator			
Elizabeth S Seavers	2.50	\$ 70.00	175.00
Kimberly A Gloster	0.50	\$ 70.00	35.00
Sub-Total Labor	50.50		\$ 7,441.00
APC at \$6.00 per Hour	50.50		\$ 303.00
Total Labor			\$ 7,744.00

UNIT PRICING

<u>Vendor / Employee Name</u>	<u>Units</u>	<u>UOM</u>	<u>Rate</u>	<u>Billing Amount</u>
Auto - Daily Use	3.00	Per Day	125.0000	375.00

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28345899

Date : June 24, 2019

UNIT PRICING

Vendor / Employee Name	Units	LOM	Rate	Billing Amount
Miles	35.00	Per Mile	0.5800	20.30
Total Unit Pricing				\$ 395.30
Total Expenses				\$ 395.30
Amount Due this Invoice				\$ 8,139.30

SES: # 1118938433 Fax: # 8043235

APPROVAL STAMP	
P.O. NO. <u>55115731/2</u>	INV. NO. <u>21345899</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>---</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001025</u>	WBS: <u>---</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

E. Comings CA939 10/10/19
10-11-19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28345899

Date : June 24, 2019

Summary of Account

Invoiced To Date :	\$ 376,788.37	Contract Ceiling :	\$ 408,340.25
Total Paid To Date :	<u>\$(18,193.50)</u>	Invoiced To Date :	<u>\$ 376,788.37</u>
Balance Outstanding :	<u><u>\$ 358,594.87</u></u>	Remaining Balance :	<u><u>\$ 31,551.88</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



July 29, 2019

RECEIVED

AUG 07 2019

Environmental Department

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

152956

Subject: Progress Report Project May 24, 2019 through June 27, 2019
Newton II Former MGP Site
ISS Pilot Study
P.O. 55115731-C01

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from May 24, 2019 through June 27, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 - Management and Coordination

- Project management activities
- Preparing monthly accrual update
- Preparation of reserve estimate
- Coordination of confirmation drilling

Phase 200 - Building Inspection

- No services this period

Phase 300 - ISS Installation

- No services this period

Phase 400 - Post Stabilization Coring

- No services this period

Phase 500 - Reporting

- Preparing pilot study report

2. Project Schedule

ISS Pilot Study Report was provided for review on May 30, 2019.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul W. Thorn". The signature is fluid and cursive, with a large initial "P" and "T".

Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Pre Construction Inspection	BC	12/18/2018	12/18/2018	12/18/2018	Completed
200	Post Construction Inspection	BC	2/6/2019	2/29/2019	4/4/2019	Completed
200	Building Inspection Report	BC	2/27/2019	3/29/2019	5/30/2019	Completed
300	ISS Pilot Study Completion	BC	2/1/2019	2/15/2019	2/15/2019	Completed
400	Post Stabilization Coring	BC	3/11/2019	3/22/2019	3/20/2019	Completed
500	ISS Pilot Study Report	BC	4/15/2019	4/24/2019	5/30/2019	Completed

Table 2
Project Costs
May 24, 2019 to June 27, 2019

Phase	Task Description and Work Order	Invoiced This Period	YTD Expensed to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Expenditure %
100	Management and Coordination	\$ 1,782	\$ 14,169	\$ 16,764	\$ 16,764	\$ 2,595	84.5%
200	Building Inspection	\$ -	\$ 3,551	\$ 7,143	\$ 7,143	\$ 3,592	49.7%
300	ISS Installation	\$ -	\$ 325,738	\$ 319,175	\$ 319,175	\$ (6,563)	102.1%
400	Post Stabilization Curing	\$ -	\$ 19,389	\$ 22,877	\$ 22,877	\$ 3,488	84.6%
500	Reporting	\$ 5,512.00	\$ 21,235.50	\$ 42,392	\$ 42,392	\$ 21,147	50.1%
	Contract Totals:	\$ 7,294	\$ 384,082	\$ 408,341	\$ 408,341	\$ 24,259	94.1%

Brown Caldwell



Brown and Caldwell
 201 North Civic Drive, Suite 300
 Walnut Creek, CA 94598
 Tel: 925-937-9010, Fax: 925-937-9026

To : First Energy
 300 Madison Avenue
 Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28348726

Date : July 22, 2019

Subject : First Energy Newton - Pilot Study

Contact : Paul J Thom , PM

Billing Period : May 24, 2018 through June 27, 2019

Invoiced By : David G George

Progress Billing No : 7

Reference : Authorization Dated : 10/15/2018

P.O. 55115731

Class/ Employee Name	Hours	Rate	Billing Amount
Vice President			
Peter Randazzo	2.00	\$ 179.00	358.00
Managing Engineer			
Kevin D Dyson	0.25	\$ 166.00	41.50
Marek Ostrowski	27.00	\$ 166.00	4,482.00
Supv Geol/Hydrogeologist			
James L Marolda	1.00	\$ 160.00	160.00
Principal Scientist			
Paul J Thom	13.50	\$ 141.00	1,903.50
Administrative Coordinator			
Elizabeth S Seavers	0.50	\$ 70.00	35.00
Project Analyst I			
Nicolas Newsome	0.75	\$ 58.00	43.50
Sub-Total Labor	45.00		\$ 7,023.50
APC at \$6.00 per Hour	45.00		\$ 270.00
Total Labor			\$ 7,293.50
Amount Due this Invoice			\$ 7,293.50

APPROVAL STAMP

P.O. NO. _____

COMPANY CODE: _____ INV. NO. _____

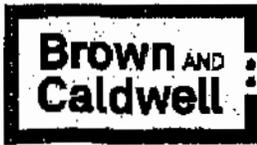
PROJECT CODE: SC00 COST CENTER _____

CLIENT (GL ACCT): _____

BY: _____ EMP. NO. _____

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
 201 North Civic Drive, Suite 300
 Walnut Creek, CA 94596
 Tel: 925-937-9010, Fax: 925-937-9026

To : First Energy
 300 Madison Avenue
 Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28348726

Date : July 22, 2019

Summary of Account

Invoiced To Date :	\$ 384,081.87	Contract Ceiling :	\$ 408,340.25
Total Paid To Date :	<u>\$(368,649.07)</u>	Invoiced To Date :	<u>\$ 384,081.87</u>
Balance Outstanding :	<u>\$ 15,432.80</u>	Remaining Balance :	<u>\$ 24,258.38</u>

Line 01 \$ 532.00 SES# 1118761626 - Fax# 8043440
 Line 02 \$ 6,761.50 SES# 1118761634 Fax# 8043442

APPROVAL STAMP	
P.O. NO. <u>55115731</u>	INV. NO. <u>28348726</u>
COMPANY CODE: SCOO	COST CENTER: <u>---</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001025</u>	WBS: <u>---</u>
APPROVED BY:	EMP. NO.:

E. Corninga CA939 10/10/19
 Approved for \$7,293.50

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



July 29, 2019

RECEIVED
AUG 07 2019
Environmental Department

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

153508

Subject: Progress Report – May 24, 2019 through June 27, 2019
Newton II Former MGP Site
RAWP and Bid Package Preparation
P.O. 55115731, CO #6

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning May 24, 2019 through June 27, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 – Management and Coordination

- Project management activities
- Update monthly cost tables
- Prepare project cost estimates

Phase 200 – Utility Survey

- Surveying subcontract expenses
- Invoices for geophysical and land survey

Phase 300 – Geotechnical Data Collection

- Laboratory expenses
- Rental equipment and travel expenses
- Preparation of boring logs

Phase 400 – Technical Meeting with NJDEP

- No Activities this period

Phase 500 – Remedial Action Workplan

- Preparation of RAW text, tables, and figures

Phase 600 - Bid Package

- Preparation of bid package and technical specs

Phase 700 – Soil Erosion and Sediment Control Plan

- No Activities this period

Elaine Comings
First Energy Company
June 24, 2019
Page 2

Phase 800 – Waste Characterization

- Expenses from waste characterization sampling
- Review of sampling results

Phase 850 – Project Planning and Scoping Activities

- No Activities this period

2. Project Schedule

The utility survey, waste characterization sampling and geotechnical sampling were completed in May 2019. The RAWP and bid specifications were provided for draft review during the week of July 22, 2019.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell



Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1: Action Plan
Newton II Former MGP Site
RAWP and Bid Specifications Prep

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Geophysical and Land Survey	BC	6/1/2019		04/26 & 04/29	Completed
300 & 800	Waste Characterization and Geotechnical Soil Sampling	BC	6/1/2019		05/03 & 05/08	Completed
500	Remedial Action Workplan Preparation	BC	8/5/2019			Scheduled
600	Bid Package Preparation	BC	8/5/2019			Scheduled
700	SEGC Permitting	BC	10/28/2019			Scheduled

Table 2
Project Costs
May 24, 2019 to June 27, 2019

Phase	Task Description and Work Order	Invoice this	Total Expended to	Original Task Budget	Revised Phase	Available	Contract
		Period	Date		Budget		Budget
100	Management and Coordination	\$ 1,920	\$ 8,842	\$ 11,268	\$ 11,368	\$ 2,487	78.2%
200	Utility Survey	\$ 2,573	\$ 8,044	\$ 12,551	\$ 12,551	\$ 4,507	64.1%
300	Geotechnical Data Collection	\$ 1,796	\$ 18,980	\$ 27,944	\$ 27,944	\$ 8,964	67.9%
400	Technical Meeting with NJDEP	\$ -	\$ -	\$ 8,828	\$ 8,828	\$ 8,828	0.0%
500	Remedial Action Workplan	\$ 13,896	\$ 18,547	\$ 49,399	\$ 49,399	\$ 29,852	39.6%
600	Bid Package	\$ 1,442	\$ 3,331	\$ 68,666	\$ 68,566	\$ 65,235	4.9%
700	Soil Erosion and Sediment Control Plan	\$ -	\$ -	\$ 3,432	\$ 3,432	\$ 3,432	0.0%
800	Waste Characterization	\$ 202	\$ 5,035	\$ 16,962	\$ 16,962	\$ 11,927	28.7%
850	Project Planning and Scoping Activities	\$ -	\$ 38,489	\$ 97,781	\$ 97,781	\$ (708)	101.9%
Contract Totals:		\$ 21,818	\$ 102,267	\$ 236,771	\$ 236,771	\$ 134,504	49.2%



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28348764

Date : July 23, 2019

Total Labor				\$ 17,838.25
REGULAR EXPENSES				
Account / Vendor Name				Billing Amount
Subconsultants				
O/S CONSULT - SURVEYOR				
KELLER AND				2,450.00
O/S CONSULT - ANALYTICAL SERVICES				
RSA GEOLAB LLC				654.00
Sub-Total Subconsultants				<u>\$ 3,104.00</u>
Markup on Subconsultants @ 5.00%				\$ 156.20
Total Subconsultants				<u>\$ 3,259.20</u>
Outside Services				
O/S SVS-EQUIPMENT RENTAL				
U.S. ENVIRONMENTAL				208.73
Sub-Total Outside Services				<u>\$ 208.73</u>
Markup on Outside Services @ 5.00%				\$ 10.44
Total Outside Services				<u>\$ 219.17</u>
Total Regular Expenses				<u>\$ 3,478.37</u>
UNIT PRICING				
Vendor / Employee Name	Units	UOM	Rate	Billing Amount
Auto - Daily Use	3.00	Per Day	125.0000	375.00
Auto - Daily Use	1.00	Per Day	125.0000	125.00
TOTAL: Auto - Daily Use				<u>\$ 500.00</u>
Total Unit Pricing				<u>\$ 500.00</u>
Total Expenses				<u>\$ 3,978.37</u>
Amount Due this Invoice				<u><u>\$ 21,817.62</u></u>

SES# 11187381e0 Fox# 8043248
APPROVAL STAMP
P.O. NO. 55115731 / Line 1 INV. NO. 28348764
COMPANY CODE: SCOO COST CENTER -
COST ELEMENT (GL ACCT.): 550300
ORDER: 3001025 WBS: -
APPROVED BY: *[Signature]* EMP. NO.: 297

E. O'Connell 24939 10/10/19 10-11-19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28348764

Date : July 23, 2019

Subject : Newton RAWP Bid Package Prep
Billing Period : May 24, 2019 through June 27, 2019
Progress Billing No : 4
Reference : Authorization Dated : 1/24/2019

Contact : Scott Nelson , PM
Invoiced By : David G George

P.O. 55115731

<u>Class/ Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Billing Amount</u>
Vice President			
Peter Randazzo	5.00	\$ 188.00	930.00
Managing Engineer			
Marek Ostrowski	27.00	\$ 173.00	4,671.00
Scott Nelson	18.50	\$ 173.00	3,200.50
Senior Engineer			
Adam S Gutta	11.25	\$ 119.00	1,338.75
Engineer II			
Radhika Patel	35.00	\$ 90.00	3,150.00
Engineer I			
Stephanie S Gramkow	0.50	\$ 73.00	36.50
Managing Geol/Hydrogeologist			
Scott D MacMillin	0.25	\$ 173.00	43.25
Principal Geol/Hydrogeologist			
Steven J Dentico	1.50	\$ 73.00	109.50
Geologist/Hydrogeologist I			
Rachel Hojnacki	4.25	\$ 73.00	310.25
Senior Designer			
Alan Santiago	23.00	\$ 92.00	2,116.00
Principal Scientist			
Paul J Thorn	6.50	\$ 147.00	955.50
Project Analyst I			
Nicolas Newsome	2.75	\$ 60.00	165.00
Sub-Total Labor	135.50		\$ 17,026.25
APC at \$5.00 per Hour	135.50		\$ 813.00

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28348764

Date : July 23, 2019

Summary of Account

Invoiced To Date :	\$ 102,266.89	Contract Ceiling :	\$ 236,770.00
Total Paid To Date :	<u>\$(37,132.20)</u>	Invoiced To Date :	<u>\$ 102,266.89</u>
Balance Outstanding :	<u><u>\$ 65,134.69</u></u>	Remaining Balance :	<u><u>\$ 134,503.11</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607



August 27, 2019

RECEIVED
SEP 04 2019
Environmental Department

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

153508

Subject: Progress Report – June 28, 2019 through July 25, 2019
Newton II Former MGP Site
RAWP and Bid Package Preparation
P.O. 55115731, CO #6

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning June 28, 2019 through July 25, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 – Management and Coordination

- Project management activities

Phase 200 – Utility Survey

- No Activities this period

Phase 300 – Geotechnical Data Collection

- Finalized logs from geotechnical investigation

Phase 400 – Technical Meeting with NJDEP

- Review of local fill ordinances
- Meeting in Newton with township officials

Phase 500 – Remedial Action Workplan

- Preparation of Draft CEA
- Preparation of Draft RAWP document
- Preparation of tables, figures, appendices to RAWP
- Update to Case Inventory Document

Phase 600 – Bid Package

- Preparation of bid package and technical specs
- Preparation of drawings to accompany specs

Phase 70D – Soil Erosion and Sediment Control Plan

- Preparation of SESC package

Elaine Comings
First Energy Company
August 27, 2019
Page 2

Phase 800 – Waste Characterization

- No Activities this period

Phase 850 – Project Planning and Scoping Activities

- No Activities this period

2. Project Schedule

The utility survey, waste characterization sampling and geotechnical sampling were completed in May 2019. The RAWP and bid specifications were provided for draft review during the week of July 22, 2019.

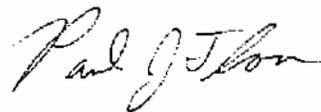
3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell



Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1: Action Plan
Newton II Former MGP Site
RAWP and Bid Specifications Prep

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Geophysical and Land Survey	BC	6/1/2019		04/26 & 04/29	Completed
300 & 800	Waste Characterization and Geotechnical Soil Sampling	BC	6/1/2019		05/03 & 05/08	Completed
500	Remedial Action Workplan Preparation	BC	8/5/2019		7/23/2019	Completed
600	Bid Package Preparation	BC	8/5/2019		7/24/2019	Completed
700	SESC Permitting	BC	10/28/2019			Scheduled

Table 2
Project Costs
June 28, 2019 to July 25, 2019

Phase	Task Description and Work Order	Total Expended to			Original Task Budget	Available Phase Budget	Available Balance	Cumulative Budget Expended (%)
		Invoiced this Period	DBE	DBE				
100	Management and Coordination	\$ 547	\$ 9,388	\$ 11,308	\$ 11,308	\$ 1,920	83.0%	
200	Utility Survey	\$ -	\$ 8,044	\$ 12,551	\$ 12,551	\$ 4,507	64.1%	
300	Geotechnical Data Collection	\$ 686	\$ 19,666	\$ 27,944	\$ 27,944	\$ 8,276	70.1%	
400	Technical Meeting with NIDEP	\$ 2,027	\$ 2,027	\$ 8,828	\$ 8,828	\$ 6,801	22.0%	
500	Remedial Action Workplan	\$ 26,353	\$ 44,300	\$ 49,399	\$ 49,399	\$ 4,499	80.8%	
600	Bid Package	\$ 10,240	\$ 19,570	\$ 68,566	\$ 68,566	\$ 48,596	70.5%	
700	Soil Erosion and Sediment Control Plan	\$ 868	\$ 688	\$ 3,432	\$ 3,432	\$ 2,746	20.0%	
800	Waste Characterization	\$ -	\$ 5,035	\$ 16,962	\$ 16,962	\$ 11,927	29.7%	
850	Project Planning and Scoping Activities	\$ -	\$ 36,489	\$ 37,781	\$ 37,781	\$ (708)	101.9%	
Contract Totals:		\$ 45,539	\$ 147,806	\$ 236,771	\$ 236,771	\$ 88,865	62.4%	



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28349249

Date : July 31, 2019

Subject : Newton RAWP Bid Package Prep
Billing Period : June 28, 2019 through July 25, 2019
Progress Billing No : 5
Reference : Authorization Dated : 1/24/2019

Contact : Scott Nelson , PM
Invoiced By : David G George

P.O. 55115731

<u>Class/ Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Billing Amount</u>
Vice President			
Peter Randazzo	35.00	\$ 186.00	6,510.00
Managing Engineer			
Jonathan D Howland	3.50	\$ 173.00	605.50
Marek Ostrowski	60.00	\$ 173.00	10,380.00
Scott Nelson	17.50	\$ 173.00	3,027.50
Senior Engineer			
Adam S Gutta	46.50	\$ 119.00	5,533.50
Brendan E Quann	29.00	\$ 119.00	3,451.00
Engineer II			
Eric J Thornburg	2.00	\$ 90.00	180.00
Radhika Patel	47.25	\$ 90.00	4,252.50
Engineer I			
Stephanie S Gramkow	2.25	\$ 73.00	164.25
Managing Geol/Hydrogeologist			
Scott D MacMillin	0.25	\$ 173.00	43.25
Principal Geol/Hydrogeologist			
Charles R Meyn	0.75	\$ 147.00	110.25
Geologist/Hydrogeologist I			
Rachel Hojnacki	0.75	\$ 73.00	54.75
Senior Designer			
Alan Santiago	58.50	\$ 92.00	5,382.00
Principal Scientist			
Paul J Thom	19.50	\$ 147.00	2,866.50
Marketing Coordinator I			
Elizabeth S Seavers	2.75	\$ 82.00	225.50

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9028

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28349249

Date : July 31, 2019

Class/ Employee Name	Hours	Rate	Billing Amount
Administrative Manager			
Dorothy M Martucci	4.50	\$ 126.00	567.00
Project Analyst I			
Nicolas Newsome	1.50	\$ 60.00	90.00
Sub-Total Labor	331.50		\$ 43,443.50
APC at \$6.00 per Hour	331.50		\$ 1,989.00
Total Labor			\$ 45,432.50

REGULAR EXPENSES

Account / Vendor Name	Billing Amount
Other Direct Costs	
MILEAGE	
Peter Randazzo	101.50
Sub-Total Other Direct Costs	\$ 101.50
Markup on Other Direct Costs @ 5.00%	\$ 5.08
Total Other Direct Costs	\$ 106.58
Total Regular Expenses	\$ 106.58
Total Expenses	\$ 106.58
Amount Due this Invoice	\$ 45,539.08

DES# 1118738375 Fax# 8043224

APPROVAL STAMP

P.O. NO. 55115731 / 1 INV. NO. 28349249

COMPANY CODE : SCOO COST CENTER ---

COST ELEMENT (GL ACCT.): 550300

ORDER: 3001025 WBS: _____

APPROVED BY: [Signature] EMP. NO.: 297

E. Comings C4939 10/10/19
10-11-19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28349249

Date : July 31, 2019

Summary of Account

Invoiced To Date :	\$ 147,805.97	Contract Ceiling :	\$ 236,770.00
Total Paid To Date :	<u>\$(37,132.20)</u>	Invoiced To Date :	<u>\$ 147,805.97</u>
Balance Outstanding :	<u><u>\$ 110,673.77</u></u>	Remaining Balance :	<u><u>\$ 88,964.04</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

2 Park Way, Suite 2A
Upper Saddle River, New Jersey 07458

T: 201.574.4700
F: 201.236.1607

RECEIVED

SEP 04 2019

Environmental Department



August 27, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

152956

Subject: Progress Report Project June 28, 2019 through July 25, 2019
Newton II Former MGP Site
ISS Pilot Study
P.O. 55115731-C01

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning from June 28, 2019 through July 25, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Phase 100 - Management and Coordination

- Project management activities
- Attendance at meeting with township officials

Phase 200 - Building Inspection

- No services this period

Phase 300- ISS Installation

- No services this period

Phase 400- Post Stabilization Coring

- No services this period

Phase 500- Reporting

- Follow up on draft and finalizing pilot report

2. Project Schedule

ISS Pilot Study Report was provided for review on May 30, 2019.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Elaine Comings
First Energy Company
August 27, 2019
Page 2

Very truly yours,

Brown and Caldwell

A handwritten signature in black ink, appearing to read "Paul W. Thorn". The signature is fluid and cursive, with a large initial "P" and "T".

Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1
Action Plan
Newton II Former MGP Site

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Pre Construction Inspection	BC	12/18/2018	12/18/2018	12/18/2018	Completed
200	Post Construction Inspection	BC	2/6/2019	2/29/2019	4/4/2019	Completed
200	Building Inspection Report	BC	2/27/2019	3/29/2019	5/30/2019	Completed
300	ISS Pilot Study Completion	BC	2/1/2019	2/15/2019	2/15/2019	Completed
400	Post Stabilization Coring	BC	3/11/2019	3/22/2019	3/20/2019	Completed
500	ISS Pilot Study Report	BC	4/15/2018	4/24/2019	5/30/2018	Completed

Table 2
Project Costs
June 28, 2019 to July 25, 2019

Phase	Task Description and Work Order	Invoiced this Period	Total Expended to Date	Original Task Budget	Revised Phase Budget	Available Balance	Cumulative Budget Expended (%)
100	Management and Coordination	\$ 1,130	\$ 15,298	\$ 16,764	\$ 16,764	\$ 1,466	91.3%
200	Building Inspection	\$ -	\$ 3,551	\$ 7,143	\$ 7,143	\$ 3,592	49.7%
300	ISS Installation	\$ -	\$ 325,738	\$ 319,175	\$ 319,175	\$ (6,563)	102.1%
400	Post-Stabilization Coring	\$ -	\$ 19,389	\$ 22,877	\$ 22,877	\$ 3,488	84.8%
500	Reporting	\$ 73.50	\$ 21,309.00	\$ 42,382	\$ 42,382	\$ 21,073	50.3%
	Contract Totals:	\$ 1,203	\$ 385,285	\$ 408,341	\$ 408,341	\$ 23,056	94.4%





Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28350386

Date : August 14, 2019

Subject : First Energy Newton - Pilot Study
Billing Period : June 28, 2019 through July 25, 2019
Progress Billing No : 8
Reference : Authorization Dated : 10/15/2018

Contact : Paul J Thom , PM
Invoiced By : David G George

P.O. 55115731

Class/ Employee Name	Hours	Rate	Billing Amount
Principal Scientist			
Paul J Thom	7.75	\$ 141.00	1,092.75
Project Analyst I			
Nicolas Newsome	1.00	\$ 58.00	58.00
Sub-Total Labor	8.75		\$ 1,150.75
APC at \$6.00 per Hour	8.75		\$ 52.50
Total Labor			\$ 1,203.25
Amount Due this Invoice			\$ 1,203.25

SES: # 1118738361 Fax # 8043315

APPROVAL STAMP	
P.O. NO. <u>55115731/2</u>	INV. NO. <u>28350386</u>
COMPANY CODE.: <u>SCOO</u>	COST CENTER <u>-</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001025</u>	WBS: <u>-</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

E. Comings CA989 10/10/19
10-14-19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 152956

Invoice No : 28350386

Date : August 14, 2019

Summary of Account

Invoiced To Date :	\$ 385,285.12	Contract Ceiling :	\$ 408,340.25
Total Paid To Date :	<u>\$(368,649.07)</u>	Invoiced To Date :	<u>\$ 385,285.12</u>
Balance Outstanding :	<u><u>\$ 16,636.05</u></u>	Remaining Balance :	<u><u>\$ 23,055.13</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

Upper Saddle River, New Jersey 07458

T: 201.574.4700

F: 201.236.1607

RECEIVED

SEP 30 2019

Environmental Department



September 25, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

153508

Subject: Progress Report - July 26, 2019 through August 22, 2019
Newton II Former MGP Site
RAWP and Bid Package Preparation
P.O. 55115731, CO #6

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning July 26, 2019 through August 22, 2019. An invoice for this period is attached.

1. Work Performed During This Period:**Phase 100 - Management and Coordination**

- Project management activities

Phase 200 - Utility Survey

- No Activities this period

Phase 300 - Geotechnical Data Collection

- No Activities this period

Phase 400 - Technical Meeting with NJDEP

- No Activities this period

Phase 500 - Remedial Action Workplan

- Preparation of Revised RAWP and CEA documents

Phase 600 - Bid Package

- Finalize bid package and send out
- Preparation of cost estimates

Phase 700 - Soil Erosion and Sediment Control Plan

- Preparation of SESC package
- SESC Permit Fees

Phase 800 - Waste Characterization

- No Activities this period

Phase 850 – Project Planning and Scoping Activities

- No Activities this period

2. Project Schedule

The utility survey, waste characterization sampling and geotechnical sampling were completed in May 2019. The RAWP was submitted on September 3, 2019.

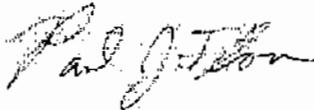
3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell



Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1: Action Plan
 Newton II Former MGP Site
 RAWP and Bid Specifications Prep

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Geophysical and Land Survey	BC	6/1/2019		04/26 & 04/29	Completed
300 & 800	Waste Characterization and Geotechnical Soil Sampling	BC	6/1/2019		05/03 & 05/08	Completed
500	Remedial Action Workplan Preparation	BC	8/5/2019		7/23/2019	Completed
600	Bid Package Preparation	BC	8/9/2019		7/24/2019	Completed
700	SESC Permitting	BC	10/28/2019			Scheduled



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

RECEIVED

INVOICE

OCT 2 2019

Environmental Department

To: First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28352882

Date : September 17, 2019

Subject : Newton RAWP Bid Package Prep

Contact : Scott Nelson , PM

Billing Period : July 26, 2019 through August 22, 2019

Invoiced By : David G George

Progress Billing No : 6

Reference : Authorization Dated : 1/24/2019

P.O. 56115731

Class/ Employee Name	Hours	Rate	Billing Amount
Vice President			
Peter Randazzo	20.50	\$ 186.00	3,813.00✓
Chief Engineer			
Keith J Bogatch	0.50	\$ 186.00	93.00✓
Managing Engineer			
Adam R Sherman	2.50	\$ 173.00	432.50✓
Marek Ostrowski	21.00	\$ 173.00	3,633.00✓
Scott Nelson	33.50	\$ 173.00	5,795.50✓
Principal Engineer			
Carla M Oliveira	12.75	\$ 147.00	1,874.25✓
Senior Engineer			
Adam S Gutta	33.50	\$ 119.00	3,986.50✓
Brendan E Quann	16.00	\$ 119.00	1,904.00✓
Engineer II			
Eric J Thornburg	2.00	\$ 90.00	180.00✓
Radhika Patel	35.00	\$ 90.00	3,150.00✓
PA Manager I			
Charlene N Spence	0.25	\$ 92.00	23.00✓
Principal Scientist			
Paul J Thorn	5.50	\$ 147.00	808.50✓
Administrative Coordinator			
Kimberly A Glöster	7.00	\$ 73.00	511.00✓
Project Analyst I			
Nicolas Newsome	1.00	\$ 80.00	80.00✓
Sub-Total Labor	191.00		\$ 26,264.25
APC at \$8.00 per Hour	191.00		\$ 1,146.00

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28352882

Date : September 17, 2019

Total Labor	<u>\$ 27,410.25</u>
REGULAR EXPENSES	
Account / Vendor Name	<u>Billing Amount</u>
Other Direct Costs	
PERMIT/LICENSE	
Brendan E Quann	890.00
Brendan E Quann	10.00
Sub-Total Other Direct Costs	<u>\$ 900.00</u>
Markup on Other Direct Costs @ 5.00%	\$ 45.00
Total Other Direct Costs	<u>\$ 945.00</u>
Total Regular Expenses	<u>\$ 845.00</u>
Total Expenses	<u>\$ 945.00</u>
Amount Due this Invoice	<u>\$ 28,355.25</u> ✓

SES: # 1119377216 Fax: # 8097325

APPROVAL STAMP	
P.O. NO. <u>55115731/1</u>	INV. NO. <u>28352882</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>—</u>
COST ELEMENT (GL ACCT.): <u>55000 550300</u>	
ORDER: <u>3001025</u>	WBS: <u>—</u>
APPROVED BY:	EMP. NO.:

E. Amings CA939 12/13/19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

To : First Energy
300 Madison Avenue
Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28352882

Date : September 17, 2019

Summary of Account

Invoiced To Date :	\$ 176,161.22	Contract Ceiling :	\$ 236,770.00
Total Paid To Date :	<u>\$(37,132.20)</u>	Invoiced To Date :	<u>\$ 176,161.22</u>
Balance Outstanding :	<u><u>\$ 139,029.02</u></u>	Remaining Balance :	<u><u>\$ 60,608.78</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.

T: 201.574.4700
F: 201.236.1607

RECEIVED
NOV 05 2019
Environmental Department



October 29, 2019

Ms. Elaine Comings
First Energy Company
300 Madison Avenue
Morristown, New Jersey 07962-1911

153508

Subject: Progress Report – August 23, 2019 through September 26, 2019
Newton II Former MGP Site
RAWP and Bid Package Preparation
P.O. 55115731, CO #6

Dear Elaine:

The following summarizes the project activities performed by Brown and Caldwell for the Newton II Former MGP Site for the period beginning August 23, 2019 through September 26, 2019. An invoice for this period is attached.

1. Work Performed During This Period:

Line 03

Phase 100 – Management and Coordination

- Project management activities
- Communications regarding public notices

Phase 200 – Utility Survey

- No Activities this period

Line 03

Phase 300 – Geotechnical Data Collection

- Preparing geotechnical pre-construction inspections

Phase 400 – Technical Meeting with NJDEP

- No Activities this period

Line 03

Phase 500 – Remedial Action Workplan

- Preparation of Revised RAWP and CEA documents

Line 03

Phase 600 - Bid Package

- Conducting site walk with contractors
- Preparing RFP for air monitoring services
- Respond to bidder questions
- Evaluation of construction bids received and discuss with First Energy
- Preparing contractor selection and costs

Line 03

Phase 700 – Soil Erosion and Sediment Control Plan

- Discussions with township engineers on grading permit and clean fill certifications

Line 03

Phase 800 – Waste Characterization

- Waste characterization analytical expenses

Phase 850 – Project Planning and Scoping Activities

- No Activities this period

2. Project Schedule

The utility survey, waste characterization sampling and geotechnical sampling were completed in May 2019. The RAWP was submitted on September 3, 2019.

3. Action Plan

- Table 1 (attached) is an Action Plan that addresses the status of the tasks for the current billing period.
- A summary table documenting the costs billed to date is also included in Table 2.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brown and Caldwell



Paul Thorn
Senior Scientist

Attachments

Table 1: Action Plan

Table 2: Cost Summary Table

Table 1: Action Plan
Newton II Former MGP Site
RAW P and Bid Specifications Prep

Phase	Task	Accountable Entity	Initial Due Date	Revised Due Date	Completion Date	Status
200	Geophysical and Land Survey	BC	8/1/2019		04/26 & 04/28	Completed
300 & 400	Waste Characterization and Geotechnical Soil Sampling	BC	9/1/2019		05/03 & 05/08	Completed
500	Remedial Action Workplan Preparation	BC	8/5/2019		7/23/2019	Completed
600	Bid Package Preparation	BC	8/5/2019		7/24/2019	Completed
700	SESC Permitting	BC	10/28/2019		10/28/2019	Completed



Brown and Caldwell
 201 North Civic Drive, Suite 300
 Walnut Creek, CA 94596
 Tel: 925-937-9010, Fax: 925-937-9026

To : First Energy
 300 Madison Avenue
 Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28355042

Date : October 14, 2019

Subject : Newton RAWP Bid Package Prep Contact : Scott Nelson , PM
 Billing Period : August 23, 2019 through September 26, 2019 Invoiced By : David G George
 Progress Billing No : 7
 Reference : Authorization Dated : 1/24/2019

P.O. 55115731

Class/ Employee Name	Hours	Rate	Billing Amount
Vice President			
Peter Randazzo	11.75	\$ 186.00	2,185.50
Managing Engineer			
Jonathan D Howland	4.50	\$ 173.00	778.50
Marek Ostrowski	51.00	\$ 173.00	8,823.00
Scott Nelson	45.00	\$ 173.00	7,785.00
Senior Engineer			
Adam S Gutta	4.25	\$ 119.00	505.75
Brendan E Quann	61.00	\$ 119.00	7,259.00
Engineer II			
Eric J Thornburg	2.00	\$ 90.00	180.00
Engineer I			
Phillip T Gunderson	7.50	\$ 73.00	547.50
PA Manager I			
Charlene N Spence	3.00	\$ 92.00	276.00
Managing Geol/Hydrogeologist			
Scott D MacMillin	0.50	\$ 173.00	86.50
Principal Scientist			
Paul J Thorn	6.50	\$ 147.00	955.50
Administrative Manager			
Claire J Egan	1.25	\$ 92.00	115.00
Administrative Coordinator			
Kimberly A Gloster	2.50	\$ 73.00	182.50
Project Analyst I			
Hannah E Eaton	0.50	\$ 60.00	30.00
Sub-Total Labor	201.25		\$ 20,709.75

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice, interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
201 North Civic Drive, Suite 300
Walnut Creek, CA 94596
Tel: 925-937-9010, Fax: 925-937-9026

INVOICE

To : First Energy
300 Madison Avenue
Morristown, NJ 07982-1911

Project No : 153508

Invoice No : 28355042

Date : October 14, 2019

APC at \$6.00 per Hour	201.26	\$ 1,207.50
Total Labor		\$ 30,917.25
REGULAR EXPENSES		
Account / Vendor Name		Billing Amount
Outside Services		
ANALYTICAL SERVICES		
EUROFINS LANCASTER		9,770.00
Sub-Total Outside Services		\$ 9,770.00
Markup on Outside Services @ 5.00%		\$ 488.50
Total Outside Services		\$ 10,258.50
Other Direct Costs		
MILEAGE		
Scott Nelson		122.96
Scott Nelson		122.96
PARKING & TOLLS		
Scott Nelson		5.30
Scott Nelson		6.25
OVERNIGHT POSTAGE		
FEDEX		
		16.59
Sub-Total Other Direct Costs		\$ 274.06
Markup on Other Direct Costs @ 5.00%		\$ 13.70
Total Other Direct Costs		\$ 287.76
Total Regular Expenses		\$ 10,546.26
Total Expense		\$ 10,546.26
Amount Due this Invoice		\$ 41,483.51

SES: # 1119363870 Fax: # 804602

APPROVAL STAMP	
P.O. NO. <u>55115731</u>	INV. NO. <u>28355042</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u> </u>
COST ELEMENT (OL ACCT.): <u>550300</u>	
ORDER: <u>3001025</u>	WBS: <u> </u>
APPROVED BY: <u> </u>	EMP. NO.: <u> </u>

E. Commins C4939 12/10/19

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lesser.



Brown and Caldwell
 201 North Civic Drive, Suite 300
 Walnut Creek, CA 94596
 Tel: 925-937-9010, Fax: 925-937-9026

To : First Energy
 300 Madison Avenue
 Morristown, NJ 07962-1911

Project No : 153508

Invoice No : 28355042

Date : October 14, 2019

Summary of Account

Invoiced To Date :	\$ 217,824.73	Contract Ceiling :	\$ 236,770.00
Total Paid To Date :	<u>\$(37,132.20)</u>	Invoiced To Date :	<u>\$ 217,624.73</u>
Balance Outstanding :	<u><u>\$ 180,492.53</u></u>	Remaining Balance :	<u><u>\$ 19,145.27</u></u>

PAYMENT REMIT ADDRESS: Brown and Caldwell, P.O. Box 45208, San Francisco, CA 94145-0208

Payment is due within 30 days of receipt of invoice. Interest on the unpaid balance will accrue beginning with the 31st day at the rate of 1.5 percent per month or the maximum interest permitted by law, whichever is lower.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-4b(2)

Application for Payment

LAND

Remediation, Inc.
an environmental services company

To: Jersey Central Power and Light (JCP&L) 308 Madison Avenue Morristown, NJ 07962	Project: Newton Coal Gas 2 Site JCP&L 15 East Clinton Street Newton, NJ 55128536
From: Land Remediation, Inc. (Contractor) 74 Hudson River Rd Waterford, NY 12188	Owner PO No.: 270083980
Remit To:	Application No.: 10472019 through 10372019

1 ORIGINAL CONTRACT SUM SCHEDULE A	\$	3,678,020.00
2 ADDITIONAL ITEMS	\$	0.00
3 NET CHANGE BY CHANGE ORDER (AS NOTED BELOW)	\$	0.00
4 CONTRACT SUM, TO DATE	\$	3,678,020.00

CONTRACTOR:
The undersigned Contractor certifies that to the best of the Contractor's knowledge and belief, the Work covered by this Application For Payment has been completed in accordance with the Contract Documents and that all amounts have been paid by the Contractor for Work included in previous Applications For Payment.

By: *William Lindhelmer* Date: 11/06/2019
William Lindhelmer LAND Remediation, Inc.

Application is made for Payment as shown below and on the attached sheets, itemizing the Cost breakdown.

5 TOTAL COMPLETED AND STORED THIS PERIOD	\$	516,017.17
6 RETAINAGE HELD THIS PERIOD 10%	\$	51,601.72
7 TOTAL EARNED THIS PERIOD LESS RETAINAGE	\$	464,415.45
8 PREPAYMENT DISCOUNT AMOUNT THIS PERIOD	\$	6,883.58
9 CURRENT PAYMENT DUE	\$	457,531.87
10 TOTAL CONTRACT TO DATE	\$	516,017.17
11 BALANCE TO FINISH	\$	3,162,002.83
12 RETAINAGE HELD TO DATE	\$	51,601.72

CERTIFICATION OF PAYMENT
In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Construction Manager and Design Engineer certify to the Owner that to the best of their knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to the CERTIFIED AMOUNT.

Amount Certified \$ 457,531.87

CO Number:	Date Approved:	Value of COs approved by Owner	
		Addition	Deduction
TOTALS		\$0.00	\$0.00
Net Change by CO		\$0.00	\$0.00

DESIGN ENGINEER/OWNER'S REPRESENTATIVE

By: Scott Nelson Date: _____

JCP&L
By: Elaine Corings Date: _____

**See approval stamp on page 3*

Newport Coal Gas 2 Silo
 JCTAL
 35 East Clinton Street
 Newton, NJ

Period of Performance
 Application for Payment No. 18702019 (Month) 10/01/2019

PO: 5502634
 Request: 21061960

Item No.	Description	Quantity	Unit	Original Bid	Current Bid	Section 1 Lump Sum Items	Unit Price	Percentage	Amount	Percentage	Amount
1.1	Mobilization	1	LS	\$ 283,000.00	\$ 283,000.00	\$ 283,000.00	0.33	33%	\$ 93,390.00	33%	\$ 93,390.00
1.2	Project Commission and Management Services, Construction Permits and Insurances	1	LS	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	0.30	16%	\$ 17,500.00	16%	\$ 17,500.00
1.3	Site Specific Health and Safety Plan Implementation	1	LS	\$ 200,000.00	\$ 200,000.00	\$ 200,000.00	0.16	16%	\$ 26,000.00	16%	\$ 26,000.00
1.4	Surveying and Record Drawings	1	LS	\$ 140,000.00	\$ 140,000.00	\$ 140,000.00	0.10	10%	\$ 14,000.00	10%	\$ 14,000.00
1.5	Temporary Facilities and Utilities	1	LS	\$ 230,000.00	\$ 230,000.00	\$ 230,000.00	0.10	10%	\$ 23,000.00	10%	\$ 23,000.00
1.6	Site Preparation	1	LS	\$ 44,000.00	\$ 44,000.00	\$ 44,000.00	0.30	50%	\$ 22,000.00	50%	\$ 22,000.00
1.7	Measuring Well Decommissioning and Protection of Vents in Drains	1	LS	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	0.09	6%	\$ 5,000.00	6%	\$ 5,000.00
1.8	Selective Detention of Surface Runoff	1	LS	\$ 31,000.00	\$ 31,000.00	\$ 31,000.00	0.09	6%	\$ 31,000.00	6%	\$ 31,000.00
1.9	Reclaimer Utility Transfer (Cut and Cap)	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	0.08	6%	\$ 50,000.00	6%	\$ 50,000.00
1.10	ISS Run-off Pumps	1	LS	\$ 28,000.00	\$ 28,000.00	\$ 28,000.00	0.08	6%	\$ 28,000.00	6%	\$ 28,000.00
1.11	Excavation Support System	1	LS	\$ 130,000.00	\$ 130,000.00	\$ 130,000.00	0.09	6%	\$ 130,000.00	6%	\$ 130,000.00
1.12	Drainage Operation, Management, Storage	1	LS	\$ 31,000.00	\$ 31,000.00	\$ 31,000.00	0.08	6%	\$ 31,000.00	6%	\$ 31,000.00
1.13	Excavation of Roof/Deck Slab	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	0.09	6%	\$ 50,000.00	6%	\$ 50,000.00
1.14	Roof Restoration	1	LS	\$ 29,000.00	\$ 29,000.00	\$ 29,000.00	0.08	6%	\$ 29,000.00	6%	\$ 29,000.00
1.15	Roof Modification	1	LS	\$ 29,000.00	\$ 29,000.00	\$ 29,000.00	0.08	6%	\$ 29,000.00	6%	\$ 29,000.00
2.1	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.1	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.2	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.3	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.4	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.5	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.6	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.7	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.8	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.9	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.10	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.11	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.12	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.13	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.14	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.15	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.16	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.17	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.18	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.19	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.20	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.21	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.22	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.23	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.24	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.25	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.26	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.27	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.28	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.29	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.30	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.31	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.32	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.33	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.34	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.35	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.36	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.37	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.38	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.39	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.40	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.41	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.42	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.43	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.44	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.45	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.46	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.47	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.48	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.49	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.50	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.51	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.52	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.53	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.54	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.55	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.56	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.57	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.58	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.59	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.60	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.61	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127,500.00	0.08	6%	\$ 127,500.00	6%	\$ 127,500.00
2.1.62	Construction of 2 Silos	30	DMR RD	\$ 4,350.00	\$ 127,500.00	\$ 127					

Newman Coal Gas 2 Sibs
JCF LLC
15 East Clinton Street
Newman, NJ

PO: 5512854
REFERENCE: 21062588

Period of Performance: 10/1/2019 through 10/31/2019
Application for Payment No.

Item No.	Description	Unit	Quantity	Unit Price	Amount	Tax	Net	Disc	Net								
3.1	Medical Supplies / Supplies	per 1/100	1.00	\$	1.00												
3.2	Transportation and Dispatch to Chain South - Southwest PA (2019-Present)	hour	93.00	\$	93.00												
3.3	Transportation and Dispatch to Chain South - Southwest PA (2019-Present)	hour	73.00	\$	73.00												
3.4	Alameda water (Special to Lingo Population Services) (TBD based on Analysis)	gallon	0.65	\$	0.65												
3.5	In Situ Sorbent Carbon (ISC) - Full-Scale Implementation (6% Gross Margin)	CY	64.00	\$	64.00												
3.6	Providing labor direct rate, per-offer, gross amount, not (net)	LS	187,000.00	\$	187,000.00												
	Subtotal & Applied Taxes																
	Excluded Taxes																
	Subtotal Change Order																

5 444,413.19 - Amount After Retainage
5 457,851.87 - Amount After Retainage and Payment Discount

* Prepayment discount applied below. Vendor calculated discount after determining retaining amount.

SES 11/19/2010 Fax # 8049368

APPROVAL STAMP
P.O. NO. 55128536-1 INV. NO. 1
COMPANY CODE: SC00 COST CENTER
COST ELEMENT (GL ACCT): 550300
ORDER: 3001025 WBS:
APPROVED BY: [Signature] EMP. NO.: 297

DK 48899 11/11/19 Pay only \$457,851.87
11-11-19

SES 11/19/2022 Fax # 8049372

APPROVAL STAMP
P.O. NO. 55128536-1 INV. NO. 18
COMPANY CODE: SC00 COST CENTER
COST ELEMENT (GL ACCT): 550300
ORDER: 3001025 WBS:
APPROVED BY: [Signature] EMP. NO.: 297

DK 48899 11/11/19 Retainage hold of \$51,601.72
11-11-19

November 11, 2019



Ms. Elaine Comings
JCP&L
300 Madison Avenue
Morristown, New Jersey 07960

Subject: ISS Contractor Invoice Review
Newton Coal Gas 2 Site
LAND Remediation, Inc.
Invoice No.: 1
Invoice Period: October 1st - 31st 2019

Dear Elaine:

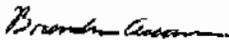
Brown and Caldwell (BC) has reviewed the above-referenced invoice compared to the contract documents and the work that was completed during the invoice period. Based on our review, BC can verify the following activities have been completed:

Invoice No. 1 for payment of \$457,851.87

- Invoice Items 1.1 through 1.6 relating to contractor submittals, mobilization and Site preparation were completed at the percentage claimed.
- Invoice Items 2.3, 2.5.4, 2.6.1, 2.6.2, 2.6.3, 2.6.4 relating to materials and services eligible for pre-payment discount were invoiced at one-third the eligible amount for pre-payment. The remaining two-thirds of materials/services eligible for pre-payment are anticipated to be invoiced in November and December 2019 payment applications.
- A retainage of 10% was held.
- The pre-payment discount of \$6,563.58 was applied to the invoice. Documentation justify the pre-payment discount amount is provided within the invoice.

Based on the work summarized above during the above-referenced pay period, BC finds that the amount of work completed on the property is in line with the contractor's payment request. Therefore, BC recommends that the above referenced Invoice of \$457,851.87 be paid.

Very truly yours,
Brown and Caldwell


Brendan Quann, P.E.

Cc:
Dan Kerr, FirstEnergy

Attachments (1)
1. LAND Remediation Invoice No. 1

Kerr, Daniel W

From: Kerr, Daniel W
Sent: Thursday, November 21, 2019 9:38 AM
To: Will Lindheimer
Cc: kad@land-remediation.com
Subject: FW: FirstEnergy: Payment # 2000397648 was initiated

FYI

From: Ap Help Desk <aphelp@firstenergycorp.com>
Sent: Thursday, November 21, 2019 9:36 AM
To: Kerr, Daniel W <dwkerr@firstenergycorp.com>
Subject: RE: FirstEnergy: Payment # 2000397648 was initiated

Dan,

A debit has been entered for immediate payment.

Transaction Subsequent Debit Balance 0.00

Basic Data | Payment | Details | Tax | Contacts | Note

Invoice date 11/21/2019 Reference 1
 Posting Date 11/21/2019
 Amount 9,157.04 USD Calculate tax
 Tax amount 0.00
 Text Reimbursement of 2% discount/see texts
 Paymt terms Due immediately
 Baseline Date 11/21/2019
 Company Code SC00 FirstEnergy Service Co. Akron

Vendor 0210065960
 LAND REMEDIATION INCORPORATED
 74 HUDSON RIVER ROAD
 WATERFORD NY 12188
 (518)766-4105-14
 WPL@LAND-REMEDATION.COM
 Bank acct 117913073
 KeyBank National Association

PO Reference GAL Account

Service Entry Sheet 1119112210

Layout All informatio

Item	Amount	Quantity	Or	Purchase Or	Item	PO Text
	9,157.04		1 EA	<input type="checkbox"/> 55128536	1	SS Remediation Services - Newton II

Thank you,

Melissa Hawkins

FirstEnergy / Accounts Payable



From: Kerr, Daniel W <dwkerr@firstenergycorp.com>
Sent: Thursday, November 21, 2019 9:21 AM
To: Ap Help Desk <aphelp@firstenergycorp.com>
Subject: RE: FirstEnergy: Payment # 2000397648 was initiated

Melissa,

I authorize you to debit LAND Remediation (vendor 210065960) **\$9,157.04** to cover the 2% amount that we mistakenly withheld as part of Invoice 1 payment (SES 1119112210).

Thanks,
Dan

FirstEnergy, 300 Madison Avenue
P.O. Box 1911
Morristown, NJ 07962

Daniel W. Kerr Phone: 973-401-8643
Adv. Environmental Specialist Fax: 330-436-8159
Environmental Department Cell: 201-602-8643

<https://www.firstenergycorp.com>

From: Ap Help Desk <aphelp@firstenergycorp.com>
Sent: Thursday, November 21, 2019 8:53 AM
To: Kerr, Daniel W <dwkerr@firstenergycorp.com>
Subject: RE: FirstEnergy: Payment # 2000397648 was initiated

I can process a debit for that amount as long as your authorize me in an email to do so.

Thank you,

Melissa Hawkins

FirstEnergy / Accounts Payable

FirstEnergy

From: Kerr, Daniel W <dwkerr@firstenergycorp.com>
Sent: Wednesday, November 20, 2019 3:37 PM
To: Ap Help Desk <aphelp@firstenergycorp.com>
Subject: RE: FirstEnergy: Payment # 2000397648 was initiated

Is there any way to release the 2% discount amount now or how should I proceed with that?

Thanks,
Dan

From: Ap Help Desk <aphelp@firstenergycorp.com>
Sent: Wednesday, November 20, 2019 3:36 PM
To: Kerr, Daniel W <dwkerr@firstenergycorp.com>
Subject: RE: FirstEnergy: Payment # 2000397648 was initiated

Looks like they were paid today, minus the 2% discount. Payment proposals are run at 8:30, so this was already processed prior to them making the change.

Vendor	210065960	LAND REMEDIATION INCORPORATED	GA Acc	232000
Company Code	5C00	74 HUDSON RIVER ROAD		
FirstEnergy Service Co.		WATERFORD	Doc. no.	5104555093
Line Item 1 / Invoice / 31				
Amount	457,851.87	USD		
Tax code	**			
W.tax base	0.00	USD	W.tax exempt	457,851.87
			W.Tax Code	00
Additional Data				
Disc. base	457,851.87	USD	Disc. amount	9,157.04
Payt Terms	0175		Days/percent	10 2.000 % 45 0.000 % 0
Bline Date	11/11/2019		Fixed	
Pmnt Block			Invoice Ref.	/ / 0
Pmt Method	Pmt meth.sopl.			
Clearing	11/20/2019 / 2000397648			
Assignment				
Text				Long text

Thank you,

Melissa Hawkins

FirstEnergy / Accounts Payable



From: Kerr, Daniel W <dwkerr@firstenergycorp.com>
Sent: Wednesday, November 20, 2019 3:31 PM
To: Ap Help Desk <aphelp@firstenergycorp.com>
Subject: FW: FirstEnergy: Payment # 2000397648 was initiated

Good afternoon - Can someone please let me know if the vendor is going to receive full payment of \$457,851.87 or partial with the 2% discount applied? Supply Chain changed payment terms to Net-30 today. The vendor should not be receiving a 2% Net-10 discount. Thanks for your help!

Entry Sheet Eds. Goto Environment System Help



1119112210 Display Entry Sheet

Other Purchase Order

Entry Sheet	1119112210	OO Accepted	LAND REMEDIATION I.	<input type="checkbox"/> Ret
For Purchase Order	55128536	1	Net 30 Days	
Short Text	1			

Basic Data Accept. Data Vals Long Txt History

Acct Assgt Cat.	Order	Price Ref.	11/11/2019
External Number	1	PRsp. Intern.	297
Service Loc.		PRsp. Extern.	
Period			

Line	D..	P	C	U	Service No.	Short Text	Quantity
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		ISS Remediation Services - Newton II	1
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			0.000
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			0.000
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			0.000

Thanks,
Dan Kerr
201-602-8643

From: Shelton, Susan K. <skshelton@firstenergycorp.com>
Sent: Wednesday, November 20, 2019 1:28 PM
To: Will Lindheimer <wpl@land-remediation.com>; Kerr, Daniel W <dwkerr@firstenergycorp.com>
Cc: Comings, Elaine M <ecomings@firstenergycorp.com>; Lawson, Frank D <flawson@firstenergycorp.com>; Keith Decker <kad@land-remediation.com>
Subject: RE: FirstEnergy: Payment # 2000397648 was initiated

Will, I changed the payment terms internally on the PO to net 30. You will see after we do the first change order that they have been changed.

Susan K. Shelton
Supply Chain Specialist V
FirstEnergy Corp
Corporate Sourcing
Phone: 440-280-5557
e-mail: skshelton@firstenergycorp.com

From: Will Lindheimer <wpl@land-remediation.com>
Sent: Wednesday, November 20, 2019 10:43 AM

To: Shelton, Susan K. <skshelton@firstenergycorp.com>; Kerr, Daniel W <dwkerr@firstenergycorp.com>
Cc: Comings, Elaine M <ecomings@firstenergycorp.com>; Lawson, Frank D <flawson@firstenergycorp.com>; Keith Decker <kad@land-remediation.com>
Subject: [EXTERNAL] FW: FirstEnergy: Payment # 2000397648 was initiated

Susan and Dan,

Can you please look into this. Our proposal was clear, if we are offering a pre-payment discount, we can not additionally offer and early payment discount. Please see the image below from our proposal. Please ensure payment application no. 1 is paid in full and an early payment discount is not taken in addition to the prepayment discount already applied to the invoice.

Thanks
Will

Early Payment Discount:

- LRI would offer a 2.25% Pre-payment Discount for any materials or services to be provided. Specifically, there is approximately 2000 tons of Portland Cement / Slag with an estimated cost of \$249,500 that could be secured with a 2.25% discount with a prepayment on this material. Additional prepayments can be accommodated for a number of other items or services including but not limited to steel sheet piles, stone products, odor control materials, or waste disposal. This Prepayment discount is intended to be used singularly and not in combination with any other early payment discounts (ie. 2% - 10 net 45) as provided for by the proposed subcontract agreement.

William Lindheimer
LAND Remediation, Inc.
74 Hudson River Road
Waterford, NY 12188
Cell: 518-937-0473
Phone: 518-766-4105 (X12)
Fax: 518-233-0141
www.land-remediation.com

From: FirstEnergy <donotreply@firstenergycorp.com>
Sent: Wednesday, November 20, 2019 9:07 AM
To: Will Lindheimer <wpl@land-remediation.com>
Subject: FirstEnergy: Payment # 2000397648 was initiated


The logo for FirstEnergy, featuring the word "FirstEnergy" in a bold, sans-serif font with a registered trademark symbol. A thick, curved underline is positioned beneath the text.

Payment was initiated

FirstEnergy has initiated a new payment on **11/20/19** in the amount of **\$448,694.83** for payment number **2000397648**.

The following invoices and credit notes were cleared with this payment:

#	Invoice Number	Type	Date	Invoice Amount	Discount	Payment Initiated
1	1	Invoice	Nov 11, 2019	\$457,851.87	\$9,157.04	\$448,694.83

Show me the details →

Please note that this is only a notification that payment processing has or will start on **11/20/19**. The availability of your funds is dependent on your payment method. If you have questions about this payment, please contact **FirstEnergy**.



Did you know that you can download a copy of your payment reports? Click [here](#) to learn how!

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San Francisco, CA 94104, US

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Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-4c(1)



INVOICE

INVOICE NUMBER: 51383510
INVOICE DATE: 12/03/18
BILL THROUGH DATE: 11/23/18
INVOICE DUE DATE: 01/17/19
TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07982

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
Purchase Order # 55117899
Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	1.00	\$175.00	\$175.00
TOTAL LABOR	1.00		\$175.00
INVOICE TOTAL			\$175.00

DRAPS
C29432
1-9-19

SES: 1117525677 tax: 38046091

Line Item 1 - LSAP Services

APPROVAL STAMP	
P.O. NO. <i>85117499</i>	INV. NO. <i>51383510</i>
COMPANY CODE.: SCOO	COST CENTER <i>50272</i>
COST ELEMENT (GL ACCT.): <i>550100</i>	
ORDER: <i>3001026</i>	WBS: <i>✓</i>
APPROVED BY: <i>[Signature]</i>	EMP. NO.: <i>297</i>

1-11-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 811674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51383510
 INVOICE DATE: 12/03/18
 BILL THROUGH DATE: 11/23/18
 INVOICE DUE DATE: 01/17/19
 TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

Purchase Order # 55117699

Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight
 TASK 01 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	1.00	\$175.00	\$175.00
TOTAL LABOR	1.00		\$175.00
TOTAL TASK 01			\$175.00

=====

INVOICE TOTAL \$175.00

REMIT PAYMENT TO:

TETRA TECH, INC.
 PO BOX 911874
 DENVER, CO 80291-1874

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51383510
 INVOICE DATE: 12/03/18
 BILL THROUGH DATE: 11/23/18
 INVOICE DUE DATE: 01/17/19
 TERMS: NET 45 NO DIS
 PROJECT NUMBER: 117-2804011

EMPLOYEE NAME	DATE	HOURS
PROJECT 117-2804011 Project Oversight		
TASK 01 Project Oversight		
Hosterman, Jeffrey L.	10-31-2018	0.50
Hosterman, Jeffrey L.	11-06-2018	0.50
TOTAL FOR Hosterman, Jeffrey L.		1.00
TOTAL TASK 01		1.00
=====		
TOTAL LABOR HOURS		1.00



RECEIVED

DEC 18 2018

Environmental Department

PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Thursday, December 13, 2018
 Subject: Progress Report through November 23, 2018
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51383510

1. Work Performed through November 23, 2018

LSRP Support Services:

- General correspondence.
- Review of bay water sampling results.

2. Planned Activities:

- Remedial action workplan preparation support.
- Supplemental remedial investigation support.
- Continuing LSRP support services.

Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through November 23, 2018

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$175.00		\$34,248.29	\$34,423.29	\$7,609.90	81.90%



INVOICE TASK DETAIL

RECEIVED

FEB 19 2019

Environmental Department

INVOICE NUMBER: 51395380

INVOICE DATE: 01/07/19

BILL THROUGH DATE: 12/28/18

INVOICE DUE DATE: 02/21/19

TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services
TASK 01 Remediation Design and Related Support Services

Table with columns: EMPLOYEE NAME, HOURS, RATE, CURRENT AMOUNT. Includes entry for Cohen, Robert M. with 2.00 hours at \$197.00 rate, totaling \$394.00.

INVOICE TOTAL

\$394.00

SES 1117746894 fny 38046103

OK APB
C29632
2/25/19

Line Item 5 - Remediation Activities

APPROVAL STAMP box containing fields for PO NO., INV. NO., COMPANY CODE, COST CENTER, COST ELEMENT, ORDER, WBS, APPROVED BY, and EMP. NO.

2-25-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51385380

INVOICE DATE: 01/07/19

BILL THROUGH DATE: 12/28/18

INVOICE DUE DATE: 02/21/19

TERMS: NET 45

PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services
TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	12-12-2018	1.00
Cohen, Robert M.	12-19-2018	1.00
TOTAL FOR Cohen, Robert M.		2.00
TOTAL TASK 01		2.00
TOTAL LABOR HOURS		2.00



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company

RECEIVED

FROM: Robert Cohen

FEB 19 2019

DATE: February 11, 2019

Environmental Department

SUBJECT: Progress Report for **December 8, 2018 to January 25, 2019**
First Energy Corporation PO# 55117699, Line Item #00004
Tetra Tech Project No. 117-2804014 "Remediation Design and Related Support Services"
Tetra Tech Invoice 51395380 (\$394.00)

1. Work Performed from December 7, 2018 to January 25, 2019

I worked 2 hours on this project in December.

2. Planned Activities

Ongoing work will entail RAWP refinement (response to comments) and development of plans and specification for remedial action construction.

3. Other Comments

None.

Table 1. Financial Status as of January 25, 2018.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$130,367.00
Total Cost in Current Period	\$394.00
Previously Billed Total	\$26,412.85
Total Billed to Date	\$26,806.85
Budget Remaining	\$103,560.15
Percent Expended	20.56%



INVOICE

INVOICE NUMBER: 51395381

INVOICE DATE: 01/07/19

BILL THROUGH DATE: 12/28/18

INVOICE DUE DATE: 02/21/19

TERMS: NET 45 NO DIS

RECEIVED

JAN 18 2019

Environmental Department

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
Purchase Order # 55117699
Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	0.50	\$175.00	\$87.50
TOTAL LABOR	0.50		\$87.50

INVOICE TOTAL

\$87.50

02/15
C29632
2-7-19

SES 1117680629 fax 38042767

Line Item 1 - LSAP Services

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51395381</u>
COMPANY CODE: SCOO	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <i>[Signature]</i>	EMP. NO.: <u>297</u>

2-8-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911874
DENVER, CO 80281-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51395381
INVOICE DATE: 01/07/19
BILL THROUGH DATE: 12/28/18
INVOICE DUE DATE: 02/21/19
TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:

Purchase Order # 55117689
 Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight
TASK 01 Project Oversight

<u>EMPLOYEE NAME</u>	<u>HOURS</u>	<u>RATE</u>	<u>CURRENT AMOUNT</u>
Hosterman, Jeffrey L.	0.50	\$175.00	\$87.50
TOTAL LABOR	0.50		\$87.50
TOTAL TASK 01			\$87.50

INVOICE TOTAL **\$87.50**

REMIT PAYMENT TO:

TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80281-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51395381
 INVOICE DATE: 01/07/19
 BILL THROUGH DATE: 12/28/18
 INVOICE DUE DATE: 02/21/19
 TERMS: NET 45 NO DIS
 PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE		HOURS
Hosterman, Jeffrey L.	12-13-2018		0.50
TOTAL FOR	Hosterman, Jeffrey L.		0.50
TOTAL TASK	01		0.50
TOTAL LABOR HOURS			0.50



RECEIVED
JAN 18 2019
Environmental Department

PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Friday, January 11, 2019
 Subject: Progress Report through December 28, 2018
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51395381

1. Work Performed through December 28, 2018

LSRP Support Services:

- General correspondence.

2. Planned Activities:

- Remedial action workplan preparation support.
- Supplemental remedial investigation support.
- Continuing LSRP support services.

Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through November 23, 2018

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$87.50		\$34,423.29	\$34,510.79	\$7,522.40	82.10%



INVOICE

INVOICE NUMBER: 51405203
INVOICE DATE: 02/04/19
BILL THROUGH DATE: 01/25/19
INVOICE DUE DATE: 03/21/19
TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

RECEIVED

FEB 11 2019

Environmental Department

Contract Reference:
Purchase Order # 55117699
Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	1.50	\$175.00	\$262.50
TOTAL LABOR	1.50		\$262.50
INVOICE TOTAL			\$262.50

SES 117766887 fax 38046097

Line Item 1 - LSND Services

APPROVAL STAMP	
PO NO. <u>55117699</u>	INV. NO. <u>51405203</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>SD2702</u>
COST ELEMENT (GL ACCT.): <u>530100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

2-25-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51405203
 INVOICE DATE: 02/04/19
 BILL THROUGH DATE: 01/25/19
 INVOICE DUE DATE: 03/21/19
 TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 Purchase Order # 55117699
 Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight
 TASK 01 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hostarman, Jeffrey L.	1.50	\$175.00	\$282.50
TOTAL LABOR	1.50		\$282.50
TOTAL TASK 01			\$282.50

=====

INVOICE TOTAL \$282.50

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51405203
INVOICE DATE: 02/04/19
BILL THROUGH DATE: 01/25/19
INVOICE DUE DATE: 03/21/19
TERMS: NET 45 NO DIS
PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE	HOURS	
Hosterman, Jeffrey L.	01-11-2019	0.50	
Hosterman, Jeffrey L.	01-14-2019	0.50	
Hosterman, Jeffrey L.	01-21-2019	0.50	
TOTAL FOR	Hosterman, Jeffrey L.	1.50	
TOTAL TASK	01	1.50	
=====			
TOTAL LABOR HOURS		1.50	



RECEIVED
FEB 11 2019
Environmental Department

PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Tuesday, February 05, 2019
 Subject: Progress Report through January 25, 2019
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51405203

1. Work Performed through January 25, 2019

LSRP Support Services:

- Public notification guidance.
- Review supplemental investigation results.
- General correspondence.

2. Planned Activities:

- Remedial action workplan preparation support.
- Supplemental remedial investigation support.
- Continuing LSRP support services.

**Table 1 – Budget Status for Ocean City Site – LSRP Support Services
PO #55117699, Line Item 0001 – Costs through January 25, 2019**

LSRP Support Services	Approved Budget	Total Cost in Current Period	Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$262.50	\$34,510.79	\$34,773.29	\$7,259.90	82.73%



RECEIVED
 FEB 19 2019
 Environmental Department

INVOICE NUMBER: 51407826
 INVOICE DATE: 02/08/19
 BILL THROUGH DATE: 01/25/19
 INVOICE DUE DATE: 03/25/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&LA FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47869
 CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	35.00 ✓	\$197.00 ✓	\$6,895.00
Cooper, Justin T.	34.00 ✓	\$110.00 ✓	\$3,740.00
Laforet, Zachary W.	32.50 ✓	\$77.00 ✓	\$2,502.50
Wagner, Roy J.	6.90 ✓	\$84.00	\$579.60
TOTAL LABOR	108.40		\$13,717.10
OTHER DIRECT COSTS			CURRENT AMOUNT
Field Equipment-Rental			\$295.88
Field Equipment-Supplies			\$93.40
Incidental Travel			\$180.68
Laboratory Services			\$10,530.00
Lodging			\$445.02
Lodging Tax			\$20.84
Meals-Employee Meals			\$71.81
Per Diem			\$440.00
Permits			\$1,770.00
Shipping - Overnight			\$60.43
Subcontractor-External			\$5,981.00
Subcontractor-I/C			\$10,790.00
TOTAL ODCs			\$30,659.06
G&A on ODC's			\$2,215.22
INVOICE TOTAL			\$46,591.38

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

See Page 3 for Approval

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51407826
INVOICE DATE: 02/08/19
BILL THROUGH DATE: 01/25/19
INVOICE DUE DATE: 03/25/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay
TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	35.00	\$197.00	\$6,895.00
Cooper, Justin T.	34.00	\$110.00	\$3,740.00
Laforet, Zachary W.	32.50	\$77.00	\$2,502.50
Wagner, Roy J.	6.90	\$84.00	\$579.60
TOTAL LABOR	108.40		\$13,717.10

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment-Rental	\$295.88
Field Equipment-Supplies	\$93.40
Incidental Travel	\$160.68
Laboratory Services	\$10,530.00
Lodging	\$445.02
Lodging Tax	\$20.84
Meals-Employee Meals	\$71.81
Per Diem	\$440.00
Permits	\$1,770.00
Shipping - Overnight	\$60.43
Subcontractor-External	\$5,981.00
Subcontractor-I/C	\$10,790.00
TOTAL ODCs	\$30,659.06
G&A on ODC's	\$2,215.22
TOTAL TASK 01	\$46,591.38

INVOICE TOTAL

\$46,591.38

*ORTS
C29632
2-25-19*

*See Annual
Status Next
page →*



INVOICE TASK DETAIL

INVOICE NUMBER: 51407828
INVOICE DATE: 02/08/19
BILL THROUGH DATE: 01/25/19
INVOICE DUE DATE: 03/25/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 85-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

SES 1117766899 for 38046110

Line Item 6 - Supplemental Buy Investigation

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51407826</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>802702</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

\$ 46,591.38

2-25-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911874
DENVER, CO 80291-1874

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: February 11, 2019
SUBJECT: Progress Report for December 8, 2018 to January 25, 2019
First Energy Corporation PO# 55117699, Line Item #00005
Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
Tetra Tech Invoices 51407826 (\$46,591.38)

1. Work Performed from December 8, 2018 to January 25, 2019

Substantial work was completed on the Supplemental Bay Investigation during the subject period. This invoice includes costs for the lab doing macroinvertebrate population assessment work (Cove Corporation - \$10,530.00), the temporary well drilling contractor (SGS North America - \$5,981.00), rental of the pontoon boat including Captain Jolly (Tetra Tech CES - \$10,790), road opening permit fees (\$1,770.00), field equipment rental (Pine - \$295.88), shipping fees (FedEx - \$60.43), and field work lodging and travel expenses (~\$978).

This invoice for this period shows billed hours including: 35.0 hours for Robert Cohen, 34 hours for Justin Cooper, 32.5 hours for Zach Laforet, and 6.9 hours for Roy Wagner. Cooper, Laforet, and Wagner worked at the site during the temporary well installation and groundwater sampling in late December. Roy Wagner was at the site to ensure that compliance with NJDEP field instrument use and program certification requirements. My work primarily involved field work coordination and management and analysis of investigation data prior to submitting a progress report to Clean Land.

2. Planned Activities

As discussed, we were unable to acquire porewater samples at some of the planned locations due to difficulty penetrating the sediment using a steel well point and steel rods. Thus, sampling bay porewater at additional locations is now planned to occur in March using a probing rig equipped with a Hydropunch sampler on a barge operated by Uni-Tech Drilling company. We also plan to obtain storm sewer sediment samples during this mobilization. After analytical results become available for the final samples, a report will be prepared for review.

3. Other Comments

The estimated cost for barge work by Uni-Tech Drilling to acquire additional bay sediment porewater samples is \$43,900. In addition to the increase in scope-of-work resulting from comments and concerns of CleanLand, this will necessitate increasing the budget associated with this study. I plan to provide this additional budget request later this week.

Table 1. Financial Status as of January 25, 2019.

Task Number and Title	01 I&D 30 New Wells
Approved Budget	\$155,490.00
Total Cost in Current Period	\$46,591.38
Previously Billed Total	\$104,026.79
Total Billed to Date	\$150,618.17
Budget Remaining	\$4,871.83
Percent Expended	96.87%

Table 2. Project status summary.

FMGP Site in Ocean City, NJ Recent/Ongoing Work Status	Action Items	Due Date	Status
Periodic LNAPL recovery from MW-10B	Purged in December 2017	ongoing	Additional purging will occur periodically. Need to address recovered NAPL storage issue.
Monitoring well abandonment [MW-H4] and rehabilitation [MW-E2] and additional wells damaged by City paving contractors.	Ban on opening streets that were paved in past few years. Revisit with City.	???	Need to address additional monitoring wells damaged by City paving contractors in addition to MW-H4.
RAWP work	Revised draft completed.	Fall 2018	Coordination with Atlantic City Electric ongoing.
Remedial action implementation.	Our remedial action regulatory deadline is 5/6/21. The mandatory deadline is two years after the date of the regulatory deadline.		RAWP in preparation and review.

JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement	ARRCS or Tech Rule Citation	Action Item	Due Date	Status
The person responsible for conducting the remediation shall: 1. Provide site specific information and documents related to the remediation at a site or area of concern when requested by the Department, including information pertaining to field sampling activities; and 2. Within 14 days prior to commencing field activities associated with the remedial action, provide notification to any local property owners and tenants who reside within 200 feet of the contaminated site, and to the government entities noted in (h)2iii below. The notification shall summarize site conditions and describe the activities that are to take place to remediate the site and shall either be in the form of written correspondence or the posting of a sign visible to the public, which shall be located on the boundaries of the contaminated site. The person responsible for conducting the remediation shall also: i. Send a notification letter to each local property owner and tenant to whom notification was sent pursuant to (h)2 above that describes the current condition and progress of the remediation every two years until the required remediation is completed and	7:26C-1.7(h) Notifications and Public Outreach	Update and expand (as delineation requires) notification letters to owners/tenants within 200 feet of contaminated site every two years. Submit letter, list of recipients, fact sheet, and advertisement	Notification letters were sent to local government entities in August 2009, August 2011, and August 2013. An updated Fact Sheet was prepared in October 2013.	Updated notification letters were sent out in August 2015.

ARRCS or Tech Rule Citation	Action Item to government entities.	Due Date	Status
<p>JCP&L FMGP Site in Ocean City, New Jersey NIDEP Submittal Status Action Items Requirement</p> <p>the final remediation document is filed with the Department; ii. if a sign is utilized, post and maintain the sign until such time as the required remediation is completed and the final remediation document is filed with the Department; and iii. Submit one copy of the notification letter and list of recipients required in (h)2i above or a photograph of the notification sign required in (h)2ii above, and one copy of the fact sheet required in (f)1 below and the display advertisement required in (f)3 below to the local government entities as follows: (1) The municipal clerk of each municipality in which the site is located; and (2) The county health department and the local health agency.</p> <p>(f) Except as provided in (f)4ii and (m) below, if contamination migrates off site in any environmental medium, the person responsible for conducting the remediation shall prepare, distribute and publish a fact sheet, which shall include a description of the site's industrial history, source(s) of contamination, description of contamination, current remedial status, proposed remedial actions with a schedule, extent of contamination, actions performed to minimize the impact to the public, and a list of online resources for information about the contaminants, as follows: 1. Prepare and distribute the fact sheet within 14 days after the determination that contamination has migrated off site; 2. Distribute the fact sheet to each owner of real property, as shown on the current municipal tax duplicate, and the tenants of those properties, located within 200 feet of the site boundary and to the following government entities: i. The municipal clerk of each municipality in which the site is located; and ii. The county health department and local health agency; 3. Publish the fact sheet, or a fact sheet template available at www.nj.gov/dep/srp/srra/guidance that has been updated with site specific information, as a display advertisement in a daily or weekly newspaper of general circulation in the vicinity of the site, within 30 days after the determination that contamination has migrated off site; . For soil contamination: 1. The fact sheet shall be updated to include current contaminant extent, redistributed to the parties listed in (f)2 above and republished as described in (f)3i above within 90 days of complete delineation;</p>	<p>Distribute and publish a fact sheet</p>	<p>A fact sheet was distributed in 2009 and revised in 2013. An updated Fact Sheet was distributed with completion of RI report.</p>	<p>A fact sheet was sent out with the CEA/WRR form to the public and government officials in April 2016.</p>

ARRCS or Tech Rule Citation	Action Item	Due Date	Status
<p>JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement</p> <p>and i. if the contamination has affected only one adjoining property and the affected contaminated medium is limited to the soil, the person responsible for conducting the remediation shall notify only that adjoining property owner and tenant in writing. The notice shall describe the nature and extent of the contamination; and 5. For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area.</p>	<p>7:26C-1.7(i)(5) 7:26C-7.3(d)</p>	<p>Mail a copy of the CEA/WRA Fact Sheet form to listed government entities and property owners within footprint of CEA/WRA.</p>	<p>Distribute when DEP establishes a CEA. The CEA/WRA Form was mailed to the public and government officials in April 2016.</p> <p>Public notification was performed in April 2016.</p>
<p>Annual Remediation Fee</p>	<p>7:26C-4 Fees and Oversight Costs</p>	<p>Pay Annual Remediation Fee of \$6,400</p>	<p>Annually.</p> <p>Paid.</p>
<p>LNAPL Reporting Form</p>	<p>7:26E-1.10</p>	<p>Update form with additional LNAPL recovery information</p>	<p>Data incorporated in the RIR; updated LNAPL reporting form is not required.</p> <p>Update every two years.</p>
<p>Update Well Search every two years to identify if new wells have been installed.</p>	<p>7:26E-1.14(a)(3)</p>	<p>Last updated in July 2014.</p>	<p>ASAP -- well search update performed in 7/2018.</p>

<p>JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement</p>	<p>ARRCS or Tech Rule Citation</p>	<p>Action Item</p>	<p>Due Date</p>	<p>Status</p>
<p>Update Receptor Evaluation Form</p>	<p>7:26C-1.12</p>	<p>Update Receptor Evaluation Form with submission of the RI Report.</p>	<p>Concurrent with submission of RI Report.</p>	<p>Submitted online to NJDEP with RIR on 5/3/2016.</p>



INVOICE

INVOICE NUMBER: 51415498 ✓

INVOICE DATE: 03/04/19

BILL THROUGH DATE: 02/22/19

INVOICE DUE DATE: 04/18/19

TERMS: NET 45

RECEIVED

MAR 25 2019

Environmental Department

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07982

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

PO Number 55117689 L.I. 0000#5

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	2.00	\$197.00	\$394.00
Rich, Peter A.	3.00	\$196.00	\$588.00
TOTAL LABOR	5.00		\$982.00
INVOICE TOTAL			\$982.00

82 AFS
 029632
 4/4/19

SES 1117937255 fax 38043929

Line Item 5 Remediation Activities

APPROVAL STAMP	
P.O. NO. 55117689	INV. NO. 51415498
COMPANY CODE.: SCOO	COST CENTER 502702
COST ELEMENT (GL ACCT.): 550100	
ORDER: 3001026	WBS: ✓
APPROVED BY: [Signature]	EMS NO.: 297

4-2-19

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51415498
 INVOICE DATE: 03/04/19
 BILL THROUGH DATE: 02/22/19
 INVOICE DUE DATE: 04/18/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	2.00	\$197.00	\$394.00
Rich, Peter A.	3.00	\$196.00	\$588.00
TOTAL LABOR	5.00		\$982.00
TOTAL TASK 01			\$982.00

=====

INVOICE TOTAL **\$982.00**

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51415498
 INVOICE DATE: 03/04/19
 BILL THROUGH DATE: 02/22/19
 INVOICE DUE DATE: 04/18/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	02-08-2019	1.00
Cohen, Robert M.	02-11-2019	1.00
TOTAL FOR Cohen, Robert M.		2.00

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	02-11-2019	1.50
Rich, Peter A.	02-13-2019	1.50
TOTAL FOR Rich, Peter A.		3.00
TOTAL TASK 01		5.00

=====

TOTAL LABOR HOURS		5.00
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TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company

FROM: Robert Cohen

DATE: March 19, 2019

SUBJECT: Progress Report for **January 25, 2019 to February 22, 2019**
 First Energy Corporation PO# 55117699, Line Item #00004
 Tetra Tech Project No. 117-2804014 "Remediation Design and Related Support Services"
 Tetra Tech Invoice **51415498 (\$982.00)**

RECEIVED
MAR 25 2019
Environmental Department

1. Work Performed from January 25, 2019 to February 22, 2019.

I worked 2 hours and Peter Rich worked 3 hours on this project during the subject period..

2. Planned Activities

Ongoing work will entail RAWP refinement, response to comments, and development of plans and specification for remedial action construction. The Draft Interim RAWP was submitted to NJDEP in March.

3. Other Comments

None.

Table 1. Financial Status as of February 22, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$130,367.00
Total Cost in Current Period	\$982.00
Previously Billed Total	\$26,806.85
Total Billed to Date	\$27,788.85
Budget Remaining	\$102,578.15
Percent Expended	21.32%

Table 2. Project status summary.

FMGP Site in Ocean City, NJ Recent/Ongoing Work Status	Action Items	Due Date	Status
Periodic LNAPL recovery from MW-10B	Purged in December 2017	ongoing	Additional purging will occur periodically. Need to address recovered NAPL storage issue.
Monitoring well abandonment [MW-H4] and rehabilitation [MW-E2] and additional wells damaged by City paving contractors.	Ban on opening streets that were paved in past few years. Revisit with City.	???	Need to address additional monitoring wells damaged by City paving contractors in addition to MW-H4.
RAWP work	Draft RAWP submitted to NJDEP.	March 2019	Develop final RAWP, plans, specs, etc.
Remedial action implementation.	Our remedial action regulatory deadline is 5/6/21. The mandatory deadline is two years after the date of the regulatory deadline.		RAWP in preparation and review.

JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement	ARRCS or Tech Rule Citation	Action Item	Due Date	Status
The person responsible for conducting the remediation shall: 1. Provide site specific information and documents related to the remediation at a site or area of concern when requested by the Department, including information pertaining to field sampling activities; and 2. Within 14 days prior to commencing field activities associated with the remedial action, provide notification to any local property owners and tenants who reside within 200 feet of the contaminated site, and to the government entities noted in (h)2iii below. The notification shall summarize site conditions and describe the activities that are to take place to remediate the site and shall either be in the form of written correspondence or the posting of a sign visible to the public, which shall be located on the boundaries of the contaminated site. The person responsible for conducting the remediation shall also: i. Send a notification letter to each local property owner and tenant to whom notification was sent pursuant to (h)2 above that describes the current condition and progress of the remediation every two years until the required remediation is completed and the final remediation document is filed with the Department; ii. If a sign is	7:26C-1.7(h) Notifications and Public Outreach	Update and expand (as delineation requires) notification letters to owners/tenants within 200 feet of contaminated site every two years. Submit letter, list of recipients, fact sheet, and advertisement	Notification letters were sent to local government entities in August 2009, August 2011, and August 2013. An updated Fact Sheet was prepared in October 2013.	Updated notification letters were sent out in August 2015.

	ARRCS or Tech Rule Citation	Action Item	Due Date	Status
<p>JCP&L FMGP Site in Ocean City, New Jersey NIDEP Submittal Status Action Items Requirement</p> <p>affected contaminated medium is limited to the soil, the person responsible for conducting the remediation shall notify only that adjoining property owner and tenant in writing. The notice shall describe the nature and extent of the contamination; and 5. For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area.</p> <p>For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area.</p>	<p>7:26C-1.7(I)(5) 7:26C-7.3(d)</p>	<p>Mail a copy of the CEA/WRA Fact Sheet form to listed government entities and property owners within footprint of CEA/WRA.</p>	<p>Distribute when DEP establishes a CEA. The CEA/WRA Form was mailed to the public and government officials in April 2016.</p>	<p>Public notification was performed in April 2016.</p>
<p>Annual Remediation Fee</p>	<p>7:26C-4 Fees and Oversight Costs</p>	<p>Pay Annual Remediation Fee of \$6,400</p>	<p>Annually.</p>	<p>Paid.</p>
<p>LNAPL Reporting Form</p>	<p>7:26E-1.10</p>	<p>Update form with additional LNAPL recovery information</p>		<p>Data incorporated in the RIR; updated LNAPL reporting form is not required.</p>
<p>Update Well Search every two years to identify if new wells have been installed.</p>	<p>7:26E-1.14(a)(3)</p>	<p>Last updated in July 2014.</p>	<p>March 2019 – an updated well search is being prepared.</p>	<p>Update every two years.</p>



INVOICE

INVOICE NUMBER: 51415494

INVOICE DATE: 03/04/19

BILL THROUGH DATE: 02/22/19

INVOICE DUE DATE: 04/18/19

TERMS: NET 45

RECEIVED

MAR 25 2019

Environmental Department

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804016
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 000096

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	9.00	\$197.00	\$1,773.00
TOTAL LABOR	9.00		\$1,773.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment Consumable	\$9.47
Incidental Travel	\$38.77
Lodging	\$249.88
Meals-Employee Meals	\$22.96
Vehicle Rental	\$152.79
TOTAL ODCs	\$473.87
G&A on ODC's	\$0.76
INVOICE TOTAL	\$2,247.63

SES 117937267 inv 38043932

Line Item 6 - Supplemental Bay Investigation

APPROVAL STAMP

P.O. NO. 55117699 INV. NO. 51415494

COMPANY CODE: SCOO COST CENTER 502702

COST ELEMENT (GL ACCT.): 550100

ORDER: 3001026 WBS: ✓

APPROVED BY: [Signature] EMS NO: 297

DUATS
C29632
4/2/19

4-2-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51415494
 INVOICE DATE: 03/04/19
 BILL THROUGH DATE: 02/22/19
 INVOICE DUE DATE: 04/18/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	9.00	\$197.00	\$1,773.00
TOTAL LABOR	9.00		\$1,773.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment Consumable	\$9.47
Incidental Travel	\$38.77
Lodging	\$249.88
Meals-Employee Meals	\$22.98
Vehicle Rental	\$152.79
TOTAL ODCs	\$473.87
G&A on ODC's	\$0.78
TOTAL TASK 01	\$2,247.63

=====

INVOICE TOTAL **\$2,247.63**

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51415494
 INVOICE DATE: 03/04/19
 BILL THROUGH DATE: 02/22/19
 INVOICE DUE DATE: 04/18/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804015

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	02-01-2019	1.00
Cohen, Robert M.	02-04-2019	1.00
Cohen, Robert M.	02-08-2019	1.00
Cohen, Robert M.	02-11-2019	1.00
Cohen, Robert M.	02-14-2019	1.00
Cohen, Robert M.	02-15-2019	2.00
Cohen, Robert M.	02-18-2019	1.00
Cohen, Robert M.	02-21-2019	1.00
TOTAL FOR Cohen, Robert M.		9.00
TOTAL TASK 01		9.00
=====		
TOTAL LABOR HOURS		9.00



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company

FROM: Robert Cohen

DATE: March 19, 2019

SUBJECT: Progress Report for **January 26, 2019 to February 22, 2019**
 First Energy Corporation PO# 55117699, Line Item #00005
 Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
 Tetra Tech Invoices 51415494 (\$2,247.63)

RECEIVED
MAR 25 2019
 Environmental Department

1. Work Performed from January 26, 2019 to February 22, 2019

I worked 9.0 hours on the Supplemental Bay Investigation Study, primarily performing planning and other project management tasks, during the subject period. Additional costs for lodging, travel, meals, and field equipment consumables are also reflected on the invoice.

2. Planned Activities

Additional bay sediment porewater samples and manhole sediment samples will be obtained in March to complete the investigation sampling activities. After analytical results become available for the final samples, a report will be prepared for review.

3. Other Comments

None.

Table 1. Financial Status as of February 22, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$155,490.00
Total Cost in Current Period	\$2,247.63
Previously Billed Total	\$150,618.17
Total Billed to Date	\$152,865.80
Budget Remaining	\$2,624.20
Percent Expended	98.31%



INVOICE

INVOICE NUMBER: 51427511

INVOICE DATE: 04/08/19

BILL THROUGH DATE: 03/29/19

INVOICE DUE DATE: 05/23/19

TERMS: NET 45

RECEIVED

APR 19 2019

Environmental Department

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	19.00 ✓	\$197.00 ✓	\$3,743.00
Cooper, Justin T.	53.00 ✓	\$110.00 ✓	\$5,830.00
Murley, Ryan C.	28.00 ✓	\$110.00 ✓	\$3,080.00
TOTAL LABOR	100.00		\$12,653.00

OTHER DIRECT COSTS

	CURRENT AMOUNT
Field Supplies	\$4.70 ✓
Incidental Travel	\$176.83 ✓
Lodging	\$297.00 ✓
Lodging Tax	\$32.10 ✓
Meals-Employee Meals	\$92.88 ✓
Vehicle Rental	\$79.68 ✓
TOTAL ODCs	\$683.19
G&A on ODC's	\$0.38
INVOICE TOTAL	\$13,336.57

SES 1118107013 fax 38041963

Line Items to Supp. Bay Inv. Study

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51427511</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>292</u>

5-10-19

REMIT PAYMENT TO:

TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51427511
 INVOICE DATE: 04/08/19
 BILL THROUGH DATE: 03/29/19
 INVOICE DUE DATE: 05/23/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 PO Number 55117689 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay
 TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	19.00	\$197.00	\$3,743.00
Cooper, Justin T.	53.00	\$110.00	\$5,830.00
Murley, Ryan C.	28.00	\$110.00	\$3,080.00
TOTAL LABOR	100.00		\$12,653.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Supplies	\$4.70
Incidental Travel	\$176.83
Lodging	\$297.00
Lodging Tax	\$32.10
Meals-Employee Meals	\$92.88
Vehicle Rental	\$79.68
TOTAL ODCs	\$683.19
G&A on ODC's	\$0.38
TOTAL TASK 01	\$13,336.57

=====

INVOICE TOTAL **\$13,336.57**

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911874
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51427511
 INVOICE DATE: 04/08/19
 BILL THROUGH DATE: 03/29/19
 INVOICE DUE DATE: 05/23/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804015

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	02-26-2019	1.00
Cohen, Robert M.	02-27-2019	1.00
Cohen, Robert M.	02-28-2019	1.00
Cohen, Robert M.	03-06-2019	2.00
Cohen, Robert M.	03-07-2019	4.00
Cohen, Robert M.	03-13-2019	2.00
Cohen, Robert M.	03-14-2019	2.00
Cohen, Robert M.	03-15-2019	3.00
Cohen, Robert M.	03-18-2019	2.00
Cohen, Robert M.	03-19-2019	1.00
TOTAL FOR Cohen, Robert M.		19.00

EMPLOYEE NAME	DATE	HOURS
Cooper, Justin T.	03-13-2019	10.00
Cooper, Justin T.	03-14-2019	10.00
Cooper, Justin T.	03-15-2019	14.00
Cooper, Justin T.	03-17-2019	5.00
Cooper, Justin T.	03-18-2019	12.00
Cooper, Justin T.	03-19-2019	2.00
TOTAL FOR Cooper, Justin T.		53.00

EMPLOYEE NAME	DATE	HOURS
Murley, Ryan C.	03-07-2019	1.50
Murley, Ryan C.	03-08-2019	3.00
Murley, Ryan C.	03-11-2019	1.50
Murley, Ryan C.	03-12-2019	3.50
Murley, Ryan C.	03-14-2019	5.00
Murley, Ryan C.	03-15-2019	13.00
Murley, Ryan C.	03-18-2019	0.50
TOTAL FOR Murley, Ryan C.		28.00
TOTAL TASK 01		100.00

TOTAL LABOR HOURS 100.00



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: April 11, 2019
SUBJECT: Progress Report for **February 23, 2019 to March 29, 2019**
First Energy Corporation PO# 55117699, Line Item #00005
Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
Tetra Tech Invoices **51427511 (\$13,336.57)**

RECEIVED
APR 19 2019
Environmental Department

1. Work Performed from February 23, 2019 to March 29, 2019

I worked 19.0 hours, Justin Cooper worked 53.0 hours, and Ryan Murley worked 28.0 hours on the Supplemental Bay Investigation Study, primarily planning, managing, and completing the field investigation. Additional costs for lodging, travel, meals, and field equipment consumables are also reflected on the invoice.

2. Planned Activities

A final report is in preparation.

3. Other Comments

None.

Table 1. Financial Status as of March 29, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$237,126.00
Total Cost in Current Period	\$13,336.57
Previously Billed Total	\$152,865.80
Total Billed to Date	\$166,202.37
Budget Remaining	\$70,923.63
Percent Expended	70.09%

Table 2. Project status summary.

FMGP Site in Ocean City, NJ Recent/Ongoing Work Status	Action Items	Due Date	Status
Periodic LNAPL recovery from MW-10B	Purged in December 2017	ongoing	Additional purging will occur periodically. Need to address recovered NAPL storage issue.
Monitoring well abandonment [MW-H4] and rehabilitation [MW-E2] and additional wells damaged by City paving contractors.	Ban on opening streets that were paved in past few years. Revisit with City.	???	Need to address additional monitoring wells damaged by City paving contractors in addition to MW-H4.
RAWP work	Draft IRAWP submitted to NJDEP.	March 2019	Develop final RAWP, plans, specs, etc.
Remedial action implementation.	Our remedial action regulatory deadline is 5/6/21. The mandatory deadline is two years after the date of the regulatory deadline.		RAWP in preparation and review.

JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement	ARRCS or Tech Rule Citation	Action Item	Due Date	Status
The person responsible for conducting the remediation shall: 1. Provide site specific information and documents related to the remediation at a site or area of concern when requested by the Department, including information pertaining to field sampling activities; and 2. Within 14 days prior to commencing field activities associated with the remedial action, provide notification to any local property owners and tenants who reside within 200 feet of the contaminated site, and to the government entities noted in (h)2iii below. The notification shall summarize site conditions and describe the activities that are to take place to remediate the site and shall either be in the form of written correspondence or the posting of a sign visible to the public, which shall be located on the boundaries of the contaminated site. The person responsible for conducting the remediation shall also: i. Send a notification letter to each local property owner and tenant to whom notification was sent pursuant to (h)2 above that describes the current condition and progress of the remediation every two years until the required remediation is completed and the final remediation document is filed with the Department; ii. If a sign is	7:26C-1.7(h) Notifications and Public Outreach	Update and expand (as delineation requires) notification letters to owners/tenants within 200 feet of contaminated site every two years. Submit letter, list of recipients, fact sheet, and advertisement	Notification letters were sent to local government entities in August 2009, August 2011, and August 2013. An updated Fact Sheet was prepared in October 2013.	Updated notification letters were sent out in August 2015.

ARRCS or Tech Rule Citation	Action Item	Due Date	Status
<p>JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement affected contaminated medium is limited to the soil, the person responsible for conducting the remediation shall notify only that adjoining property owner and tenant in writing. The notice shall describe the nature and extent of the contamination; and 5. For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area. For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area.</p>			
7:26C-1.7(l)(5) 7:26C-7.3(d)	Mail a copy of the CEA/WRA Fact Sheet form to listed government entities and property owners within footprint of CEA/WRA.	Distribute when DEP establishes a CEA. The CEA/WRA Form was mailed to the public and government officials in April 2016.	Public notification was performed in April 2016.
7:26C-4 Fees and Oversight Costs 7:26E-1.10	Pay Annual Remediation Fee of \$6,400 Update form with additional LNAPL recovery information	Annually.	Paid. Data incorporated in the RIR; updated LNAPL reporting form is not required.
Update Well Search every two years to identify if new wells have been installed.	Last updated in July 2014.	March 2019 – an updated well search is being prepared.	Update every two years.



INVOICE

INVOICE NUMBER: 51427512

INVOICE DATE: 04/08/19

BILL THROUGH DATE: 03/29/19

INVOICE DUE DATE: 05/23/19

TERMS: NET 45

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APR 19 2019

Environmental Department

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 **Remediation Design and Related Support Services**

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Chang, Belssi A.	6.50 ✓	\$147.00 ✓	\$955.50
Cohen, Robert M.	30.50 ✓	\$197.00 ✓	\$6,008.50
Rich, Peter A.	21.00 ✓	\$196.00 ✓	\$4,116.00
TOTAL LABOR	58.00		\$11,080.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Mileage (unit)	\$203.00
TOTAL ODCs	\$203.00

INVOICE TOTAL **\$11,283.00**

OK RB

629632

5/9/19

See Approval
 Stamp Next
 page →
 split into
 2

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.

SES 1118107011 fax 38041961

Line Item 5 Remediation Activities \$ 6,964.00

APPROVAL STAMP	
P.O. NO. <u>5517699</u>	INV. NO. <u>51427512-1</u>
COMPANY CODE.: SCOO	COST CENTER <u>SD2702</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001024</u>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

5-10-19

SES 1118107012 fax 38041962

Line Item 5- Remediation Activities \$ 4,309.00

APPROVAL STAMP	
P.O. NO. <u>5517699</u>	INV. NO. <u>51427512-2</u>
COMPANY CODE.: SCOO	COST CENTER <u>SD2702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001018</u>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

5-10-19



INVOICE TASK DETAIL

INVOICE NUMBER: 51427512
 INVOICE DATE: 04/08/19
 BILL THROUGH DATE: 03/29/19
 INVOICE DUE DATE: 05/23/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services
 TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Chang, Belssi A.	6.50	\$147.00	\$955.50
Cohen, Robert M.	30.50	\$197.00	\$6,008.50
Rich, Peter A.	21.00	\$196.00	\$4,116.00
TOTAL LABOR	58.00		\$11,080.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Mileage (unit)	\$203.00
TOTAL ODCs	\$203.00
TOTAL TASK 01	\$11,283.00

=====

INVOICE TOTAL **\$11,283.00**

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911874
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51427512

INVOICE DATE: 04/08/19

BILL THROUGH DATE: 03/29/19

INVOICE DUE DATE: 05/23/19

TERMS: NET 45

PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services
TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	DATE	HOURS
Chang, Belssi A.	03-12-2019	4.50
Chang, Belssi A.	03-13-2019	2.00
TOTAL FOR Chang, Belssi A.		6.50

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	02-28-2019	0.50
Cohen, Robert M.	03-06-2019	1.00
Cohen, Robert M.	03-07-2019	4.00
Cohen, Robert M.	03-08-2019	4.00
Cohen, Robert M.	03-11-2019	3.00
Cohen, Robert M.	03-12-2019	4.00
Cohen, Robert M.	03-13-2019	4.00
Cohen, Robert M.	03-14-2019	3.00
Cohen, Robert M.	03-18-2019	3.00
Cohen, Robert M.	03-19-2019	1.00
Cohen, Robert M.	03-22-2019	1.00
Cohen, Robert M.	03-25-2019	1.00
Cohen, Robert M.	03-26-2019	1.00
TOTAL FOR Cohen, Robert M.		30.50

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	02-27-2019	0.50
Rich, Peter A.	03-04-2019	1.50
Rich, Peter A.	03-05-2019	1.00
Rich, Peter A.	03-07-2019	1.00
Rich, Peter A.	03-11-2019	1.00
Rich, Peter A.	03-12-2019	1.00
Rich, Peter A.	03-13-2019	1.00
Rich, Peter A.	03-14-2019	8.00
Rich, Peter A.	03-15-2019	1.00
Rich, Peter A.	03-19-2019	1.00
Rich, Peter A.	03-20-2019	1.00
Rich, Peter A.	03-21-2019	3.00
TOTAL FOR Rich, Peter A.		21.00
TOTAL TASK 01		58.00

TOTAL LABOR HOURS 58.00



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: April 11, 2019
SUBJECT: Progress Report for February 22, 2019 to March 29, 2019
First Energy Corporation PO# 55117699, Line Item #00004
Tetra Tech Project No. 117-2804014 "Remediation Design and Related Support Services"
Tetra Tech Invoice 51427512 (\$11,283.00)

RECEIVED
APR 19 2019
Environmental Department

1. Work Performed from February 22, 2019 to March 29, 2019

I worked 30.5 hours, Peter Rich billed 21.0 hours, and Belssi Chang worked 6.5 hours on this project during the subject period. Most of Peter's time was on optimization of the Cape May system. During this period, we developed a detailed pump-and-treat system performance monitoring plan, made other modifications to the Remedial Action Work Plan, which was submitted to NJDEP in March, and managed issues related to plans by New Jersey American Water to replace the deep sanitary sewer line on 11th Street east of West Avenue.

2. Planned Activities

Ongoing work will entail development of plans and specifications for the planned remedial actions.

3. Other Comments

None.

Table 1. Financial Status as of March 29, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$130,367.00
Total Cost in Current Period	\$11,283.00
Previously Billed Total	\$27,788.85
Total Billed to Date	\$39,071.85
Budget Remaining	\$91,295.15
Percent Expended	29.97%



INVOICE
RECEIVED
APR 15 2019

Environmental Department

INVOICE NUMBER: 51427513
INVOICE DATE: 04/08/19
BILL THROUGH DATE: 03/29/19
INVOICE DUE DATE: 05/23/19
TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
Purchase Order # 55117699
Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	17.50	\$175.00	\$3,062.50
TOTAL LABOR	17.50		\$3,062.50
INVOICE TOTAL			\$3,062.50

OKAFS
C29032
5/9/19

SES 1118107004 fax 38041956

Line Item 1 - LSPP Services

APPROVAL STAMP

P.O. NO. 55117699 INV. NO. 51427513
 COMPANY CODE: 8000 COST CENTER 502202
 COST ELEMENT (OL ACCT.): 550100
 ORDER: 3001026 WBS: ✓
 APPROVED BY: [Signature] EMP. NO.: 397

5-10-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911874
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51427513
 INVOICE DATE: 04/08/19
 BILL THROUGH DATE: 03/29/19
 INVOICE DUE DATE: 05/23/19
 TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

Contract Reference:

Purchase Order # 55117699

Line Item 000D1

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight
TASK 01 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	17.50	\$175.00	\$3,062.50
TOTAL LABOR	17.50		\$3,062.50
TOTAL TASK 01			\$3,062.50

=====

INVOICE TOTAL **\$3,062.50**

REMIT PAYMENT TO:

TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51427513
 INVOICE DATE: 04/08/19
 BILL THROUGH DATE: 03/29/19
 INVOICE DUE DATE: 05/23/19
 TERMS: NET 45 NO DIS
 PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE	HOURS	
Hosterman, Jeffrey L.	01-21-2018	0.00	
Hosterman, Jeffrey L.	02-05-2019	0.00	
Hosterman, Jeffrey L.	02-27-2019	1.00	
Hosterman, Jeffrey L.	03-01-2019	5.50	
Hosterman, Jeffrey L.	03-04-2019	0.50	
Hosterman, Jeffrey L.	03-07-2019	0.50	
Hosterman, Jeffrey L.	03-13-2019	0.50	
Hosterman, Jeffrey L.	03-14-2019	6.50	
Hosterman, Jeffrey L.	03-15-2019	2.00	
Hosterman, Jeffrey L.	03-19-2019	1.00	
TOTAL FOR	Hosterman, Jeffrey L.	17.50	
TOTAL TASK	01	17.50	
=====			
TOTAL LABOR HOURS		17.50	



RECEIVED

PROGRESS REPORT

APR 15 2019

Environmental Department

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Tuesday, April 09, 2019
 Subject: Progress Report through March 29, 2019
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51427513

1. Work Performed through March 29, 2019

LSRP Support Services:

- Remedial action workplan preparation and submittal support.
- Draft NJDEP Site and Contact Info Update Form.
- General correspondence.

2. Planned Activities:

- Supplemental remedial investigation support.
- Remedial action implementation support.
- Continuing LSRP support services.

Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through March 29, 2019

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$3,062.50		\$34,860.79	\$37,923.29	\$4,109.90	90.22%



INVOICE TASK DETAIL

INVOICE NUMBER: 51438147
INVOICE DATE: 06/06/19
BILL THROUGH DATE: 04/28/19
INVOICE DUE DATE: 06/20/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07862

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 95-4148614
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
PO Number 55117689 L.L 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay
TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	3.00	\$187.00	\$591.00
TOTAL LABOR	3.00		\$591.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment-Rental	\$322.66
TOTAL ODCs	\$322.66
G&A on ODC's	\$25.81
TOTAL TASK 01	\$939.47

INVOICE TOTAL

*SES 1118310033 Inv 38041173
Line Item 6 - Supplemental Bay Investigation*

\$939.47
*OK AB
C29632
6/26/19*

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51438147</u>
COMPANY CODE.: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550190</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>292</u>

6-26-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE
RECEIVED

JUN 21 2019

Environmental Department

INVOICE NUMBER: 51438147
INVOICE DATE: 06/06/19
BILL THROUGH DATE: 04/28/19
INVOICE DUE DATE: 06/20/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

Contract Reference:
PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT		Supplemental Bay Investigation Study - Great Egg Harbor Bay		
EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT	
Cohen, Robert M.	3.00	\$197.00	\$591.00	
TOTAL LABOR	3.00		\$591.00	
OTHER DIRECT COSTS			CURRENT AMOUNT	
Field Equipment-Rental			\$322.68	
TOTAL ODCs			\$322.68	
G&A on ODC's			\$25.61	
INVOICE TOTAL			\$939.47	

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911874
DENVER, CO 80291-1874

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51438147
INVOICE DATE: 05/08/19
BILL THROUGH DATE: 04/28/19
INVOICE DUE DATE: 06/20/19
TERMS: NET 45
PROJECT NUMBER: 117-2804016

PROJECT	117-2804016	Supplemental Bay Investigation Study - Great Egg Harbor Bay	
TASK	01	Supplemental Bay Investigation Study - Great Egg Harbor Bay	
EMPLOYEE NAME	DATE	HOURS	
Cohen, Robert M.	04-18-2019	2.00	
Cohen, Robert M.	04-23-2019	1.00	
TOTAL FOR	Cohen, Robert M.	3.00	
TOTAL TASK	01	3.00	
TOTAL LABOR HOURS		3.00	



TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

RECEIVED

TO: Anna Sullivan, JCP&L A FirstEnergy Company

JUN 21 2019

FROM: Robert Cohen

Environmental Department

DATE: June 21, 2019

SUBJECT: Progress Report for **March 29, 2019 to April 26, 2019**
First Energy Corporation PO# 55117699, Line Item #00005
Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
Tetra Tech Invoices 51438147 (\$939.47)

1. Work Performed from March 29, 2019 to April 26, 2019

I worked 3.0 hours on this project in April. Work included preparation of a quarterly report for submittal to SI parties and other project management activities.

2. Planned Activities

A final report is in preparation.

3. Other Comments

None.

Table 1. Financial Status as of April 26, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$237,126.00
Total Cost in Current Period	\$939.47
Previously Billed Total	\$166,202.37
Total Billed to Date	\$167,141.84
Budget Remaining	\$69,984.16
Percent Expended	70.49%



RECEIVED INVOICE

JUN 21 2019

Environmental Department

INVOICE NUMBER: 51438148
INVOICE DATE: 05/08/19
BILL THROUGH DATE: 04/28/19
INVOICE DUE DATE: 06/20/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
PO Number 55117899 L.I. 000045

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	8.00	\$110.00 ✓	\$880.00
Chang Lee, Belasi A.	19.00	\$147.00 ✓	\$2,793.00
Cohen, Robert M.	2.00	\$197.00 ✓	\$394.00
Parthling, Pinangsysa	1.25	\$68.00 ✓	\$85.00
Paugh, Christina M.	1.50	\$100.00 ✓	\$150.00
Rich, Peter A.	23.00	\$196.00 ✓	\$4,508.00
TOTAL LABOR	54.75		\$8,810.00

INVOICE TOTAL

SES 1118310014 fax 38041171

Line Item 5 - Remediation Activities

\$8,810.00
OK APB
C29632
6/26/19

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51438148</u>
COMPANY CODE.: SCOO	COST CENTER <u>562102</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

6-26-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 011674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51438148
INVOICE DATE: 06/06/19
BILL THROUGH DATE: 04/28/19
INVOICE DUE DATE: 08/20/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47889
CURRENCY: USD

Contract Reference:
 PO Number 55117899 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services
TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	8.00	\$110.00	\$880.00
Chang Lee, Belsai A.	19.00	\$147.00	\$2,793.00
Cohen, Robert M.	2.00	\$197.00	\$394.00
Parindng, Phangsya	1.25	\$68.00	\$85.00
Paugh, Christina M.	1.50	\$100.00	\$150.00
Rich, Peter A.	23.00	\$196.00	\$4,508.00
TOTAL LABOR	64.75		\$8,810.00
TOTAL TASK 01			\$8,810.00

INVOICE TOTAL **\$8,810.00**

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51438148
INVOICE DATE: 05/08/19
BILL THROUGH DATE: 04/28/19
INVOICE DUE DATE: 06/20/19
TERMS: NET 45
PROJECT NUMBER: 117-2804014

PROJECT	117-2804014	Remediation Design and Related Support Services	
TASK	01	Remediation Design and Related Support Services	
EMPLOYEE NAME	DATE	HOURS	
Byk, Jonathan J.	04-15-2019	4.50	
Byk, Jonathan J.	04-18-2019	2.50	
Byk, Jonathan J.	04-25-2019	1.00	
TOTAL FOR	Byk, Jonathan J.	8.00	
EMPLOYEE NAME	DATE	HOURS	
Chang Lee, Beisel A.	04-09-2019	4.00	
Chang Lee, Beisel A.	04-15-2019	1.00	
Chang Lee, Beisel A.	04-16-2019	3.00	
Chang Lee, Beisel A.	04-17-2019	1.00	
Chang Lee, Beisel A.	04-22-2019	4.00	
Chang Lee, Beisel A.	04-23-2019	6.00	
TOTAL FOR	Chang Lee, Beisel A.	19.00	
EMPLOYEE NAME	DATE	HOURS	
Cohen, Robert M.	04-26-2019	2.00	
TOTAL FOR	Cohen, Robert M.	2.00	
EMPLOYEE NAME	DATE	HOURS	
Parinding, Pinangsya	04-16-2019	0.25	
Parinding, Pinangsya	04-17-2019	0.75	
Parinding, Pinangsya	04-23-2019	0.25	
TOTAL FOR	Parinding, Pinangsya	1.25	
EMPLOYEE NAME	DATE	HOURS	
Paugh, Christina M.	04-22-2019	1.00	
Paugh, Christina M.	04-23-2019	0.50	
TOTAL FOR	Paugh, Christina M.	1.50	
EMPLOYEE NAME	DATE	HOURS	
Rich, Peter A.	04-03-2019	0.50	
Rich, Peter A.	04-04-2019	3.00	
Rich, Peter A.	04-05-2019	2.00	
Rich, Peter A.	04-08-2019	2.00	
Rich, Peter A.	04-08-2019	2.00	
Rich, Peter A.	04-10-2019	1.00	
Rich, Peter A.	04-15-2019	1.50	
Rich, Peter A.	04-16-2019	1.00	
Rich, Peter A.	04-17-2019	1.50	
Rich, Peter A.	04-16-2019	0.50	



TIMESHEET REPORT

INVOICE NUMBER: 51438148
INVOICE DATE: 05/08/19
BILL THROUGH DATE: 04/28/19
INVOICE DUE DATE: 06/20/19
TERMS: NET 45
PROJECT NUMBER: 117-2804014

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	04-19-2019	1.00
Rich, Peter A.	04-22-2019	2.00
Rich, Peter A.	04-23-2019	2.00
Rich, Peter A.	04-24-2019	1.50
Rich, Peter A.	04-25-2019	1.00
Rich, Peter A.	04-26-2019	0.50
TOTAL FOR Rich, Peter A.		<u>23.00</u>
TOTAL TASK 01		<u>54.75</u>

TOTAL LABOR HOURS **54.75**



TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

RECEIVED

TO: Anna Sullivan, JCP&L A FirstEnergy Company

JUN 21 2019

FROM: Robert Cohen

Environmental Department

DATE: June 21, 2019

SUBJECT: Progress Report for March 30, 2019 to April 26, 2019
First Energy Corporation PO# 55117699, Line Item #00004
Tetra Tech Project No. 117-2804014 "Remediation Design and Related Support Services"
Tetra Tech Invoice 51438148 (\$8,810.00)

1. Work Performed from March 30, 2019 to April 26, 2019

During the subject period, the following hours were recorded to this project: 8.0 hours by Jon Byk, 19.0 hours by Belssi Change, 2.0 hours by Bob Cohen, 1.25 hours by Pinangsyia Parinding, 1.5 hours by Christina Paugh, and 23.0 hours by Peter Rich. Work done included development of permit applications and plans and specifications for Site remediation.

2. Planned Activities

In addition to ongoing work to support the remediation design, we expect to perform analyses and provide onsite support related to New Jersey American Water Company plans to replace the sanitary sewer line along 11th Street near the Site.

3. Other Comments

None.

Table 1. Financial Status as of April 26, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$130,367.00
Total Cost in Current Period	\$8,810.00
Previously Billed Total	\$39,071.85
Total Billed to Date	\$47,881.85
Budget Remaining	\$82,485.15
Percent Expended	36.73%



INVOICE

INVOICE NUMBER: 51438149

INVOICE DATE: 05/06/19

BILL THROUGH DATE: 04/26/19

INVOICE DUE DATE: 06/20/19

TERMS: NET 45 NO DIS

RECEIVED

MAY 18 2019

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

Environmental Department

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:

Purchase Order # 55117699

Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	3.50	\$175.00	\$612.50
TOTAL LABOR	3.50		\$612.50
INVOICE TOTAL			\$612.50

8/21/19
 (29632
 5/22/19

SES 1118159113 FAX 38044575
 Line Item 1-LSRP Services

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51438149</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502762</u>
COST ELEMENT (GL ACCT.): <u>530100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>JH</u>	EMP. NO.: <u>297</u>

5-22-19

REMIT PAYMENT TO:

TETRA TECH, INC.

PO BOX 811674

DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51438149

INVOICE DATE: 05/06/19

BILL THROUGH DATE: 04/26/19

INVOICE DUE DATE: 06/20/19

TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:

Purchase Order # 55117699

Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight
TASK 01 Project Oversight

<u>EMPLOYEE NAME</u>	<u>HOURS</u>	<u>RATE</u>	<u>CURRENT AMOUNT</u>
Hosterman, Jeffrey L.	3.50	\$175.00	\$612.50
TOTAL LABOR	3.50		\$612.50
TOTAL TASK 01			\$612.50

=====

INVOICE TOTAL **\$612.50**

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 811874
DENVER, CO 80291-1874

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51438149
INVOICE DATE: 05/06/19
BILL THROUGH DATE: 04/26/19
INVOICE DUE DATE: 06/20/19
TERMS: NET 45 NO DIS
PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE	HOURS	
Hosterman, Jeffrey L.	03-04-2019	0.00	
Hosterman, Jeffrey L.	03-07-2019	0.00	
Hosterman, Jeffrey L.	04-09-2019	0.50	
Hosterman, Jeffrey L.	04-16-2019	1.00	
Hosterman, Jeffrey L.	04-17-2019	1.00	
Hosterman, Jeffrey L.	04-18-2019	0.50	
Hosterman, Jeffrey L.	04-22-2019	0.50	
TOTAL FOR	Hosterman, Jeffrey L.	3.50	
TOTAL TASK	01	3.50	
=====			
TOTAL LABOR HOURS		3.50	



RECEIVED
MAY 13 2019
Environmental Department

PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Monday, May 06, 2019
 Subject: Progress Report through April 26, 2019
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51438149

1. Work Performed through April 26, 2019

LSRP Support Services:

- Classification Exception Area (CEA) support.
- General correspondence.

2. Planned Activities:

- Supplemental remedial investigation support.
- Remedial action implementation support.
- Continuing LSRP support services.

Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through April 26, 2019

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$612.50		\$37,923.29	\$38,535.79	\$3,497.40	91.68%



INVOICE RECEIVED

JUN 21 2019

Environmental Department

INVOICE NUMBER: 51448718
INVOICE DATE: 06/03/19
BILL THROUGH DATE: 06/24/19
INVOICE DUE DATE: 07/18/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
PO Number 55117899 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	56.00 ✓	\$197.00 ✓	\$11,032.00
Cooper, Justin T.	4.00 ✓	\$110.00 ✓	\$440.00
Murley, Ryan C.	0.00	\$110.00	\$0.00
Scheffer, John D.	5.00 ✓	\$175.00 ✓	\$875.00
TOTAL LABOR	65.00		\$12,347.00

OTHER DIRECT COSTS

	CURRENT AMOUNT
Field Equipment-Supplies	\$379.08
Laboratory Services	\$730.00
TOTAL ODCs	\$1,109.08
G&A on ODC's	\$88.73

INVOICE TOTAL

SES 1118310037 fax 38041175
Lane Henke - Supplemental Bay Invest.

\$13,544.81
OR TFS
029632
6/26/19

APPROVAL STAMP	
P.O. NO. <u>5517699</u>	INV. NO. <u>51448718</u>
COMPANY CODE.: SCOO	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.):	<u>550100</u>
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

6-26-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51448718
INVOICE DATE: 08/03/19
BILL THROUGH DATE: 05/24/19
INVOICE DUE DATE: 07/18/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&LA FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07982

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 85-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 **Supplemental Bay Investigation Study - Great Egg Harbor Bay**
TASK 01 **Supplemental Bay Investigation Study - Great Egg Harbor Bay**

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	56.00	\$197.00	\$11,032.00
Cooper, Justin T.	4.00	\$110.00	\$440.00
Murley, Ryan C.	0.00	\$110.00	\$0.00
Schaffer, John D.	5.00	\$175.00	\$875.00
TOTAL LABOR	65.00		\$12,347.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment-Supplies	\$379.08
Laboratory Services	\$730.00
TOTAL ODCs	\$1,109.08
G&A on ODC's	\$89.73
TOTAL TASK 01	\$13,544.81

INVOICE TOTAL **\$13,544.81**

REMIT PAYMENT TO:
TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51448718
INVOICE DATE: 08/03/19
BILL THROUGH DATE: 05/24/19
INVOICE DUE DATE: 07/18/19
TERMS: NET 45
PROJECT NUMBER: 117-2804015

PROJECT	117-2804015	Supplemental Bay Investigation Study - Great Egg Harbor Bay	
TASK	01	Supplemental Bay Investigation Study - Great Egg Harbor Bay	
EMPLOYEE NAME	DATE	HOURS	
Cohen, Robert M.	04-29-2019	1.00	
Cohen, Robert M.	04-30-2019	2.00	
Cohen, Robert M.	05-01-2019	2.00	
Cohen, Robert M.	05-02-2019	4.00	
Cohen, Robert M.	05-03-2019	4.00	
Cohen, Robert M.	05-06-2019	8.00	
Cohen, Robert M.	05-07-2019	8.00	
Cohen, Robert M.	05-08-2019	8.00	
Cohen, Robert M.	05-09-2019	4.00	
Cohen, Robert M.	05-10-2019	2.00	
Cohen, Robert M.	05-13-2019	1.00	
Cohen, Robert M.	05-14-2019	1.00	
Cohen, Robert M.	05-15-2019	1.00	
Cohen, Robert M.	05-16-2019	4.00	
Cohen, Robert M.	05-17-2019	4.00	
Cohen, Robert M.	05-20-2019	3.00	
Cohen, Robert M.	05-21-2019	4.00	
Cohen, Robert M.	05-22-2019	1.00	
TOTAL FOR	Cohen, Robert M.	66.00	
EMPLOYEE NAME	DATE	HOURS	
Cooper, Justin T.	05-15-2019	2.00	
Cooper, Justin T.	05-16-2019	2.00	
TOTAL FOR	Cooper, Justin T.	4.00	
EMPLOYEE NAME	DATE	HOURS	
Murley, Ryan C.	03-07-2019	0.00	
Murley, Ryan C.	03-08-2019	0.00	
Murley, Ryan C.	03-11-2019	0.00	
Murley, Ryan C.	03-12-2019	0.00	
Murley, Ryan C.	03-14-2019	0.00	
Murley, Ryan C.	03-15-2019	0.00	
EMPLOYEE NAME	DATE	HOURS	
Schaffer, John D.	05-22-2019	1.00	
Schaffer, John D.	05-23-2019	1.00	
Schaffer, John D.	05-24-2019	3.00	
TOTAL FOR	Schaffer, John D.	5.00	
TOTAL TASK	01	69.00	



TIMESHEET REPORT

INVOICE NUMBER: 51448718
INVOICE DATE: 08/03/18
BILL THROUGH DATE: 05/24/18
INVOICE DUE DATE: 07/18/18
TERMS: NET 45
PROJECT NUMBER: 117-2804015

TOTAL LABOR HOURS

65.00

Table 2. Project status summary.

FMGP Site in Ocean City, NJ Recent/Ongoing Work Status	Action Items	Due Date	Status
Periodic LNAPL recovery from MW-10B	Purged in May 2019	ongoing	Additional purging will occur periodically.
Monitoring well abandonment [MW-H4] and rehabilitation [MW-E2] and additional wells damaged by City paving contractors.	Ban on opening streets that were paved in past few years. Revisit with City.	???	Need to address additional monitoring wells damaged by City paving contractors in addition to MW-H4.
RAWP work	Draft IRAWP submitted to NJDEP.	March 2019	Develop final RAWP, plans, specs, etc.
Remedial action implementation.	Our remedial action regulatory deadline is 5/6/21. The mandatory deadline is two years after the date of the regulatory deadline.		RAWP in preparation and review.

JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement	ARRCS or Tech Rule Citation	Action Item	Due Date	Status
The person responsible for conducting the remediation shall: 1. Provide site specific information and documents related to the remediation at a site or area of concern when requested by the Department, including information pertaining to field sampling activities; and 2. Within 14 days prior to commencing field activities associated with the remedial action, provide notification to any local property owners and tenants who reside within 200 feet of the contaminated site, and to the government entities noted in (h)2iii below. The notification shall summarize site conditions and describe the activities that are to take place to remediate the site and shall either be in the form of written correspondence or the posting of a sign visible to the public, which shall be located on the boundaries of the contaminated site. The person responsible for conducting the remediation shall also: i. Send a notification letter to each local property owner and tenant to whom notification was sent pursuant to (h)2 above that describes the current condition and progress of the remediation every two years until the required remediation is completed and the final remediation document is filed with the Department; ii. if a sign is	7:26C-1.7(h) Notifications and Public Outreach	Update and expand (as delineation requires) notification letters to owners/tenants within 200 feet of contaminated site every two years. Submit letter, list of recipients, fact sheet, and advertisement	Notification letters were sent to local government entities in August 2009, August 2011, and August 2013. An updated Fact Sheet was prepared in October 2013.	Updated notification letters were sent out in August 2015.

ARRCS or Tech Rule Citation	Action Item to government entities.	Due Date	Status
<p>JCP&L FMGP Site in Ocean City, New Jersey NIDEP Submittal Status Action Items Requirement</p> <p>utilized, post and maintain the sign until such time as the required remediation is completed and the final remediation document is filed with the Department; and iii. Submit one copy of the notification letter and list of recipients required in (h)2i above or a photograph of the notification sign required in (h)2ii above, and one copy of the fact sheet required in (l)1 below and the display advertisement required in (l)3 below to the local government entities as follows: (1) The municipal clerk of each municipality in which the site is located; and (2) The county health department and the local health agency.</p> <p>(l) Except as provided in (l)4ii and (m) below, if contamination migrates off site in any environmental medium, the person responsible for conducting the remediation shall prepare, distribute and publish a fact sheet, which shall include a description of the site's industrial history, source(s) of contamination, description of contamination, current remedial status, proposed remedial actions with a schedule, extent of contamination, actions performed to minimize the impact to the public, and a list of online resources for information about the contaminants, as follows: 1. Prepare and distribute the fact sheet within 14 days after the determination that contamination has migrated off site; 2. Distribute the fact sheet to each owner of real property, as shown on the current municipal tax duplicate, and the tenants of those properties, located within 200 feet of the site boundary and to the following government entities: i. The municipal clerk of each municipality in which the site is located; and ii. The county health department and local health agency; 3. Publish the fact sheet, or a fact sheet template available at www.nj.gov/dep/srp/srra/guidance that has been updated with site specific information, as a display advertisement in a daily or weekly newspaper of general circulation in the vicinity of the site, within 30 days after the determination that contamination has migrated off site; - For soil contamination: i. The fact sheet shall be updated to include current contaminant extent, redistributed to the parties listed in (l)2 above and republished as described in (l)3i above within 90 days of complete delineation; and ii. If the contamination has affected only one adjoining property and the</p>	<p>Distribute and publish a fact sheet</p>	<p>A fact sheet was distributed in 2009 and revised in 2013. An updated Fact Sheet was distributed with completion of RI report.</p>	<p>A fact sheet was sent out with the CEA/WRR form to the public and government officials in April 2016.</p>

ARRCS of Tech Rule Citation	Action Item	Due Date	Status
<p>JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement</p> <p>affected contaminated medium is limited to the soil, the person responsible for conducting the remediation shall notify only that adjoining property owner and tenant in writing. The notice shall describe the nature and extent of the contamination; and 5. For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area.</p>	<p>For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area.</p>		
7:26C-1.7(i)(5) 7:26C-7.3(d)	Mail a copy of the CEA/WRA Fact Sheet form to listed government entities and property owners within footprint of CEA/WRA.	Distribute when DEP establishes a CEA. The CEA/WRA Form was mailed to the public and government officials in April 2016.	Public notification was performed in April 2016.
7:26C-4 Fees and Oversight Costs	Pay Annual Remediation Fee of \$6,400	Annually.	Paid.
7:26E-1.10	Update form with additional LNAPL recovery information		Data incorporated in the RIR; updated LNAPL reporting form is not required.
7:26E-1.14(a)(3)	Last updated in July 2014.	June 2019 - an updated well search is being prepared.	Update every two years.

<p>JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement Update Receptor Evaluation Form</p>	<p>ARRCS or Tech Rule Citation 7:26C-1.12</p>	<p>Action Item Update Receptor Evaluation Form with submission of the RI Report.</p>	<p>Due Date Concurrent with submission of RI Report.</p>	<p>Status Submitted online to NJDEP with RIR on 5/3/2016.</p>
--	--	---	---	--



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

RECEIVED

TO: Anna Sullivan, JCP&L A FirstEnergy Company

JUN 21 2019

FROM: Robert Cohen

Environmental Department

DATE: June 21, 2019

SUBJECT: Progress Report for May 2019
First Energy Corporation PO# 55117699, Line Item #00005
Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
Tetra Tech Invoices 51448718 (\$13,544.81)

1. Work Performed from April 27, 2019 to May 24, 2019

Hours worked during this period included: Bob Cohen 56.0 hours, Justin Cooper 4.0 hours, and John Schaffer 5.0 hours. Our work involved development of maps, tables, and text for the SI report.

2. Planned Activities

A final report is in preparation.

3. Other Comments

None.

Table 1. Financial Status as of May 24, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$237,126.00
Total Cost in Current Period	\$13,544.81
Previously Billed Total	\$167,141.84
Total Billed to Date	\$180,686.65
Budget Remaining	\$56,439.35
Percent Expended	76.20%



RECEIVED INVOICE

JUN 21 2019

Environmental Department

INVOICE NUMBER: 51448719
INVOICE DATE: 06/03/19
BILL THROUGH DATE: 06/24/19
INVOICE DUE DATE: 07/18/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

Contract Reference:
PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	72.50 ✓	\$110.00 ✓	\$7,975.00
Chang Lee, Beata A.	13.50 ✓	\$147.00 ✓	\$1,984.50
Cohen, Robert M.	29.00 ✓	\$197.00 ✓	\$5,713.00
Cooper, Justin T.	32.00 ✓	\$110.00 ✓	\$3,520.00
Kessel, Kristine N.	4.00 ✓	\$198.00 ✓	\$784.00
Laforet, Zachary W.	12.25 ✓	\$77.00 ✓	\$943.25
Merta, Priscilla A.	5.50 ✓	\$68.00 ✓	\$374.00
Parinding, Pinangaya	1.25 ✓	\$68.00 ✓	\$85.00
Paugh, Christina M.	7.00 ✓	\$100.00 ✓	\$700.00
Rich, Peter A.	22.50 ✓	\$198.00 ✓	\$4,410.00
TOTAL LABOR	199.50		\$26,488.75 ✓

OTHER DIRECT COSTS

Field Equipment Consumable		CURRENT AMOUNT
Field Equipment-Rental		\$52.21
Incidental Travel		\$58.74
TOTAL ODCs		\$109.35
G&A on ODC's		\$220.30
INVOICE TOTAL		\$26,717.83

SES 1118310025 tax 38041172

Line item 5- Remediation Activities

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51448719</u>
COMPANY CODE.: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550800</u>	
ORDER: <u>30010216</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

626-19

OK ADS
C29032
6/26/19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51448719
INVOICE DATE: 06/03/19
BILL THROUGH DATE: 06/24/19
INVOICE DUE DATE: 07/18/19
TERMS: NET 45
PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	DATE	HOURS
Byk, Jonathan J.	04-29-2019	6.00
Byk, Jonathan J.	04-30-2019	4.75
Byk, Jonathan J.	05-01-2019	4.00
Byk, Jonathan J.	05-03-2019	7.00
Byk, Jonathan J.	05-06-2019	3.50
Byk, Jonathan J.	05-08-2019	8.00
Byk, Jonathan J.	06-13-2019	2.25
Byk, Jonathan J.	05-14-2019	2.75
Byk, Jonathan J.	05-15-2019	4.00
Byk, Jonathan J.	05-17-2019	8.00
Byk, Jonathan J.	05-20-2019	8.00
Byk, Jonathan J.	05-21-2019	8.00
Byk, Jonathan J.	05-22-2019	4.00
Byk, Jonathan J.	05-23-2019	2.25
TOTAL FOR Byk, Jonathan J.		72.50

EMPLOYEE NAME	DATE	HOURS
Chang Lee, Belsel A.	04-30-2019	2.00
Chang Lee, Belsel A.	05-14-2019	3.00
Chang Lee, Belsel A.	05-21-2019	5.50
Chang Lee, Belsel A.	05-23-2019	1.50
Chang Lee, Belsel A.	05-24-2019	1.50
TOTAL FOR Chang Lee, Belsel A.		13.50

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	05-02-2019	2.00
Cohen, Robert M.	05-03-2019	1.00
Cohen, Robert M.	05-09-2019	2.00
Cohen, Robert M.	05-10-2019	1.00
Cohen, Robert M.	06-13-2019	4.00
Cohen, Robert M.	05-14-2019	4.00
Cohen, Robert M.	05-15-2019	4.00
Cohen, Robert M.	05-16-2019	2.00
Cohen, Robert M.	05-17-2019	2.00
Cohen, Robert M.	05-20-2019	2.00
Cohen, Robert M.	05-21-2019	2.00
Cohen, Robert M.	05-22-2019	3.00
TOTAL FOR Cohen, Robert M.		29.00



TIMESHEET REPORT

INVOICE NUMBER: 51448719
 INVOICE DATE: 08/03/19
 BILL THROUGH DATE: 05/24/19
 INVOICE DUE DATE: 07/18/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804014

EMPLOYEE NAME	DATE	HOURS
Cooper, Justin T.	05-19-2019	2.00
Cooper, Justin T.	05-20-2019	15.00
Cooper, Justin T.	05-21-2019	8.00
Cooper, Justin T.	05-22-2019	7.00
TOTAL FOR Cooper, Justin T.		32.00
EMPLOYEE NAME	DATE	HOURS
Kessel, Kristina N.	05-19-2019	2.00
Kessel, Kristina N.	05-20-2019	1.00
Kessel, Kristina N.	05-21-2019	1.00
TOTAL FOR Kessel, Kristina N.		4.00
EMPLOYEE NAME	DATE	HOURS
Laforet, Zachary W.	04-30-2019	0.25
Laforet, Zachary W.	05-01-2019	11.00
Laforet, Zachary W.	05-02-2019	0.25
Laforet, Zachary W.	05-15-2019	0.25
Laforet, Zachary W.	05-17-2019	0.50
TOTAL FOR Laforet, Zachary W.		12.25
EMPLOYEE NAME	DATE	HOURS
Merta, Priscilla A.	05-13-2019	1.50
Merta, Priscilla A.	05-16-2019	0.60
Merta, Priscilla A.	05-21-2019	3.50
TOTAL FOR Merta, Priscilla A.		5.50
EMPLOYEE NAME	DATE	HOURS
Parinding, Pinangsyra	05-14-2019	0.25
Parinding, Pinangsyra	05-20-2019	1.00
TOTAL FOR Parinding, Pinangsyra		1.25
EMPLOYEE NAME	DATE	HOURS
Paugh, Christina M.	05-01-2019	1.00
Paugh, Christina M.	05-16-2019	0.50
Paugh, Christina M.	05-17-2019	0.50
Paugh, Christina M.	05-20-2019	3.00
Paugh, Christina M.	05-21-2019	1.00
Paugh, Christina M.	05-24-2019	1.00
TOTAL FOR Paugh, Christina M.		7.00
EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	04-29-2019	0.50
Rich, Peter A.	05-01-2019	2.00



TIMESHEET REPORT

INVOICE NUMBER: 51448719
INVOICE DATE: 06/03/19
BILL THROUGH DATE: 05/24/19
INVOICE DUE DATE: 07/18/19
TERMS: NET 45
PROJECT NUMBER: 117-2804014

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	05-02-2019	2.00
Rich, Peter A.	05-06-2019	1.00
Rich, Peter A.	05-07-2019	1.00
Rich, Peter A.	05-08-2019	0.50
Rich, Peter A.	05-09-2019	0.50
Rich, Peter A.	05-10-2019	0.50
Rich, Peter A.	05-13-2019	1.00
Rich, Peter A.	05-14-2019	2.00
Rich, Peter A.	05-15-2019	2.00
Rich, Peter A.	05-16-2019	2.00
Rich, Peter A.	05-17-2019	1.00
Rich, Peter A.	05-20-2019	2.50
Rich, Peter A.	05-21-2019	1.50
Rich, Peter A.	05-22-2019	1.50
Rich, Peter A.	05-23-2019	0.50
Rich, Peter A.	05-24-2019	0.50
TOTAL FOR Rich, Peter A.		22.50
TOTAL TASK 01		199.50

TOTAL LABOR HOURS **199.50**



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: June 21, 2019
SUBJECT: Progress Report for April 27, 2019 to May 24, 2019
First Energy Corporation PO# 55117699, Line Item #00004
Tetra Tech Project No. 117-2804014 "Remediation Design and Related Support Services"
Tetra Tech Invoice 51448719 (\$26,717.93)

RECEIVED
JUN 21 2019
Environmental Department

1. Work Performed from April 26, 2019 to May 24, 2019

During the subject period, the following hours were recorded to this project: 72.5 hours by Jon Byk, 13.5 hours by Belssi Change, 29.0 hours by Bob Cohen, 32.0 hours by Justin Cooper, 4.0 hours by Kristine Kessel, 12.25 hours by Zach Laforet, 5.5 hours by Priscilla Merta, 1.25 hours by Pinangsyia Parinding, 7.0 hours by Christina Paugh, and 22.5 hours by Peter Rich. Work done included continued development of permit applications and plans and specifications for Site remediation, and LNAPL recovery at MW-10B.

Additional work that was not included in the original scope for this task included field sampling of well water along Haven Avenue to support NPDES permit application (after NJAWC indicated that it would not accept treatment plant effluent), evaluation and modeling analysis of dewatering impacts associated with NJAWC's planned 11th Street sanitary sewer replacement work east of West Avenue, assessment of treatment options if contaminated groundwater is encountered by the dewatering, and field monitoring and chemical analyses associated with pilot testing of the dewatering system. All hours invoiced by Justin Cooper and Zach Laforet, and nearly all hours invoiced by Bob Cohen, were to perform these add-on tasks.

2. Planned Activities

We will continue working on permits, plans, and specifications for the remediation system.

3. Other Comments

None.

Table 1. Financial Status as of May 24, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$130,367.00
Total Cost in Current Period	\$26,717.93
Previously Billed Total	\$47,881.85
Total Billed to Date	\$74,599.78
Budget Remaining	\$55,767.22
Percent Expended	57.22%



INVOICE

INVOICE NUMBER: 51448720
 INVOICE DATE: 06/03/19
 BILL THROUGH DATE: 05/24/19
 INVOICE DUE DATE: 07/18/19
 TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47869
 CURRENCY: USD

Contract Reference:
 Purchase Order # 55117689
 Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	7.00 ✓	\$175.00 ✓	\$1,225.00
TOTAL LABOR	7.00		\$1,225.00
INVOICE TOTAL			\$1,225.00

OKATS
 C29632
 8/8/19

SES: 1118464742 Fax: 8049759

Line Item 1 - CSR Services

APPROVAL STAMP	
P.O. NO. 55117699	INV. NO. 51448720
COMPANY CODE.: SCOO	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT): <u>350100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>292</u>

8-9-19

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51448720
 INVOICE DATE: 06/03/19
 BILL THROUGH DATE: 05/24/19
 INVOICE DUE DATE: 07/18/19
 TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 Purchase Order # 55117699
 Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight
 TASK 01 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	7.00	\$175.00	\$1,225.00
TOTAL LABOR	7.00		\$1,225.00
TOTAL TASK 01			\$1,225.00

=====

INVOICE TOTAL \$1,225.00

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51448720
INVOICE DATE: 06/03/19
BILL THROUGH DATE: 05/24/19
INVOICE DUE DATE: 07/18/19
TERMS: NET 45 NO DIS
PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE	HOURS	
Hosterman, Jeffrey L.	05-08-2019	0.50	
Hosterman, Jeffrey L.	05-20-2019	3.50	
Hosterman, Jeffrey L.	05-21-2019	1.50	
Hosterman, Jeffrey L.	05-22-2019	1.50	
TOTAL FOR	Hosterman, Jeffrey L.	7.00	
TOTAL TASK	01	7.00	
=====			
TOTAL LABOR HOURS		7.00	



RECEIVED
JUN 11 2019
Environmental Department

PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Tuesday, June 04, 2019
 Subject: Progress Report through May 24, 2019
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51448720

1. Work Performed through May 24, 2019

LSRP Support Services:

- GP-11 permit application support.
- Classification Exception Area (CEA) support.
- General correspondence.

2. Planned Activities:

- Supplemental remedial investigation support.
- Remedial action implementation support.
- Continuing LSRP support services.

Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through May 24, 2019

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$1,225.00		\$38,535.79	\$39,760.79	\$2,272.40	94.59%



RECEIVED
JUL 02 2019
Environmental Department

INVOICE

INVOICE NUMBER: 51459769
INVOICE DATE: 06/28/19
BILL THROUGH DATE: 06/28/19
INVOICE DUE DATE: 08/12/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Schaffer, John D.	13.00	\$175.00	\$2,275.00
TOTAL LABOR	13.00		\$2,275.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Incidental Travel	\$90.81
Lodging	\$107.75
Subcontractor-External	\$47,600.00
Vehicle Rental	\$99.68
TOTAL ODCs	\$47,898.24
G&A on ODC's	\$3,808.00
INVOICE TOTAL	\$53,981.24

SES 1118336830 fax 38042822

Great Egg Harbor - Supplemental Bay Invest.

APPROVAL STAMP

P.O. NO. 55117699 INV. NO. 514 59769

COMPANY CODE: 8000 COST CENTER 502702

COST ELEMENT (OL ACCT): 550100

ORDER: 3001026 WEB: ✓

APPROVED BY: [Signature] EMP. NO.: 297

*OK IRS
C29632
7/5/19*

7-5-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911874
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51459769
INVOICE DATE: 06/28/19
BILL THROUGH DATE: 06/28/19
INVOICE DUE DATE: 08/12/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay
TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Schaffer, John D.	13.00	\$175.00	\$2,275.00
TOTAL LABOR	13.00		\$2,275.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Incidental Travel	\$90.81
Lodging	\$107.75
Subcontractor-External	\$47,600.00
Vehicle Rental	\$90.68
TOTAL ODCs	\$47,898.24
G&A on ODC's	\$3,808.00
TOTAL TASK 01	\$53,981.24

INVOICE TOTAL **\$53,981.24**

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51459769
INVOICE DATE: 06/28/19
BILL THROUGH DATE: 06/28/19
INVOICE DUE DATE: 08/12/19
TERMS: NET 45
PROJECT NUMBER: 117-2804015

PROJECT	117-2804015	Supplemental Bay Investigation Study - Great Egg Harbor Bay	
TASK	01	Supplemental Bay Investigation Study - Great Egg Harbor Bay	
EMPLOYEE NAME	DATE	HOURS	
Schaffer, John D.	05-28-2019	4.00	
Schaffer, John D.	05-29-2019	5.00	
Schaffer, John D.	05-30-2019	4.00	
TOTAL FOR	Schaffer, John D.	<u>13.00</u>	
TOTAL TASK	01	13.00	
=====			
TOTAL LABOR HOURS		<u>13.00</u> ✓	



TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: July 2, 2019
SUBJECT: Progress Report for **June 2019**
First Energy Corporation PO# 55117699, Line Item #00005
Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
Tetra Tech Invoices **51459769 (\$53,981.24)**

1. Work Performed from May 25, 2019 to June 28, 2019

John Schaffer worked 13.0 hours on the updated ecological evaluation. Costs for the barge drilling work by Uni-Tech (\$47,600) are included in this invoice. I mistakenly believed that the Uni-Tech costs were submitted a few months ago and apologize for the delay. Your expeditious processing to allow payment of their invoice will be greatly appreciated.

2. Planned Activities

A draft final report was submitted for review on June 27, 2019.

3. Other Comments

A request for additional funding for this task was also submitted on June 27, 2019.

Table 1. Financial Status as of June 28, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$237,126.00
Total Cost in Current Period	\$53,981.24
Previously Billed Total	\$180,686.65
Total Billed to Date	\$234,667.89
Budget Remaining	\$2,458.11
Percent Expended	98.96%



INVOICE

INVOICE NUMBER: 51460556
 INVOICE DATE: 07/08/19
 BILL THROUGH DATE: 06/28/19
 INVOICE DUE DATE: 08/22/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 000045

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	47.75	\$110.00	\$5,252.50
Chang Lee, Belssi A.	6.50	\$147.00	\$955.50
Cohen, Robert M.	34.50	\$197.00	\$6,796.50
Paugh, Christina M.	23.00	\$100.00	\$2,300.00
Rich, Peter A.	24.00	\$196.00	\$4,704.00
TOTAL LABOR	135.75		\$20,008.50
OTHER DIRECT COSTS			CURRENT AMOUNT
Field Equipment-Rental			\$166.21
Field Supplies			\$18.33
Incidental Travel			\$105.51
Lodging			\$258.00
Lodging Tax			\$37.74
Meals-Employee Meals			\$44.81
Mileage (unit)			\$185.80
Permits			\$885.00
Postage/Shipping			\$8.35
TOTAL ODCs			\$1,709.55
G&A on ODC's			\$14.77
INVOICE TOTAL			\$21,732.82

REMIT PAYMENT TO:

TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51460556
 INVOICE DATE: 07/08/19
 BILL THROUGH DATE: 06/28/19
 INVOICE DUE DATE: 08/22/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services
 TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	47.75	\$110.00 ✓	\$5,252.50
Chang Lee, Belssi A.	6.50	\$147.00 ✓	\$955.50
Cohen, Robert M.	34.50	\$197.00 ✓	\$6,796.50
Paugh, Christina M.	23.00	\$100.00 ✓	\$2,300.00
Rich, Peter A.	24.00	\$196.00 ✓	\$4,704.00
TOTAL LABOR	135.75 ✓		\$20,008.50

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment-Rental	\$166.21 ✓
Field Supplies	\$18.33 ✓
Incidental Travel	\$105.51 ✓
Lodging	\$258.00 ✓
Lodging Tax	\$37.74 ✓
Meals-Employee Meals	\$44.81 ✓
Mileage (unit)	\$185.60 ✓
Permits	\$885.00 ✓
Postage/Shipping	\$8.35 ✓
TOTAL ODCs	\$1,709.55
G&A on ODC's	\$14.77
TOTAL TASK 01	\$21,732.82

\$14.77 = 0.08 x []

INVOICE TOTAL

\$21,732.82

OK AFS
 029032
 7/24/19
 See Attachment
 Stamp Next
 Page →



INVOICE TASK DETAIL

INVOICE NUMBER: 51460556
INVOICE DATE: 07/08/19
BILL THROUGH DATE: 08/28/19
INVOICE DUE DATE: 08/22/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47869
CURRENCY: USD

For 8046663

Doc.: 1118414879

Line Item 5 - Remediation Activities \$ 21,782.82

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51460556</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

7-26-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 811674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51460566
 INVOICE DATE: 07/08/19
 BILL THROUGH DATE: 06/28/19
 INVOICE DUE DATE: 08/22/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	DATE	HOURS
Byk, Jonathan J.	05-28-2019	3.00
Byk, Jonathan J.	05-29-2019	1.50
Byk, Jonathan J.	05-30-2019	2.75
Byk, Jonathan J.	05-31-2019	7.50
Byk, Jonathan J.	06-03-2019	2.25
Byk, Jonathan J.	06-04-2019	5.25
Byk, Jonathan J.	06-05-2019	4.50
Byk, Jonathan J.	06-06-2019	1.50
Byk, Jonathan J.	06-07-2019	5.00
Byk, Jonathan J.	06-10-2019	2.50
Byk, Jonathan J.	06-11-2019	2.00
Byk, Jonathan J.	06-12-2019	4.00
Byk, Jonathan J.	06-13-2019	3.00
Byk, Jonathan J.	06-25-2019	2.00
Byk, Jonathan J.	06-28-2019	1.00
TOTAL FOR Byk, Jonathan J.		47.75

EMPLOYEE NAME	DATE	HOURS
Chang Lee, Belssi A.	05-28-2019	2.00
Chang Lee, Belssi A.	06-03-2019	2.00
Chang Lee, Belssi A.	06-07-2019	1.00
Chang Lee, Belssi A.	06-17-2019	1.00
Chang Lee, Belssi A.	06-26-2019	0.50
TOTAL FOR Chang Lee, Belssi A.		6.50

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	05-30-2019	4.00
Cohen, Robert M.	05-31-2019	6.00
Cohen, Robert M.	06-03-2019	3.00
Cohen, Robert M.	06-04-2019	3.00
Cohen, Robert M.	06-05-2019	1.00
Cohen, Robert M.	06-06-2019	2.00
Cohen, Robert M.	06-18-2019	2.00
Cohen, Robert M.	06-19-2019	2.00
Cohen, Robert M.	06-20-2019	8.00
Cohen, Robert M.	06-24-2019	0.50
Cohen, Robert M.	06-28-2019	3.00
TOTAL FOR Cohen, Robert M.		34.50



TIMESHEET REPORT

INVOICE NUMBER: 51460556
 INVOICE DATE: 07/08/19
 BILL THROUGH DATE: 06/28/19
 INVOICE DUE DATE: 08/22/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804014

EMPLOYEE NAME	DATE	HOURS
Paugh, Christina M.	05-28-2019	1.00
Paugh, Christina M.	05-29-2019	3.00
Paugh, Christina M.	05-31-2019	2.00
Paugh, Christina M.	06-05-2019	4.00
Paugh, Christina M.	06-07-2019	1.00
Paugh, Christina M.	06-10-2019	2.00
Paugh, Christina M.	06-11-2019	1.00
Paugh, Christina M.	06-14-2019	2.00
Paugh, Christina M.	06-18-2019	3.00
Paugh, Christina M.	08-25-2019	4.00
TOTAL FOR Paugh, Christina M.		23.00
EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	05-28-2019	1.50
Rich, Peter A.	05-28-2019	0.50
Rich, Peter A.	05-30-2019	0.50
Rich, Peter A.	05-31-2019	0.50
Rich, Peter A.	06-03-2019	0.50
Rich, Peter A.	06-06-2019	1.00
Rich, Peter A.	06-07-2019	2.00
Rich, Peter A.	06-10-2019	1.00
Rich, Peter A.	06-13-2019	1.00
Rich, Peter A.	06-14-2019	1.00
Rich, Peter A.	06-17-2019	1.00
Rich, Peter A.	06-18-2019	1.00
Rich, Peter A.	06-19-2019	1.00
Rich, Peter A.	06-20-2019	6.00
Rich, Peter A.	06-21-2019	1.00
Rich, Peter A.	06-24-2019	1.50
Rich, Peter A.	06-25-2019	1.50
Rich, Peter A.	06-26-2019	0.50
Rich, Peter A.	06-28-2019	1.00
TOTAL FOR Rich, Peter A.		24.00
TOTAL TASK 01		135.75
TOTAL LABOR HOURS		135.75



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: July 9, 2019
SUBJECT: Progress Report for **May 25, 2019 to June 28, 2019**
First Energy Corporation PO# 55117699, Line Item #00004
Tetra Tech Project No. 117-2804014 "Remediation Design and Related Services"
Tetra Tech Invoice **51460556 (\$21,732.82)**

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JUL 17 2019
Environmental Department

1. Work Performed from May 24, 2019 to June 28, 2019

During the subject period, the following hours were recorded to this project: 47.75 hours by Jon Byk, 6.5 hours by Belssi Change, 34.5 hours by Bob Cohen, 15.0 hours by Justin Cooper, 23.0 hours by Christina Paugh, and 24.0 hours by Peter Rich. Work done included continued development of permit applications and plans and specifications for Site remediation.

Additional work that was not included in the original scope for this task included evaluation and modeling analysis of dewatering impacts associated with NJAWC's planned 11th Street sanitary sewer replacement work east of West Avenue, assessment of treatment options if contaminated groundwater is encountered by the dewatering, and field monitoring and chemical analyses associated with pilot testing of the dewatering system.

2. Planned Activities

We will continue working on permits, plans, and specifications for the remediation system.

3. Other Comments

None.

Table 2. Project status summary.

FMGP Site in Ocean City, NJ Recent/Ongoing Work Status	Action Items	Due Date	Status
Periodic LNAPL recovery from MW-10B	Quarterly purging.	ongoing	Additional purging will occur periodically.
Monitoring well abandonment [MW-H4] and rehabilitation [MW-E2] and additional wells damaged by City paving contractors.	Ban on opening streets that were paved in past few years. Revisit with City.	???	Need to address additional monitoring wells damaged by City paving contractors in addition to MW-H4.
Two shallow temporary wells at substation to assess LNAPL presence for VI concern	None.	4/1/2016 NOT NEEDED.	Access issues with substation owner. The RIR explains why these borings are not needed.
RAWP work	In progress.	January 2018	Coordination with Atlantic City Electric ongoing.

JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement	ARRCS or Tech Rule Citation	Action Item	Due Date	Status
The person responsible for conducting the remediation shall: 1. Provide site specific information and documents related to the remediation at a site or area of concern when requested by the Department, including information pertaining to field sampling activities; and 2. Within 14 days prior to commencing field activities associated with the remedial action, provide notification to any local property owners and tenants who reside within 200 feet of the contaminated site, and to the government entities noted in (h)2iii below. The notification shall summarize site conditions and describe the activities that are to take place to remediate the site and shall either be in the form of written correspondence or the posting of a sign visible to the public, which shall be located on the boundaries of the contaminated site. The person responsible for conducting the remediation shall also: i. Send a notification letter to each local property owner and tenant to whom notification was sent pursuant to (h)2 above that describes the current condition and progress of the remediation every two years until the required remediation is completed and the final remediation document is filed with the Department; ii. If a sign is	7-26C-1.7(h) Notifications and Public Outreach	Update and expand (as delineation requires) notification letters to owners/tenants within 200 feet of contaminated site every two years. Submit letter, list of recipients, fact sheet, and advertisement	Notification letters were sent to local government entities in August 2009, August 2011, and August 2013. An updated Fact Sheet was prepared in October 2013.	A public notification letter will be sent to property owners and residents within 200 feet of the project site in July 2019.

ARRCS or Tech Rule Citation	Action Item	Due Date	Status
<p>JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement</p> <p>affected contaminated medium is limited to the soil, the person responsible for conducting the remediation shall notify only that adjoining property owner and tenant in writing. The notice shall describe the nature and extent of the contamination; and 5. For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area.</p>			
<p>7:26C-1.7(l)(5) 7:26C-7.3(d)</p>	<p>Mail a copy of the CEA/WRA Fact Sheet form to listed government entities and property owners within footprint of CEA/WRA.</p>	<p>Distribute when DEP establishes a CEA. The CEA/WRA Form was mailed to the public and government officials in April 2016.</p>	<p>Public notification was performed in April 2016.</p>
<p>7:26C-4 Fees and Oversight Costs</p>	<p>Pay Annual Remediation Fee of \$6,400</p>	<p>March.</p>	<p>Paid.</p>
<p>7:26E-1.10</p>	<p>Update form with additional LNAPL recovery information</p>		<p>Updated LNAPL reporting form is not required.</p>
<p>7:26E-1.14(a)(3)</p>	<p>Last updated in July 2014.</p>	<p>ASAP</p>	<p>Update every two years.</p>
<p>7:26C-1.12</p>	<p>Update Receptor Evaluation Form with submission of the RI Report.</p>	<p>Concurrent with submission of RI Report.</p>	<p>Submitted online to NJDEP with RIR on 5/3/2016.</p>



INVOICE

INVOICE NUMBER: 51460557
INVOICE DATE: 07/08/19
BILL THROUGH DATE: 08/28/19
INVOICE DUE DATE: 08/22/19
TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4146514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

Contract Reference:
Purchase Order # 55117699
Line Item 00001

PROFESSIONAL SERVICES:

Fax # ~~801~~ 80467350 Dr: 118415351

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	0.50	\$175.00	\$87.50
TOTAL LABOR	0.50		\$87.50
INVOICE TOTAL			\$87.50

*OK MS
C29432
7-24-19*

Hosterman 1 - LSRP Services

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51460557</u>
COMPANY CODE: <u>8000</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>292</u>

7-26-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911874
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51460557

INVOICE DATE: 07/08/19

BILL THROUGH DATE: 06/28/19

INVOICE DUE DATE: 08/22/19

TERMS: NET 45 NO DIS

PROJECT NUMBER: 117-2804011

EMPLOYEE NAME	DATE	HOURS
Hosterman, Jeffrey L.	06-04-2019	0.50
TOTAL FOR Hosterman, Jeffrey L.		0.50
TOTAL TASK 01		0.50
TOTAL LABOR HOURS		0.50



RECEIVED
JUL 17 2019
Environmental Department

PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Tuesday, July 09, 2019
 Subject: Progress Report through June 28, 2019
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51460557

1. Work Performed through June 28, 2019

LSRP Support Services:

- General correspondence.

2. Planned Activities:

- Supplemental remedial investigation support.
- Remedial action implementation support.
- Continuing LSRP support services.

Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through June 28, 2019

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$87.50		\$39,760.79	\$39,848.29	\$2,184.90	94.80%



INVOICE

INVOICE NUMBER: 51471496

INVOICE DATE: 08/05/19

BILL THROUGH DATE: 07/26/19

INVOICE DUE DATE: 09/19/19

TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	10.25	\$110.00 ✓	\$1,127.50
Chang Lee, Belssi A.	20.50	\$147.00 ✓	\$3,013.50
Cohen, Robert M.	18.50	\$197.00 ✓	\$3,841.50
Paugh, Christina M.	3.50	\$100.00 ✓	\$350.00
Rich, Peter A.	17.50	\$196.00 ✓	\$3,430.00
TOTAL LABOR	71.25		\$11,762.50

OTHER DIRECT COSTS

	CURRENT AMOUNT
Shipping - Overnight	\$14.19 ✓
Subcontractor-External	\$7,200.00 ✓
TOTAL ODCs	\$7,214.19 ✓
G&A on ODC's	\$576.00

INVOICE TOTAL

\$19,552.69

Line item 5 - Remediation Activities

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51471496</u>
COMPANY CODE: <u>8000</u>	COST CENTER <u>502702</u>
COST ELEMENT (OL ACCT.): <u>550100</u>	
ORDER: <u>300 1026</u>	WBS: <u>✓</u>
APPROVED BY:	EMP. NO.:

JES: 1118517755 Fax 8042931

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911874
 DENVER, CO 80291-1874

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51471496
 INVOICE DATE: 08/05/19
 BILL THROUGH DATE: 07/26/19
 INVOICE DUE DATE: 09/18/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47869
 CURRENCY: USD

Contract Reference:
 PO Number 55117899 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services
 TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jon	10.25	\$110.00	\$1,127.50
Chang Lee, Belssi	20.50	\$147.00	\$3,013.50
Cohen, Robert	19.50	\$197.00	\$3,841.50
Paugh, Christina	3.50	\$100.00	\$350.00
Rich, Peter	17.50	\$198.00	\$3,430.00
TOTAL LABOR	71.25		\$11,762.50

OTHER DIRECT COSTS	CURRENT AMOUNT
Shipping - Overnight	\$14.19
Subcontractor-External	\$7,200.00
TOTAL ODCs	\$7,214.19
G&A on ODC's	\$578.00
TOTAL TASK 01	\$18,552.69

=====

INVOICE TOTAL **\$19,552.69**

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911874
 DENVER, CO 80291-1874

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51471496

INVOICE DATE: 08/05/19

BILL THROUGH DATE: 07/26/19

INVOICE DUE DATE: 09/19/19

TERMS: NET 45

PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services
TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	DATE	HOURS
Byk, Jonathan J.	07-16-2019	0.75
Byk, Jonathan J.	07-19-2019	4.00
Byk, Jonathan J.	07-25-2019	1.00
Byk, Jonathan J.	07-26-2019	4.50
TOTAL FOR Byk, Jonathan J.		10.25

EMPLOYEE NAME	DATE	HOURS
Chang Lee, Belssi A.	07-02-2019	1.50
Chang Lee, Belssi A.	07-03-2019	2.00
Chang Lee, Belssi A.	07-05-2019	3.00
Chang Lee, Belssi A.	07-08-2019	2.00
Chang Lee, Belssi A.	07-10-2019	2.00
Chang Lee, Belssi A.	07-15-2019	3.00
Chang Lee, Belssi A.	07-16-2019	4.00
Chang Lee, Belssi A.	07-17-2019	3.00
TOTAL FOR Chang Lee, Belssi A.		20.50

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	07-01-2019	1.00
Cohen, Robert M.	07-05-2019	5.00
Cohen, Robert M.	07-08-2019	1.00
Cohen, Robert M.	07-09-2019	1.00
Cohen, Robert M.	07-10-2019	3.00
Cohen, Robert M.	07-12-2019	1.00
Cohen, Robert M.	07-15-2019	1.50
Cohen, Robert M.	07-16-2019	3.00
Cohen, Robert M.	07-17-2019	1.00
Cohen, Robert M.	07-23-2019	1.00
Cohen, Robert M.	07-24-2019	1.00
TOTAL FOR Cohen, Robert M.		19.50

EMPLOYEE NAME	DATE	HOURS
Paugh, Christina M.	07-01-2019	0.50
Paugh, Christina M.	07-02-2019	1.50
Paugh, Christina M.	07-03-2019	1.50
TOTAL FOR Paugh, Christina M.		3.50

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	07-01-2019	1.00
Rich, Peter A.	07-02-2019	2.00



TIMESHEET REPORT

INVOICE NUMBER: 51471496

INVOICE DATE: 08/05/19

BILL THROUGH DATE: 07/26/19

INVOICE DUE DATE: 09/19/19

TERMS: NET 45

PROJECT NUMBER: 117-2804014

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	07-03-2019	2.00
Rich, Peter A.	07-08-2019	2.00
Rich, Peter A.	07-09-2019	1.00
Rich, Peter A.	07-10-2019	1.00
Rich, Peter A.	07-11-2019	1.00
Rich, Peter A.	07-15-2019	0.50
Rich, Peter A.	07-16-2019	1.50
Rich, Peter A.	07-18-2019	1.00
Rich, Peter A.	07-19-2019	0.50
Rich, Peter A.	07-22-2019	0.50
Rich, Peter A.	07-23-2019	1.00
Rich, Peter A.	07-24-2019	1.00
Rich, Peter A.	07-25-2019	1.00
Rich, Peter A.	07-26-2019	0.50
TOTAL FOR Rich, Peter A.		17.50
TOTAL TASK 01		71.25
=====		
TOTAL LABOR HOURS		71.25



NON LABOR DETAIL

INVOICE NUMBER: 51471498

INVOICE DATE: 08/05/19

BILL THROUGH DATE: 07/26/19

INVOICE DUE DATE: 09/19/19

TERMS: NET 45

PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 **Remediation Design and Related Support Services**
TASK 01 **Remediation Design and Related Support Services**

TYPE	VENDOR/ DESCRIPTION	AP INV NUM	PO NUMBER	AMOUNT
Shipping - Overnight	FEDERAL EXPRESS CORPORATION	6-582-69620		\$14.19
TOTAL	Shipping - Overnight			\$14.19

TYPE	VENDOR/ DESCRIPTION	AP INV NUM	PO NUMBER	AMOUNT
Subcontractor-External	DENNIS W SKLAR INC	2404-1		\$7,200.00
TOTAL	Subcontractor-External			\$7,200.00

TOTAL ODC's	01			\$7,214.19
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Total Project ODC's				\$7,214.19
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TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: August 11, 2019
SUBJECT: Progress Report for **June 29, 2019**
First Energy Corporation PO# 55117699, Line Item #00004
Tetra Tech Project No. 117-2804014 "Remediation Design and Related Services"
Tetra Tech Invoice **51471496 (\$19,552.69)**

1. Work Performed from June 29, 2019 to July 26, 2019

During the subject period, the following hours were recorded to this project: 10.25 hours by Jon Byk, 20.5 hours by Belssi Change, 19.5 hours by Bob Cohen, 3.5 hours by Christina Paugh, and 17.5 hours by Peter Rich. Work done included continued development of permit applications and plans and specifications for Site remediation.

2. Planned Activities

We will continue working on permits, plans, specifications, and remedial action bidding/contracting for construction of the remediation system.

3. Other Comments

None.

Table 1. Financial Status as of July 26, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$130,367.00
Total Cost in Current Period	\$19,552.69
Previously Billed Total	\$96,332.60
Total Billed to Date	\$115,885.29
Budget Remaining	\$14,481.71
Percent Expended	88.89%

Table 2. Project status summary.

FMGP Site in Ocean City, NJ Recent/Ongoing Work Status	Action Items	Due Date	Status
Periodic LNAPL recovery from MW-10B	Quarterly purging.	ongoing	Additional purging will occur periodically.
Monitoring well abandonment [MW-H4] and rehabilitation [MW-E2] and additional wells damaged by City paving contractors.	Ban on opening streets that were paved in past few years. Revisit with City.	???	Need to address additional monitoring wells damaged by City paving contractors in addition to MW-H4.
Two shallow temporary wells at substation to assess LNAPL presence for VI concern	None.	4/1/2016 NOT NEEDED.	Access issues with substation owner. The RIR explains why these borings are not needed.
RAWP work	In progress.	January 2018	Coordination with Atlantic City Electric ongoing.

JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement	ARRCS or Tech Rule Citation	Action Item	Due Date	Status
The person responsible for conducting the remediation shall: 1. Provide site specific information and documents related to the remediation at a site or area of concern when requested by the Department, including information pertaining to field sampling activities; and 2. Within 14 days prior to commencing field activities associated with the remedial action, provide notification to any local property owners and tenants who reside within 200 feet of the contaminated site, and to the government entities noted in (h)2iii below. The notification shall summarize site conditions and describe the activities that are to take place to remediate the site and shall either be in the form of written correspondence or the posting of a sign visible to the public, which shall be located on the boundaries of the contaminated site. The person responsible for conducting the remediation shall also: i. Send a notification letter to each local property owner and tenant to whom notification was sent pursuant to (h)2 above that describes the current condition and progress of the remediation every two years until the required remediation is completed and the final remediation document is filed with the Department; ii. If a sign is	7:26C-1.7(h) Notifications and Public Outreach	Update and expand (as delineation requires) notification letters to owners/tenants within 200 feet of contaminated site every two years. Submit letter, list of recipients, fact sheet, and advertisement	Notification letters were sent to local government entities in August 2009, August 2011, and August 2013. An updated Fact Sheet was prepared in October 2013.	A public notification letter will be sent to property owners and residents within 200 feet of the project site in July 2019.

ARRCS or Tech Rule Citation	Action Item	Due Date	Status
<p>JCP&L FMGP Site in Ocean City, New Jersey NJDEP Submittal Status Action Items Requirement</p> <p>affected contaminated medium is limited to the soil, the person responsible for conducting the remediation shall notify only that adjoining property owner and tenant in writing. The notice shall describe the nature and extent of the contamination; and 5. For ground water contamination, conduct the public notification pursuant to the requirements of N.J.A.C. 7:26C-7.3 when the Department establishes a ground water classification exception area.</p>			
<p>7:26C-1.7(l)(5) 7:26C-7.3(d)</p>	<p>Mail a copy of the CEA/WRA Fact Sheet form to listed government entities and property owners within footprint of CEA/WRA.</p>	<p>Distribute when DEP establishes a CEA. The CEA/WRA Form was mailed to the public and government officials in April 2016.</p>	<p>Public notification was performed in April 2016.</p>
<p>Annual Remediation Fee</p>	<p>Pay Annual Remediation Fee of \$6,400</p>	<p>March.</p>	<p>Paid.</p>
<p>LNAPL Reporting Form</p>	<p>Update form with additional LNAPL recovery information</p>		<p>Updated LNAPL reporting form is not required.</p>
<p>Update Well Search every two years to identify if new wells have been installed.</p>	<p>Last updated in July 2014.</p>	<p>ASAP</p>	<p>Update every two years.</p>
<p>Update Receptor Evaluation Form</p>	<p>Update Receptor Evaluation Form with submission of the RI Report.</p>	<p>Concurrent with submission of RI Report.</p>	<p>Submitted online to NJDEP with RIR on 5/3/2016.</p>



INVOICE

INVOICE NUMBER: 51471497
INVOICE DATE: 08/05/19
BILL THROUGH DATE: 07/28/19
INVOICE DUE DATE: 09/19/19
TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
Purchase Order # 55117699
Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	1.50	\$175.00	\$282.50
TOTAL LABOR	1.50		\$262.50
INVOICE TOTAL			\$262.50

JW/APS
C29632
8/14/19

Line Item 1 - LSRP Services

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51471497</u>
COMPANY CODE: <u>8000</u>	COST CENTER <u>50220</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <i>[Signature]</i>	EMP. NO.: <u>297</u>

8-1579

SES: 1118487876 Fax: 8041121

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911874
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51471497

INVOICE DATE: 08/05/19

BILL THROUGH DATE: 07/26/19

INVOICE DUE DATE: 09/19/19

TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:

Purchase Order # 55117699

Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 **Project Oversight**
TASK 01 **Project Oversight**

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeff	1.50	\$175.00	\$262.50
TOTAL LABOR	1.50		\$262.50
TOTAL TASK 01			\$262.50

=====

INVOICE TOTAL **\$262.50**

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51471497

INVOICE DATE: 08/05/19

BILL THROUGH DATE: 07/26/19

INVOICE DUE DATE: 09/19/19

TERMS: NET 45 NO DIS

PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE	HOURS	
Hosterman, Jeffrey L.	07-09-2019	0.50	
Hosterman, Jeffrey L.	07-15-2019	0.50	
Hosterman, Jeffrey L.	07-17-2019	0.50	
TOTAL FOR	Hosterman, Jeffrey L.	1.50	
TOTAL TASK	01	1.50	
=====			
TOTAL LABOR HOURS		1.50	



RECEIVED
AUG 12 2019
Environmental Department

PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
From: Jeff Hosterman/Bob Cohen
Date: Tuesday, August 06, 2019
Subject: Progress Report through July 26, 2019
Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
PO #55117699, Line Item 0001
Invoice No. 51471497

1. Work Performed through July 26, 2019

LSRP Support Services:

- General correspondence.
- Documentation of public notification support.

2. Planned Activities:

- Supplemental remedial investigation support.
- Remedial action implementation support.
- Continuing LSRP support services.

Table 1 – Budget Status for Ocean City Site – LSRP Support Services
PO #55117699, Line Item 0001 – Costs through July 26, 2019

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$262.50		\$39,848.29	\$40,110.79	\$1,922.40	95.43%



INVOICE

INVOICE NUMBER: 51474916
INVOICE DATE: 08/12/19
BILL THROUGH DATE: 07/26/19
INVOICE DUE DATE: 09/26/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

RECEIVED

AUG 20 2019

Contract Reference:
PO Number 55117699 L.I. 00005

Environmental Department

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	62.50	\$197.00	\$12,312.50
Schaffer, John D.	15.00	\$175.00	\$2,625.00
TOTAL LABOR	77.50		\$14,937.50

OTHER DIRECT COSTS	CURRENT AMOUNT
Incidental Travel	\$48.00
Laboratory Services	\$497.50
Shipping - Overnight	\$27.17
TOTAL ODCs	\$572.67

TYPE	CURRENT AMOUNT
Laboratory Services - Cove Corporation INV #2019-4-17A (4172.04 plus markup)	\$4,505.80
G&A on ODC's <i>Line Item 6 - Supplemental Bay Inv. Study</i>	\$39.80
INVOICE TOTAL	\$20,055.77

APPROVAL STAMP

P.O. NO. 55117699 INV. NO. 51474916
 COMPANY CODE: SCOO COST CENTER SD2702
 COST ELEMENT (GL ACCT.): 550100
 ORDER: 3001026 WBS: ✓
 APPROVED BY: [Signature] EMP. NO.: 297

*DN 115
C29632
8/22/19*

8-30-19

JES: 1118541658 Fax: 8044195

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51474916
INVOICE DATE: 08/12/19
BILL THROUGH DATE: 07/26/19
INVOICE DUE DATE: 09/26/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

Contract Reference:
PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay
TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert	62.50	\$197.00	\$12,312.50
Schaffer, John	15.00	\$175.00	\$2,625.00
TOTAL LABOR	77.50		\$14,937.50

OTHER DIRECT COSTS	CURRENT AMOUNT
Incidental Travel	\$48.00
Laboratory Services	\$497.50
Shipping - Overnight	\$27.17
TOTAL ODCs	\$572.67

TYPE	CURRENT AMOUNT
Laboratory Services - Cove Corporation INV #2019-4-17A (4172.04 plus markup)	\$4,505.80
G&A on ODC's	\$39.80
TOTAL TASK 01	\$20,055.77

=====

INVOICE TOTAL **\$20,055.77**

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51474916
 INVOICE DATE: 08/12/19
 BILL THROUGH DATE: 07/26/19
 INVOICE DUE DATE: 09/26/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804015

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	05-30-2019	2.00
Cohen, Robert M.	05-31-2019	2.00
Cohen, Robert M.	06-03-2019	2.00
Cohen, Robert M.	06-04-2019	1.00
Cohen, Robert M.	06-06-2019	2.00
Cohen, Robert M.	06-13-2019	4.00
Cohen, Robert M.	06-14-2019	6.00
Cohen, Robert M.	06-17-2019	4.00
Cohen, Robert M.	06-18-2019	3.00
Cohen, Robert M.	06-19-2019	3.00
Cohen, Robert M.	06-21-2019	4.00
Cohen, Robert M.	06-24-2019	6.00
Cohen, Robert M.	06-25-2019	6.00
Cohen, Robert M.	06-26-2019	6.50
Cohen, Robert M.	06-27-2019	5.50
Cohen, Robert M.	07-02-2019	2.00
Cohen, Robert M.	07-08-2019	1.00
Cohen, Robert M.	07-22-2019	1.00
Cohen, Robert M.	07-23-2019	1.50

TOTAL FOR Cohen, Robert M. 62.50

EMPLOYEE NAME	DATE	HOURS
Schaffer, John D.	06-03-2019	1.00
Schaffer, John D.	06-04-2019	1.00
Schaffer, John D.	06-05-2019	6.00
Schaffer, John D.	06-06-2019	4.00
Schaffer, John D.	06-07-2019	3.00

TOTAL FOR Schaffer, John D. 15.00

TOTAL TASK 01 77.50

=====

TOTAL LABOR HOURS 77.50



TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: August 12, 2019
SUBJECT: Progress Report for **July 2019**
First Energy Corporation PO# 55117699, Line Item #00005
Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
Tetra Tech Invoices **547916 (\$20,055.77)**

1. Work Performed from May 30, 2019 to July 26, 2019

This invoice includes withheld costs incurred prior to July because we had reached our task budget limit, which was recently increased. Thank you. In June, John Schaffer worked 15.0 hours on the updated ecological evaluation. Between May 30 and June 27, I worked 57.0 hours, mainly preparing the Final Bay SI Report. During July 2019, I worked 5.5 hours on this project. This invoice also includes the additional work performed by Cove Corporation needed to process the benthic macroinvertebrate samples.

2. Planned Activities

The final report was completed in early August and is being submitted to NJDEP and others.

3. Other Comments

Our task budget was increased to \$275,896.

Table 1. Financial Status as of July 26, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$275,896.00
Total Cost in Current Period	\$20,055.77
Previously Billed Total	\$237,126.00
Total Billed to Date	\$257,181.77
Budget Remaining	\$18,714.23
Percent Expended	93.22%



INVOICE

INVOICE NUMBER: 51481982

INVOICE DATE: 09/03/19

BILL THROUGH DATE: 08/23/19

INVOICE DUE DATE: 10/18/19

TERMS: NET 45

RECEIVED

SEP 23 2019

Environmental Department

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47869
CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 **Remediation Design and Related Support Services**

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	19.00	\$110.00 ✓	\$2,090.00
Chang Lee, Belssi A.	10.00	\$147.00 ✓	\$1,470.00
Cohen, Robert M.	17.00	\$197.00 ✓	\$3,349.00
Merta, Priscilla A.	0.50	\$68.00 ✓	\$34.00
Paugh, Christina M.	0.50	\$100.00 ✓	\$50.00
Rich, Peter A.	24.50	\$196.00 ✓	\$4,802.00
TOTAL LABOR	71.50		\$11,795.00

OTHER DIRECT COSTS

	CURRENT AMOUNT
Field Equipment Consumable	\$52.21
Field Equipment-Rental	\$58.74
Incidental Travel	\$109.35
Laboratory Services	\$695.50
Lodging	\$63.00
Lodging Tax	\$15.97
Mileage (unit)	\$77.69
Permits	\$1,480.00
Shipping - Overnight	\$14.70
TOTAL ODCs	\$2,567.16
G&A on ODC's	\$64.52
INVOICE TOTAL	\$14,428.68

Line Item 5 - Remediation Activities

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51481982</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>SU2702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

SES: # 1118658917 Fax: 8040176
 9-27-19

OKAPS
 C29632
 9/25/19

REMIT PAYMENT TO:

TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51481982
 INVOICE DATE: 09/03/19
 BILL THROUGH DATE: 08/23/19
 INVOICE DUE DATE: 10/18/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jon	19.00	\$110.00	\$2,090.00
Chang Lee, Belsai	10.00	\$147.00	\$1,470.00
Cohen, Robert	17.00	\$197.00	\$3,349.00
Merta, Priscilla	0.50	\$68.00	\$34.00
Paugh, Christina	0.50	\$100.00	\$50.00
Rich, Peter	24.50	\$196.00	\$4,802.00
TOTAL LABOR	71.50		\$11,795.00

OTHER DIRECT COSTS

	CURRENT AMOUNT
Field Equipment Consumable	\$52.21
Field Equipment-Rental	\$58.74
Incidental Travel	\$109.36
Laboratory Services	\$695.50
Lodging	\$63.00
Lodging Tax	\$15.97
Mileage (unit)	\$77.89
Permits	\$1,480.00
Shipping - Overnight	\$14.70
TOTAL ODCs	\$2,567.16
G&A on ODC's	\$64.52
TOTAL TASK 01	\$14,426.68

INVOICE TOTAL

\$14,426.68



INVOICE TASK DETAIL

INVOICE NUMBER: 51481982
INVOICE DATE: 09/03/19
BILL THROUGH DATE: 08/23/19
INVOICE DUE DATE: 10/16/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.

45610 Woodland Road, Suite 400, Sterling, VA 20166 Phone: 703-444-7000 Fax: 703-444-3478



TIMESHEET REPORT

INVOICE NUMBER: 51481982
 INVOICE DATE: 09/03/19
 BILL THROUGH DATE: 08/23/19
 INVOICE DUE DATE: 10/18/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	DATE	HOURS
Byk, Jonathan J.	07-29-2019	4.75
Byk, Jonathan J.	07-31-2019	1.50
Byk, Jonathan J.	08-02-2019	3.50
Byk, Jonathan J.	08-09-2019	2.50
Byk, Jonathan J.	08-22-2019	1.75
Byk, Jonathan J.	08-23-2019	5.00
TOTAL FOR Byk, Jonathan J.		19.00

EMPLOYEE NAME	DATE	HOURS
Chang Lee, Belssi A.	08-15-2019	3.00
Chang Lee, Belssi A.	08-16-2019	1.00
Chang Lee, Belssi A.	08-19-2019	3.00
Chang Lee, Belssi A.	08-23-2019	3.00
TOTAL FOR Chang Lee, Belssi A.		10.00

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	07-30-2019	1.00
Cohen, Robert M.	07-31-2019	1.00
Cohen, Robert M.	08-09-2019	1.00
Cohen, Robert M.	08-12-2019	2.00
Cohen, Robert M.	08-13-2019	1.00
Cohen, Robert M.	08-21-2019	2.00
Cohen, Robert M.	08-22-2019	8.00
Cohen, Robert M.	08-23-2019	1.00
TOTAL FOR Cohen, Robert M.		17.00

EMPLOYEE NAME	DATE	HOURS
Merta, Priscilla A.	07-29-2019	0.50
TOTAL FOR Merta, Priscilla A.		0.50

EMPLOYEE NAME	DATE	HOURS
Paugh, Christina M.	08-02-2019	0.50
TOTAL FOR Paugh, Christina M.		0.50

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	07-29-2019	1.50
Rich, Peter A.	07-30-2019	0.50
Rich, Peter A.	07-31-2019	2.50
Rich, Peter A.	08-01-2019	1.50
Rich, Peter A.	08-02-2019	2.00



TIMESHEET REPORT

INVOICE NUMBER: 51481982
 INVOICE DATE: 09/03/19
 BILL THROUGH DATE: 08/23/19
 INVOICE DUE DATE: 10/18/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804014

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	08-05-2019	1.00
Rich, Peter A.	08-06-2019	1.50
Rich, Peter A.	08-08-2019	1.00
Rich, Peter A.	08-09-2019	0.50
Rich, Peter A.	08-14-2019	1.00
Rich, Peter A.	08-15-2019	0.50
Rich, Peter A.	08-16-2019	1.00
Rich, Peter A.	08-19-2019	1.00
Rich, Peter A.	08-20-2019	0.50
Rich, Peter A.	08-21-2019	0.50
Rich, Peter A.	08-22-2019	8.00
TOTAL FOR Rich, Peter A.		24.50
TOTAL TASK 01		71.50
=====		
TOTAL LABOR HOURS		71.50



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: September 12, 2019
SUBJECT: Progress Report for **August 2019**
First Energy Corporation PO# 55117699, Line Item #00004
Tetra Tech Project No. 117-2804014 "Remediation Design and Related Services"
Tetra Tech Invoice **51481982 (\$14,426.68)**

1. Work Performed from July 27, 2019 to August 23, 2019

During the subject period, the following hours were recorded to this project: 19.0 hours by Jon Byk, 10.0 hours by Belssi Change, 17.0 hours by Bob Cohen, 0.5 hours by Priscilla Merta, 0.5 hours by Christina Paugh, and 24.5 hours by Peter Rich. Work performed included continued development of permit applications, project bidding work, project coordination, and meeting with Atlantic City Electric at the site.

2. Planned Activities

We will continue work related to startup of construction of the remediation system in October.

3. Other Comments

Our budget is expended. As previously discussed, our effort has included several related work efforts that were not incorporated into our original funding request. A supplemental funding request will be provided within days.

Table 1. Financial Status as of August 23, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$130,367.00
Total Cost in Current Period	\$14,426.68
Previously Billed Total	\$115,885.29
Total Billed to Date	\$130,311.97
Budget Remaining	\$55.03
Percent Expended	99.96%



RECEIVED

INVOICE

SEP 11 2019

Environmental Department

INVOICE NUMBER: 51484376
INVOICE DATE: 09/05/19
BILL THROUGH DATE: 08/08/19
INVOICE DUE DATE: 10/20/19
TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
Purchase Order # 55117699
Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	10.00	\$175.00	\$1,750.00
TOTAL LABOR	10.00		\$1,750.00
INVOICE TOTAL			\$1,750.00

JKAFS
C29632
9/20/19

Line Item 1 - USRP Services

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51484376</u>
COMPANY CODE.: SCOO	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.):	<u>550100</u>
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <i>[Signature]</i>	EMP. NO.: <u>297</u>

9-20-19

SES: 1118631355 Fax: 8048615

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

RECEIVED

SEP 11 2019

Environmental Department

INVOICE NUMBER: 51484376

INVOICE DATE: 09/05/19

BILL THROUGH DATE: 08/08/19

INVOICE DUE DATE: 10/20/19

TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47869
 CURRENCY: USD

Contract Reference:

Purchase Order # 55117690

Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

TASK 01 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeff	10.00	\$175.00	\$1,750.00
TOTAL LABOR	10.00		\$1,750.00
TOTAL TASK 01			\$1,750.00

=====

INVOICE TOTAL \$1,750.00

REMIT PAYMENT TO:

TETRA TECH, INC.

PO BOX 911874

DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.

45610 Woodland Road, Suite 400, Sterling, VA 20166, Phone: 703-444-7000 Fax: 703-444-3478



TIMESHEET REPORT

RECEIVED

SEP 11 2019

Environmental Department

INVOICE NUMBER: 51484376

INVOICE DATE: 09/05/19

BILL THROUGH DATE: 08/08/19

INVOICE DUE DATE: 10/20/19

TERMS: NET 45 NO DIS

PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE	HOURS	
Hosterman, Jeffrey L.	07-09-2019	0.00	
Hosterman, Jeffrey L.	07-30-2019	1.50	
Hosterman, Jeffrey L.	08-02-2019	4.50	
Hosterman, Jeffrey L.	08-06-2019	0.50	
Hosterman, Jeffrey L.	08-07-2019	0.50	
Hosterman, Jeffrey L.	08-08-2019	3.00	
TOTAL FOR	Hosterman, Jeffrey L.	<u>10.00</u>	
TOTAL TASK	01	<u>10.00</u>	
=====			
TOTAL LABOR HOURS		<u>10.00</u>	



PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Friday, September 06, 2019
 Subject: Progress Report through August 8, 2019
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51484376

1. Work Performed through August 8, 2019

LSRP Support Services:

- Supplemental Investigation Report preparation support including updated receptor evaluation and PFAS evaluation support.
- Prepare draft letter marking completion of Bay Work.
- General correspondence.

2. Planned Activities:

- Supplemental Investigation Report finalization and submittal support.
- Remedial action implementation support.
- Continuing LSRP support services.

**Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through August 8, 2019**

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$42,033.19	\$1,750.00		\$40,110.79	\$41,860.79	\$172.40	99.59%



INVOICE

INVOICE NUMBER: 51486772
 INVOICE DATE: 09/12/19
 BILL THROUGH DATE: 08/23/19
 INVOICE DUE DATE: 10/27/19
 TERMS: NET 45

RECEIVED

SEP 23 2019

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962
 Environmental Department

PROJECT NUMBER: 117-2804015
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	25.00 ✓	\$197.00 ✓	\$4,925.00
TOTAL LABOR	25.00		\$4,925.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Laboratory Services	\$4,347.50
TOTAL ODCs	\$4,347.50 ✓
G&A on ODC's	\$347.80 ✓
INVOICE TOTAL	\$9,620.30

JK AS
 029432
 9/25/19

Line Item - 6 Supp. Bay Invs.

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51486772</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>Jh</u>	EMP. NO.: <u>297</u>

SER: # 1118658926 Fax: # 8040178

9-27-19

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51486772
 INVOICE DATE: 08/12/19
 BILL THROUGH DATE: 08/23/19
 INVOICE DUE DATE: 10/27/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 PO Number 55117699 L.I. 00005

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert	25.00	\$197.00	\$4,925.00
TOTAL LABOR	25.00		\$4,925.00

OTHER DIRECT COSTS

	CURRENT AMOUNT
Laboratory Services	\$4,347.50
TOTAL ODCs	\$4,347.50
G&A on ODC's	\$347.80
TOTAL TASK 01	\$9,620.30

=====

INVOICE TOTAL **\$9,620.30**

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51486772
 INVOICE DATE: 09/12/19
 BILL THROUGH DATE: 08/23/19
 INVOICE DUE DATE: 10/27/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804015

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	07-29-2019	2.00
Cohen, Robert M.	07-31-2019	1.00
Cohen, Robert M.	08-05-2019	2.00
Cohen, Robert M.	08-07-2019	3.00
Cohen, Robert M.	08-08-2019	3.00
Cohen, Robert M.	08-09-2019	3.00
Cohen, Robert M.	08-10-2019	4.00
Cohen, Robert M.	08-12-2019	3.50
Cohen, Robert M.	08-13-2019	3.00
Cohen, Robert M.	08-14-2019	0.50

TOTAL FOR Cohen, Robert M. 25.00

TOTAL TASK 01 25.00

=====

TOTAL LABOR HOURS 25.00



TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: September 12, 2019
SUBJECT: Progress Report for **August 2019**
First Energy Corporation PO# 55117699, Line Item #00005
Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
Tetra Tech Invoices **51486772 (\$9,620.30)**

1. Work Performed from July 27, 2019 to August 23, 2019

This invoice includes final laboratory analysis costs from Eurofins TestAmerica and withheld labor costs for a prior period when we exceeded our budget limit (25.0 hours of my time, primarily report writing work).

2. Planned Activities

The final report has been submitted. No meetings have been scheduled at this time to discuss report results.

3. Other Comments

None.

Table 1. Financial Status as of August 23, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$275,896.00
Total Cost in Current Period	\$9,620.30
Previously Billed Total	\$257,181.77
Total Billed to Date	\$266,802.07
Budget Remaining	\$9,093.93
Percent Expended	96.70%



INVOICE

INVOICE NUMBER: 51500445
 INVOICE DATE: 10/07/19
 BILL THROUGH DATE: 09/27/19
 INVOICE DUE DATE: 11/21/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 0000#6

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert M.	1.00	\$197.00	\$197.00
TOTAL LABOR	1.00		\$197.00
INVOICE TOTAL			\$197.00

*DLAPS
 C29632
 12/3/19*

*See Attachment
 Stamp Next
 page →*

REMIT PAYMENT TO:

TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51500445
 INVOICE DATE: 10/07/19
 BILL THROUGH DATE: 09/27/19
 INVOICE DUE DATE: 11/21/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804015
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 0000 *SL*

PROFESSIONAL SERVICES:

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert	1.00	\$197.00	\$197.00
TOTAL LABOR	1.00		\$197.00
TOTAL TASK 01			\$197.00

INVOICE TOTAL

\$197.00 ✓

PA 113
029432
12/3/19

Line Item 6 - Supplemental Bay Inv. Study

APPROVAL STAMP	
P.O. NO. <u>55117699/5</u>	INV. NO. <u>51500445</u>
COMPANY CODE: SCOO	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>55010</u>	
ORDER: <u>3001026</u>	WBS: <input checked="" type="checkbox"/>
APPROVED BY: <i>[Signature]</i>	EMP. NO.: <u>292</u>
SES# <u>1119316100</u> Fax# <u>8044477</u>	

12-3-19

REMIT PAYMENT TO:

TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51500445
 INVOICE DATE: 10/07/19
 BILL THROUGH DATE: 09/27/19
 INVOICE DUE DATE: 11/21/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804015

PROJECT 117-2804015 Supplemental Bay Investigation Study - Great Egg Harbor Bay

TASK 01 Supplemental Bay Investigation Study - Great Egg Harbor Bay

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	09-12-2019	1.00
TOTAL FOR Cohen, Robert M.		1.00
TOTAL TASK 01		1.00
TOTAL LABOR HOURS		1.00



TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company

RECEIVED

FROM: Robert Cohen

NOV 08 2019

DATE: October 31, 2019

Environmental Department

SUBJECT: Progress Report for **September 2019**
First Energy Corporation PO# 55117699, Line Item #00005
Tetra Tech Project No. 117-2804015 "Supplemental Bay Investigation"
Tetra Tech Invoices **51500445 (\$197.00)**

1. Work Performed from August 24, 2019 to September 27, 2019

I worked 1.0 hours on this project during the invoice period performing project management activities including document organization.

2. Planned Activities

The final report has been submitted. No meetings have been scheduled at this time to discuss report results.

3. Other Comments

None.

Table 1. Financial Status as of September 27, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$275,896.00
Total Cost in Current Period	\$197.00
Previously Billed Total	\$266,802.07
Total Billed to Date	\$266,999.07
Budget Remaining	\$8,896.93
Percent Expended	96.78%



INVOICE

INVOICE NUMBER: 51500447
INVOICE DATE: 10/07/19
BILL THROUGH DATE: 09/27/19
INVOICE DUE DATE: 11/21/19
TERMS: NET 45 NO DIS

RECEIVED

OCT 18 2019

BILL TO: FIRST ENERGY CORPORATION *Financial Department*
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47889
CURRENCY: USD

Contract Reference:
Purchase Order # 55117699
Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	11.50	\$175.00	\$2,012.50
TOTAL LABOR	11.50		\$2,012.50
INVOICE TOTAL			\$2,012.50

Line Item 1 - LSRA Service

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51500447</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>802702</u>
COST ELEMENT (GL ACCT): <u>550100</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

*OK AFS
029632
12/3/19*

*SES: # 1119316069 Fax: # 8044466
12-3-19*

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80281-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51500447
 INVOICE DATE: 10/07/19
 BILL THROUGH DATE: 09/27/19
 INVOICE DUE DATE: 11/21/19
 TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:
 Purchase Order # 55117699
 Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight
 TASK 01 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeff	11.50	\$175.00	\$2,012.50
TOTAL LABOR	11.50		\$2,012.50
TOTAL TASK 01			\$2,012.50

=====

INVOICE TOTAL **\$2,012.50**

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51500447

INVOICE DATE: 10/07/19

BILL THROUGH DATE: 09/27/19

INVOICE DUE DATE: 11/21/19

TERMS: NET 45 NO DIS

PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE	HOURS	
Hosterman, Jeffrey L.	08-08-2019	0.00	
Hosterman, Jeffrey L.	08-07-2019	0.00	
Hosterman, Jeffrey L.	08-08-2019	0.00	
Hosterman, Jeffrey L.	08-09-2019	5.50	
Hosterman, Jeffrey L.	08-12-2019	3.50	
Hosterman, Jeffrey L.	08-13-2019	2.00	
Hosterman, Jeffrey L.	09-05-2019	0.50	
TOTAL FOR	Hosterman, Jeffrey L.	11.50	
TOTAL TASK	01	11.50	
=====			
TOTAL LABOR HOURS		11.50	



PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Thursday, October 10, 2019
 Subject: Progress Report through September 27, 2019
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51500447

1. Work Performed through September 27, 2019

LSRP Support Services:

- Supplemental Investigation Report finalization and submittal support including associated NJDEP forms.
- Finalize letter marking completion of Bay Work.
- General correspondence.

2. Planned Activities:

- Remedial action implementation support.
- Continuing LSRP support services.

**Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through September 27, 2019**

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$62,383.19	\$2,012.50		\$41,860.79	\$43,873.29	\$18,509.90	70.33%



INVOICE

INVOICE NUMBER: 51502645
 INVOICE DATE: 10/10/19
 BILL THROUGH DATE: 09/27/19
 INVOICE DUE DATE: 11/24/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47869
 CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 000045

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	13.50✓	\$110.00	\$1,485.00✓
Chang Lee, Belssi A.	3.00✓	\$147.00	\$441.00✓
Cohen, Robert M.	32.50✓	\$197.00	\$6,402.50✓
Cooper, Justin T.	63.00✓	\$110.00	\$6,930.00✓
Paugh, Christina M.	1.00✓	\$100.00	\$100.00✓
Rich, Peter A.	20.75✓	\$196.00	\$4,067.00✓
TOTAL LABOR	133.75✓		\$19,425.50

OTHER DIRECT COSTS

	CURRENT AMOUNT
Field Equipment Consumable	\$24.61
Field Supplies	\$75.76
Incidental Travel	\$204.11
Laboratory Services	\$597.50
Lodging	\$616.57
Lodging Tax	\$98.03
Meals-Employee Meals	\$117.35
Mileage (unit)	\$880.68
Shipping - Overnight	\$17.19
Vehicle Rental	\$122.86
TOTAL ODCs	\$2,754.68
G&A on ODC's	\$55.84

INVOICE TOTAL

\$22,236.00✓

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

ANAS
029632
121319
SU APPROVAL
Stamp Next
page →

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51502645
 INVOICE DATE: 10/10/19
 BILL THROUGH DATE: 09/27/19
 INVOICE DUE DATE: 11/24/19
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 000045

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jon	13.50	\$110.00	\$1,485.00✓
Chang Lee, Belssi	3.00	\$147.00	\$441.00✓
Cohen, Robert	32.50	\$197.00	\$6,402.50✓
Cooper, Justin	63.00	\$110.00	\$6,930.00✓
Paugh, Christina	1.00	\$100.00	\$100.00✓
Rich, Peter	20.75	\$196.00	\$4,067.00✓
TOTAL LABOR	133.75		\$19,425.50

OTHER DIRECT COSTS

	CURRENT AMOUNT
Field Equipment Consumable	\$24.61
Field Supplies	\$75.78
Incidental Travel	\$204.11
Laboratory Services	\$597.50
Lodging	\$616.57
Lodging Tax	\$98.03
Meals-Employee Meals	\$117.35
Mileage (unit)	\$880.68
Shipping - Overnight	\$17.19
Vehicle Rental	\$122.86
TOTAL ODCs	\$2,754.66
G&A on ODC's	\$55.84
TOTAL TASK 01	\$22,236.00✓

Loc H on 5 - Remediation Activities

APPROVAL STAMP

P.O. NO. 55117699/45 INV. NO. 51502645

COMPANY CODE: SCOO COST CENTER 502702

COST ELEMENT (GL ACCT.): 550100

ORDER: 3001026 WBS: ✓

APPROVED BY: [Signature] EMP. NO.: 297

SES# 1119316118 Fax# 8044495

INVOICE TOTAL

\$22,236.00

OR 15
129632
12/31/19



INVOICE TASK DETAIL

INVOICE NUMBER: 51502645
INVOICE DATE: 10/10/19
BILL THROUGH DATE: 09/27/19
INVOICE DUE DATE: 11/24/19
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51502645
 INVOICE DATE: 10/10/19
 BILL THROUGH DATE: 09/27/19
 INVOICE DUE DATE: 11/24/19
 TERMS: NET 45
 PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	DATE	HOURS
Byk, Jonathan J.	08-26-2019	4.00
Byk, Jonathan J.	08-27-2019	2.50
Byk, Jonathan J.	08-29-2019	2.00
Byk, Jonathan J.	09-03-2019	1.00
Byk, Jonathan J.	09-04-2019	4.00
TOTAL FOR Byk, Jonathan J.		13.50 ✓

EMPLOYEE NAME	DATE	HOURS
Chang Lee, Belssi A.	08-28-2019	2.00
Chang Lee, Belssi A.	09-25-2019	1.00
TOTAL FOR Chang Lee, Belssi A.		3.00

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	08-28-2019	1.00
Cohen, Robert M.	09-03-2019	2.00
Cohen, Robert M.	09-06-2019	1.00
Cohen, Robert M.	09-10-2019	2.00
Cohen, Robert M.	09-11-2019	1.00
Cohen, Robert M.	09-12-2019	1.00
Cohen, Robert M.	09-13-2019	2.00
Cohen, Robert M.	09-17-2019	2.00
Cohen, Robert M.	09-18-2019	1.00
Cohen, Robert M.	09-19-2019	2.00
Cohen, Robert M.	09-20-2019	0.50
Cohen, Robert M.	09-23-2019	2.00
Cohen, Robert M.	09-24-2019	7.00
Cohen, Robert M.	09-25-2019	3.00
Cohen, Robert M.	09-26-2019	4.00
Cohen, Robert M.	09-27-2019	1.00
TOTAL FOR Cohen, Robert M.		32.50 ✓

EMPLOYEE NAME	DATE	HOURS
Cooper, Justin T.	09-17-2019	6.00
Cooper, Justin T.	09-18-2019	10.00
Cooper, Justin T.	09-19-2019	14.00
Cooper, Justin T.	09-20-2019	2.00
Cooper, Justin T.	09-22-2019	5.00
Cooper, Justin T.	09-23-2019	10.00
Cooper, Justin T.	09-24-2019	15.00
Cooper, Justin T.	09-25-2019	1.00



TIMESHEET REPORT

INVOICE NUMBER: 51502645

INVOICE DATE: 10/10/19

BILL THROUGH DATE: 09/27/19

INVOICE DUE DATE: 11/24/19

TERMS: NET 45

PROJECT NUMBER: 117-2804014

TOTAL FOR	Cooper, Justin T.	63.00 ✓
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EMPLOYEE NAME	DATE	HOURS
Paugh, Christina M.	09-25-2019	1.00

TOTAL FOR	Paugh, Christina M.	1.00
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EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	08-26-2019	1.50
Rich, Peter A.	08-27-2019	1.50
Rich, Peter A.	08-29-2019	0.50
Rich, Peter A.	08-30-2019	1.00
Rich, Peter A.	09-03-2019	0.50
Rich, Peter A.	09-04-2019	0.50
Rich, Peter A.	09-05-2019	0.50
Rich, Peter A.	09-06-2019	0.50
Rich, Peter A.	09-09-2019	0.25
Rich, Peter A.	09-10-2019	0.50
Rich, Peter A.	09-11-2019	0.50
Rich, Peter A.	09-12-2019	0.50
Rich, Peter A.	09-13-2019	0.50
Rich, Peter A.	09-16-2019	1.00
Rich, Peter A.	09-17-2019	0.50
Rich, Peter A.	09-18-2019	0.50
Rich, Peter A.	09-19-2019	0.50
Rich, Peter A.	09-20-2019	0.50
Rich, Peter A.	09-23-2019	3.00
Rich, Peter A.	09-25-2019	3.00
Rich, Peter A.	09-26-2019	1.00
Rich, Peter A.	09-27-2019	2.00

TOTAL FOR	Rich, Peter A.	20.75 ✓
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TOTAL TASK	01	133.75
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TOTAL LABOR HOURS		133.75
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TETRA TECH

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetratech.com

703-444-7000

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: October 31, 2019
SUBJECT: Progress Report for **September 2019**
 First Energy Corporation PO# 55117699, Line Item #00004
 Tetra Tech Project No. 117-2804014 "Remediation Design and Related Services"
 Tetra Tech Invoice **51502645 (\$22,236.00)**

RECEIVED
NOV 08 2019
Environmental Department

1. Work Performed from August 24, 2019 to September 27, 2019

During the subject period, the following hours were recorded to this project: 13.50 hours by Jon Byk, 3.00 hours by Belssi Change, 32.50 hours by Bob Cohen, 1.00 hours by Christina Paugh, and 20.75 hours by Peter Rich. Work performed included continued development of permit applications, project bidding work, project coordination, sewer replacement oversight work, and preparation of plans for construction.

2. Planned Activities

Startup of construction of the remediation system will begin in mid-October.

3. Other Comments

The Approved Budget shown below reflects that additional funding provided in October 2019. Our presentation of task costs and activities will be revised beginning in October to reflect the additional tasks and task breakdown.

Table 1. Financial Status as of September 27, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$530,924.65
Total Cost in Current Period	\$22,236.00
Previously Billed Total	\$130,311.97
Total Billed to Date	\$152,547.97
Budget Remaining	\$378,376.68
Percent Expended	28.73%



RECEIVED

INVOICE

NOV 18 2019

Environmental Department

INVOICE NUMBER: 51511971

INVOICE DATE: 11/04/19

BILL THROUGH DATE: 10/25/19

INVOICE DUE DATE: 12/19/19

TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:

Purchase Order # 55117699

Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeffrey L.	0.50	\$175.00	\$87.50
TOTAL LABOR	0.50		\$87.50

INVOICE TOTAL

\$87.50^v

Line Item 1 - LSAP Services

STAMP	
P.O. NO. 55117699/1	INV. NO. 51511971
COMPANY CODE: 5050	COST CENTER 502702
COST ELEMENT (GL CODE): 550300	OC
ORDER: 3001026	WBS: ✓
APPROVED BY: <i>[Signature]</i>	EMP. NO.: 297
SES# 1119240823 Fax# 8041543	

*OK FTS
 C29632
 11/18/19*

11-20-19

REMIT PAYMENT TO:

TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the Invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51511971
 INVOICE DATE: 11/04/19
 BILL THROUGH DATE: 10/25/19
 INVOICE DUE DATE: 12/19/19
 TERMS: NET 45 NO DIS

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804011
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47689
 CURRENCY: USD

Contract Reference:
 Purchase Order # 55117699
 Line Item 00001

PROFESSIONAL SERVICES:

PROJECT 117-2804011 Project Oversight
 TASK 01 Project Oversight

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Hosterman, Jeff	0.50	\$175.00	\$87.50
TOTAL LABOR	0.50		\$87.50
TOTAL TASK 01			\$87.50

=====

INVOICE TOTAL \$87.50

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51511971
 INVOICE DATE: 11/04/19
 BILL THROUGH DATE: 10/25/19
 INVOICE DUE DATE: 12/19/19
 TERMS: NET 45 NO DIS
 PROJECT NUMBER: 117-2804011

PROJECT	117-2804011	Project Oversight	
TASK	01	Project Oversight	
EMPLOYEE NAME	DATE	HOURS	
Hosterman, Jeffrey L.	09-05-2019	0.00	
Hosterman, Jeffrey L.	10-09-2019	0.50	
TOTAL FOR	Hosterman, Jeffrey L.	0.50	
TOTAL TASK	01	0.50	
TOTAL LABOR HOURS		0.50	



PROGRESS REPORT

To: Anna Sullivan, First Energy/JCP&L
 From: Jeff Hosterman/Bob Cohen
 Date: Wednesday, November 06, 2019
 Subject: Progress Report through October 25, 2019
 Project Number 117-2804011 – LSRP SUPPORT SERVICES – Ocean City Site
 PO #55117699, Line Item 0001
 Invoice No. 51511971

1. Work Performed through October 25, 2019

LSRP Support Services:

- General correspondence.

2. Planned Activities:

- Remedial action implementation support.
- Continuing LSRP support services.

**Table 1 – Budget Status for Ocean City Site – LSRP Support Services
 PO #55117699, Line Item 0001 – Costs through October 25, 2019**

LSRP Support Services	Approved Budget	Total Cost in Current Period		Previously Billed Total	Total Billed to Date	Budget Remaining	Percent Expended
Labor, Travel, Expenses & Tolls	\$62,383.19	\$87.50		\$43,873.29	\$43,960.79	\$18,422.40	70.47%



RECEIVED

NOV 18 2019

Environmental Department

INVOICE

INVOICE NUMBER: 51520737
 INVOICE DATE: 11/18/19
 BILL THROUGH DATE: 11/15/19
 INVOICE DUE DATE: 01/02/20
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47669
 CURRENCY: USD

Contract Reference:

PO Number 55117899 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	2.00	\$110.00	\$220.00
Chang Lee, Belssi A.	1.00	\$147.00	\$147.00
Cohen, Robert M.	95.00	\$197.00	\$18,715.00
Cooper, Justin T.	182.00	\$110.00	\$20,020.00
Laforet, Zachary W.	111.25	\$77.00	\$8,566.25
Paugh, Christina M.	1.50	\$100.00	\$150.00
Rich, Peter A.	45.50	\$196.00	\$8,918.00
TOTAL LABOR	438.25		\$56,736.25

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment Consumable	\$31.80
Field Equipment-Rental	\$143.94
Incidental Travel	\$370.25
Laboratory Services	\$7,573.80
Lodging	\$1,689.90
Lodging Tax	\$181.95
Meals-Employee Meals	\$376.47
Mileage (unit)	\$121.80
Permits	\$5,420.80
Subcontractor-External	\$67,975.00
Vehicle Rental	\$770.57
TOTAL ODCs	\$84,816.28
G&A on ODC's	\$6,057.96
INVOICE TOTAL	\$147,410.49

REMIT PAYMENT TO:

TETRA TECH, INC.
 PO BOX 911674
 DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



INVOICE TASK DETAIL

INVOICE NUMBER: 51520737

INVOICE DATE: 11/18/19

BILL THROUGH DATE: 11/15/19

INVOICE DUE DATE: 01/02/20

TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 **Remediation Design and Related Support Services**

TASK 01 **Remediation Design and Related Support Services**

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jon	2.00	\$110.00	\$220.00
Chang Lee, Belssi	1.00	\$147.00	\$147.00
Cohen, Robert	28.00	\$197.00	\$5,518.00
Paugh, Christina	1.50	\$100.00	\$150.00
Rich, Peter	13.50	\$196.00	\$2,646.00
TOTAL LABOR	46.00		\$8,679.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment-Rental	\$143.94
Lodging	\$114.00
Lodging Tax	\$16.67
Meals-Employee Meals	\$10.93
Mileage (unit)	\$121.80
Permits	\$5,420.80
TOTAL ODCs	\$5,828.14
G&A on ODC's	\$11.52
TOTAL TASK 01	\$14,518.86

TASK 02 **Remediation Well Installation**

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert	44.00	\$197.00	\$8,668.00
Cooper, Justin	109.00	\$110.00	\$11,990.00
Laforet, Zack	63.00	\$77.00	\$4,851.00
TOTAL LABOR	216.00		\$25,509.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Field Equipment Consumable	\$31.80
Incidental Travel	\$274.91



INVOICE TASK DETAIL

INVOICE NUMBER: 51520737

INVOICE DATE: 11/18/19

BILL THROUGH DATE: 11/15/19

INVOICE DUE DATE: 01/02/20

TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

OTHER DIRECT COSTS		CURRENT AMOUNT
Laboratory Services		\$7,573.80
Lodging		\$1,135.15
Lodging Tax		\$83.78
Meals-Employee Meals		\$241.31
Subcontractor-External		\$67,975.00
Vehicle Rental		\$544.79
TOTAL ODCs		\$77,860.54
G&A on ODC's		\$6,046.44
TOTAL TASK	02	\$109,415.98

TASK 03 Remediation Construction Oversight and Support

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert	23.00	\$197.00	\$4,531.00
Cooper, Justin	73.00	\$110.00	\$8,030.00
Laforet, Zack	48.25	\$77.00	\$3,715.25
Rich, Peter	32.00	\$196.00	\$6,272.00
TOTAL LABOR	176.25		\$22,548.25

OTHER DIRECT COSTS		CURRENT AMOUNT
Incidental Travel		\$95.34
Lodging		\$420.75
Lodging Tax		\$61.50
Meals-Employee Meals		\$124.23
Vehicle Rental		\$225.78
TOTAL ODCs		\$927.60
TOTAL TASK	03	\$23,475.85

INVOICE TOTAL

\$147,410.49

*OK AFS
 C29432
 11/18/19
 See Approval
 Stamp Next
 Page →*



INVOICE TASK DETAIL

INVOICE NUMBER: 51520737

INVOICE DATE: 11/18/19

BILL THROUGH DATE: 11/15/19

INVOICE DUE DATE: 01/02/20

TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&LA FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07982

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47689
CURRENCY: USD

Line Item 5 - Remediation Activities → \$1,477,410.49

APPROVAL STAMP	
P.O. NO. <u>35117699</u>	INV. NO. <u>51520737</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER: <u>507102</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>292</u>

SES# 1119256007 Fax # 8042165

11-18-19

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TIMESHEET REPORT

INVOICE NUMBER: 51520737
 INVOICE DATE: 11/18/19
 BILL THROUGH DATE: 11/15/19
 INVOICE DUE DATE: 01/02/20
 TERMS: NET 45
 PROJECT NUMBER: 117-2804014

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME DATE HOURS

Byk, Jonathan J. 10-02-2019 2.00

TOTAL FOR Byk, Jonathan J. 2.00

EMPLOYEE NAME DATE HOURS

Chang Lee, Belssi A. 09-30-2019 1.00

TOTAL FOR Chang Lee, Belssi A. 1.00

EMPLOYEE NAME DATE HOURS

Cohen, Robert M. 09-30-2019 2.00

Cohen, Robert M. 10-01-2019 3.00

Cohen, Robert M. 10-02-2019 3.00

Cohen, Robert M. 10-03-2019 2.50

Cohen, Robert M. 10-04-2019 1.50

Cohen, Robert M. 10-07-2019 3.00

Cohen, Robert M. 10-08-2019 4.00

Cohen, Robert M. 10-09-2019 5.00

Cohen, Robert M. 10-10-2019 2.00

Cohen, Robert M. 10-11-2019 2.00

TOTAL FOR Cohen, Robert M. 28.00

EMPLOYEE NAME DATE HOURS

Paugh, Christina M. 10-02-2019 1.50

TOTAL FOR Paugh, Christina M. 1.50

EMPLOYEE NAME DATE HOURS

Rich, Peter A. 09-30-2019 2.00

Rich, Peter A. 10-01-2019 2.00

Rich, Peter A. 10-02-2019 1.00

Rich, Peter A. 10-03-2019 1.00

Rich, Peter A. 10-07-2019 2.50

Rich, Peter A. 10-08-2019 2.00

Rich, Peter A. 10-10-2019 2.00

Rich, Peter A. 10-11-2019 1.00

TOTAL FOR Rich, Peter A. 13.50

TOTAL TASK 01 46.00

TASK 02 Remediation Well Installation

EMPLOYEE NAME DATE HOURS

Cohen, Robert M. 10-14-2019 2.00



TIMESHEET REPORT

INVOICE NUMBER: 51520737

INVOICE DATE: 11/18/19

BILL THROUGH DATE: 11/15/19

INVOICE DUE DATE: 01/02/20

TERMS: NET 45

PROJECT NUMBER: 117-2804014

EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	10-15-2019	4.00
Cohen, Robert M.	10-16-2019	4.00
Cohen, Robert M.	10-17-2019	4.00
Cohen, Robert M.	10-18-2019	4.00
Cohen, Robert M.	10-21-2019	4.00
Cohen, Robert M.	10-22-2019	5.00
Cohen, Robert M.	10-23-2019	3.00
Cohen, Robert M.	10-24-2019	2.00
Cohen, Robert M.	10-25-2019	2.00
Cohen, Robert M.	10-28-2019	2.00
Cohen, Robert M.	10-29-2019	2.00
Cohen, Robert M.	10-30-2019	2.00
Cohen, Robert M.	10-31-2019	2.00
Cohen, Robert M.	11-01-2019	2.00
TOTAL FOR Cohen, Robert M.		44.00

EMPLOYEE NAME	DATE	HOURS
Cooper, Justin T.	10-14-2019	8.00
Cooper, Justin T.	10-15-2019	8.00
Cooper, Justin T.	10-16-2019	8.00
Cooper, Justin T.	10-17-2019	8.00
Cooper, Justin T.	10-18-2019	12.00
Cooper, Justin T.	10-19-2019	1.00
Cooper, Justin T.	10-21-2019	6.00
Cooper, Justin T.	10-22-2019	10.00
Cooper, Justin T.	10-23-2019	15.00
Cooper, Justin T.	10-24-2019	2.00
Cooper, Justin T.	10-27-2019	4.00
Cooper, Justin T.	10-28-2019	4.00
Cooper, Justin T.	10-29-2019	5.00
Cooper, Justin T.	10-30-2019	5.00
Cooper, Justin T.	10-31-2019	5.00
Cooper, Justin T.	11-01-2019	8.00
TOTAL FOR Cooper, Justin T.		109.00

EMPLOYEE NAME	DATE	HOURS
Laforet, Zachary W.	10-18-2019	14.00
Laforet, Zachary W.	10-20-2019	3.50
Laforet, Zachary W.	10-21-2019	8.00
Laforet, Zachary W.	10-22-2019	9.00
Laforet, Zachary W.	10-23-2019	10.00
Laforet, Zachary W.	10-24-2019	7.50
Laforet, Zachary W.	10-25-2019	11.00



TIMESHEET REPORT

INVOICE NUMBER: 51520737

INVOICE DATE: 11/18/19

BILL THROUGH DATE: 11/15/19

INVOICE DUE DATE: 01/02/20

TERMS: NET 45

PROJECT NUMBER: 117-2804014

TOTAL FOR	Laforet, Zachary W.	<u>63.00</u>
TOTAL TASK	02	216.00

TASK	03	Remediation Construction Oversight and Support
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EMPLOYEE NAME	DATE	HOURS
Cohen, Robert M.	10-30-2019	1.00
Cohen, Robert M.	10-31-2019	3.00
Cohen, Robert M.	11-01-2019	2.00
Cohen, Robert M.	11-04-2019	2.00
Cohen, Robert M.	11-05-2019	1.00
Cohen, Robert M.	11-06-2019	3.00
Cohen, Robert M.	11-07-2019	2.00
Cohen, Robert M.	11-08-2019	2.00
Cohen, Robert M.	11-11-2019	1.00
Cohen, Robert M.	11-12-2019	2.00
Cohen, Robert M.	11-13-2019	3.00
Cohen, Robert M.	11-14-2019	0.50
Cohen, Robert M.	11-15-2019	0.50

TOTAL FOR	Cohen, Robert M.	<u>23.00</u>
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EMPLOYEE NAME	DATE	HOURS
Cooper, Justin T.	10-28-2019	4.00
Cooper, Justin T.	10-29-2019	4.00
Cooper, Justin T.	10-30-2019	4.00
Cooper, Justin T.	10-31-2019	4.00
Cooper, Justin T.	11-01-2019	4.00
Cooper, Justin T.	11-04-2019	2.00
Cooper, Justin T.	11-06-2019	1.00
Cooper, Justin T.	11-08-2019	2.00
Cooper, Justin T.	11-10-2019	4.00
Cooper, Justin T.	11-11-2019	8.00
Cooper, Justin T.	11-12-2019	8.00
Cooper, Justin T.	11-13-2019	8.00
Cooper, Justin T.	11-14-2019	8.00
Cooper, Justin T.	11-15-2019	12.00

TOTAL FOR	Cooper, Justin T.	<u>73.00</u>
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EMPLOYEE NAME	DATE	HOURS
Laforet, Zachary W.	11-03-2019	3.25
Laforet, Zachary W.	11-04-2019	8.00
Laforet, Zachary W.	11-05-2019	8.00
Laforet, Zachary W.	11-06-2019	9.00
Laforet, Zachary W.	11-07-2019	8.00



TIMESHEET REPORT

INVOICE NUMBER: 51520737

INVOICE DATE: 11/18/19

BILL THROUGH DATE: 11/15/19

INVOICE DUE DATE: 01/02/20

TERMS: NET 45

PROJECT NUMBER: 117-2804014

EMPLOYEE NAME	DATE	HOURS
Laforet, Zachary W.	11-08-2019	11.50
Laforet, Zachary W.	11-13-2019	0.50
TOTAL FOR Laforet, Zachary W.		48.25

EMPLOYEE NAME	DATE	HOURS
Rich, Peter A.	10-14-2019	2.00
Rich, Peter A.	10-15-2019	1.00
Rich, Peter A.	10-16-2019	1.00
Rich, Peter A.	10-17-2019	1.00
Rich, Peter A.	10-18-2019	1.00
Rich, Peter A.	10-21-2019	1.00
Rich, Peter A.	10-22-2019	1.00
Rich, Peter A.	10-23-2019	1.50
Rich, Peter A.	10-24-2019	2.50
Rich, Peter A.	10-25-2019	1.50
Rich, Peter A.	10-29-2019	8.00
Rich, Peter A.	10-30-2019	1.50
Rich, Peter A.	10-31-2019	1.00
Rich, Peter A.	11-01-2019	1.00
Rich, Peter A.	11-04-2019	0.50
Rich, Peter A.	11-05-2019	1.00
Rich, Peter A.	11-06-2019	1.00
Rich, Peter A.	11-07-2019	0.50
Rich, Peter A.	11-08-2019	0.50
Rich, Peter A.	11-12-2019	1.50
Rich, Peter A.	11-13-2019	1.50
Rich, Peter A.	11-15-2019	0.50
TOTAL FOR Rich, Peter A.		32.00
TOTAL TASK 03		176.25

=====

TOTAL LABOR HOURS 438.25



Environmental and Geotechnical Drilling Services
200 Century Parkway - Suite B • Mt Laurel, NJ 08054
Phone: 856 722 1111 Fax: 856 722 1745

Tetra Tech
Attention: Accounts Payable
21335 Signal Hill Road
Sterling, VA 20154

November 7, 2019
Project Name: JCP&L - Ocean City
Project Number: TETRE0005
Invoice #: KM56541

RE: Invoice for Drilling Services Performed on October 15 thru 31, 2019 at JCP&L - Ocean City Site.

**Tetra Tech Project No. 117-2804014
Amendment No. 1**

Description	Current Units	Current Rate	Amount
Well Permits & Reports - Lump Sum	1.00	\$ 2,800.00	\$ 2,800.00
Utility Markout & Air Knife Clearance - Each	17.00	175.00	2,975.00
Decontamination Services - Lump Sum	1.00	1,300.00	1,300.00
Shallow Well Installations - Each	13.00	1,950.00	25,350.00
Intermediate Well Installations - Each	4.00	3,975.00	15,900.00
Well Development - Hours	23.00	200.00	4,600.00
Transport & Management of Waste - Lump Sum	1.00	1,700.00	1,700.00
Standby Time - Hours	20.00	225.00	4,500.00
Extra Charges			
55-Gallon Drums - Each	13.00	75.00	975.00
4-inch PVC Vee Wire Screen x 10' .020 - Each	17.00	250.00	4,250.00
Mobilization/Demobilization for Geoprobe	1.00	500.00	500.00
Mobilization/Demobilization for Drill Rig	1.00	500.00	500.00
Daily Rate for Geoprobe Equipment & Personnel	1.00	1,800.00	1,800.00
12-inch Flush Mount Casing - Each	1.00	275.00	275.00
550-Gallon Poly Tank - Each	1.00	550.00	550.00

Amount Due This Invoice: \$67,975.00 ✓

Cc: Bob Cohen, bob.cohen@tetratech.com

RUSH

Preparer: RCohen Priority Code: 2 3

Supplier #: _____ Terms: _____

Routing: _____ PO: _____

Proj / Task: 117-2804014.02

Exp / Org: sub-ext 117 sterling

Remittance Y N USA Tax Y N

145596 Net 45

PLEASE REMIT PAYMENT TO:
EAST COAST DRILLING, INC.
P. O. BOX 279
RED BANK, NEW JERSEY 07701



TETRA TECH

www.tetrattech.com

703-444-7000

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: November 18, 2019
SUBJECT: Progress Report for **September 28 to November 15, 2019**
First Energy Corporation PO# 55117699, Line Item #00004
Tetra Tech Project No. 117-2804014 "Remediation Design and Related Services"
Tetra Tech Invoice 51520737 (\$147,410.49)

1. Work Performed from September 28, 2019 to November 15, 2019

Project planning/coordination continued until mid-October prior to when work was initiated to install extraction wells for the Interim Remedial Action began. All 17 extraction wells were constructed and developed by East Coast Drilling Inc (ECDI). ECDI also performed core sampling at 10 locations in the two hot-spot excavation areas (AOC#1 and AOC#8) to characterize soil contamination prior to its excavation and removal offsite. Test America labs analyzed composite and grab soil samples from the hot-spot areas for numerous parameters required by disposal facilities. After review and approval by a disposal facility, all soil to a depth of 8 feet below ground was excavated from the hot-spot areas by Panther Technologies and trucked to the Clean Earth facility in New Castle, Delaware.

Tetra Tech personnel provided projecting planning, oversight, traffic control, air monitoring, and management activities throughout the subject period. Hours worked included: 2.0 by Jon Byk, 1.0 by Belssi Chang, 95.0 by Robert Cohen, 182.0 by Justin Cooper, 111.25 by Zach LaForet, 1.5 by Christina Paugh, and 45.5 by Peter Rich. Substantial contractor costs included \$7,573.80 for chemical analyses by Test America and \$67,975.00 for drilling-related services by ECDI. A Treatment Works Approval Fee of \$5,240.80 was paid to NJDEP. Costs associated with pre-characterization of contaminated soils in the two hot-spot areas were not included in project budgets and permit fees exceeded anticipated permit costs. Task costs through November 15, 2019 are shown in Table 1.

2. Planned Activities

Construction of the pump-and-treat remediation system will continue in November and December. Initiation of baseline performance monitoring activities may begin in December.

3. Other Comments

None.

Table 1. Financial Status as of November 15, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$530,924.65
Total Cost in Current Period	\$147,410.49
Previously Billed Total	\$152,547.97
Total Billed to Date	\$299,958.46
Budget Remaining	\$230,966.19
Percent Expended	56.50%



INVOICE
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DEC 12 2019

Environmental Department

INVOICE NUMBER: 51530056
INVOICE DATE: 12/12/19
BILL THROUGH DATE: 12/06/19
INVOICE DUE DATE: 01/26/20
TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
ATTN: ANNA SULLIVAN
JCP&L A FIRSTENERGY COMPANY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
TETRA TECH FEIN: 95-4148514
PROJ MGR: Cohen, Robert
CUSTOMER NUMBER: 47669
CURRENCY: USD

Contract Reference:
PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jonathan J.	3.50	\$110.00	\$385.00
Cohen, Robert M.	44.00	\$197.00	\$8,668.00
Cooper, Justin T.	49.50	\$110.00	\$5,445.00
Laforet, Zachary W.	81.00	\$77.00	\$6,237.00
Merta, Priscilla A.	1.00	\$68.00	\$68.00
Paugh, Christina M.	2.00	\$100.00	\$200.00
Rich, Peter A.	8.50	\$196.00	\$1,666.00
TOTAL LABOR	189.50		\$22,669.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Airfare	\$197.98
Field Supplies	\$3.72
Incidental Travel	\$152.87
Lodging	\$816.75
Lodging Tax	\$119.45
Meals-Employee Meals	\$268.81
Shipping - Overnight	\$15.13
Vehicle Rental	\$225.78
TOTAL ODCs	\$1,800.47
G&A on ODC's	\$0.30
INVOICE TOTAL	\$24,469.77

*OK AFS
C29632
12/18/19*

*See Annual
Stop Next
page 7*

REMIT PAYMENT TO:
TETRA TECH, INC.
PO BOX 911674
DENVER, CO 80291-1674

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.

\$24,469.77

Line Item 5 - Remediation Activities

APPROVAL STAMP	
P.O. NO. <u>55117699</u>	INV. NO. <u>51530056</u>
COMPANY CODE: <u>SCOO</u>	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

SES# 1119383693 - Fax# 8048210

12-18-19



INVOICE TASK DETAIL

INVOICE NUMBER: 51530056
 INVOICE DATE: 12/12/19
 BILL THROUGH DATE: 12/06/19
 INVOICE DUE DATE: 01/26/20
 TERMS: NET 45

BILL TO: FIRST ENERGY CORPORATION
 ATTN: ANNA SULLIVAN
 JCP&L A FIRSTENERGY COMPANY
 300 MADISON AVENUE
 MORRISTOWN, NJ 07962

PROJECT NUMBER: 117-2804014
 TETRA TECH FEIN: 95-4148514
 PROJ MGR: Cohen, Robert
 CUSTOMER NUMBER: 47889
 CURRENCY: USD

Contract Reference:

PO Number 55117699 L.I. 00004

PROFESSIONAL SERVICES:

PROJECT 117-2804014 Remediation Design and Related Support Services

TASK 01 Remediation Design and Related Support Services

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Byk, Jon	3.50	\$110.00	\$385.00
Merta, Priscilla	1.00	\$68.00	\$68.00
Paugh, Christina	2.00	\$100.00	\$200.00
TOTAL LABOR	6.50		\$653.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Shipping - Overnight	\$15.13
TOTAL ODCs	\$15.13
TOTAL TASK 01	\$668.13

TASK 03 Remediation Construction Oversight and Support

EMPLOYEE NAME	HOURS	RATE	CURRENT AMOUNT
Cohen, Robert	24.00	\$197.00	\$4,728.00
Cooper, Justin	49.50	\$110.00	\$5,445.00
Laforet, Zack	81.00	\$77.00	\$6,237.00
Rich, Peter	8.50	\$198.00	\$1,686.00
TOTAL LABOR	163.00		\$18,076.00

OTHER DIRECT COSTS	CURRENT AMOUNT
Airfare	\$197.96
Field Supplies	\$3.72
Incidental Travel	\$152.87
Lodging	\$816.75
Lodging Tax	\$119.45
Meals-Employee Meals	\$268.81
Vehicle Rental	\$225.78
TOTAL ODCs	\$1,795.34

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DEC 12 2019



TETRA TECH

Environmental Department

45610 Woodland Road
Suite 400
Sterling, Virginia 20166
FAX 703-444-1685

www.tetrattech.com

703-444-7000

PROGRESS REPORT

TO: Anna Sullivan, JCP&L A FirstEnergy Company
FROM: Robert Cohen
DATE: December 12, 2019
SUBJECT: Progress Report for November 16, 2019 to December 6, 2019
 First Energy Corporation PO# 55117699, Line Item #00004
 Tetra Tech Project No. 117-2804014 "Remediation Design and Related Services"
 Tetra Tech Invoice 51530056 (\$24,469.77)

1. Work Performed from November 16, 2019 to December 6, 2019

Tetra Tech work and progress on construction of remedial works at the Ocean City site are detailed in weekly status reports. Tetra Tech personnel provided projecting planning, oversight, and management activities throughout the subject period. Robert Cohen also evaluated components of and equipment to be purchased for performance monitoring. An updated plan will be provided for review in December and baseline monitoring will be performed in January 2020. Hours worked included: 3.5 by Jon Byk, 44.0 by Robert Cohen, 49.5 by Justin Cooper, 81.0 by Zach Laforet, 2.0 by Christina Paugh, 1.0 by Priscilla Merta, and 8.0 by Peter Rich. Costs for shipping, lodging, meals, vehicle rental, field supplies, and airfare (to South Carolina for treatment plant inspection) totaled approximately \$1,800. Task costs through December 6, 2019 are shown in Table 1.

2. Planned Activities

Construction of the pump-and-treat remediation system and cap will continue in December and January. System testing and baseline performance monitoring activities will occur in January.

3. Other Comments

None.

Table 1. Financial status as of December 6, 2019.

Task Number and Title	01 - I&D 30 New Wells
Approved Budget	\$530,924.65
Total Cost in Current Period	\$24,469.77
Previously Billed Total	\$299,958.46
Total Billed to Date	\$324,428.23
Budget Remaining	\$206,496.42
Percent Expended	61.11%

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-4c(2)

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NOV 05 2019

Environmental Department

PANTHER TECHNOLOGIES
P.O. BOX 1184
Woodinville, WA 98072
425 527-9700

Invoice 19.1009.1

Bill to: FIRSTENERGY 76 S MAIN STREET AKRON, OH 44308	Job: 701191009 JCPL Ocean City MPG 11th Street & Haven Avenue Ocean City, NJ 08226
--	---

Invoice #: 19.1009.1 Date: 10/31/19 Payment Terms: NET 45 DAYS Customer Code: FIRENG612	Customer P.O. #: 55128545 Salesperson:
--	---

Remarks: October 2019 Services

Quantity	Description	Unit	Unit Price	Extension
1.000	October 2019 Services	Eac	22,920.000	22,920.00
			Subtotal:	22,920.00
			Total:	22,920.00

Line Item 1 - Remediation Services

APPROVAL STAMP

P.O. NO. 55128545 INV. NO. 19.1009.1
 COMPANY CODE: SCOO COST CENTER 502702
 COST ELEMENT (GL ACCT.): 550300
 ORDER: 3001026 WBS: ✓
 APPROVED BY: [Signature] EMP. NO.: 297

11-8-19

*OK APB
C29632
11/5/19*

*Approved for payment of \$ 20,428.
SES# 1119075175 Fax: 8048994*

Line Item 1 - Remediation Services

APPROVAL STAMP

P.O. NO. 55128545 INV. NO. 19.1009.1R
 COMPANY CODE: SCOO COST CENTER 502702
 COST ELEMENT (GL ACCT.): 550300
 ORDER: 3001026 WBS: ✓
 APPROVED BY: [Signature] EMP. NO.: 297

11-8-19

*Approved for payment of \$ 2,292.00
SES# 1119075179 Fax: 8048995*

RECEIVED
NOV 05 2019

Period from October 1, 2019 to October 31, 2019

CITY OF OCEAN CITY, NJ

INVOICE #1
PANTNER TECHNOLOGIES INC.
JCPL OCEAN CITY, NJ FORMER MGP REMEDIATION
GROUNDWATER TREATMENT SYSTEM PROJECT

First Energy PO: 66129545

Item No.	Item Description	Estimated Quantity	Unit	UNIT PRICE	Contract Amount	City Complete Last Period	City Complete This Period	Actual Completed To Date	Last Previous Billing	Total Due This Period
1	Mobilization, Demobilization, General Conditions	1	LB	\$ 32,380.00	\$ 32,380.00	0%	50%	\$ 16,190.00	\$ -	\$ 16,190.00
2	Erosion and Sediment Control, Construction Entrance	1	LB	\$ 6,820.00	\$ 6,820.00	0%	50%	\$ 4,480.00	\$ -	\$ 4,480.00
3	Excavation, Dewatering, and Backfill of "hobos" in existing up to 10,000 gallons water diameter	1	LB	\$ 97,230.00	\$ 97,230.00	0%	0%	\$ -	\$ -	\$ -
4	Disposal of Non-Hazardous Soil	500	Tons	\$ 86.10	\$ 78,480.00	0	0	\$ -	\$ -	\$ -
5	Disposal of Hazardous Soil	80	Tons	\$ 380.00	\$ 18,080.00	0	0	\$ -	\$ -	\$ -
6	Trench and install HDPE Pipe to Walls and Discharge, Restore Surface	1	LB	\$ 137,620.00	\$ 137,620.00	0	0	\$ -	\$ -	\$ -
7	Add FRP to Gravel, Install Gravelite Mixer and Minimum 6" Crushed Rock on Surface	37,000	SF	\$ 0.96	\$ 35,620.00	0	0	\$ -	\$ -	\$ -
8	Install Wall Pumps and Walkways	1	LB	\$ 11,330.00	\$ 11,330.00	0	0	\$ -	\$ -	\$ -
9	Connect Pumps and Piping to Treatment System	1	LB	\$ 11,980.00	\$ 11,980.00	0	0	\$ -	\$ -	\$ -
10	Start-Up Assistance	5	Days	\$ 1,530.00	\$ 7,650.00	0	0	\$ -	\$ -	\$ -
					\$ 437,770.00					
11	Additional Work	0	Galton	\$ 0.40	\$ -	0	0	\$ -	\$ -	\$ -
12	Water Disposal above 10,000 gallons (TBD)	20	Tons	\$ 280.00	\$ 5,600.00	0	0	\$ -	\$ -	\$ -
13	Stabilize Soil for TSD	1	LB	\$ -	\$ -	0	0	\$ -	\$ -	\$ -
14	System Offset, Placement, Anchoring, Grouting	1	LB	\$ 1,200.00	\$ 1,200.00	0	1	\$ 1,200.00	\$ -	\$ 1,200.00
15	Cost of Road Opening Permit and Maintenance Bond	8	Hours	\$ 148.00	\$ 1,080.00	0	8	\$ 1,080.00	\$ -	\$ 1,080.00
16	Project Manager	75	Hours	\$ 20.00	\$ 1,500.00	0	0	\$ -	\$ -	\$ -
17	Extra Trench Backfill	0	Tons	\$ -	\$ -	0	0	\$ -	\$ -	\$ -
18	Additional Hazardous and Non-Hazardous Soil Material Disposal, if any (TBD)	2	Days	\$ 670.00	\$ 1,340.00	0	0	\$ -	\$ -	\$ -
19	Traffic Control (2 Flagmen)	0	LB	\$ 3,420.00	\$ -	0	0	\$ -	\$ -	\$ -
20	Modification/Demolition Concrete Removal	0	Days	\$ 4,881.20	\$ -	0	0	\$ -	\$ -	\$ -
21	Crack and Equipment Demolish, Site to 2' x 2' x 2' and Slope Concrete	0	Days	\$ -	\$ -	0	0	\$ -	\$ -	\$ -
					\$ 11,230.00			\$ 2,280.00	\$ -	\$ 2,280.00

DUPLICATE
C29632
11/5/19

Notes:
10a - Partner will provide Daily Records for documentation

Project 701191009



TECHNICAL MEMORANDUM

To: Anna Sullivan, JCP&L
Cc: Bob Cohen, Tetra Tech
From: Peter Rich, Tetra Tech
Date: November 5, 2019
Subject: Ocean City Former MGP – October Panther Invoice #1 Review

Panther provided the attached invoice for work completed in October. Prior to mobilization, Panther obtained a road opening permit and provided a road maintenance bond to Ocean City. Panther began mobilization to the site on October 28, 2019 and completed the following from the 28th to the 31st:

- opening a trench pathway through concrete and piping obstructions between extraction wells;
- deploying sediment and erosion control features at the site including the construction entrance;
- delivering equipment and materials to the site; and,
- preparing for "hot-spot" excavations.

I agree with Panther's completion percentages:

- 50% of Item #1: Mobilization, Demobilization, General Conditions;
- 50% of Item #2: Erosion and Sediment Control, Construction Entrance; and,
- Completion of Items #14 and #14a: Cost of Road Opening Permit and Maintenance Bond and Project Manager time.

I recommend payment of the invoice.

Attachment: Panther October Invoice #1



Panther
Technologies, Inc.
a Cascade Company

220 Route 70 East, Suite B
Medford, NJ 08055
Phone: 609-714-2420
Fax: 609-714-2495

Remit to:

Panther Technologies, Inc
PO Box 757042
Baltimore, MD 21275-7042

Invoice 19.1009.2

Bill to: FIRSTENERGY 76 S MAIN STREET AKRON, OH 44308	Job: 701191009 JCPL Ocean City MPG 11th Street & Haven Avenue Ocean City, NJ 08226
---	--

Invoice #: 19.1009.2 Payment Terms: NET 45 DAYS Customer Code: FIRENG612	Date: 11/20/19 Customer P.O. #: 55128545 Salesperson:
---	--

Remarks: 11/1-11/15/19 Services

Quantity	Description	Unit	Unit Price	Amount
1.000	11/1/19 to 11/15/19 Services	Eac	220,618.49	220,618.49
			Subtotal:	220,618.49
			Total:	220,618.49

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NOV 20 2019
Environmental Department

OK AFS
C29632
11/20/19

See Approval
Stamps Next
Page

Panther Invoice
Ocean City MHP Site

Line Item 1 - Remediation Services

APPROVAL STAMP	
P.O. NO. <u>55128545</u>	INV. NO. <u>19.1009.2</u>
COMPANY CODE.: <u>SCOO</u>	COST CENTER <u> </u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3201026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

11-21-19

Approved for Payment of \$198,556.64+
SES# 1119247037 Fax: # 8041842

Line Item 1 - Remediation Services

APPROVAL STAMP <i>Retirement</i>	
P.O. NO. <u>55128545</u>	INV. NO. <u>19.1009.2R</u>
COMPANY CODE.: <u>SCOO</u>	COST CENTER <u> </u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3201026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

11-21-19

Approved for Payment of \$22,061.85+
SES# 1119247051 Fax: # 8041843

First Energy PO: 56128546

DIVISION #2
PANTHER TECHNOLOGIES INC.
JCP&L OCEAN CITY, NJ FORMER MOP REMEDIATION
GROUNDWATER TREATMENT SYSTEM PROJECT

Period from November 1, 2018 to November 16, 2018

Item No.	Item Description	Estimated Quantity	Unit	Unit Price	Contract Amount	Qty Complete Last Period	Qty Complete This Period	Qty Complete To Date	Actual Completed To Date	Last Period Billing	Total Due This Period
1	Mobilization, Demobilization, General Conditions	1	LS	\$ 32,346.00	\$ 32,346.00	50%	25%	75%	\$ 24,270.00	\$ 16,180.00	\$ 8,390.00
2	Erection and Sediment Control, Construction Entrance	1	LA	\$ 4,820.00	\$ 4,820.00	50%	60%	100%	\$ 4,820.00	\$ 4,461.00	\$ 4,461.00
3	Excavation, Dewatering, and Backfill of "Hotspots" including up to 10,000 gallons water disposal	1	LS	\$ 97,230.00	\$ 97,230.00	0%	100%	100%	\$ 97,230.00	\$ -	\$ 97,230.00
4	Disposal of Non-Hazardous Soils	800	Tons	\$ 88.90	\$ 71,120.00	0	778.58	778.58	\$ 71,120.00	\$ -	\$ 71,120.00
5	Disposal of Hazardous Soils	50	Tons	\$ 360.00	\$ 18,000.00	0	0	0	\$ -	\$ -	\$ -
6	Install and Install HDPE Pipe to Wells and Discharge, Rebar Surface	1	LS	\$ 137,820.00	\$ 137,820.00	0	100%	10%	\$ 13,782.00	\$ -	\$ 13,782.00
7	Acid Fill in Grates, Install Geotextile Membrane and Minimum 1" Crushed Rock on Surface	27,000	SF	\$ 0.30	\$ 8,100.00	0	0	0	\$ -	\$ -	\$ -
8	Install Well Pumps and Wellheads	1	LS	\$ 11,310.00	\$ 11,310.00	0	0	0	\$ -	\$ -	\$ -
9	Connect Piping and Pumps to Treatment System	1	LS	\$ 11,380.00	\$ 11,380.00	0	0	0	\$ -	\$ -	\$ -
10	Start-up Activities	6	Days	\$ 1,570.00	\$ 9,420.00	0	0	0	\$ -	\$ -	\$ -
Subtotal (Line 10)					\$ 487,770.00				\$ -	\$ -	\$ -
Subtotal (Line 11)					\$ 427,270.00				\$ 218,057.00	\$ 20,641.00	\$ 181,417.00
Additional Work											
11	Water Disposal Allowance 12,500 gallons (TSD)	0	Gal/hrs	\$ 0.40	\$ -	0	7500	7500	\$ 3,000.00	\$ -	\$ 3,000.00
12	Sub-Bits Soil for T&D	20	Tons	\$ 280.00	\$ 5,600.00	0	2.8	2.8	\$ 980.00	\$ -	\$ 980.00
13	System Operation, Placement, Anchoring, Operation	1	LS	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -
14	Cost of Road Opening Factors w/ Maintenance Band	1	LS	\$ 1,200.00	\$ 1,200.00	1	1	1	\$ 1,200.00	\$ 1,200.00	\$ -
14a	Project Manager	A	Hours	\$ 130.00	\$ 1,300.00	0	0	0	\$ 1,300.00	\$ 1,300.00	\$ -
15	Excav Trench Backfill	75	Tons	\$ 20.00	\$ 1,500.00	0	0	0	\$ -	\$ -	\$ -
16	Additional Hazardous and Non-Hazardous Soil Removal Deposit, 8 way (TSD)	0	Tons	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -
17	Traffic Control (2 Payment)	2	Days	\$ 970.00	\$ 1,940.00	0	0	0	\$ -	\$ -	\$ -
18	Crane and Equipment Overhaul, Size to 2' x 2' x 8' and Slings Capacity (Change Order 2)	0	Days	\$ 4,811.30	\$ -	0	3	3	\$ 14,633.90	\$ -	\$ 14,633.90
19	Provide 303 Feet of 8" Tall Temporary Security Fence with Privacy Screen with (20) gates (Change Order 3)	0	LA	\$ 2,742.94	\$ -	0	1	1	\$ 2,742.94	\$ -	\$ 2,742.94
19a	Install & Remove 240 Feet of 8" Tall Temporary Security Fence with Privacy Screen with (20) gates (Change Order 3)	0	LA	\$ 2,746.77	\$ -	0	0.5	0.5	\$ 1,373.39	\$ -	\$ 1,373.39
Subtotal (Line 11)					\$ 11,329.00				\$ 34,650.90	\$ 2,580.00	\$ 32,070.90
Total Cost (10 with Additional Work) (Line 11) (2018) (2019)					\$ 640,869.00				\$ 242,707.90	\$ 23,221.00	\$ 219,486.90

Notes:
Item No. 18 further will provide Daily Reports for documentation
Item No. 19 will provide 20' x 20' x 8' gates
Item 12 - 20' x 8' 8" large cement and 2 x 3,500 lb Super sacks within cement = 3.5 tons

OK AFS

C29632

11/20/18



TECHNICAL MEMORANDUM

To: Anna Sullivan, JCP&L
Cc: Bob Cohen, Tetra Tech
From: Peter Rich, Tetra Tech
Date: November 18, 2019
Subject: Ocean City Former MGP – October Panther Invoice #2 Review

Panther provided the attached invoice for work completed from November 1, 2019 to November 15, 2019. Panther completed the following during this time period:

- completed site sediment and erosion control features;
- delivered equipment and materials to the site;
- completed "hot-spot" excavations;
- disposed of soil and water off-site;
- provided privacy screening fencing for use during excavation; and,
- completed concrete removal and began trenching.

I agree with Panther's completion percentages and documentation of unit quantities of soil disposal, water disposal and concrete dust (stabilization) use.

I recommend payment of the invoice.

Attachment: Panther October Invoice #2

Monday

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (N): SCPL
CUSTOMER: SCPL
LOCATION: OCEAN CITY NJ

TODAY'S DATE: 10/28/19
CUSTOMER CONTACT:
CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	530	700	330	430
J. VOLMER	OP	↓	↓	↓	↓
J. FOGORZESH	OP	↓	↓	↓	↓
S. CARIBALDI	PT	↓	↓	↓	↓
C. STORM	PT	↓	↓	↓	↓

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill / Stone	
Certified Clean Topsoil	
Kin Dust	
FT of Safety Fence	
Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

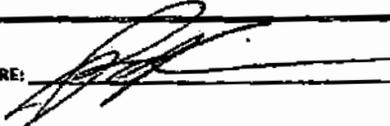
DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
QUIMP TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)	✓	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	✓	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER		PLATE TAMPER/ REMOTE COMPACTORS	✓	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	✓	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS		POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)		POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER / HAMMER	✓	PID/ FID METERS / 4-GAS	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	✓	PRESSURE WASHER (HOT/COLD)	
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	✓	WATER TRUCK / SMEAL	
MISC TOOLS	✓				

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

- START REMOVING CONCRETE FROM AROUND WELL AREAS ON 11TH ST SIDE
- START REMOVING CONCRETE FROM PIPING TRENCH 11TH ST SIDE
- REMOVE GUARD RAIL AND SET ASIDE
- REMOVE 6 FOOT FENCE AND 4 FOOT FENCE FROM EXCAVATION AREAS

CUSTOMER SIGNATURE: _____ PANTHER SIGNATURE: 

TUES

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (N): JCP 701191009
 CUSTOMER: JCP
 LOCATION: OCEAN CITY NJ

TODAY'S DATE: 10/29/19
 CUSTOMER CONTACT: _____
 CUSTOMER PHONE: _____

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	330	430
J. VOLMER	OP			330	430
S. GALBALDI	OP			330	430
J. POGORZELSKI	FT			400	500
C. STORMS	FT			400	500

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill (Stone 1 1/2)	1 LOAD
Certified Clean Topsoil	
Kiln Dust	
FT of Safety Fence	
Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)	✓	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	✓	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER		PLATE TAMPER / REMOTE COMPACTORS	✓	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	✓	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	✓	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)		POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER W/HAMMER	✓	PIDY FID METERS (4-GAS)	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	✓	PRESSURE WASHER (HOT/COLD)	
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	✓	WATER TRUCK / SMEAL	
MISC TOOLS	✓				

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELLO SAFETY MEETING WITH CREW

- CONTINUE REMOVAL CONCRETE FROM AROUND WELL AREAS ON 11TH ST
- CONTINUE REMOVAL CONCRETE FROM PIPING TRENCHES ON 11TH ST
- REMOVE OLD CAST IRON PIPES FROM TRENCHES 11TH ST
- LAY OUT FABRIC FOR CONSTRUCTION ENTRANCE
- SET UP OFFICE TRAILER

CUSTOMER SIGNATURE: _____ PANTHER SIGNATURE: _____

WED

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (#): 701191009

TODAY'S DATE: 10/30/19

CUSTOMER: JGCL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	330	430
J. VOLMER	OP			330	430
S. GARRIBALDI	OP			330	430
J. POGORZELSKI	FT			300	400
C. STORMS	FT			300	400

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill / Stone	
Certified Clean Topsoil	
Kln Dust	
FT of Safety Fence	
Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD DR ROAD)		GENERATORS (KW)	✓	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/BU)	✓	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER		PLATE TAMPER / REMOTE COMPACTORS	✓	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	✓	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	✓	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)		POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER w/ Hammer	✓	PID/ FID METERS (A-GAS)	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	✓	PRESSURE WASHER (HOT/COLD)	
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	✓	WATER TRUCK / SMEAL	
MISC TOOLS	✓				

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HOLD SAFETY MEETING WITH CREW

CONTINUE REMOVING CONCRETE FROM AROUND WELLS AROUND ON HAVEN AVE

CONTINUE REMOVING CONCRETE FROM PIPING TRENCHES ON HAVEN AVE

SPREAD STUMP ON CONSTRUCTION ENTRANCE

CUSTOMER SIGNATURE: _____

PANTHER SIGNATURE: _____

THURSDAY

**PANTHER TECHNOLOGIES, INC.
DAILY RECORD**

PROJECT NAME (#): 70119/009
 CUSTOMER: JCP
 LOCATION: OCEAN CITY NJ

TODAY'S DATE: 10/31/19
 CUSTOMER CONTACT:
 CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
<u>B. BARNEY</u>	<u>SM</u>	<u>600</u>	<u>700</u>	<u>330</u>	<u>430</u>
<u>J. VOLMER</u>	<u>OP</u>			<u>330</u>	<u>430</u>
<u>S. GARRIBALDI</u>	<u>OP</u>			<u>330</u>	<u>430</u>
<u>J. POGORZELSKI</u>	<u>FT</u>			<u>330</u>	<u>500</u>
<u>C. STOKES</u>	<u>FT</u>			<u>330</u>	<u>500</u>

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill / Stone	
Certified Clean Topsoil	
Kiln Dust	
FT of Safety Fence	
Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
<u>ACE Jetting</u>	<u>3 mkr</u>	<u>800</u>			

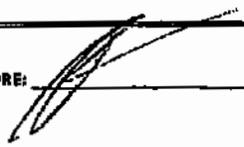
DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD DR ROAD)		GENERATORS (KW)	✓	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270)	✓	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS	✓	2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	✓	PLATE TAMPER / REMOTE COMPACTORS	✓	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	✓	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	✓	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)		POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER w/Hammer		PID / FID METERS (4-GAS)	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	✓	PRESSURE WASHER (HOT/COLD)	
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	✓	WATER TRUCK / SMEAL	
<u>MISC TOOLS</u>					

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

- ACE INSTALLING WATER EXTRACTION wells AROUND BOTH EXCAVATIONS
- OFF LOAD FORM UNIT, LOADER, EXCAVATOR
- START INSTALLING SEDIMENT CONTROL WADGLES PER PLAN
- REMOVE OLD FENCE POSTS
-
- ASSIST ACE IN INSTALLING JETS (EXCAVATOR HOURS FOR JETS TO KEEP WATER IN GROUND)

CUSTOMER SIGNATURE: _____ PANTHER SIGNATURE: 

FBI

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (#): 701191009
CUSTOMER: JCP
LOCATION: OCEAN CITY NJ

TODAY'S DATE: 11/1/19
CUSTOMER CONTACT:
CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	330	436
J. VOLMER	OP				
S. GARIBALDI	OP				
J. POGORZELSKI	PT				
C. STORMS	PT				

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill / Stone	
Certified Clean Topsoil	
Kiln Dust	
FT of Safety Fence	
Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
ACE SETTLE	2mbv	800	1.00		

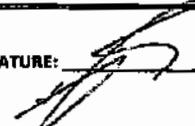
DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)	2	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
32-TON VIBRATORY ROLLER		2", 3" or 4" DUMPS	1	2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	1	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER W/Hammer	1	PID/PID METER (4-GAS)	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	PRESSURE WASHER (HOT/COLD)	
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	2	WATER TRUCK / SMEAL	
MISC TOOLS	✓	FOAM UNIT	1	ADLER TANK	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELLO SAFETY MEETING WITH CREW

- OFF LOAD SLIDE RAIL SYSTEM
- SET UP ADLER TANK IN CONTAINMENT
- FINISH INSTALLING STRAW WADOLLS AROUND SITE
- FINISH ASSISTING ACE IN WELL POINTS. ENCOUNTERED CONCRETE FOOTINGS AND PIPING IN AREA HAD TO HAMMER JUST TO GET POINTS IN, COULD NOT MOVE A CONCRETE HAMMER WHEN EXCAVATION DROVE TO
- PUT ALL CONCRETE REMOVED FROM WELL AREAS AND TRENCHING ON PLY AND COVER
- COVER ANY SOIL PILES WITH POLY
- PUMP WATER FROM SOIL ROLLERS AND PUT IN POLY TANK 2 MEN 2 HRS

CUSTOMER SIGNATURE: _____ PANTHER SIGNATURE: 

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

Monday

PROJECT NAME (#): 701191009

TODAY'S DATE: 11/4/19

CUSTOMER: JCAPL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNES	SM	600	700	330	430
J. VOLMER	OP			330	430
M. MISKOFSTY	HS			330	430
C. STORME	FT			400	500
J. EMELLS	FT			330	430

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID / FID METERS (4-GAS)	1 / 1	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

START AOC #1 EXCAVATION

INSTALL TWO SIDES AND BACK OF SLIDE RAIL

REMOVE CONCRETE PORTALS 4'x4' OUT OF EXCAVATION PIT PORTALS

ON OTHER SIDE OF SITE AND COVER WITH POLY.

SET UP PUMPING SYSTEM FOR AOC #1

CONTINUE CLEANING UP SITE

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

TUES

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (M): 201191009

TODAY'S DATE: 11/5/19

CUSTOMER: JCP

CUSTOMER CONTACT:

LOCATION: OCEAN CITY, NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	330	420
J. VOLMER	OP	600	700	330	430
M. MISKOFSKY	HS	600	700	330	430
C. STORMS	PT	500	700	330	430
J. EMERS	PT	500	700	330	430

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kln Dust	
Ft. of Safety Fence TEMP FENCE #	
FORM GALLONS	37 1/2
6' TEMP. FENCE w/ Privacy Screen	240 FT.
SAND BAGS	50

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
FEDERAL RENT A FENCE (TEMPORARY FENCE WITH PRIVACY SCREEN AND SAND BAGS)	DRIPPED		OFF		
	PANTHER		INSTALLED		

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS		ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER	3	1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID/PID METERS (4-63)	1/1	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

START WORKING OFF SOIL FROM AOC #1, ONLY 4 TRUCKS STAYED TWO DAYS

2021376 INSTALLED FRONT SIDE OF SLIP/BAIL SYSTEM

2021377 SHUT DOWN NORTH HAVEN FOR AQUIFER MONS

2021378 FORMED AOC #1 A COUPLE TIMES TO CUT DOWN SMALL

2021379 AIR MONITOR WITH DUST & PID. AOC #1

2021380

2021381

2021382

2021383

NOTE: FEDERAL RENT A FENCE DELIVERED 240' 6' FENCE PRIVACY SCREEN, 50 SAND BAGS

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

W 50

PANTHER TECHNOLOGIES, INC. DAILY RECORD

PROJECT NAME (N): 701191009

TODAY'S DATE: 11/6/19

CUSTOMER: YCAL

CUSTOMER CONTACT:

LOCATION: Ocean City NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	330	430
J. VOLMER	OP	600			430
M. MISHKOFSKY	HS	600			430
C. STORMS	FT	500	600	400	500
J. EMERIS	FT	500	600	400	500
J. HORVATH					

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	
BAGS CONCRETE DUST	22
Bank Run SAND LOADS	10

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS
2021384	1
2021385	1
2021386	1
2021387	1

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270) (80)	2	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER, REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID / FID METERS / 4-GAS	1/1	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HOLD SAFETY MEETING WITH CREW

POUR TRUCKS ON SITE TO LOAD OUT SOIL
 TWO FEET OF WATER IN EXCAVATION. PUMPED WATER IN FORTH TANK
 ROOFS CEMENT 22 BAGS TO ORT OUT SOIL AND LOADED OUT
 START BACKFILL OF ROC #1
 PICTURES OF DEPTH WITH TAPE MEASURING, ALSO WITNESSED BY
 TERRY TECH ZACH LAPORÉT.
 TAMP WITH REMOTE TAMPER
 STOCKPILE CLEAN FILL IN MAIN YARD AND BANK OVER WITH LOADER DUE
 TO OVER HEAD WIRES.

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:



PANTHER TECHNOLOGIES, INC.
DAILY RECORD

THUR

PROJECT NAME (R): 701191009

TODAY'S DATE: 11/7/19

CUSTOMER: JCP

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	370	430
J. VOLMER	OP				
M. MISHOFSKY	HS				
C. STORMS	FT				
J. SMERS	FT				

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	
BRICKLON SAND LOAD	1

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	3	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID / FID METERS / 4-GAS	1/1	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HOLD SAFETY MEETING WITH CREW

FINISH BACK FILLING AOC #1

PULL ALL SLIDE ROLL SYSTEM FROM AOC #1

REMOVE 6 FOOT SAFETY FENCE FROM AOC #1 AREA

SET UP WELL POINT SYSTEM HEADERS AROUND AOC #8

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

FEI

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (N): 701191009

TODAY'S DATE: 11/8/17

CUSTOMER: JCPL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY, NS

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	330	420
J. VOLMER	OP				
M. MISKOPSKY	HS				
C. STOLMS	FT				
J. EMERS	FT				

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
MITCHELL MICHOES	2	8	8	3	-

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS
2,500 GALLON	6

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	3	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID / PID METERS / G-GAS	1/1	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HOLD SAFETY MEETING WITH CREW

LOADED OUT 4 LOADS SOIL IN AM

START INSTALLING SLIDE RAIL SYSTEM IN DOC 2E

7 HOURS PRE DIGGING EXCAVATION TO EXPOSE CONCRETE FOOTINGS

HAMMER ALL FOOTING SLABS IN DOC 2B

REMOVE ALL PIPING THAT WAS IN EXCAVATION AND PUT IN ROLL OFF

BREAK UP FOOTING THAT WAS REMOVED FROM DOC 1 SPIN FIVE CONCRETE + CRACK

5 LOADS OF WATER PUMPED OUT OF EXCAVATION AND WENT TO SATEWAY MAN

FE DC NS - 002 / FE DC NS - 005

FE DC NS 003 / FE DC NS - 006

FE DC NS 004 / ~~FE DC NS - 007~~

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

MONDAY

PROJECT NAME (#): 701191009

TODAY'S DATE: 11/11/19

CUSTOMER: JCPL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. Barak	SM	6:40	7:40	3:20	4:30
J. Volmer	OP				
M. MISHKOFSKY	HS				
C. STORMS	FT				
J. Emery	FT				

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	
FORM CONCENTRATE	27 GAL
POLY	1 Roll

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS
PROCESSING COALD WASTE	2

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID/PID METERS AC-GAS	2	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE
Held safety meeting with crew
DECON 24' PANELS YR (SUNSET)
FINISH INSTALLING SLIDE RAIL SYSTEM LOC B ^A
DECON 325 CAT WITH HAMMER
INSTALL 6 FT SAFETY FENCE AROUND EXCAVATOR LOC B ^A
FORM AREA END OF DAY

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

TUES

PROJECT NAME (#): 701191009

TODAY'S DATE: 11/12/19

CUSTOMER: SCP

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	330	400
J. VOLMER	OP				
M. MISHKESH	HS				
C. STOKES	FX				
J. EMERS	PT				

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	
CONCRETE BAGS 90LB	18
SUPER SACK CONCRETE	2
BANKW SAND	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS
NON HAZ SOIL	10
CONCRETE BAGS	18
ROLL POLY	1

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		MID Meters (A-GAS)	2	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F350)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY WITH CREW

TWO LOADS OF WATER REMOVED FROM BRACKTANK

START LOADING OUT SOIL FROM DOC #8, ADD 18 BAGS CONCRETE 90LB PER BAG, 2 SUPER SACK CONCRETE

START BACKFILLING RIGHT SIDE OF DOC #8 EXCAVATION AND TAMP IN LIFTS

STACK PILE CLEAN BACKFILL

START BACKFILLING LEFT SIDE OF DOC #9 EXCAVATION AND TAMP IN LIFTS

FROM AREA IN DOC #8 NOT RE-EXCAVATED

PICTURES WERE TAKEN OF DOC #8 OF DEPTH 8' + WITNESS BL JUSTIN COOPER TETRA TECH

2021392, 2021395, 2021398, 2021401

2021393, 2021396, 2021399

2021394, 2021397, 2021400

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

WMSD

PROJECT NAME (#): 701191009

CUSTOMER: SCPL

LOCATION: OCEAN CITY NJ

TODAY'S DATE: 11/13/19

CUSTOMER CONTACT:

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	6:00	7:00	3:30	4:30
J. VOLMER	OP				
M. MISHKOFSKY	HS				
C. STURMS	FT				
J. EMERS	FT				

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	
FOAM CONCRETE	27 GAL

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID / PID METERS / 4-GAS	2	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

CONTINUED BACKFILLING FRONT HALF OF DEC #8. TAMP IN LIFTS AND COMPACTION TEST PER ZACH LABORER TETRA TECH.

INSTALL SLIDERAIL SYSTEM IN SECOND HALF OF DEC #8

FOAM DEC #8 EXCAVATION

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

THUR

PROJECT NAME (S): 701191009

TODAY'S DATE: 11/14/19

CUSTOMER: JPL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/DP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	6:00	7:00	3:30	4:30
J. VOLMER	OP				
M. MISHOFSKY	HS				
C. STORMS	MT				
J. EMERS	PT				

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	
Cleanly Washed S. Sand	9 LOADS
Roll Poly	1

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS
NON-HAZ SOIL OUT	10

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID / FID METERS (4-GAS)	2	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE	
HELLO SAFETY MEETING WITH CREW	
LOAD OUT NON-HAZ SOIL 10 LOADS	
2021402	Pump water from excavation and put in fract tank
2021403	Street backfilling and tamp in lifts
2021404	Stockpile 1/2 load of non-haz soil on poly and cover
2021405	Broom clean streets, Decon truck
2021406	9 loads clean fill in on site
2021407	
2021408	
2021409	
2021410	
2021411	

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

FBI

PROJECT NAME (#): 701191009

TODAY'S DATE: 11/15/19

CUSTOMER: JCPL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	7:00	7:00	3:30	4:30
J. VOLMER	OP				
M. MISKOFKY	HS				
C. STORMS	FT				
J. KEMBS	FT				

MATERIALS DESCRIPTION	QTY
Loads of Certified Clean Backfill	
Loads of Certified Clean Topsoil	
Loads of DGA or Other Stone:	
Loads of Kiln Dust	
Ft. of Safety Fence	
CLEAN BANK RW SAND	5 LOADS

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		185 CFM COMPRESSORS		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		50 KW GENERATORS		ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	5-7.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	2	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	ROLLS OF 6-MIL POLY	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		POUNDS/GALS OF PERSULFATE	
BACKHOE LOADER		PID/PID METERS (4 GA)	2	LEVEL B PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	LEVEL C PPE (# OF MEN)	
UTILITY VEHICLES (F250)	2	UTILITY VEHICLES (F550)		PRESSURE WASHER (HOT/COLD)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HOLD SAFETY MEETING WITH CREW

FINISH BACKFILLING AOC #8 TAMP IN LIFTS

PULL SLIDE RAIL SYSTEM FROM EXCAVATION

DECOR SLIDE RAIL SYSTEM

PULL WELL POINTS AND DECOR

START DECOR OF EXCAVATION

CUSTOMER SIGNATURE: _____

PANTHER SIGNATURE: _____



220 Route 70 East, Suite B
Medford, NJ 08055
Phone: 609-714-2420
Fax: 609-714-2495

Remit to:

Panther Technologies, Inc
PO Box 757042
Baltimore, MD 21275-7042

Invoice 19.1009.3

Bill to: FIRSTENERGY 76 S MAIN STREET AKRON, OH 44308	Job: 701191009 JCPL Ocean City MPG 11th Street & Haven Avenue Ocean City, NJ 08226
--	---

Invoice #: 19.1009.3 Payment Terms: NET 45 DAYS Customer Code: FIRENG612	Date: 11/30/19 Customer P.O. #: 55128545 Salesperson:
---	--

Remarks: 11/16/19 to 11/30/19 Services

Quantity	Description	Unit	Price	Total
1.000	11/16/19 to 11/30/19 Services	Eac	83,919.64	83,919.64
		Subtotal:		83,919.64
		Total:		83,919.64

OK *AFS*
C29632
12/6/19

**See Approval
Stamp Next
page**

Panther Invoice Ocean City MGP Site

Line Item 1 - Remediation Services

APPROVAL STAMP	
P.O. NO. <u>55128545</u>	INV. NO. <u>19.1009.3</u>
COMPANY CODE: SCOO	^{Resp} COST CENTER <u>5020702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

12-9-19

Approved for payment of \$75,527.68
SES: # 1119331366 Fax: # 8044926

Linnet Item - 1 Remediation Services

APPROVAL STAMP Retainage	
P.O. NO. <u>55128545</u>	INV. NO. <u>19.1009.3R</u>
COMPANY CODE: SCOO	^{Resp} COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

12-9-19

SES: # 1119331920 Fax: # 8044927
Approved for payment of \$8,391.96

First Energy PO: 05126648

INVOICE AS
PANTHER TECHNOLOGIES INC.
JCP&L OCEAN CITY, NJ FORBRIEN WWP REBIBRATORION
GROUNDWATER TREATMENT SYSTEM PROJECT

Period from November 15, 2019 to November 26, 2019

Item No.	Material Quantity	Unit	Unit Price	Contract Amount	% Complete Last Month	% Complete This Month	Sched. Complete To Date	Less Previous M. Estimate	Total Date This Month
1	1	LB	\$ 32,500.00	\$ 32,500.00	75%	10%	\$ 27,500.00	\$ 24,270.00	\$ 3,230.00
2	1	LB	\$ 6,000.00	\$ 6,000.00	100%	0%	\$ 6,000.00	\$ 6,000.00	\$ -
3	1	LB	\$ 97,250.00	\$ 97,250.00	100%	0%	\$ 97,250.00	\$ 97,250.00	\$ -
4	1	TON	\$ 98.00	\$ 78,800.00	77.83	82.64	\$ 78,800.00	\$ 78,800.00	\$ 8,045.00
5	1	TON	\$ 300.00	\$ 18,000.00	0	0	\$ -	\$ -	\$ -
6	1	LB	\$ 137,600.00	\$ 137,600.00	10%	0%	\$ 13,760.00	\$ 13,760.00	\$ 92,860.00
7	1	LB	\$ 11,300.00	\$ 11,300.00	0	0	\$ -	\$ -	\$ -
8	1	LB	\$ 11,300.00	\$ 11,300.00	0%	20%	\$ 2,260.00	\$ -	\$ 2,260.00
9	1	LB	\$ 11,600.00	\$ 11,600.00	0%	0%	\$ -	\$ -	\$ -
10	5	Days	\$ 1,900.00	\$ 7,850.00	0	0	\$ -	\$ -	\$ -
				\$ 487,710.00					
Additional Work									
11	0	Contract	\$ 3,400	\$ -	7500	0	\$ 3,400.00	\$ 3,400.00	\$ -
12	20	Yards	\$ 300.00	\$ 6,000.00	3.5	0.0	\$ 600.00	\$ 600.00	\$ -
13	1	LB	\$ -	\$ -	0	0	\$ -	\$ -	\$ -
14	1	LB	\$ 1,200.00	\$ 1,200.00	1	0	\$ 1,200.00	\$ 1,200.00	\$ -
14a	0	Hours	\$ 125.00	\$ 1,000.00	0	0	\$ 1,000.00	\$ 1,000.00	\$ -
15	75	Yards	\$ 20.00	\$ 1,500.00	6	50.69	\$ 1,200.00	\$ 1,200.00	\$ 300.00
16	0	Yards	\$ -	\$ -	0	0	\$ -	\$ -	\$ -
17	2	Days	\$ 970.00	\$ 1,940.00	0	0	\$ -	\$ -	\$ -
18	0	Days	\$ 4,000.00	\$ -	3	0	\$ 14,000.00	\$ 14,000.00	\$ -
19	0	LD	\$ 2,700.00	\$ -	1	0	\$ 2,700.00	\$ 2,700.00	\$ -
19a	0	LD	\$ 2,700.00	\$ -	0.5	0	\$ 1,350.00	\$ 1,350.00	\$ -
				\$ 11,800.00			\$ 11,800.00	\$ 11,800.00	\$ 0
							\$ 28,530.00	\$ 28,530.00	\$ 0

Notes:
Item No. 16 Further will provide Duly Receipt for documentation
Copy electrical items are complete
Item 13 - 25 x 96 lb. large concrete and 2.5 x 2.00' @. Other units contain cement = 2.5 tons

OKAFS
C29632

12/6/19

Project: 001091600



TECHNICAL MEMORANDUM

To: Anna Sullivan, JCP&L
Cc: Bob Cohen, Tetra Tech
From: Peter Rich, Tetra Tech
Date: December 4, 2019
Subject: Ocean City Former MGP – October Panther Invoice #3 Review

Panther provided the attached invoice for work completed from November 16, 2019 to November 30, 2019. Panther completed the following during this time period:

- disposed of soil off-site;
- completed trenching and pipe installation inside the site fenced area;
- completed the bulk of trenching and pipe installation along Haven Avenue;
- backfilled trenches;
- installed well head in the trenched locations; and,
- imported additional fill as needed.

I agree with Panther's completion percentages and documentation of unit quantities of soil disposal, and additional fill (beyond the 50 tons in the base contract).

I recommend payment of the invoice.

Attachment: Panther October Invoice #3

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

Mon

PROJECT NAME (E): 701191009
 CUSTOMER: JCP
 LOCATION: Ocean City NJ
 TODAY'S DATE: 11/18/15
 CUSTOMER AGENCY:
 CUSTOMER PHONE:

NAME	Labor Code (SA/CP/PT)	Stop Start	On Site Start	On Site Finish	Stop Finish	INTEGRATED DESCRIPTION	QTY
R. BARNEY	SM	8:00	7:00	3:30	7:30	Levels of Certified Clean Earth	
J. VALONIK	OP					Levels of Certified Clean Topsoil	
M. STANFISHY	PT					Tests of 968 or Other States	
C. STORMS	PT					Levels of 1/11 Chart	
S. GORRARD	PT					Ft. of Safety Fence	

SUBCONTRACTOR NAME	Labor Code (SA/CP/PT)	Stop Start	On Site Start	On Site Finish	Stop Finish	DISPOSAL INFO / NUMBER 8 (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	HEAVY EQUIPMENT	QTY	EXCAVATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (30'-12")		3/8 CFM COMPRESSORS		800 TRAILER #1 - HIGH FLOW	
DUMP TRUCK (10Y W/HD OR ROAD)		SHREW GENERATORS		800 TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (CUMMINS)	2	87.5 KW GENERATORS	1	3,000 GALLON SS TANKS	
1.5 TON FABRICATION ROLLER		3" 2" x 8" PUMPS		3,000 GALLON POLY TANKS	
TANK DIGGER (800/150)		TRUCKS		1,000 GALLON POLY TANKS	
NUMBER TIRE (400)	1	PLATE JAMPER (800/150) COMPACTORS	1	SOFT LENGTHS OF 2" or 2" HOSE	
EXCAVATOR W/ WALKER		ENCLOSED STORAGE TRAILERS		ROLLS OF 6 MIL POLY	
EXCAVATOR W/ WALKER		OFFICE TRAILERS	1	FOUR (4) GALS OF PEROXIDE	
EXCAVATOR W/ WALKER HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	FOUR (4) GALS OF PERMANENT	
FURUTA LOADER OR SPOD ATZER		SAFETY POWDER		FOUR (4) GALS OF PERMANENT	
BAGGIE LOADER		10' DIRT METERS (8-6)	2	LEVEL B PIPE (10' OF MEN)	
3,000 POUND LHM		MINIMUM DIRT METERS	1	LEVEL C PIPE (10' OF MEN)	
UTILITY VEHICLES (P/SD)	2	UTILITY VEHICLES (P/SD)		PRESSURE WASHED (MIST/FOG)	1

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

LOADED OUT ALL SHOE RAIL EQUIPMENT

LOADED OUT W/BA PUMP WATER

FINISH DOWN EXCAVATOR AND LOADED OUT

INSTALLED SILT BARRIERS & SENSORS ??

CLEANED SITE.

CUSTOMER SIGNATURE: _____ PANTHER SIGNATURE: *[Signature]*

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

TUES

PROJECT NAME: 201191009 TODAY'S DATE: 11/19/19
 CUSTOMER: JCP CUSTOMER CONTACT:
 LOCATION: OCEAN CITY, NJ CUSTOMER PHONE:

NAME	Job Code (SA/OP/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish	DESCRIPTION	QTY
R. BARNETT	SA	6:00	7:00	3:30	4:30	Certified Clean Bucket / Store	
J. VOLLMER	OP					Certified Clean Tractor	
M. MATHIAS	PT					Oil Fuel	
C. STUBBS	PT					FT of Safety Fence	
S. COOK/BAZAL	PT					Poly Stems	2
						1 1/2 Street	1.000

SUBCONTRACTOR NAME	Job Code (SA/OP/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish	DESCRIPTION	QTY
Path Saw Cutting	SA	-	7:00	3:30	-		

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	COORDINATION EQUIPMENT	QTY
LEIGH BEACH EXCAVATOR (2017)		TOPPING SYSTEM		BE2 TRAILER #1 - HIGH FLOW	
BUMP TRUCK (OFF ROAD ON TOWNS)		GENERATOR 1 KW	2	BE2 TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (2017)	1	IRS CPM COMPRESSORS		3000 GALLON TANKS	
AIR-DRY VIBRATORY ROLLER		3" 1" or 2" PUMPS		3000 GALLON TANKS	
TRUCK ROLLER (2017)		PLATE		3000 GALLON TANKS	
FLUMMULINE LOADER	1	PLATE TAMPERS / VIBRATOR COMPACTORS	1	20 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/GRAPPLE		TRUCK STORAGE TRAILER	1	POUNDALS OF PERFORATE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILER	1	POUNDALS OF PERFORATE	
EXCAVATOR W/GRAPPLE		REBAR BARRIERS (CONCRETE OR PLASTIC)	4	POUNDALS OF PERFORATE	
EXCAVATOR W/GRAPPLE		SAFETY SHOWER		LEVEL 2 PIPE (10 FT MIN)	
EXCAVATOR W/GRAPPLE		SOIL PROTECTORS (2x2)	2	LEVEL 2 PIPE (10 FT MIN)	
EXCAVATOR W/GRAPPLE		NEEDHAM CLAY MATS	1	NEEDHAM TRAILER (20' X 10')	1
EXCAVATOR W/GRAPPLE		LIBRARY VEHICLES (2017)	2	WATER TRUCK / DUMP	
EXCAVATOR W/GRAPPLE					

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HEAVY SAFETY WITH CREW

BEACH MARK CRANE USED IS ON 11TH STREET SIDE WALK ALONG WITH
 ON 3:57

MAN ON W/ SAW CUTTING ON HAWK ON 11TH STREET
 START TRENCHING AND INSTALLING HDPE PIPE 1/4 YARD 11TH STREET AND
 ON SOIL FROM TRENCH IS BEING EATEN FROM ON PIPE FOR LEAD OUT
 FOR 3000 LATER TO TRA TRAIL

SECURE TRENCHES COVER WITH SOIL

CUSTOMER SIGNATURE: _____ MANAGER SIGNATURE: _____

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

W60

PROJECT NAME: 701191009 TORNTS DATE: 11/20/19
 CUSTOMER: SCPL CUSTOMER CONTACT:
 LOCATION: OCEAN CITY, NJ CUSTOMER PHONE:

NAME	Labour Code (JOB/CITY)	Shop Hours	On Site Start	On Site Finish	Shop Finish	MATERIALS DESCRIPTION	QTY
R. BARNEI	SD	000	7:00	4:00	5:00	Decontam Clean Booths / Room	
S. VONDER	OP					Decontam Clean Booth	
M. MUSNYSKI	ME					6th Deck	
C. STORMS	ET					PT of Safety Fence	
S. GARIBOLDI	PT					poly sheeting	
						clean 3 bags yellow fill	3 loads

DISCONTINUED NAME	Labour Code (JOB/CITY)	Shop Hours	On Site Start	On Site Finish	Shop Finish	DISPOSAL INFO / BANNING # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	CONCRETE EQUIPMENT	QTY
LONG REACH EXCAVATOR (20'-70')		TOPSOIL OPS SYSTEM		500 TRAILER HI - HIGH FLOW	
GRUB TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)	2	500 TRAILER HI - LOW FLOW	
TRUCK EXCAVATOR (20' EXCAVATOR)	1	AIR COMPRESSORS		3,000 GALLON TANKS	
30-YD VIBRATORY ROLLER		2" 3" or 4" PUMPS		2,000 GALLON POLY TANKS	
TRUCK DOZER (20' DOZER)		WELDERS		1,000 GALLON POLY TANKS	
NUMBER TRUCK LOADER	1	PLATE WALKER / REMOTE CONDUCTIONS	1	20 FT LENGTH OF 2" or 3" HOSE	
EXCAVATOR W/ HAMMER		ENCLOSURE STORAGE TRAILERS	1	CYRINDRICALS OF PERIMETER	
EXCAVATOR W/ HAMMER		OFFICE TRAILERS		POUND BAGS OF PERMSULFATE	
EXCAVATOR W/ HAMMER (20')		RUNOFF BARRIERS (CONCRETE OR PLASTIC)	4	LEVEL B PIPE (6" OF DIA)	
MINIOTA LOADER (OR BOLD STEER)		SAFETY SHOWERS		LEVEL C PIPE (6" OF DIA)	
BACKHOE LOADER		CONCRETE PIPES (4" DIA)	2	PRESSURE WASHERS (HOT/COLD)	1
BACKHOE LOADER		NON-TOXIC DUST MISTERS	1	WATER TRUCK / TANK	
UTILITY VEHICLES (TRUCK)		UTILITY VEHICLES (TRUCK)	2		

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

WELD SAFETY meeting with client

continue installing HOPE PVE 11" STREET TARD. ON TEST
bottom pipes over night 15 PSI
bottom through 11" street vent. not still on top and cover
SECURE SITE

CUSTOMER IS DELIVERED: _____ PANTHER SIGNATURE: _____

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

FLUENT

PROJECT NAME: 201191009 TODAY'S DATE: 11/22/19
 CUSTOMER: SCPL CUSTOMER CONTACT:
 LOCATION: OCHON CRY AT CUSTOMER PHONE:

NAME	Job Code (M/F/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish	MATERIALS DESCRIPTION	QTY
R. DALRYMP	SM	6:00	7:00	3:30	4:30	Certified Clean PPE (H) / Stone	
J. VOLNER	OP					Certified Clean PPE (H)	
M. MISHKIN	HS					Zip Dust	
C. STUBBS	PT					Fit of Safety Harness	
S. GABRIANO	PT					Poly Shavings	

SUBCONTRACTOR NAME	Job Code (M/F/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish	DISPOSAL INFO / MATERIAL TYPE (PERCENTS)	# OF LOADS
MAK	ERW		8:00			MAK HAZ 2021412	2
						MAK HAZ 2021413	1

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	ORDINATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (20-30)		TOPCON GPS SYSTEM		500 TRAILER #1 - HIGH FLOW	
GRADER/TRACTOR (OFF ROAD)		GENERATORS (100)	1	500 TRAILER #2 - LOW FLOW	
TRACTOR EXCAVATOR (BACKHOE)	1	500 CFM COMPRESSORS		3,000 GALLON 45 TANKS	
22-TON WELDING ROILER		2" 2" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACTOR (W/DOZER)		TRENCHERS		1,000 GALLON POLY TANKS	
SLURRY TIRE LOADER	1	PLATE/TRANSFER / REMOTE CONNECTIONS	1	50 OF LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/ARMOR		WELDING STORAGE TANKS	1	POUNDS/PALETS OF PERCHLORATE	
EXCAVATOR W/ARMOR		OFFICE TANKS		POUNDS/PALETS OF PERCHLORATE	
EXCAVATOR W/ARMOR HEAD		HEAVY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/PALETS OF PERCHLORATE	
MINIOTA W/HAZER ON 3RD STERN		ENERGY BARRIERS		LEVEL 3 PPE (4 OF MISC)	
BACKHOE LOADER		PIPE/PIE MASTERS & C/S	2	LEVEL 3 PPE (4 OF MISC)	
3,000 GALLON LULA		MICROHAM DUST BARRIERS	1	PRESSURE WASHING (HOT/COLD)	1
UTILITY VEHICLES (2500)		UTILITY VEHICLES (2500)	2	WATER TRUCK / DEMOL	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

CONTINUE PILING 11" DIAMETER TOP LAYER (1200)
FINISH PILING 11" DIAMETER TOP - QA TEST FOR BACKFILL
BACKFILL PILING 12" DIAMETER CLEAN W/STOCK WASTE - BLACK TOP
BACKFILL TOP GRADE WITHIN 24 HOURS MAXIMUMS TRAP 1-100%
2 LOADS OF NEW HAZ SOLID WASTE

KEEP ON SITE TO FINISH SAW CUTTING

SECURE SITE

CUSTOMER SIGNATURE: _____ PANTHER ENGINEERED: _____

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

MAN

PROJECT NAME: 20191009 TODAY'S DATE: 11/25/19
 CUSTOMER: SEPL CONTRACTOR: _____
 LOCATION: Deer Park City NJ CUSTOMER WARD: _____

NAME	Labor Code (SMB/OP/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish	MATERIALS DESCRIPTION	QTY
R. BARNES	SM	6:00	7:00	5:00	6:00	Certified Clean Bucket / Stop	
J. HANCOCK	OP					Certified Clean Tractor	
M. MURPHY	HS					1/2" Dust	
G. STERN	PT					1/2" of Safety Fence	
S. CASANOVA	PT					Relay Switching	

DISPOSITOR NAME	Labor Code (SMB/OP/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish	DISPOSAL INFO / INQUIRY # (TYPE/AMOUNT)	# OF LOADS
						2021414 100042	1
						2021415 100042	1

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	DISPOSITION EQUIPMENT	QTY
LONG REACH EXCAVATOR (EOT-75)		TOPCON GPS SYSTEM		TRUCK TRAILER RE - HIGH FLOW	
GRAP TRACK (CON ROAD OR ROAD)		GENERATORS	1	TRUCK TRAILER RE - LOW FLOW	
TRUCK EXCAVATOR (EOT-75)	1	3/8" OSHA COMPRESSORS		3,000 GALLON RE TANKS	
30-TON VIBRATORY ROLLER		2" 3" or 4" PUMPS		3,000 GALLON POLY TANKS	
TRACK CREEPER (EOT-75)		TRENCHER		3,000 GALLON POLY TANKS	
FLUID TIRE LOADER	1	PLATE COMPACTOR / REMOTE GENERATORS	1	30 FT GENSETS (2" or 3" HOSE)	
EXCAVATOR W/MANUAL		ENCLOSURE STORAGE TRAILERS	1	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/SHOULDER		OFFICE TRAILER	1	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/HOING WARD		REUSEY BARBERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERMANGANATE	
ROBORA LOADER ON 2ND STEEL		SAFETY SHOES		LEVEL B PIPE (2" OF LINE)	
BACKHOE LOADER		40' HD METER / G-20S	2	LEVEL C PIPE (2" OF LINE)	
BLISS POLYMER LHM		MATERIAL DUST NETS	1	PRESSURE WASHER (HOT WATER)	1
UTILITY VEH (CLEANER)		UTILITY VEHICLES (2200)	2	WATER TRUCK / BUREAU	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MESSAL WITH CABLE

START TRENCHING 4" DIA. AND 100 YARD

START 10" DIA. 4" DIA. AND 100 YARD

BACKFILL & TAMP 10" DIA.

INSTALL TRENCH TIE 18" BELOW GRADE

ON THE 4" DIA. 4" DIA. BACKFILL

THE ROAD 10" DIA. 20" DIA. OFF SITE

CUSTOMER SIGNATURE: _____ PARTNER SIGNATURE: 

TUBS

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME NO: 70171009 TODAY'S DATE: 11/26/19
 CUSTOMER: JDA CUSTOMER CONTACT:
 LOCATION: Ocean City, NJ CUSTOMER PHONE:

NAME	Letter Code (S/P/T)	Stop Start	On Site Start	On Site Finish	Stop Finish	INVENTORY DESCRIPTION	QTY
<u>R. ARNEY</u>	<u>SP</u>	<u>6:40</u>	<u>7:00</u>	<u>3:30</u>	<u>4:30</u>	Certified Clean Backfill / Stone	
<u>J. KOLMER</u>	<u>OP</u>					Certified Clean Topsoil	
<u>M. MISNICKI</u>	<u>MS</u>					Fill Dirt	
<u>S. GARIBOLDI</u>	<u>PT</u>					FT of Safety Fence	
						Poly Sheeting	
						<u>Back Fill SAND CAP</u>	<u>1</u>
						<u>I-5 GRANUL SAND CAP</u>	<u>1</u>

DISPOSAL METHOD / REMOVAL (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	GOODS/OTHER EQUIPMENT	QTY
LONG REACH EXCAVATOR (20'-70')		TOPCON GPS SYSTEM		800 TRAILER (H - HIGH FLOW)	
DUMP TRUCK (OFF ROAD CAPACITY)		GENERATORS	<u>1</u>	800 TRAILER (L - LOW FLOW)	
FRANCE EXCAVATOR (18' ZED)	<u>1</u>	365 CFM COMPRESSORS		800 GALLON ST TANKS	
33-TON VIBRATORY ROLLER		2" 3" or 4" PUMPS		2500 GALLON PUMP TRUCKS	
TRUCK BODIES (AS REQUIRED)		TRUCKS		1000 GALLON POLY TANKS	
GRADER TIRE LOADER	<u>1</u>	PLANE/GRADER / REMOTE OPERATORS	<u>1</u>	50 FT LENGTHS OF 1" or 2" HDPE	
EXCAVATOR W/ARMOR		ENCLOSED STORAGE TRAILERS	<u>1</u>	POUNDS/BAGS OF PEROLITE	
EXCAVATOR W/ARMOR		OFFICE TRAILERS	<u>1</u>	POUNDS/BAGS OF PEROLITE	
EXCAVATOR W/ARMOR HEAD		JERRY BARRIERS (CONCRETE OR PLASTIC)	<u>4</u>	POUNDS/BAGS OF PEROLITE	
FLIGHTY LOADER OR BOD STEEL		SAFETY SHEETS		LEVEL C/PPE (2 OF EACH)	
BALANCE LOADER		RED/RED MATTERS (100)	<u>1</u>	LEVEL C/PPE (2 OF EACH)	
8000 LB LOAD LIFT		MINIMUM SAFETY MATS	<u>1</u>	PRESSURE WASHER (HOT/COLD)	<u>1</u>
UTILITY VEHICLES (2500)		UTILITY VEHICLES (2500)	<u>2</u>	WATER TRUCK / SHEL	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HEAVY SAFETY MEETING WITH CREW

CONTRACTOR PIPING WORKSHEET IN XA00

FOR TEST LOGS

FOR TRAIL TRACING TAP

BACK FILL IN LISTS

THE LABEL GREEN FILL

CUSTOMER SIGNATURE: _____ PANTHER SIGNATURE: _____

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

W20

PROJECT NAME: 7011 91009
CUSTOMER: JETA
LOCATION: OCEAN CITY, NJ
TRUCK DATE: 11/22/19
CUSTOMER CONTACT:
CUSTOMER PHONE:

NAME	Letter Code (S/M/P/PT)	Shop Start	On Site Start	On Site Finish	Shop End	MATERIALS DESCRIPTION	QTY
R. ADAMS	SM	6:00	7:00	3:00	3:30	Certified Clear Backho / Crane	
S. VOLUNTEER	OP					Certified Clear Topsoil	
M. MURPHY	MS					40lb Bags	
G. SPIDERS	PT					FT of Safety Fence	
S. GARLAND	PT					Poly Stacking	
						IS CRANE CAP	2

COMPACTOR NAME	Letter Code (S/M/P/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish	DISPATCH INFO / COMMENTS (TYPE/FACILITY)	# OF LOADS

ITEM	QTY	ITEM	QTY	ITEM	QTY
LEUNG BEACH EXCAVATOR (20'-10")		TOPCON GPS SYSTEM		500 TRAILER HI - HIGH FLOW	
DUMP TRUCK (10YD ROAD OR ROAD)		GENERATORS (100)		500 TRAILER HI - LOW FLOW	
TRACK EXCAVATOR (15.5/20/30)		300 CFM COMPRESSORS		3,000 GALLON 55 DRUMS	
15-TON VIBRATORY ROLLER		2" 8" 11" RUMBLE		2,500 GALLON POLY TANKS	
TRUCK DOZER (180/150)		TRUCK DOZER		3,000 GALLON POLY TANKS	
TRUCK TIRE (180/150)		PLATE TAMPERS / BROTHER COMPACTORS		300YD LENGTHS OF 2" or 2" HOSE	
EXCAVATOR W/GRAPPLE		ENCLOSED STORAGE TRAILERS		FOUR (4) GALS OF PERCHLORATE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS		FOUR (4) GALS OF PERCHLORATE	
EXCAVATOR W/GRAPPLE HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)		FOUR (4) GALS OF PERCHLORATE	
EXCAVATOR LOADER OR 3RD STEER		SAFETY BARRIERS		LEVEL 2 PIPE (10' OF 18")	
BACKHOE LOADER		NO. 160 METERS (100)		LEVEL COPPE (10' OF 18")	
3,000 GALLON TANK		METAL MAST METERS		PRESSURE WAGON (HOT/COLD)	
UTILITY VEHICLES (150)		UTILITY VEHICLES (150)		WATER TRUCK (1000)	

DESCRIPTIONS OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY BARRIERS WITH CHAIN

CRANE TRAILER BETWEEN AREA & PLACE TO LAST 3 HOURS W/ CRANE

SET UP 200 YD FROM HOUSE (AFTER WORK)

GO THROUGH HOUSE DELIVERED TO SITE FROM 300 YD TRAILER

SET UP TEST AREA FOR IS FILL

REMOVE ALL OTHER TRUCKS FROM AREA WITH CAUTION & ALL ARE CHAINED SAFELY

SECURE SITE

CUSTOMER SIGNATURE: _____ PANTHER SIGNATURE: 



220 Route 70 East, Suite B
Medford, NJ 08055
Phone: 609-714-2420
Fax: 609-714-2495

RECEIVED
DEC 13 2019
Environmental Department

Remit to:
Panther Technologies, Inc
PO Box 757042
Baltimore, MD 21275-7042

Invoice 19.1009.4

Bill to: FIRSTENERGY 76 S MAIN STREET AKRON, OH 44308	Job: 701191009 JCPL Ocean City MPG 11th Street & Haven Avenue Ocean City, NJ 08226
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Invoice #: 19.1009.4 Payment Terms: NET 45 DAYS Customer Code: FIRENG612	Date: 12/18/19 Customer P.O. #: 55128545 Salesperson:
---	--

Remarks: December 2019 Services

Quantity	Description	U/M	Unit Price	Extension
1.000	December 2019 Services	Eac	104,111.40	104,111.40
			Subtotal:	104,111.40
			Total:	104,111.40

*OK AFS
029632
12/17/19*

*See Approval
Steps Next
page. →*

Panther Invoice

Ocean city MTR Site

Line Item 1 - Remediation Services

APPROVAL STAMP	
P.O. NO. <u>55128545</u>	INV. NO. <u>19.1009.4</u>
COMPANY CODE: SCOO	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

12-18-19

Approved for Payment of \$ 93,700.26
SES: # 1119383268 Fax: # 8048136

Line Item 1 - Remediation Services

APPROVAL STAMP	
P.O. NO. <u>55128545</u>	INV. NO. <u>19.1009.412</u>
COMPANY CODE: SCOO	COST CENTER <u>502702</u>
COST ELEMENT (GL ACCT.): <u>550300</u>	
ORDER: <u>3001026</u>	WBS: <u>✓</u>
APPROVED BY: <u>[Signature]</u>	EMP. NO.: <u>297</u>

12-18-19

Approved for Payment of \$ 10,411.4
SES: # 1119383270 Fax: # 8048139

RECEIVED

DEC 13 2019

Environmental Department

First Energy PO: 65128645

INVOICE #4
PANTHER TECHNOLOGIES INC.
JCPL OCEAN CITY, NJ FORMER MGP REMEDIATION
GROUNDWATER TREATMENT SYSTEM PROJECT

Period from December 1, 2019 to December 31, 2019

Item No.	Item Description	Quantity	Unit	Unit Price	Contract Amount	Qty Complete Last Period	Qty Complete This Period	Qty Complete To Date	Actual Completed To Date	Less Previous Billings	Total Due This Period
1	Modification, Demobilization, General Conditions	1	LS	\$ 32,360.00	\$	85%	9%	90%	\$ 29,124.00	\$ 27,500.00	\$ 1,618.00
2	Erosion and Sediment Control, Construction Entrance	1	LS	\$ 6,920.00	\$ 6,920.00	100%	0%	100%	\$ 6,920.00	\$ 6,920.00	\$ -
3	Excavation, Dewatering, and Backfill of "Hotspots" including up to 10,000 gallons water disposal	1	LS	\$ 97,230.00	\$ 97,230.00	100%	0%	100%	\$ 97,230.00	\$ 97,230.00	\$ -
4	Disposal of Non-Hazardous Soils	800	Tons	\$ 96.10	\$ 76,880.00	870.87	218.23	1090.10	\$ 104,758.61	\$ 63,890.61	\$ 21,068.00
5	Disposal of Hazardous Soils	50	Tons	\$ 380.00	\$ 19,000.00	0	0	0	\$ -	\$ -	\$ -
6	Trench and Install HDPE Pipe to Wells and Discharge, Restore Surface	1	LS	\$ 137,920.00	\$ 137,920.00	60%	35%	95%	\$ 131,024.00	\$ 82,752.00	\$ 48,272.00
7	Add Fill to Grade, Install Geotextile Marker and Minimum 8" Crushed Rock on Surface	37,000	SF	\$ 0.96	\$ 35,520.00	0	500	500	\$ 480.00	\$ -	\$ 480.00
8	Install Well Pumps and Wellheads	1	LS	\$ 11,330.00	\$ 11,330.00	20%	85%	85%	\$ 9,630.50	\$ 2,265.00	\$ 7,365.50
9	Connect Power and Pumps to Treatment System	1	LS	\$ 11,900.00	\$ 11,900.00	0%	75%	75%	\$ 8,970.00	\$ -	\$ 8,970.00
10	Start-up Assistance	5	Days	\$ 1,530.00	\$ 7,650.00	0	0	0	\$ -	\$ -	\$ -
	Subtotal Cost (\$)				\$ 437,770.00				\$ -	\$ 209,494.61	\$ 67,735.00
11	Additional Work	0	Gallons	\$ 0.40	\$ -	7500	0	7500	\$ 3,000.00	\$ 3,000.00	\$ -
12	Stabilize Soil for T&D	20	Tons	\$ 280.00	\$ 5,600.00	3.5	0	3.5	\$ 980.00	\$ 980.00	\$ -
13	System Cleared, Placement, Anchoring, Grounding	1	LS	\$ 4,506.00	\$ 4,506.00	0	1	1	\$ 4,506.00	\$ -	\$ 4,506.00
14	Cost of Road Closing Permits and Maintenance Bond	1	LS	\$ 1,200.00	\$ 1,200.00	1	0	1	\$ 1,200.00	\$ 1,200.00	\$ -
14a	Project Manager	8	Hours	\$ 135.00	\$ 1,080.00	8	0	8	\$ 1,080.00	\$ 1,080.00	\$ -
15	Extra Trench Backfill	75	Tons	\$ 20.00	\$ 1,500.00	30.63	42.56	113.21	\$ 2,264.20	\$ -	\$ 1,651.60
16	Additional Hazardous and Non-Hazardous Soil Material Disposal, if any (T&D)	0	Tons	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -
17	Traffic Control (2 Flagmen)	2	Days	\$ 970.00	\$ 1,940.00	0	0	0	\$ -	\$ -	\$ -
18	Crew and Equipment (month), Size in 2' x 2' x 2' and Slugs Concrete (Change Order 2)	0	Days	\$ 4,891.20	\$ -	3	2	6	\$ 23,496.00	\$ 14,073.80	\$ 9,382.40
19	Provide 240 Feet of 6" Tall Temporary Security Fence with Privacy Screen with (50) sand bags (Change Order 3)	0	LS	\$ 2,790.84	\$ -	1	0	1	\$ 2,790.84	\$ 2,790.84	\$ -
19a	Install & Remove 240 Feet of 6" Tall Temporary Security Fence with Privacy Screen with (50) sand bags (Change Order 3)	0	LS	\$ 2,790.77	\$ -	0.5	0	0.6	\$ 1,395.39	\$ 1,395.39	\$ -
20	Profile 2B Stone for Cap Area (2" thick x 18,000 SF)	250	Tons	\$ 30.00	\$ 7,500.00	0	26.63	26.63	\$ 798.90	\$ -	\$ 798.90
	Subtotal Cost (\$)				\$ 23,218.08				\$ 41,432.43	\$ 20,093.63	\$ 16,374.80
	Total Contract (\$)				\$ 657,988.08				\$ 451,926.03	\$ 337,488.24	\$ 304,311.40

012175
024032
12/17/19

12/13/2019

Notes:
 Item No. 18 Panther will provide Daily Records for documentation - (Actual days: 10/28/19, 10/29/19, 10/30/19, 10/31/19, 11/01/19, 11/02/19)
 Grey shaded items are complete
 Item 12 - 22 x 24 lb. bags cement and 2 x 2,500 lb. Super sacks redlin cement = 3.5 tons

Project 701191008



TECHNICAL MEMORANDUM

To: Anna Sullivan, JCP&L
Cc: Bob Cohen, Tetra Tech
From: Peter Rich, Tetra Tech
Date: December 16, 2019
Subject: Ocean City Former MGP – October Panther Invoice #4 Review

Panther provided the attached invoice for work completed from December 1, 2019 to December 31, 2019. The invoice includes work completed through December 16 and projected work for the remainder of the month. Panther completed the following during this time period:

- Continued compliance with general conditions;
- Disposal of non-hazardous material off-site;
- Continued trenching and installation of piping;
- Demolishing concrete for trench advancement and providing additional backfill as needed;
- Initial capping efforts;
- Installing well pumps and well head covers and equipment; and,
- Placing the treatment system at the site and beginning to hook the system up to piping and electric.

I agree with Panther's completion percentages, assuming the additional work is completed, and documentation of unit quantities of soil disposal and additional fill.

I recommend payment of the invoice.

Attachment: Panther October Invoice #4

MONDAY

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (#: 201191009)

TODAY'S DATE: 12/2/19

CUSTOMER: SOPL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. PANKY	SM	6:00	7:00	3:30	4:30
J. VOLMER	OP				
M. MISKOTSKY	HS				
G. STORMS	FT				
J. EMERS	FT				

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill / Stone	
Certified Clean Topsoil	
Kiln Dust	
FT of Safety Fence	
Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)	2	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	✓	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	✓	PLATE TAMPER / REMOTE COMPACTORS	✓	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER		PID / FID METERS (4-GAS)	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	PRESSURE WASHER (HOT/COLD)	✓
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	1	WATER TRUCK / SMEAL	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

Held safety meeting with crew

Remove part of sidewalk on Haven Ave for COPR

Remove 5 to 6 inches of asphalt off of 11th St trench. There is another 6 to 14 inches of asphalt/concrete in trench under the 5 to 6 inch layer we removed. Try to dig it out with excavator with no luck. Next option hammer to remove. Installed steel plate over trench.

Start trenching in 11th St Haven Ave to last 3 wells.

Removed asphalt from 11th St. There is more asphalt below. Again tried hammer to remove. Cover well with steel plate in street.

SECURE SITE

CUSTOMER SIGNATURE: _____

PANTHER SIGNATURE: _____

Tue

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (#): 701191009

TODAY'S DATE: 12/3/19

CUSTOMER: JCPL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	600	700	430	530
J. VOLMER	OP	↓	↓	↓	↓
M. MISKOWSKY	HS	↓	↓	↓	↓
C. STORMS	PT	↓	↓	↓	↓
S. EMERS	PT	↓	↓	↓	↓

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill / Stone	
Certified Clean Topsoil	
Kiln Dust	
FT of Safety Fence	
Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/PT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)		ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	✓	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER		PID / FID METERS (A-GAS)	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	PRESSURE WASHER (HOT/COLD)	
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	2	WATER TRUCK / S/MEAL	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

Held safety meeting with crew

Installed hammer on 315. Hammer does not work, fuel is coming to shop out tomorrow.

Continued trenching and installing pipe hammer line. Air test and below backfill and tapping install water take 18" below grade.

CUSTOMER SIGNATURE:

PANTHER SIGNATURE:

PANTHER TECHNOLOGIES, INC.

DAILY RECORD

PROJECT NAME (H): 701191009

TODAY'S DATE: 12/4/19

CUSTOMER: JCPL

CUSTOMER CONTACT:

LOCATION: OCEAN CITY NJ

CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish	MATERIALS DESCRIPTION	QTY
R. BARNEY	SM	log	7:00			Certified Clean Backfill / Stone	
J. VOLMER	OP					Certified Clean Topsoil	
M. MISHKOVSKY	HS					Kiln Dust	
C. STORMS	FT					FT of Safety Fence	
J. EMERS	FT					Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish	DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)		185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
22-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (55D/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE TAMPER / REMOTE COMPACTORS	1	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER		PID / FID METERS (4-GAS)	1	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	PRESSURE WASHER (HOT/COLD)	1
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	2	WATER TRUCK / SMEAL	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

CONTINUE BACKFILLING AND TAMING HAVE DONE. INSTALL WATER TAPES 10' BELOW GRADE
 MOVE STOCKPILE OF CONCRETE OVER TO LOAD OUT SOIL
 REMOVE BROWN HAMMER FROM 315 EXCAVATOR. INSTALL BUCKET TO MOVE CONCRETE
 REMOVE BUCKET TO INSTALL HAMMER
 INSTALL HAMMER ON 315
 REMOVE ASPHALT FROM AROUND WELLS IN STREET, HAVAN ST
 INSTALL ROAD PLATES OVER WELLS

CUSTOMER SIGNATURE: _____

PANTHER SIGNATURE: 

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (#): 701191009
 CUSTOMER: JCPL
 LOCATION: OCEAN CITY NS

TODAY'S DATE: 12/5/19
 CUSTOMER CONTACT:
 CUSTOMER PHONE:

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNEY	SM	0900	700	400	500
J. VOLUNIA	OP				
M. MISTOFESKY	HS				
C. STORMS	FT				
J. EMERS	FT				

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill / Stone	
Certified Clean Topsoil	
Kin Dust	
FT of Safety Fence	
Poly Sheeting	
BANK RUN SAND (1 1/2 inches)	2 Loads

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	3	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER	1	PLATE RAMPER / REMOTE COMPACTORS	1	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER		PID / PD METERS / 4-GAL	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	PRESSURE WASHER (HOT/COLD)	
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	2	WATER TRUCK / SMEAL	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

REMOVE ASPHALT AND CONCRETE FROM 11TH STREET TRENCH WITH CONCRETE HAMMER
REMOVE ASPHALT AND CONCRETE FROM AROUND WELLS IN STREET EWS 1, 2, 3
EXCAVATE EWS 1, 2, 3 REMOVE SOIL & STOCKPILE ON SITE
START PIPING EWS 3, BACKFILL AND INSTALL MANHOLE AIR TEST LINE

CUSTOMER SIGNATURE: _____

PANTHER SIGNATURE: _____

FBI

PANTHER TECHNOLOGIES, INC.
DAILY RECORD

PROJECT NAME (#): 701191009 TODAY'S DATE: 12/6/19
 CUSTOMER: JCA CUSTOMER CONTACT: _____
 LOCATION: Ocean City NJ CUSTOMER PHONE: _____

NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
R. BARNETT	SM	6:00	7:00		
J. VALMER	OP				
M. MISIUSKI	HS				
C. STORMS	FT				
S. EMERS	FT				

MATERIALS DESCRIPTION	QTY
Certified Clean Backfill / Stone	
Certified Clean Topsoil	
Kiln Dust	
FT of Safety Fence	
Poly Sheeting	

SUBCONTRACTOR NAME	Labor Code (SM/OP/FT)	Shop Start	On Site Start	On Site Finish	Shop Finish
LEVEL A	L MAN	7	7:00	10:00	

DISPOSAL INFO / MANIFEST # (TYPE/FACILITY)	# OF LOADS

HEAVY EQUIPMENT	QTY	LIGHT EQUIPMENT	QTY	OXIDATION EQUIPMENT	QTY
LONG REACH EXCAVATOR (50'-70')		TOPCON GPS SYSTEM		ISCO TRAILER #1 - HIGH FLOW	
DUMP TRUCK (OFF ROAD OR ROAD)		GENERATORS (KW)	1	ISCO TRAILER #2 - LOW FLOW	
TRACK EXCAVATOR (315/270/80)	2	185 CFM COMPRESSORS		3,000 GALLON SS TANKS	
12-TON VIBRATORY ROLLER		2", 3" or 4" PUMPS		2,500 GALLON POLY TANKS	
TRACK DOZER (650/550)		TRENCHER		1,000 GALLON POLY TANKS	
RUBBER TIRE LOADER		PLATE TAMPER / REMOTE COMPACTORS	✓	50 FT LENGTHS OF 1" or 2" HOSE	
EXCAVATOR W/HAMMER		ENCLOSED STORAGE TRAILERS	1	POUNDS/GALS OF PEROXIDE	
EXCAVATOR W/GRAPPLE		OFFICE TRAILERS	1	POUNDS/GALS OF PERMANGANATE	
EXCAVATOR W/MIXING HEAD		JERSEY BARRIERS (CONCRETE OR PLASTIC)	4	POUNDS/GALS OF PERSULFATE	
KUBOTA LOADER OR SKID STEER		SAFETY SHOWER		LEVEL B PPE (# OF MEN)	
BACKHOE LOADER	1	PID FID METERS (4-GAS)	✓	LEVEL C PPE (# OF MEN)	
9,000 POUND LULL		MINIRAM DUST METERS	1	PRESSURE WASHER (HOT/COLD)	1
UTILITY VEHICLES (F550)		UTILITY VEHICLES (F250)	2	WATER TRUCK / SMEAL	

DESCRIPTION OF WORK PERFORMED AND ADDITIONAL EQUIPMENT NOT LISTED ABOVE

HELD SAFETY MEETING WITH CREW

CONTINUE PIPING WELLS PWS 2 BACKFILL & TAMP INSTALL WATER TRAPS 10' SOFT DIRT 11" AVE & LOWER SIDE WALK TO EXPOSE ELEC DUCT BENCH AC ELEC TECH ON SITE TO MONITOR SOFT DIRT SECURE SITE

CUSTOMER SIGNATURE: _____

PANTHER SIGNATURE: 

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

2. Identify the three MGP sites with the highest level of expenditures during the prior RAC period. For each identified site, provide a copy of the latest work plan, remediation report, or major work product submitted to the NJDEP. The copies should include the narrative portion of the report or work plan but need not include the technical supporting workpapers, charts and tables.

Response:

The three MGP sites with the highest level of expenditures during the 2019 RAC period are Cape May, Newton II and Ocean City. A copy of the latest work plan, remediation report, or major work product for each site submitted to the Licensed Site Remediation Professional (LSRP) or NJDEP is provided as an attachment. Further discussion of the use of LSRP's is included in MFR-8. They include:

Attachment MFR-2a – Cape May

2019 Monitoring Report and Revised Construction Completion Report for the Former Cape May Manufactured Gas Plant Site, Lafayette Street, City of Cape May, New Jersey, December 19, 2019.

Attachment MFR-2b – Newton II

Remedial Action Workplan AOC C1 – On-Site MGP Soil Impacts Newton Coal Gas 2 Site Newton, New Jersey NJDEP Program Interest No. G000005460, August 2019; and Soil Erosion and Sediment Control Plan Newton Coal Gas 2 Site, 15 East Clinton Street, Block 9.02, Lot 3 Newton, Sussex County, New Jersey Program Interest No. G000005460, August 12, 2019.

Attachment MFR-2c – Ocean City

Interim Remedial Action Work Plan, Former Manufactured Gas Plant Site Ocean City, New Jersey, NJDEP PI # G000006127, March 2019.

As requested, only the narrative portions of the respective documents are provided.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-2a

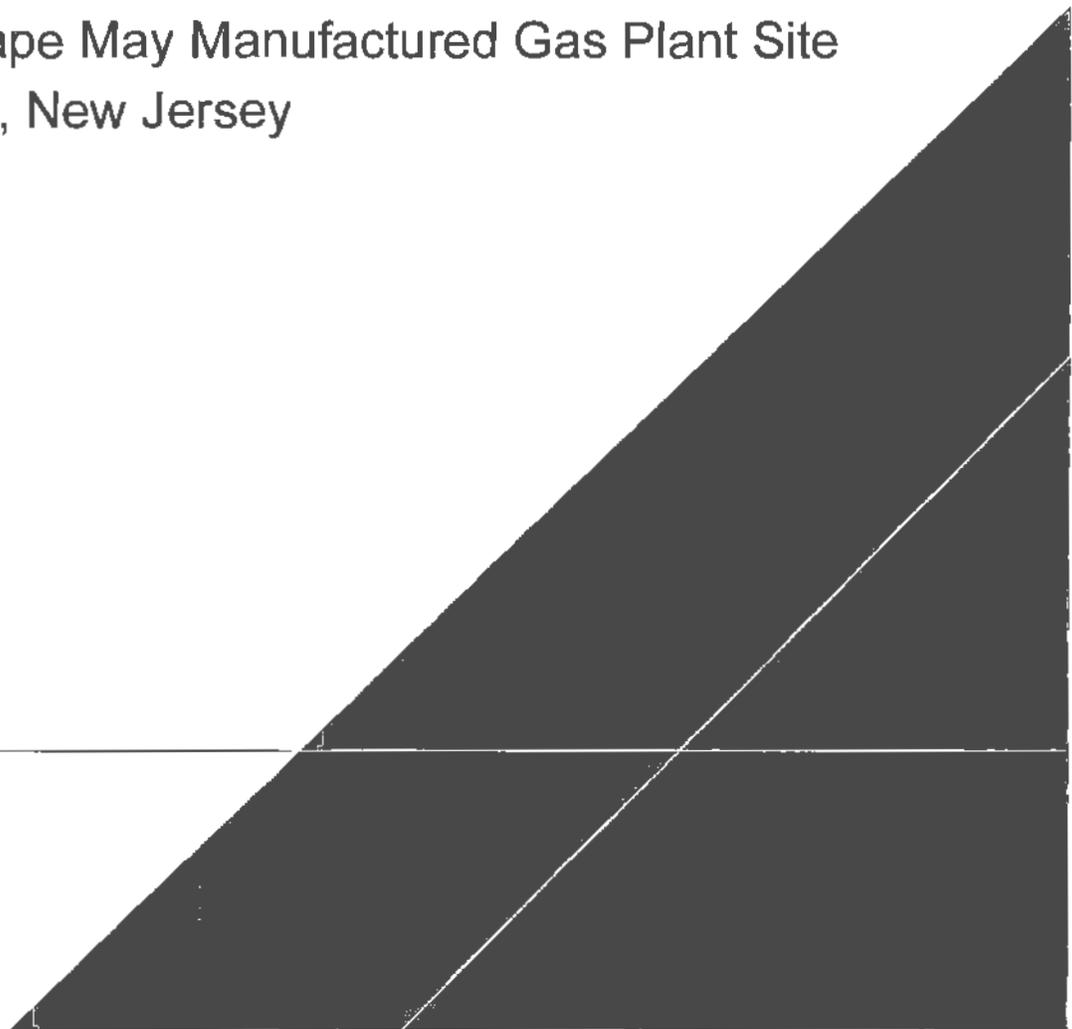


Jersey Central Power & Light Company

2019 MONITORING REPORT

Former Cape May Manufactured Gas Plant Site
Cape May, New Jersey

December 2019



2019 MONITORING REPORT

2019 MONITORING REPORT

Former Cape May Manufactured Gas
Plant Site Cape May, New Jersey



Doug Partridge
Principal Ecologist



Jessie Murray
Project Ecologist

Jeremy Cuccuini
Project Manager

Prepared for:
Jersey Central Power & Light
300 Madison Avenue
P.O. Box 1911
Morristown, NJ 07962

Prepared by:
Arcadis U.S., Inc.
50 Millstone Road
Building 200
Suite 220
East Windsor
New Jersey 08520
Tel 609 860 0590
Fax 609 448 0890

Our Ref.:
30015903

Date:
December 2019

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2019 MONITORING REPORT

CONTENTS

1. Introduction	1
1.1 Mitigation Project Objectives	1
1.2 Objectives of Annual Monitoring	2
2. Performance Criteria	4
3. Methods	5
3.1 Wetland Permanent Plot Sampling	5
3.2 Wetland Transition Quadrat Sampling	5
3.3 Wetland Transition Permanent Tree / Shrub Plot Sampling	6
3.4 Photographic Documentation	6
4. Results	7
4.1 Year 1 Wetlands	7
4.1.1 Total Vegetative Cover	7
4.1.2 Invasive Species Cover	7
4.1.3 Evidence of Wetland Hydrology	8
4.2 Year 2 Wetland Transition Area	8
4.2.1 Tree and Shrub Survival/Density	8
4.2.2 Total Vegetative Cover and Invasive Cover	9
5. Adaptive Management Summary	11
5.1 Enhancement Planting and Seeding	11
5.2 Invasive Species Control	11
5.3 2020 Recommended Activities	11
6. Summary	12
7. References	13

2019 MONITORING REPORT

TABLES

- 1 Site Permits Summary
- 2 Restored Regulated Areas Summary
- 3 Cover Class Midpoints
- 4 Wetland Vegetation Monitoring Summary
- 5 Wetland Transition Area Vegetation Monitoring Summary

FIGURES

- 1 Site Location Map
- 2 Site Plan – Aerial
- 3 Cape May County Road Map
- 4 Monitoring Plan

APPENDICES

- A As-Built Plan
- B Raw 2019 Monitoring Data
- C Site Photographs
- D Pesticide Application Field Logs

2019 MONITORING REPORT

1. INTRODUCTION

On behalf of Jersey Central Power & Light Company (JCP&L), Arcadis U.S., Inc. (Arcadis) has prepared this 2019 Monitoring Report in accordance with the New Jersey Department of Environmental Protection (NJDEP) *Mitigation Project Monitoring Reports Checklist for Completeness (Revised: January 2018)*, *Mitigation Project Monitoring Reports for Coastal Wetlands Checklist for Completeness (Revised: January 2018)*, and pursuant to NJDEP Freshwater Wetlands General Permit Number 4 (GP-4) and NJDEP Coastal Wetlands Individual Permit (File Nos. 0502-02-0001.3 FWW14001 and 0502-02-0001.6 FWW160001 CSW160001) and associated permits and permit modifications as summarized in **Table 1**. Activities authorized under these permits allowed JCP&L to complete a phased remedial soil excavation in accordance with the Administrative Consent Order (ACO) dated October 29, 1991 and consistent with the Remedial Action Work Plan (RAWP) (Arcadis 2015) at the Cape May Former Manufactured Gas Plant (MGP) site (site) located in the City of Cape May, Cape May County, New Jersey. A USGS site location map is included as **Figure 1**, an aerial photograph of the project area is provided as **Figure 2**, and a County Road map is provided as **Figure 3**.

Permit applications previously submitted to and approved by the NJDEP provide a general site description and land-use history, ecological characterization of the area prior to implementation of site remediation activities, including wetland delineation and associated data forms, and mitigation plan. The *Construction Completion Report* (Arcadis 2018a) and *Revised Construction Completion Report* (Arcadis 2019), discuss the completion of initial mitigation activities, which includes final grading, planting and seeding activities completed. A Year 1 (2018) Monitoring Report (Arcadis 2018b) documented conditions after the first full growing season within the upland transition area. As such, this report pertains to monitoring and evaluation of progress towards (or deviation from) stipulated performance criteria after the second full growing season following planting efforts within upland transition areas and after the first full growing season following planting efforts within wetlands areas.

Table 1. Site Permits Summary

Permit Phase	Phase 1	Phase 2	Phase 2 Modification	Phase 2 Modification	Phase 2 Modification
File No.	0502-02-0001.3 CAF130001 FWW14001	0502-02-0001.6 WFD160001 CSW160001 FWW160001	0502-02-0001.6 WFD170001Mod CSW170001Mod FWW160001	0502-02-0001.6 WFD170002Mod CSW170002Mod FWW160001	0502-02-0001.6 WFD170002Mod CSW1800001Mod FWW160001
Approval Date	3/17/15	1/9/17	4/20/17	12/6/17	2/28/18

1.1 Mitigation Project Objectives

As discussed in the NJDEP approved Mitigation Plan (Arcadis 2017) and the Revised Construction Completion Report (Arcadis 2019), goals of the mitigation project included improvement of habitat quality

2019 MONITORING REPORT

and ecological function of the coastal wetland system and adjacent upland areas temporarily disturbed during unavoidable site remediation activities.

Project activities included a phased soil excavation in regulated wetlands and associated transition areas (see As-Built drawing included as **Appendix A**). Specifically, soil excavation activities resulted in the temporary disturbance to 0.003 acres of state open waters, 2.46 acres of intertidal wetlands (i.e., high and low marsh), and 1.39 acres of wetland transitional area. Project areas were restored on-Site and in-kind consistent with the approved Mitigation Plan (Arcadis 2017). Restoration activities also included the conversion of an upland area dominated by invasive bamboo to native intertidal wetlands in order to improve overall site ecological function. **Table 2** summarizes the overall acreage requirements identified in the permit approvals (included as an appendix to the Revised Construction Completion Report [Arcadis 2019]) the actual disturbance to regulated areas resulting from implementing the remedial activities, and the area of the habitats restored following the completion of restoration activities to mitigate for temporary disturbances at the site.

Table 2. Restored Regulated Areas Summary

Jurisdictional Habitat	Permitted Temporary Disturbance (ac)	Approved Restoration (ac)	Actual Project Disturbance (ac)	Total Project Restoration (ac)
Upland Wetland Transition	1.44	1.54	1.39	1.48
Wetlands High Marsh	0.49	0.42	0.45	0.33
Wetlands Low Marsh	2.69	2.91	2.01	2.21
State Open Waters	0.02	0.02	0.003	0.003

The mitigation project was designed to re-establish intertidal wetlands and wetlands transitional plant communities at the site through the restoration of six distinct native plant communities, based upon the different hydrologic conditions at the site.

Final planting and seeding activities for upland transition areas and a portion of the wetlands were completed in June 2017 and in remaining wetland areas in May 2019. An As-Built, including planting specifications for each regulated area, is included in **Appendix A**, and described in more detail in the Revised Construction Completion Report (Arcadis 2019).

1.2 Objectives of Annual Monitoring

Objectives for the annual monitoring are as follows:

- Quantitatively assess the vegetative cover throughout the mitigation site.

2019 MONITORING REPORT

- Illustrate progress toward, or deviation from, stipulated monitoring criteria as defined by the approved Mitigation Plan (Arcadis 2017)
- Provide NJDEP with suitable information to evaluate the existing condition of the site.
- If necessary, trigger corrective actions to move or maintain progress toward stipulated monitoring criteria as defined by the approved Mitigation Plan (Arcadis 2017).

This report details site conditions through the fall of 2019, which is two growing seasons after completion of the first phase of upland restoration activities and one growing season after completion of wetland restoration activities. This report is intended to enable NJDEP, JCP&L and Arcadis to evaluate the continued degree of success toward the defined monitoring criteria.

2019 MONITORING REPORT

2. PERFORMANCE CRITERIA

The overall objective of the mitigation project was to compensate for the temporary loss of regulated wetlands and their associated transitional habitat areas through on-site and in-kind restoration¹. Consistent with the approved Mitigation Plan (Arcadis 2017) as well as NJDEP permit conditions (see permit approvals presented as Appendix A in the Revised Construction Completion Report [Arcadis 2019]), the performance criteria for the upland wetland transition area is as follows:

1. 85 percent (%) survival of mitigation plantings and trees exhibit growth (i.e., a minimum of 5-feet);
2. 85% cover by mitigation plantings; and
3. Less than 10% cover by invasive species.

Additionally, the performance criteria for the wetland area according to NJDEP permit conditions and the *Mitigation Project Monitoring Reports for Coastal Wetlands Checklist for Completeness* includes:

4. 30% cover of mitigation plantings after the first full growing season
5. 60% cover of mitigation plantings after the second full growing season
6. 85% cover of mitigation plantings after the third full growing season; and
7. Less than 10% cover by invasive species.

Consistent with permit conditions, the compliance monitoring interval is intended to occur for a minimum of five years in wetland transition areas and three years in wetland areas until the performance criteria have been met. This report documents conditions after two years of monitoring wetland transition areas and one year of monitoring wetland areas.

¹ Additional forested areas within upland waterfront development area were covered under a donation for offsite mitigation, which is further described in the Construction Completion Reports (Arcadis 2018a, Arcadis 2019).

2019 MONITORING REPORT

3. METHODS

This section describes the methodologies developed to evaluate progress toward (or deviation from) performance criteria. Monitoring activities include field vegetation data collection and photographic documentation.

3.1 Wetland Permanent Plot Sampling

Quantitative monitoring in intertidal wetland areas was completed through 14 permanent sampling plot locations; 3 within high marsh areas and 11 within low marsh areas. The center of each sampling location is established by placement of a 6-foot-tall, metal fence post. Locations of each permanent location were determined in the field and are presented in the Monitoring Plan (Figure 4). All locations are circular one hundredth acre plots. Data collection at each plot includes species identification, percentage cover class (summarized in Table 3; Daubenmire 1959), invasive status, height, and any other relevant growth observations (i.e. documentation of recruitment).

Table 3. Cover Class Midpoints

Percent Cover Range	Cover Class Midpoint
< 1%	0.5
1 – 5 %	3
6 – 15 %	10.5
16 – 25 %	20.5
26 – 50 %	38
51 – 75 %	63
76 – 95 %	85.5
> 95 %	98

Monitoring was also completed at 6 of the planted high marsh islands, which were assessed separately for total vegetative cover.

3.2 Wetland Transition Quadrat Sampling

Random quadrat sampling was performed to characterize vegetation, hydrology, general cover type, and wildlife utilization. Specific to vegetation, the quadrats generally describe conditions in the herbaceous and vine stratum. The total number of herbaceous sample quadrats includes 20 sample quadrats randomly distributed across the three restoration habitat areas (i.e. Maritime Woodland, Mixed Maritime Forest, Maritime Meadow). Locations were determined randomly in the field. Data collected at each quadrat included plant species composition and associated percentage cover class (summarized in Table 3; Daubenmire 1959), invasive status, and wetland indicator status.

In addition, general cover type characterization includes cover percent estimations for various cover types (i.e., vegetation, bare soil, open water, litter/debris). Hydrology characterization, if observed, includes

2019 MONITORING REPORT

qualitative indicators of wetland hydrology such as stained leaves, ponded water, and/or drainage patterns.

3.3 Wetland Transition Permanent Tree / Shrub Plot Sampling

Eleven permanent wetland transition sampling locations were established to evaluate development of both the shrub and tree strata within the restoration site². The center of each sampling location is established by placement of a 6-foot-tall, metal fence post. Locations of each permanent location were determined in the field and are presented in the Monitoring Plan (**Figure 4**). Seven locations are circular one hundredth acre plots (11.7 feet radius) and four locations are circular one tenth acre plots (37.2 feet radius). Data collection at each plot includes species identification, stem density, total tree and shrub cover, and height measurements for each identified tree and shrub.

3.4 Photographic Documentation

Eleven permanent photo point locations were established throughout the site to provide consistent photo-documentation of the restoration site throughout monitoring. Photo locations are included in the as-built plans (**Appendix A**) and the attached Monitoring Plan (**Figure 4**). At each photo point location, photographs were collected at an established height of 5 feet to illustrate growth and cover in these areas through time.

² One permanent upland sampling location, TP-4, was removed as part of the 2019 monitoring program due to overlap with other sampling locations.

2019 MONITORING REPORT

4. RESULTS

This section summarizes monitoring results after the second growing season of restored upland areas and first full growing season of wetlands using the methods outlined in Section 3. Qualitative site visits were conducted during the week of May 20, 2019 and on June 18, 2019 to assess site conditions and identify target invasive species. Two additional site visits were conducted on June 6, 2019 and September 16, 2019 to target invasive species management (discussed further in Section 5). Quantitative field work was performed on September 4, 2019. Permanent monitoring and photo locations are included as Figure 4, raw monitoring data are included as Appendix B, and site photographs as Appendix C.

4.1 Year 1 Wetlands

The following presents the results of the quantitative monitoring for the wetlands.

4.1.1 Total Vegetative Cover

Total vegetative cover was evaluated using data collected at each of the 14 permanent 0.01-acre wetland plot monitoring locations (Figure 4). The total average vegetative cover was approximately 31%, with 99% of this cover dominated by target hydrophytes. Planted species and their respective average canopy cover included: smooth cordgrass (*Spartina alterniflora*, 13%), saltmeadow cordgrass (*Spartina patens*, 7%), and saltgrass (*Distichlis spicata*, 6%). Appendix B includes all identified species per sample plot, in addition to an average canopy cover and proportional species composition of total cover across all permanent wetland plots.

Table 4. Wetland Vegetation Monitoring Summary

Field Measurement	2019
Total Percent Herbaceous Cover	31
Relative Percent Target Species	99
Relative Percent Invasive Species	0.7

Significant recruitment was observed across the wetlands as indicated by a total of 8 species identified in the quadrats and an average of 3 species per 0.01-acre plot. It is anticipated that the species composition of the wetland community will continue to develop throughout the monitoring interval from both planted species as well as natural recruitment.

Consistent with the monitoring protocols discussed in Section 3.1, the high marsh islands were addressed separately. Average total coverage of target species across all high marsh islands was 48%. As such, the total coverage of mitigation plantings in all wetland areas exceeds the Year 1 wetland performance criteria of at least 30% cover.

4.1.2 Invasive Species Cover

The relative invasive cover across the permanent wetland plots was 0.7% cover (Table 4), which meets the performance criteria of less than 10% invasive cover. Observations of common reed (*Phragmites*

2019 MONITORING REPORT

australis) were identified within one of the fourteen permanent plots. The establishment of common reed was likely the result of rhizomes from nearby populations. At this time, no invasive species were identified as a concern to the successional development of the restored plant communities. Stands of common reed found outside of the restoration area have been actively managed since 2018 and will continually need to be monitored and managed, which is further discussed in Section 5 below. In addition, the elevation and expected salinities throughout the majority of restored wetlands is expected to inhibit establishment and growth of common reed.

4.1.3 Evidence of Wetland Hydrology

The restored wetland hydrology is driven by tidal flows through the restored intertidal channels. Low marsh wetlands are influenced by twice daily high tides, and the high marsh wetlands are routinely saturated by spring high tides. Soils within the restored wetlands are continually saturated throughout the year from tidal influence; and Site hydrology been observed to be restored to pre-construction conditions. This observation is based upon observations within the site and adjacent wetlands that were not impacted by construction.

4.2 Year 2 Wetland Transition Area

A total of 7 permanent 0.01-acre sample plots, 4 permanent 0.1-acre plots, and 20 randomly placed 1 square meter herbaceous quadrats were sampled in the fall of 2019 within the restored wetland transition area. Five permanent sample plots were in the Mixed Maritime Forest and six permanent sample plots were in the Maritime Woodland habitats. Herbaceous quadrats were randomly sampled across all three wetland transition habitats (i.e. Maritime Woodland, Mixed Maritime Forest, Maritime Meadow).

4.2.1 Tree and Shrub Survival/Density

The average density of tree and shrub species across the eleven permanent sampling plots was approximately 546 stems per acre and 791 stems per acre, respectively³. The Mitigation Plan represented a planting density of 488 stems per acre for trees and 388 stems per acre for shrubs⁴. Both tree and shrub densities have increased compared to the previous monitoring year. Supplemental plantings were completed in October 2018 based on replacement needs following the one-year plant survival evaluation. Similar to 2018, significant natural recruitment was documented in the tree and shrub stratum in 2019. This is especially true for widespread establishment of groundsel bush (*Baccharis halimifolia*) and Jesuit's bark (*Iva frutescens*). Multiple sample plots within the Mixed Maritime Forest (Figure 4) were dominated by seedlings of these woody species. As such, higher densities than the original plantings are a result of supplemental planting activities, the random sampling, the random nature of initial plantings, and for shrubs, a high number of recruited species. Therefore, the performance criteria of 85% survival of planted trees and shrubs continues to be met in 2019.

Other quantitative data collected at the permanent sampling locations included an average of 5 tree and/or shrub species within each plot, an average tree height of 6 feet, a maximum tree height of 15 feet,

³ Monitoring densities included 516 stems per acre for trees and 468 stems per acre for shrubs in the Mixed Maritime Forest and densities of 572 stems per acre for trees and 1060 stems per acre for shrubs in the Maritime Woodland.

⁴ Planting densities for the Mixed Maritime Forest included a target of 500 stems per acre for trees and 375 stems per acre for shrubs. Planting densities for the Maritime Woodland included a target of 475 stems per acre for trees and 400 stems per acre for shrubs.

2019 MONITORING REPORT

an average shrub height of 4 feet, and a maximum shrub height of 6 feet. Data are summarized in Table 5. Raw data are included in Appendix B.

Table 5. Wetland Transition Vegetation Monitoring Summary

Field Measurement	2018	2019
Total Percent Herbaceous Cover	78	83
Relative Percent Invasive Species	3	1.4
Tree Density (stems/acre)	483	546
Shrub Density (stems/acre)	625	791
Max / Average Shrub & Max / Average Tree Height (feet)	5 / 3 7 / 5	6 / 4 15* / 6

Note:

* Actual maximum height recorded at 40-feet from established tree within sampling plot. Tree height was not included in average or maximum height calculations.

Trees and shrubs have both continued to grow as compared to 2018, and tree height continues to meet and exceed the minimum performance criteria of 5-feet.

4.2.2 Total Vegetative Cover and Invasive Cover

The total average vegetative cover across the 20 randomly placed 1 square meter quadrats was 83%, with 83% dominated by target species. Total coverage is slightly below the target of 85% cover of mitigation plantings. However, this is an increase in coverage from 2018 (78%). Commonly identified species and their respective average canopy cover were switchgrass (*Panicum virgatum*, 39.1%), big bluestem (*Andropogon gerardii*, 5.7%), New England aster (*Symphotrichum novae-angliae*, 4.2%), partridge pea (*Chamaecrista fasciculata*, 4.1%) and black-eyed Susan (*Rudbeckia hirta*, 3.9%) (Appendix B).

Overall, the site was observed to be dominated by target native species. In addition, significant diversity was observed across the site with a total of 47 species identified in the quadrats and an average of 7 species per 1-square meter quadrat. Species diversity and composition have increased slightly since 2018, at 40 species identified and 6 species per 1-square meter quadrat, respectively. The increased composition is likely due to the combination of seed mixes and natural recruitment. The expected successional development of a restoration site includes the initial increase of species composition followed by a decrease in species composition, stabilization, and establishment of species best suited for the microhabitats developed on the site.

Invasive cover was 1.4% with minor coverage in four of the 20 quadrats. At this time, no invasive species were identified as a concern to the successional development of the restored plant communities.

2019 MONITORING REPORT

However, stands of common reed found outside of the restoration area will continually need to be monitored and managed, which is further discussed in Section 5 below.

2019 MONITORING REPORT

5. ADAPTIVE MANAGEMENT SUMMARY

This section summarizes adaptive management activities completed on the site during 2019, as well as summarizes recommendations for 2020. Previous activities performed in 2018 are addressed in the Year 1 (2018) Monitoring Report (Arcadis 2018b). As discussed in Section 4, multiple site visits were conducted to assess site conditions and perform adaptive management activities; qualitative site visits were conducted during the week of May 20, 2019 and on June 18, 2019 and invasive species management was performed on June 6, 2019 and September 16, 2019.

5.1 Enhancement Planting and Seeding

Data presented in Section 3, as well as observations throughout the growing season did not identify the need for enhancement planting or seeding. Performance criteria are generally met, and results have demonstrated a positive trajectory towards meeting them within the monitoring period.

5.2 Invasive Species Control

An adaptive management program that was implemented in 2018, continued throughout the 2019 growing season. Invasive species control for the project area involved spot application of a glyphosate-based herbicide and a non-ionic surfactant to target invasive species using backpack-style sprayers. Site visits occurred on June 6, 2019 and September 16, 2019. Target species included mugwort (*Artemisia vulgaris*), Japanese knotweed (*Fallopia cuspidatum*), honeysuckle (*Lonicera Sp*), mimosa (*Albizia julibrissin*), and common reed (*Phragmites australis*). Additionally, yellow sweet clover (*Melilotus officinalis*) was manually cut with a line trimmer on June 10, 2019. Field logs for all invasive species control events are included in Appendix D.

5.3 2020 Recommended Activities

While the relative cover of invasive species was essentially equivalent to the performance criteria in 2018, it is recognized that the Site will continue to benefit from adaptive management. This recognizes the potential seed bank for targeted species listed above. As such, effective treatment should consist of two to three site visits between June and September. Similar application techniques used in 2018 and 2019 should be used in 2020.

2019 MONITORING REPORT

6. SUMMARY

This monitoring report presents the results of 2019 monitoring surveys of the upland wetland transition area after the second full growing season and wetlands after the first full growing season at the site, and is intended to illustrate progress toward, or deviation from, stipulated performance criteria as defined by the approved Mitigation Plan (Arcadis 2017). Performance criteria were established as part of the permitting process to provide benchmarks by which to define project success. The three performance targets for wetland transition area as they compare to 2019 monitoring data are as follows:

1. *85% survival of tree and shrub plantings.* Data from 2019 demonstrates an average tree and shrub density of 546 and 791 stems per acre, respectively. Tree and shrub density represent a higher density than what was planted, and therefore reflects a survival rate of equal to or greater than 85%, meeting the performance criteria. As noted herein, the higher density of shrubs is attributed to supplemental planting, the result of random sampling, the random nature of initial plantings, and a high number of recruited shrubs.
2. *85% cover by mitigation plantings.* The percent cover of herbaceous mitigation plantings was slightly lower than the performance criteria in 2019 but increased from 2018 and was overall reflective of an early successional coastal forest/woodland community.
3. *Less than 10% cover by invasive species.* The percent cover of invasive species (i.e., 1.4%) was lower than 10% throughout the wetland transition area, meeting the performance criteria. Continuation of the adaptive management program will ensure performance criteria related to invasive species will be met.

The two performance targets for wetland areas as they compare to 2019 monitoring data are as follows:

4. *30% cover of mitigation plantings after the first full growing season.* Data from 2019 demonstrates total coverage of wetlands plantings meeting the performance criteria with 31% total cover.
5. *Less than 10% cover by invasive species.* The percent cover of invasive species (i.e., 0.7%) was lower than 10 percent throughout the restoration area, meeting the performance criteria. Continuation of the adaptive management program will ensure performance criteria related to invasive species will be met.

The wetland restoration is developing as an early successional intertidal marsh with expected survival of herbaceous plantings and positive signs of recruitment and spreading. Additionally, the wetland transition restoration is developing as an early successional coastal forest/woodland community, with continued high survival of the initially planted trees and shrubs. The structure of the wetland transition herbaceous understory is expected to change throughout the five-year monitoring interval as the tree and shrub canopy structure develops. In doing so, it is anticipated that performance criteria specific to cover of mitigation plantings will be met. The continuation of the adaptive management program will also ensure performance criteria specific to invasive species will also be met.

2019 MONITORING REPORT

7. REFERENCES

- Arcadis U.S., Inc. (Arcadis). 2019. Revised Construction Completion Report. Cape May Former Manufactured Gas Plant Site. Cape May New Jersey. December 2019.
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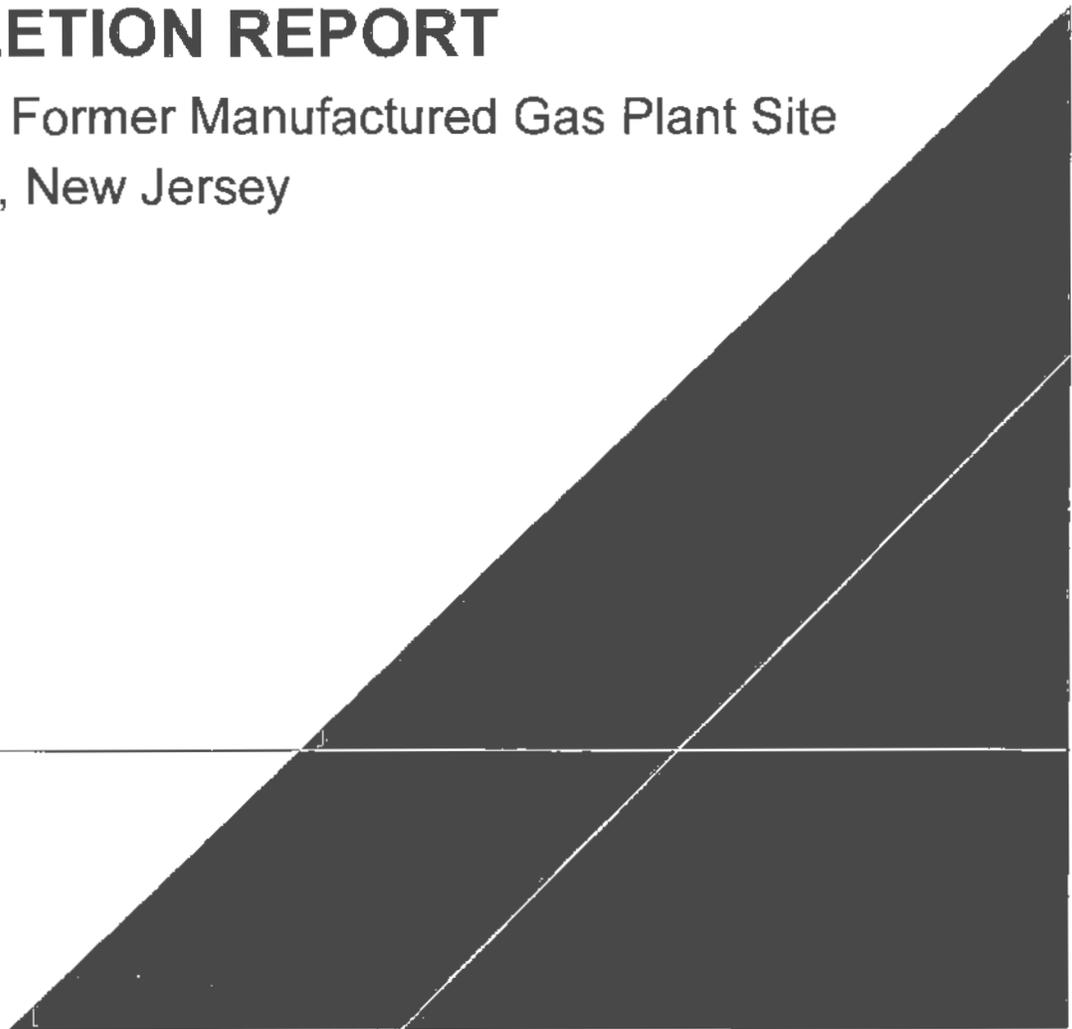


Jersey Central Power & Light Company

REVISED CONSTRUCTION COMPLETION REPORT

Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

December 2019



REVISED CONSTRUCTION COMPLETION REPORT

**REVISED CONSTRUCTION
COMPLETION REPORT**

Cape May Former Manufactured Gas
Plant Site Cape May, New Jersey



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REVISED CONSTRUCTION COMPLETION REPORT

CONTENTS

1 Introduction 1
 1.1 Mitigation Project Objectives 2
2 Mitigation Project Activities Summary 3
 2.1 Construction Activities 3
 2.2 Backfilling and Grading 4
 2.3 Vegetation Restoration 4
3 Summary 8
4 References 9

TABLES

1 Site Permit Summary
2 Restored Areas Summary
3 Wetland Transition – Maritime Woodland
4 Wetland Transition – Mixed Maritime Forest
5 Wetland – High Marsh
6 Wetland – High Marsh Island
7 Wetland – Low Marsh
8 Maritime Seed Mix

FIGURE

1 Site Location Map
2 As-Built

APPENDICES

A Permit Approvals
B Completion of Construction Form
C Site Photographs
D Soil Data
E Nursery Packing Slips and Seed Tag

REVISED CONSTRUCTION COMPLETION REPORT

1 INTRODUCTION

On behalf of Jersey Central Power & Light Company (JCP&L), Arcadis U.S., Inc. (Arcadis) has prepared this Revised Construction Completion Report for the Cape May Former Manufactured Gas Plant (MGP) site (site) located in the City of Cape May, Cape May County, New Jersey (Figure 1). Arcadis prepared this report in accordance with the New Jersey Department of Environmental Protection (NJDEP) Freshwater Protection Act Rules, New Jersey Administrative Code (N.J.A.C.) 7:7A-15; NJDEP Coastal Zone Management Rules, N.J.A.C. 7:7-17; and requirements associated with the most currently available *Mitigation Project Construction Completion Checklist for Completeness (Revised: January 2018)* pursuant to NJDEP Freshwater Wetlands General Permit Number 4 (GP-4) and NJDEP Coastal Wetlands Individual Permit (File Nos. 0502-02-0001.3 FWW14001 and 0502-02-0001.6 FWW160001 CSW160001) and associated permits and permit modifications as summarized in Table 1 and in approvals included in Appendix A. This Revised Construction Completion Report is an amendment to the original Construction Completion Report submitted in December 2018 and includes additional construction details for wetland areas.

Activities authorized under these permits allowed JCP&L to complete a phased remedial soil excavation in accordance with the Administrative Consent Order (ACO) dated October 29, 1991 and consistent with the Remedial Action Work Plan (RAWP) (Arcadis 2015).

Table 1. Site Permit Summary

Permit Phase	Phase 1	Phase 2	Phase 2 Modification	Phase 2 Modification	Phase 2 Modification
File No.	0502-02-0001.3 CAF130001 FWW14001	0502-02-0001.6 WFD160001 CSW160001 FWW160001	0502-02-0001.6 WFD170001Mod CSW170001Mod FWW160001	0502-02-0001.6 WFD170002Mod CSW170002Mod FWW160001	0502-02-0001.6 WFD170002Mod CSW180001Mod FWW160001
Approval Date	7/17/15	1/9/17	4/20/17	12/6/17	2/28/18

Permit applications previously submitted to and approved by the NJDEP provide a general site description and land-use history, ecological characterization of the area prior to implementation of site remediation activities, and mitigation plan. As such, the remainder of this report discusses the completion mitigation activities, which include final grading, seeding, and planting activities for upland transition and wetland areas on the site.

All temporarily disturbed areas were backfilled and restored to grade, as included on the As-Built (Figure 2). Upland and wetland plantings were completed in June 2017 for a majority of the disturbed areas. Additional and unexpected shallow MGP-impacts were found in wetland areas in 2017, further described below in Section 2, which resulted in the conclusion of all remaining activities in wetland areas in fall 2018

REVISED CONSTRUCTION COMPLETION REPORT

and final plantings in May 2019. **Appendix B** provides a Completion of Construction Form for upland transition areas and wetlands areas, and **Figure 2** provides an As-Built plan for upland transition and wetland areas.

1.1 Mitigation Project Objectives

As discussed in the NJDEP approved Mitigation Plan (Arcadis 2017) goals of the mitigation project included improvement of habitat quality and ecological function of the coastal wetland system and adjacent upland areas temporarily disturbed during unavoidable site remediation activities.

Project activities included a phased soil excavation in regulated coastal wetlands and associated transition areas (see as-Built drawing included as **Figure 2**). Specifically, soil excavation activities resulted in the temporary disturbance to 0.003 acres of state open waters, 2.46 acres of wetlands (i.e., high and low marsh), and 1.39 acres of wetland transitional area. All areas were restored on-Site and in-kind consistent with the approved Mitigation Plan (Arcadis 2017). **Table 2** summarizes the overall acreage requirements identified in the permit approvals (**Appendix A**) the actual disturbance to regulated areas resulting from implementing the remedial activities, and the area of the habitats restored following the completion of restoration activities to mitigate for temporary disturbances at the site.

Table 2. Restored Areas Summary

Jurisdictional Habitat	Permitted Temporary Disturbance (ac)	Approved Restoration (ac)	Actual Project Disturbance (ac)	Total Project Restoration (ac)
Upland Wetland Transition	1.44	1.54	1.39	1.48
Wetlands High Marsh	0.49	0.42	0.45	0.33
Wetlands Low Marsh	2.69	2.91	2.01	2.21
State Open Waters	0.02	0.02	0.003	0.003

In addition to the restored jurisdictional habitats, a monetary donation was made for offsite mitigation to compensate for the loss of 0.34-acre of woodland habitat within the upland waterfront development area at a 2:1 mitigation ratio, representing the preservation of a total of 0.68-acre habitat for threatened and endangered species. This offsite mitigation included a donation of \$20,000 to the NJDEP as part of the January 2017 approved permit (**Appendix A**).

The remainder of this report summarizes activities conducted at the site, including mitigation project activities conducted to date.

REVISED CONSTRUCTION COMPLETION REPORT

2 MITIGATION PROJECT ACTIVITIES SUMMARY

2.1 Construction Activities

Remedial activities occurred in a phased approach between 2016 and 2018, which focused on the excavation and containment of MGP-impacted soils. Project activities at the site were planned and conducted in a phased approach due to work timing restrictions deemed by the City of Cape May (i.e. work freeze between Memorial Day and Labor Day). As such, project activities were split into phases for work in upland areas and wetland areas, respectively.

A summary of activities associated with remedial excavation includes:

- clearing and grubbing of vegetation
- installing soil erosion and sediment control measures
- excavating impacted material and installation of a soil cap
- stockpiling excavated material
- shipping excavated material offsite for disposal
- installation of primary containment wall, secondary containment wall, and groundwater treatment system
- well decommissioning and installation
- backfilling and grading
- establishing vegetative cover

An initial phase of site activities (Phase 1), which included the removal of MGP impacted materials, installation of a soil cap, and the installation of a primary containment wall for groundwater containment occurred in 2016 in upland areas. A majority of the work took place in the upland waterfront development area and partially in wetland transition area. Temporarily disturbed areas were backfilled, graded, and covered with a temporary seed mix and gravel/DGA in the construction staging area in anticipation of additional disturbance in wetland areas.

A second phase of site activities (Phase 2) took place in 2017 to remove the remaining MGP impacted materials within coastal wetland areas and for the installation of a secondary containment wall and groundwater treatment system. Disturbed areas were backfilled to grade in upland and wetland areas and planted according to the Mitigation Plan (Arcadis 2017). During Phase 2 activities additional unexpected shallow MGP-impacts were found to extend beyond original permitted limits in wetland areas. In order to avoid re-disturbing restored areas, an access path through the restored Phase 2 area was maintained in anticipation of additional remedial action excavation activities.

A third and final phase of site activities (Phase 3) took place in 2018 to remove remaining shallow MGP-impacted material from the wetlands. Upon completion of excavation activities, all areas were backfilled to grade, which included all wetland areas and the access road running through upland areas. Disturbed upland areas along the access road were also planted according to the Mitigation Plan. Due to timing of activities, which concluded in October 2018 after the optimal planting window for wetland grasses (i.e. September), the remaining Phase 3 wetland grasses were planted in May 2019 in accordance with the

REVISED CONSTRUCTION COMPLETION REPORT

Mitigation Plan (Arcadis 2017). Supplemental wetland plantings in the Phase 2 area were also completed in May 2019 in tandem with the Phase 3 wetland plantings.

The remaining sections will only focus on detailing backfilling, grading, and restoration efforts to establish vegetation cover within the remediated areas. All actions were performed consistent with approved plans and referenced in the permits/modification to permits authorizing regulated activities in upland waterfront development, wetland transition, and coastal wetland areas (**Appendix A**). A final As-Built for all site grading and areas planted is included as **Figure 2**. A photolog documenting mitigation work is included as **Appendix C**.

Additional construction details will be summarized in the forthcoming Remedial Action Report.

2.2 Backfilling and Grading

Areas excavated during the remediation were backfilled with certified clean material and a minimum of 4-inches of organic topsoil was added to the upland areas to achieve final grades pursuant to the February 2018 Revised Restoration Plan (**Appendix A**). A Remedial Action Report will be submitted with additional geotechnical and analytical details regarding certified backfill material and topsoil used at the site.

Appendix D provides the pH, moisture, total organic carbon content (TOC), and macronutrients found in the topsoil. Test results included a pH between 7.3-7.7, TOC of 21.9 percent (%), and 40.4% moisture content.

Figure 2 presents the As-Built final grade contours for the remediation area.

2.3 Vegetation Restoration

Upon completion of surface restoration grading, all areas of disturbance were re-vegetated to conditions similar or ecologically better to those that existed prior to remediation activities, and consistent with the planting As-Built presented in **Figure 2**. Planting and seeding in upland areas were completed in June 2017 and in the remaining uplands, previously occupied by the access path, in October 2018. Planting in wetlands (i.e. high and low marshes) were partially completed in June 2017 and finalized in May 2019. Nursery packing slips and the seed tags are included as **Appendix E**.

In summary, the planting of upland woody vegetation and wetland grasses and shrubs represent an in-kind and on-site restoration for areas temporarily disturbed as part of the remediation. Arcadis wetland scientists worked with the remedial engineers throughout the process to minimize vegetative disturbances, including the number of trees and shrubs that were removed. **Tables 3** and **4** provide a summary of the planted tree and shrub species in their designated upland habitat areas. **Tables 5, 6** and **7** provide a summary of the planted wetland grasses and shrubs within wetland areas. All tables and designated planting areas are also presented on the final As-Built (**Figure 2**).

REVISED CONSTRUCTION COMPLETION REPORT

Table 3. Wetland Transition – Maritime Woodland

Species	Density (# / Acre)	Size Planted	Quantity Planted
hackberry (<i>Celtis occidentalis</i>)	150	#5 (4-7')	80
		#3 (3-4')	37
eastern red cedar (<i>Juniperus virginiana</i>)	150	#5 (5-6')	24
		#3 (3-4')	90
American holly (<i>Ilex opaca</i>)	100	#3 (3-4')	65
black gum (<i>Nyssa sylvatica</i>)	100	#5 (4-6')	11
black cherry (<i>Prunus serotina</i>)	50	#5 (5-8')	39
pitch pine (<i>Pinus rigida</i>)	25	#5 (3-4')	18
		#3 (3-4')	4
bayberry (<i>Morella pensylvanica</i>)	200	#1 (12-18")	119
		#2 (12-18")	39
highbush blueberry (<i>Vaccinium corymbosum</i>)	100	#1 (18-24")	70
groundsel bush (<i>Baccharis halimifolia</i>)	50	#1 (18")	43
sassafras (<i>Sassafras albidum</i>)	50	#2 (2-4')	10
		#3 (2-3')	34

Note:

Due to nursery availability, a subset of American holly was not available and substituted with black gum, in the Maritime Woodland habitat.

Table 4. Wetland Transition – Mixed Maritime Forest

Species	Density (# / Acre)	Size Planted	Quantity Planted
red maple (<i>Acer rubrum</i>)	150	#5 (4-7')	59
			18
American holly (<i>Ilex opaca</i>)	50	#3 (3-4')	21
black gum (<i>Nyssa sylvatica</i>)	50	#5 (4-6')	2
black cherry (<i>Prunus serotina</i>)	75	#5 (5-8')	26
pitch pine (<i>Pinus rigida</i>)	50	#5 (3-6')	15
		#3 (3-4')	4
eastern cottonwood (<i>Populus deltoides</i>)	50	#5 (5-6')	5
		#3 (4-5')	15
scarlet oak (<i>Quercus coccinea</i>)	50	#5 (4-7')	20
hackberry (<i>Celtis occidentalis</i>)	75	#5 (4-5')	17
		#3 (4-5')	9
bayberry (<i>Morella pensylvanica</i>)	100	#1 (12-18")	32
		#2 (12-18")	10
winged sumac (<i>Rhus copallinum</i>)	75	#2 (2-3")	26
Staghorn sumac (<i>Rhus typhina</i>)	75	#1 (3-5')	9
highbush blueberry (<i>Vaccinium corymbosum</i>)	100	#1 (18-24")	43
sassafras (<i>Sassafras albidum</i>)	50	#1 (2-4')	9
		#3 (2-3')	18

REVISED CONSTRUCTION COMPLETION REPORT

Notes:

Winged sumac was not available through the nursery and was replaced by staghorn sumac during June 2017 planting. Scrub oak (*Quercus ilicifolia*) was not obtained by the nursery and the quantity of proposed plants was redistributed to other species.

Table 5. Wetlands – High Marsh

Species	Density (# / Acre)	On Center Spacing (feet)	Quantity Planted
saltmarsh hay (<i>Spartina patens</i>)	19,360	1.5	3,720

Table 6. Wetlands – High Marsh Islands

Species	Density (# / Acre)	On Center Spacing (feet)	Quantity Planted
saltmarsh hay (<i>Spartina patens</i>)	10,890	2	1,660
eastern red cedar (<i>Juniperus virginiana</i>)	300	12	19
bayberry (<i>Morella pensylvanica</i>)			18
groundsel bush (<i>Baccharis halimifolia</i>)			29
marsh elder (<i>Iva frutescens</i>)			16

Table 7. Wetlands – Low Marsh

Species	Density (# / Acre)	On Center Spacing (feet)	Quantity Planted
smooth cordgrass (<i>Spartina alterniflora</i>)	10,890	2	21,400
saltgrass (<i>Distichlis spicata</i>)			7,500
saltmarsh hay (<i>Spartina patens</i>)			900

The upland portion of the restoration area was hydro-seeded and seeded by hand with a Maritime Meadow native habitat seed mix, at a rate of approximately 15 lbs. per acre (**Table 8**). All hand-seeded areas were covered with hand spread straw following seeding.

REVISED CONSTRUCTION COMPLETION REPORT

Table 8. Maritime Seed Mix

Scientific Name	Common Name	Seed Mix Composition
<i>Panicum virgatum</i>	Switchgrass	30
<i>Elymus virginicus</i>	Virginia wildrye	20
<i>Andropogon gerardii</i>	Big bluestem	14
<i>Schizachyrium scoparium</i>	Little bluestem	14
<i>Chamaecrista fasciculata</i>	Partridge Pea	3
<i>Rudbeckia hirta</i>	Black-eyed Susan	3
<i>Chamaecrista fasciculata</i>	Partridge Pea	3
<i>Asclepias syriaca</i>	Common milkweed	2
<i>Asclepias tuberosa</i>	Butterfly milkweed	1
<i>Symphotrichum puriceum</i>	Purplestem aster	1
<i>Aster umbellatus</i>	Flat topped white aster	1
<i>Monarda fistulosa</i>	Wild bergamot	1
<i>Vernonia noveboracensis</i>	New York Ironweed	1
<i>Eupatorium perfoliatum</i>	boneset	1
<i>Solidago juncea</i>	Early goldenrod	1

REVISED CONSTRUCTION COMPLETION REPORT

3 SUMMARY

This Revised Construction Completion Report addresses conditions of the NJDEP GP-4 and Coastal Wetlands Individual Permit, File No. 0502-02-0001.3 FWW14001 and 0502-02-0001.6 FWW160001 CSW160001 and associated upland waterfront development and permit modifications as summarized in **Table 1**. Approval letters are included as **Appendix A**. Specifically, this report addresses the following requirements:

1. As-built grading and planting plans for all remediated areas (**Figure 2**)
2. Mitigation Project Completion of Construction Form (**Appendix B**)
3. Photographs of the restoration area following planting activities (**Appendix C**)
4. Soil analysis results (**Appendix D**)

Consistent with the permit application, compliance monitoring began after one full growing season in the late summer of 2018 for upland areas and in 2019 for wetland areas. Adaptive management for invasive plant species was conducted throughout 2018 and 2019. The second annual monitoring report for uplands areas and first annual monitoring report for wetlands is being submitted concurrently this year (2019).

REVISED CONSTRUCTION COMPLETION REPORT

4 REFERENCES

Arcadis. 2017. Mitigation Plan. Cape May Former Manufactured Gas Plant Site. Cape May New Jersey.
Revised January 2017.

Arcadis. 2015. Remedial Action Work Plan. Cape May Former MGP Site.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-2b

Remedial Action Workplan
AOC C1 - On-Site MGP Soil Impacts
Newton Coal Gas 2 Site
Newton, New Jersey
NJDEP Program Interest No. G000005460

Prepared for
Jersey Central Power & Light Company,
Morristown, New Jersey
August 2019

Remedial Action Workplan
AOC C1 – On-Site MGP Soil Impacts
Newton Coal Gas 2 Site
Newton, New Jersey
NJDEP Program Interest No. G000005460

Prepared for
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300 Madison Avenue
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August 2019

Project Number: 153508.500.002



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Table of Contents

Appendices	ii
List of Tables	iii
List of Figures	iii
List of Abbreviations	iv
1. Introduction.....	1-1
1.1 Site Description and History.....	1-1
1.2 Site Conditions.....	1-2
1.2.1 Land Use.....	1-2
1.2.2 Topography.....	1-2
1.2.3 Underground Structures.....	1-2
1.2.4 Geology.....	1-2
1.2.5 Hydrogeology.....	1-3
1.3 Previous Investigations.....	1-3
1.4 Areas of Concern.....	1-4
1.4.1 AOC A – Former Above Ground Storage Tank.....	1-4
1.4.2 AOC B – Former Underground Storage Tanks.....	1-5
1.4.3 AOC C1 – On-Site MGP-Related Soil Impacts.....	1-5
1.4.4 AOC C2 – Off-Site MGP-Related Soil Impacts	1-5
1.4.5 AOC D – MGP-Related Groundwater Impacts	1-5
1.4.6 AOC E – PCE Discharges from Former Lynn Cleaners Leasehold.....	1-5
1.5 Post-Remedial Investigation Activities.....	1-6
1.5.1 Pre-Design Investigation (2014).....	1-6
1.5.2 ISS Treatability Study (2017-2018).....	1-6
1.5.3 ISS Field Pilot Test (2018-2019)	1-6
1.5.4 Waste Characterization and Geotechnical Investigation (2019).....	1-7
1.5.5 PFOA/PFOS Assessment (2019).....	1-7
1.5.5.1 Scope of Assessment	1-8
1.5.5.2 Findings.....	1-8
2. Remedial Action.....	2-1
2.1 Remedial Action Standards.....	2-1
2.2 Remedial Action Implementation.....	2-1
2.2.1 ISS.....	2-1
2.2.1.1 Permitting.....	2-1
2.2.1.2 Utility Relocation	2-2
2.2.1.3 Site Clearing and Preparation.....	2-2
2.2.1.4 Perimeter Air Monitoring	2-2
2.2.1.5 Soil Excavation and Debris Removal.....	2-3

2.2.1.6	ISS Implementation	2-4
2.2.1.7	Waste Management and Disposal.....	2-6
2.2.1.8	Slope Stabilization	2-7
2.2.1.9	Backfilling and Site Restoration.....	2-7
2.2.1.10	Soil Erosion and Sediment Control.....	2-7
2.2.1.11	Performance Verification	2-7
2.2.2	Engineering Control	2-7
2.2.3	Deed Notice and Remedial Action Permit.....	2-8
3.	Fill Use Plan	3-1
4.	Health and Safety Plan.....	4-1
5.	Schedule	5-1
6.	References.....	6-1

Appendices

Appendix A	Case Inventory Document
Appendix B	Pre-Design Investigation Results
Appendix C	In-Situ Soil Solidification Treatability Study Report
Appendix D	In-Situ Solidification Pilot Study Report
Appendix E	Results of Waste Characterization and Geotechnical Investigation
Appendix F	PFOA/PFOS Assessment Documentation
Appendix G	Perimeter Air Monitoring Plan
Appendix H	Volume Estimates
Appendix I	Town of Newton Ordinance – Soil Importation and Grading
Appendix J	Health and Safety Plan



List of Tables

Table 5-1. Remedial Action Implementation Schedule 5-1

List of Figures

- Figure 1-1. Site Location
- Figure 1-2. Existing Conditions
- Figure 1-3. Geologic Cross-Section
- Figure 1-4. Summary of Impacts
- Figure 2-1. Site Remedial Action Plan
- Figure 2-2. ISS Cross-Sections
- Figure 2-3. Temporary Waste Containment Area



List of Abbreviations

AOC	Area of Concern
AST	above ground tank
BC	Brown and Caldwell
bgs	below ground surface
BMM	bucket mixing method
BMP	best management practice
CID	Case Inventory Document
cm/sec	centimeters per second
COC	Constituent of Concern
CVOC	chlorinated compounds
CY	Cubic Yard
DNAPL	dense non-aqueous phase liquid
EA	EA Engineering, Science and Technology
IGWSSL	Impact to Groundwater Soil Screening Levels
ISS	in-situ stabilization
ITRC	Interstate Technology and Regulatory Council
JCP&L	Jersey Central Power and Light Company
LSRP	Licensed Site Remediation Professional
MGP	manufactured gas plant
NFA	no further action
NAPL	non-aqueous phase liquid
NGVD	National Geodetic Vertical Datum
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NRDCSRS	NJDEP Non-Residential Direct Contact Soil Remediation Standards
PAH	polycyclic aromatic hydrocarbon
PCE	Tetrachloroethylene
PDI	Pre-Design Investigation
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane sulfonate
PI	Program Interest
PM10	particulate matter less than 10 micrometers in diameter
PSI	Preliminary Site Investigation
psi	pounds per square inch
QAPP	Quality Assurance Project Plan
RAW	Remedial Action Workplan
RDCSRS	NJDEP Residential Direct Contact Soil Remediation Standards
RI	Remedial Investigation
RIR	Remedial Investigation Report

SESC	Soil Erosion and Sediment Control
SPT	Standard Penetration Test
SRP	Site Remediation Program
SRS	Soil Remediation Standards
TWA	time weighted average
UCS	unconfined compressive strength
UST	underground heating oil storage tank
VI	Vapor Intrusion
VOC	Volatile Organic Compound



Section 1

Introduction

This Remedial Action Workplan (RAW) has been prepared by Brown and Caldwell (BC) on behalf of Jersey Central Power and Light Company (JCP&L), a FirstEnergy Company, for the Former Newton Coal Gas 2 Site (Site), located in Newton, Sussex County, New Jersey (Figure 1-1). It has been prepared to specifically address Area of Concern (AOC) C1, which includes soil located on the former Manufactured Gas Plant (MGP) property (Block 9.02, Lot 3) that is impacted by MGP residuals. The Site is filed with the New Jersey Department of Environmental Protection (NJDEP) under Program Interest (PI) No. G000005460. JCP&L has engaged Mr. Peter Randazzo, LSRP of BC as its Licensed Site Remediation Professional (LSRP) for this case. This RAW was prepared in accordance with the NJDEP's Technical Requirements for Site Remediation and New Jersey Administrative Code (N.J.A.C.) 7:26E, specifically N.J.A.C. 7:26E-5 (Remedial Action). The Case Inventory Document (CID) is included as Appendix A.

The remedy described in this RAW includes the stabilization of MGP-impacted soil using In-Situ Stabilization (ISS), the construction of engineering controls and the placement of a Deed Notice on the property. The remedy will protect human health, safety and the environment by stabilizing soil that has been impacted by MGP-related hazardous substances, including volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHS), and dense non-aqueous phase liquid (DNAPL). This RAW does not address off-site impacts on soil and groundwater, which will be addressed in a separate RAW.

1.1 Site Description and History

The property that is subject to this RAW is located in the Town of Newton, Sussex County, New Jersey at 15 East Clinton Street (Figure 1-2). It is owned by JCP&L and was the former location of MGP operations between approximately 1869 and 1916. In more recent years, up until 2011, the property was operated as a commercial strip mall that included various retail operations, among them several restaurants, a bakery, an appliance store, and nail salon. The retail building was demolished in 2011-2012 after JCP&L assumed the ownership of the property and the property has been vacant since then. The property currently has no structures and the ground surface is represented by the property's former parking lot and exposed floor foundation of the demolished building.

The property is bordered by a dialysis center to the west, an automotive shop to the east, private residences to the south, and East Clinton Street on the north. Nearby properties located north of East Clinton Street include the Newton Shopping Center (2-10 East Clinton Street property), which is currently operated as a strip mall and an office building complex. The nearest surface water body, the Paulins Kill (known locally as Moore's Creek), is a FW2 NT stream located north of the 2-10 and 20 East Clinton Street properties.



1.2 Site Conditions

This section provides a description of the physical setting of the Site including land use, topography, underground structures, geology, and hydrogeology.

1.2.1 Land Use

The Site is situated on the northern edge of downtown Newton, New Jersey where the land use is a mix of urban/suburban commercial and residential properties. The Site property itself has been used commercially as described in Section 1.1 of this report.

1.2.2 Topography

The Site lies in the southeast portion of the Valley and Ridge physiographic province. This area is characterized by northeast trending hills and valleys that were formed from the differential weathering of the various Paleozoic age strata. In addition, northern New Jersey displays evidence of having been glaciated at least three times during the last 2.5 million years. The different glacial events have left a mix of Quaternary age sediments deposited throughout the region and, depending on the environment of deposition, these deposits include glaciofluvial sand and gravel, glaciolacustrine clay, and glacial till. Glacial till and glaciolacustrine clay sediments are found in the study area.

Most of the Site is paved and relatively flat, with the surface elevations ranging between approximately 179 and 183 feet National Geodetic Vertical Datum (NGVD). Remnants of the approximately 20 to 30 feet wide former strip mall building extend along the southern limit of the Onsite Area. The surface elevation of the western part of these remains is similar to the surface elevation of the majority of the Site property; however, it rises to the east, following the rise of the topography immediately south of the Site, to the maximum elevation of approximately 592 feet NGVD. Along the southern limits of the Onsite Area the remnants of the former strip mall building form a retaining wall separating the lower-lying surface of the Site from the higher ground to the south, where residential properties are located. The maximum height of this retaining wall is approximately 9 feet at the southeast corner of the Site.

1.2.3 Underground Structures

Several structures used during the MGP operations were identified based on the review of the Sanborn® Fire Insurance maps. These structures include two gas holders (Gas Holder #1 in the southwest corner of the Onsite Area and Gas Holder #2 in southeast corner), barrel and coal sheds in the central part of the Onsite Area, a crude tort house near the Gas Holder #2, a finished tort house along the eastern boundary of the Onsite Area, and a group of structures near the northeast corner of the Site (the drier house, the retort house, the purifying room and the meter room). An investigation was conducted by means of test pitting to locate the underground portions of the structures that may still remain. Results of the investigation were presented in the Technical Memorandum entitled 2014 Pre-Design Investigation Results and are shown on Figure 1-2.

1.2.4 Geology

According to the New Jersey Geological Survey publication “Generalized Bedrock Geology of New Jersey” (Publication No. DGS04-6), the bedrock underlying the Site is composed of the Bushkill Member of the Martinsburg Formation. The Martinsburg Formation (Upper and Middle Ordovician) reaches thicknesses of up to 1,500 feet and consists of laminated, thick bedded slaty shale and less abundant laminated siltstone. The Bushkill Member consists of shale, slate, less abundant siltstone, and minor dolomitic lenses. Other geologic formations located near the Site include the Ramseyburg Member of the Martinsburg Formation, the Jacksonburg Limestone, and the Rickenbach Dolomite. Outcrops of the Jacksonburg Limestone (Middle Ordovician) can be found at Memorial Park northeast of the Site and



NJDEP well records dating back to the 1950s indicate that the Jacksonburg Limestone underlies a portion of 20 East Clinton Street property.

Overlying the bedrock in the Site area is soil derived from glacial deposition as well as from anthropogenic filling. The glacial deposits encountered beneath the Site and the two properties located north of the Site include, in order of increasing depth, a glaciolacustrine clay that thickens in a northward direction away from the Site, an ablation till and a significantly denser lodgment till.

The fill is composed of various materials including sand, gravel, ash, cinders, coal, and demolition debris (e.g., brick and concrete). Finer grained material (silt and clay), where present in the fill, is typically not the predominant component.

The glacial till is variable in composition, consisting of poorly sorted sand and gravel with varying amounts of clay and silt. However, the consistency of the till changes with depth, with the upper till being more loosely compacted and less dense. Compared to the upper till, the lower till is much denser and more cohesive, with higher standard penetration test (SPT) n-values (based on higher split-spoon blow-counts). Given the cohesive and compacted nature of the lower till, it is considered to be a lodgment till deposited beneath the base of a glacier under the weight of the overlying ice. The upper, less dense till is likely an ablation till (material initially entrained in the glacial ice and deposited as the ice melted).

Within the Site, the fill varies in thickness, but is typically 4 to 13 feet thick. In the locations of the former gas holders, the fill extends to a depth of over 20 feet below ground surface (bgs). The ablation till is approximately 20 to 25 feet thick, with the exception of the areas of the gas holders, where it has been largely excavated, with the remaining thickness of approximately 5 feet. The lodgment till is approximately 30 to 40 feet thick.

The geologic cross section is shown on Figure 1-3.

1.2.5 Hydrogeology

Groundwater flow in the study area occurs under unconfined conditions in a shallow water bearing zone contained within the unconsolidated sediments (Figure 1-3). The groundwater flow is generally north-northeast towards the Paulins Kill. The Paulins Kill is approximately 39 miles long and, including its tributaries, drains an area of 197 square miles. From its headwaters near Newton, less than 2 miles from the Site, the Paulins Kill flows east-northeast for approximately 5 miles before turning northward and then southwestward en route to discharging into the Delaware River near Columbia, New Jersey.

Groundwater flows north from the Site where it eventually discharges to the Paulins Kill north of the 2-10 and 20 East Clinton Street properties. The hydraulic gradient within the unconsolidated overburden aquifer between the Site and the Paulins Kill is approximately 0.04. The water table is at the elevation of approximately 573 to 580 feet NGVD throughout most of the Site. Depth to the water table on the Site ranges from 2 feet adjacent to the remnants of the former strip mall building to 10 feet in the higher elevation areas located on the Site's southern property boundary.

1.3 Previous Investigations

Previous investigations at the Site included a Preliminary Site Investigation (PSI) conducted by Ebasco Environmental (Ebasco) in 1985 and several phases of Remedial Investigation (RI) activities performed by EA Engineering, Science and Technology (EA) from 1995 to 2003. The results from the PSI and RI activities performed by Ebasco and EA were presented in the following reports:

- Investigations at the Newton 2 Coal Gas Site (Ebasco 1985)
- Final Remedial Investigation Report for the Newton 2 Former Manufactured Gas Plant Site, Newton, New Jersey (EA 1996)

- Final Phase II Remedial Investigation Report, Newton 2 Former Manufactured Gas Plant Site, Newton, New Jersey (EA 2003)
- Supplemental Remedial Investigation Report for the Newton II Former Manufactured Gas Plant Site, Newton, New Jersey (EA 2004)

These investigations indicated that both soil and groundwater have concentrations of MGP residuals in excess of NJDEP remediation standards in the vicinity of and downgradient of the Site. Constituents typically associated with MGP operation, such as PAHs and benzene, have been detected on the Site and in locations north of the Site under East Clinton Street and on the 2-10 East Clinton Street property. These investigations also identified contaminants unrelated to former MGP operations on neighboring or nearby properties, including chlorinated aliphatic compounds likely associated with former dry-cleaning establishments, PAHs associated with historic fill material and benzene and other VOCs associated for former gasoline service station operations.

In April of 2004 the RETEC Group, Inc. and GeoSyntec Consultants Inc. conducted a vapor intrusion (VI) study within the former commercial building located at the Site (RETEC, 2004). The investigation indicated that the potential intrusion of vapors on the Site from MGP materials was not significant. However, the occurrence of tetrachloroethene (PCE) within the building, which the NJDEP recognized as not being related to former MGP operations, prompted the NJDEP to install a sub-slab vapor extraction system to reduce the concentrations PCE within the commercial building. The PCE was believed to be a related to a discharge from a former dry-cleaning operation associated with a former tenant, Lynns Cleaners. Later sampling performed by JCP&L confirmed that there are no chlorinated VOCs occurring in the Site's soil or groundwater at concentrations exceeding New Jersey remediation standards.

BC conducted several Pre-Design Investigations (PDI) between September 2006 and January 2010 under NJDEP oversight to further evaluate and delineate MGP-related impacts on the Site and downgradient of the Site. These activities included additional soil sampling, well installations, groundwater sampling and the development of a groundwater flow model to better understand groundwater flow behavior within the impacted area. A final SPDI report was submitted to the NJDEP in January 2010.

A soil vapor investigation consisting of near-slab sampling was performed at the 2-10 East Clinton Street and the 20 East Clinton Street property by GeoSyntec in 2009 to determine whether MGP-related impacts on or near those properties posed an indoor vapor risks to building occupants. Based on the results of that investigation, sub-slab soil gas sampling was performed at 2-10 East Clinton Street location in February 2010. The results, which were presented to NJDEP in an April 16, 2010 Technical Memorandum, indicated that MGP-related substances were not occurring in soil gas beneath 2-10 East Clinton Street property building at concentrations exceeding Soil Gas Screening Levels and that no further investigation was planned. NJDEP approved of this conclusion in a letter dated June 16, 2010.

A Remedial Investigation Report (RIR) was submitted to NJDEP in May 2014 to satisfy the RIR reporting regulatory timeframe specified in N.J.A.C. 7:26E. The RIR included soil and groundwater data collected at the Site and from downgradient off-Site properties between 2006 and 2013. The RIR documented the nature and the extent of the MGP-related impacts in soil and groundwater.

1.4 Areas of Concern

Based on investigations performed on the Site, six Potential AOCs were identified an and downgradient of the Site. These are summarized below and in the Case Inventory Document included in Appendix A.

1.4.1 AOC A – Former Above Ground Storage Tank



An above ground storage tank (AST), located at the southwest corner of the Site's former strip mall building's Unit B leasehold space was used for storage of heating oil from 1993 to 2011. The tank's volume was estimated to be 275 gallons and it appeared to be made of steel. During a preliminary assessment of the property prior to its sale to JCP&L, it was determined that no sampling around the AST was necessary since there was no evidence of discharges. The AST no longer exists since the building and related appurtenances were demolished in 2011-2012. No further investigation was recommended for this AOC.

1.4.2 AOC B – Former Underground Storage Tanks

Five underground heating oil storage tanks (USTs) were located underneath the southern end of the Site's former strip mall building. The tanks were decommissioned in 1993. Four were left in place below the building and one was removed from behind the former strip mall's Unit B. The tank which was removed (550 gallons) was reported to have leaked and was addressed under Program Interest No. G000010631 (McKeeby's Liquor Store). The tanks that were left in place passed integrity tests before being decommissioned. Nonetheless, soil sampling was conducted in the locations of these tanks in 1993, 2004 and 2011 by the property owner that preceded JCP&L. JCP&L also performed soil sampling in the vicinity of the tanks in 2006 and found no UST-related contamination. An unrestricted No Further Action (NFA) letter was issued by NJDEP for Program Interest No. G000010631 in 2006.

1.4.3 AOC C1 – On-Site MGP-Related Soil Impacts

Soil impacted by MGP-related substances occurs in the southeastern corner and northern sections of the 15 East Clinton Street property. DNAPL associated with the former MGP operations is also present. Investigations performed on the Site have fully delineated the horizontal and vertical extent of the soil impacts. The contaminants of concern associated with this AOC includes benzene, toluene, ethylbenzene, xylenes, naphthalene and a variety of other PAHs. This AOC is the subject of this RAW.

1.4.4 AOC C2 – Off-Site MGP-Related Soil Impacts

Soil impacted by MGP-related substances occurs on the 2-10 East Clinton Street property and under East Clinton Street itself between the source property (15 East Clinton Street) and the 2-10 East Clinton Street property. MGP-related DNAPL is also present in the soil on the 2-10 East Clinton Street property. Investigations have delineated the horizontal and vertical extent of the soil impacts of the off-Site MGP-impacts. The chemicals-of-concern include the same as those associated with AOC C1. AOC C2 is not addressed by this RAW.

1.4.5 AOC D – Off-Site MGP-Related Groundwater Impacts

Groundwater on the eastern and northern sides of the 15 East Clinton Street property, and downgradient of the site north onto the neighboring 2-10 East Clinton Street property, is impacted by MGP-residuals at concentration exceeding Class II-A Groundwater Quality Standards. The horizontal and vertical extent of these groundwater impacts have been delineated. The chemicals-of-concern include the same as those identified for AOC C1. Off-site groundwater impacts are not addressed by this RAW.

1.4.6 AOC E – PCE Discharges from Former Lynn Cleaners Leasehold

Unit C of the Site's former strip mall building was potentially an area of discharge per N.J.A.C. 7:1E based on the presence of chlorinated compounds (CVOCs) measured in sub slab and indoor air in 2004. NJDEP applied public funding to mitigate the compounds measured in the indoor air under Program Interest No. 234693, which was combined with Program Interest Number G000005460 after JCP&L's purchase of the property. Unit C was the former location of a dry cleaner (Lynn Cleaners). Soil sampling performed beneath and downgradient of Unit C in 2012 did not indicate detectable concentrations of CVOCs in the soil. In addition, no CVOCs were detected in groundwater samples collected from monitoring wells

installed on the Site. As a result, it was concluded that the source of CVOC vapors measured in indoor air was not impacted soil or groundwater, but likely a result CVOC-impacted building material. The Building was demolished in 2012. This resulted in the termination of Indoor air mitigation measures. It has been concluded that no additional investigation or mitigation is required.

1.5 Post-Remedial Investigation Activities

This section summarizes the results of investigation activities performed on the Site after the submission of the RIR in May 2014. These activities included a Pre-Design Investigation conducted in 2014, an ISS Treatability Study performed in late 2017 to early 2018, and ISS Field Pilot Test performed in 2018 to 2019, and a waste classification/geotechnical soil investigation performed in 2019. These investigation activities were conducted to evaluate remedial alternatives for AOC C1. In addition, an assessment of potential perfluorooctanoic acid and perfluorooctane sulfonate (PFOA and PFOC, respectively) usage at the Site was performed in accordance with a March 13, 2019 NJDEP Listserv request. Each activity is discussed below.

1.5.1 Pre-Design Investigation (2014)

A PDI was performed in 2014 to provide additional information to facilitate remedial action selection. The PDI accomplished this by means of advancing five soil borings and three test pits. The soil borings were advanced to more accurately define the horizontal and vertical extent of DNAPL on the Site in order to better estimate the size of the area that would need to be subjected to the remedial action. The test pits were excavated to provide a better understanding of the nature of subsurface structures, such as building foundations, that would need to be addressed during a remedial action. The test pits revealed that extensive remnants of the former structures are present underground, at depths ranging from just beneath the surface to approximately 7 feet bgs (except for the gas holder walls, which may extend significantly deeper). These remnants include brick and concrete walls and floors, brick and concrete fill, and clay and steel pipes.

The results of the PDI activities are presented in a Technical Memorandum entitled 2014 Pre-Design Investigation Results (Appendix B).

1.5.2 ISS Treatability Study (2017-2018)

A laboratory treatability study was performed in 2017-2018 to evaluate ISS as a remedial alternative for the Site. The results of the treatability study were described in a Technical Memorandum entitled In-Situ Soil Solidification Treatability Study Report dated April 2018 (Appendix C). The results of the treatability indicated that ISS was a viable remedial alternative for the Site, which led to the recommendation that the evaluation of the ISS remedy be continued by conducting a field pilot study.

1.5.3 ISS Field Pilot Test (2018-2019)

The scope and methodology for conducting the pilot study are presented in the document entitled In-Situ Solidification Pilot Study Work Plan submitted to JCP&L in August 2018. The objectives of the pilot study were to further assess the feasibility of ISS as a Site remedy, including an evaluation of the efficiency of in-situ mixing using the bucket mixing method (BMM), a verification of the properties (unconfined compressive strength and hydraulic conductivity) of the mix as indicated by the laboratory treatability study, an evaluation of the physical structure of the solidified mass, and an evaluation of the vibrations created during the implementation of the mixing. The pilot study is described in the In-Situ Solidification Pilot Study Report (Appendix D). The results of the Pilot Test are summarized below.

- Excavation/mixing using an excavator bucket is difficult, but feasible to the design depth of approximately 25 feet.

- A mix of 60 percent Portland cement and 40 percent of ground-granulated blast furnace slag, used during the pilot study (cement/slag), is suitable for the ISS process.
- Two mixes were used: Cell 1 – 8 percent cement/slag by wet soil weight, delivered to the excavation as a grout slurry, with the water to reagent proportion of 1.0 by weight; Cell 2 – 10 percent cement/slag by wet soil weight, delivered to the excavation as a grout slurry, with the water to reagent proportion of 1.0 by weight. Both mixes were determined to result in a very similar performance of the solidified mass, as summarized below:
 - The 28-day cure unconfined compressive strength (UCS) values obtained from samples collected from Cell 1 and Cell 2 were approximately 500 pounds per square inch (psi). These values on UCS are relatively high, and are sufficient to support loads occurring at typical development scenarios that may be envisioned for the Site (e.g., commercial, residential, light industrial).
 - The 28-day cure values of hydraulic conductivity for samples collected from Cell 1 and Cell 2 ranged between 1×10^{-7} centimeters per second (cm/sec) and 3×10^{-7} cm/sec. These values of hydraulic conductivity are relatively low and are sufficient to satisfy the typical ISS performance requirements. For comparison, many ISS projects contain the performance criterion for hydraulic conductivity of the geometric mean being 1×10^{-6} cm/sec or less.
 - Coring of the solidified mass performed in Cell 1 and Cell 2 indicated that ISS was effective in creating a relatively uniform solidified mix encapsulating the impacted materials, without excessive fractures or voids.
- Vibrations were measured at four locations prior to construction (background) and during the excavation and ISS mixing. The vibration monitors were located 13 to 42 feet from the nearest construction activity. Vibrations remained below the trigger level peak particle velocity of 0.25 inches per second, with the exception of a short period of time at one location during asphalt removal.

The conclusion drawn based on the results of the pilot study is that ISS would be effective in addressing the MGP-related impacts at the Site.

1.5.4 Waste Characterization and Geotechnical Investigation (2019)

Additional test borings were advanced at the site in May 2019. Waste characterization borings were advanced within the proposed limits of the ISS implementation area at nine locations to a depth of 6 to 8 feet bgs, correlating with the expected depths of pre-ISS excavation and soil disposal (refer to Section 2). Soil samples collected from these borings were composited to form a representative sample for each boring which were then sent to Eurofins Lancaster Analytical Laboratory for waste characterization analytical testing. Results of waste characterization testing will be used to characterize soil excavated during ISS implementation for off-Site disposal.

Geotechnical borings were advanced at two locations near the southeast corner of the Site where slope stabilization was anticipated during ISS implementation. Continuous SPT data were collected from each boring between the ground surface and a depth of 26 feet bgs and at 5-foot intervals below a depth of 26 feet bgs. Soil samples were also collected at discrete depths from each boring and sent to RSA Geolab for geotechnical testing that included the determination of particle size and water content. The geotechnical data and testing results will be used to design a support system to accommodate excavation activities in the southeastern corner of the Site during the remedial action.

The location of waste characterization and geotechnical borings are shown on Figure 1-4. The waste characterization testing results, geotechnical boring logs and geotechnical test results are included in Appendix E.

1.5.5 PFOA/PFOS Assessment (2019)

In accordance with direction provided by NJDEP in a March 13, 2019, Listserv announcement, JCP&L has performed a limited Preliminary Assessment of the Newton 2 Coal Gas facility to determine whether there is a potential that PFOA and/or PFOS that may have been manufactured, used, handled, stored, disposed or discharged at the site. The scope and findings of the assessment are described in this section.

1.5.5.1 Scope of Assessment

The PFOA/PFOS assessment included:

- A review of documents that are reasonably likely to contain information related to PFOA and/or PFOS usage at the site, which are in the Responsible Party's possession, custody or control, or in the possession, custody or control of the Site's LSRP. These documents include but are not limited to Preliminary Assessment reports prepared on behalf of the Responsible Party soon after its filing under the Industrial Site Remediation Action;
- Inquiries of employees and agents of the Responsible Party who may maintain knowledge of the Site's manufacturing operations and product lines and who may have knowledge or documents relevant to the inquiry;
- An evaluation of site specific operational and environmental information, both current and historic; and,
- A reliance on IRTC references identified by NJDEP in its March 13, 2019 listserv announcement to identify industries/manufacturing processes that may have used PFOA and/or PFOS.

Due to the targeted nature of the inquiry relative to the determination of PFOA and/or PFOS usage at the Site, a site inspection was not performed.

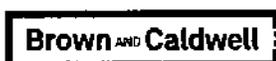
1.5.5.2 Findings

Former Site operations were compared to operations that were noted in several references listed on the Interstate Technology & Regulatory Council (ITRC) website as being operations that potentially used PFOA and/or PFOS. A list compiled from these references is presented in Appendix F.

According to the Site's previously prepared 2007 Phase I Environmental Site Assessment (Appendix F), the Site was developed as a MGP prior to 1890 and continued operating as an MGP facility until on or around 1916. According to title records, the facility was owned by Newton Electric and Gas Company until 1921, after which it was owned by New Jersey Power and Light until 1957. The property underwent gradual redevelopment, evolving into a commercial configuration which was completed during the 1970s. Property ownership was transferred from New Jersey Power and Light to Harper Terminal Inc. in 1957, to Tilt Enterprises Inc. in 1961, to Albert N. Devita in 1966, to Magnaland Industries Inc. in 1973, to Oreste N. Passarelli in 1973, to Daniel E. Kent in 1976, and then to the Cheng K. Weng on December 7, 1978. In 2010, the property was purchased by JCP&L to implement remedial actions necessary to address MGP-related wastes remaining on the property.

Commercial operations on the property after 1957 included several restaurants, a children's gym, a bakery, a hair salon, an appliance store, a liquor store and a dry cleaner.

Based on a comparison of operations performed at the Site and the list of operations identified in the literature which may have involved the use of PFOA and/or PFOS (Attachment A), it is concluded that PFOA and/or PFOS was not manufactured, used, handled, stored, disposed or discharged at the Site.



Section 2

Remedial Action

The Remedial Action described in this RAW addresses only AOC C1. The remedial action objective is to stabilize DNAPL occurring in the soil by applying ISS and then addressing contaminants exceeding application soil remediation standards (SRS) through the use of an engineering control consisting of a clean fill cap and a Deed Notice.

The limits of proposed remedial action are depicted on Figure 2-1.

2.1 Remedial Action Standards

The applicable SRS for AOC C1 include New Jersey's Residential Direct-Contact Soil Remediation Standards (RDCCRS), New Jersey's Direct Contact Non-Residential Soil Remediation Standards (NRDCRS), and the default Impact to Groundwater Soil Screening Levels (IGWSSL).

2.2 Remedial Action Implementation

2.2.1 ISS

The primary construction activities associated with the implementation of the remedial action will be associated with the construction of the engineering controls. They will include:

- Permitting
- Utility Relocation
- Site Clearing and Preparation
- Air Monitoring
- Construction-Related Excavation Support and Slope Stabilization
- Soil Excavation
- ISS
- Waste Management and Disposal
- Permanent Slope Stabilization
- Backfilling and Site Restoration
- Soil Erosion and Sediment Control (SESC)

Major elements of the remedy are presented on Figure 2-1. A description of the work activities associated with implementation of the remedial action for soil is presented below.

2.2.1.1 Permitting

Local construction permits from the Town of Newton will be required for the implementation of the remedial action and will be obtained by the Remedial Contractor. These permits are anticipated to include a permit to allow the use of hydrants, a traffic permit, a permit to allow the use of imported fill material and a grading permit.

The remedial action will include soil disturbance greater than 5,000 square feet; therefore, a Soil Erosion and Sediment Control Plan Certificate will be required.

2.2.1.2 Utility Relocation

An existing overhead power line that extends along the southern boundary of the Site adjacent to the limits of ISS will be relocated underground prior to the commencement of work in that area. The relocation will be performed by JCP&L.

2.2.1.3 Site Clearing and Preparation

Site clearing and preparation activities will include the mobilization of equipment, materials, and personnel, surveying, removal of parts of the existing fencing, installation of work-zone security fencing, removal of existing asphalt pavement and construction of a temporary waste containment area (TWCA), if needed. Existing monitoring wells located within the limits of the excavation or ISS will be decommissioned in accordance with NJDEP regulations by a licensed New Jersey well driller: MW-15, P-8, MW-04, P-9, MW-05, P-10, and MW-03. Wells located outside of the excavation or ISS areas that can potentially be impacted by the construction-related activities because of their proximity to the limits of remediation will be protected: MW-20, P-7, MW-10R and MW-14D.

Prior to the start of construction, a New Jersey licensed surveyor will mark out the limits of the excavation and ISS areas.

As indicated previously, the soils that will be excavated as part of the remedy were sampled for the purpose of characterizing it for waste disposal; therefore, the Remedial Contractor will have the option to either direct-load the soil for transportation to the disposal facility or staging the soils on Site prior to export. Soil staged on-Site will be staged in designated and approved waste containers including roll-off containers, dump trucks, drums, and temporary waste containment areas (Figure 2-3). The staging area will be located as near as practical to the excavation areas.

Non-soil waste materials and debris (concrete, brick, metal, wood, piping, conduits, etc.) will be managed and processed on Site as necessary to meet disposal facility acceptance criteria (e.g., maximum dimension/size requirement) before transportation to the off-site disposal facility.

Temporary fencing will be installed along the limits of the work to restrict entry into the immediate work zone by unauthorized persons and to protect personnel from construction hazards (e.g., open excavation, heavy equipment).

2.2.1.4 Perimeter Air Monitoring

Perimeter Air Monitoring Plan

Perimeter air monitoring (Appendix G) will be implemented during intrusive activities which have the potential to generate particulate matter and VOCs (e.g., saw cutting, excavation, ISS soil mixing) and onsite management of waste materials (handling, staging, and waste load-out). Perimeter air monitoring activities will include the following activities:

- Particulate matter less than 10 micrometers in diameter (PM₁₀) concentrations will be monitored continuously at a minimum of two locations throughout the workday (during intrusive activities) for perimeter air monitoring purposes (i.e., air monitoring for onsite worker safety will be separate). The location of the monitoring locations will be modified as needed based on the location of the work activities, location of potential receptors, and wind directions.
 - An action level for PM₁₀ perimeter air monitoring of 150 micrograms per cubic meter will be employed.
 - If the measured 15-minute time weighted average (TWA) particulate concentrations are less than the perimeter air monitoring action level, then work activities and monitoring will continue.



- If the measured 15-minute TWA particulate concentration exceeds the perimeter air monitoring action level, appropriate actions will be taken to mitigate dust and/or stop work to allow PM10 concentrations to decrease before starting again.
- Dust control actions include wetting work surfaces with potable water, and construction of wind screens around the grout plant to prevent dust generation during grout mixing.
- VOC concentrations will be monitored continuously at a minimum of three locations throughout the workday (during construction activities). The location of the monitoring locations, similar to dust monitoring, will be modified as needed based on the location of the work activities, location of potential receptors, and wind directions.
 - An action level for VOC monitoring of 15 parts per million will be employed.
 - If the measured VOC concentrations exceeds the VOC action level, appropriate actions will be taken to mitigate the generation of VOCs and/or stop work to allow VOC concentrations to decrease below the action level before starting again.
 - VOC control actions will include applying BioSolve® to the work area and/or covering temporary waste containment areas (if applicable).

Work Zone Air Monitoring Plan

Air quality (VOCs and odors) will be also monitored and control measures implemented if work zone action levels are exceeded and if VOCs are detected above background levels (as confirmed with a Photo-Ionization Detector at the property boundary and downwind of the work zone).

The selected Remedial Contractor will be required to proactively implement dust and odor suppression measures during construction activities, which include, but are not limited to:

- Wetting equipment and disturbed soil during implementation activities with water or amended water solutions
- Spraying water or amended water on equipment during soil disturbance activities and loading/unloading
- Covering stockpiles when active loading or unloading is not being performed
- Hauling earthen materials and waste materials in properly tarped or watertight containers
- Applying odor control foam or liquid to the excavation area and stockpiled excavated soils

The control measures identified above include applicable best management practices (BMPs) for dust control, as defined in the United States Environmental Protection Agency's Dust Control BMP guidelines.

2.2.1.5 Soil Excavation and Debris Removal

Soils will be removed from the ISS Area (approximately 15,850 square feet in total, shown on Figure 2-1) as part of the pre-ISS excavation described in the subsequent section. The volume of soil removed will depend on the Remedial Contractor's means and methods for implementing ISS. However, the pre-ISS excavation and post-ISS excavation of swell, as described later in the report, will be performed to provide a top of ISS grade that is 4 feet below the finished grade. The top of ISS grade in the southeast corner of the site will be excavated to be flat and will not match the final slope stabilization grades. A 5-foot pre-ISS excavation depth is anticipated based on results of the PDI Pilot Study. Pre-ISS excavation is anticipated to generate approximately 2,940 cubic yards (CY) of materials (Appendix H).

The limits of ISS extend to the southeast corner of the Site where the remnants of the former strip mall building are visible at the ground surface. The foundation and soil forming the slope will be excavated to facilitate the application of the ISS. The former strip mall building and soil forming the slope will be removed to create a surface at approximately the same elevation as the remaining part of the Onsite Area (Figure 2-1). The volume of these soils and debris is approximately 675 CY (Appendix H).

Excavated soil will be transported to an off-Site disposal facility.

2.2.1.5.1 Construction-Related Slope Stabilization

Prior to excavation in the southeast corner of the Site, the Remedial Contractor will design and install an excavation support system (i.e., slope stabilization measures) to ensure that the ISS can proceed in a safe manner. The remedial contractor will design the excavation support, currently anticipated to be a sheet pile wall.

2.2.1.6 ISS Implementation

ISS performed as part of the Site remedy will involve mixing of treatment agents (a mix of Portland Cement and Ground-Granulated Blast Furnace Slag) with the MGP DNAPL impacted soils within the area where the DNAPL impacts were identified (Figure 2-1). The ISS will be performed using a bucket mixing method (BMM) to treat discrete rectangular cells. The individual cells are overlapped to treat the overall ISS area. The desired changes to the impacted soil include:

- Decreasing the hydraulic conductivity of impacted soils
- Achieving soil strength compatible with the anticipated Site use
- Achieving a well-mixed matrix

The depths and the area of the ISS application were selected based on the observations of intervals of non-aqueous phase liquid (NAPL) saturation encountered during the drilling and sampling of soil borings, results of soil sample analyses from these borings, and observations of DNAPL in monitoring wells. Accordingly, ISS will be performed from the ground surface to the deepest DNAPL horizon encountered. The depth to which DNAPL intervals were encountered is relatively uniform throughout the targeted ISS area; therefore, a uniform elevation of the bottom of the ISS was selected at elevation 558 feet North American Vertical Datum, as shown on Figure 2-2.

As indicated previously, a Treatability Study and Pilot Study were performed to identify the mix. Results indicate that a mix containing 8 to 10 percent by wet weight cement/slag would be able to achieve the performance objectives. The Remedial Contractor will propose the mix to be used during the full-scale application based on the results of these studies. Samples of the ISS mix will be analyzed in a laboratory, and coring of the solidified mass will be performed after the completion of the ISS to confirm that the mix has achieved the above-mentioned objectives. These topics are discussed below.

Site-Specific ISS Performance Standards

The Site-specific performance standards were developed for ISS and are as follows:

- Achieving an UCS value of the arithmetic average of all verification samples equal to, or greater than, 50 psi
- Achieving target geometric mean hydraulic conductivity of all individual samples as well as the maximum hydraulic conductivity for the individual samples, as specified by the Design Engineer following the completion of the pilot-scale study described below. The goals for the geometric mean and maximum values are 1×10^{-6} cm/s or less and 1×10^{-5} cm/s, respectively, as feasible.

ISS Spoils Management

As part of the implementation of the ISS, spoils generated during soil mixing will be managed on-Site, allowed to cure, and disposed of off Site. The total volume of the spoils is related to the volume of soil to be treated and the amount of grout added to achieve performance standards. Post-ISS excavation will be performed to accommodate installation of the surface cover above the top of the solidified mass. At the Site, the top of the solidified mass will be 4 feet below the finished grade. Based on the results of the pilot study, the amount of swell is expected to be between 15 and 25 percent of the ISS volume. Twenty-five percent was assumed for a conservative estimate. The volumetric quantity of swell is estimated to

be 2,940 CY (Appendix H). The actual volume of the spoils generated will depend on the groundwater conditions, and amount of pre-ISS excavation performed (greater pre-ISS excavation results in less swell) and, therefore, may differ from the estimate presented here.

The waste management for ISS spoils will be as follows:

- ISS spoils generated during soil mixing will be managed within ISS area. As necessary, cured spoils will be resized to meet disposal facility acceptance requirements (e.g., maximum dimension requirements).
- Waste characterization samples will be collected before the ISS spoils set up. Samples will be cured and conveyed to the laboratory.
- After receiving the final waste characterization results and obtaining approval from the disposal facility, the waste materials will be transported to a permitted disposal facility.

ISS near Sensitive Features

ISS will occur in the vicinity of sensitive features (i.e., along Clinton Street where underground utilities are present, within the area of the shoring of the slope in the southeast portion of the Onsite Area) that will require the use of alternate ISS methods incorporating special precautions.

Adjacent to sensitive buildings/structures ISS implementation will be modified to maintain the structural integrity of the building/structure. The pre-excavation depth will be limited to a depth of 2 feet to prevent undermining of structures or sloughing of soils. The ISS mixing will proceed sequentially in small, alternating sections adjacent to the sensitive structure. The ISS cells will be sequenced so that every fourth cell is completed. After the ISS-treated material is sufficiently cured in the initial cells, the intervening secondary and tertiary cells will be completed until soil around the sensitive structure is remediated to the target depth.

Verification Sampling and Coring

To document that the ISS achieves the established performance standards, verification sampling will be conducted during the ISS implementation. Samples will be collected from the ISS mass immediately after the mixing of reagents into the subsurface and before the ISS cell cures. Sampling frequency will consist of the following:

- A primary sample and a secondary sample will be collected from two separate ISS cells (each sample collected at a discrete depth), based on the following frequency:
 - One pair of samples (primary and secondary) per 500 CY (on an average weekly basis) of solidified soil (up to 2,000 CY of treated soil)
 - One pair of samples (primary and secondary) per 1,000 CY of solidified soil (after 2,000 CY of soil have been treated)
 - One pair of samples (primary and secondary) per day (minimum)
 - One pair of samples (primary and secondary) if visual observations of the solidified soil note significant changes to the solidified material

Six primary and six secondary cylinders will be made in order to have samples for possible retesting at later curing periods.

The primary sample will be cured for 7 to 28 days and submitted to the laboratory where they will be tested for hydraulic conductivity and UCS. The secondary samples will be cured and sent to the laboratory and will be tested to confirm the results of the primary samples as necessary.

Core samples will be collected from the ISS mass for quality control purposes. Cores will be advanced using direct-push sampling methods, HQ wireline coring methods, or an equivalent method. Cores will be collected at a rate of one core borehole for every 5,000 square feet of ISS, but not less than two bore

holes per ISS area. The first core sample(s) will be collected when approximately 5 percent of the ISS volume is treated to confirm encapsulation of NAPL. Core samples will be visually inspected for the following criteria, and results recorded:

- Visible NAPL
- Non-mechanically induced separation or cracking within the core
- Percent of core sample recovered
- NAPL coating on drilling tools
- NAPL in drill wash tub

Corrective Action

Results of the sample testing and coring will be compared to the project-specific hydraulic conductivity, UCS, and NAPL-encapsulation performance standards. If results do not comply with the performance standards, the NJDEP will be consulted regarding the need for and the type of corrective action. The corrective actions may include:

- Collection of additional cores from the area of concern to determine if the identified NAPL within the ISS mass is encapsulated
- Analysis of additional primary cylinders formed from the same sample at a longer cure time
- Analysis of the secondary sample obtained from the same batch of solidified soil to determine if the result from the failing sample is anomalous and isolated
- Modification to the mix design
- Installing new cells to surround the cell(s) represented by the failing sample
- Re-working (e.g., re-mixing) the cell(s) represented by the failing sample with additional grout, if possible

2.2.1.7 Waste Management and Disposal

Waste materials generated during the remedial action will include excavated impacted soils and debris generated during the removal of the former strip mall building floor slab and foundation, ISS swell, decontamination water and personal protective equipment.

Based on the results of the waste characterization analysis performed during the PDI, the excavated soils and ISS spoils will be characterized as non-hazardous waste and will be disposed at a permitted disposal facility in accordance with applicable Federal, State, and local regulations.

Concrete and masonry debris from the demolition of floor slabs and foundations will be crushed and disposed at a permitted disposal facility in accordance with applicable Federal, State, and local regulations.

Other debris (metal, wood, piping, conduits, etc.) will be managed, processed as necessary, and disposed at a permitted disposal facility in accordance with applicable Federal, State, and local regulations.

It is anticipated that groundwater will not be encountered during the ISS pre-excavation. Incidental amounts of groundwater may be removed during the construction activities, as necessary. This groundwater, as well as water generated from the decontamination process, will be containerized, staged and handled in a secure manner to prevent exposure to human and environmental receptors, and disposed of off site at a licensed disposal facility.

2.2.1.8 Slope Stabilization

The southeast corner of the Site currently includes a former building foundation which acts as a retaining structure to support the existing slope along the southeast portion of the site. Following pre-ISS excavation and ISS treatment, imported clean fill will be placed and compacted in lifts, and will be graded to establish a 1V:3H slope. The southeast portion of the site is shown on Figure 2-1.

2.2.1.9 Backfilling and Site Restoration

Site restoration activities will include backfilling of the ISS area to match existing grade, with the exception of the southeast corner of the Site, where the 1V:3H slope will be established. Dense graded aggregate will be placed and compacted as final surface cover across the majority of the site. Topsoil will be placed and seeded on the slope along the southeast portion of the site.

Backfill and surface cover materials will be imported clean fill. Imported clean fill shall meet the requirements provided in N.J.A.C. 7:26E-5.2 and the NJDEP's "Alternative and Clean Fill Guidance for SRP Sites" (Version 2.0, updated December 29, 2011).

2.2.1.10 Soil Erosion and Sediment Control

A SESC application will be filed with NJDEP prior to the commencement of the remedial activities. The temporary SESC measures will be installed to prevent and minimize the potential offsite migration of the soil and sediment. The elements of the proposed SESC measures will be designed and installed in accordance with the New Jersey Department of Agriculture Soil Erosion and Sediment Control Standards. In addition, remedial activities will be implemented to minimize erosion and siltng and the potential for fugitive odor and dust emissions.

SESC measures will be employed utilizing BMPs including silt fencing, hay bale dikes, storm drain inlet protection, stabilized construction entrances/exits, and dust control measures. Silt fence/hay bale dikes will be installed to delineate the limit of the remedial work area (installed on the down slope side) and around the perimeter of any stockpile areas. The SESC measures outlined in the application may be augmented during construction based on visual observation of flow patterns and the topography of work areas to control sediment entrained storm water from exiting and entering work areas.

During remedial construction, SESC measures will be inspected and maintained daily and following precipitation events. Inspection and maintenance activities will be documented in the field logs. Accumulated sediment will be removed from the erosion and sediment controls, as needed. Sediment that originates from the remedial work areas will be added to the stockpile(s) for offsite disposal.

2.2.1.11 Performance Verification

The remedy is based on implementing engineering controls in the form of ISS. The Constituent of Concern (COCs) will remain in situ; however, they will be encapsulated within a solidified ISS matrix. Therefore, there is no confirmatory analytical sampling associated with this remedy. The performance verification is based on the properties of the solidified ISS matrix. The associated sampling for UCS and hydraulic conductivity, as well as coring, were described previously.

2.2.2 Engineering Control

An engineering control in the form of a surface cap will be implemented at the Site. The surface cap will be constructed on the site over areas where soil with contaminant concentrations exceeding NRDCSRS remain on the site (over the ISS area) to control potential human contact.

The surface cap will be 4 feet thick and will include, from top to bottom, 6 inches of Dense Graded Aggregate as a wearing surface, 30 inches of common fill, an orange non-woven geotextile demarcation layer, and 12 inches of Coarse Aggregate on top of the of solidified ISS mass.

As stated previously, the southeast corner of the Site will be graded using common fill to establish a 1V:3H slope. Therefore, the fill layer in that area will be thicker than 30 inches. Also, a utility corridor will be provided in the northwest part of the Site by establishing a lower finished surface of the ISS. Within the utility corridor, the layer of the Coarse Aggregate overlying the ISS surface will be thicker than in other areas.

Imported fill material will meet the definition of clean fill as defined in NJDEP's *Fill Material Guidance for SRP Sites* date April 2015. The location and description of the engineering control is presented on Figure 2-1, Figure 2-2 shows the typical cross section of the cap.

2.2.3 Deed Notice and Remedial Action Permit

A Deed Notice will be placed on the 15 East Clinton Street property (Block 9.02, Lot 3), to restrict future use of the property (Figure 2-1). The Deed Notice is intended to cover areas where soil remains on the Site at concentrations exceeding RDCSRs and in this particular case will include the entire lot.

A Remedial Action Permit application will be submitted to NJDEP for review upon the completion of the Remedial Action and the submission of a Remedial Action Report (RAR).

Section 3

Fill Use Plan

The remedial action includes the use of fill materials from off-Site sources during remedial action construction and, in accordance with N.J.A.C. 7:26E-5.2(g) and the NJDEP "Fill Material Guidance for SRP Sites," dated April 2015.

Imported fill materials used for remedial action construction, including backfilling and surface restoration, will consist of clean fill from approved off-Site sources. Donor source information, sampling and analytical testing data will be obtained in accordance with the NJDEP April 2015 guidance document prior to importation and will be documented in a RAR.

In addition, imported fill will comply with the requirements of the Town of Newton ordinance (Appendix I).

Onsite excavated material will not be reused. Excavated material from the site will be sampled, characterized, and sent off site for disposal.

Section 4

Health and Safety Plan

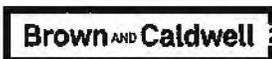
BC's Health and Safety Plan for the work related to the construction oversight during the remedy implementation is included in Appendix J.

Section 5

Schedule

The following sequence will be followed to implement the selected remedial action.

Table 5-1. Remedial Action Implementation Schedule			
Activity Description	Duration	Start Date	End Date
Remedial Action Workplan Submittal/Review	60 days	August 10, 2019	October 10, 2019
Contractor Procurement and Permitting	60 days	August 10, 2019	October 10, 2019
Remedial Action Implementation	180 days	November 1, 2019	April 30, 2020
Remedial Action Report	60 days	May 1, 2020	July 1, 2020



Section 6

References

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- The RETEC Group, Inc., 2004. *Report of Evaluation of the Potential for Sub-Surface Vapor Intrusion, Newton II Former Manufactured Gas Plant, Newton, New Jersey*, April.

500 North Franklin Turnpike, Suite 306
Ramsey, NJ 07446

T: 201.574.4700



August #, 2019

Sussex County Soil Conservation District
224 West Stiger Street
Hackettstown, New Jersey 07840

153508.700

Subject: Soil Erosion and Sediment Control Plan
Newton Coal Gas 2 Site
15 East Clinton Street, Block 9.02, Lot 3
Newton, Sussex County, New Jersey
Program Interest No. G000005460

Dear Sussex County Soil Conservation District:

Brown and Caldwell (BC), on behalf of Jersey Central Power & Light Company (JCP&L), has prepared this application for a Soil Erosion and Sediment Control (SESC) Certificate for implementation of remedial activities at the Newton Coal Gas 2 Site (Site). Two copies of this application are included herein. This application has been prepared for remedial construction activities to be performed in accordance with the August 2019 Remedial Action Workplan (RAW) for MGP related impacts at the Site.

Included as part of the application are the following:

- Description of the Remedial Action (this letter)
- Application fee of \$890 [SESC Category C, less than 1-acre area of disturbance]
- Completed application form
- Ownership Disclosure Affidavit
- Figures: Figure 1 – Site Location Map and Figure 2 – Soil Survey
- Construction Drawings:
 - C-100 Existing Conditions Plan
 - C-120 Final Grade Plan
 - C-510 Restoration Details
 - C-800 Soil Erosion and Sediment Control Plan
 - C-801 Soil Erosion and Sediment Control Notes and Details
 - C-802 Soil Erosion and Sediment Control Details

This letter report contains a summary of the Site, a description of the construction activities and applicable SESC measures, a general construction schedule, and a description of SESC maintenance activities.

Site Description and Background

The Site consists of the former MGP site located at 15 East Clinton Street on Lot 3 of Block 9.02 in Newtown, New Jersey. The project area occupies 0.6 acres of vacant land that is mostly covered with paved surfaces. The Site operated as a MGP from approximately 1869 to the early 1910's. Most recently, a commercial strip mall

occupied the Site before being demolished in 2012. The Site is bordered by East Clinton Street on the north, an automotive shop on the east, private residential properties on the south, and a commercial dialysis center on the west.

Surface grades range from approximately elevation (El.) 593 to 579 feet (referenced to North American Vertical Datum [NAVD] 1988), based on surveying conducted by Keller and Kirkpatrick, Inc. dated January 30, 2013. The Site topography is mostly flat (El. Range 579 to 583 feet) with the exception of an approximate 10-foot rise in the southeast corner of the Site, which is supported by remnants of the former strip mall building. The Site is not located within a Flood Hazard Area and no streams, wetlands, or other significant natural features pursuant to N.J.S.A. 13:9B are located within or adjacent to the project area limit of disturbance. A soil survey of the Site is shown on Figure 2.

The area of concern associated with the Site consists of MGP-related soil and groundwater impacts across portions of the Site. On-Site soils exhibiting non-aqueous phase liquid (NAPL) [i.e. MGP tars] and elevated concentrations of MPG-related constituents (i.e. volatile organic compounds [VOCs] and polycyclic aromatic hydrocarbons [PAHs]) have been targeted for treatment. Remedial treatment technologies include in-situ stabilization (ISS) and removal via excavation and off-Site disposal. Upon completion of remedial activities, the Site will be restored to match existing surface elevations and ground cover, with the exception of the southeast corner of the Site where the existing building remnants (which act as a retaining wall) will be removed and the replaced with a sloped stone covered surface that ties the grades together.

Remedial Activities

The remedial activities at the Site will include the following:

- Site preparation, including mobilization of equipment, preparation of staging areas, and installation of erosion and sediment controls
- Removal of the existing surface covers within the ISS treatment area and installation of excavation shoring/support systems
- Excavation and off-Site disposal of shallow soils within the ISS treatment area
- Blending of deeper soils within the ISS treatment area with a grout mixture as part of the ISS remedial treatment process
- Backfilling of the ISS treatment area and construction of final surface covers, including restoration of any damaged surfaces outside the ISS treatment area

The proposed remedial actions include the removal of approximately 3,000 cubic yards shallow soils within the ISS treatment area and then ISS of approximately 11,700 cubic yards of potentially impacted soils down to an average treatment depth of 22 feet below ground surface. The extent of the excavation and ISS treatment has been pre-determined through remedial investigation activities and is not anticipated to change based on field observations. Excavation and ISS soil mixing set-up activities will include installation of an excavation support shoring system, establishing grout mixing equipment, preparing a waste load-out area, and staging excavation backfill material. After soil excavation and mixing activities have been completed, the excavation

shoring/support system will be removed, treatment areas will be backfilled, and the disturbed area will be stabilized and restored.

A Site plan showing the limits of the ISS treatment area and limits of areas to be disturbed are shown on Drawing C-800. The total area of land to be disturbed to implement the remedial activities is 0.4 acres. The limits of the final stabilized and restored surface covers are shown on Drawing C-120 and additional details on the surface cover types is provided on Drawing C-510

Dust and Air Monitoring and Controls

Dust and air quality will be monitored in the work area during the construction activities in accordance with the Contractor's Site-Specific Health and Safety Plan and the RAW air monitoring and action plan. Dust control and best management measures will be implemented, as necessary, to limit airborne dust generation during construction activities. Dust control measures will include the use of water or amended water sprays, implementation of best management practices, and good housekeeping.

Soil Erosion and Sediment Control Measures

The identified SESC concerns for this project include the potential of sediment transport via surface water runoff and equipment tracking. The potential for sediment transport via surface water runoff will be controlled by surrounding disturbed areas and staged material stockpiles with sediment barriers. Excavated soils will be loaded out directly for off-Site transport. Sediment transport off-Site via equipment will be prevented through staging equipment and construction vehicles in areas which have not been disturbed (i.e., existing asphalt remains) or have been stabilized. Equipment which has entered an area of disturbance will be decontaminated within the truck wash station prior to leaving the Site. Additional details of the SESC controls are included in Drawings C-801 and C-802.

Sequence of Construction Activities

The following list describes the anticipated sequence of construction activities to be conducted at the Site.

- Site preparation (including the installation of SESC measures)
- Installation of southeast slope support system (i.e., sheet pile installation)
- Demolition of existing surface covers and excavation of targeted shallow soils
- ISS soil mixing of targeted soils
- Excavation backfilling
- Removal of southeast slope support systems
- Construction of final surface covers and surface restorations
- Removal of SESC measures
- Demobilization

The specific sequence of construction and duration of each step will be developed by the Contractor. The SESC measures will be installed prior to start of construction

Sussex County Soil Conservation District
August #, 2019
Page 4

activities and will remain until Site work has been completed. The overall duration of the construction activities is anticipated to be approximately 6 months.

Maintenance of Soil Erosion and Sediment Control Measures

SESC measures will be inspected daily and a weekly report documenting SESC maintenance will be produced. Required maintenance and repair identified during the inspection will be completed as soon as possible. Activities that could potentially result in significant off-Site sediment transport will be delayed until the appropriate maintenance and repairs have been completed.

If you have any questions or concerns, please call me at (201) 574-4728.

Very truly yours,
Brown and Caldwell

Marek Ostrowski, P.E.
Senior Principle Engineer
NJ License No. 24GE04794400

Attachments

Attachments

Application Form

Application Fee

Ownership Disclosure Affidavit

Figures: Figure 1 – Site Location Map and Figure 2 – Soil Survey

Construction Drawings:

- C-100 Existing Conditions Plan
- C-120 Final Grade Plan
- C-510 Restoration Details
- C-800 Soil Erosion and Sediment Control Plan
- C-801 Soil Erosion and Sediment Control Notes and Details
- C-802 Soil Erosion and Sediment Control Details



For District Use Only	
Application Number	

APPLICATION FOR SOIL EROSION AND SEDIMENT CONTROL PLAN CERTIFICATION

The enclosed soil erosion and sediment control plan and supporting information are submitted for certification pursuant to the Soil Erosion and Sediment Control Act, Chapter 251, P.L. 1975 as amended (N.J.S.A. 4:24-39 et. seq.) An application for certification of a soil erosion and sediment control plan shall include the items listed on the reverse side of this form.

Name of Project NEWTON COAL GAS 2 SITE		Project Location: Municipality NEWTON, NJ	
Project Street Address 15 EAST CLINTON STREET		Block 9.02	Lot 3
Project Owner(s) Name JERSEY CENTRAL POWER & LIGHT COMPANY		Phone #	Fax #
Project Owner(s) Street Address (No P.O. Box Numbers) 300 MADISON AVENUE		City MORRISTOWN	State NJ Zip 07962
Total Area of Project (Acres) 0.6	Total Area or Land to be Disturbed (Acres) 0.4	No. Dwelling or other Units NA	Fee \$ 890.00
Plans Prepared by* BROWN AND CALDWELL		Phone # 201-574-4728	Fax #
Street Address 500 NORTH FRANKLIN TURNPIKE, SUITE 306		City RAMSEY	State NJ Zip 07446

*Engineering related items of the Soil Erosion and Sediment Control Plan MUST be prepared by or under the direction of and be sealed by a Professional Engineer or Architect licensed in the State of New Jersey, in accordance with NJAC 13:27-6.1 et. seq.)

Agent Responsible During Construction MAREK OSTROWSKI, P.E., BROWN AND CALDWELL			
Street Address 500 NORTH FRANKLIN TURNPIKE, SUITE 306			
City RAMSEY	State NJ	Zip 07446	Phone 201-574-4728 Fax #

The applicant hereby certifies that all soil erosion and sediment control measures are designed in accordance with current Standards for Soil Erosion and Sediment Control in New Jersey and will be installed in accordance with those Standards and the plan as approved by the Soil Conservation District and agrees as follows:

- To notify the District in writing at least 48 hours in advance of any land disturbance activity. Failure to provide such notification may result in additional inspection fees.
- To notify the District upon completion of the Project (Note: No certificate of occupancy can be granted until a report of compliance is issued by the District.
- To maintain a copy of the certified plan on the project site during construction.
- To allow District agents to go upon project lands for inspection.
- That any conveyance of this project or portion thereof prior to its completion will transfer full responsibility for compliance with the certified plan to any subsequent owners.
- To comply with all terms and conditions of this application and certified plan including payment of all fees prescribed by the district fee schedule hereby incorporated by reference.

The applicant hereby acknowledges that structural measures contained in the Soil Erosion and Sediment Control Plan are reviewed for adequacy to reduce offsite soil erosion and sedimentation and not for adequacy of structural design. The applicant shall retain full responsibility for any damages which may result from any construction activity notwithstanding district certification of the subject soil erosion and sediment control plan. It is understood that approval of the plan submitted with this application shall be valid only for the duration of the initial project approval granted by the municipality. All municipal renewals of this project will require submission and approval by the district. In no case shall the approval extend beyond three and one half years at which time resubmission and certification will be required. Soil Erosion and Sediment Control Plan certification is limited to the controls specified in the plan. It is not authorization to engage in the proposed land use unless such use has been previously approved by the municipality or other controlling agency.

<p>1. Applicant Certification*</p> <p>Signature _____ Date _____</p> <p>MR. FRANK LAWSON, SUPERVISOR - SITE REMEDIATION</p> <p>Applicant Name (Print)</p>	<p>3. Plan determined complete:</p> <p>Signature of District Official _____ Date _____</p>
<p>2. Receipt of fee, plan and supporting documents is hereby acknowledged:</p> <p>Signature of District Official _____ Date _____</p>	<p>4. Plan certified, denied or other actions noted above. Special Remarks:</p> <p>Signature of District Official _____ Date _____</p>

*If other than project owner, written authorization of owner must be attached.

**SOIL CONSERVATION DISTRICT
ADDENDUM TO APPLICATION**

APPLICATION BY CORPORATION, PARTNERSHIP OR ORGANIZATION

OWNERSHIP DISCLOSURE AFFIDAVIT

Soil Conservation District requests that all applicants submit a complete list of ownership for purposes of determining conflicts of interest between the applicant and the board of members or their professionals. Attach Rider if necessary.

Disclosure of owners of organization and property subject to application. Any organization making an application for development under this act shall list the names and addresses of all members, stockholders, or individual partners (collectively, "interest holders"), including any other organization holding at least a 10% ownership interest in the organization, and shall also identify the owner of the property subject to the application, including any organization holding at least a 10% ownership interest in the property.

Listing of names and addresses of interest holders of applicant and owner organization.

If an organization owns an interest equivalent to 10% or more of another organization, subject to the disclosure requirements hereinabove described, that organization shall list the names and addresses of its interest holders holding 10% or greater interest in the organization.

Disclosure of all officers and trustees of a non-profit organization. A non-profit organization filing an application of development under this act shall list the names and addresses of all officers and trustees of the non-profit organization.

This disclosure requirement is continuing during the Certification period and transfer of ownership of more than 10% must be disclosed.

Organization or non-profit organization failing to disclose: fine. Any organization or non-profit organization failing to disclose in accordance with this act shall be subject to a fine of \$1,000 to \$10,000, which shall be recoverable in the name of the municipality in any court of record in the State in a summary manner pursuant to the "Penalty Enforcement Law" (N.J.S.A. 2A:58-1 et seq.)

Name and Address of Applicant:

**MR. FRANK LAWSON, SUPERVISOR - SITE REMEDIATION
JERSEY CENTRAL POWER & LIGHT COMPANY, A FIRSTENERGY COMPANY
300 MADISON AVENUE, MORRISTOWN, NJ 07962**

(If Corporation, Name and Address of Registered Agent and Officers, Trustees):

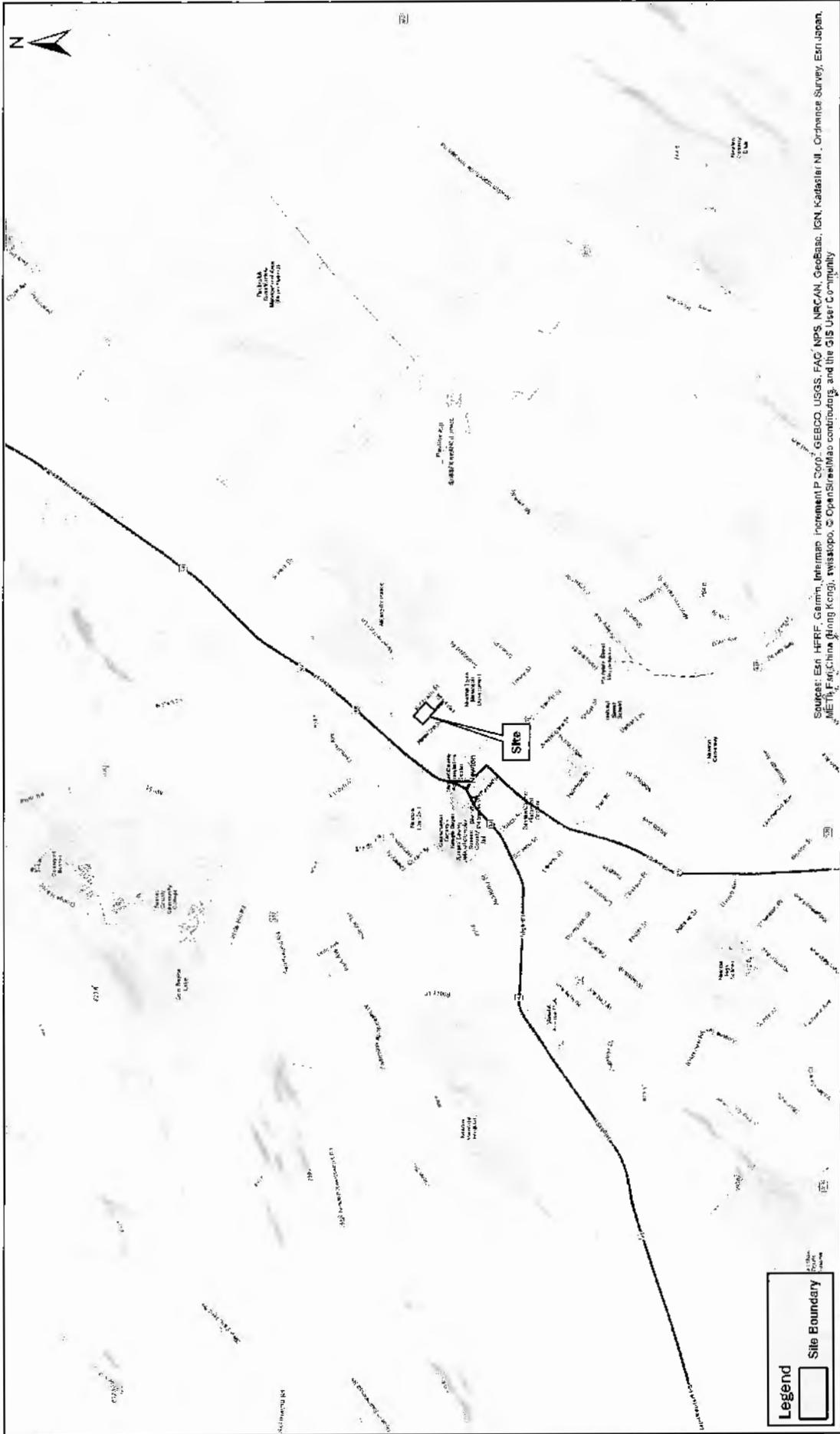
Stockholders / Members / Partners:

I certify that the above statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

**MR. FRANK LAWSON,
SUPERVISOR - SITE REMEDIATION**
Print Name of Authorized Signatory & Title

Date

Authorized Signature



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GEBCO, IGN, Kadaster NL, Ordnance Survey, Esri Japan, Swisstopo, Esri Korea, Esri (China), Swisstopo, © OpenStreetMap contributors, and the GIS User Community

FIGURE 1
SITE LOCATION
NEWTON COAL GAS 2 SITE, NEWTON, NEW JERSEY

Legend
Site Boundary



Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-2c

INTERIM REMEDIAL ACTION WORK PLAN (RAWP)

FORMER MANUFACTURED GAS PLANT SITE
OCEAN CITY, NEW JERSEY

PROGRAM INTEREST NUMBER G000006127

Prepared for:
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
Morristown, New Jersey 07962-1911

Prepared by:
Tetra Tech
980 Awald Road, Suite 302
Annapolis, Maryland 21403

March 2019

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1-1
2.0	SUMMARY OF SITE CONDITIONS.....	2-1
2.1	Site Location, Description, and History.....	2-1
2.2	Current / Future Land Use	2-2
2.3	Site Geology and Hydrogeology.....	2-2
2.4	Delineation of FMGP Residuals	2-5
	2.4.1 Soil and NAPL.....	2-5
	2.4.2 Groundwater	2-6
2.5	Potential Receptor Survey.....	2-7
2.6	Ecological Evaluation	2-8
2.7	Investigation of Building Vapor Intrusion Impacts	2-9
2.8	Area Groundwater Use	2-10
3.0	INTERIM REMEDIAL ACTION SELECTION	3-1
3.1	Interim Remedial Action Goals and Objectives	3-1
3.2	Proposed Interim Remedial Action.....	3-2
	3.2.2 Soils.....	3-3
	3.2.3 Groundwater and NAPL	3-5
	3.2.4 NJDEP Criteria Evaluation	3-7
	3.2.5 Impacted Parties.....	3-8
	3.2.6 Schedule and Cost.....	3-9
4.0	SOIL REMEDIATION PLAN.....	4-1
4.1	Soil Remediation Components	4-1
	4.1.1 Soil Excavation	4-1
	4.1.2 Capping.....	4-2
	4.1.3 Engineering and Institutional Controls	4-2
4.2	Erosion and Sediment Control Plan.....	4-3
4.3	Soil Disposal and Reuse.....	4-3
4.4	Perimeter (Or Community) Air Monitoring and Action Plan.....	4-3
4.5	Fill Use Plan.....	4-3
4.6	Permit and Approval Requirements.....	4-4
	4.6.1 State Permits and Approvals.....	4-4

4.6.1.1	Soil Remedial Action Permit	4-4
4.6.1.2	Land Use Permits.....	4-4
4.6.2	Local Permits and Approvals.....	4-5
4.6.2.1	Zoning and Development Approvals	4-5
4.6.2.2	Erosion and Sediment Control Plan Approval.....	4-5
4.6.2.3	Construction Permits.....	4-5
5.0	GROUNDWATER REMEDIATION PLAN	5-1
5.1	Groundwater Remediation Components.....	5-1
5.1.1	Hydraulic Containment.....	5-1
5.1.2	Treatment of Recovered Groundwater and NAPL	5-2
5.1.2.1	Well Pumps.....	5-2
5.1.2.2	Oil/Water Separator	5-2
5.1.2.3	Bag Filters.....	5-3
5.1.2.4	Organoclay and GAC Adsorption.....	5-3
5.1.3	Institutional Controls	5-3
5.1.4	Operations, Maintenance, and Monitoring Program.....	5-4
5.1.5	Production Well Abandonment.....	5-4
5.2	Recovery Well Installation and Testing.....	5-4
5.3	Permit and Approval Requirements.....	5-5
5.3.1	State Permits and Approvals.....	5-5
5.3.1.1	Groundwater Remedial Action Permit.....	5-5
5.3.1.2	Land Use Permits.....	5-5
5.3.1.3	Discharge Permit.....	5-5
5.3.1.4	Significant Industrial User (SIU) Determination.....	5-6
5.3.1.5	Treatment Works Approval (TWA).....	5-6
5.3.1.6	Well Permitting.....	5-7
5.3.1.7	Air Permit.....	5-8
5.3.2	Local Permits and Approvals.....	5-8
5.3.2.1	Zoning and Development Approvals	5-8
5.3.2.2	Erosion and Sediment Control Plan Approval.....	5-8
5.3.2.3	Construction Permits.....	5-8
5.3.2.4	CMCMUA Approval	5-8
5.3.2.5	New Jersey American Water Company Approval.....	5-9
6.0	PROJECT IMPLEMENTATION.....	6-1
6.1	Final Design	6-1
6.2	Contractor Bidding.....	6-2

6.3	Work Plans.....	6-2
6.3.1	Traffic Control Plan.....	6-2
6.3.2	Quality Assurance Project Plan.....	6-2
6.3.3	Health and Safety Plan.....	6-3
6.3.4	Community Air Monitoring Plan.....	6-3
6.3.5	Waste Management Plan.....	6-3
6.3.6	Site Security.....	6-3
6.3.7	Dewatering.....	6-4
6.4	Access.....	6-4
6.5	Utility Clearance.....	6-4
6.6	Startup Plan.....	6-5
6.7	Site Restoration Plan.....	6-5
6.8	Project Closeout.....	6-5
7.0	SCHEDULE.....	7-1
8.0	COST ESTIMATE.....	8-1
9.0	REFERENCES.....	9-1

LIST OF TABLES

Table 1:	Summary of Monitoring Well Construction Details
Table 2:	Expected Influent Concentrations and Applicable Discharge Requirements
Table 3:	Construction Cost Estimate – Capping, Groundwater Recovery and Treatment System
Table 4:	O&M Costs and Total Present Worth Estimate – Capping, Groundwater Recovery and Treatment System

LIST OF FIGURES

- Figure 1. Location of the former manufactured gas plant (FMGP) site between 10th and 11th Streets and West and Haven Avenues in Ocean City, New Jersey.
- Figure 2. Commercial and residential land-use (showing block-lot numbers) surrounding the Ocean City FMGP site.
- Figure 3. Ground surface elevations in the site area based on U.S. Geological Survey digital elevation map data; storm sewer drainage divides and locations of storm sewers along west 10th and 11th Streets (near the site) are derived from City engineering maps.
- Figure 4. FMGP structures and onsite Areas of Concern (AOCs).
- Figure 5. Geologic and data cross section locations. For clarity, not all shallow probes (temporary wells) are shown.
- Figure 6. Subsurface geologic section A-A' showing concentrations of benzene and naphthalene in $\mu\text{g/L}$ detected in groundwater between 2010 and 2013. ND indicates not detected. Electrical Conductivity (EC) log units are milli-Siemens/meter.
- Figure 7. Subsurface geologic section B-B' showing concentrations of benzene and naphthalene in $\mu\text{g/L}$ detected in groundwater between 2010 and 2013. ND indicates not detected. Electrical Conductivity (EC) log units are milli-Siemens/meter.
- Figure 8. Subsurface geologic section C-C' showing concentrations of benzene and naphthalene in $\mu\text{g/L}$ detected in groundwater between 2010 and 2013. ND indicates not detected. Electrical Conductivity (EC) log units are milli-Siemens/meter.
- Figure 9. Potentiometric surfaces of the Atlantic City 800-foot aquifer during (a) predevelopment, (b) January 1958, (c) fall 1983, and (d) fall 1988; and vertical and horizontal groundwater flow directions along Section A-A' (see Figure 8 for location) in northern Cape May County prior to development (<1890s) and in 1991 (from Lacombe and Carleton, 2002).
- Figure 10. Representative photographs of site strata obtained by Geoprobe coring. Core diameter is 1.25 inches.

- Figure 11. Average hydraulic heads (ft>MSL) in shallow (A-zone) monitoring wells between 1/16/2014 and 1/26/2014 based on measurements made each minute using automated dataloggers.
- Figure 12. Average hydraulic heads (ft>MSL) in intermediate depth (B-zone) monitoring wells between 1/16/2014 and 1/26/2014 and inferred hydraulic head contours based on measurements made each minute using automated dataloggers.
- Figure 13. Average hydraulic heads (ft>MSL) in deep (C-zone) monitoring wells between 1/16/2014 and 1/26/2014 based on measurements made each minute using automated dataloggers.
- Figure 14. Soil Cleanup Criteria exceedances.
- Figure 15. Nonaqueous phase liquid (NAPL) observations in wells, borings, and test pits at the Ocean City FMGP site between 1995 and 2013. NAPL present appears to have little mobility as evidenced by limited movement offsite and into wells. Most observations were of sheens and films associated with soil disturbance (drilling and excavation).
- Figure 16. Benzene / Naphthalene / Benzo(a)anthracene in $\mu\text{g/L}$ detected in intermediate depth groundwater sampled from 15 to 50 feet bgs between 2010 and 2013. No other site-related organic compounds were detected above NJDEP Groundwater Quality Criteria. Only samples from permanent monitoring wells were analyzed for benzo(a)anthracene. Extent of benzene exceeding $1 \mu\text{g/L}$ is shown by dashed red line.
- Figure 17. Benzene / Naphthalene / Benzo(a)anthracene in $\mu\text{g/L}$ detected in deep groundwater sampled from 50 to 75 feet bgs between 2010 and 2013. No other site-related organic compounds were detected above NJDEP Groundwater Quality Criteria. Only samples from permanent monitoring wells were analyzed for benzo(a)anthracene.
- Figure 18. Benzene / Naphthalene / Benzo(a)anthracene in $\mu\text{g/L}$ detected in shallow groundwater sampled from <15 feet bgs between 2010 and 2013. No other site-related organic compounds were detected above NJDEP Groundwater Quality Criteria. Only samples from permanent monitoring wells were analyzed for benzo(a)anthracene. Extent of benzene exceeding $1 \mu\text{g/L}$ is shown by dashed red line. Exceedances of the benzene criterion ($>1 \mu\text{g/L}$), all in temporary well samples, are highlighted by orange circles.
- Figure 19. Interpreted conceptual model showing groundwater flow directions and benzene and naphthalene concentrations in $\mu\text{g/L}$ along the axis of the zone

of impacted groundwater between the FMGP Site and Great Egg Harbor Bay.

- Figure 20. Limits of dissolved compounds exceeding NJDEP Groundwater Criteria and proposed Classification Exception Area / Well Restriction Area (CEA/WRA).
- Figure 21. Potential “hot-spot” areas to be excavated up to eight feet deep assuming accessibility and approval by the land owner.
- Figure 22. Conceptual layout of shallow and intermediate depth sand flow zone recovery wells, area to be capped, and treatment building footprint at the FMGP Site. Precise remedial measure locations are to be determined based on site access constraints and additional analysis.
- Figure 23. Process and Instrumentation Diagram.
- Figure 24. Utility Map.
- Figure 25. Project Schedule.

LIST OF APPENDICES

- Appendix A: N.J.A.C. 7:26E-5 Remedial Action Requirements
- Appendix B: Preliminary Hydraulic Containment System Design Analysis
- Appendix C: Classification Exception Area / Well Restriction Area (CEA/WRA) Fact Sheet Form
- Appendix D: Performance Monitoring Plan
- Appendix E: Deed Notice Agreements
- Appendix F: Quality Assurance Project Plan Outline (To Be Completed With Contractor Selection)
- Appendix G: Health and Safety Plan
- Appendix H: Community Air Monitoring Plan

LIST OF ABBREVIATIONS

$\mu\text{g/L}$	micrograms per liter
$\mu\text{g/m}^3$	micrograms per cubic meter
ACE	Atlantic City Electric
ACO	Administrative Consent Order
AOC	Areas of Concern
BEEP	Bureau of Environmental Engineering and Permitting
BTU	British thermal unit
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAMP	Community Air Monitoring Plan
CEA	Classification Exception Area
CMCMUA	Cape May County Municipal Utilities Authority
DNAPL	dense non-aqueous-phase liquid
E&S	erosion and sedimentation
FMGP	former manufactured gas plant
ft/d	feet per day
ft/ft	feet per feet
ft/yr	feet per year
GAC	granular activated carbon
g/cm^3	grams per cubic centimeter
gpm	gallons per minute
GWQS	Ground Water Quality Standards
GWSLs	NJDEP VI Ground Water Screening Levels
HASP	Health and Safety Plan
HVAC	heating, ventilation, and air conditioning
JCP&L	Jersey Central Power & Light Company
LNAPL	light non-aqueous-phase liquid
LSRP	Licensed Site Remediation Professional

mg/L	milligram per liter
MSL	Mean Sea Level
NAPL	non-aqueous-phase liquid
NFA	No Further Action
N.J.A.C.	New Jersey Administrative Code
NJAWC	New Jersey American Water Company
NJDEP	New Jersey Department of Environmental Protection
NJNG	New Jersey Natural Gas Company
NJPDES	New Jersey Pollutant Discharge Elimination System
O&M	operation and maintenance
OM&M	operation, maintenance, and monitoring
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
ppb	parts per billion
QAPP	Quality Assurance Project Plan
RAWP	Remedial Action Work Plan
RAR	Remedial Action Report
RI	Remedial Investigation
SGSL	Soil Gas Screening Level
SIU	Significant Industrial User
SRP	Site Remediation Program
SVOC	semi-volatile organic compound
TCP	Traffic Control Plan
TCLP	Toxicity Characteristic Leaching Procedure
TWA	Treatment Works Approval
USGS	United States Geological Survey
VI	vapor intrusion
VOC	volatile organic compound
WRA	Well Restriction Area

1.0 INTRODUCTION

The Ocean City Former Manufactured Gas Plant (FMGP) is located on a barrier island in the community of Ocean City, New Jersey as illustrated on Figure 1. The FMGP is situated approximately 1,100 feet from Great Egg Harbor Bay (bay) to the west and 2,000 feet from the Atlantic Ocean to the east. The FMGP occupied 1.4-acres of one-half of a city block in a residential commercial area as illustrated by the purple dashed boundary on Figure 2. The FMGP occupied portions of Block 1006 Lots 1 and 1.01. The FMGP, FMGP property, and FMGP site refer to the area bounded by the purple dashed line on Figure 2 throughout this document.

The FMGP is situated within property currently owned by Atlantic City Electric (ACE) (a subsidiary of Exelon) as illustrated by the bold yellow boundary on Figure 2. The property owned by ACE encompasses all of Block 1006 Lots 1 and 1.01 and is referred to as the ACE property throughout this document. ACE operates a substation on the ACE property. The energized area of the substation is restricted to all except those persons authorized by ACE and is illustrated by the bold red line on Figure 2. This area is referred to as the Substation Operations area throughout this document.

ACE leases two areas of the ACE property to others. The Township of Ocean City leases space along the corner of 11th Street and Haven Avenue for equipment parking and tank storage and the New Jersey American Water Company (NJAWC) lease space along Haven Avenue for vehicle parking (see green dashed boundaries on Figure 2). These areas are referred to as the Ocean City leased portion and the NJAWC leased portion of the ACE property throughout this document.

The FMGP operated from 1902 to 1969 with the associated structures demolished in 1970. Following the discovery of FMGP residuals in 1982, a series of remedial investigations were performed between the 1980s and 2015 to characterize the nature and extent of contamination associated with the FMGP (Tetra Tech, 2016).

Shallow soil and groundwater contamination are present throughout much of the FMGP property as evidenced by oily sheens, coal tar odors, residual non-aqueous-phase liquid (NAPL), and contaminant concentrations in soil and groundwater. Residual NAPL and soil contaminant concentrations including benzene, toluene, ethylbenzene, and xylenes (referred to collectively as BTEX) and several polycyclic aromatic hydrocarbons (PAHs) exceeding New Jersey Department of Environmental Protection (NJDEP) Soil Cleanup Criteria are generally restricted to shallow soils (<15 feet deep) at the FMGP site and beneath adjacent streets. Shallow groundwater (<12 feet below ground surface [bgs]) containing benzene and/or naphthalene concentrations that exceed NJDEP groundwater quality criteria extends approximately 200 feet northwestward from the FMGP site. A well-defined plume of intermediate depth B zone (20 to 45 feet bgs) groundwater containing concentrations of benzene and naphthalene extends northwestward from the FMGP site to where it discharges into Great Egg Harbor Bay (Tetra Tech, 2016). Collectively, the areas determined to contain MGP-related residuals and compounds at concentrations exceeding relevant criteria are referred to as the Site throughout this document and can include all or portions of the FMGP, ACE property, Substation Operations area, Ocean City and NJAWC leased portions of the ACE property and downgradient areas within the defined groundwater plume to and including the bay.

This Interim Remedial Action Work Plan (RAWP) was prepared in accordance with the NJDEP Technical Requirements for Site Remediation (N.J.A.C. 7:26E) to address FMGP site impacts. It addresses soils, groundwater and product at and in close proximity to the FMGP site. This RAWP is considered interim pending additional evaluation of MGP-impacted groundwater on the bay and may be amended to further address areas downgradient of the FMGP site and ACE property as appropriate. The proposed remedy in this RAWP includes:

1. Use of existing or new (where feasible) permeable cap over on-Site areas where contaminants exceed restricted use criteria in shallow soil;
2. Hydraulic containment of shallow and intermediate zone groundwater beneath and immediately downgradient of the FMGP site using recovery wells;
3. Light non-aqueous-phase liquid (LNAPL) recovery where feasible;

4. Treatment of recovered groundwater preferably at an on-site plant in the southeast corner of the ACE property prior to permitted discharge to the sanitary sewer system;
5. Excavation of FMGP site soil contamination “hot-spots” where feasible;
6. Use of engineering controls (existing or new fencing) and institutional controls (deed notices and establishment of a Classification Exception Area (CEA) to restrict groundwater use);
7. Sampling and abandonment of the former production well on the ACE property; and,
8. Either or both use of existing or installation of new recovery or monitoring wells as needed, and development of an operations, maintenance, and monitoring (OM&M) program with long-term remedy performance monitoring.

2.0 SUMMARY OF SITE CONDITIONS

This section presents a summary of previous Site investigations and current Site conditions. More detailed information can be found in the Final Remedial Investigation (RI) Report (Tetra Tech, 2016).

2.1 SITE LOCATION, DESCRIPTION, AND HISTORY

The Ocean City Former Manufactured Gas Plant (FMGP) is located on 11th Street between West and Haven Avenues, Ocean City, Cape May County, New Jersey (Figures 1 and 2). Ocean City is situated on a barrier island. The FMGP site occupies approximately one-half of a city block and is bordered to the northwest, southwest, and southeast by public streets. The FMGP site covers portions of Block 1006 Lots 1 and 1.01 (Figure 2).

The FMGP site, formerly owned by Jersey Central Power & Light Company (JCP&L) and New Jersey Natural Gas Company (NJNG), is situated within property currently owned by ACE referred to as the ACE property (see bold yellow boundary on Figure 2). ACE operates an electrical substation on the ACE property energized within the Substation Operations area as delimited by the red bold line on Figure 2. A portion of the remainder of the property is leased by Ocean City for equipment storage and by New Jersey American Water Company (NJAWC) for parking as indicated by the green dashed boundaries on Figure 2. Nearly the entire ACE property is secured by fencing. The ACE property topography consists of a slightly crowned area near the center with less than two feet of relief across the property (Figure 3). The ACE property surface is generally composed of crushed rock, sand and gravel. The energized portion of the Substation Operations area consists of numerous transformers with overhead and underground power lines. A New Jersey American Water Company (NJAWC) distribution pumping station and an office building are located adjacent to the north side of the ACE property (and south of 10th Street).

The FMGP was owned and operated by City Gas Light Company from 1902 through 1925. In 1925, JCP&L acquired the City Gas Light Company through a merger and continued producing gas until the plant was sold to NJNG in 1952. From 1958 to 1969, the FMGP site

was used for the production of high-British thermal unit (BTU) oil gas. In 1970, the gas production facilities (Figure 4) were demolished and removed from the FMGP site. ACE purchased the FMGP site from NJNG in 1973.

2.2 CURRENT / FUTURE LAND USE

ACE operates an electrical substation on the ACE property to provide electricity to Ocean City customers. The ACE property has been used for such nonresidential purposes for nearly 100 years. Surrounding land use consists of commercial office buildings (Ocean City Public Works and NJAWC pump station and offices), retail stores (gas stations, banks, and motels), and some residential properties. The ACE property and surrounding properties are zoned for commercial¹ and residential use. According to representatives of Ocean City's Planning Office, there is no intent to change this zoning in the future. The current property owner, ACE, plans to continue to use the property as an electrical substation.

2.3 SITE GEOLOGY AND HYDROGEOLOGY

The Site geology consists of (1) building rubble and fill material; (2) fine to coarse sand; (3) lenses of peat; and (4) clays of tidal marsh and swamp deposits. At and near the Site, permeable sand intervals are typically encountered from approximately 0 to 12 feet below ground surface (bgs) (referred to as the A zone), 21 to 43 feet bgs (referred to as the B zone), and 68 to 75 feet bgs (referred to as the C zone); finer-grained sediments, which act as aquitards (and confining units), typically exist from approximately 12 to 21 feet bgs and 43 to 68 feet bgs. Geologic cross-section locations and sections are shown on Figures 5, 6, 7 and 8. These deposits are underlain by alternating sand aquifers and clay aquitards to more than 800 feet bgs (Figure 9). Representative photographs of each stratigraphic unit are provided in Figure 10.

Overall, hydraulic head and dissolved compound distribution data indicate a predominance of northwestward and downward flow of shallow groundwater from the FMGP site and ACE property into and through the intermediate depth B zone with discharge to the Great Egg

¹ "Drive-in Business Zone" of the Ocean City Zoning and Land Development Code

Harbor Bay (bay). Representative hydraulic head levels in the A, B and C zones are illustrated in the attached Figures 11, 12 and 13, respectively. The hydraulic heads are characterized as follows:

- **A zone:** Average hydraulic heads measured in shallow (A zone) monitoring wells (Figure 11) are highest southeast of West Avenue and decrease in an erratic pattern toward the bay. The unconfined water table is likely influenced by spatial variations in precipitation runoff and infiltration as well as drainage provided by sewers and other features.
- **B zone:** Average hydraulic heads measured in intermediate depth (B zone) wells (Figure 12) reflect decreasing hydraulic heads and groundwater flow from the FMGP site/ACE property in a northwestward direction toward the bay. The horizontal hydraulic gradient between the FMGP site/ACE property and the bay is approximately 0.0013 feet per foot (ft/ft) (1.50 feet head decline over 1,125 feet distance).
- **C zone:** Average hydraulic heads in the deep (C zone) monitoring wells (Figure 13) generally decrease from the southeast (between Haven and Asbury Avenues) to the northwest (between Simpson Avenue and the bay). Deep zone hydraulic heads are typically lower than intermediate depth zone heads near the FMGP site/ACE property (indicating a downward component of groundwater flow), but are higher than intermediate depth zone heads adjacent to the bay (indicating an upward component of groundwater flow).

The magnitude of the tidal fluctuations at Ocean City is approximately four (4) feet and, as expected, is damped (lessened) with distance inland from the bay. Shallow (A zone) hydraulic heads for unconfined, water table monitoring wells show no relationship to the tidal fluctuations. Intermediate depth (B zone) hydraulic heads show a strong tidal response that dissipates and lags in time with distance from the bay. Deep (C zone) hydraulic heads also show the strong effect of tidal fluctuations that extend throughout the study area.

Horizontal hydraulic conductivity was estimated at select locations and depth intervals by conducting slug tests and short-term single-well pumping tests. Slug tests were performed in nine (9) on-ACE property and five (5) off-ACE property shallow A zone wells (less than 13

feet deep), 10 off-ACE property B zone wells (completed to 5-foot intervals between 26 and 43 feet bgs), and four (4) off-ACE property C zone wells (completed to 5-foot intervals between 69 and 76 feet bgs). In November 2013, the hydraulic conductivity in the C zone was also estimated by 60-minute single-well pumping tests performed in four (4) off-ACE property C zone wells (completed between 70 and 75 feet bgs).

Horizontal hydraulic conductivity (K_h) values ranging from 1 to 30 feet per day (ft/d) were estimated from tests conducted at the 14 shallow A zone test wells; the geometric mean of test results is 7.3 ft/d. K_h values ranging from five (5) to 207 ft/d were estimated from 10 tests performed in intermediate B zone sediments with screens extending between 25 and 44 feet bgs; the geometric mean of these results is 32 ft/d. Higher K_h values ranging from 67 to 207 ft/d were estimated from the four tests conducted in intermediate B zone wells with screen intervals completed between 35 and 43 feet bgs; the geometric mean for the lower intermediate zone is 112 ft/d. K_h values ranging from 12 to 149 ft/d, with a geometric mean value of 77 ft/d, were estimated from tests in six (6) wells conducted in the deep C zone between 69 and 75 feet bgs.

Vertical hydraulic conductivity (K_z) through the layered sediments, particularly in the finer-grained aquitard layers, is much less than their horizontal hydraulic conductivity (perhaps by a factor of 0.01 or less).

An estimate of the average linear groundwater flow velocity (v) between the FMGP site/ACE property and the bay through the B zone aquifer can be calculated by $v = K_h i / n$, where K_h is horizontal hydraulic conductivity (ft/d), i is hydraulic gradient (ft/ft), and n is effective porosity (dimensionless). Based on a measured i of 0.0013 ft/ft, an estimated K_h of 100 ft/d, and an n value of 0.25, the average linear groundwater velocity between the FMGP site/ACE property and the bay through permeable intermediate-depth B zone sediments would be 0.52 ft/d, which is equal to 189 feet per year (ft/yr). Actual flow velocities will vary considerably through space and time due to the heterogeneous nature of subsurface sediments.

2.4 DELINEATION OF FMGP RESIDUALS

The 2016 Remedial Investigation Report (Tetra Tech, 2016) delineated the extent and characteristics of FMGP residuals in soil and groundwater at the Site. Characterization efforts for the media of concern (soil and groundwater) are described in more detail below.

2.4.1 Soil and NAPL

All exceedances of NJDEP's current residential and non-residential soil cleanup standards from historical investigations are compiled in Figure 14. The horizontal extent of FMGP residuals (polycyclic aromatic hydrocarbons [PAHs] and benzene, toluene, ethylbenzene, and xylenes [referred to collectively as BTEX]) have been delineated to the most stringent soil criteria by clean samples collected in the roadways bordering the FMGP site/ACE property and northeast within the ACE property. The extent of contaminant concentrations in soil that exceed NJDEP's cleanup standards for residential direct contact, and non-residential direct contact soil remediation standards, as determined by analysis of soil samples for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and cyanide, has been delineated and is restricted to shallow soils (generally less than 15 feet deep) located beneath the FMGP site/ACE property and adjacent streets.

Residual non-mobile NAPL is present in A zone sediments beneath the FMGP site (Figure 15), but with little historic or projected movement to off-FMGP site areas. NAPL was observed historically in shallow sediments beneath Haven Avenue near its intersection with 11th Street (at MW-H1 and MW-H1A and during drilling of MW-P1c). Observed NAPL is primarily viscous and less dense than water. A small volume of dense non-aqueous-phase liquid (DNAPL) was observed at a few on-FMGP site locations (e.g., with a density of 1.05 grams per cubic centimeter (g/cm^3) at MW-6) (Tetra Tech, 2016). Between 2002 and 2015, a total of 24.5 gallons of light non-aqueous-phase liquid (LNAPL) were pumped for off-site disposal from well MW-10B located in the vicinity of the former drip oil tanks at the north end of the FMGP site (Figure 4). The screen in well MW-10B is 11 to 16 feet bgs and approximately six (6) to 11 feet below the water table. It appears that LNAPL seeping slowly into this well is trapped locally below fine-grained strata.

2.4.2 Groundwater

Based on hydraulic head and analytical data acquired during the past several years, it is apparent that groundwater containing dissolved benzene and naphthalene is migrating northwestward from the FMGP site primarily through the intermediate-depth B zone sand aquifer (typically between 21 and 43 feet bgs) and discharging to the bay. Groundwater and surface water from the FMGP site do not flow to the ocean. The horizontal limits of groundwater concentrations in excess of NJDEP Groundwater Quality Standards are shown in Figure 16. As shown, benzene in B zone groundwater exceeding the NJDEP Groundwater Quality Standard of one microgram per liter (1 µg/L) extends in a well-defined zone approximately 1,100 feet northwest from the FMGP site to the bay. Within this impacted zone, benzene concentrations ranging from 500 to 5,270 µg/L were detected in intermediate depth groundwater at multiple locations and depths. The extent of naphthalene concentrations exceeding the NJDEP Groundwater Quality Standard of 300 µg/L is much smaller than the benzene plume. Figure 17 shows dissolved concentrations of benzene and naphthalene detected in deeper C zone groundwater that was sampled from 50 to 75 feet bgs between 2010 and 2013. The horizontal extent of dissolved benzene in intermediate depth groundwater is shown for reference. Benzene and/or naphthalene were detected at only five (5) of the deep groundwater sample locations; and the concentrations were greatly reduced compared to those present in intermediate depth groundwater.

Recharge of precipitation and downward flow creates a layer of shallow groundwater that is not impacted by the FMGP site above most of the Site area where benzene was detected in groundwater; see Figure 18. The vertical extent of groundwater contamination can be seen in the cross section in Figure 19.

Delineation of the nature and extent of groundwater contamination associated with the FMGP site was initiated in 1983 by Weston (Weston, 1984) and progressed over the ensuing years during a series of investigations. Groundwater sampling events were performed in 1995, 1998, 2002, 2003, 2010, 2011, 2012, 2013, 2014, and 2015. Monitoring well location and construction details are compiled in Table 1 and locations of existing and abandoned

monitoring wells in the Site area are shown on Figure 17. Additional temporary groundwater sampling points are discussed in the 2016 RI Report.

2.5 POTENTIAL RECEPTOR SURVEY

A survey of potential receptors of impacted groundwater from the FMGP site was conducted as part of the Remedial Investigation in accordance with N.J.A.C. 7:26E-1.12 through 7:26-1.16. Potential receptors examined included water supply wells, surface water bodies, wetlands, underground utilities, and indoor air from vapor intrusion. The results of an area-wide well search (which was made by searching file records of the NJDEP, Ocean City, and NJAWC and by performing a door-to-door well search) indicates that there was one irrigation well across West Street from the FMGP site (which was not in use and was abandoned in 2013), one deep unused industrial well (at the FMGP site, which is to be abandoned; see Section 5.1.5 below), and three public water supply wells within one mile of the FMGP site. None of these wells are at risk from horizontal or vertical migration of MGP residuals from the Site due to the depth of their screened intervals (greater than 740 feet bgs) and/or distance from the FMGP plume flow path. An updated well search will be completed in March 2019. Public water in Ocean City is provided by the NJAWC, which owns and operates nine pumping stations, a distribution system with 92.5 miles of water main, and metered services.

The unused deep industrial well at the FMGP site was located in April 1998. Available records indicate that this well is triple-cased with 6-inch diameter inner well casing and screen completed to a depth of 825 bgs in the lower Kirkwood aquifer. The outer casings consist of 8-inch diameter casing set to a depth of 400 feet through the Cape May and upper Kirkwood-Cohansey aquifers into the confining unit that overlies the lower Kirkwood aquifer, and 10-inch diameter casing set to a depth of 125 feet bgs. A video survey conducted in July 1998 indicates that there are no breaches in the casing to a depth of 597 feet bgs. Deeper video inspection of the well was prevented by an obstruction at 597 feet bgs, which appears to be a pump stuck in the casing. The water level in this well is approximately 125 feet bgs, which is similar to other wells completed in the lower Kirkwood aquifer, and much deeper than the water table at the Site.

LNAPL was discovered in, and bailed from, the former production well in July 1998. This LNAPL is believed to be hydraulic oil from the well pump that drained down the casing and accumulated on the surface of the water column. This conclusion is supported by hydrocarbon fingerprinting analysis, which indicates that the LNAPL in the production well was not coal tar, but rather a refined petroleum oil similar to hydraulic oil. Additionally, no further accumulation of LNAPL has been observed in the well since LNAPL was bailed from the well in July 1998. Finally, chemical analyses of groundwater from surrounding public water supply wells do not show the presence of typical MGP-related contaminants such as benzene, toluene, ethylbenzene, xylenes, and naphthalene, in any of the deep well water-supply samples. Based on available data, therefore, it appears highly unlikely that this deep well is serving as a pathway for downward contaminant migration. Procedures proposed to further investigate and abandon this well are described in Section 5.1.5.

2.6 ECOLOGICAL EVALUATION

There are no environmentally sensitive natural resources within the FMGP site or in the adjacent commercial and residential areas. As shown on Figure 1, the nearest surface water bodies are the Great Egg Harbor Bay and the Atlantic Ocean, approximately 1,100 feet northwest and 2,000 feet southeast of the FMGP site, respectively, and the nearest mapped wetlands are at Cowpens Island across the Intracoastal Waterway from Ocean City.

Based on hydraulic head and analytical data acquired during the past several years, it is apparent that groundwater containing dissolved benzene and naphthalene is migrating north-westward from the FMGP site primarily through the intermediate-depth B zone sand aquifer (typically between 21 and 43 feet bgs) and discharging to the bay.

Groundwater and surface water from the FMGP site do not flow to the ocean. The horizontal limits of groundwater concentrations exceeding NJDEP Groundwater Quality Criteria are shown in Figure 20. Calculations presented herein, suggest that the average linear groundwater velocity between the FMGP site and the bay in permeable sand and gravel strata in the B zone aquifer is on the order of 190 ft/yr. Actual flow velocities vary considerably through space and time due to the heterogeneous nature of subsurface sediments. Dissolved benzene transport is retarded compared to groundwater. The magnitude of benzene retardation varies with organic

carbon content distribution in the subsurface. Additional information on sediment, pore water, and surface water investigation and analysis conducted to date is included in the RI Report (Tetra Tech, 2016); and further investigation in the bay is planned and results will be incorporated into future action plans for off-site locations if and as appropriate.

Numerous shallow groundwater samples were taken adjacent to the 11th Street storm sewer between the FMGP site and the bay to assess whether its bedding/backfill is a preferential pathway for contaminant migration to the bay. As shown in Figure 18, benzene and naphthalene were not detected above 1 µg/L in any of the nine samples taken below 11th Street and northwest of the benzene plume in shallow groundwater. These results indicate that sewer bedding/backfill along the 11th Street storm sewer is not a preferential contaminant migration pathway to the bay.

2.7 INVESTIGATION OF BUILDING VAPOR INTRUSION IMPACTS

Vapor intrusion (VI) study triggers, primarily dissolved volatile concentrations exceeding NJDEP VI Ground Water Screening Levels (GWSLs) and/or NAPL presence within specified distances of structures, were evaluated to assess the need to perform VI studies on properties adjacent to and downgradient from the FMGP site. Due to high water table conditions, no homes in the site area are constructed with a basement; rather, buildings generally rest on surface slabs or are elevated above ground surface. The presence of a clean water lens in excess of six (6) feet (and of a low permeability aquitard) that is above contaminated groundwater in the permeable B zone between 21 and 43 feet bgs provides protection to downgradient building inhabitants from VI risks. NAPL was not identified within 100 feet of a building in the site area. VI assessment details are presented in the RI Report (Tetra Tech, 2016).

2.9 AREA GROUNDWATER USE

The two principal aquifers used as a source for water supplies in the region are the Kirkwood-Cohansey aquifer and the lower Kirkwood aquifer. However, along the coastal fringe and on the barrier islands, the Kirkwood-Cohansey aquifer system contains brackish or salty water and cannot be used as a source of water supply without treatment. The lower Kirkwood aquifer is the principal water supply aquifer in this area. This aquifer is commonly referred to as the Atlantic City 800-foot Kirkwood sand aquifer due to its depth along the coast. A 400-foot thick confining unit separates lower Kirkwood aquifer from the overlying Kirkwood-Cohansey aquifer. The presence of this thick confining unit, effectively protects the regional water supply aquifer from surface contamination.

3.0 INTERIM REMEDIAL ACTION SELECTION

This section identifies remediation goals and standards based on current and future land use at the ACE property within which the FMGP site is situated. As described below, an unrestricted use remedy is not feasible for the ACE property as ACE will continue to operate an electrical substation providing power to Ocean City at this location. MGP impacts are situated beneath electrical substation equipment and are not accessible. Given the restricted use of the ACE property, the selected remedy includes NAPL recovery, containment of contaminated groundwater, limited excavation of accessible “hot-spots”, and capping areas that exceed restricted direct contact clean-up criteria in soil, deed notices, and anticipated natural groundwater remediation with associated controls (CEA). This remedy is interim recognizing that it may be amended as a result of pending additional evaluation of MGP-impacted groundwater on the bay, if and as appropriate.

3.1 INTERIM REMEDIAL ACTION GOALS AND OBJECTIVES

The interim remedial action goals for the FMGP site/ACE property are to reduce or eliminate potential exposure to MGP-related contaminants, which are present above applicable remediation standards, to the extent feasible, while minimizing disturbance to ongoing activities and operations of the current property owner. These goals address concerns of the current property owner (ACE), operators and the NJDEP Technical Requirements for Site Remediation (Appendix A), and are based on site-specific conditions discussed in Section 2, including:

- The current and future restricted use for the ACE property, including energization of the Substations Operations area;
- The presence of MGP contamination beneath ACE property structures that prevent implementation of an unrestricted use remedy;
- The ability to restrict access and potential exposure through institutional and engineering controls;

- The media of concern (soil and non-potable groundwater);
- The low mobility of PAH compounds in soils; and,
- The reduction of mobile NAPL in the subsurface based on monitoring data collected since the early 1980s.

3.2 PROPOSED INTERIM REMEDIAL ACTION

The proposed remedy consists of the following process options and technologies:

1. Existing or new, where feasible, permeable cap over ACE property areas where contaminants exceed restricted use/nonresidential standards in soil;
2. Hydraulic containment of shallow and intermediate zone groundwater beneath and immediately downgradient of the FMGP site area using recovery wells;
3. LNAPL recovery where practicable;
4. Treatment of recovered groundwater (and NAPL, if present) at a water treatment plant prior to permitted discharge to the sanitary sewer system;
5. Excavation of soils on ACE property where feasible and necessary for substation maintenance, repair, replacement or reconstruction and/or of soil contamination ‘hot-spots’ where feasible;
6. Engineering controls (fencing) and institutional controls (deed notices and establishment of a CEA/WRA to restrict groundwater use) as required;
7. Sampling and abandonment of the former production well, when feasible; and
8. Installation of new recovery or monitoring wells as needed and development of an OM&M program with long-term remedy performance monitoring.

A conceptual plan of the recovery well locations, preferred treatment plant location, and area to be capped is shown in Figure 22. Potential soil contamination “hot-spots” to be excavated are illustrated in Figure 21.

3.2.2 Soils

Remedial action goals for soil media will be accomplished through institutional and engineering controls to restrict access, use, and potential exposure to areas of the Site where MGP residuals remain above restricted use standards. Engineering controls will include capping and fencing (existing and newly installed, as needed to complete access restriction). The capping with gravel ground cover will also prevent erosion and soil loss from the property. All cap materials will comply with NJDEP Fill Material Guidance.

Capping will be used to prevent exposure, indicate the extent of MGP materials with geotextile fabric “marker”, and control erosion. Portions of the ACE property area that will be capped comprise approximately 83,000 square feet as shown in Figure 22 and include:

- *Existing Substation Operations Area Cap* – 23,000 square feet are already capped by more than six (6) inches of clean gravel and/or concrete;
- *New Cap Area* – a new cap, consisting of clean gravel over geotextile filter fabric, will be placed over 60,000 square feet of FMGP site/ACE property area.

The new cap shown on Figure 22 will prevent dermal exposure to soil materials. During cap installation, minor surface regrading will be performed, in compliance with NJDEP Fill Material Guidance, to provide for surface water drainage and minimize the volume of surface soil removed from the ACE property. The installation of a permeable cap is necessary because storm sewer drainage in this portion of Ocean City is limited, as evidenced by street flooding adjacent to the ACE property during periods of heavy precipitation. Construction of asphalt pavement on the property would exacerbate this street flooding problem. The permeable gravel cap will achieve the remediation goals of preventing contact with contaminated soil and providing for equipment storage and vehicle parking while also limiting erosion and soil loss from the FMGP property.

The existing permeable cap will be improved, expanded or augmented at the ACE property to maintain infiltration/drainage, prevent dermal exposure to soils, indicate the extent of MGP materials, and control erosion. Depending on the preferences of ACE and tenants (NJAWC

and Ocean City, using a portion of the property for equipment storage and/or parking), the cap placed over different portions of the ACE property will, to the extent feasible, seek to achieve a minimum of six inches of clean gravel (e.g., ¾-inch crushed trap rock) or other permeable materials (e.g., sand, permeable pavement, or other acceptable permeable material) over, to the extent feasible, geotextile fabric. The adjacent off-site area is already capped by pavement, sidewalks, and clean soil. The nature, extent and timing of additional cap installation will be subject to coordination with, and consent of, ACE (in particular to avoid any shutdown of substation operations and the supply of electricity to the neighboring community) and affected tenants. Capping work within the Substation Operations area, if any is needed, will be postponed pending future ACE's schedule for repair, replacement, improvement or reconstruction projects, if any.

Excavation of "hot-spots" would involve removal of soils at Areas of Concern (AOCs) 1, 7, and 8 to a depth of approximately eight (8) feet, to the extent feasible (see Figure 21). Analysis and visual evidence indicate that these AOCs are most impacted by MGP residuals. ACE has indicated that excavation near the substation equipment poses an unacceptable potential risk to operations and equipment; thus, much of this material may not be accessible. Partial removal of impacted soils, specifically, approximately 400 cubic yards of accessible impacted soils, might accelerate the naturally occurring reduction of benzene levels to groundwater quality criteria. Excavated soils would likely be transported off-site for thermal treatment and recycling. Excavated areas would be backfilled with clean soil. Hot-spot excavation likely would not provide significant additional protection to human health and the environment because substantial residuals would remain in place but will be under a cap and fenced to prevent access.

ACE has previously advised that it may consider major reconstruction of its substation sometime in the future. Most recent (2018) discussions with ACE indicated that such plans are postponed for the immediate future. Any major reconstruction may require substantial excavation of soil and provide an opportunity to excavate additional impacted soils without disrupting substation operation. JCP&L has reached an agreement with ACE under which ACE

has committed to advise JCP&L if and as its plans change. If and when reconstruction plans become available to JCP&L, JCP&L will evaluate excavation requirements and opportunities, characterize conditions and excavated waste materials (e.g., by test pit excavation, dewatering tests, and contaminant presence screening and analyses), develop excavation plans and specifications (e.g., including excavation support systems, dewatering/treatment, and air monitoring plans), obtain permits, and then implement and monitor excavation activities, all if and to the extent then feasible. Excavated soils would likely be transported off-site for thermal treatment and recycling, and excavated areas would be backfilled with clean soil and/or in accord with ACE requirements.

Excavation to achieve an unrestricted use remedy would require removal of all soil at depth above unrestricted direct contact soil cleanup criteria. This would include complete dismantling of the electrical substation and removal and replacement of over 10,000 cubic yards of soil and uncertain volumes of water, which may be infeasible. The impacts on and risks to the community, neighbors and workers, including from the staging, excavation, preliminary work, dewatering, waste/recyclable handling, restoration and traffic, are unnecessary to be protective.

3.2.3 Groundwater and NAPL

The selected remedy for the saturated zone is (1) hydraulic containment of shallow and intermediate zone groundwater beneath and immediately downgradient of the FMGP site area using recovery wells; (2) LNAPL recovery where practicable; (3) treatment of recovered groundwater at a water treatment plant (preferably on the ACE property) prior to permitted discharge to the sanitary sewer system; (4) engineering controls (capping, fencing) and institutional controls; (5) sampling and abandonment of the former production well; (6) installation of new monitoring wells as needed; and (7) development of an OM&M program with long-term remedy performance monitoring. A conceptual plan of the recovery well locations, treatment plant location, and area to be capped is shown in Figure 22.

Groundwater and NAPL will be extracted from the 13 wells using pneumatic submersible pumps and routed to a treatment plant. Recovered NAPL will be separated for disposal and water will be treated through organoclay and granular activated carbon and discharged to the sanitary sewer in accord with applicable regulations. Details of the proposed pump-and-treat system are provided in Section 5.

Institutional controls include the establishment of a Classification Exception Area (CEA) for the shallow sand zones A, B and C where benzene and PAH concentrations exceed Class IIA Groundwater Quality Standards. The CEA, will be established in accordance with N.J.A.C. 7:26C-7.3; CEA boundaries are included in Appendix C.

A groundwater monitoring program will be implemented as part of the CEA. A-, B- and C-zone wells and surface water will likely be sampled as detailed in Appendix D in order to monitor changes in the impacted groundwater zone over time.

- *Hydraulic containment of FMGP site groundwater using pump-and-treat* – JCP&L proposes to contain and remove contaminated groundwater (and mobile NAPL, if present) in shallow and intermediate depth groundwater beneath the FMGP site by installing and operating a recovery well pump-and-treat system. Based on ACE property constraints and subsurface conditions, it was determined that installation of a recovery trench drain system is not feasible because of subsurface utilities and other potential obstructions in the area. Design analysis based on a three-dimensional groundwater flow model described in Appendix B indicates that capture of shallow and intermediate depth groundwater beneath and surrounding the FMGP site can likely be achieved by pumping from nine (9) shallow zone wells at a combined rate of 12 gallons per minute (gpm) and from four (4) intermediate depth wells at a combined rate of less than 20 gpm. Extracted groundwater and NAPL (if present) will be piped to a treatment plant where it will be treated using flow equalization, oil/water separation, bag filtration, organoclay filtration, and granular activated carbon (GAC) filtration or similar processes prior to permitted discharge to the sanitary sewer system. This action will prevent continued migration of FMGP site contaminants (e.g., benzene and naphthalene) in groundwater from the FMGP site toward the bay.

- *Establishment of a CEA/WRA* – JCP&L has submitted documentation to NJDEP to establish a Classification Exception Area (CEA) and Well Restriction Area (WRA) to a depth of 100 feet bgs at the Site where benzene in groundwater exceeds the 1 µg/L drinking water standard. This will provide additional protection to prevent groundwater use and exposure to dissolved contaminants in this area.
- *Deed notices* – Establishment of deed notices by agreement with ACE and Ocean City will help ensure that impacted subsurface soils are not disturbed without taking adequate precautions. Agreements have been reached with both and are included in Appendix E
- *Operations, maintenance, and monitoring (OM&M) program* – A detailed OM&M plan will be developed and implemented to guide operation of the remediation system and determine system performance. Modifications to remediation system components and/or operations will be made if deemed to be appropriate based on performance monitoring.
- *Former deep production well sampling and abandonment* – An unused deep water supply well present at the FMGP site has not been abandoned due to safety concerns associated with its proximity to substation equipment. This well was reportedly drilled to 825 feet bgs. Cable line probing and a video inspection identified the presence of a hard obstruction stuck in the well at a depth of 598 feet. JCP&L plans to sample and abandon the well in accordance with NJDEP Bureau of Water Allocation requirements when this area of the substation is de-activated and safe access can be provided by ACE.

3.2.4 NJDEP Criteria Evaluation

This interim remedial action meets the remedial goals for the FMGP site in its ability to protect the public and the environment, compatibility with future land use, ease of implementation, effectiveness, and reliability. Capping in unsecured areas provides containment and exposure control. The long-term risks posed by MGP residual material remaining within the operations areas, subsurface soils, and groundwater are controlled due to the nature of the contaminants, the limit of residual NAPL contamination to approximate FMGP site boundaries, and the meeting of all NJDEP requirements in view of the planned interim remedial actions and absence or control of pathways on at least an interim basis, pending and subject to the receipt of additional information from future efforts and any future supplement or amendment hereto. Establishment of a deed notice will ensure that the impacted subsurface soils are not disturbed. A CEA will mitigate potential future human exposure to impacted groundwater. Groundwater

monitoring will ensure the adequacy of the CEA well restriction area and will verify that no new exposure routes are created. The following summarizes compliance of the selected remedy with the requirements in N.J.A.C. 7:26E- Subchapter 5:

<i>NJDEP Requirement</i>	<i>Criteria Met</i>	<i>How</i>
Potential for off-site migration of contaminants must be mitigated or eliminated	Yes	Hydraulic containment by pump and treat system and CEA
Access/exposure to areas where contamination remains must be restricted	Yes	Land use restrictions, capping of area exceeding restricted use soil clean-up criteria
Treatment/removal of contaminated soil to the restricted use soil standard is not acceptable if the soil can be treated/removed to meet the unrestricted use soil standard at an additional cost of 10% or less	Yes	Removal of soil to unrestricted soil standard is not possible due to building structures and operations; further removal of all soils to unrestricted standards would exceed the 10% additional cost threshold.
Institutional controls must be placed and maintained on the property to ensure protection of the public and the environment	Yes	Deed notices, Classification Exception Area, and long term monitoring are proposed
Transferee or owner of the property must agree in writing to the restrictions and controls on the property	Yes	Agreements with ACE and Ocean City have been reached to allow the proposed remediation and related deed notices.
Free and/or residual product shall be treated or removed when practicable	Yes	Recovery wells will contain and recover free and/or residual product and contaminated groundwater to the extent practicable

3.2.5 Impacted Parties

This selected remedial alternative is consistent with current and anticipated future nonresidential land uses, and has been conceptually approved by the current site owner (ACE). An unrestricted use remedy for the FMGP site is not feasible because the ACE substation is an active permanent facility where, for any remedial effort pursuing unrestricted standards, there exists a high risk of structural hazards, disruption of electric service to the community and shock hazards to workers. These risks preclude excavation activities. Residual soil contamination will remain beneath these permanent structures.

ACE maintains and secures the substation and leases portions of the property. They are aware of environmental conditions and, with the assistance of JCP&L, will employ appropriate health and safety procedures to minimize exposure of employees to MGP residuals (i.e., Health and Safety Plan protocols for any intrusive subsurface work). ACE and JCP&L have reached a written agreement regarding the proposed remediation, and that agreement anticipates use of a deed notice. Similarly, Ocean City and JCP&L have reached a written agreement regarding remediation which contemplates use of a deed notice to address the contamination remaining beneath City property, including the streets in the area shown in Figure 18.

The Cape May County Municipal Utilities Authority (CMCMUA) is also aware of the FMGP site conditions and the proposed remediation. Tetra Tech on behalf of JCP&L will apply for all permits and approvals necessary to discharge treated groundwater recovered by the hydraulic containment system to the sanitary sewer on 11th Street.

3.2.6 Schedule and Cost

A remediation project schedule is provided in Section 7. A cost estimate for the remediation system is provided in Section 8.

4.0 SOIL REMEDIATION PLAN

As discussed in Section 3.2.1, the interim remedial action selected for impacted soils includes excavation, capping, and implementation of engineering and institutional controls. Details of these components are discussed below along with erosion and sedimentation control plans, excavated soil management plans, air monitoring plans, fill use plans, and permit requirements associated with the remediation.

4.1 SOIL REMEDIATION COMPONENTS

4.1.1 Soil Excavation

Soil excavation will focus on removal of contamination “hot-spots” and will also be performed as necessary for planned reconstruction of the existing electrical substation. The removal of contaminated soils will serve to eliminate an existing source of MGP residuals and accelerate the naturally occurring reduction of dissolved benzene levels to groundwater quality criteria.

Excavation of “hot-spots” will focus on Areas of Concern (AOCs) 1, 7, and 8, the locations of former drip oil tanks, a tar separator and well, and tar tank, still, separator, and condenser units, respectively (see Figure 21). The extent of “hotspot” excavation will be limited by the existing substation equipment. In those areas that are accessible, soils will be excavated to a depth of approximately eight (8) feet. It is estimated that approximately 400 cubic yards of highly impacted soils will be removed in this effort.

The current owner and operator of the ACE property, ACE, is considering major reconstruction of the electrical substation sometime in the next several years which may require substantial excavation. Additional excavation of contaminated soils in conjunction with the proposed reconstruction work may be possible without disrupting substation operations. When plans become available, an evaluation of the excavation requirements and opportunities for additional removal will be conducted to determine a volume of material that may be removed. Property conditions and excavated waste materials will be characterized via test pit excavation, dewatering tests, and contaminant screening and analyses. Excavation plans and specifications will be developed to include excavation support systems, dewatering with treatment, and air

monitoring plans. Excavated areas will be backfilled with clean soil and/or in accordance with ACE requirements following the fill use plan described in Section 4.5.

4.1.2 Capping

The existence and/or additional installation of a permeable cap at the ACE property will maintain infiltration/drainage while preventing exposure to contaminated soils by property occupants, indicating the extent of impacted materials, and controlling erosion. The western portion of the ACE property, an area totaling approximately 83,000 square feet, is proposed to receive the cap. The new cap will be composed of six (6) inches of clean gravel underlain by geotextile fabric, and/or other acceptable permeable material depending on the preferences of the property owners and tenants in the approximately 60,000 square foot area that is not already covered and secured by ACE. The cap must be permeable so as not to exacerbate flooding in the streets adjacent to the property during heavy precipitation events. Minor surface regrading will provide for surface water drainage and minimize the volume of surface soil removed from the ACE property. Improvements, as appropriate, to the existing 23,000 square foot cap within a portion of the Substation Operations area will be conducted in conjunction with planned reconstruction of the existing electrical substation. Areas adjacent to the ACE property are presently capped by pavement, sidewalks, and clean soil.

4.1.3 Engineering and Institutional Controls

Implementation of engineering and institutional controls will serve to reduce the potential for exposure to remaining MGP contaminants in soil. ACE property fencing, already in place due to the presence of the existing electrical substation and equipment storage, will prevent access by the general public. A deed notice established by agreement with ACE and the City of Ocean City, New Jersey (the City) will ensure that impacted subsurface soils are not disturbed without taking adequate precautions. The deed notice with ACE will be established to reflect existing conditions as soon as near-term excavation, capping, and fencing of the ACE property are achieved, and thereafter adjusted if and as needed after future maintenance, repair, replacement, reconstruction and additional remediation occur.

4.2 EROSION AND SEDIMENT CONTROL PLAN

An erosion and sediment control plan will be implemented during soil excavation activities and installation of the cap to control soil erosion and dust transport from the ACE property. Silt fencing will be installed around the ACE property perimeter to prevent off-site migration of material with surface water runoff. Gravel tracking pads at construction exits will be used to control movement of material off-site by vehicular traffic. Wetting of soils in disturbed areas will be practiced to reduce off-site migration of dust.

4.3 SOIL DISPOSAL AND REUSE

Soil excavated from “hot-spots,” if any, and during any substation subsurface maintenance, repair, replacement or reconstruction work, or JCP&L remediation work, if any, will be analyzed via the Toxicity Characteristic Leaching Procedure (TCLP) to determine if it is hazardous or non-hazardous. Material exhibiting the characteristics of a hazardous waste will be managed in accordance with the New Jersey hazardous waste regulations. Material that does not exhibit characteristics of a hazardous waste will be transported to an appropriate facility for possible treatment and recycling. A minimal volume of soil generated by grading work associated with the cap installation and trenching to connect to recovery wells will be handled in the same manner.

4.4 PERIMETER (OR COMMUNITY) AIR MONITORING AND ACTION PLAN

Continuous air monitoring for volatile organic contaminants and particulate matter will be conducted during JCP&L intrusive activities in the MGP-impacted areas (for example during excavation or material handling). Vapors or dust found to be emanating from contaminated soil will be controlled as necessary by biodegradable vapor-suppression foam, polyethylene sheeting, rapid containment and removal, wetting, and/or other means as appropriate.

4.5 FILL USE PLAN

Excavated areas will be backfilled with approved clean fill material consistent with NJDEP’s Fill Material Guidance for Site Remediation Program (SRP) Sites (Fill Guidance). Sources of clean fill materials appropriate for final site use will be identified and approved by the Site Licensed Site Remediation Professional (LSRP). Monitoring of the fill material placement will include visual spot-checking of the material for indicators of adverse environmental impacts

and recording of the locations that the material is placed. Delivery tickets will be collected with each load to track the volume and source of the imported material. Any then-existing deed notice will be revised.

4.6 PERMIT AND APPROVAL REQUIREMENTS

Various state and local permits and approvals will be required for the construction and maintenance of the soil remediation components. A discussion of permit requirements follows.

4.6.1 State Permits and Approvals

4.6.1.1 Soil Remedial Action Permit

A Soil Remedial Action Permit will be required for the Site as the proposed remedial action includes leaving soil contamination in place at concentrations in excess of the unrestricted use Soil Remediation Standards set forth in N.J.A.C. 7:26D using engineering controls and institutional controls. The permit application is to be filed after the deed notice is recorded with the county government. In addition, prior to filing the permit the Remedial Action Report (RAR) must be submitted including RAR form, a Case Inventory Document, and an updated Receptor Evaluation Report. The Soil Remedial Action Permit will include a copy of the deed notice, RAR, a Remediation Funding Source/Financial Assurance Form and the applicable application fee.

4.6.1.2 Land Use Permits

The proposed remedial action will require a NJDEP Coastal General Permit #11 under the Coastal Zone Management Rules at N.J.A.C 7:7-6.11. The application for the Coastal General Permit will need to address the Flood Hazard Area Control Act at N.J.A.C 7:13 and the Stormwater Management Rule at N.J.A.C 7:8. Permit applications submitted to the NJDEP Division of Land Use Regulation are typically reviewed within 90 days.

4.6.3 Local Permits and Approvals

4.6.3.1 Zoning and Development Approvals

Details of the soil remedial action plan will be included in a development application to the City, if required. The application will be reviewed for approval by the City's zoning and or planning boards if and as necessary. Appropriate zoning variances, if any, will be determined in the development plan review process.

4.6.3.2 Erosion and Sediment Control Plan Approval

Certification of a Soil Erosion and Sedimentation Control Plan (E&S Plan) by the Cape-Atlantic Soil Conservation District will be required as the area of disturbance for the remedial action is in excess of 5,000 square feet. An E&S Plan will include a figure showing the proposed control measures accompanied by a narrative. Certification of the E&S Plan should be obtained before or during application for zoning and development approval to the City, if required.

4.6.3.3 Construction Permits

Construction permits for cap installation, excavations, the treatment system enclosure and associated plumbing, heating, ventilation, and air conditioning (HVAC) and electric and any necessary fencing will be filed with the City, if and as required by the installation contractor

5.0 GROUNDWATER REMEDIATION PLAN

The interim remediation proposed for FMGP site groundwater includes hydraulic containment of shallow and intermediate groundwater, treatment of recovered groundwater and LNAPL, and implementation of institutional controls (CEA and WRA). A long-term OM&M program will be implemented in conjunction with the active groundwater remediation plan to monitor remedy performance. Details of these components are discussed below along with erosion and sedimentation control plans, air monitoring plans, well installation and testing procedures, and permit requirements associated with the remediation. Off-site groundwater remediation will be addressed separately hereafter.

5.1 GROUNDWATER REMEDIATION COMPONENTS

5.1.1 Hydraulic Containment

Contaminated groundwater and mobile NAPL where present in shallow and intermediate depth groundwater beneath the FMGP site and ACE property will be contained and removed using a recovery well pump-and-treat system. Analysis of a three-dimensional groundwater flow model indicates that capture of shallow (<12 ft bgs) and intermediate (20 to 45 ft bgs) depth groundwater can be achieved by pumping from nine (9) perimeter shallow zone wells at a combined rate of 12 gallons per minute (gpm) and four intermediate depth wells at a combined rate of less than 20 gpm. Proposed well locations are shown on Figure 22. Extracted groundwater and NAPL will be piped to a treatment plant. The implementation of hydraulic containment will prevent the continued migration of dissolved contaminants from the FMGP site toward the bay. If additional investigation, monitoring and analysis results in the determination that additional actions are needed, they will be incorporated by an amended RAWP or other appropriate mechanism.

5.1.3 Treatment of Recovered Groundwater and NAPL

As mentioned above, groundwater and NAPL extracted from recovery wells will be piped to a treatment plant capable of treating a flow of up to 40 gpm. The preferred location is in the southeast corner of the ACE property based on current structures and use. The treatment plant will provide for flow equalization, oil/water separation, bag filtration, organoclay filtration, and GAC adsorption with final discharge to the sanitary sewer per an agreement to be negotiated with CMCMUA. A process and instrumentation diagram is included as Figure 23.

Groundwater and NAPL extracted from the recovery wells using pneumatic submersible pumps will be piped to the treatment building. The flow will enter an oil/water separator unit then flow by gravity to a feed tank. NAPL will be separated from the water stream and transferred to storage drums for off-site disposal. The water stream will then be pumped through bag filters to remove suspended particles. An organoclay filter media unit followed by two (2) liquid-phase GAC units installed in series will receive process water from the bag filters. A spare liquid-phase GAC unit will be available with valving arranged to provide for changing of the flow sequence through the three units. Effluent from the GAC units will be discharged to the sanitary sewer along 11th Street in accordance with an agreement to be reached with CMCMUA.

5.1.3.1 Well Pumps

Pumps will be QED Model AP-4B or similar top loading auto-pumps. The well pumps will be powered by air from a 7.5 horsepower rotary screw air compressor with an air drier and filter.

5.1.3.2 Oil/Water Separator

The oil/water separator is designed to separate dense and light NAPL from the extracted groundwater. The unit will be sized to accommodate a maximum flow of 40 gpm and have coalescing media and an LNAPL skimmer. Separated DNAPL and sludge will be manually drained from the bottom of the unit as necessary to a storage drum for off-site disposal. Separated LNAPL will drain via gravity to a storage drum for off-site disposal as it accumulates in the unit. A high-level alarm in the LNAPL drum will shut down the system before overtopping occurs. Effluent water from the unit will enter a storage chamber (feed tank) from which it will be fed to the bag filters via a transfer pump (with spare). Vapor vented

from the separator and feed tank will be routed through a granular activated carbon filter prior to discharge to the atmosphere.

5.1.3.3 Bag Filters

Water from the feed tank will be pumped through a duplex bag filter unit to remove suspended solids that could clog the organoclay and GAC filter units. The unit will use a basket strainer with a replaceable filter bag. Filter bags will be replaced when head loss across the unit reaches an unacceptable level.

5.1.3.4 Organoclay and GAC Adsorption

After passing through the bag filters, the water will be fed to an organoclay filtration unit. The organoclay filter media will serve to remove remaining NAPL droplets to prolong the life of the GAC filter media. Regular change-out of the organoclay filter media may be necessary to maintain treatment capacity.

Polishing treatment via a two-stage liquid-phase GAC adsorption process will serve to remove dissolved organic compounds such as PAHs and BTEX via adsorption to the media surface. The GAC filtration will operate with two vessels in series during system operation. A third spare vessel and valving that provides for control of the lead and lag vessel orientation will provide for uninterrupted treatment during routine vessel backwashing and media change-out procedures.

Effluent from the GAC filters will be discharged to the sanitary sewer. A vacuum relief valve will be installed on the discharge line after the carbon units to ensure consistent discharge flow rates and prevent vacuum buildup.

5.1.4 Institutional Controls

A CEA/WRA will be issued for the Site to protect against groundwater use and exposure. The CEA/WRA will extend to a depth of 100 ft bgs at the Site and in the downgradient area northwest of the FMGP site where benzene in groundwater exceeds the 1 µg/L drinking water standard. A copy of the CEA/WRA Fact Sheet Form is included in Appendix C.

5.1.5 Operations, Maintenance, and Monitoring Program

A detailed OM&M Manual will be developed and implemented to guide operation of the pump-and-treat system and evaluate system performance. Modifications to the remediation system components and/or operations will be made based on the performance monitoring. Installation of new monitoring wells at the Site will be completed as necessary for collection of groundwater analytical and evaluation of the recovery wells capture zone and surface water sampling will be conducted as part of the Performance Monitoring Plan included as Appendix D.

5.1.6 Production Well Abandonment

The former production well will be sampled and abandoned with NJDEP approval, when feasible to do so. The total well depth is approximately 825 feet bgs and the well currently has an obstruction at 598 feet bgs. A drill rig will be used to penetrate the obstruction and any other blockages that may be present in order to reach the well bottom. A video survey of the well will then be performed to evaluate the well condition and determine the screened interval. Groundwater samples will be collected from the top, middle, and bottom of the well screen interval using a positive-displacement pump and low-flow sampling procedures. The samples will be analyzed for VOCs, SVOCs, and inorganic compounds including cyanide and chloride by a NJDEP certified laboratory. A report of the well investigation findings, including sample results, will be submitted to NJDEP for review and approval of well abandonment. If approved, the well will be abandoned by a licensed New Jersey well driller by filling with cement grout. A well closure report form will be prepared by the well driller and included in the report to NJDEP.

5.2 RECOVERY WELL INSTALLATION AND TESTING

The recovery well network is designed to prevent migration of groundwater contamination in the shallow and intermediate zones. Nine (9) shallow zone wells and four (4) intermediate zone wells installed to depths of approximately 12 feet bgs and 40 feet bgs, respectively, are proposed. All wells will be installed by a licensed New Jersey well driller who will obtain all necessary well permits and provide proper utility location notifications before beginning field work. Both shallow and intermediate zone recovery wells will be sized as 6-inch diameter

wells. Well materials, screen intervals, slot sizes, installation, development, and testing methods will be specified in final design documents.

5.3 PERMIT AND APPROVAL REQUIREMENTS

Various state and local permits will be required for the construction and operation of the groundwater remediation components. A discussion of the permit requirements follows.

5.3.1 State Permits and Approvals

5.3.1.1 Groundwater Remedial Action Permit

A Groundwater Remedial Action Permit will be required for the Site as groundwater contamination exceeding the groundwater remediation standards set forth in N.J.A.C. 7:26D will remain after the proposed interim remedial action has been demonstrated as protective. The permit application will be filed following construction of the remedial action, the Remedial Action Report (RAR), RAR form, Case Inventory Document and an updated Receptor Evaluation Report. The permit application will include the RAR, a Groundwater Monitoring Plan, an updated CEA/WRA Fact Sheet, Remediation Funding Source/Financial Assurances Form, and the applicable application fee.

5.3.1.2 Land Use Permits

As discussed under the soil remediation plan, the proposed remedial action will require a NJDEP Coastal General Permit #11 under the Coastal Zone Management Rules at N.J.A.C 7:7-6.11. The application for the Coastal General Permit will need to address the Flood Hazard Area Control Act at N.J.A.C 7:13 and the Stormwater Management Rule at N.J.A.C 7:8. Permit applications submitted to the NJDEP Division of Land Use Regulation are typically reviewed within 90 days.

5.3.1.3 Discharge Permit

Treated groundwater will be discharged to the sanitary sewer beneath 11th Street after obtaining necessary approvals to discharge to the sewer pipe and downstream municipal treatment facilities, and to construct the treatment building. For the purposes of this RAWP, we assume that it will be possible to obtain approval to discharge treated water to the CMCMUA through the NJAWC sewer lines. If discharge to the CMCMUA is not feasible, we will apply for a New

Jersey Pollutant Discharge Elimination System (NJPDES) permit for discharge to surface water through the storm drain.

5.3.1.4 Significant Industrial User (SIU) Determination

A Significant Industrial User (SIU) permit is required from the NJDEP for all industrial discharges from certain industries at a flow rate of 25,000 gallons per day (17.4 gpm) or more. The expected groundwater recovery rate is up to 32 gpm. A list of influent parameters and estimated influent concentrations along with CMCMUA discharge requirements is included in Table 2. We will submit an SIU determination request to the NJDEP to confirm that an SIU permit is required. With this determination from the NJDEP, requests for approval to connect to the sanitary sewer can be made and a Treatment Works Approval (TWA) application can be accepted by the NJDEP. A TWA is required for construction and operation of the proposed treatment facility.

Prior to preparation of permit applications for discharge we will obtain a sample of groundwater representative of treatment plant influent for analysis by an NJDEP certified laboratory. The analysis required for discharge to the sanitary sewer includes inorganics, conventional parameters such as total suspended solids and biochemical oxygen demand, pesticides, polychlorinated biphenyls (PCBs), volatile and semi-volatile organics. These analyses are needed to support a SIU determination request from the NJDEP, for the TWA approval, and to obtain approval to discharge to the CMCMUA wastewater treatment facilities.

5.3.1.5 Treatment Works Approval (TWA)

Following agreement for discharge to CMCMUA or issuance of the NJPDES permit issued by the Bureau of Surface Water Permitting, a General Industrial TWA Application is to be submitted for the groundwater treatment system to the NJDEP Bureau of Environmental Engineering and Permitting (BEEP). The application package includes the following:

- A completed Application Form TWA-1
- A completed Engineer's Report Form WQM-006
- A completed Consent Form WQM-003 to include appropriate authorizations from CMCMUA and, if and to the extent required, the City including zoning and planning board development approvals

- A detailed Construction Cost Estimate
- Copies of Receipts of Public Notification from the City Planning Board and Environmental Commission
- A copy of the appropriate United States Geological Survey (USGS) Quadrangle Map that clearly delineates the Site.
- A set of Final Plans and Profiles signed and sealed by a New Jersey Licensed Professional Engineer. These plans must be marked “FINAL”
- A set of Construction Specifications signed and sealed by a New Jersey Licensed Professional Engineer
- A completed Licensed Operator Grading Sheet Form DWR-175
- An Engineer’s Certification for General Industrial TWAs signed and sealed by a New Jersey Licensed Professional Engineer in accordance with N.J.A.C. 7:14A-22.6(a)3
- An Engineer’s Abstract containing at a minimum the following:
 - A description of waste treatment system;
 - The ultimate destination of all wastewater and residuals;
 - Listing of all pollutants, including regular and intermittent flows, which may enter the system;
 - The average and peak flow requirements;
 - The expected composition of effluent from the treatment system; and,
 - The approval for acceptance of discharge from CMCMUA (or a copy of a valid NJPDES permit).

Completed TWA applications typically undergo a 30-day review period by BEEP.

5.3.1.6 Well Permitting

All new recovery wells and monitoring wells at the Site will be installed by a licensed New Jersey driller. The same applies to abandoning of the former production well. Well installation and abandonment will be performed in accordance with the requirements promulgated in N.J.S.A 58:4A-4.1 et seq. The driller will be responsible for obtaining all necessary local and State permits. State well permits will be submitted to the NJDEP Bureau of Water Allocation and Well Permitting. Permits are typically issued within two to three weeks after application

submission. New wells can only be installed after permit issuance. The licensed well driller will provide all completed well forms for each new well installed and existing well closed.

5.3.1.7 Air Permit

Based on the concentrations of benzene in the groundwater entering the oil/water separator an air permit will be required for the system. We will complete the NJDEP permit application on RADIUS following RAWP approval. Vapors vented from the oil/water separator and feed tank will be treated through granular activated carbon prior to emission from the treatment system.

5.3.2 Local Permits and Approvals

5.3.2.1 Zoning and Development Approvals

As discussed under the soil remedial action, details of the groundwater remedial action will be included in any development application to the City, if and as required. The application will be reviewed for approval by the City's zoning and or planning boards if and as necessary. Appropriate zoning variances, if any, will be determined in the development plan review process.

5.3.2.2 Erosion and Sediment Control Plan Approval

As discussed under the soil remedial action, certification of an E&S Plan by the Cape-Atlantic Soil Conservation District will be required as the area of disturbance for the remedial action is in excess of 5,000 square feet. The E&S Plan will include a figure showing the proposed control measures accompanied by a narrative. Certification of the E&S Plan will be obtained before or during application for zoning and development approval to the City.

5.3.2.3 Construction Permits

Construction permits for well installations, trenching and pipework, creation of the treatment system housing and any necessary fencing will be filed with the City, if and as required.

5.3.2.4 CMCMUA Approval

After receipt of a determination, if any, from the NJDEP that a SIU permit is required, a letter report and accompanying documents will be submitted to the CMCMUA requesting approval to discharge to their wastewater treatment facilities with a draft copy of the TWA application

discussed in the previous section, and a Consent Form WQM-003 for completion by the CMCMUA.

5.3.2.5 New Jersey American Water Company Approval

The proposed treatment facility will discharge to the sanitary sewer beneath 11th Street that is owned by the New Jersey American Water Company. Approval to connect to a manhole in 11th Street will be requested by submitting a letter request with connection and flow details.

6.0 PROJECT IMPLEMENTATION

6.1 FINAL DESIGN

This design is conceptual in nature and will be advanced to the 100% design level prior to implementation. The design will be used as the basis for the preliminary and final designs. The proposed interim remedial action includes the following components:

1. Use of existing or new (where feasible) permeable cap over areas where FMGP contaminants exceed restricted use criteria in shallow soil on ACE property;
2. Hydraulic containment of shallow and intermediate zone groundwater beneath and immediately downgradient of the FMGP site area using recovery wells;
3. NAPL recovery where practicable;
4. Treatment of recovered groundwater and NAPL at a water treatment plant, preferably located in the southeast corner of the ACE property, prior to permitted discharge to the sanitary sewer system;
5. Excavation of impacted soils on ACE property as necessary for substation reconstruction and/or of soil contamination “hot-spots” where feasible;
6. Implementation of engineering controls and institutional controls to prevent receptor contact with contaminated media;
7. Sampling and abandoning of the former production well; and,
8. Installation of new monitoring wells as needed and development of an OM&M program with long-term remedy performance monitoring.

The technical specifications will act as a guide for the construction and startup of the various components of the interim remedial action while defining responsible parties for execution.

The specifications will include details under the following divisions:

- Division 1: General Requirements
- Division 11: Equipment (enclosure, well pumps, treatment equipment)
- Division 15: Mechanical
- Division 2: Site Construction/Civil
- Division 12: Special Construction (Wells)
- Division 16: Electrical

6.2 CONTRACTOR BIDDING

Contractors with the proper experience and expertise will be identified as potential bidders for installation of the groundwater recovery and treatment system, soil excavation, and cap. Bid documents will be prepared to include construction drawings and technical specifications. These materials will be provided to the identified contractors in advance of a mandatory bid-walk to be held at the ACE property. The bid-walk, coordinated with ACE and conducted by Tetra Tech and JCP&L, will provide an opportunity for contractors to see the ACE property layout and pose questions. A defined period for additional questions from contractors will be allotted and answers will be provided on a set date to all contractors in a formal manner. Following the date on which answers are provided, a deadline will be set for acceptance of contractor bids. Bids will be reviewed by Tetra Tech and JCP&L and a contract will be awarded within an allotted period of time following the bid due date.

6.3 WORK PLANS

Various work plans will be developed to address construction and operation of the proposed soil and groundwater remedial action plan. A discussion of these plans follows.

6.3.1 Traffic Control Plan

A Traffic Control Plan (TCP) will be developed to address vehicular and pedestrian traffic around the ACE property and construction areas. The TCP will detail procedures for the management of traffic during activities such as material and equipment delivery and earthwork that extends into the roadway or sidewalk. The safety of the public and on-site workers will be protected and the minimization of disruption to traffic will be achieved through the procedures outlined within the TCP.

6.3.2 Quality Assurance Project Plan

A Quality Assurance Project Plan (QAPP) will be developed to define the sampling, analysis, procedures, and quality requirements for the remedial actions being implemented. The QAPP will include details on the planning and organization of activities and training and qualification requirements of project personnel. Data quality standards will be defined in the plan with sampling and analytical procedures outlined to ensure a high degree of accuracy and precision. An outline of this plan is included as Appendix F.

6.3.3 Health and Safety Plan

A site-specific Health and Safety Plan (HASP) included as Appendix G will provide workers with information on hazards associated with the ACE property and FMGP site and the activities involved in constructing and operating the remedial actions being implemented. The HASP will include details on emergency response, personal protective equipment, hazards assessment, and other site specific health and safety related items.

6.3.4 Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) (also referred to as a Perimeter Air Monitoring Plan) will be developed to ensure that construction of the various components of the soil and groundwater remedial actions are not adversely impacting the air within and around the FMGP site/ACE property construction areas. The CAMP will detail procedures for monitoring and documenting air quality using properly calibrated devices. Particulates and volatile compounds known to be present at the FMGP site will be monitored daily. Response actions for detections of elevated concentrations will be provided in the CAMP as well. A preliminary CAMP is included as Appendix H.

6.3.5 Waste Management Plan

A detailed waste management plan will be developed to direct the handling and removal of waste material from the ACE property and construction areas during construction and operation of the remedial action. The plan will include procedures for storing, testing, and properly disposing of well drill cuttings, excavated soil, and spent filtration media associated with the groundwater treatment system. It will also provide plans for managing solid waste materials generated at the property and construction areas.

6.3.6 Site Security

Security of the ACE property and construction areas during the construction and implementation phases of the remedial action is important. The ACE property is largely enclosed by perimeter fencing and locked gates that protect ACE's substation and equipment stored by the City from trespassers. It is likely that this fencing will remain in place and provide security for the groundwater pump and treat system housing and permeable cap; fencing will be added or improved as needed in cooperation with ACE and site tenants to limit access. A

limited amount of materials and equipment necessary for construction of the various components of the remedial action may be stored within the secure fenced area for overnight protection. Employment of security guard services for monitoring of the ACE property during the construction phase will be considered. Once the remedial action is fully constructed and operational, ACE property security will be maintained by the perimeter fencing, locked gates and building doors, and routine property inspections to take place in conjunction with operation and maintenance activities.

6.3.7 Dewatering

Dewatering of trenches and excavations may be necessary for some work. Shallow groundwater encountered at the Site will be pumped from trenches and excavations to maintain stability and provide adequate conditions for the compaction of backfill material. The removed water will require proper handling as it may be impacted by contaminants known to be present at the Site. The water may be managed by on-site treatment via a temporary treatment system with discharge to the sewer. Alternatively, the water may be temporarily stored on-site for treatment by the groundwater pump and treat system or hauling off-site to be treated at a local wastewater treatment facility.

6.4 ACCESS

Property access arrangements have been made with ACE in order to provide access to the ACE property as needed. Precise locations, manner, and extent of remedial work, including the location of the groundwater treatment shed, remain the subject of discussion with ACE. Contact with the tenants may still be required, but ACE has agreed to assist such needs.

6.5 UTILITY CLEARANCE

Underground and overhead utilities at and around the FMGP site/ACE property will be evaluated, including through discussions with ACE, in order to avoid interference with the proposed remedial action components and all adverse impacts on substation operations. An initial determination of utilities will be made through maps provided by the various public utility companies serving the City. Prior to commencing intrusive work at the property, including trenching, excavation, and well installation, a New Jersey One Call mark-out will be performed. If deemed necessary, additional utility mark-outs will be obtained through

employment of a ground penetrating radar scan of the property and adjacent areas. Other steps will be taken, as needed, to satisfy ACE concerns. When intrusive work is started, soft digging and or hand digging will be used within close proximity of marked out utilities in order to safely reveal these lines. Figure 24 includes known utility locations.

6.6 STARTUP PLAN

A detailed startup plan will be developed for bringing the groundwater pump and treat system up to full scale, long-term operating conditions. The plan will address testing the various treatment components to ensure their required efficiency in removing contaminants. Shallow and intermediate zone recovery well pumps will be tested for proper operation and adjusted to the desired pumping rate. Pipework and valves will be checked to ensure that joints are free of leaks, pipes are properly secured, and valves are operational. System transfer pumps will be tested for proper rotation and flow rates. Instrumentation will be checked to ensure accuracy in measurement of key system operating parameters.

Sampling and analysis of the influent water will be conducted on a regular basis from startup until a stable or definite trend is found in contaminant concentrations. Sampling frequency will increase or decrease as necessary. Long-term sampling of the system effluent will be on a scheduled basis as required by the CMCMA agreement to provide for verification of compliance with the discharge standards.

6.7 SITE RESTORATION PLAN

The FMGP site occupied a portion of the ACE property that is presently the location of an electrical substation owned and operated by ACE. A portion of the ACE property is utilized for vehicle parking and/or equipment storage by the City and NJAWC. A property restoration plan will address returning the property to conditions that provide for continued use by both ACE and the tenants (Ocean City and NJAWC). The plan will include input from both entities to ensure finished surfaces meet the needs of future property use.

6.8 PROJECT CLOSEOUT

Following remedial construction an interim remedial action report will be produced and submitted in accordance with 7:26E-5.7 using a Remedial Action Report (RAR) form. The

interim RAR will include descriptions of each remedial action, as-built drawings, photographs, costs, permits and other documentation of the construction efforts.

7.0 SCHEDULE

Following submittal of the interim RAWP, we plan to complete permit applications and design drawings and specifications so a contractor can be selected by October 31, 2019. Construction must take place over the vacation off-season and will be completed by May 15, 2020. The active groundwater treatment system is expected to operate for approximately 20 years thereafter. A proposed schedule is included as Figure 25.

8.0 COST ESTIMATE

Estimated capital and OM&M costs are provided in Tables 3 and 4.

9.0 REFERENCES

Agency for Toxic Substances and Disease Registry (ATSDR), 2007. Toxicological Profile for Benzene, U.S. Department of Health and Human Services, Public Health Service, 438 p. August.

Boehm, P.D., 2006. *Polycyclic Aromatic Hydrocarbons (PAHS)*, Chapter 15 in Environmental Forensics Contaminant Specific Guide, R.D. Morrison and B.L. Murphy, eds., Elsevier, New York.

Duffield Associates, 2012. *Sampling and Analysis Report, City of Ocean City Proposed Maintenance Dredging, Cape May County, New Jersey*, Letter report to NJDEP.

HSI GeoTrans, Inc., 2000. *Draft Remedial Action Work Plan (RAWP), Former Manufactured Gas Plant Site, Ocean City, New Jersey*, prepared for GPU Energy. December.

Tetra Tech, Inc., 2016. *Remedial Investigation Report, Ocean City Former Manufactured Gas Plant Site, Ocean City, New Jersey*, prepared for Jersey Central Power & Light Company (JCP&L). March.

Weston, 1984. *Geohydrological Site Investigation at Ocean City Substation*, prepared for Atlantic City Electric Company.

U.S. Fish and Wildlife Service, 1997. *Significant Habitats and Habitat Complexes of the New York Bight Watershed*.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

3. For each of the same three MGP sites, provide all correspondence between the Company and the NJDEP concerning submissions for the site, reply comments, and other major items which have a material impact on remediation activities and associated costs incurred by the Company. The correspondence should span the twelve-months preceding December 31st of the most recent RAC period.

Response:

Copies of all Company written correspondence to or from the Licensed Site Remediation Professional (LSRP) or NJDEP for calendar year 2019, which may have a material impact on remediation activities and associated costs incurred by the Company concerning the three referenced sites, are provided as attachments. Further discussion of the use of LSRP's is included in MFR-8. They include:

Attachment MFR-3a – Cape May

Attachment MFR-3b – Newton II; and

Attachment MFR-3c – Ocean City.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-3a



State of New Jersey

PHIL MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Water Pollution Management Element
Bureau of Surface Water Permitting
P.O. Box 420 – 401 E State St
Trenton, NJ 08625-0420
Phone: (609) 292-4860 / Fax: (609) 984-7938

CATHERINE R. McCABE
Commissioner

SHEILA OLIVER
Lt. Governor

Notice of Administrative Revocation

Via Email Only
February 4, 2019

Frank Lawson, Remediation Supervisor
Jersey Central Power & Light
300 Madison Avenue
Morristown, NJ 07962

RE: Administrative Revocation
Discharge Category: B4B – General Permit GW Petroleum
NJPDES Permit No. NJG0262498
Former Cape May Manufactured Gas Plant (MGP)
City of Cape May, Cape May County

Dear Mr. Lawson:

Please be advised that the Department has confirmed that you are no longer performing any activities requiring a permit under the NJPDES permit referenced above. Therefore, your NJPDES permit is administratively revoked effective January 1, 2019.

The Water Pollution Control Act prohibits the discharge of pollutants except as authorized by a NJPDES permit. If you plan to discharge pollutants to the surface or ground waters of the state of New Jersey, you must submit a new application at least 180 days before proposing to discharge.

If you have any questions regarding this revocation permit action, please contact Johnathan Lakhicharran either by phone at (609) 292-4860 or via email at Johnathan.Lakhicharran@dcp.nj.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Johnathan Lakhicharran".

Johnathan Lakhicharran
Environmental Engineer 2
Bureau of Surface Water Permitting

c: Charles Bisese, Case Manager, Southern Bureau of Water Compliance and Enforcement

MF: 63908 / PI: 744321



NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJG0262498

Final: Surface Water GPA Revocation

Permittee:

Jersey Central Power & Light
300 Madison Avenue
Morristown, NJ 07962

Property Owner:

Jersey Central Power & Light
300 Madison Avenue
Morristown, NJ 07962

Location of Activity:

Former Cape May Manufactured Gas Plant (MGP)
705 Lafayette Street
City of Cape May, Cape May County

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Status
B4B – General Permit GW Petroleum Product Cleanup	2/4/19	1/1/19	Revoked

By Authority of:
Commissioner's Office

A handwritten signature in black ink that reads "Susan Rosenwinkel".

DEP AUTHORIZATION
Susan Rosenwinkel, Bureau Chief
Bureau of Surface Water Permitting
Division of Water Quality

(Terms, conditions and provisions attached hereto)



300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

February 26, 2019

New Jersey Department of Treasury
Division of Revenue
PO Box 417
Trenton, NJ 08646-0417

Certified Mail Article Number 7017 0190 0000 5717 7497

To whom it may concern:

Jersey Central Power and Light Company (JCP&L) encloses payment for the following NJDEP Annual Site Remediation Fee invoice:

Invoice No. 190106740
Period Covered: 1/29/2019 – 1/29/2019
Amount: \$3,320.00
Amount Paid: \$3,320.00
Cape May MGP Site
PI #: G000005363

Enclosed please find check number 2866523 in the amount of \$3,320.00, which covers the summary of charges for the current invoice period.

Sincerely,

A handwritten signature in cursive script, appearing to read "Anna F. Sullivan".

Anna F. Sullivan
Project Manager

Enclosures

cc: David Thompson, LSRP



VOID IF NOT CASHED WITHIN 90 DAYS

2866523

50-937

213

Check No. 2866523

CHECK DATE

02 14 2019

AMOUNT

*****3,320.00

PAY TO THE ORDER OF TREASURER STATE OF NEW JERSEY
NJ DEPARTMENT OF TREASURY
PO BOX 417
TRENTON, NJ 08646-0417

EXACTLY *****3,320 DOLLARS 00 CENTS

Steven R. Steub
Treasurer
FirstEnergy Corp.

JPMorgan Chase Bank, Syracuse, NY 13206

⑈ 2866523⑈ ⑆021309379⑆ 601864788⑈

VENDOR NO. 0210000188 DOC NO. 2000048646

PO NO	INVOICE / RCPT #	DATE	DOCUMENT #	VENDOR INV AMT	DISCOUNT	NET AMOUNT
	19016740	02/11/2019	1902080070	3,320.00	0.00	3,320.00

FOR CHECK INQUIRY, CONTACT FIRSTENERGY ACCOUNTS PAYABLE HELP DESK AT 814-539-3200.

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INVOICE NO. 190106740

ANNUAL SITE REMEDIATION FEE

Program Interest
CAPE MAY MANUFACTURED GAS PLANT SITE FOR 705 LAFAYETTE ST Cape May City, NJ. 08240 6000005363

Type of Notice
CORRECTED(NON-INITIAL)

Amount Due
\$ 3,320.00

Billing Date
02/01/19

Due Date
03/30/19

NJEMS Bill ID
000000192682700

Summary	
Total Amount Assessed	7,260.00
Amount Received Before Creating Installment Plan (if installment plans is allowed)	0.00
Amount Transferred To Installment Plan	0.00
Installment Amount	0.00
Total Amount Credited	3,940.00
Total Amount Debited (Other Than Amounts Assessed)	0.00
Total Amount Due	3,320.00

RECEIVED
FEB 11 2019
Environmental Department

REMINDER:
-RETURN THE PAYMENT STUB BELOW WITH A CHECK MADE PAYABLE TO: TREASURER - STATE OF NEW JERSEY
-WRITE THE INVOICE NUMBER ON YOUR CHECK
-PAYMENT CAN BE MADE ELECTRONICALLY VIA THE PAY A PAPER INVOICE LINK AT WWW.NJDEPONLINE.COM
-FOR 2ND OR 3RD NOTICE INVOICES OR DEP CONTACT INFORMATION, SEE BACK OF THIS PAGE
-FOR GENERAL INFORMATION, BILLING DISPUTES, AND FREQUENTLY ASKED QUESTIONS GO TO:
WWW.STATE.NJ.US/DEP/SRP/DIRECTBILLING
-INSTALLMENT PLANS ARE NOT AVAILABLE FOR PAYMENT OF LSRP ANNUAL FEES OR RFS 1% SURCHARGES.

for AP's
2/13/19

See Back Of Page for Billing Inquiries

INVOICE NO. 190106740

D9901F (R 3/14/02)

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
ANNUAL SITE REMEDIATION FEE

INVOICE NO. 190106740

NJEMS Bill ID
000000192682700

Program Interest ID
6000005363

Type of Notice
CORRECTED(NON-INITIAL)

Billing Date
02/01/19

Due Date
03/30/19

Amount Due
\$ 3,320.00

For name and/or address change, check box and write corrections on the back of this invoice.

DO NOT FOLD, BEND OR MARK

Enter the Amount of your payment →

\$ 3,320.00

RETURN THIS PORTION

with your check made payable to:

89
 JERSEY CENTRAL POWER AND LIGHT
 ATTN: Frank Lawson
 300 MADISON AVE
 Morristown NJ 07960-6169

TREASURER - STATE OF NEW JERSEY
 and mail to:
 NJ DEPARTMENT OF TREASURY
 DIVISION OF REVENUE
 PO BOX 417
 TRENTON, NJ 08648-0417

EP101010101700000000005030603111110003320000007051901067405893



ANNUAL SITE REMEDIATION FEE

Program Interest
CAPE MAY MANUFACTURED GAS PLANT SITE FOR 705 LAFAYETTE ST Cape May City, NJ. 08240 6000005363

Type of Notice
CORRECTED(NON-INITIAL)

Amount Due
\$ 3,320.00

Billing Date
02/01/19

Due Date
03/30/19

NJEMS Bill ID
000000192682700

LSRP Opt-In Case
Licensed Site Professional Program

ASSESSMENTS

Start-End Date: 01/29/2019-01/29/2019	Activity: LSR120001	Alternate ID: (Supersedes RPC000005)	Status: Open (Pending Payment)	Amount: \$ 1780.00
Assessment Type: FEE(CAOC Category 2-Annual)				
Regulatory Basis:				
Start-End Date: 01/29/2019-01/29/2019	Activity: LSR120001	Alternate ID: (Supersedes RPC000005)	Status: Open (Pending Payment)	Amount: \$ 1540.00
Assessment Type: FEE(GW Media-SRP Annual)				
Regulatory Basis:				
Start-End Date: 12/06/2018-12/06/2018	Activity: LSR120001	Alternate ID: (Supersedes RPC000005)	Status: Open (Pending Payment)	Amount: \$ 3940.00
Assessment Type: FEE(CAOC Category 2-Annual)				
Regulatory Basis:				
Total Amount Assessed:				\$ 7,260.00

CREDITS

Credit Date	Credit Type	Amount	
01/23/2019	Cash Payment	\$ 3,940.00	
Total Amount Credited:			\$ 3,940.00

Sullivan, Anna F (Lawson, Frank D)

From: Cuccuini, Jeremy <Jeremy.Cuccuini@arcadis.com>
Sent: Monday, April 8, 2019 11:40 AM
To: Sullivan, Anna F (Lawson, Frank D)
Cc: Scillieri, Darren; Murray, Jessie
Subject: [EXTERNAL] FW: Cape May, Restoration

Hi Anna, for your records see below the email Jessie received from Andrew at NJDEP following up on their 3/28 Cape May site walk. Overall his tone remains positive, and we will follow-up with the requested final as-builts (with planting details) within 30 days of completion of the final wetland planting activities.

We will also regroup with Andrew later in the year (as needed) regarding any potential low marsh post-planting inspections he may request.

Feel free to reach back out if you would like to catch up on any other specifics.

Thanks,
Jeremy

From: Murray, Jessie <Jessie.Murray@arcadis.com>
Sent: Monday, April 8, 2019 10:08 AM
To: Cuccuini, Jeremy <Jeremy.Cuccuini@arcadis.com>
Subject: FW: Cape May, Restoration

From: Jensen, Andrew <Andrew.Jensen@dep.nj.gov>
Sent: Friday, April 5, 2019 11:34 AM
To: Murray, Jessie <Jessie.Murray@arcadis.com>
Subject: RE: Cape May, Restoration

Good morning Jessie,

Thanks again for being so cooperative in assisting with the Mitigation Unit inspecting the Former Cape May Gas/JCPL restoration site last week, Thursday, March 28, 2019. I just wanted to follow up on the inspection.

As observed during the meeting, the site appears to be doing well within the upland transitional areas, and much of the coastal wetland areas that were restored prior to the latest permit modification. Vegetation appeared to be establishing and invasive species were at a minimum across the majority of the site. It is acknowledged that a large portion of the marsh area has yet to be planted with *Spartina*, but as you mentioned, you anticipate that the planting of these areas will be conducted this spring.

Although it was discussed that water levels appear to be very inconsistent and are very dependent upon the tides, season, and weather events, there is a commonly shared confidence that the areas will be inundated sufficiently as needed to support the hydric vegetation. It was apparent that much of the already restored with coastal marsh vegetation was establishing.

It was also discussed that upon completion of the final plantings, an a-built report for the entirety of the project area will be provided to the Mitigation Unit.

As such, there are no further concerns at this time regarding the project. I'll look forward to receiving the as-built report and conducting a site inspection during the growing season. Should you have any questions or concerns about this email, or if I missed anything from our onsite discussions, please just reach out at your convenience.

Thanks again, Jessie, and I'll be in touch. Have a great weekend!

-AFJ

From: Jensen, Andrew
Sent: Monday, March 25, 2019 2:39 PM
To: 'Murray, Jessie' <Jessie.Murray@arcadis.com>
Subject: RE: Cape May, Restoration

Great, Jessie, that's super helpful. Thank you again and we'll be seeing you in a few days' time. Have a good one.

-AFJ

From: Murray, Jessie <Jessie.Murray@arcadis.com>
Sent: Monday, March 25, 2019 2:13 PM
To: Jensen, Andrew <Andrew.Jensen@dep.nj.gov>
Subject: [EXTERNAL] RE: Cape May, Restoration

Hi Andrew

Works for me – I'll still hoot to be at the site around 12.

If anything comes up before or on Thursday just give me a ring. My cell is 732.567.4089.

Thanks!

Jessie

From: Jensen, Andrew <Andrew.Jensen@dep.nj.gov>
Sent: Monday, March 25, 2019 2:04 PM
To: Murray, Jessie <Jessie.Murray@arcadis.com>
Subject: RE: Cape May, Restoration

Hey Jessie,

So I have a meeting in Ocean City at 10:00 am Thursday, so I'm anticipating being able to make it to Cape May Town around the lunch time or after. Can we just be safe and call it 12:30 pm? I will have Susan Lockwood with me. I don't think the 10 o'clock will be all that involved, but it is a bit of a drive still so I want to be sure there's enough time. I can also keep you posted as the day goes on in the event anything changes. But I don't think it will, if anything we may be earlier.

Let me know what you think and I'll look forward to hearing back from you. Thanks again!

-AFJ

From: Murray, Jessie <Jessie.Murray@arcadis.com>
Sent: Thursday, March 21, 2019 3:01 PM
To: Jensen, Andrew <Andrew.Jensen@dep.nj.gov>
Cc: Todoroff, Katherine <Katherine.Todoroff@dep.nj.gov>
Subject: [EXTERNAL] Re: Cape May, Restoration

Hi Andrew

Great to hear from you. Next Thursday the 28th works. For scheduling with folks from our side, would you be able to give a general timeframe when you plan to visit the site? Also, will anyone else be joining you?

Thanks

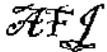
Jessie

Sent from my iPhone

On Mar 19, 2019, at 8:21 AM, Jensen, Andrew <Andrew.Jensen@dep.nj.gov> wrote:

Hey Jessie,

Hope all is well and your winter has been a decent one. As we approach the growing season, I was wondering if there would be any opportunity to visit the Former Cape May Gas Plant (JCPL) site on the 28th of March to just have a look and assess how the project is going. Understanding it'll be too early perhaps for full leaf-out of any planted material, I'd like to just keep tabs on the project. I'm actually planning on being in the area that day, and as such was thinking it would be ideal to make the visit. At your convenience, please let me know if that would be at all possible. At this time, I've not yet determined the time I'm meeting the other party, and so I would have to get back to you on a time if we were to decide the meeting is possible. Look forward to hearing back from you, thanks!



Andrew F. Jensen
Environmental Specialist I
New Jersey Department of Environmental Protection
Division of Land Use and Regulation
Bureau of Technical Services
(609) -777-0088 phone
609-777-3656 fax
501-02A
P.O. Box 420
Trenton, NJ 08625-0420

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Sullivan, Anna F (Lawson, Frank D)

From: Cuccuini, Jeremy <Jeremy.Cuccuini@arcadis.com>
Sent: Friday, April 19, 2019 2:15 PM
To: Sullivan, Anna F (Lawson, Frank D)
Cc: Scillieri, Darren
Subject: [EXTERNAL] FW: JCP&L Cape May: Permit-By-Rule Modification
Attachments: PBR Table 1_revised_Cape_May.docx

Hi Anna, as we discussed yesterday see attached the email received from Greg Bakeman at NJDEP agreeing to the new PBR limits for Cape May. I've attached the revised PBR Table 1 for reference.

Thanks,
Jeremy

From: Bakeman, Greg <Greg.Bakeman@dep.nj.gov>
Sent: Monday, April 15, 2019 12:54 PM
To: Cuccuini, Jeremy <Jeremy.Cuccuini@arcadis.com>
Cc: Bakeman, Greg <Greg.Bakeman@dep.nj.gov>
Subject: RE: JCP&L Cape May: Permit-By-Rule Modification

Jeremy,
We agree to the new K-01 standards and agree arsenic is considered a sporadic element that may be considered background and that the standard will be met for arsenic and benzene at K-02. Greg Bakeman

From: Cuccuini, Jeremy <Jeremy.Cuccuini@arcadis.com>
Sent: Monday, April 15, 2019 11:58 AM
To: Bakeman, Greg <Greg.Bakeman@dep.nj.gov>
Cc: Fuller, Andrew <Andrew.Fuller@arcadis.com>; Scillieri, Darren <Darren.Scillieri@arcadis.com>
Subject: [EXTERNAL] JCP&L Cape May: Permit-By-Rule Modification

Greg,

Hi Greg, I hope this email finds you well. On behalf of Jersey Central Power and Light Company (JCP&L), Arcadis U.S. Inc. (Arcadis) is requesting an amendment associated with the sampling requirements to the existing Discharge to Groundwater Permit for the former Cape May Manufactured Gas Plant (MGP) Site, PI #G000005363. This email summarizes the requested modifications associated with:

- Removal of the effluent sampling requirement and effluent limit for arsenic; and,
- Revising the effluent limit of location K01 for benzene to 50 parts per billion (ppb).

Arsenic

An evaluation of sitewide groundwater quality demonstrates that concentrations of arsenic are highly variable both on and offsite (Table 1). Specifically, monitoring wells have registered detections of arsenic above the Class IIA Groundwater Quality Standard (GWQS) at downgradient sentinel well locations and wells located upgradient of the site, as well as at monitoring wells located on-site. The following monitoring well clusters, which are outside the areas of site related impacts in groundwater, have exceeded the GWQS for arsenic during at least one round of sampling over the last six months (September 2018 - March 2019):

Table 1. Extent of Arsenic in Groundwater Based on September 2018-March 2019 Groundwater Sampling Events (Concentrations in ug/L)

Well ID	September 2018	December 2018	March 2019
MW-7A	3.3	2.2	3.1
PRW-8C	3.0	3.0	6.4
MW-12A	3.6	<2.0	2.7
MW-16B	5.3	<2.0	<2.0
MW-17A	44	76	28
MW-17B	7.3	7.3	2.7
MW-22B	6.8	8.3	9.1

Of these well clusters, MW-7A and MW-16B are located upgradient of historic site related MGP-operations. Arsenic detections in MW-7A and MW-16B were reported above GWQS in September 2018 and with MW-7A also exceeding GWQS in March 2019.

Based on these observations, arsenic concentrations within wells across the site and at both upgradient and downgradient locations outside of areas with known MGP groundwater impacts are noted to vary over time, with no discernable trends indicating the presence of an onsite source. Accordingly, these arsenic exceedances cannot be attributed to the historic MGP site operations and are naturally occurring background concentrations. As such, Arcadis is requesting the removal of the arsenic effluent limit and sampling requirements because post-treatment system arsenic concentrations, which have been non-detect for the past 12-month period, will be similar or lower than the existing naturally occurring concentrations within the effluent discharge area. This request is consistent with prior approvals granted by NJDEP to address other similarly naturally occurring background concentrations of inorganics (i.e., iron, manganese, and chloride).

Benzene

The active groundwater treatment system utilizes a lead and a lag vessel containing granulated active carbon (GAC) to treat site constituents prior to effluent discharge downgradient of the secondary containment wall (SCW). Arcadis has been utilizing a 1 ppb effluent limit for mid-point K01 (after the first GAC unit) to determine when a change-out of the GAC in the lead vessel is required. Based on this effluent limit, maintenance of the GAC unit has been required on a routine (e.g., monthly) basis and the capacity of the GAC vessel to remove mass has been underutilized; therefore, Arcadis is requesting to revise the effluent limit for benzene at mid-point K01 to 50 ppb. This request is supported by sampling data collected between July 2018 and December 2018 where mid-point K01 exceeded the 1 ppb; however, the subsequent sample at K02 (after the second GAC unit) was below the effluent limit for discharge (i.e., non-detect) (Table 2).

Table 2. Extent of Benzene in Effluent Limit from July 2018-December 2018 PBR Sampling Events (Concentrations in ug/L)

Sample Port	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018
K01	<0.50	<0.50	21	<0.50	74	46
K02	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Note that the current permit effluent limit of 1 ppb benzene at effluent point K02 will remain.

I have attached the proposed revised *Table 1 of the Cape May PBR* authorization for your review and approval, which summarizes the system effluent sampling requirements. Feel free to review the attached documents at your convenience. Furthermore, I am available to discuss or respond to any questions/comments you may have. Thank you again for your quick response and review of this request.

Regards,
Jeremy

Jeremy Cuccuini | Sr. Project Scientist / Certified Project Manager | jeremy.cuccuini@arcadis-us.com



* Please note our new address below

Arcadis | 50 Millstone Road, Suite 220 | East Windsor, NJ 08520
*New T. 609.366.9033 | M. 609.203.3157 | F. 609.860.8007

Connect with us! www.arcadis.com | [LinkedIn](#) | [Twitter](#) | [Facebook](#)

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300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

Certified Mail Return Receipt #7017 0190 0000 5717 5653

June 06, 2019

NJ Department of Treasury
Division of Revenue
PO Box 417
Trenton, NJ 08646-0417

RE: Cape May Manufactured Gas Plant (MGP) FO
705 Lafayette St
Cape May, NJ 08204
PI #744321
NJPDES Permit Invoice No.: 190451990
Period – 07/01/2018 – 06/30/2019

Dear Bureau Representative:

Jersey Central Power & Light, a FirstEnergy Company encloses payment in the amount of \$2,300.00 for the NJPDES 07/01/2018 – 06/30/2019 annual permit (NJPDES-DSW160002).

Please call me at 973-401-8409 if you have any questions regarding this submittal.

Sincerely,

A handwritten signature in black ink, appearing to read "Anna F. Sullivan".

Anna F. Sullivan
Project Manager
Site Remediation

c: File



2884026

VOID IF NOT CASHED WITHIN 90 DAYS

50-937

213

CHECK DATE

AMOUNT

Check No. 2884026

05 30 2019

*****2,300.00

PAY TO THE ORDER OF
TREASURER STATE OF NEW JERSEY
NEW JERSEY DEPT. OF ENV. PROTECTION
PO BOX 638
TRENTON, NJ 08625-0638

EXACTLY *****2,300 DOLLARS 00 CENTS

Treasurer
FirstEnergy Corp.

JPMorgan Chase Bank, Syracuse, NY 13206

⑈ 2884026 ⑆ ⑆ 021309379 ⑆ 601864788 ⑆

VENDOR NO. 0200010190 DOC NO. 2000177872

PO NO	INVOICE / RCPT #	DATE	DOCUMENT #	VENDOR INV AMT	DISCOUNT	NET AMOUNT
	190431890	05/22/2019	1902278130	2,300.00	0.00	2,300.00

FOR CHECK INQUIRY, CONTACT FIRSTENERGY ACCOUNTS PAYABLE AT APHELP@FIRSTENERGYCORP.COM.

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL REGULATION-NJPDES

Program Interest
CAPE MAY MANUFACTURED GAS PLANT (MGP) FO 705 LAFAYETTE ST Cape May, NJ. 08204 744321

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 2,300.00

Billing Date
05/10/19

Due Date
06/19/19

NJEMS Bill ID
000000195836100

Summary	
Total Amount Assessed	2,300.00
Amount Received Before Creating Installment Plan (if installment plans is allowed)	0.00
Amount Transferred To Installment Plan	0.00
Installment Amount	RECEIVED 0.00
Total Amount Credited	0.00
Total Amount Debited (Other Than Amounts Assessed)	MAY 22 2019 0.00
Total Amount Due	Environmental Department 2,300.00

REMINDER:
 YOU CAN PAY THIS BILL ONLINE WITH A CREDIT CARD OR E-CHECK.
 GO TO [HTTP://WWW.NJ.GOV/DEP/ONLINE](http://www.nj.gov/dep/online) AND CLICK PAY A PAPER INVOICE.
 THE SYSTEM WILL ASK FOR THE INVOICE NUMBER THAT IS FOUND AT THE TOP-RIGHT CORNER OF THIS BILL.
 THERE IS NO FEE FOR PAYING VIA E-CHECK; FOR CREDIT CARD USE, 1.9% OF THE TOTAL + \$1 IS CHARGED.
 TO PAY BILL BY MAIL SEND A CHECK PAYABLE TO TREASURER-STATE OF NEW JERSEY.
 WRITE INVOICE NUMBER AND PROGRAM INTEREST NUMBER ON CHECK.
 RETURN CHECK WITH BOTTOM PORTION OF THIS INVOICE TO THE NJ DEPARTMENT OF TREASURY.
 IF YOU HAVE QUESTIONS SEE BACK OF INVOICE FOR CONTACT INFORMATION.

PAID 5/29/19

See Back Of Page for Billing Inquiries

INVOICE NO.
190451990

DS901F (R 3/14/02)

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL REGULATION-NJPDES

INVOICE NO.
190451990

Program Interest ID
744321

Type of Notice
ORIGINAL (NON-INITIAL)

Billing Date
05/10/19

Due Date
06/19/19

NJEMS Bill ID
000000195836100

Amount Due
\$ 2,300.00

For name and/or address change, check box and write corrections on the back of this invoice.

DO NOT FOLD, BEND OR MARK

Enter the Amount of your payment → \$

RETURN THIS PORTION

with your check made payable to:



46

JCP&L
ATTN: FRANK LAWSON
PO BOX 1911
Morristown

NJ 07962-1911

TREASURER - STATE OF NEW JERSEY
and mail to:

NJ DEPARTMENT OF TREASURY
DIVISION OF REVENUE
PO BOX 417
TRENTON, NJ 08646-0417

EP10101010101010070404030201111110002300000046061904519901461

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INVOICE NO.
190451990

ENVIRONMENTAL REGULATION-NJPDES

Program Interest
CAPE MAY MANUFACTURED GAS PLANT (MGP) FO 705 LAFAYETTE ST Cape May, NJ. 08204 744321

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 2,300.00

Billing Date
05/10/19

Due Date
06/19/19

NJEMS Bill ID
000000195836100

Surface Water GPA New
Discharge to Surface Water

ASSESSMENTS

Start-End Date: 07/01/2018-06/30/2019 Activity: DSW180001 Alternate ID: NJC0262498
 Assessment Type: FEE(Annual Fee) Status: Open (Pending Payment) Amount: \$ 2300.00
 Regulatory Basis: [N.J.A.C. 7:14A- 3.1(a)9]
 Total Amount Assessed: \$ 2,300.00



New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program
Bureau of Groundwater Pollution Abatement
Mail Code 401-05V
PO Box 420
Trenton, NJ 08625-0420
Attention: Greg Bakeman

Arcadis U.S., Inc.
50 Millstone Road
Suite 220
East Windsor
New Jersey 08512
Tel 609 860 0590
Fax 609 860 0491
www.arcadis.com

Subject:

Discharge to Groundwater Permit-by-Rule Annual Compliance Report
Former Cape May MGP Site - (PI #G000005363)
Jersey Central Power & Light
Cape May, New Jersey

ENVIRONMENT

Date:
July 30, 2019

Contact:
Jeremy Cuccuini

Dear Mr. Bakeman:

Phone:
609.366.9090

Arcadis U.S., Inc. (Arcadis), on behalf of Jersey Central Power & Light Company (JCP&L), is submitting this letter report in accordance with the requirements established by the New Jersey Pollutant Discharge Elimination System/Discharge to Ground Water (NJPDES/DGW) Permit-by-Rule (PBR) Authorization of May 26, 2017 and addendum emails dated September 8, 2017 and April 15, 2019 for the groundwater treatment system discharge at the former Cape May manufactured gas plant (MGP) site, located in the City of Cape May, Cape May County, New Jersey (the Site).

Email:
Jeremy.Cuccuini@arcadis.com

Our ref:
30015903

Consistent with the DGW PBR authorization requirements monitoring of the system discharge is being reported annually. This report summarizes the discharge monitoring activities conducted during the period of July 1, 2018 through June 30, 2019.

Treatment System Operation and Discharge Monitoring Activities

The groundwater treatment system (GWTS) extracts groundwater from five extraction wells within the groundwater Classification Exception Area (CEA) located hydraulically upgradient of two low-permeability groundwater containment walls to provide hydraulic control of plume migration. The extracted groundwater is treated with a multimedia filter and two 1,000-lb liquid phase granulated activated carbon (LPGAC) vessels in lead/lag configuration to remove site-related contaminants of concern (COCs) in accordance with the PBR authorization, prior to being reinjected into the aquifer at five injection wells

Bureau of Groundwater Pollution and Abatement
NJDEP
July 30, 2019

located downgradient of the containment walls. In addition to the discharge monitoring, the GWTS was programmed with control interlocks to cease system operation if issues arise that could disrupt treatment to ensure adequate groundwater treatment.

The GWTS started limited operation on September 15, 2017 and reinjection became fully operational on September 20, 2017. In accordance with the PBR requirements, discharge monitoring is currently conducted monthly.

Discharge Monitoring Activities

Pursuant to the PBR authorization, discharge monitoring samples are collected at two compliance points throughout the treatment process: mid-point sample K01 is collected between the lead and lag LPGAC vessels and effluent sample K02 is collected after the LPGAC vessels. PBR compliance samples are collected for analyses per the PBR sampling requirements and include: benzene, ethylbenzene, styrene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno (1,2,3-cd)pyrene, naphthalene, arsenic, iron and manganese.

System sampling activities completed between July 2018 and June 2019 were conducted in accordance with the New Jersey Department of Environmental Protection (NJDEP) *Field Sampling Procedures Manual* (August 2005) per the scope and analysis outlined in the PBR requirements. Prior to sample collection, the system was verified to be in operation and sampling ports were purged. Samples were then collected in laboratory provided sample bottles directly from the sampling ports. Samples were submitted to Hampton-Clark, Inc. of Fairfield, NJ, a New Jersey Certified Laboratory for PBR selected VOCs (Method 8260), base neutrals (Method 625), and metals (200.7/200.8).

During each sampling event, pH, flow, and vapors (using a photo ionization detector (PID)) were measured at the effluent sample location. Consistent with the PBR requirements, the injection area was also visually inspected for evidence of malfunction and the injection area and individual injection wells were monitored for vapors using a PID. Injection monitoring data (gallons injected and flowrate) and field measurements are summarized in Table 1.

Discharge Monitoring Results

Pursuant to the PBR authorization, discharge monitoring and sampling was conducted monthly from July 2018 to June 2019. Results of the effluent discharge monitoring for this period indicate concentrations of all PBR constituents were below regulatory limits or below laboratory method detection limits. Select field parameters and analytical results for this reporting period are summarized in Tables 1 and 2, respectively. Copies of the laboratory data packages are included on CD as Attachment 1.

Following the receipt of each analytical data package, results were evaluated to determine the effectiveness of the system and if any action needed to be taken. Accordingly, benzene concentrations at the mid-point sample (K01) were detected greater than the original PBR regulatory limit of 1 ug/L (micrograms per liter) during the September 12, 2018, November 27, 2018, December 27, 2018, January 30, 2019, March 21, 2019 sampling events. Therefore, consistent with the PBR requirements, upon the receipt of the analytical data carbon changeouts were immediately coordinated. Spent carbon was

Bureau of Groundwater Pollution and Abatement
NJDEP
July 30, 2019

removed and replaced by virgin LPGAC on October 10, 2018, December 18, 2018, January 17, 2019, February 19, 2019, and April 16, 2019 respectively.

Data trends observed between September 12, 2018 through March 21, 2019 identified benzene concentrations at K01 greater than the PBR regulatory limit of 1 ug/L, with no exceedances of the effluent sampling location (K02). As such, on behalf of JCP&L Arcadis requested an amendment to the PBR sampling requirements in April 2019 to increase the allowable concentration of benzene at the mid-point sampling location K01 from 1 ug/L to 50 ug/L. The amendment was submitted and approved by the NJDEP Bureau of Groundwater Pollution Abatement on April 15, 2019, increasing the effluent limit at K01 for benzene from 1 ug/L to 50 ug/L. Benzene concentrations at K01 were detected above the revised PBR limit of 50 ug/L during the May 15, 2019 sampling event; therefore, a carbon changeout was immediately scheduled and spent carbon was removed and replaced by virgin LPGAC on June 19, 2019. Results of the June 2019 K01 mid-point sampling did not indicate a benzene concentration greater than the 50 ug/L limit.

It should also be noted that iron was removed from the PBR effluent requirements as requested in the prior 2018 Discharge to Groundwater Permit-by-Rule Annual Compliance Report, and approved by the New Jersey Department of Environmental Protection Bureau of Groundwater Pollution Abatement on August 1, 2018 due to naturally occurring concentrations observed greater than the NJDEP Class IIA Groundwater Quality Standards (GWQS). Although iron, manganese and arsenic were removed from the effluent monitoring requirements by NJDEP and not required to meet current NJDEP GWQS, effluent sampling for iron, manganese and arsenic are still conducted monthly for system performance monitoring per NJDEP request (Table 2).

Evaluation of Monitoring Results and Recommendations

Discharge effluent sampling results from system startup on September 15, 2017 through the most recent June 26, 2019 event, do not indicate concentrations of PBR constituents above regulatory limits, thus demonstrating that the current GWTS is effective in treating site-related groundwater COCs per the requirements of the PBR authorization. As such, PBR monitoring and analytical data evaluation will continue monthly with annual reporting in June of each year. As indicated by the PBR authorization, Arcadis will immediately report results if a non-compliance condition occurs.

Bureau of Groundwater Pollution and Abatement
NJDEP
July 30, 2019

If you have questions or require additional information, please contact me at 609.366.9033.

Sincerely,

Arcadis U.S., Inc.

Jeremy Cuccuini
Certified Project Manager

Copies:

Anna Sullivan, JCP&L
Andrew Fuller P.E., Arcadis

Enclosures:

Tables

- 1 Summary of Injection Operational and Field Monitoring Data
- 2 Summary of DGW PBR Analytical Results: July 2018-June 2019

Attachment

- 1 DGW PBR Sampling Laboratory Data Packages – July 2018 thru June 2019



New Jersey Department of Environmental Protection
Division of Land Use Regulation
501 East State Street, Second Floor
Mail Code 501-02A P.O. Box 420
Trenton, NJ 08625-0420
Attention: Application Support

Arcadis U.S., Inc.
50 Millstone Road
Building 200
Suite 220
East Windsor
New Jersey 08520
Tel 609 860 0590
Fax 609 448 0890
www.arcadis.com

Subject:
NJDEP Land Use Permit Application Package
Freshwater Wetlands General Permit No. 14 & Coastal General Permit No. 23
JCP&L Cape May Former Manufactured Gas Plant
City of Cape May, Cape May County, New Jersey

ENVIRONMENT

Date:
October 31, 2019

To Whom It May Concern:

Arcadis U.S., Inc. (Arcadis), on behalf of Jersey Central Power & Light Company (JCP&L), is submitting this combined permit application package to the New Jersey Department of Environmental Protection (NJDEP) for a Freshwater Wetlands General Permit No. 14 (FWWGP-14) and Coastal General Permit No. 23 (CGP-23) to address the decommission and installation of monitoring wells related to Cape May Former Manufactured Gas Plant (MGP) site in Cape May, New Jersey. The propose activities are a component of ongoing remediation in support of a long term groundwater monitoring program.

Contact:
Jeremy Cuccuini

Phone:
609.366.9033

Email:
Jeremy.Cuccuini
@arcadis.com

Our ref:
30015903

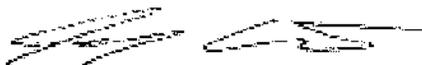
Pursuant to the NJDEP – Division of Land Use Regulation Program (LURP) Form and Regulatory Fee Schedule, please find enclosed LURP form and permit fees (\$2,000) in the form of Arcadis check number 284913 made payable to the "Treasurer – State of New Jersey". Two hard copies of a Compliance Statement, which includes three copies of the required Site Plan, and a CD with a PDF of the full application are also included as part of this permit application package.

Should you have any questions or require additional information, please contact me at 609.366.9033 or Jeremy.Cuccuini@arcadis.com.

NJDEP DLUR
October 31, 2019

Sincerely,

Arcadis U.S., Inc.



Jeremy Cucchini
Senior Project Scientist

Copies:

Anna Sullivan, JCP&L
Jessie Murray, Arcadis
Dave Caballero, Arcadis
Dawn Austin, City of Cape May Board of Education
Clarence Lear, City of Cape May
Paul Menz, State of NJ Department of Transportation
John Geitner, NJ Transit

Enclosures:

- 1 LURP Form
- 2 Application Fees
- 3 Compliance Statement



State of New Jersey
Department of Environmental Protection
 Division of Land Use Regulation
Application Form for Permit(s)/Authorization(s)
 501 E. State Street Mail Code 501-02A P.O. Box 420
 Trenton, NJ 08626-0420
 Phone #: (609) 777-0454 Web: www.nj.gov/dep/landuse



Please print legibly or type the following: Complete all sections and pages unless otherwise noted. Is this project a NJDOT Priority 1 Repair Project? Yes No

Initial Application Response to DLUR Deficiency Extension / Modification Is this project a NJDOT Priority 2 Repair Project? Yes No

1. Applicant Name: Mr./Ms./Mrs. Frank Lawson, JCP&L E-Mail: flawson@firstenergycorp.com
 Address: 300 Madison Avenue, P.O. Box 1911 Daytime Phone: 973-401-8309 Ext. _____
 City/State: Morristown, NJ Zip Code 07962 Cell Phone: _____

2. Agent Name: Mr./Ms./Mrs. Jeremy Cuccuini E-Mail: jeremy.cuccuini@arcadis.com
 Firm Name: Arcadis U.S., Inc. Daytime Phone: 609-366-9033 Ext. _____
 Address: 50 Millstone Road, Building 200, Suite 220 Zip Code 08520 Cell Phone: _____
 City/State: East Windsor, NJ

3. Property Owner: Mr./Ms./Mrs. NJ Transit, NJDOT, City of Cape May, Cape May City Board of Education E-mail: _____
 Address: See attached Daytime Phone: _____ Ext. _____
 City/State: _____ Zip Code _____ Cell Phone: _____

4. Project Name: Cape May Former Manufactured Gas Plant Address/Location: _____
 Municipality: City of Cape May County: _____ Zip Code _____
 Block(s): 1061 Lot(s): 21, 23, 30, 37.02, 38, 42, 51, 54
 N.A.D. 1983 State Plane Coordinates (feet) E(x): 372396 N(y): 38006 Not Longitude/Latitude
 Watershed: Cape May Trib East Subwatershed: Cape May Harbor and Bays
 Nearest Waterway: Cape Island Creek

5. Project Description: Decommissioning of existing monitoring wells and installation of new monitoring wells as part of a long term monitoring program in support of a groundwater Classification Exception Area

Provide if applicable: Previous LUR File # (s): 0502-02-0001.6 WFD170002/CSW 170002 Waiver request ID # (s): _____
0502-02-0001.3 CAF 130001/FWW13001

A. SIGNATURE OF APPLICANT (required):

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining and preparing the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment. If the applicant is an organization such as a corporation, municipal entity, home-owners association etc., the party responsible for the application shall sign on behalf of the organization.

Frank Lawson
 Signature of Applicant
10-10-19
 Date
Frank Lawson, JCP&L
 Print Name

 Signature of Applicant

 Date

 Print Name

**DLUR LURP Form List of Property Owners
Jersey Central Power & Light Company
Cape May Former MGP Facility
Cape May, New Jersey**

Name	Block	Lot	Mailing Address	Contact Info
City of Cape May	1081	23, 37.02, 42.51	City of Cape May 643 Washington Street Cape May, NJ 08204	Clarence Lear, Mayor 609-884-8535 clear@capemeycity.com
Cape May Board of Education	1061	38, 54	Cape May Board of Education 921 Lafayette Street Cape May, NJ 08204	Dawn Austin, President c/o John Thomas, Board Secretary 609-884-8485 [Ext - 225]
State of NJ Dept of Transportation	1061	21	New Jersey Department of Transportation David J. Goldberg Transportation Complex 1035 Parkway Avenue Trenton, NJ 08625	Paul Menz, Operations Permit Office 609-963-1492 paul.menz@dot.nj.gov
NJ Transit	1061	30	New Jersey Department of Transportation One Penn Plaza Newark, NJ 07105	John Gettner, Senior Director Environment, Energy, & Sustainability JGettner@njtransit.com c/o Raymond Maleski 873-491-8301 RMaleski@njtransit.com

C. APPLICANT'S AGENT

I, Frank Lawson, JCP&L, the Applicant/Owner and _____, co-Applicant/Owner authorize to act as my agent/representative in all matters pertaining to my application the following person:

Jeremy Cuccuini
Name of Agent
Senior Project Scientist
Occupation/Profession of Agent

Frank Lawson
Signature of Applicant/Owner

Signature of co-Applicant/Owner

AGENT'S CERTIFICATION:

I agree to serve as agent for the above-referenced applicant:

[Signature]
Signature of Agent

Arcadis U.S., Inc.
Name of Firm

D. STATEMENT OF PREPARER OF PLANS, SPECIFICATIONS, SURVEYOR'S OR ENGINEER'S REPORT

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining and preparing the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

[Signature]
Signature
David Caballero
Print Name
Technical Expert (Engineer), Arcadis U.S., Inc.
Position & Name of Firm
24GE04919300
Professional License # 10/20/2019
Date

E. STATEMENT OF PREPARER OF APPLICATION, REPORTS AND/OR SUPPORTING DOCUMENTS (other than engineering)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining and preparing the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

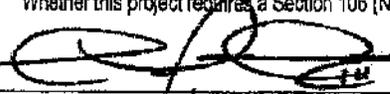
[Signature]
Signature
Jessie Murray, CE
Print Name
Project Ecologist, Arcadis U.S., Inc.
Position & Name of Firm
NA
Professional License # (If Applicable) 10/22/19
Date

B. PROPERTY OWNER'S CERTIFICATION

I hereby certify that the undersigned is the owner of the property upon which the proposed work is to be done. This endorsement is certification that the owner/easement holder grants permission for the conduct of the proposed activity. In addition, written consent is hereby given to allow access to the site by representatives or agents of the Department for the purpose of conducting a site inspection(s) or survey(s) of the property in question.

In addition, the undersigned property owner hereby certifies:

1. Whether any work is to be done within an easement? Yes No
(If answer is "Yes" – Signature/title of reasonable party is required below)
2. Whether any part of the entire project will be located within property belonging to the State of New Jersey? Yes No
3. Whether any work is to be done on any property owned by any public agency that would be encumbered by Green Acres? Yes No
4. Whether this project requires a Section 106 (National Register of Historic Places) Determination as part of a federal approval? Yes No



Signature of Owner
10/18/2019

Date
City of Cape May

Print Name

Signature of Owner/Easement Holder

Date

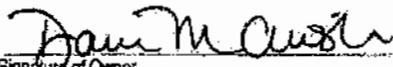
Print Name/Title

B. PROPERTY OWNER'S CERTIFICATION

I hereby certify that the undersigned is the owner of the property upon which the proposed work is to be done. This endorsement is certification that the owner/easement holder grants permission for the conduct of the proposed activity. In addition, written consent is hereby given to allow access to the site by representatives or agents of the Department for the purpose of conducting a site inspection(s) or survey(s) of the property in question.

In addition, the undersigned property owner hereby certifies:

1. Whether any work is to be done within an easement? Yes No
(If answer is "Yes" - Signature/title of responsible party is required below)
2. Whether any part of the entire project will be located within property belonging to the State of New Jersey? Yes No
3. Whether any work is to be done on any property owned by any public agency that would be encumbered by Green Acres? Yes No
4. Whether this project requires a Section 108 (National Register of Historic Places) Determination as part of a federal approval? Yes No



Signature of Owner
10/24/2019

Date
Cape May City Board of Education

Print Name

Signature of Owner/Easement Holder

Date

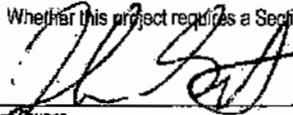
Print Name/Title

B. PROPERTY OWNER'S CERTIFICATION

I hereby certify that the undersigned is the **owner of the property** upon which the proposed work is to be done. This endorsement is certification that the owner/easement holder grants permission for the conduct of the proposed activity. In addition, written consent is hereby given to allow access to the site by representatives or agents of the Department for the purpose of conducting a site inspection(s) or survey(s) of the property in question.

In addition, the undersigned property owner hereby certifies:

1. Whether any work is to be done within an easement? Yes No
(If answer is "Yes" – Signature/title of responsible party is required below)
2. Whether any part of the entire project will be located within property belonging to the State of New Jersey? Yes No
3. Whether any work is to be done on any property owned by any public agency that would be encumbered by Green Acres? Yes No
4. Whether this project requires a Section 106 (National Register of Historic Places) Determination as part of a federal approval? Yes No



Signature of Owner
Date 10/19/19
Print Name **NJ Transit**

John Geltner

Sr. Director, Environment,
Energy, & Sustainability

Signature of Owner/Easement Holder

Date

Print Name/Title

B. PROPERTY OWNER'S CERTIFICATION

I hereby certify that the undersigned is the **owner of the property** upon which the proposed work is to be done. This endorsement is certification that the owner/leaseholder grants permission for the conduct of the proposed activity. In addition, written consent is hereby given to allow access to the site by representatives or agents of the Department for the purpose of conducting a site inspection(s) or survey(s) of the property in question.

In addition, the undersigned property owner hereby certifies:

- | | |
|--|---|
| 1. Whether any work is to be done within an easement?
(If answer is "Yes" - Signature/title of responsible party is required below) | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| 2. Whether any part of the entire project will be located within property belonging to the State of New Jersey? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| 3. Whether any work is to be done on any property owned by any public agency that would be encumbered by Green Acres? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| 4. Whether this project requires a Section 106 (National Register of Historic Places) Determination as part of a federal approval? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |

Paul Douglas Menz
Signature of Owner
8-28-2019
Date
PAUL DOUGLAS MENZ
Print Name
SUPERVISING ENGINEER
NJDOT

Signature of Owner/Easement Holder

Date

Print Name/Title

FEE CALCULATION TIPS:

- Whenever the calculation requires an acreage figure (including the Stormwater calculations), you will need to round UP to the nearest whole number, for example: 0.25 acres gets rounded up to one (1) acre or 2.61 acres gets rounded up to three (3) acres.
- The maximum fee for a CAFRA Individual permit, an Upland Waterfront Development permit, or an In-Water Waterfront Development permit is \$30,000 per permit type. For example: if you are applying for both an upland and an in-water Waterfront Development the maximum fee is applied to each permit for a maximum total of \$60,000 plus any applicable stormwater review fee.
- The stormwater review fee is applied only one time per project, maximum of \$20,000, regardless of multiple applications.

APPLICATION(S) FOR: Please check each permit/authorization that you are applying for and fill in the calculated fee (for each) in the "Fee Paid" column

	Coastal General Permits	Fee Amount	Fee Paid
<input type="checkbox"/>	CZMGP1 Amusement Pier Expansion	\$1,000.00	
<input type="checkbox"/>	CZMGP2 Beach/Dune Activities	\$1,000.00	
<input type="checkbox"/>	CZMGP3 Voluntary Reconstruction Certain Residential/Commercial Dev.	\$1,000.00	
<input type="checkbox"/>	CZMGP4 Development of one or two SFH or Duplexes	\$1,000.00	
<input type="checkbox"/>	CZMGP6 Expansion or Reconstruction SFH/Duplex	\$1,000.00	
<input type="checkbox"/>	CZMGP6 New Bulkhead/Fill Lagoon	\$1,000.00	
<input type="checkbox"/>	CZMGP7 Revetment at SFH/Duplex	\$1,000.00	
<input type="checkbox"/>	CZMGP8 Gablons at SFH/Duplex	\$1,000.00	
<input type="checkbox"/>	CZMGP9 Support Facilities at a Marina	\$1,000.00	
<input type="checkbox"/>	CZMGP10 Reconstruction of Existing Bulkhead	\$1,000.00	
<input type="checkbox"/>	CZMGP11 Hazard Waste Clean-up	\$1,000.00	
<input type="checkbox"/>	CZMGP12 Landfill of Utilities	\$1,000.00	
<input type="checkbox"/>	CZMGP13 Recreation Facility at Public Park	\$1,000.00	
<input type="checkbox"/>	CZMGP14 Bulkhead Construction & Fill Placement	\$1,000.00	
<input type="checkbox"/>	CZMGP15 Construction of Piers/Docks/Ramps in Lagoons	\$1,000.00	
<input type="checkbox"/>	CZMGP16 Minor Maintenance Dredging in Lagoons	\$1,000.00	
<input type="checkbox"/>	CZMGP17 Eroded Shoreline Stabilization	\$1,000.00	
<input type="checkbox"/>	CZMGP18 Avian Nesting Structures	\$1,000.00	
<input type="checkbox"/>	CZMGP19 Modification of Electrical Substations	\$1,000.00	
<input type="checkbox"/>	CZMGP20 Legalization of the Filling of Tidelands	\$1,000.00	
<input type="checkbox"/>	CZMGP21 Construction of Telecommunication Towers	\$1,000.00	
<input type="checkbox"/>	CZMGP22 Construction of Tourism Structures	\$1,000.00	
<input checked="" type="checkbox"/>	CZMGP23 Geotechnical Survey Borings	\$1,000.00	\$1,000
<input type="checkbox"/>	CZMGP24 Habitat Creation, Restoration, Enhancement, Living Shorelines	No Fee	No Fee
<input type="checkbox"/>	CZMGP25 1 to 3 Turbines < 200 Feet	\$1,000.00	
<input type="checkbox"/>	CZMGP26 Wind Turbines < 250 Feet	\$1,000.00	
<input type="checkbox"/>	CZMGP27 Dredge Lagoon (post storm event)	\$1,000.00	
<input type="checkbox"/>	CZMGP28 Dredge post Bulkhead Failure	\$1,000.00	
<input type="checkbox"/>	CZMGP29 Dredge Marina (post storm event)	\$1,000.00	
<input type="checkbox"/>	CZMGP30 Aquaculture Activities	\$1,000.00	
<input type="checkbox"/>	CZMGP31 Placement of Shell (shellfish areas)	\$1,000.00	
<input type="checkbox"/>	CZMGP32 Application of Herbicide in Coastal Wetlands	\$1,000.00	
<input type="checkbox"/>	CZM Permit-by-Certification (On-line application ONLY)	\$1000.00	

	Coastal Individual Permits	Fee Amount	Fee Paid
<input type="checkbox"/>	CAFRA - IP SFH or Duplex	\$2,000	
<input type="checkbox"/>	CAFRA - IP Residential not SFH/duplex	\$3,000 x _____ # of units	
<input type="checkbox"/>	CAFRA - IP Commercial, Industrial or Public	\$3,000 x _____ acres of the site	
<input type="checkbox"/>	WFD - IP SFH or Duplex (Upland/Landward of MHWL)	\$2,000	
<input type="checkbox"/>	WFD - IP Residential not SFH/duplex (Upland/Landward of MHWL)	\$3,000 x _____ # of units	
<input type="checkbox"/>	WFD - IP Commercial, Industrial or Public Development (Upland/Landward of MHWL)	\$3,000 x _____ acres of the site	
<input type="checkbox"/>	WFD - IP SFH or Duplex (Waterward of MHWL)	\$2,000	
<input type="checkbox"/>	WFD - IP Residential not SFH/duplex (Waterward of MHWL)	\$3,000 x _____ acres of water area impacted	
<input type="checkbox"/>	WFD - IP Commercial, Industrial or Public Development (Waterward of MHWL)	\$3,000 x _____ acres of water area impacted	
<input type="checkbox"/>	CSW - IP SFH or Duplex	\$2,000	
<input type="checkbox"/>	CSW - IP All Development not SFH/duplex	\$3,000 x _____ acres of wetlands disturbed	

	Additional Coastal Authorizations	Fee Amount	Fee Paid
<input type="checkbox"/>	Modification of a Coastal GP	\$500	
<input type="checkbox"/>	Minor Technical Modification of a Coastal Wetland Permit	\$500 x _____ # of items to be revised	
<input type="checkbox"/>	Minor Technical Modification of a CAFRA IP	\$500 x _____ # of items to be revised	
<input type="checkbox"/>	Minor Technical Modification of a Waterfront IP	\$500 x _____ # of items to be revised	
<input type="checkbox"/>	Major Technical Modification of a Coastal Wetland Permit	0.30 x _____ original fee = Fee (Minimum \$500)	
<input type="checkbox"/>	Major Technical Modification of a CAFRA IP	0.30 x _____ original fee = Fee (Minimum \$500)	
<input type="checkbox"/>	Major Technical Modification of a Waterfront IP	0.30 x _____ original fee = Fee (Minimum \$500)	
<input type="checkbox"/>	Zone Letter (Waterfront Development Examination)	\$500	
<input type="checkbox"/>	CAFRA Exemption Request	\$500	
<input type="checkbox"/>	CZM General Permit Extension	\$240 x _____ # of GPs to be extended	
<input type="checkbox"/>	Waterfront Development Individual Permit - Extension (Waterward of MHWL)	0.25 x _____ original fee = Fee (Maximum \$3,000)	
<input type="checkbox"/>	Meadowlands District Water Quality Certificate	\$5,000 + (\$2,500 x _____ # acres regulated area disturbed)	
<input type="checkbox"/>	Individual Permit Equivalency/CERCLA	No Fee	No Fee

	Consistency Determination	Fee Amount	Fee Paid
<input type="checkbox"/>	Water Quality Certificate (NOTE: No fee required under the coastal program)	\$5,000 + (\$2,500 x _____ # acres regulated area disturbed)	
<input type="checkbox"/>	Federal Consistency	No Fee	No Fee

APPLICATION(S) FOR: Please check each permit/authorization that you are applying for and fill in the calculated fee (for each) in the "Fee Paid" column

	Freshwater Wetlands General Permits	Fee Amount	Fee Paid
<input type="checkbox"/>	FWGP1 Main. & Repair Exist Feature	\$1,000.00	
<input type="checkbox"/>	FWGP2 Underground Utility Lines	\$1,000.00	
<input type="checkbox"/>	FWGP3 Discharge of Return Water	\$1,000.00	
<input type="checkbox"/>	FWGP4 Hazard Site Invest/Cleanup	\$1,000.00	
<input type="checkbox"/>	FWGP5 Landfill Closures	\$1,000.00	
<input type="checkbox"/>	FWGP6 Filling of Non-Tributary Wetlands	\$1,000.00	
<input type="checkbox"/>	FWGP6A TA Adj. to Non-Tributary Wetlands	\$1,000.00	
<input type="checkbox"/>	FWGP7 Human-made Ditches/Swales in Headwaters	\$1,000.00	
<input type="checkbox"/>	FWGP8 House Additions	\$1,000.00	
<input type="checkbox"/>	FWGP9 Airport Sight-line Clearing	\$1,000.00	
<input type="checkbox"/>	FWGP10A Very Minor Road Crossings	\$1,000.00	
<input type="checkbox"/>	FWGP10B Minor Road Crossings	\$1,000.00	
<input type="checkbox"/>	FWGP11 Outfalls / Intakes Structures	\$1,000.00	
<input type="checkbox"/>	FWGP12 Surveying and Investigating	\$1,000.00	
<input type="checkbox"/>	FWGP13 Lake Dredging	\$1,000.00	
<input checked="" type="checkbox"/>	FWGP14 Water Monitoring Devices	\$1,000.00	\$1,000
<input type="checkbox"/>	FWGP15 Mosquito Control Activities	\$1,000.00	
<input type="checkbox"/>	FWGP16 Creation/Restoration/Enhancement Habitat	No Fee	No Fee
<input type="checkbox"/>	FWGP17 Trails / Boardwalks	\$1,000.00	
<input type="checkbox"/>	FWGP17A Non-Motorized Multi-Use Paths	\$1,000.00	
<input type="checkbox"/>	FWGP18 Dam Repairs	\$1,000.00	
<input type="checkbox"/>	FWGP18 Docks and Piers	\$1,000.00	
<input type="checkbox"/>	FWGP20 Bank Stabilization	\$1,000.00	
<input type="checkbox"/>	FWGP21 Above Ground Utility Lines	\$1,000.00	
<input type="checkbox"/>	FWGP22 Expansion Cranberry Growing (Pinelands)	No Fee	No Fee
<input type="checkbox"/>	FWGP23 Spring Developments	\$1,000.00	
<input type="checkbox"/>	FWGP24 Malfunctioning Individual Septic Systems	No Fee	No Fee
<input type="checkbox"/>	FWGP25 Minor Channel / Stream Cleaning	\$1,000.00	
<input type="checkbox"/>	FWGP26 Redevelop Previously Disturbed Site	\$1,000.00	
<input type="checkbox"/>	FWGP27 Application of herbicide In wetlands	\$1,000.00	

	Freshwater Individual Permits	Fee Amount	Fee Paid
<input type="checkbox"/>	FWW IP-SFH/Duplex-Wetlands	\$2,000	
<input type="checkbox"/>	FWW IP-Wetlands (not SFH/Duplex)	\$5,000 + (\$2,500 x # acres FWW disturbed)	
<input type="checkbox"/>	FWW IP-SFH/Duplex-Open Water	\$2,000	
<input type="checkbox"/>	FWW IP-Open Water (not SFH/Duplex)	\$5,000 + (\$2,500 x # acres FWW disturbed)	

	Freshwater Wetlands Transition Area Waivers	Fee Amount	Fee Paid
<input type="checkbox"/>	TAW Averaging Plan	With valid LOI \$1,000 + (\$100 x # acres TA disturbed)	
<input type="checkbox"/>	TAW Hardship Reduction		
<input type="checkbox"/>	TAW Reduction per N.J.A.C. 7:7A-9.1(d)		
<input type="checkbox"/>	TAW Special Activity Individual Permit		
<input type="checkbox"/>	TAW Special Activity Linear Development	Without valid LOI \$1000 + (\$100 x # acres TA disturbed) + LOI Fee	
<input type="checkbox"/>	TAW Special Activity Redevelopment		
<input type="checkbox"/>	TAW Special Activity Stormwater		

	Letter of Interpretation	Fee Amount	Fee Paid
<input type="checkbox"/>	LOI Presence Absence	\$1,000.00	
<input type="checkbox"/>	LOI Footprint of Disturbance (3 Maximum)	\$1,000.00 each	
<input type="checkbox"/>	LOI Delineation < 1.00 Acres	\$1,000.00	
<input type="checkbox"/>	LOI Verification	\$1,000 + (\$100 x # of acres of the site)	
<input type="checkbox"/>	LOI Partial Site Verification	\$1,000 + (\$100 x # of acres of the site subject to LOI)	
<input type="checkbox"/>	LOI Extension Presence/Absence, Footprint, Delineation < 1 acre (Re-issuance)	\$500	
<input type="checkbox"/>	LOI Extension Line Verification (Re-issuance)	0.50 x original fee (Minimum \$500)	

	Additional Freshwater Wetlands Authorizations	Fee Amount	Fee Paid
<input type="checkbox"/>	FWGP Administrative Modification	No fee	No Fee
<input type="checkbox"/>	FWGP Minor technical modification	\$500.00	
<input type="checkbox"/>	FWGP Major technical modification	\$500.00	
<input type="checkbox"/>	Individual Permit Administrative Modification	No Fee	No Fee
<input type="checkbox"/>	Individual Permit Minor Technical Modification	\$500.00	
<input type="checkbox"/>	Individual Permit Major Technical Modification	0.30 x original fee (Minimum \$500)	
<input type="checkbox"/>	TAW Administrative Modification	No Fee	No Fee
<input type="checkbox"/>	TAW Minor Technical Modification	\$500.00	
<input type="checkbox"/>	TAW Major Technical Modification	0.30 x original fee (Minimum \$500)	
<input type="checkbox"/>	FWGP Extension	\$500 x # of items to be extended	
<input type="checkbox"/>	Individual Permit/Open Water Permit Extension	0.30 x original fee (Minimum \$500)	
<input type="checkbox"/>	TAW Extension	\$500 x # of items to be extended	
<input type="checkbox"/>	Freshwater Wetlands Exemption	\$500.00	
<input type="checkbox"/>	TAW Exemption	\$500.00	
<input type="checkbox"/>	Permit Equivalency/CERCLA	No Fee	No Fee

	Highlands	Fee Amount	Fee Paid
<input type="checkbox"/>	Pre-application Meeting	\$500.00	
<input type="checkbox"/>	Resource Area Determination Boundary Delineation < one acre	\$500.00	
<input type="checkbox"/>	Resource Area Footprint of Disturbance	\$500 + (\$50 x # of acres of the site)	
<input type="checkbox"/>	Resource Area Determination Verification (> one acre)	\$750 + (\$100 x # of acres of the site)	
<input type="checkbox"/>	Resource Area Determination Extension	0.25 x original fee (Minimum \$250)	
<input type="checkbox"/>	HPAAGP 1/ Habitat Creation/Enhance	No Fee	No Fee
<input type="checkbox"/>	HPAAGP 2 Bank Stabilization	\$500.00	
<input type="checkbox"/>	Preservation Area Approval (PAA)		
<input type="checkbox"/>	PAA with Waiver (Specify type below)		
	Waiver Type:		
<input type="checkbox"/>	HPAA Extension	\$1,000	

APPLICATION(S) FOR: Please check each permit/authorization that you are applying for and fill in the calculated fee (for each) in the "Fee Paid" column

	Flood Hazard Area General Permits	Fee Amount	Fee Paid
<input type="checkbox"/>	FHAGP1 Channel Clean w/o Sediment Removal	No Fee	
<input type="checkbox"/>	FHAGP1 Channel Clean w/Sediment Removal	No Fee	
<input type="checkbox"/>	FHAGP2 Mosquito Control	\$1,000.00	
<input type="checkbox"/>	FHAGP3 Scour Protection Bridges/Culverts	\$1,000.00	
<input type="checkbox"/>	FHAGP4 Creation/Restoration/Enhancement of Habitat and Water Quality Values and Functions	No Fee	
<input type="checkbox"/>	FHAGP5 Reconstruction and/or Elevation of Building in a Floodway	No Fee	
<input type="checkbox"/>	FHAGP6 Construction of One SFH/Duplex and Driveway	\$1,000.00	
<input type="checkbox"/>	FHAGP7 Relocation of Manmade Roadside Ditches for Public Roadway Improvements	\$1,000.00	
<input type="checkbox"/>	FHAGP8 Placement of Storage Tanks	\$1,000.00	
<input type="checkbox"/>	FHAGP9 Construction/Reconstruction of Bridge/Culvert Across Water < 50 Acres	\$1,000.00	
<input type="checkbox"/>	FHAGP10 Construction/Reconstruction of Bridge/Culvert Across Water > 50 Acres	\$1,000.00	
<input type="checkbox"/>	FHAGP11 Stormwater Outfall Along Regulated Water <50 Acres	\$1,000.00	
<input type="checkbox"/>	FHAGP12 Construction of Footbridges	\$1,000.00	
<input type="checkbox"/>	FHAGP13 Construction of Trails and Boardwalks	\$1,000.00	
<input type="checkbox"/>	FHAGP14 Application of herbicide in Riparian zone	\$1,000.00	

	Additional Flood Hazard Area Authorizations	Fee Amount	Fee Paid
<input type="checkbox"/>	FHA Hardship Exception Request	\$4,000	
<input type="checkbox"/>	FHA GP Administrative Modification	No Fee	No Fee
<input type="checkbox"/>	FHA GP Minor technical modification	\$500 x _____ # of project elements to be revised	
<input type="checkbox"/>	FHA GP Major technical modification	0.30 x _____ original fee (Minimum \$500)	
<input type="checkbox"/>	FHA Individual Permit Administrative Modification	No Fee	No Fee
<input type="checkbox"/>	FHA Individual Permit Minor Technical Modification	\$500 x _____ # of project elements to be revised	
<input type="checkbox"/>	FHA Individual Permit Major Technical Modification	0.30 x _____ original fee (Minimum \$500)	
<input type="checkbox"/>	FHA Verification Administrative Modification	No Fee	No Fee
<input type="checkbox"/>	FHA Verification Minor Technical Modification	\$500 x _____ # of project elements to be revised	
<input type="checkbox"/>	FHA Verification Major Technical Modification	0.30 x _____ original fee (Minimum \$500)	
<input type="checkbox"/>	FHA GP Extension	\$240	
<input type="checkbox"/>	FHA Individual Permit Extension	0.25 x _____ original fee	
<input type="checkbox"/>	FHA Verification Extension of Methods 1, 2, 3, 5, or Riparian Zone Only	\$240	
<input type="checkbox"/>	FHA Verification Extension of Methods 4 or 6	0.25 x _____ original fee	
<input type="checkbox"/>	FHA Individual Permit Equivalency/CERCLA	No Fee	No Fee
<input type="checkbox"/>	FHA GP Administrative Modification	No Fee	No Fee

	Flood Hazard Area Individual Permits	Fee Amount	Fee Paid
<input type="checkbox"/>	FHA - IP SFH and/or Accessory Structures	\$2,000	
<input type="checkbox"/>	Individual Permit (Fee is calculated by adding the base fee to the specific elements below)	\$3,000 Base Fee	
	FHA - IP Utility*	+\$1,000 x _____ # of water crossings	
	FHA - IP Bank/Channel (No Calculation Review) *	+\$1,000	
	FHA - IP Bank/Channel (With Calculation Review) *	+\$4,000 + (\$400 x _____ per 100 linear ft.)	
	FHA - IP Bridge/Culvert/Footbridge/Low Dam (No Calculation Review)*	+\$1,000 x _____ # of structures	
	FHA - IP Bridge/Culvert/Footbridge/Low Dam (With Calculation Review) *	+\$4,000 x _____ # of structures	
	FHA - Review of Flood Storage Displacement (net fill) Calculations*	+\$4,000	
	Total	IP Review Fee	

	Stormwater Review Fee (Maximum Fee = \$20,000)	Fee Amount (Round UP to the nearest whole number)	Fee Paid
<input type="checkbox"/>	Stormwater Review (Fee is calculated by adding the base fee to the specific elements below)	\$3,000 Base Fee	
	Review of Groundwater Calculations	+\$250 x _____ # acres disturbed	
	Review of Runoff Quantity Calculations	+\$250 x _____ # acres disturbed	
	Review of Water Quality Calculations	+\$250 x _____ # acres impervious surface	
	Total	Stormwater Review Fee	

	Flood Hazard Area Verifications	Fee Amount	Fee Paid
<input type="checkbox"/>	Verification-Delineation of Riparian Zone Only	\$1,000	
<input type="checkbox"/>	Verification-Method 1 (DEP Delineation) *	\$1,000	
<input type="checkbox"/>	Verification-Method 2 (FEMA Tidal Method) *	\$1,000	
<input type="checkbox"/>	Verification-Method 3 (FEMA Fluvial Method) *	\$1,000	
<input type="checkbox"/>	Verification-Method 4 (FEMA Hydraulic Method)	\$4,000 + (\$400 x _____ per 100 linear feet)	
<input type="checkbox"/>	Verification-Method 5 (Approximation Method)	\$1,000	
<input type="checkbox"/>	Verification-Method 6 (Calculation Method)	\$4,000 + (\$400 x _____ per 100 linear feet)	

	Applicability Determination	Fee Amount	Fee Paid
<input type="checkbox"/>	Coastal Applicability Determination	No Fee	No Fee
<input type="checkbox"/>	Flood Hazard Applicability Determination	No Fee	No Fee
<input type="checkbox"/>	Highlands Jurisdictional Determination	No Fee	No Fee
<input type="checkbox"/>	Executive Order 215	No Fee	No Fee

TOTAL FEE:	\$2,000
CHECK NUMBER:	28493

*Fee not applicable to (1) SFH

*Fee not applicable to (1) SFH

APPLICANT NAME: Jersey Central Power & Light

FILE # (if known):

0502-02-0001

APPLICATION FORM - APPENDIX I

Section 1: Please provide the following information for the overall project site. All area measurements shall be recorded in acres to the nearest thousandth (0.001 acres).

<u>PROPOSED:</u>	<u>PRESERVED</u>	<u>UNDISTURBED</u>	<u>DISTURBED</u>
<i>RIPARIAN ZONE</i>	_____	_____	_____
<i>CZMRA FORESTED (CZMRA IP - Only)</i>	_____	_____	_____
<i>E & THABITAT Endangered and/or Threatened</i>	_____	_____	0.224 combined high and low marsh
<i>FRESHWATER WETLANDS</i>	_____	_____	0.024 high marsh

Section 2: Please provide the following information for each permit/authorization requested pursuant to the Freshwater Wetlands Protection Act. All area measurements shall be recorded in acres to the nearest thousandth (0.001 acres). Use additional sheets if necessary

PERMIT TYPE	GP14	WETLAND TYPE <i>Emergent, Forest, Shrub, Etc.</i>	High marsh	RESOURCE CLASSIFICATION <i>Ordinary, Intermediate, Exceptional, EPA, Etc.</i>	Exceptional
<u>PROPOSED DISTURBANCE:</u>		<u>WETLANDS</u>	<u>TRANSITION AREA</u>	<u>SOW</u>	
FILLED		_____	_____	_____	
EXCAVATED		_____	_____	_____	
CLEARED		_____	_____	_____	
TEMPORARY DISTURBANCE		0.024	0.189	_____	

PERMIT TYPE		WETLAND TYPE <i>Emergent, Forest, Shrub, Etc.</i>		RESOURCE CLASSIFICATION <i>Ordinary, Intermediate, Exceptional, EPA, Etc.</i>	
<u>PROPOSED DISTURBANCE:</u>		<u>WETLANDS</u>	<u>TRANSITION AREA</u>	<u>SOW</u>	
FILLED		_____	_____	_____	
EXCAVATED		_____	_____	_____	
CLEARED		_____	_____	_____	
TEMPORARY DISTURBANCE		_____	_____	_____	

284913

Bank of America, N.A.

70-2328/719 IL

CHECK DATE

October 10, 2019

ARCADIS A World of Possibilities
for restoration and
built assets
630 Plaza Drive, Suite 600 • Highlands Ranch, Colorado 80129
Tel 720/344-3500 • Fax 720/344-3535

PAY Two thousand and 00/100

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TO State Of New Jersey
PO Box 420
Trenton, NJ 08625
United States

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Details on back.

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284913

Check Date: 10/10/2019

Invoice Number	Date	Voucher	Amount	Discount	Previous Pay	Net Amount
10092019	10/09/2019	34075310	\$2,000.00			\$2,000.00
State Of New Jersey		TOTAL	\$2,000.00			\$2,000.00
ABOFAA	C284913C	1010554				

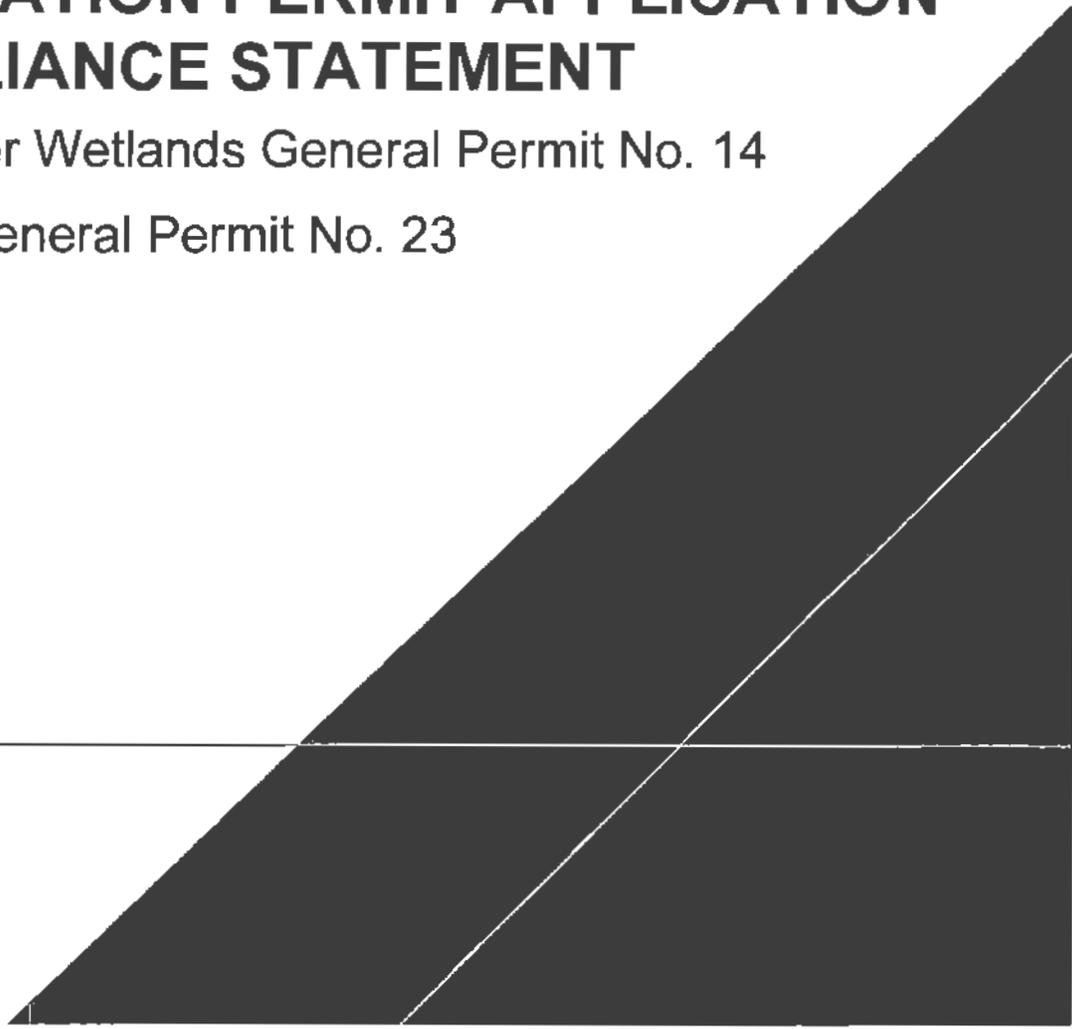


NJDEP DIVISION OF LAND USE REGULATION PERMIT APPLICATION COMPLIANCE STATEMENT

Freshwater Wetlands General Permit No. 14

Coastal General Permit No. 23

October 2019



NJDEP Division of Land Use Regulation Permit Application Compliance Statement

**NJDEP DIVISION OF
LAND USE
REGULATION PERMIT
APPLICATION
COMPLIANCE
STATEMENT**

Freshwater General Permit No. 14 &
Coastal General Permit No. 23



David Caballero, P.E. NJ 24GE04919300
Technical Expert



Jessie E. Murray, CE
Staff Ecologist



Gwen Miller-Dannelongue
Environmental Scientist

Prepared for:

Jersey Central Power & Light
A FirstEnergy Company
300 Madison Avenue
Morristown, New Jersey 07962

Prepared by:

Arcadis U.S., Inc.
50 Millstone Road
Building 200
Suite 220
East Windsor
New Jersey 08520
Tel 609 860 0590
Fax 609 448 0890

Our Ref.:

30015903

Date:

October 2019

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NJDEP Division of Land Use Regulation Permit Application Compliance Statement

CONTENTS

Cover Letter

LURP Form

Application Fee

Compliance Statement

TABLES iii

FIGURES ii

ATTACHMENTS iv

1 Introduction 1

1.1 Scope 1

1.2 Report Organization 1

2 Site Description 3

2.1 Site Location and Ownership 3

2.2 Site History 3

2.2.1 Recent Remedial Activities 4

3 Environmental inventory 5

3.1 Topography 5

3.2 Hydrology 5

3.3 Soil 5

3.4 Vegetation 6

3.5 Threatened and Endangered Species 6

3.6 Waters and Wetlands 7

3.6.1 Coastal Marsh 8

3.6.2 Freshwater Wetlands 8

3.6.3 Wetland Resource Value Classification 8

3.6.4 Tidelands 8

4 Project Description 9

4.1 Access and Erosion Control 9

4.2 Decommissioning of Existing Wells 9

4.3 Monitoring Well Installation 10

NJDEP Division of Land Use Regulation Permit Application Compliance Statement

4.4	Surveying	10
4.5	Summary of Disturbances and Restoration	10
4.6	Schedule	11
5	N.J.A.C. 7:7A Regulatory Compliance	12
5.1	Conditions Applying to General Permits	12
5.2	Conditions Applying to General Permit 14	17
6	N.J.A.C. 7:7 Regulatory Compliance	18
6.1	Subchapter 1 – General Provisions	18
6.2	Subchapter 6 – General Permit 23	19
6.3	Subchapter 9 – Special Areas	22
6.3.1	Shellfish Habitat (7:7-9.2)	23
6.3.2	Prime Fishing Areas (7:7-9.4)	23
6.3.3	Finfish Migratory Pathways (7:7-9.5)	23
6.3.4	Submerged Infrastructure Routes (7:7-9.12)	24
6.3.5	Intertidal and Subtidal Shallows (7:7-9.15)	24
6.3.6	Coastal High-Hazard Areas (7:7-9.18)	24
6.3.7	Filled Water’s Edge (7:7-9.23)	24
6.3.8	Flood Hazard Areas (7:7-9.25)	24
6.3.9	Riparian Zones (7:7-9.26)	25
6.3.10	Wetlands (7:7-9.27)	25
6.3.11	Wetland Buffers (7:7-9.28)	26
6.3.12	Intermittent Stream Corridors (7:7-9.30)	26
6.3.13	Historic and Archaeological Resources (7:7-9.34)	26
6.3.14	Endangered or Threatened Wildlife or Plant Species Habitats (7:7-9.36)	26
6.3.15	Critical Wildlife Habitats (7:7-9.37)	27
6.3.16	Public Open Space (7:7-9.38)	27
6.3.17	Special Hazard Areas (7:7-9.39)	28
6.3.18	Geodetic Control Reference Marks (7:7-9.45)	28
6.3.19	Lands and Waters Subject to Public Trust Rights (7:7-9.48)	28
6.4	Subchapter 17 – Mitigation	28
7	N.J.A.C. 7:13 Regulatory Compliance	30

NJDEP Division of Land Use Regulation Permit Application Compliance Statement

7.1	Subchapter 3 – Determining the Flood Hazard Area and Floodway	30
7.2	Subchapter 4 - Determining the Riparian Area.....	30
7.3	Subchapter 5 – Verifications	30
7.4	Subchapter 6 - Conditions Applicable to an Authorization Pursuant to a General Permit-by-Certification	30
7.5	Subchapter 8 – General Permit by Certification 14	32
8	Summary and Conclusions	34
9	References.....	35

TABLES

- 1 Threatened and Endangered Species Documented in Project Area
- 2 Threatened and Endangered Species Documented within 1-mile of Project Area
- 3 Summary of Disturbances to Regulated Areas (in Text)
- 4 N.J.A.C. 7:7 – Subchapter 9: Special Areas

FIGURES

- 1 USGS Site Location Map
- 2 Aerial Site Location Map
- 3 Tax Parcel Map
- 4 Cape May County Road Map
- 5 NRCS Soil Map
- 6 NJDEP Landscape Map
- 7 NJDEP Landscape Map – One Mile Radius

NJDEP Division of Land Use Regulation Permit Application Compliance Statement

ATTACHMENTS

- 1 Application Checklists
- 2 Notification
- 3 Previous Permits and Correspondence
- 4 Photolog
- 5 Natural Heritage Database Search Results
- 6 IPaC Search Results
- 7 Site Plan
- 8 Tidelands Documentation
- 9 New Jersey Register of Historic Places
- 10 FEMA FIRM Mapping



300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

November 13, 2019

New Jersey Department of Treasury
Division of Revenue
PO Box 417
Trenton, NJ 08646-0417

Certified Mail Article Number 7017 0190 0000 5717 6186

To whom it may concern:

Jersey Central Power and Light Company (JCP&L) encloses payment for the following NJDEP Site Remediation – Permit Fee invoice:

Invoice No. 191897150
Period Covered: 10/24/2019 – 10/24/2019
Amount: \$550.00
Amount Paid: \$550.00
Cape May MGP Site
PI #: G000005363

Enclosed please find check number 2908030 in the amount of \$550.00, which covers the summary of charges for the current invoice period.

Sincerely,

A handwritten signature in cursive script that reads "Denise E. Johnson".

Denise E. Johnson
Admin to:
Anna F. Sullivan
Project Manager

Enclosures

cc: Dave Thompson, LSRP

2908030



VOID IF NOT CASHED WITHIN 90 DAYS

50-937

213

CHECK DATE

AMOUNT

Check No. 2908030

11 | 05 | 2019

*****550.00

PAY TO THE ORDER OF
TREASURER STATE OF NEW JERSEY
NJ DEPARTMENT OF TREASURY
PO BOX 417
TRENTON, NJ 08646-0417

EXACTLY *****550 DOLLARS 00 CENTS

Treasurer
FirstEnergy Corp.

Morgan Chase Bank, Syracuse, NY 13205

⑈ 2908030⑈ ⑆ 021309379⑆ 601864788⑈

NDOR NO. 0210000188 DOC NO. 2000374694

PO NO	INVOICE / RCPT #	DATE	DOCUMENT #	VENDOR INV AMT	DISCOUNT	NET AMOUNT
	191897150	11/04/2019	1902563641	550.00	0.00	550.00

& CHECK INQUIRY, CONTACT FIRSTENERGY ACCOUNTS PAYABLE AT APHELP@FIRSTENERGYCORP.COM.

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INVOICE NO.

SITE REMEDIATION - PERMIT FEE

191897150

Program Interest
CAPE MAY MANUFACTURED GAS PLANT SITE FOR 705 LAFAYETTE ST Cape May City, NJ. 08240 G000005363

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 550.00

Billing Date
10/24/19

Due Date
12/23/19

NJEMS Bill ID
000000203090100

Summary	
Total Amount Assessed	550.00
Amount Received Before Creating Installment Plan (if installment plans is allowed)	RECEIVED 0.00
Amount Transferred To Installment Plan	0.00
Installment Amount	NOV 04 2019 0.00
Total Amount Credited	Environmental Department 0.00
Total Amount Debited (Other Than Amounts Assessed)	0.00
Total Amount Due	550.00
REMINDER:	
- RETURN THE PAYMENT STUB BELOW WITH A CHECK MADE PAYABLE TO: TREASURER - STATE OF NEW JERSEY	
- WRITE THE INVOICE NUMBER ON THE MEMO LINE OF YOUR CHECK	
- PAYMENT CAN BE MADE ELECTRONICALLY VIA THE PAY A PAPER INVOICE LINK AT WWW.NJDEPONLINE.COM	
- SEE BACK OF THIS PAGE FOR DEP CONTACT INFORMATION	
- FOR GENERAL INFORMATION GO TO: WWW.NJ.GOV/DEP/SRP/SRRA	
- 2ND/3RD NOTICES: FAILURE TO PAY WILL RESULT IN COLLECTION AGENCY, ENFORCEMENT ACTION, PENALTY A MD OR LIEN.	

See Back Of Page for Billing Inquiries

Handwritten initials and date: J.R. 11-6-19

INVOICE NO.
191897150

08901F (R 3/14/02)

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INVOICE NO.

SITE REMEDIATION - PERMIT FEE

191897150

Program Interest ID
G000005363

Type of Notice
ORIGINAL (NON-INITIAL)

Billing Date
10/24/19

Due Date
12/23/19

NJEMS Bill ID
000000203090100

Amount Due
\$ 550.00

For name and/or address change, check box and write corrections on the back of this invoice.

DO NOT FOLD, BEND OR MARK

Enter the Amount of your payment →

\$ 550.00

RETURN THIS PORTION

with your check made payable to:

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NJ DEPARTMENT OF TREASURY
DIVISION OF REVENUE
PO BOX 417
TRENTON, NJ 08646-0417



86

JERSEY CENTRAL POWER AND LIGHT
ATTN: Frank Lawson
PO BOX 1911
Morristown

NJ 07962-1911

EP101010101700000000005030603111110000550000001451918971506868



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INVOICE NO.
191897150

SITE REMEDIATION - PERMIT FEE

Program Interest
CAPE MAY MANUFACTURED GAS PLANT SITE FOR 705 LAFAYETTE ST Cape May City, NJ. 08240 G000005363

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 550.00

Billing Date
10/24/19

Due Date
12/23/19

NJEMS Bill ID
000000203090100

Remedial Action Permit - Initial Soil
This bill was created by the Assessments Trigger.

ASSESSMENTS

Start-End Date: 10/24/2019-10/24/2019 Activity: RAP140001
 Assessment Type: FEE(RAPermitAnnual-Soil w/EC) Status: Open (Pending Payment)
 Regulatory Basis: Amount: \$ 550.00
 Total Amount Assessed: \$ 550.00

State of New Jersey Department of Environmental Protection
Division of Land Use Regulation
501 E. State Street
501-02A P.O. Box 420
Trenton, New Jersey 08609
Attn: Mitigation Unit, Andrew Jensen

Arcadis U.S., Inc.
50 Millstone Road
Building 200
Suite 220
East Windsor
New Jersey 08520
Tel 609 860 0590
Fax 609 448 0890
www.arcadis.com

ENVIRONMENT

Subject:
2019 Monitoring Report & Revised Construction Completion Report
Cape May Former Manufactured Gas Plant Site
Lafayette Street
City of Cape May, New Jersey
File Nos.: 0502-02-0001.3 & 0502-02-0001.6

Date:
December 19, 2019

Contact:
Jessie E. Murray

Dear Mr. Jensen:

Phone:
609.366.9027

On behalf of Jersey Central Power & Light Company (JCP&L), Arcadis U.S., Inc. (Arcadis) is submitting the attached 2019 Monitoring Report and Revised Construction Completion Report as required by the New Jersey Department of Environmental Protection (NJDEP) Freshwater Wetlands General Permit Number 4, Individual Upland Waterfront Development Permit, and Individual Coastal Wetlands Permit under File Nos.: 0502-02-0001.3 & 0502-02-0001.6. Activities conducted under the approved permits allowed JCP&L to complete remedial soil excavation and containment activities, as approved by the NJDEP – Site Remediation Program (SRP) and in accordance with the Administrative Consent Order (ACO) dated October 29, 1991 at the Cape May Former Manufactured Gas Plant Site located in the City of Cape May, Cape May County, New Jersey. Following the completion of excavation and containment of MGP-impacted soils, all temporarily disturbed wetlands and wetland transition areas were restored in-place, and in-kind consistent with the approved permits and Mitigation Plan. The Revised Construction Completion Report includes a final As-Built plan and represents baseline conditions. The 2019 Monitoring Report details site conditions through the fall of 2019, which is two growing seasons after completion of all construction and planting activities in upland areas and one year after completion of all construction and planting activities in wetlands. The Monitoring Report is intended to enable NJDEP to evaluate the degree of

Email:
Jessie.Murray@arcadis.com

Our ref:
30015903

Mr. Jensen
December 19, 2019

success towards achieving the defined performance criteria within the defined monitoring interval.

If you have any questions or concerns regarding this report, please do not hesitate to contact me at Jessie.Murray@arcadis-us.com or 609.366.9027.

Sincerely,

Arcadis U.S., Inc.

A handwritten signature in black ink, appearing to read "Jessie E. Murray". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Jessie E. Murray, CE
Project Ecologist

Copies:

Doug Partridge, Arcadis
Jeremy Cuccuini, Arcadis
Anna Sullivan, JCP&L

Enclosures:

2019 Monitoring Report
Revised Construction Completion Report

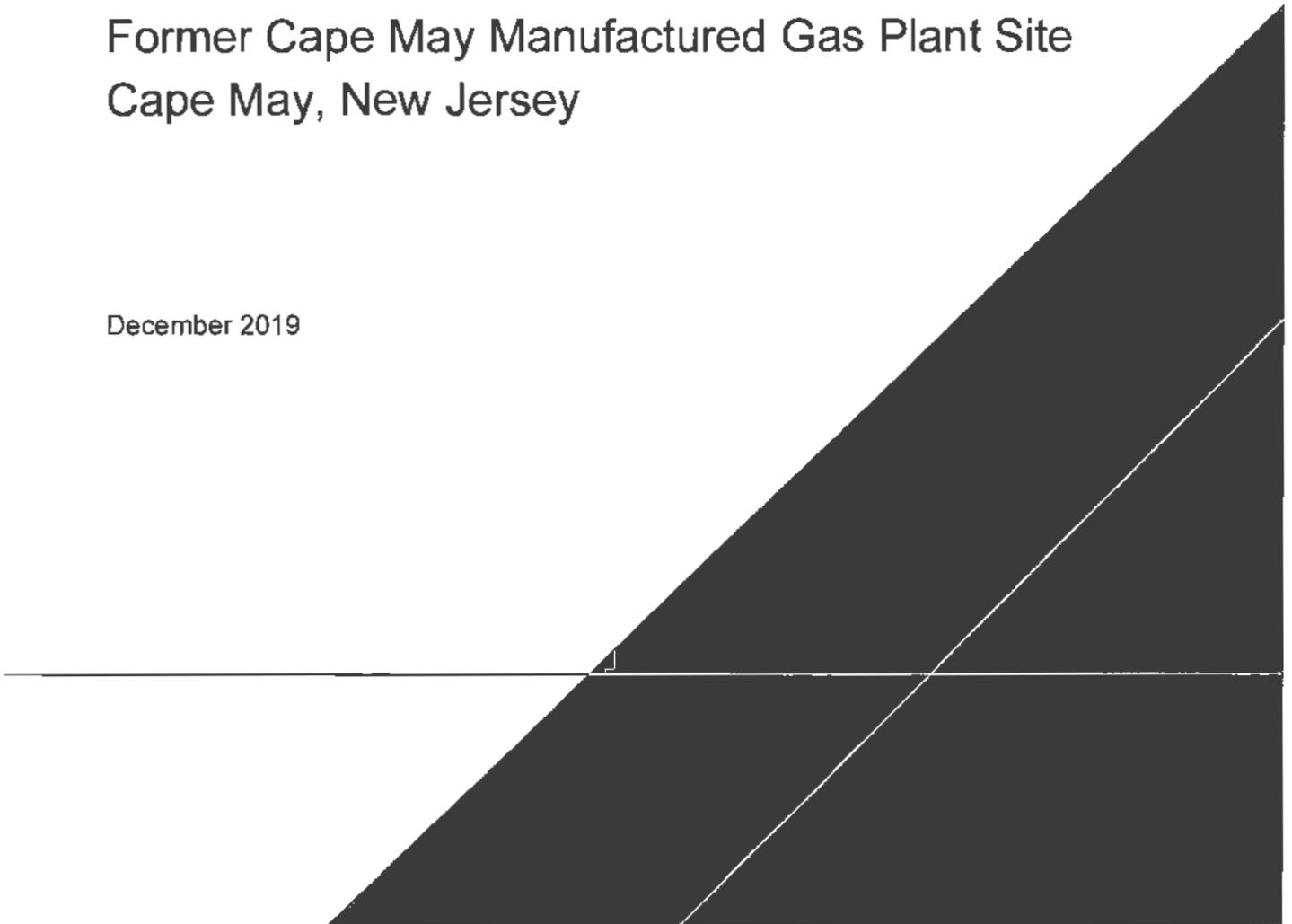


Jersey Central Power & Light Company

2019 MONITORING REPORT

Former Cape May Manufactured Gas Plant Site
Cape May, New Jersey

December 2019



2019 MONITORING REPORT

2019 MONITORING REPORT

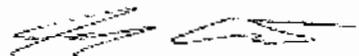
Former Cape May Manufactured Gas
Plant Site Cape May, New Jersey



Doug Partridge
Principal Ecologist



Jessie Murray
Project Ecologist



Jeremy Cuccuini
Project Manager

Prepared for:
Jersey Central Power & Light
300 Madison Avenue
P.O. Box 1911
Morristown, NJ 07962

Prepared by:
Arcadis U.S., Inc.
50 Millstone Road
Building 200
Suite 220
East Windsor
New Jersey 08520
Tel 609 860 0590
Fax 609 448 0890

Our Ref.:
30015903

Date:
December 2019

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2019 MONITORING REPORT

CONTENTS

1. Introduction	1
1.1 Mitigation Project Objectives	1
1.2 Objectives of Annual Monitoring	2
2. Performance Criteria	4
3. Methods	5
3.1 Wetland Permanent Plot Sampling	5
3.2 Wetland Transition Quadrat Sampling	5
3.3 Wetland Transition Permanent Tree / Shrub Plot Sampling	6
3.4 Photographic Documentation	6
4. Results	7
4.1 Year 1 Wetlands	7
4.1.1 Total Vegetative Cover	7
4.1.2 Invasive Species Cover	7
4.1.3 Evidence of Wetland Hydrology	8
4.2 Year 2 Wetland Transition Area	8
4.2.1 Tree and Shrub Survival/Density	8
4.2.2 Total Vegetative Cover and Invasive Cover	9
5. Adaptive Management Summary	11
5.1 Enhancement Planting and Seeding	11
5.2 Invasive Species Control	11
5.3 2020 Recommended Activities	11
6. Summary	12
7. References	13

2019 MONITORING REPORT

TABLES

- 1 Site Permits Summary
- 2 Restored Regulated Areas Summary
- 3 Cover Class Midpoints
- 4 Wetland Vegetation Monitoring Summary
- 5 Wetland Transition Area Vegetation Monitoring Summary

FIGURES

- 1 Site Location Map
- 2 Site Plan – Aerial
- 3 Cape May County Road Map
- 4 Monitoring Plan

APPENDICES

- A As-Built Plan
- B Raw 2019 Monitoring Data
- C Site Photographs
- D Pesticide Application Field Logs

2019 MONITORING REPORT

1. INTRODUCTION

On behalf of Jersey Central Power & Light Company (JCP&L), Arcadis U.S., Inc. (Arcadis) has prepared this 2019 Monitoring Report in accordance with the New Jersey Department of Environmental Protection (NJDEP) *Mitigation Project Monitoring Reports Checklist for Completeness (Revised: January 2018)*, *Mitigation Project Monitoring Reports for Coastal Wetlands Checklist for Completeness (Revised: January 2018)*, and pursuant to NJDEP Freshwater Wetlands General Permit Number 4 (GP-4) and NJDEP Coastal Wetlands Individual Permit (File Nos. 0502-02-0001.3 FWW14001 and 0502-02-0001.6 FWW160001 CSW160001) and associated permits and permit modifications as summarized in **Table 1**. Activities authorized under these permits allowed JCP&L to complete a phased remedial soil excavation in accordance with the Administrative Consent Order (ACO) dated October 29, 1991 and consistent with the Remedial Action Work Plan (RAWP) (Arcadis 2015) at the Cape May Former Manufactured Gas Plant (MGP) site (site) located in the City of Cape May, Cape May County, New Jersey. A USGS site location map is included as **Figure 1**, an aerial photograph of the project area is provided as **Figure 2**, and a County Road map is provided as **Figure 3**.

Permit applications previously submitted to and approved by the NJDEP provide a general site description and land-use history, ecological characterization of the area prior to implementation of site remediation activities, including wetland delineation and associated data forms, and mitigation plan. The *Construction Completion Report* (Arcadis 2018a) and *Revised Construction Completion Report* (Arcadis 2019), discuss the completion of initial mitigation activities, which includes final grading, planting and seeding activities completed. A Year 1 (2018) Monitoring Report (Arcadis 2018b) documented conditions after the first full growing season within the upland transition area. As such, this report pertains to monitoring and evaluation of progress towards (or deviation from) stipulated performance criteria after the second full growing season following planting efforts within upland transition areas and after the first full growing season following planting efforts within wetlands areas.

Table 1. Site Permits Summary

Permit Phase	Phase 1	Phase 2	Phase 2 Modification	Phase 2 Modification	Phase 2 Modification
File No.	0502-02-0001.3 CAF130001 FWW14001	0502-02-0001.6 WFD160001 CSW160001 FWW160001	0502-02-0001.6 WFD170001Mod CSW170001Mod FWW160001	0502-02-0001.6 WFD170002Mod CSW170002Mod FWW160001	0502-02-0001.6 WFD170002Mod CSW1800001Mod FWW160001
Approval Date	3/17/15	1/9/17	4/20/17	12/6/17	2/28/18

1.1 Mitigation Project Objectives

As discussed in the NJDEP approved Mitigation Plan (Arcadis 2017) and the Revised Construction Completion Report (Arcadis 2019), goals of the mitigation project included improvement of habitat quality

2019 MONITORING REPORT

and ecological function of the coastal wetland system and adjacent upland areas temporarily disturbed during unavoidable site remediation activities.

Project activities included a phased soil excavation in regulated wetlands and associated transition areas (see As-Built drawing included as Appendix A). Specifically, soil excavation activities resulted in the temporary disturbance to 0.003 acres of state open waters, 2.46 acres of intertidal wetlands (i.e., high and low marsh), and 1.39 acres of wetland transitional area. Project areas were restored on-Site and in-kind consistent with the approved Mitigation Plan (Arcadis 2017). Restoration activities also included the conversion of an upland area dominated by invasive bamboo to native intertidal wetlands in order to improve overall site ecological function. Table 2 summarizes the overall acreage requirements identified in the permit approvals (included as an appendix to the Revised Construction Completion Report [Arcadis 2019]) the actual disturbance to regulated areas resulting from implementing the remedial activities, and the area of the habitats restored following the completion of restoration activities to mitigate for temporary disturbances at the site.

Table 2. Restored Regulated Areas Summary

Jurisdictional Habitat	Permitted Temporary Disturbance (ac)	Approved Restoration (ac)	Actual Project Disturbance (ac)	Total Project Restoration (ac)
Upland Wetland Transition	1.44	1.54	1.39	1.48
Wetlands High Marsh	0.49	0.42	0.45	0.33
Wetlands Low Marsh	2.69	2.91	2.01	2.21
State Open Waters	0.02	0.02	0.003	0.003

The mitigation project was designed to re-establish intertidal wetlands and wetlands transitional plant communities at the site through the restoration of six distinct native plant communities, based upon the different hydrologic conditions at the site.

Final planting and seeding activities for upland transition areas and a portion of the wetlands were completed in June 2017 and in remaining wetland areas in May 2019. An As-Built, including planting specifications for each regulated area, is included in Appendix A, and described in more detail in the Revised Construction Completion Report (Arcadis 2019).

1.2 Objectives of Annual Monitoring

Objectives for the annual monitoring are as follows:

- Quantitatively assess the vegetative cover throughout the mitigation site.

2019 MONITORING REPORT

- Illustrate progress toward, or deviation from, stipulated monitoring criteria as defined by the approved Mitigation Plan (Arcadis 2017)
- Provide NJDEP with suitable information to evaluate the existing condition of the site.
- If necessary, trigger corrective actions to move or maintain progress toward stipulated monitoring criteria as defined by the approved Mitigation Plan (Arcadis 2017).

This report details site conditions through the fall of 2019, which is two growing seasons after completion of the first phase of upland restoration activities and one growing season after completion of wetland restoration activities. This report is intended to enable NJDEP, JCP&L and Arcadis to evaluate the continued degree of success toward the defined monitoring criteria.

2019 MONITORING REPORT

2. PERFORMANCE CRITERIA

The overall objective of the mitigation project was to compensate for the temporary loss of regulated wetlands and their associated transitional habitat areas through on-site and in-kind restoration¹. Consistent with the approved Mitigation Plan (Arcadis 2017) as well as NJDEP permit conditions (see permit approvals presented as Appendix A in the Revised Construction Completion Report [Arcadis 2019]), the performance criteria for the upland wetland transition area is as follows:

1. 85 percent (%) survival of mitigation plantings and trees exhibit growth (i.e., a minimum of 5-feet);
2. 85% cover by mitigation plantings; and
3. Less than 10% cover by invasive species.

Additionally, the performance criteria for the wetland area according to NJDEP permit conditions and the *Mitigation Project Monitoring Reports for Coastal Wetlands Checklist for Completeness* includes:

4. 30% cover of mitigation plantings after the first full growing season
5. 60% cover of mitigation plantings after the second full growing season
6. 85% cover of mitigation plantings after the third full growing season; and
7. Less than 10% cover by invasive species.

Consistent with permit conditions, the compliance monitoring interval is intended to occur for a minimum of five years in wetland transition areas and three years in wetland areas until the performance criteria have been met. This report documents conditions after two years of monitoring wetland transition areas and one year of monitoring wetland areas.

¹ Additional forested areas within upland waterfront development area were covered under a donation for offsite mitigation, which is further described in the Construction Completion Reports (Arcadis 2018a, Arcadis 2019).

2019 MONITORING REPORT

3. METHODS

This section describes the methodologies developed to evaluate progress toward (or deviation from) performance criteria. Monitoring activities include field vegetation data collection and photographic documentation.

3.1 Wetland Permanent Plot Sampling

Quantitative monitoring in intertidal wetland areas was completed through 14 permanent sampling plot locations; 3 within high marsh areas and 11 within low marsh areas. The center of each sampling location is established by placement of a 6-foot-tall, metal fence post. Locations of each permanent location were determined in the field and are presented in the Monitoring Plan (Figure 4). All locations are circular one hundredth acre plots. Data collection at each plot includes species identification, percentage cover class (summarized in Table 3; Daubenmire 1959), invasive status, height, and any other relevant growth observations (i.e. documentation of recruitment).

Table 3. Cover Class Midpoints

Percent Cover Range	Cover Class Midpoint
< 1%	0.5
1 – 5 %	3
6 – 15 %	10.5
16 – 25 %	20.5
26 – 50 %	38
51 – 75 %	63
76 – 95 %	85.5
> 95 %	98

Monitoring was also completed at 6 of the planted high marsh islands, which were assessed separately for total vegetative cover.

3.2 Wetland Transition Quadrat Sampling

Random quadrat sampling was performed to characterize vegetation, hydrology, general cover type, and wildlife utilization. Specific to vegetation, the quadrats generally describe conditions in the herbaceous and vine stratus. The total number of herbaceous sample quadrats includes 20 sample quadrats randomly distributed across the three restoration habitat areas (i.e. Maritime Woodland, Mixed Maritime Forest, Maritime Meadow). Locations were determined randomly in the field. Data collected at each quadrat included plant species composition and associated percentage cover class (summarized in Table 3; Daubenmire 1959), invasive status, and wetland indicator status.

In addition, general cover type characterization includes cover percent estimations for various cover types (i.e., vegetation, bare soil, open water, litter/debris). Hydrology characterization, if observed, includes

2019 MONITORING REPORT

qualitative indicators of wetland hydrology such as stained leaves, ponded water, and/or drainage patterns.

3.3 Wetland Transition Permanent Tree / Shrub Plot Sampling

Eleven permanent wetland transition sampling locations were established to evaluate development of both the shrub and tree strata within the restoration site². The center of each sampling location is established by placement of a 6-foot-tall, metal fence post. Locations of each permanent location were determined in the field and are presented in the Monitoring Plan (Figure 4). Seven locations are circular one hundredth acre plots (11.7 feet radius) and four locations are circular one tenth acre plots (37.2 feet radius). Data collection at each plot includes species identification, stem density, total tree and shrub cover, and height measurements for each identified tree and shrub.

3.4 Photographic Documentation

Eleven permanent photo point locations were established throughout the site to provide consistent photo-documentation of the restoration site throughout monitoring. Photo locations are included in the as-built plans (Appendix A) and the attached Monitoring Plan (Figure 4). At each photo point location, photographs were collected at an established height of 5 feet to illustrate growth and cover in these areas through time.

² One permanent upland sampling location, TP-4, was removed as part of the 2019 monitoring program due to overlap with other sampling locations.

2019 MONITORING REPORT

4. RESULTS

This section summarizes monitoring results after the second growing season of restored upland areas and first full growing season of wetlands using the methods outlined in Section 3. Qualitative site visits were conducted during the week of May 20, 2019 and on June 18, 2019 to assess site conditions and identify target invasive species. Two additional site visits were conducted on June 6, 2019 and September 16, 2019 to target invasive species management (discussed further in Section 5). Quantitative field work was performed on September 4, 2019. Permanent monitoring and photo locations are included as Figure 4, raw monitoring data are included as Appendix B, and site photographs as Appendix C.

4.1 Year 1 Wetlands

The following presents the results of the quantitative monitoring for the wetlands.

4.1.1 Total Vegetative Cover

Total vegetative cover was evaluated using data collected at each of the 14 permanent 0.01-acre wetland plot monitoring locations (Figure 4). The total average vegetative cover was approximately 31%, with 99% of this cover dominated by target hydrophytes. Planted species and their respective average canopy cover included: smooth cordgrass (*Spartina alterniflora*, 13%), saltmeadow cordgrass (*Spartina patens*, 7%), and saltgrass (*Distichlis spicata*, 6%). Appendix B includes all identified species per sample plot, in addition to an average canopy cover and proportional species composition of total cover across all permanent wetland plots.

Table 4. Wetland Vegetation Monitoring Summary

Field Measurement	2019
Total Percent Herbaceous Cover	31
Relative Percent Target Species	99
Relative Percent Invasive Species	0.7

Significant recruitment was observed across the wetlands as indicated by a total of 8 species identified in the quadrats and an average of 3 species per 0.01-acre plot. It is anticipated that the species composition of the wetland community will continue to develop throughout the monitoring interval from both planted species as well as natural recruitment.

Consistent with the monitoring protocols discussed in Section 3.1, the high marsh islands were addressed separately. Average total coverage of target species across all high marsh islands was 48%. As such, the total coverage of mitigation plantings in all wetland areas exceeds the Year 1 wetland performance criteria of at least 30% cover.

4.1.2 Invasive Species Cover

The relative invasive cover across the permanent wetland plots was 0.7% cover (Table 4), which meets the performance criteria of less than 10% invasive cover. Observations of common reed (*Phragmites*

2019 MONITORING REPORT

australis) were identified within one of the fourteen permanent plots. The establishment of common reed was likely the result of rhizomes from nearby populations. At this time, no invasive species were identified as a concern to the successional development of the restored plant communities. Stands of common reed found outside of the restoration area have been actively managed since 2018 and will continually need to be monitored and managed, which is further discussed in Section 5 below. In addition, the elevation and expected salinities throughout the majority of restored wetlands is expected to inhibit establishment and growth of common reed.

4.1.3 Evidence of Wetland Hydrology

The restored wetland hydrology is driven by tidal flows through the restored intertidal channels. Low marsh wetlands are influenced by twice daily high tides, and the high marsh wetlands are routinely saturated by spring high tides. Soils within the restored wetlands are continually saturated throughout the year from tidal influence; and Site hydrology been observed to be restored to pre-construction conditions. This observation is based upon observations within the site and adjacent wetlands that were not impacted by construction.

4.2 Year 2 Wetland Transition Area

A total of 7 permanent 0.01-acre sample plots, 4 permanent 0.1-acre plots, and 20 randomly placed 1 square meter herbaceous quadrats were sampled in the fall of 2019 within the restored wetland transition area. Five permanent sample plots were in the Mixed Maritime Forest and six permanent sample plots were in the Maritime Woodland habitats. Herbaceous quadrats were randomly sampled across all three wetland transition habitats (i.e. Maritime Woodland, Mixed Maritime Forest, Maritime Meadow).

4.2.1 Tree and Shrub Survival/Density

The average density of tree and shrub species across the eleven permanent sampling plots was approximately 546 stems per acre and 791 stems per acre, respectively³. The Mitigation Plan represented a planting density of 488 stems per acre for trees and 388 stems per acre for shrubs⁴. Both tree and shrub densities have increased compared to the previous monitoring year. Supplemental plantings were completed in October 2018 based on replacement needs following the one-year plant survival evaluation. Similar to 2018, significant natural recruitment was documented in the tree and shrub stratum in 2019. This is especially true for widespread establishment of groundsel bush (*Baccharis halimifolia*) and Jesuit's bark (*Iva frutescens*). Multiple sample plots within the Mixed Maritime Forest (Figure 4) were dominated by seedlings of these woody species. As such, higher densities than the original plantings are a result of supplemental planting activities, the random sampling, the random nature of initial plantings, and for shrubs, a high number of recruited species. Therefore, the performance criteria of 85% survival of planted trees and shrubs continues to be met in 2019.

Other quantitative data collected at the permanent sampling locations included an average of 5 tree and/or shrub species within each plot, an average tree height of 6 feet, a maximum tree height of 15 feet,

³ Monitoring densities included 516 stems per acre for trees and 468 stems per acre for shrubs in the Mixed Maritime Forest and densities of 572 stems per acre for trees and 1060 stems per acre for shrubs in the Maritime Woodland.

⁴ Planting densities for the Mixed Maritime Forest included a target of 500 stems per acre for trees and 375 stems per acre for shrubs. Planting densities for the Maritime Woodland included a target of 475 stems per acre for trees and 400 stems per acre for shrubs.

2019 MONITORING REPORT

an average shrub height of 4 feet, and a maximum shrub height of 6 feet. Data are summarized in **Table 5**. Raw data are included in **Appendix B**.

Table 5. Wetland Transition Vegetation Monitoring Summary

Field Measurement	2018	2019
Total Percent Herbaceous Cover	78	83
Relative Percent Invasive Species	3	1.4
Tree Density (stems/acre)	483	546
Shrub Density (stems/acre)	625	791
Max / Average Shrub & Max / Average Tree Height (feet)	5 / 3 7 / 5	6 / 4 15* / 6

Note:

* Actual maximum height recorded at 40-feet from established tree within sampling plot. Tree height was not included in average or maximum height calculations.

Trees and shrubs have both continued to grow as compared to 2018, and tree height continues to meet and exceed the minimum performance criteria of 5-feet.

4.2.2 Total Vegetative Cover and Invasive Cover

The total average vegetative cover across the 20 randomly placed 1 square meter quadrats was 83%, with 83% dominated by target species. Total coverage is slightly below the target of 85% cover of mitigation plantings. However, this is an increase in coverage from 2018 (78%). Commonly identified species and their respective average canopy cover were switchgrass (*Panicum virgatum*, 39.1%), big bluestem (*Andropogon gerardii*, 5.7%), New England aster (*Symphotrichum novae-angliae*, 4.2%), partridge pea (*Chamaecrista fasciculata*, 4.1%) and black-eyed Susan (*Rudbeckia hirta*, 3.9%) (**Appendix B**).

Overall, the site was observed to be dominated by target native species. In addition, significant diversity was observed across the site with a total of 47 species identified in the quadrats and an average of 7 species per 1-square meter quadrat. Species diversity and composition have increased slightly since 2018, at 40 species identified and 6 species per 1-square meter quadrat, respectively. The increased composition is likely due to the combination of seed mixes and natural recruitment. The expected successional development of a restoration site includes the initial increase of species composition followed by a decrease in species composition, stabilization, and establishment of species best suited for the microhabitats developed on the site.

Invasive cover was 1.4% with minor coverage in four of the 20 quadrats. At this time, no invasive species were identified as a concern to the successional development of the restored plant communities.

2019 MONITORING REPORT

However, stands of common reed found outside of the restoration area will continually need to be monitored and managed, which is further discussed in Section 5 below.

2019 MONITORING REPORT

5. ADAPTIVE MANAGEMENT SUMMARY

This section summarizes adaptive management activities completed on the site during 2019, as well as summarizes recommendations for 2020. Previous activities performed in 2018 are addressed in the Year 1 (2018) Monitoring Report (Arcadis 2018b). As discussed in Section 4, multiple site visits were conducted to assess site conditions and perform adaptive management activities; qualitative site visits were conducted during the week of May 20, 2019 and on June 18, 2019 and invasive species management was performed on June 6, 2019 and September 16, 2019.

5.1 Enhancement Planting and Seeding

Data presented in Section 3, as well as observations throughout the growing season did not identify the need for enhancement planting or seeding. Performance criteria are generally met, and results have demonstrated a positive trajectory towards meeting them within the monitoring period.

5.2 Invasive Species Control

An adaptive management program that was implemented in 2018, continued throughout the 2019 growing season. Invasive species control for the project area involved spot application of a glyphosate-based herbicide and a non-ionic surfactant to target invasive species using backpack-style sprayers. Site visits occurred on June 6, 2019 and September 16, 2019. Target species included mugwort (*Artemisia vulgaris*), Japanese knotweed (*Fallopia cuspidatum*), honeysuckle (*Lonicera Sp*), mimosa (*Albizia julibrissin*), and common reed (*Phragmites australis*). Additionally, yellow sweet clover (*Melilotus officinalis*) was manually cut with a line trimmer on June 10, 2019. Field logs for all invasive species control events are included in Appendix D.

5.3 2020 Recommended Activities

While the relative cover of invasive species was essentially equivalent to the performance criteria in 2018, it is recognized that the Site will continue to benefit from adaptive management. This recognizes the potential seed bank for targeted species listed above. As such, effective treatment should consist of two to three site visits between June and September. Similar application techniques used in 2018 and 2019 should be used in 2020.

2019 MONITORING REPORT

6. SUMMARY

This monitoring report presents the results of 2019 monitoring surveys of the upland wetland transition area after the second full growing season and wetlands after the first full growing season at the site, and is intended to illustrate progress toward, or deviation from, stipulated performance criteria as defined by the approved Mitigation Plan (Arcadis 2017). Performance criteria were established as part of the permitting process to provide benchmarks by which to define project success. The three performance targets for wetland transition area as they compare to 2019 monitoring data are as follows:

1. *85% survival of tree and shrub plantings.* Data from 2019 demonstrates an average tree and shrub density of 546 and 791 stems per acre, respectively. Tree and shrub density represent a higher density than what was planted, and therefore reflects a survival rate of equal to or greater than 85%, meeting the performance criteria. As noted herein, the higher density of shrubs is attributed to supplemental planting, the result of random sampling, the random nature of initial plantings, and a high number of recruited shrubs.
2. *85% cover by mitigation plantings.* The percent cover of herbaceous mitigation plantings was slightly lower than the performance criteria in 2019 but increased from 2018 and was overall reflective of an early successional coastal forest/woodland community.
3. *Less than 10% cover by invasive species.* The percent cover of invasive species (i.e., 1.4%) was lower than 10% throughout the wetland transition area, meeting the performance criteria. Continuation of the adaptive management program will ensure performance criteria related to invasive species will be met.

The two performance targets for wetland areas as they compare to 2019 monitoring data are as follows:

4. *30% cover of mitigation plantings after the first full growing season.* Data from 2019 demonstrates total coverage of wetlands plantings meeting the performance criteria with 31% total cover.
5. *Less than 10% cover by invasive species.* The percent cover of invasive species (i.e., 0.7%) was lower than 10 percent throughout the restoration area, meeting the performance criteria. Continuation of the adaptive management program will ensure performance criteria related to invasive species will be met.

The wetland restoration is developing as an early successional intertidal marsh with expected survival of herbaceous plantings and positive signs of recruitment and spreading. Additionally, the wetland transition restoration is developing as an early successional coastal forest/woodland community, with continued high survival of the initially planted trees and shrubs. The structure of the wetland transition herbaceous understory is expected to change throughout the five-year monitoring interval as the tree and shrub canopy structure develops. In doing so, it is anticipated that performance criteria specific to cover of mitigation plantings will be met. The continuation of the adaptive management program will also ensure performance criteria specific to invasive species will also be met.

2019 MONITORING REPORT

7. REFERENCES

- Arcadis U.S., Inc. (Arcadis). 2019. Revised Construction Completion Report. Cape May Former Manufactured Gas Plant Site. Cape May New Jersey. December 2019.
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- Arcadis. 2018b. Year 1 (2018) Monitoring Report. Cape May Former Manufactured Gas Plant Site. Cape May New Jersey. December 2018.
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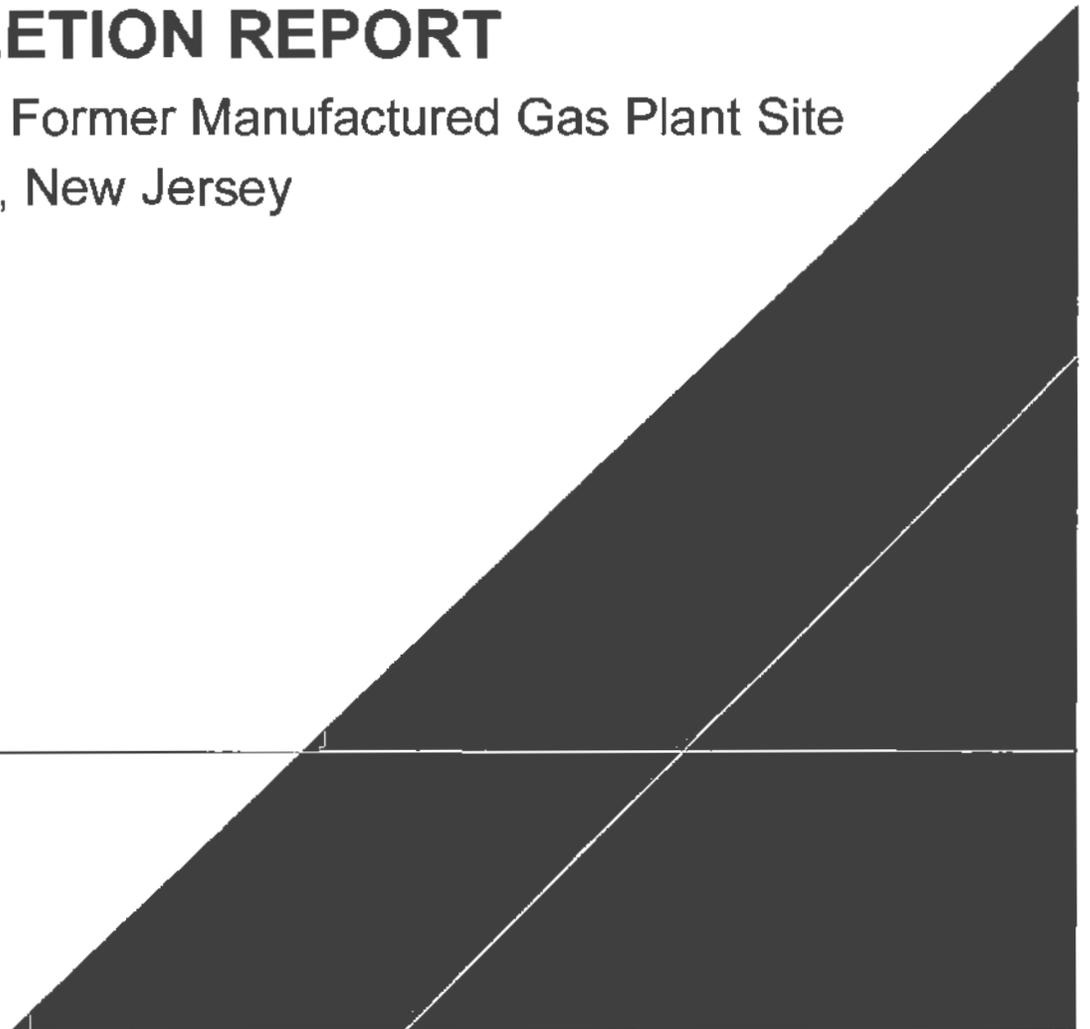


Jersey Central Power & Light Company

REVISED CONSTRUCTION COMPLETION REPORT

Cape May Former Manufactured Gas Plant Site
Cape May, New Jersey

December 2019



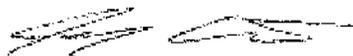
REVISED CONSTRUCTION COMPLETION REPORT

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COMPLETION REPORT**

Cape May Former Manufactured Gas
Plant Site Cape May, New Jersey



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REVISED CONSTRUCTION COMPLETION REPORT

CONTENTS

1	Introduction	1
1.1	Mitigation Project Objectives	2
2	Mitigation Project Activities Summary.....	3
2.1	Construction Activities	3
2.2	Backfilling and Grading.....	4
2.3	Vegetation Restoration	4
3	Summary.....	8
4	References.....	9

TABLES

1	Site Permit Summary
2	Restored Areas Summary
3	Wetland Transition – Maritime Woodland
4	Wetland Transition – Mixed Maritime Forest
5	Wetland – High Marsh
6	Wetland – High Marsh Island
7	Wetland – Low Marsh
8	Maritime Seed Mix

FIGURE

1	Site Location Map
2	As-Built

APPENDICES

A	Permit Approvals
B	Completion of Construction Form
C	Site Photographs
D	Soil Data
E	Nursery Packing Slips and Seed Tag

REVISED CONSTRUCTION COMPLETION REPORT

1 INTRODUCTION

On behalf of Jersey Central Power & Light Company (JCP&L), Arcadis U.S., Inc. (Arcadis) has prepared this Revised Construction Completion Report for the Cape May Former Manufactured Gas Plant (MGP) site (site) located in the City of Cape May, Cape May County, New Jersey (Figure 1). Arcadis prepared this report in accordance with the New Jersey Department of Environmental Protection (NJDEP) Freshwater Protection Act Rules, New Jersey Administrative Code (N.J.A.C.) 7:7A-15; NJDEP Coastal Zone Management Rules, N.J.A.C. 7:7-17; and requirements associated with the most currently available *Mitigation Project Construction Completion Checklist for Completeness (Revised: January 2018)* pursuant to NJDEP Freshwater Wetlands General Permit Number 4 (GP-4) and NJDEP Coastal Wetlands Individual Permit (File Nos. 0502-02-0001.3 FWW14001 and 0502-02-0001.6 FWW160001 CSW160001) and associated permits and permit modifications as summarized in Table 1 and in approvals included in Appendix A. This Revised Construction Completion Report is an amendment to the original Construction Completion Report submitted in December 2018 and includes additional construction details for wetland areas.

Activities authorized under these permits allowed JCP&L to complete a phased remedial soil excavation in accordance with the Administrative Consent Order (ACO) dated October 29, 1991 and consistent with the Remedial Action Work Plan (RAWP) (Arcadis 2015).

Table 1. Site Permit Summary

Permit Phase	Phase 1	Phase 2	Phase 2 Modification	Phase 2 Modification	Phase 2 Modification
File No.	0502-02-0001.3 CAF130001 FWW14001	0502-02-0001.6 WFD160001 CSW160001 FWW160001	0502-02-0001.6 WFD170001Mod CSW170001Mod FWW160001	0502-02-0001.6 WFD170002Mod CSW170002Mod FWW160001	0502-02-0001.6 WFD170002Mod CSW180001Mod FWW160001
Approval Date	7/17/15	1/9/17	4/20/17	12/6/17	2/28/18

Permit applications previously submitted to and approved by the NJDEP provide a general site description and land-use history, ecological characterization of the area prior to implementation of site remediation activities, and mitigation plan. As such, the remainder of this report discusses the completion mitigation activities, which include final grading, seeding, and planting activities for upland transition and wetland areas on the site.

All temporarily disturbed areas were backfilled and restored to grade, as included on the As-Built (Figure 2). Upland and wetland plantings were completed in June 2017 for a majority of the disturbed areas. Additional and unexpected shallow MGP-impacts were found in wetland areas in 2017, further described below in Section 2, which resulted in the conclusion of all remaining activities in wetland areas in fall 2018

REVISED CONSTRUCTION COMPLETION REPORT

and final plantings in May 2019. **Appendix B** provides a Completion of Construction Form for upland transition areas and wetlands areas, and **Figure 2** provides an As-Built plan for upland transition and wetland areas.

1.1 Mitigation Project Objectives

As discussed in the NJDEP approved Mitigation Plan (Arcadis 2017) goals of the mitigation project included improvement of habitat quality and ecological function of the coastal wetland system and adjacent upland areas temporarily disturbed during unavoidable site remediation activities.

Project activities included a phased soil excavation in regulated coastal wetlands and associated transition areas (see as-Built drawing included as **Figure 2**). Specifically, soil excavation activities resulted in the temporary disturbance to 0.003 acres of state open waters, 2.46 acres of wetlands (i.e., high and low marsh), and 1.39 acres of wetland transitional area. All areas were restored on-Site and in-kind consistent with the approved Mitigation Plan (Arcadis 2017). **Table 2** summarizes the overall acreage requirements identified in the permit approvals (**Appendix A**) the actual disturbance to regulated areas resulting from implementing the remedial activities, and the area of the habitats restored following the completion of restoration activities to mitigate for temporary disturbances at the site.

Table 2. Restored Areas Summary

Jurisdictional Habitat	Permitted Temporary Disturbance (ac)	Approved Restoration (ac)	Actual Project Disturbance (ac)	Total Project Restoration (ac)
Upland Wetland Transition	1.44	1.54	1.39	1.48
Wetlands High Marsh	0.49	0.42	0.45	0.33
Wetlands Low Marsh	2.69	2.91	2.01	2.21
State Open Waters	0.02	0.02	0.003	0.003

In addition to the restored jurisdictional habitats, a monetary donation was made for offsite mitigation to compensate for the loss of 0.34-acre of woodland habitat within the upland waterfront development area at a 2:1 mitigation ratio, representing the preservation of a total of 0.68-acre habitat for threatened and endangered species. This offsite mitigation included a donation of \$20,000 to the NJDEP as part of the January 2017 approved permit (**Appendix A**).

The remainder of this report summarizes activities conducted at the site, including mitigation project activities conducted to date.

REVISED CONSTRUCTION COMPLETION REPORT

2 MITIGATION PROJECT ACTIVITIES SUMMARY

2.1 Construction Activities

Remedial activities occurred in a phased approach between 2016 and 2018, which focused on the excavation and containment of MGP-impacted soils. Project activities at the site were planned and conducted in a phased approach due to work timing restrictions deemed by the City of Cape May (i.e. work freeze between Memorial Day and Labor Day). As such, project activities were split into phases for work in upland areas and wetland areas, respectively.

A summary of activities associated with remedial excavation includes:

- clearing and grubbing of vegetation
- installing soil erosion and sediment control measures
- excavating impacted material and installation of a soil cap
- stockpiling excavated material
- shipping excavated material offsite for disposal
- installation of primary containment wall, secondary containment wall, and groundwater treatment system
- well decommissioning and installation
- backfilling and grading
- establishing vegetative cover

An initial phase of site activities (Phase 1), which included the removal of MGP impacted materials, installation of a soil cap, and the installation of a primary containment wall for groundwater containment occurred in 2016 in upland areas. A majority of the work took place in the upland waterfront development area and partially in wetland transition area. Temporarily disturbed areas were backfilled, graded, and covered with a temporary seed mix and gravel/DGA in the construction staging area in anticipation of additional disturbance in wetland areas.

A second phase of site activities (Phase 2) took place in 2017 to remove the remaining MGP impacted materials within coastal wetland areas and for the installation of a secondary containment wall and groundwater treatment system. Disturbed areas were backfilled to grade in upland and wetland areas and planted according to the Mitigation Plan (Arcadis 2017). During Phase 2 activities additional unexpected shallow MGP-impacts were found to extend beyond original permitted limits in wetland areas. In order to avoid re-disturbing restored areas, an access path through the restored Phase 2 area was maintained in anticipation of additional remedial action excavation activities.

A third and final phase of site activities (Phase 3) took place in 2018 to remove remaining shallow MGP-impacted material from the wetlands. Upon completion of excavation activities, all areas were backfilled to grade, which included all wetland areas and the access road running through upland areas. Disturbed upland areas along the access road were also planted according to the Mitigation Plan. Due to timing of activities, which concluded in October 2018 after the optimal planting window for wetland grasses (i.e. September), the remaining Phase 3 wetland grasses were planted in May 2019 in accordance with the

REVISED CONSTRUCTION COMPLETION REPORT

Mitigation Plan (Arcadis 2017). Supplemental wetland plantings in the Phase 2 area were also completed in May 2019 in tandem with the Phase 3 wetland plantings.

The remaining sections will only focus on detailing backfilling, grading, and restoration efforts to establish vegetation cover within the remediated areas. All actions were performed consistent with approved plans and referenced in the permits/modification to permits authorizing regulated activities in upland waterfront development, wetland transition, and coastal wetland areas (**Appendix A**). A final As-Built for all site grading and areas planted is included as **Figure 2**. A photolog documenting mitigation work is included as **Appendix C**.

Additional construction details will be summarized in the forthcoming Remedial Action Report.

2.2 Backfilling and Grading

Areas excavated during the remediation were backfilled with certified clean material and a minimum of 4-inches of organic topsoil was added to the upland areas to achieve final grades pursuant to the February 2018 Revised Restoration Plan (**Appendix A**). A Remedial Action Report will be submitted with additional geotechnical and analytical details regarding certified backfill material and topsoil used at the site. **Appendix D** provides the pH, moisture, total organic carbon content (TOC), and macronutrients found in the topsoil. Test results included a pH between 7.3-7.7, TOC of 21.9 percent (%), and 40.4% moisture content.

Figure 2 presents the As-Built final grade contours for the remediation area.

2.3 Vegetation Restoration

Upon completion of surface restoration grading, all areas of disturbance were re-vegetated to conditions similar or ecologically better to those that existed prior to remediation activities, and consistent with the planting As-Built presented in **Figure 2**. Planting and seeding in upland areas were completed in June 2017 and in the remaining uplands, previously occupied by the access path, in October 2018. Planting in wetlands (i.e. high and low marshes) were partially completed in June 2017 and finalized in May 2019. Nursery packing slips and the seed tags are included as **Appendix E**.

In summary, the planting of upland woody vegetation and wetland grasses and shrubs represent an in-kind and on-site restoration for areas temporarily disturbed as part of the remediation. Arcadis wetland scientists worked with the remedial engineers throughout the process to minimize vegetative disturbances, including the number of trees and shrubs that were removed. **Tables 3** and **4** provide a summary of the planted tree and shrub species in their designated upland habitat areas. **Tables 5, 6** and **7** provide a summary of the planted wetland grasses and shrubs within wetland areas. All tables and designated planting areas are also presented on the final As-Built (**Figure 2**).

REVISED CONSTRUCTION COMPLETION REPORT

Table 3. Wetland Transition – Maritime Woodland

Species	Density (# / Acre)	Size Planted	Quantity Planted
hackberry (<i>Celtis occidentalis</i>)	150	#5 (4-7') #3 (3-4')	80 37
eastern red cedar (<i>Juniperus virginiana</i>)	150	#5 (5-6') #3 (3-4')	24 90
American holly (<i>Ilex opaca</i>)	100	#3 (3-4')	65
black gum (<i>Nyssa sylvatica</i>)	100	#5 (4-6')	11
black cherry (<i>Prunus serotina</i>)	50	#5 (5-8')	39
pitch pine (<i>Pinus rigida</i>)	25	#5 (3-4') #3 (3-4')	18 4
bayberry (<i>Morella pensylvanica</i>)	200	#1 (12-18") #2 (12-18")	119 39
highbush blueberry (<i>Vaccinium corymbosum</i>)	100	#1 (18-24")	70
groundsel bush (<i>Baccharis halimifolia</i>)	50	#1 (18")	43
sassafras (<i>Sassafras albidum</i>)	50	#2 (2-4') #3 (2-3')	10 34

Note:

Due to nursery availability, a subset of American holly was not available and substituted with black gum, in the Maritime Woodland habitat.

Table 4. Wetland Transition – Mixed Maritime Forest

Species	Density (# / Acre)	Size Planted	Quantity Planted
red maple (<i>Acer rubrum</i>)	150	#5 (4-7')	59 18
American holly (<i>Ilex opaca</i>)	50	#3 (3-4')	21
black gum (<i>Nyssa sylvatica</i>)	50	#5 (4-6')	2
black cherry (<i>Prunus serotina</i>)	75	#5 (5-8')	26
pitch pine (<i>Pinus rigida</i>)	50	#5 (3-6') #3 (3-4')	15 4
eastern cottonwood (<i>Populus deltoides</i>)	50	#5 (5-6') #3 (4-5')	5 15
scarlet oak (<i>Quercus coccinea</i>)	50	#5 (4-7')	20
hackberry (<i>Celtis occidentalis</i>)	75	#5 (4-5') #3 (4-5')	17 9
bayberry (<i>Morella pensylvanica</i>)	100	#1 (12-18") #2 (12-18")	32 10
winged sumac (<i>Rhus copallinum</i>)	75	#2 (2-3')	26
Staghorn sumac (<i>Rhus typhina</i>)	75	#1 (3-5')	9
highbush blueberry (<i>Vaccinium corymbosum</i>)	100	#1 (18-24")	43
sassafras (<i>Sassafras albidum</i>)	50	#1 (2-4') #3 (2-3')	9 18

REVISED CONSTRUCTION COMPLETION REPORT

Notes:

Winged sumac was not available through the nursery and was replaced by staghorn sumac during June 2017 planting. Scrub oak (*Quercus ilicifolia*) was not obtained by the nursery and the quantity of proposed plants was redistributed to other species.

Table 5. Wetlands – High Marsh

Species	Density (# / Acre)	On Center Spacing (feet)	Quantity Planted
saltmarsh hay (<i>Spartina patens</i>)	19,360	1.5	3,720

Table 6. Wetlands – High Marsh Islands

Species	Density (# / Acre)	On Center Spacing (feet)	Quantity Planted
saltmarsh hay (<i>Spartina patens</i>)	10,890	2	1,660
eastern red cedar (<i>Juniperus virginiana</i>)	300	12	19
bayberry (<i>Morella pensylvanica</i>)			18
groundsel bush (<i>Baccharis halimifolia</i>)			29
marsh elder (<i>Iva frutescens</i>)			16

Table 7. Wetlands – Low Marsh

Species	Density (# / Acre)	On Center Spacing (feet)	Quantity Planted
smooth cordgrass (<i>Spartina alterniflora</i>)	10,890	2	21,400
saltgrass (<i>Distichlis spicata</i>)			7,500
saltmarsh hay (<i>Spartina patens</i>)			900

The upland portion of the restoration area was hydro-seeded and seeded by hand with a Maritime Meadow native habitat seed mix, at a rate of approximately 15 lbs. per acre (Table 8). All hand-seeded areas were covered with hand spread straw following seeding.

REVISED CONSTRUCTION COMPLETION REPORT

Table 8. Maritime Seed Mix

Scientific Name	Common Name	Seed Mix Composition
<i>Panicum virgatum</i>	Switchgrass	30
<i>Elymus virginicus</i>	Virginia wildrye	20
<i>Andropogon gerardii</i>	Big bluestem	14
<i>Schizachyrium scoparium</i>	Little bluestem	14
<i>Chamaecrista fasciculata</i>	Partridge Pea	3
<i>Rudbeckia hirta</i>	Black-eyed Susan	3
<i>Chamaecrista fasciculata</i>	Partridge Pea	3
<i>Asclepias syriaca</i>	Common milkweed	2
<i>Asclepias tuberosa</i>	Butterfly milkweed	1
<i>Symphyotrichum puniceum</i>	Purplestem aster	1
<i>Aster umbellatus</i>	Flat topped white aster	1
<i>Monarda fistulosa</i>	Wild bergamot	1
<i>Vernonia noveboracensis</i>	New York Ironweed	1
<i>Eupatorium perfoliatum</i>	boneset	1
<i>Solidago juncea</i>	Early goldenrod	1

REVISED CONSTRUCTION COMPLETION REPORT

3 SUMMARY

This Revised Construction Completion Report addresses conditions of the NJDEP GP-4 and Coastal Wetlands Individual Permit, File No. 0502-02-0001.3 FWW14001 and 0502-02-0001.6 FWW160001 CSW160001 and associated upland waterfront development and permit modifications as summarized in **Table 1**. Approval letters are included as **Appendix A**. Specifically, this report addresses the following requirements:

1. As-built grading and planting plans for all remediated areas (**Figure 2**)
2. Mitigation Project Completion of Construction Form (**Appendix B**)
3. Photographs of the restoration area following planting activities (**Appendix C**)
4. Soil analysis results (**Appendix D**)

Consistent with the permit application, compliance monitoring began after one full growing season in the late summer of 2018 for upland areas and in 2019 for wetland areas. Adaptive management for invasive plant species was conducted throughout 2018 and 2019. The second annual monitoring report for uplands areas and first annual monitoring report for wetlands is being submitted concurrently this year (2019).

REVISED CONSTRUCTION COMPLETION REPORT

4 REFERENCES

Arcadis. 2017. Mitigation Plan. Cape May Former Manufactured Gas Plant Site. Cape May New Jersey.
Revised January 2017.

Arcadis. 2015. Remedial Action Work Plan. Cape May Former MGP Site.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-3b

	<p>New Jersey Department of Environmental Protection Site Remediation and Waste Management Program</p> <p>REMEDIAL TIMEFRAME NOTIFICATION FORM</p> <p><input checked="" type="checkbox"/> Extension Request <input type="checkbox"/> Lengthen Remedial Investigation Report (RIR) Timeframe Notification <input type="checkbox"/> Contaminated Media Notification</p>	<p>Date Stamp (For Department use only)</p>
---	---	---

SECTION A. SITE NAME AND LOCATION

Site Name: Newton Coal Gas 2 (ETG)

List all AKAs: _____

Street Address: 15 East Clinton Street

Municipality: Newton (Township, Borough or City)

County: Sussex Zip Code: 07860

Program Interest (PI) Number(s): G000005460

Case Tracking Number(s) for this submission: _____

SECTION B. NJDEP CASE MANAGER

Do you have an assigned Case Manager? Yes No

If "Yes," please list the Case Manager: _____

SECTION C. EXTENSION REQUEST

(Complete this section only if you are filing an extension request)

An extension is requested to the regulatory timeframe pursuant to NJAC 7:26C-3.2(b) or the mandatory or site-specific timeframe pursuant to NJAC 7:26C-3.5 as follows:

Report Type	Current Regulatory Timeframe	Proposed Regulatory Timeframe**	Current Mandatory or Expedited Site-Specific Timeframe	Proposed Mandatory or Expedited Site Specific Timeframe
Initial Receptor Evaluation*				
Preliminary Assessment Report*				
Site Investigation Report*				
Remedial Investigation Report*				
Remedial Action Report*	05/06/2019	5/6/2021		
LNAPL Interim Remedial Measures Report*				
Immediate Environmental Concern Engineered System Response Action Report				
Immediate Environmental Concern Source Control Report*				
Other (write in):				
Other (write in):				
Other (write in):				

* This report has a mandatory remediation timeframe
 ** This date cannot exceed the mandatory remediation timeframe.

Note: Extensions to the regulatory timeframe are deemed approved provided the requirements of N.J.A.C. 7:26C-3.2(b) are met. If these requirements are not met, the NJDEP will notify the requestor in writing the extension is denied.

Justification for Extension

1. Describe the cause or causes of the need for additional time to complete the work:

Case complexity due to presence of DNAPL on-Site and on Off-Site properties.

2. Describe in detail the steps taken to minimize the additional time needed to complete the work:

(For any site where access is a cause of the need for additional time to complete the work, detail the steps taken to obtain access)

Bench scale and pilot tests for In-Situ Stabilization (ISS) remedy are being implemented on-Site coincidentally with the preparation of a RAWP and contractor bid specifications for a full-scale on-Site ISS remedy that is to be implemented in or around the 4th quarter of 2019.

3. Additional information:

SECTION D. CONTAMINATED MEDIA NOTIFICATION (to Adjust RI/RA Regulatory Timeframes)

(Complete this section only when notifying the NJDEP of the discovery of contamination in any media other than soil.)

Contamination was discovered in:

- Ground Water Date: _____
- Sediment Date: _____
- Surface Water Date: _____

For sites not subject to N.J.S.A. 58:10C-27 wherein the remedial investigation must be completed by May 7, 2014, checking any box will increase the regulatory timeframe to complete the remedial investigation and remedial action from 3 years to 5 years and requires the Annual Remediation Fee Form be updated via the NJ Portal pursuant to N.J.A.C 7:26C-4.3(e).

SECTION E. LENGTHEN RIR TIMEFRAME NOTIFICATION

(Complete this section only if you are lengthening the Remedial Investigation Report Regulatory Timeframe)

1. Is the request for an Industrial Establishment subject to ISRA? Yes No
2. Indicate the number of additional years requested beyond the initial Remedial Investigation Report Regulatory Timeframe due date. Number of Years: _____ (Maximum of 4 years)
3. The initial Remedial Investigation Report Regulatory Timeframe Due Date:
4. The revised Remedial Investigation Report Regulatory Timeframe Due Date:
5. Justification (check all that apply)
 - Access to real property not owned or controlled by the person responsible for conducting the remediation is required, or contamination has impacted an environmentally sensitive natural resource, as defined in N.J.A.C. 7:26E-1.8.
 - Ground water contamination exists in a consolidated aquifer or a dense non-aqueous phase liquid exists in ground water.
 - Ground water contamination exists in more than one aquifer or there are two or more distinct ground water contaminant plumes.
 - The person responsible for conducting the remediation wants a final remediation document for the entire site, the discharge was not discovered prior to **May 7, 1999**, and the site does not include an industrial establishment that the owner or operator are required to remediate pursuant to the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et seq., and the Industrial Site Recovery Act rules, N.J.A.C. 7:26B.

SECTION F. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: 573512
First Name: Peter Last Name: Randazzo
Phone Numbers: (201) 574-4755 Ext.: _____ Fax: _____
Mailing Address: Two Radnor Corporate Center, Suite 250; 100 Matsonford Road
Municipality: Radnor State: Pennsylvania Zip Code: 19087
Email Address: prandazzo@brwnald.com

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

- (1) I certify, as a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C-1 et seq. to conduct business in New Jersey, that for the remediation described in this submission, and all attachments included in this submission, I personally: Managed, supervised, or performed the remediation conducted at this site that is described in this submission, and all attachments included in this submission; and/or periodically reviewed and evaluated the work performed by other persons that forms the basis for the information in this submission; and/or completed the work of another site remediation professional, licensed or not, after having: (1) reviewed all available documentation on which I relied; (2) conducted a site visit and observed the then-current conditions and verified the status of as much of the work as was reasonably observable; and (3) concluded, in the exercise of my independent professional judgment, that there was sufficient information upon which to complete any additional phase of remediation and prepare workplans and reports related thereto.
- (2) I certify:
- That I have read this submission and all attachments to this submission;
 - That in performing the professional services as the licensed site remediation professional for the entire site or each area of concern, I adhered to the professional conduct standards and requirements governing licensed site remediation professionals provided in N.J.S.A. 58:10C-16;
 - That the remediation conducted at the entire site or each area of concern, that is described in this submission and all attachments to this submission, was conducted pursuant to and in compliance with the remediation requirements in N.J.S.A. 58:10C-14.c;
 - That the remediation described in this submission, and all attachments to this submission, was conducted pursuant to and in compliance with the regulations of the Site Remediation Professional Licensing Board at N.J.A.C. 7:26l; and
 - That the information contained in this submission and all attachments to this submission is true, accurate, and complete.
- (3) I certify, when this submission includes a response action outcome, that the entire site or each area of concern has been remediated in compliance with all applicable statutes, rules, and regulations and is protective of public health and safety and the environment.
- (4) I certify that no other person is authorized or able to use any password, encryption method, or electronic signature that the Board or the Department have provided to me.
- (5) I certify that I understand and acknowledge that:
- If I knowingly make a false statement, representation, or certification in any document or information I submit to the Department I may be subject to civil and administrative enforcement pursuant to N.J.S.A. 58:10C-17.a.1(a) through (f) by the Board, including but not limited to license suspension, revocation, or denial of renewal; and
 - If I purposely, knowingly, or recklessly make a false statement, representation, or certification in any application, form, record, document or other information submitted to the Department or required to be maintained pursuant to the Site Remediation Reform Act, I shall be guilty, upon conviction, of a crime of the third degree and shall, notwithstanding the provisions of subsection b. of N.J.S.2C:43-3, be subject to a fine of not less than \$5,000 nor more than \$75,000 per day of violation, or by imprisonment, or both.
- (6) I certify that I have read this certification prior to signing, certifying, and making this submission.

LSRP Signature:  Date: March 7, 2019
LSRP Name: Peter Randazzo
Company Name: Brown and Caldwell

SECTION G. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Jersey Central Power & Light Company

Representative First Name: Frank

Representative Last Name: Lawson

Title: Supervisor - Site Remediation

Phone Number: (973) 401-8309

Ext.: _____

FAX: _____

Mailing Address: 300 Madison Avenue P.O. Box 1911

Municipality: Morristown

State: New Jersey

Zip code: 07962

Email Address: flawson@firstenergycorp.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Frank Lawson

Date: 3-6-19

Name/Title: Frank Lawson - Supervisor Remediation

Company Name: Jersey Central Power & Light Company

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420



New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program
CLASSIFICATION EXCEPTION AREA / WELL RESTRICTION
AREA (CEA/WRA) FACT SHEET FORM

Date Stamp
(For Department use only)

SECTION A. SITE INFORMATION

Site Name: Newton Coal Gas II (ETG)
 Program Interest (PI) Number(s): G000005460
 Case Tracking Number(s) for this submission: _____

**This form must be attached to the Cover / Certification Form
 if not submitted through the Remedial Phase Report Online Service**

- Indicate the reason for submission of this form (*see instructions*):
 New CEA Revise CEA Reestablish CEA Existing CEA with no changes
 CEA for historic fill CEA for Historically Applied Pesticides (HAP) CEA lift/removal
 If you are submitting this form for an existing CEA provide the CEA Subject Item ID: _____
- Indicate the type of ground water Remedial Action (RA):
 Natural Active Final RA not yet selected
- Is this form being submitted with a Remedial Action Permit (RAP) Form (for Soil or Ground Water)? Yes No

SECTION B. CEA COMPONENT AND VAPOR INTRUSION INFORMATION

Name of document that includes the CEA Fate and Transport Description: Remedial Investigation Report
 Date of document: 05/01/2014

1. Ground Water Classification: What is the ground water classification within the CEA as per N.J.A.C. 7:9C?

(Check all that apply)

- Class I-A Class II-A
 Class I-PL Pinelands Protection Area Class III-A
 Class I-PL Pinelands Preservation Area Class III-B

2. Contaminant Data: This CEAWRA applies only to the contaminants listed below with concentrations above, or assumed to be above, numeric values established for the applicable classification area via the Ground Water Quality Standards (GWQS), N.J.A.C. 7:9C. Except for historic fill CEAs based on assumed ground water contamination, list the maximum contaminant value for all ground water data that could be representative of **current** conditions for any well or sampling point used to establish the CEA. See form instructions before entering data into the below table.

Contaminant	Concentration ⁽¹⁾	GWQS ⁽²⁾	SWQS ⁽³⁾	GWSL ⁽⁴⁾
Benzene	13000	1		
Benzo(a)anthracene	36	0.1		
Benzo(a)pyrene	25	0.1		
Benzo(b)fluoranthene	0.2	31		
Benzo(k)fluoranthene	11	0.5		

- Notes: ⁽¹⁾ Maximum concentration in Micrograms Per Liter
⁽²⁾ New Jersey Ground Water Quality Standards, N.J.A.C. 7:9C-1.7 and 1.9(c)
⁽³⁾ Surface Water Quality Standards, N.J.A.C. 7:9B - Applicable only where contaminants in the CEA may discharge to a surface water body.
⁽⁴⁾ Current NJDEP Vapor Intrusion (VI) Ground Water Screening Levels (GWSL) available at <http://www.nj.gov/dep/srp/guidance/vaporintrusion/>

Check if attaching the form Addendum to list additional contaminants and associated information.

3. **CEA Boundaries and VI Pathway Status:** Year of tax map used: 2009

Are there volatile contaminants in the CEA? Yes No
 Is there LNAPL currently found in the CEA? Yes No

For CEA revisions only:

- Check if CEA Boundary has changed (See instructions)
- Check if Block and Lot numbers have changed (See instructions)

List the block(s) and lot(s) included in the areal extent of the CEA and check the appropriate boxes:

Block	Lot(s)	Check if off-site	Check if VI pathway was evaluated*	Check if VI pathway status is indeterminate*
9.02	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.02	2,4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.03	5,26,27	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check if attaching an Addendum to list additional Blocks/Lots and associated information. (see instructions)

* Follow instructions for parcels where the vapor intrusion (VI) pathway was evaluated and the status is indeterminate.

Direction of ground water flow: Northwest (If multiple water bearing zones exist within the CEA and/or there is no predominant flow direction, see instructions.)

Vertical depth of CEA: 40 (ft bgs) and 530 (msl).

Horizontal extent of CEA: 84954 Indicate units: acres or square feet

Name(s) of the affected Geologic Formation(s)/Unit(s) (see instructions if multiple formations/units affected):

Overburden (Fill, Ablation Till, Lodgement Till)

Narrative description of proposed CEA boundaries:

The CEA encompasses an area of groundwater within the overburden aquifer that is impacted with Volatile Organic Compounds (VOCs) and Polycyclic Aromatic Hydrocarbons (PAHs) emanating from the site of the former Manufactured Gas Plant (MGP) located at 15 East Clinton St., Newton, NJ.

4. **Projected Term of CEA:** (Based on modeling/calculations in the fate and transport description)

Proposed Duration in Years: _____ Anticipated Expiration Date: _____

or Indeterminate (Review instructions before selecting "Indeterminate" for the CEA duration.)

5. **ATTACH AND/OR SUBMIT THE FOLLOWING:** (see instructions for additional information/requirements)

Exhibit A: Site Location Maps – Based on USGS Quadrangle Map;

Exhibit B: CEA Map and Cross Section Figure – See N.J.A.C 7:26C- 7.3(c)1 and 2 and instructions regarding what is required to be included on the map and the cross-section figure.

Exhibit C: GIS Deliverables – CEA Boundary Extent Map. The CEA Boundary Extent Map shall be submitted via email to srpgis_cea@dep.nj.gov. (See the instructions for detailed GIS deliverable requirements.)

Identify format of CEA Boundary Extent Map being submitted: Shape File CAD File N/A

If there is a CEA map already on NJ-GeoWeb, does it need to be revised? Yes No N/A

SECTION C. CURRENT GROUND WATER USE DOCUMENTATION

1. Indicate the year of the most recent well search completed per N.J.A.C. 7:26E-1.14: 2019
2. If this Fact Sheet form is for a revised CEA or an existing CEA with no changes, have new wells been installed since the CEA was established? Yes No N/A
3. Are there any pumping wells (e.g., potable, industrial, irrigation or recovery wells) within the foot print of the CEA? Yes No
If "Yes" list/attach list of the type and status of any pumping well(s) within CEA:

SECTION D. WELL RESTRICTION INFORMATION

Certain well restrictions relevant to potable ground water use, such as "Double Case Wells", "Sample Potable Wells", and "Evaluate Production Wells", are consistently set within the boundaries of all CEAs established by the NJDEP in Class I and II-A areas (*see instructions*).

1. Are there any other site-specific well restrictions relevant to potable ground water use that should be set within or near the boundaries of the proposed CEA?..... Yes No
If "Yes", describe below any such site-specific well restrictions proposed for this CEA:

SECTION E. PUBLIC NOTIFICATION REQUIREMENTS

1. Indicate which of the following entities have been notified pursuant to N.J.A.C. 7:26C-7.3(d) and the dates each notification was sent. (*check all that apply*)
 - Municipal and county clerk(s) Dated mailed: _____
 - Local, county or regional health department(s) Dated mailed: _____
 - Designated County Environmental Health Act agency (if applicable) Dated mailed: _____
 - County Planning Board Dated mailed: _____
 - Pinelands Commission (if applicable)..... Dated mailed: _____
 - Owners of real property overlying CEA foot print Dated mailed: _____

ADDENDUM
Classification Exception Area / Well Restriction Area
Fact Sheet Form

Section B. CEA Component and Vapor Intrusion Information

1. **Contaminant Data** (continued): This CEAWRA applies only to the contaminants listed on page 1 and in the table below with concentrations above, or assumed to be above, numeric values established for the applicable classification area via the GWQS, N.J.A.C. 7:9C. Except for historic fill CEAs based on assumed ground water contamination, list below the maximum contaminant value for all ground water data that could be representative of **current** conditions for any well or sampling point used to establish the CEA. See form Instructions before entering data into the tables below.

Contaminant	Concentration ⁽¹⁾	GWQS ⁽²⁾	SWQS ⁽³⁾	VI GWSL ⁽⁴⁾
Chrysene	28	5		
Dibenz(a,h)anthracene	3.5	0.3		
Ethylbenzene	1200	700		
Naphthalene	9500	300		
Toluene	13000	1000		
Total Xylenes	4700	1000		

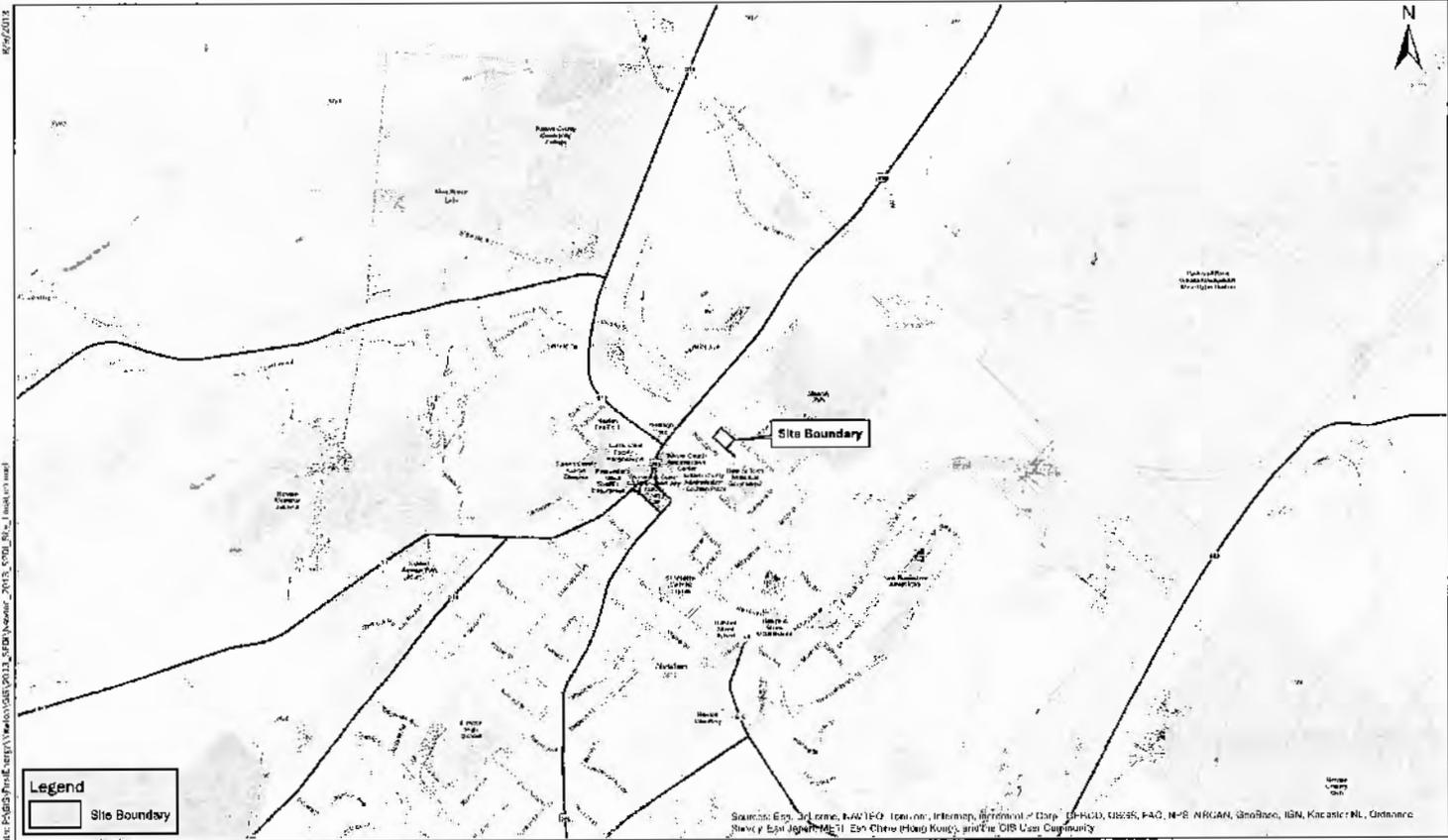
- Notes: (1) Maximum concentration in Micrograms Per Liter
 (2) New Jersey Ground Water Quality Standards, N.J.A.C. 7:9C-1.7 and 1.9(c)
 (3) Surface Water Quality Standards, N.J.A.C. 7:9B - Applicable only where contaminants in the CEA may discharge to a surface water body.
 (4) Current NJDEP Vapor Intrusion (VI) Ground Water Screening Levels (GWSL)

2. **CEA Boundaries and VI Pathway Status** (continued): List additional parcels included in the CEA. Attach additional Addendum sheets if necessary to list all blocks and lots within the CEA.

For CEA revisions, check here if block and lot numbers have changed:

Block	Lot(s)	Check if off-site	Check if VI pathway was evaluated*	Check if VI pathway status is indeterminate*
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Follow instructions for parcels where the vapor intrusion (VI) pathway was evaluated and status is indeterminate.



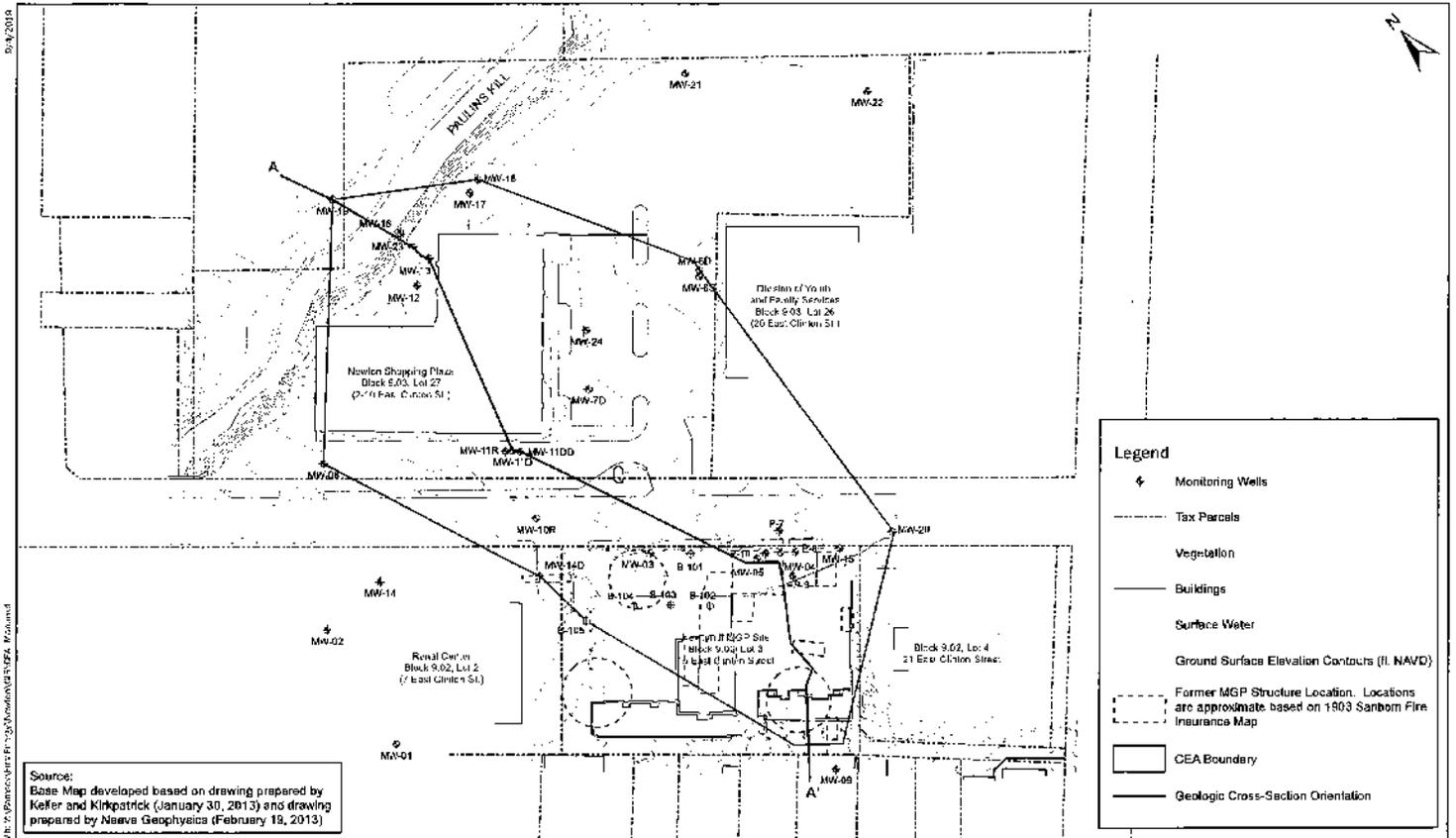
Address: C:\Users\Public\Documents\Projects\Newton\GIS\MapServer\2015_0706_NJ_1.mxd
 Date: 7/20/2015 10:58:10 AM
 Scale: 1:10000
 Author: Brown and Caldwell

Legend
Site Boundary



FIGURE 1-1
SITE LOCATION
JCP&L NEWTON II FORMER MGP SITE, NEWTON, NEW JERSEY

0 500 1,000
Feet



Source:
Base Map developed based on drawing prepared by Kefter and Kirkpatrick (January 30, 2013) and drawing prepared by Naava Geophysics (February 18, 2013)

FIGURE 1
CEA BOUNDARY
JCP&L NEWTON II FORMER MGP SITE, NEWTON, NEW JERSEY

0 30 60
Feet

8/24/2015
 C:\Users\jcp\Documents\Projects\NewtonII\CEA_Maps.mxd

April 11, 2019

New Jersey Department of Treasury
Division of Revenue
PO Box 417
Trenton, NJ 08646-0417

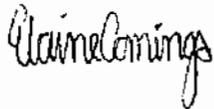
Certified Mail Article Number 7017 0190 0000 5717 7596

To whom it may concern:

Jersey Central Power and Light Company (JCP&L) encloses payment for the following NJDEP Annual Site Remediation Fee invoice:

Invoice No. 190070260
PI ID#G000005460
Period Covered: 1/21/2019 to 1/21/2019
Amount: \$3,320.00
Newton II MGP Site

Sincerely,



Elaine Comings
Project Manager

Enclosures



ANNUAL SITE REMEDIATION FEE

Program Interest
NEWTON COAL GAS 2 (ETG)
EAST CLINTON AVE
Newton Town, NJ. 07860
G000005460

Type of Notice
ORIGINAL(NON-INITIAL)

Amount Due
\$ 3,320.00

Billing Date
01/21/19

Due Date
03/22/19

NJEMS Bill ID
000000192517600

Summary	
Total Amount Assessed	3,320.00
Amount Received Before Creating Installment Plan (if installment plans is allowed)	0.00
Amount Transferred To Installment Plan	0.00
Installment Amount	0.00
Total Amount Credited	0.00
Total Amount Debited (Other Than Amounts Assessed)	0.00
Total Amount Due	3,320.00

RECEIVED
 JAN 29 2019
 Environmental Department

REMINDER:

- RETURN THE PAYMENT STUB BELOW WITH A CHECK MADE PAYABLE TO: TREASURER - STATE OF NEW JERSEY
- WRITE THE INVOICE NUMBER ON YOUR CHECK
- PAYMENT CAN BE MADE ELECTRONICALLY VIA THE PAY A PAPER INVOICE LINK AT WWW.NJDEPONLINE.COM
- FOR 2ND OR 3RD NOTICE INVOICES OR DEP CONTACT INFORMATION, SEE BACK OF THIS PAGE
- FOR GENERAL INFORMATION, BILLING DISPUTES, AND FREQUENTLY ASKED QUESTIONS GO TO: WWW.STATE.NJ.US/DEP/SRP/DIRECTBILLING
- INSTALLMENT PLANS ARE NOT AVAILABLE FOR PAYMENT OF LSRP ANNUAL FEES OR RFS 1% SURCHARGES.

See Back Of Page for Billing Inquiries

INVOICE NO. 190070260

D9901F (R 3/14/02)



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION ANNUAL SITE REMEDIATION FEE

INVOICE NO. 190070260

NJEMS Bill ID
000000192517600

Program Interest ID
G000005460

Type of Notice
ORIGINAL(NON-INITIAL)

Billing Date
01/21/19

Due Date
03/22/19

Amount Due
\$ 3,320.00

For name and/or address change, check box and write corrections on the back of this invoice.

DO NOT FOLD, BEND OR MARK

Enter the Amount of your payment →

\$

RETURN THIS PORTION

with your check made payable to:

TREASURER - STATE OF NEW JERSEY
 and mail to:
 NJ DEPARTMENT OF TREASURY
 DIVISION OF REVENUE
 PO BOX 417
 TRENTON, NJ 08646-0417

89

JCP&L
 ATTN: Frank Lawson
 PO BOX 1911
 Morristown

NJ 07962-1911



EP1010101017000000000005040600111110003320000004531900702604894



ANNUAL SITE REMEDIATION FEE

Program Interest
NEWTON COAL GAS 2 (ETG) EAST CLINTON AVE Newton Town, NJ. 07860 G000005460

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 3,320.00

Billing Date
01/21/19

Due Date
03/22/19

NJEMS Bill ID
000000192517600

LSRP Opt-In Case
 Licensed Site Professional Program
 This bill was created BY the Assessments TRIGGER.

ASSESSMENTS

Start-End Date: 01/21/2019-01/21/2019 Activity: LSR120001 Alternate ID: (Supersedes RPC000001)
 Assessment Type: FEE(CAOC Category 2-Annual) Status: Open (Pending Payment) Amount: \$ 1780.00
 Regulatory Basis:

Start-End Date: 01/21/2019-01/21/2019 Activity: LSR120001 Alternate ID: (Supersedes RPC000001)
 Assessment Type: FEE(GW Media-SRP Annual) Status: Open (Pending Payment) Amount: \$ 1540.00
 Regulatory Basis:

Total Amount Assessed: \$ 3,320.00



VOID IF NOT CASHED WITHIN 90 DAYS

50-937
213

Check No. 2874024

CHECK DATE

AMOUNT

04 | 01 | 2019

*****3,320.00

PAY TO THE ORDER OF
TREASURER STATE OF NEW JERSEY
NJ DEPARTMENT OF TREASURY
PO BOX 417
TRENTON, NJ 08646-0417

EXACTLY *****3,320 DOLLARS 00 CENTS

Treasurer
FirstEnergy Corp.

Morgan Chase Bank, Syracuse, NY 13206

⑈ 2874024⑈ ⑆ 021309379⑆ 601864788⑈

ENDOR NO. 0210000188 DOC NO. 2000103319

PO NO	INVOICE / RCPT #	DATE	DOCUMENT #	VENDOR INV AMT	DISCOUNT	NET AMOUNT
	190070260	01/29/2019	1902140117	3,320.00	0.00	3,320.00

FOR CHECK INQUIRY, CONTACT FIRSTENERGY ACCOUNTS PAYABLE AT APHELP@FIRSTENERGYCORP.COM.



State of New Jersey

PHILIP D. MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
SITE REMEDIATION AND WASTE MANAGEMENT
PROGRAM

CATHERINE R. McCABE
Commissioner

SHEILA Y. OLIVER
Lt. Governor

BUREAU OF INSPECTION AND REVIEW
401 E. STATE STREET
P.O. BOX 420
MAIL CODE 401-05P
Trenton, NJ 08625-0420

LSRP: Peter Randazzo
prandazzo@brwnald.com

September 3, 2019

Frank Lawson
Supervisor - Site Remediation
Jersey Central Power & Light
300 Madison Avenue
Morristown, NJ 07962
Phone: (973) 401-8309
Email: flawson@firstenergycorp.com

Frank Lawson
JCP&L
300 Madison Ave., Po Box 1911
Morristown, NJ 07962

Re: NEWTON COAL GAS # 2 (ETG)
EAST CLINTON AVE
Newton Town, Sussex
Case Tracking #: 48227
SRP PI: G000005460
Activity Number Reference: LSD190001

Dear Peter Randazzo,

This letter serves to advise you that a Remedial Action Workplan form has been received by the New Jersey Department of Environmental Protection (NJDEP) for NEWTON COAL GAS # 2 (ETG).

On May 7, 2009, the Site Remediation Reform Act (SRRA) was enacted. SRRA establishes criteria for the licensing of site remediation professionals who will assure that contaminated sites are remediated in accordance

with the Technical Requirements for site Remediation, N.J.A.C. 7:26E. SRRA authorizes the NJDEP to establish mandatory timeframes for the completion of each phase of remediation. These timeframes, as well as other requirements of the act, have been codified in regulations that became effective November 4, 2009. The complete rule can be found at www.state.nj.us/dep/srp/regs/arrcs/arrcs_rule.pdf. N.J.A.C. 7:26C-2.4 identifies the requirements with which you must comply.

Per the NJDEP records, the following depicts the Areas of Concern associated with your case:

In Submission	NJDEP ID	AOC ID	AOC TYPE	DESCRIPTION	Confirmed Contamination	STATUS	DATE
	1616633	AOC A	Storage tank and appurtenance – Above ground storage tank	Former Above Ground Storage Tank	No	PA/SI	05/02/2014
	1616634	AOC B	Other areas of concern – Any area suspected of containing contaminants	Former Underground Storage Tanks (owned and closed by prior Property Owner)	No	PA/SI	03/02/2006
X	1616635	AOC C1	Other areas of concern – Other discharge area	On-Site MGP-Related Soil Impacts	Yes	RAW	07/09/2019
	1616636	AOC C2	Other areas of concern – Other discharge area	Off-Site MGP-Related Soil Impacts	Yes	RI	05/02/2014
	1616637	AOC D	Other areas of concern – Other discharge area	MGP-Related Groundwater Impacts	Yes	RI	05/02/2014
	1616638	AOC E	Environmental media – Media Air	PCE discharge from former Lynn Cleaners Leasehold	No	RI	05/02/2014

Note: NJDEP recommends that you keep the NJDEP ID recorded in your Master Case Inventory Document Spreadsheet.

Per the NJDEP records, the following attachments have been associated with your submission are:

ATTACHMENT TYPE	DESCRIPTION	FILE NAME	RECEIVED	DUE
Signed Affidavit	Authorization to Submit through NJDEP Online	SMGO112-P19080612180.pdf	09/03/2019	
Remedial Action Workplan (RAW)	Remedial Action Workplan (RAW)	RAW082719_RAW-Onsite_compiled.pdf	09/03/2019	

The table above displays attachments associated with your submittal. The NJDEP will proceed with its inspection of your submission at this time. You may view the status of your submission via the NJDEP DataMiner service, at <https://www13.state.nj.us/DataMiner>.

Sincerely,



Myrna Campion, Bureau Chief
BUREAU OF INSPECTION AND REVIEW

LSRP - RAW (Area of Concern)

There are no additional hard copy submissions required at this time



300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07962-1911

September 18, 2019

Re: Notification of Environmental Remediation - Work To Begin October 2019
15 East Clinton Street (Block 9.02, Lot 3)
NJDEP Site Preferred ID # - G000005460
Town of Newton, New Jersey

Dear Property Owner or Tenant:

In accordance with New Jersey Department of Environmental Protection (NJDEP) regulations for "Notification and Public Outreach" (ARRCS, N.J.A.C. 7:26C-1.7), Jersey Central Power & Light Company (JCP&L) is providing notification relating to environmental investigative and remedial activities being conducted at the above referenced site. The Licensed Site Remediation Professional (LSRP) of record for this site is Peter Randazzo, Brown and Caldwell, who can be reached at (201) 574-4755 for further information about site activities.

The Town of Newton, like thousands of other communities throughout the United States, hosts a former manufactured gas plant (MGP) site. The site is owned by JCP&L. The former MGP operations produced "town gas" or "coal gas" to serve the community's street lighting systems, and cooking and heating needs before the advent of natural gas. Town gas manufacturing was phased out at this location in the early 1910s. The former plant was owned and operated between 1869 and the early 1910s by a predecessor company of JCP&L.

This letter is to inform you that in October 2019 JCP&L and its contractors expect to begin mobilizing personnel and equipment to property located on East Clinton Street to conduct soil remediation activities.

Specifically, JCP&L will remove the top surface layer of soil, and mechanically and chemically stabilize impacted soils at depth to render contaminants immobile. This In Situ Stabilization (ISS) process involves mixing of soil in place, below ground, with stabilizing agents such as Portland cement, bentonite and slag. A pilot program to determine the effectiveness of ISS mixes under actual field conditions was successfully completed in February 2019. A Fact Sheet with additional information is enclosed.

The ISS remedy complies with all NJDEP goals and objectives for addressing contamination. It is protective of human health and the environment, and is less disruptive to a community than an excavation-only remedy. The work is in cooperation with and under the direction of the site LSRP, and in accordance with the NJDEP's Technical Requirements for Site Remediation.

The project is expected to be completed in Spring 2020.

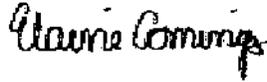
Community Information Session on October 3, 2019 from 6-8 pm

Before work begins, JCP&L will hold a community information session on October 3 from 6-8 pm at the Newton Town Centre community room, 225 Spring Street. The JCP&L project team will provide the public with detailed information about the project work and measures JCP&L will put in place to safeguard public health and safety as well as minimize impacts to the community. The JCP&L project team also will be available to answer questions.

In addition, JCP&L is proposing to the NJDEP the establishment of a Classification Exception Area (CEA) for groundwater within and near the JCP&L property. A CEA is an administrative control that identifies for state and county officials the horizontal and vertical extents of groundwater impacts. No properties in the planned CEA use drinking water wells and there are no impacts from the former MGP facility to public water service. Additional information regarding the CEA is being provided to the owners of properties that are to be included within the CEA. If you do not receive this additional information, then your property is not included within the CEA.

JCP&L is committed to keeping area residents and businesses informed during the work. A copy of all of our reports regarding the work also will be made available to Town of Newton municipal officials, upon request. If you have any questions or just want additional information about the project, please call our Project Community Information Line at 1-800-598-9724.

Sincerely,



Elaine Comings
Project Manager

Enclosure

cc: Lorraine Read, Town of Newton Clerk
James R. McDonald III, Sussex County Division of Health
Jacqueline A. Espinoza, Area Manager-JCP&L
Peter Randazzo, Brown and Caldwell

September 2019

Newton II Former Manufactured Gas Plant Site

Background

Like thousands of other communities throughout the United States, the Town of Newton is home to a former manufactured gas plant (MGP) site. The former plant, which was owned and operated between 1869 and the early 1910s by a predecessor company of JCP&L, produced "town gas" or "coal gas" to serve the community's street lighting system, and home heating and cooking needs before the advent of natural gas. Town gas manufacturing was phased out at this location in the early 1910s.

JCP&L is working in accordance with the regulations of the New Jersey Department of Environmental Protection (NJDEP) and in cooperation with, and under the direction of, the Licensed Site Remediation Professional (LSRP) of record to conduct environmental remediation activities at the site and on off-site properties near the site. This work is being done to determine future remedial activities to address soil and groundwater impacted from historic MGP operations.

Where is the site?

The JCP&L-owned former MGP site is located at 15 East Clinton Street, Town of Newton, Sussex County. The site is identified as Block 9.02, Lot 3. The NJDEP Preferred Identification Number is G000005460.

What is the status of remediation activities?

Since 1996, JCP&L has been conducting environmental investigations at the site in accordance with NJDEP regulations and guidance. One study included collection of soil, groundwater, surface water and sediment samples in and around the vicinity of the Pauline Kill Creek. The study found no impacts to the sediments and surface water of the creek from the MGP materials. Numerous reports and studies documenting these activities were approved by the NJDEP.

In December 2010, NJDEP approved the Remedial Investigation (RI) Report detailing the extent of MGP impacts identified at an offsite property located at 2-10 East Clinton Street and a Supplemental RI Work Plan to conduct additional investigation activities to complete delineation.

JCP&L has completed delineation of impacts to groundwater and will propose a Classification Exception Area (CEA) to NJDEP to define impacts to groundwater. A CEA is an administrative control that identifies for state and county officials the horizontal and vertical extents of groundwater impacts.

Characterization of the nature and extent of impacts attributable to former MGP operations beneath the site is considered complete for the purposes of Remedial Investigation, consistent with the NJDEP Technical Requirements for site remediation.

In 2017, Brown and Caldwell, an environmental consultant working on behalf of JCP&L, performed a laboratory treatability study to evaluate the potential effectiveness of In Situ Soil Solidification (ISS) as a Remedial Action for the site. The study results were favorable for the remedy, and summarized in an April 2018 technical memorandum and the July 2018 ISS Pilot Study Work Plan.

A field pilot study of the ISS remedy was performed January through February 2019. It confirmed the effectiveness of the mix ratio identified in the treatability study, and the ability to effectively mix the Portland cement and water into the soil under actual field conditions.

What is the focus of current activities?

Based on the successful results of the ISS pilot study, shallow soils will be removed through excavation and impacted soils at depth will be mixed in place, below ground, with agents such as Portland cement, bentonite and slag to render the contaminants immobile.

The ISS remedy complies with all NJDEP goals and objectives for addressing contamination and is being considered because it is protective of human health and the environment, and is less disruptive to a community than a deep soil removal remedy.

Schedule

Trimming of tree branches and relocation of electric lines in the alley behind the site are occurring in September 2019. Construction activities are expected to begin in October 2019. The work is expected to be complete in spring 2020. Work will be performed weekdays, during daylight hours.

Jersey Central Power & Light Company

September 2019

WHAT YOU CAN EXPECT TO SEE

Work Impacting the Alley - To ready the site for remediation, JCP&L is moving electrical wires and poles in the alley between homes on Hamilton Street and the project site. The alley will be closed to traffic during the work, which is expected to take about two weeks. The alley also will be intermittently closed as a safety precaution while work near the alley is performed. Residents using the alley will be notified beforehand.

Staging of Construction Equipment - Construction equipment, including a batch plant with silos where the dry reagent mix will be stored, will be brought on site. Traffic impacts, which could include temporary lane closures, will be supported by the Newton police.

Establishment of Soil Erosion and Sediment Control Measures - Proper controls, such as a silt fence and hay bales, will be temporarily installed along the site perimeter as part of an effective storm water pollution prevention plan.

Workers in Protective Clothing - Workers performing certain activities may wear personal protective equipment, including Tyvek coveralls, which are one-piece garments commonly worn where a disposable, one-time use coverall is needed. These garments do not mean there is a hazard to the public. The work performed onsite is often messy and workers can choose to wear these garments to keep their clothes clean. Other protective gear may include gloves, overboots and respirators, based on workers personal preferences.

Trucks Carrying Clean and Treated Soil - Excavated soil will be loaded into trucks for transport to facilities where it will be thermally treated and beneficially reused, or disposed of at a licensed facility. Trucks will be covered and cleaned prior to leaving the Site, and a flagger or police detail used to ensure safety.

Truck Route - Trucks will enter and leave the Site on Clinton Street to Water Street (Route 206).

PROTECTING PUBLIC HEALTH AND SAFETY

Maintenance of a Safe Site Perimeter - The existing fence with screening around the site will be maintained for safety.

Use of Air Monitoring Equipment and Dust Control Measures - Air monitors will be installed along the perimeter of the work area. Confirmatory air samples will be collected while soil intrusive activities occur. Dust and vapor control measures (such as water mist, foam spray, plastic sheeting and sand cover) will be used as needed to control potential dust and odors during excavation and non-work periods, including evening and weekends.

Odors During Remediation - MGP materials can sometimes have a characteristic odor, similar to that of

freshly applied asphalt. These odors can often be detected by people at levels that are well below what would be considered a health concern and often below what can be detected by an air monitoring instrument. While the project team is committed to doing everything possible to minimize odors, it remains possible that odors will at times persist.

Vibration Monitoring - JCP&L's contractor will document pre-existing conditions of nearby structures prior to commencing work. The contractor also will conduct vibration monitoring during construction.

FREQUENTLY ASKED QUESTIONS

Is the site safe?

The potential concern associated with the presence of manufactured gas plant materials would involve the ingestion (or eating) of the affected soil or drinking of the affected groundwater. The site is covered by asphalt, some vegetation and concrete. In addition, following removal of the vacant building, a fence was installed around the majority of the site. Collectively these features have served as a barrier to potential direct contact. Additionally, in 2003 and 2010, JCP&L conducted an evaluation of soil gas and indoor air quality at an onsite building, later demolished in winter 2011-12, and offsite buildings in accordance with NJDEP requirements. The evaluations confirmed there is no pathway for vapor intrusion by the MGP materials remaining in the soil and groundwater.

Are local public water supplies affected?

No. The Town of Newton public water supply is not affected.

What are the materials of concern?

The source of the MGP materials is the former MGP operations. Some by-products of the gas manufacturing process, including coal tar and oils, are found in the soil and groundwater at and in the vicinity of the site. Compounds of concern present in coal tar and oils include benzene, toluene, ethylbenzene and xylene(s) (or BTEX) and polycyclic aromatic hydrocarbons (or PAHs).

Are there any plans for the future use of the property?

No. The future use of the site has not yet been determined. The focus of JCP&L's near-term activities is to address the site's environmental conditions to enable a beneficial future use of the site.

QUESTIONS?

JCP&L is committed to keeping the community informed. If you have a question or concern, or just want additional information, please call us:

JCP&L Community Information Line
1-800-598-8724

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-3c

February 13, 2019

New Jersey Department of Treasury
Division of Revenue
PO Box 417
Trenton, NJ 08646-0417

Certified Mail Article Number 7017 0190 0000 5717 7428

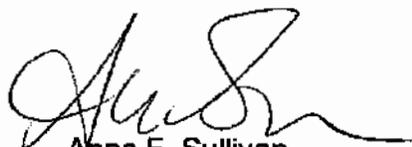
To whom it may concern:

Jersey Central Power & Light Company (JCP&L) encloses payment for the following NJDEP Annual Site Remediation Fee invoice:

Invoice No. 190089360
Period Covered: 01/28/2019 – 01/28/2019
Amount: \$11,330.00
Amount Paid: \$11,330.00
Ocean City MGP Site
PI #: G000006127

Enclosed please find check number 2865633 in the amount of \$11,330.00, which covers the summary of charges for the current invoice period.

Sincerely,



Anna F. Sullivan
Project Manager

Enclosures

cc: David Thompson, LSRP

2865633



VOID IF NOT CASHED WITHIN 90 DAYS

50-937

213

Check No. 2865633

CHECK DATE

AMOUNT

02 08 2019

*****11,330.00

PAY TO THE ORDER OF
TREASURER STATE OF NEW JERSEY
NJ DEPARTMENT OF TREASURY
PO BOX 417
TRENTON, NJ 08646-0417

EXACTLY *****11,330 DOLLARS 00 CENTS

Steven R. Stead
Treasurer
FirstEnergy Corp.

JPMorgan Chase Bank, Syracuse, NY 13206

⑈ 2865633⑈ ⑆ 021309379⑆ 601864788⑈

VENDOR NO. 0210000188 DOC NO. 2000043384

PO NO	INVOICE / RCPT #	DATE	DOCUMENT #	VENDOR INV AMT	DISCOUNT	NET AMOUNT
	19008936D	02/05/2019	1902068157	11,330.00	0.00	11,330.00

FOR CHECK INQUIRY, CONTACT FIRSTENERGY ACCOUNTS PAYABLE HELP DESK AT 814-539-3200.

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INVOICE NO.
190089360

ANNUAL SITE REMEDIATION FEE

Program Interest
OCEAN CITY COAL GAS (JCP&L & NJNG)
11TH ST & WEST AVE
Ocean City, NJ. 08226
G000006127

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 11,330.00

Billing Date
01/28/19

Due Date
03/29/19

NJEMS Bill ID
000000192657600

Summary	
Total Amount Assessed	11,330.00
Amount Received Before Creating Installment Plan (if installment plans is allowed)	0.00
Amount Transferred To Installment Plan	0.00
Installment Amount	0.00
Total Amount Credited	0.00
Total Amount Debited (Other Than Amounts Assessed)	0.00
Total Amount Due	11,330.00

RECEIVED
FEB 5 2019
Environmental Department

REMINDER:
-RETURN THE PAYMENT SLIP BELOW WITH A CHECK MADE PAYABLE TO: TREASURER - STATE OF NEW JERSEY
-WRITE THE INVOICE NUMBER ON YOUR CHECK
-PAYMENT CAN BE MADE ELECTRONICALLY VIA THE PAY A PAPER INVOICE LINK AT WWW.NJDEPONLINE.COM
-FOR 2ND OR 3RD NOTICE INVOICES OR DEP CONTACT INFORMATION, SEE BACK OF THIS PAGE
-FOR GENERAL INFORMATION, BILLING DISPUTES, AND FREQUENTLY ASKED QUESTIONS GO TO:
WWW.STATE.NJ.US/DEP/SRP/DIRECTBILLING
-INSTALLMENT PLANS ARE NOT AVAILABLE FOR PAYMENT OF LSRP ANNUAL FEES OR RFS 1% SURCHARGES.

See Back Of Page for Billing Inquiries

INVOICE NO.
190089360

D8901F (R 3/14/02)

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
ANNUAL SITE REMEDIATION FEE

INVOICE NO.
190089360

NJEMS Bill ID
000000192657600

Program Interest ID
G000006127

Type of Notice
ORIGINAL (NON-INITIAL)

Billing Date
01/28/19

Due Date
03/29/19

Amount Due
\$ 11,330.00

For name and/or address change, check box and write corrections on the back of this invoice.

DO NOT FOLD, BEND OR MARK

Enter the Amount of your payment →

\$ 11,330.00

RETURN THIS PORTION

with your check made payable to:



89

JCP&L
ATTN: FRANK LAWSON
PO BOX 1911
Morristown

NJ 07962-1911

TREASURER - STATE OF NEW JERSEY
and mail to:

NJ DEPARTMENT OF TREASURY
DIVISION OF REVENUE
PO BOX 417
TRENTON, NJ 08646-0417

EP1010101010170000000000060102071111110011330000003621900893605896



ANNUAL SITE REMEDIATION FEE

Program Interest
OCEAN CITY COAL GAS (JCP&L & NJNG) 11TH ST & WEST AVE Ocean City, NJ. 08226 G000006127

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 11,330.00

Billing Date
01/28/19

Due Date
03/29/19

NJEMS Bill ID
000000192657600

LSRP Opt-In Case
Licensed Site Professional Program
This bill was created BY the Assessments TRIGGER.

ASSESSMENTS

Start-End Date: 01/28/2019-01/28/2019 Activity: LSR120001 Alternate ID: (Supersedes RPC070001)
 Assessment Type: FEE(CAOC Category 3-Annual) Status: Open (Pending Payment) Amount: \$ 9790.00
 Regulatory Basis:

Start-End Date: 01/28/2019-01/28/2019 Activity: LSR120001 Alternate ID: (Supersedes RPC070001)
 Assessment Type: FEE(GW Media-SRP Annual) Status: Open (Pending Payment) Amount: \$ 1540.00
 Regulatory Basis:

Total Amount Assessed: \$ 11,330.00



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Site Remediation and Waste Management Program
Bureau of Ground Water Pollution Abatement

Mail Code: 401-05V

P.O. Box 420

Trenton, NJ 08625-0420

Phone: (609) 292-8427

PHIL MURPHY
Governor

CATHERINE R. MCCABE
Commissioner

SHEILA OLIVER
Lt. Governor

RECEIVED

MAY 21 2019

Environmental Department

May 7, 2019

Mr. Harry Slagle
JCP&L
300 Madison Avenue
Morristown, NJ 07962-1911

Re: Classification Exception Area/Well Restriction Area
JCP&L Ocean City Coal Gas
11th Street & West Avenue
Ocean City, NJ 08226
Program Interest Number: G000006127
Subject Item ID: CEA10000167324

Dear Mr. Slagle,

Please be advised that the New Jersey Department of Environmental Protection (Department) has established a Classification Exception Area/Well Restriction Area (CEA/WRA) for contamination in ground water associated with this site. A CEA/WRA is an institutional control that the Department uses to restrict the use of ground water within an area where ground water contaminant concentrations exceed the applicable Ground Water Quality Standards (N.J.A.C. 7:9C-1.7). The Department has established this CEA/WRA in response to information submitted by Licensed Site Remediation Professional (LSRP), Jeff Hostermann on a CEA/WRA Fact Sheet Form received by the Department on 5-7-2019.

The CEA/WRA is described on the enclosed CEA/WRA Fact Sheet. As indicated on the Fact Sheet, ground water within the CEA/WRA contains benzene and naphthalene at concentrations that exceed the Ground Water Quality Standards. The contamination is attributed to discharges that occurred at the site referenced above, because of the levels of contamination, it is suggested additional remediation be conducted. Please note that the LSRP has reported that there are no potable wells within the CEA boundary and that the area is served by municipal water. Therefore, the contamination associated with this CEA will not affect the quality of drinking water in the area.

The CEA/WRA has an indeterminate time frame. Attainment of the Ground Water Quality Standards must be confirmed through ground water sampling within 180 days after the expiration date, pursuant to N.J.A.C. 7:26C-7.9(f). Consistent with N.J.A.C. 7:26C-7.3, the Department may revise or remove the CEA/WRA at any time in the interim on the basis of new ground water data.

Please note, while the Department has established the CEA, additional ground water sampling points may be necessary to confirm the horizontal and/or vertical extent of contamination. As stated in the Department's June 2013 policy statement of the interpretation of SRRA requirement for completion of remedial investigation, "Even though the remedial investigation does not need to include delineation to the "clean zone", such sampling is required to demonstrate attainment of the applicable remediation standards at the conclusion of the remedial action and prior to the issuance of the Response Action Outcome (RAO)".

If you have any comments or questions regarding this CEA/WRA, please contact Greg Bakeman at (609) 292-9963.

Sincerely,



Mary Anne Kuserk, Chief
Bureau of Ground Water Pollution Abatement

Enclosure

c: Jeff Hostermann, Tetra tech
Harry Slagle, JCP&L
M Bovera, Ocean City Municipal Clerk
Cape May County Clerk
Cape May Health Department
Cape May Planning Board

CEA100167324	1108	7	Ocean City	Yes
CEA100167324	1108	8	Ocean City	Yes
CEA100167324	1108	9	Ocean City	Yes
CEA100167324	1109	1	Ocean City	Yes
CEA100167324	1109	10	Ocean City	Yes
CEA100167324	1109	11	Ocean City	Yes
CEA100167324	1109	12	Ocean City	Yes
CEA100167324	1109	15	Ocean City	Yes
CEA100167324	1109	2	Ocean City	Yes
CEA100167324	1109	3	Ocean City	Yes
CEA100167324	1109	4	Ocean City	Yes
CEA100167324	1109	5	Ocean City	Yes
CEA100167324	1109	6	Ocean City	Yes
CEA100167324	1109	7	Ocean City	Yes
CEA100167324	1109	8	Ocean City	Yes
CEA100167324	1109	9	Ocean City	Yes

Facility Contact(s)

LSRP: Jeffrey L Hosterman
TETRA TECH EM INC
240 CONTINENTAL DR STE 200
Newark
DE
19713

Person Responsible for Conducting the Remediation: Harry Slagle
JCP&L
300 Madison Avenue
Morristown, NJ 07962-1911

NJDEP Contact: Bureau of Ground Water Pollution Abatement
(609) 292-8427

CEA Information

<u>Subject Item</u>	<u>Description</u>
CEA100167324	Benzene plume boundaries are used to define the CEA extent. The CEA extends 1100 feet offsite to the northwest where gw discharges towards Great Egg Harbor.

<u>Subject Item</u>	<u>Affected Geologic Formation</u>	<u>Vertical Depth</u>
CEA100167324	Quaternary Age Alluvial Deposits	100feet

<u>Subject Item</u>	<u>Classification</u>
CEA100167324	II-A

Contaminants

This CEA/WRA applies only to the contaminants listed in the table below. Pursuant to N.J.A.C. 7:9C-1.6, all constituent standards of the surrounding classification area apply at the CEA perimeter.

<i>Subject Item</i>	<i>Contaminant</i>	<i>Concentration (1)</i>	<i>GWQS (2)</i>
CEA100167324	Benzene	5270 Micrograms Per Liter	1 Micrograms Per Liter
CEA100167324	Benzo(a)anthracene	.169 Micrograms Per Liter	.1 Micrograms Per Liter
CEA100167324	Naphthalene	2290 Micrograms Per Liter	300 Micrograms Per Liter

Note: (1) Maximum concentration detected at the time of CEA establishment
(2) Ground Water Quality Standards

Comment:

CEA Boundary: Refer to Exhibit B – CEA Boundary Map

Projected Term of CEA:

Subject Item
CEA100167324

Date Established
04/15/2019

Subject Item
CEA100167324

Duration in Years
Indeterminate

Subject Item
CEA100167324

Anticipated Expiration Date
Indeterminate

Well Restrictions set within the boundaries of the CEA

Since groundwater quality data within the CEA indicates exceedance of the Primary Drinking Water Standards, and the primary designated uses of Class II-A ground water is the provision of potable water supply, the CEA established for this site is also a Well Restriction Area, pursuant to N.J.A.C. 7:9C-1.6(d). The extent of Well Restriction shall coincide with the boundaries of the CEA unless otherwise specified.

<i>Subject Item</i>	<i>Restriction</i>
CEA100167324	Double Case Wells: With the exception of monitoring wells installed into the first water bearing zone, any proposed well to be installed within the CEA/WRA boundary shall be double cased to an appropriate depth in order to prevent any vertical contaminant migration pathways. This depth is either into a confining layer or 50 feet below the vertical extent of the CEA.

Exhibit A: Site Location Map

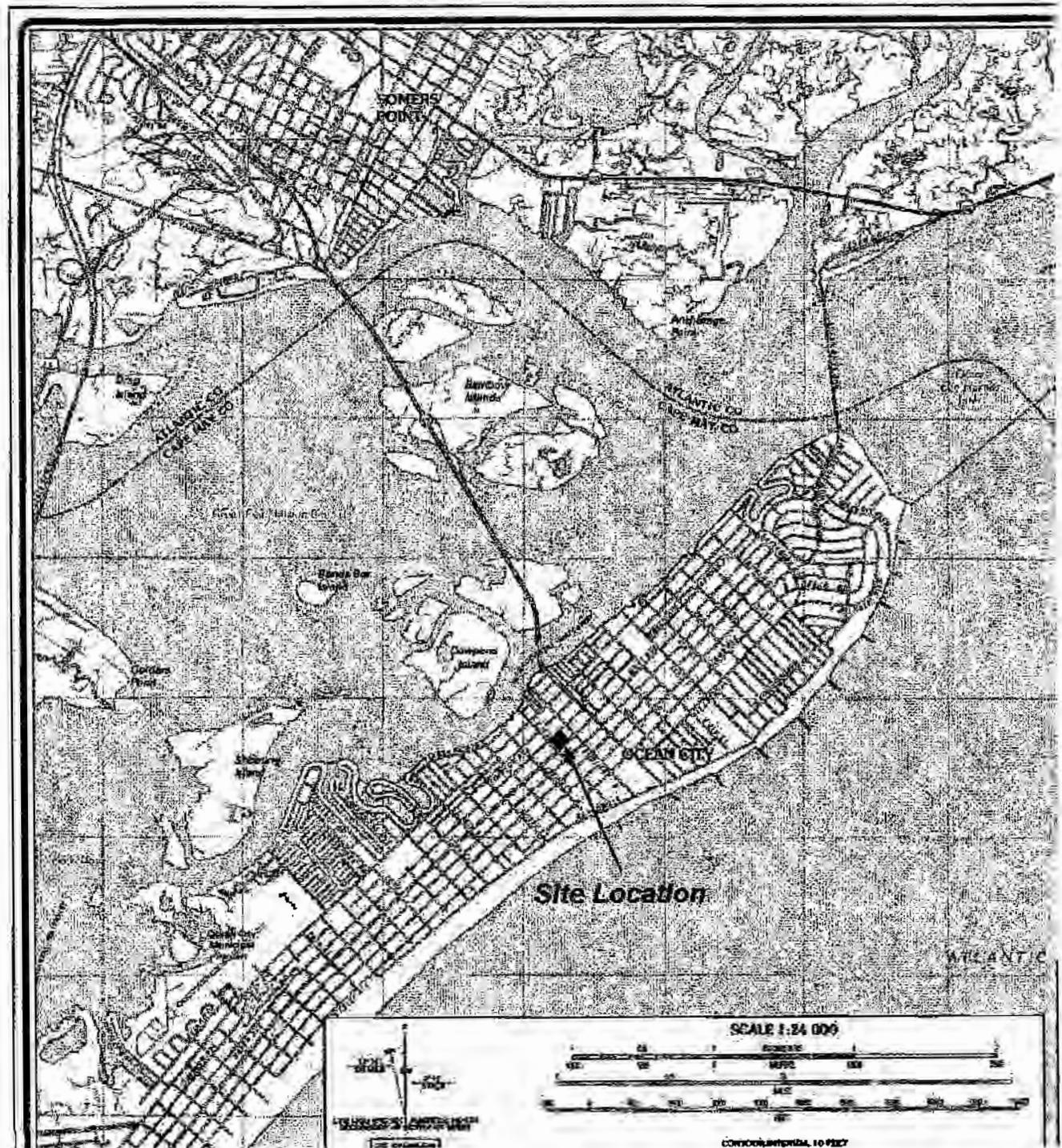
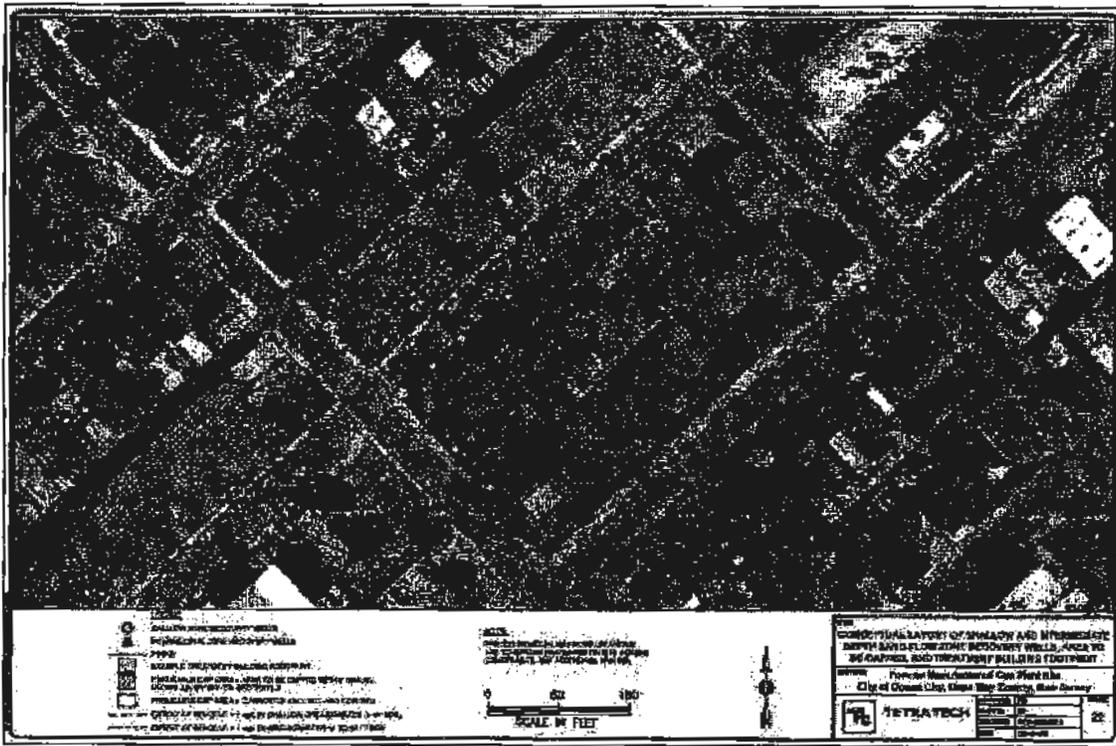


Exhibit B: CEA Boundaries



July 16, 2019

New Jersey Department of Treasury
Division of Revenue
PO Box 417
Trenton, NJ 08646-0417

Certified Mail Article Number 7017 0190 0000 5717 5776

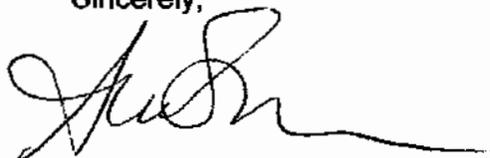
To whom it may concern:

Jersey Central Power & Light Company (JCP&L) encloses payment for the following NJDEP Air Quality Permitting Program invoice:

Invoice No. 191050770
Period Covered: 06/24/2019 – 06/24/2019
Amount: \$3,117.00
Amount Paid: \$3,117.00
Ocean City MGP Site
PI #: G000006127

Enclosed please find check number 2889372 in the amount of \$3,117.00, which covers the summary of charges for the current invoice period.

Sincerely,



Anna F. Sullivan
Project Manager

Enclosures

cc: Jeffrey Hosterman, LSRP

2889372



VOID IF NOT CASHED WITHIN 90 DAYS

50-937

213

CHECK DATE

AMOUNT

Check No. 2889372

07 03 2019

*****3,117.00

PAY TO THE ORDER OF TREASURER STATE OF NEW JERSEY
NJ DEPARTMENT OF TREASURY
PO BOX 417
TRENTON, NJ 08646-0417

EXACTLY *****3,117 DOLLARS 00 CENTS

Treasurer
FirstEnergy Corp.

Morgan Chase Bank, Syracuse, NY 13206

⑈ 2889372⑈ ⑆021309379⑆ 601864788⑈

VENDOR NO. 0210000188 DOC NO. 2000221463

PO NO	INVOICE / RCPT #	DATE	DOCUMENT #	VENDOR INV AMT	DISCOUNT	NET AMOUNT
	191050770	07/01/2019	1902340483	3,117.00	0.00	3,117.00

FOR CHECK INQUIRY, CONTACT FIRSTENERGY ACCOUNTS PAYABLE AT APHELP@FIRSTENERGYCORP.COM.



AIR QUALITY PERMITTING PROGRAM

Program Interest
OCEAN CITY COAL GAS (JCP&L & NJNG)
11TH ST & WEST AVE
Ocean City, NJ. 08226
73433

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 3,117.00

Billing Date
06/24/19

Due Date
07/24/19

NJEMS Bill ID
000000197172600

Summary	
Total Amount Assessed	3,117.00
Amount Received Before Creating Installment Plan (if installment plans is allowed)	0.00
Amount Transferred To Installment Plan	0.00
Installment Amount	0.00
Total Amount Credited	0.00
Total Amount Debited (Other Than Amounts Assessed)	0.00
Total Amount Due	3,117.00

RECEIVED
JUL 01 2019
Environmental Department

REMINDER:

- 5-YEAR RENEWAL INVOICES FOR PERMITS WHICH HAVE NOT MODIFIED ANY OF THE EQUIPMENT CONTAINED THEREIN CAN BE PAID ELECTRONICALLY AT WWW.NJDEPONLINE.COM
- WHEN PAYING BY CHECK PLEASE BE SURE TO WRITE YOUR INVOICE NUMBER ON YOUR CHECK.
- ALL RECORD CHANGES FOR PRECONSTRUCTION PERMITS MUST BE MADE ON A NON-TECH AMENDMENT FORM LOCATED ON OUR WEBSITE WWW.STATE.NJ.US/DEP/AQPP. DO NOT USE THIS INVOICE AS INDICATED.
- INITIAL & RENEWAL FEES ARE CALCULATED USING THE FEE STRUCTURE FOUND IN N.J.A.C. 7:27-8.6
- UPDATES TO ALL AIR REGULATIONS CAN BE FOUND AT WWW.STATE.NJ.US/DEP/AQM.
- SEE BACK OF INVOICE FOR DEP CONTACT INFORMATION AND ADDITIONAL PERMIT BILLING AND RENEWAL INFO

See Back Of Page for Billing Inquiries

INVOICE NO. 191050770

D9801F (R 3/14/02)

Let's protect our earth



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PERMITTING PROGRAM

INVOICE NO. 191050770

Program Interest ID
73433

Type of Notice
ORIGINAL (NON-INITIAL)

Billing Date
06/24/19

Due Date
07/24/19

NJEMS Bill ID
000000197172600

Amount Due
\$ 3,117.00

For name and/or address change, check box and write corrections on the back of this invoice.

DO NOT FOLD, BEND OR MARK

Enter the Amount of your payment →

\$ 3,117.00

RETURN THIS PORTION

with your check made payable to:

55

JERSEY CENTRAL POWER & LIGHT
 ATTN: Frank Lawson
 PO BOX 1911
 Morristown Town NJ 07962-1911

TREASURER - STATE OF NEW JERSEY
 and mail to:
 NJ DEPARTMENT OF TREASURY
 DIVISION OF REVENUE
 PO BOX 417
 TRENTON, NJ 08646-0417

EP1010101010101010100703040303111110003117000002321910507702555



AIR QUALITY PERMITTING PROGRAM

Program Interest
OCEAN CITY COAL GAS (JCP&L & NJNG) 11TH ST & WEST AVE Ocean City, NJ. 08226 73433

Type of Notice
ORIGINAL (NON-INITIAL)

Amount Due
\$ 3,117.00

Billing Date
06/24/19

Due Date
07/24/19

NJEMS Bill ID
000000197172600

Construction of New Source
Preconstruction Permit
This bill was created by the Assessments Trigger.

ASSESSMENTS

Start-End Date: 06/24/2019-06/24/2019 Activity: PCP190001

Assessment Type: Fee(Initial Application)

Regulatory Basis: [M.J.A.C. 7:27- 8.6(a)]

Status: Open (Pending Payment)

Amount: \$ 3117.00

Total Amount Assessed: \$ 3,117.00



New Jersey Department of Environmental Protection
Site Remediation Program

SITE AND CONTACT INFORMATION UPDATE FORM

Date Stamp
(For Department use only)

SECTION A. EXISTING SITE NAME AND LOCATION

NOTE: If you are changing LSRP contact information only, skip to Section B, No. 4.

Site Name: Ocean City Coal Gas (JCP&L & NJNG)

Street Address: 11th Street and Haven Avenue

Tax Lot Address (if different): _____

Municipality: Ocean City (Township, Borough or City)

County: Cape May Zip Code: 08226

Program Interest (PI) Number(s): G000006127

Case Tracking Number(s): LSR120001

SECTION B. INFORMATION TO BE UPDATED

Check all that apply then complete the corresponding section(s) of the form.

1. Changes in Site Address or Block and Lot Information

- Complete Section C. Changes in Site Address or Block and Lot Information (For changes in block and lot information **attach map(s)** showing old and new block and lot configurations)
- Complete Section D. Responsible Party Certification **Or** Section E. Person Responsible for Conducting Remediation Certification

2. Changes in Responsible Party Information

- I am adding Myself as a Responsible Party
- I am Updating the Responsible Party's Contact Information

Provide the new information in Section D. Responsible Party Information and Certification

NOTE: Adding a new responsible party does not relinquish responsibility for any previous responsible parties. See the instructions for this form for more details, available at: <http://www.nj.gov/dep/srp/srra/forms/>.

3. Changes in Person Responsible for Conducting Remediation Information

- I am changing the Person Responsible for Conducting Remediation (**Entity is Changing**)
- I am Updating the Contact Information for the Person Responsible for Conducting Remediation (**Entity remains the same**)

Provide the new information in Section E. Responsible Party Information and Certification

NOTE: Adding a Person Responsible for Conducting Remediation is **ONLY NECESSARY** when the Person Responsible for Conducting Remediation is **DIFFERENT** from the Responsible Party. Responsible Parties are assumed to be conducting remediation unless noted in this section. See the instructions for this form for definitions of 'Responsible Party' and 'Person Responsible for Conducting Remediation', available at: <http://www.nj.gov/dep/srp/srra/forms/>.

4. Changes in LSRP Contact Information

- Section F. Licensed Site Remediation Professional Information and Certification

SECTION C. CHANGES IN SITE ADDRESS OR BLOCK AND LOT INFORMATION NOT APPLICABLE

If you are reporting a change to **either** the site address or the site blocks and lots, provide **all information** (both address and block and lot information) below.

Check all that apply:

- I am reporting changes in the Site address
- I am reporting changes in the Block and lot information

Street Address (Site): _____

Tax Lot Address (if different): _____

Municipality: _____ (Township, Borough or City)

County: _____ Zip Code: _____

NOTE: When changing Block and Lots, please **attach Maps** to this form showing the current and former configuration of the Site Parcels.

List Old Municipal Block and Lot Numbers:		List New Municipal Block and Lot Numbers:	
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____

SECTION D. RESPONSIBLE PARTY INFORMATION AND CERTIFICATION & REMOVE HARRY SLAGLE AS A CONTACT

Full Legal Name of the Responsible Party: Jersey Central Power & Light Company

Name of Organization / Affiliation: Jersey Central Power & Light Company

Representative First Name: Frank Representative Last Name: Lawson

Title: Supervisor, Site Remediation

Phone Number: (973) 401-8309 Ext: _____ Fax: (973) 644-4165

Mailing Address: 300 Madison Avenue, P.O. Box 1911

City/Town: Morristown State: NJ Zip Code: 07962

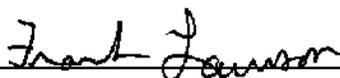
Email Address: flawson@firstenergycorp.com

Relationship to site:

Property Owner Leasehold Developer Other: Former property owner

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____



Date: _____

8-13-19

Name/Title: Frank Lawson / Supervisor, Site Remediation

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

SECTION E. PERSON RESPONSIBLE FOR CONDUCTING REMEDIATION INFORMATION AND CERTIFICATION
NOT APPLICABLE

Full Legal Name of Person Responsible for Conducting Remediation: _____

Name of Organization / Affiliation: _____

Representative First Name: _____ Representative Last Name: _____

Title: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

Relationship to site:
 Property Owner Leasehold Developer Other: _____

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____ Date: _____

Name/Title: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

Complete this Section ONLY if you are changing LSRP contact information

SECTION F. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND CERTIFICATION NOT APPLICABLE

Provide New Contact Information and Certify:

LSRP ID Number: _____
First Name: _____ Last Name: _____ (cannot change with this form)
Phone Number: _____ Ext: _____ Fax: _____
Mailing Address: _____
City/Town: _____ State: _____ Zip Code: _____
Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____
LSRP Name/Title: _____
Company Name: _____

NOTE: This form should not be used to retain or dismiss an LSRP from a specific site or program interest number. A completed LSRP Notification of Retention or Dismissal Form must be filed electronically through NJDEP Online at <http://www.nj.gov/dep/online> to dismiss the assigned LSRP, and a separate complete LSRP Notification of Retention or Dismissal Form must be filed to retain the new LSRP. The purpose of this form is to update LSRP contact information ONLY.

This form updates license information in the NJDEP's the database. It will not update your user profile information on NJDEP Online. You must update that information yourself on NJDEP Online available at: <http://www.nj.gov/dep/online>.

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420



State of New Jersey

PHILIP D. MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Site Remediation and Waste
Management Program
BUREAU OF INSPECTION
AND REVIEW
401 E. STATE STREET
P.O. BOX 420
MAIL CODE 401-05P

CATHERINE R. MCCABE
Commissioner

SHEILA Y. OLIVER
Lt. Governor

LSRP: Jeffrey Hosterman
jeff.hosterman@tetrattech.com

August 13, 2019

Harry Slagle
Supervisor
Jersey Central Power & Light
300 Madison Ave
Morristown, NJ 07962-1911
Phone: (973) 401-8762

Frank Lawson
JCP&L
300 Madison Avenue, P O Box 1911
Morristown, NJ 07960
Phone: (973) 401-8762
Email: flawson@firstenergycorp.com

Re: Ocean City Coal Gas (JCP&L)
11TH ST & WEST AVE
Ocean City, Cape May
Case Tracking #: 48735
SRP PI: G000006127
Activity Number Reference: LSD190002
Submission Type: LSRP - RIR (Area of Concern)

Dear Jeffrey Hosterman,

This letter serves to advise you that a Remedial Investigation Report submission has been received by the New Jersey Department of Environmental Protection (NJDEP) for Ocean City Coal Gas (JCP&L).

On May 7, 2009, the Site Remediation Reform Act (SRRA) was enacted. SRRA establishes criteria for the licensing of site remediation professionals who will assure that contaminated sites are remediated in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E. SRRA authorizes the NJDEP to establish mandatory timeframes for the completion of each phase of remediation. These timeframes, as well as other requirements of the act, have been codified in regulations that became effective November 4, 2009. The complete rule can be found at www.statc.nj.us/dep/srp/regs/arrcs/arrcs_rule.pdf. N.J.A.C. 7:26C-2.4 identifies the requirements with which you must comply.

Per the NJDEP records, the following attachments have been associated with your submission:

ATTACHMENT TYPE	DESCRIPTION	FILE NAME	RECEIVED	DUE
Signed Affidavit	Authorization to Submit through NJDEP Online	FORM - Authorization to Submit the RIR through NJDEP Online - FL signed 8-8-2019x.pdf	08/13/2019	
Remedial Investigation Report (RIR)	Remedial Investigation Report (RIR)	FINAL Great Egg Harbor Bay Supplemental Investigation Report 08102019.pdf	08/13/2019	
EDD (Contaminant Results Data)	Electronic Data Deliverable (Contaminant Results Data, Zip)			08/28/2019
Public Notification and Outreach form	Public Notification and Outreach form	FORM - Public Notification - FL signed 08082019.pdf	08/13/2019	
Receptor Evaluation (Updated)	Receptor Evaluation (Updated)	Updated Receptor Evaluation Form 8-10-2019.pdf	08/13/2019	
Receptor Evaluation Optional Attachments	Receptor Evaluation Optional Comments and Attachments	Updated Receptor Evaluation Form attachments 8-10-2019_printed.pdf	08/13/2019	
Well Search Spreadsheet	Well Search Spreadsheet	G000006127_071619WRS.xlsx	08/13/2019	

The table above displays attachments associated with your submittal. The NJDEP will proceed with its inspection of your submission at this time. You may view the status of your submission via the NJDEP DataMiner service, at <https://www13.state.nj.us/DataMiner>.

Sincerely,



Matthew Turner, Acting Bureau Chief
BUREAU OF INSPECTION AND REVIEW

TRANSMITTAL SHEET

Facility ID: G000006127
FACILITY Name: OCEAN CITY COAL GAS (JCP&L & NJNG)
CASE Name: Ocean City Coal Gas (JCP&L)
CASE Tracking#: 48735
SUBMISSION TYPE: LSRP - RIR (Area of Concern)
SERVICE ID: 964853
SUMBISSION COR: LSD190002

You are required to submit the following documents(s). If you Bypassed the Electronic Data Deliverable because you previously submitted electronically to the Department, then disregard it from the list:

Electronic Data Deliverable (Contaminant Results Data, Zip)

Please mail to:

Attn: LSRP - Submission SRRA Report received
401 East State Street
Mail Code 401-05H
PO Box 420
Trenton, NJ 08625

***Note: If you are still required to submit the Electronic Data Deliverable, Please send electronically via e-mail to srpedd@dep.nj.gov. Please put in the subject line of e-mail, G000006127, SERVICE ID: 964853**

Per the NJDEP records, the following depicts the Areas of Concern associated with your case:

In Submission ID	NJDEP ID	AOC ID	AOC TYPE	Confirmed Contamination		DATE
				DESCRIPTION	STATUS	
X	11 82 13 6	1	Storage tank and appurtenance – Above ground storage tank	MGP site drip oil tanks (removed prior to RI). These were made of steel and had 8000 and 3000 gallon capacities. Drip oil was recycled for carburation oil for the water gas process.	RAW	08/08/2019
X	11 82 14 5	10	Storage tank and appurtenance – Above ground storage tank	Gas holder (removed prior to RI, concrete base apparent). This gas holder had a 90-ft diameter volume and a volume of 500,000 cubic feet.	RAW	08/08/2019
X	11 82 14 6	11	Storage tank and appurtenance – Above ground storage tank	Purifiers (removed prior to RI). There were 3 purifiers with 15-ft diameters.	RAW	08/08/2019
X	11 82 14 7	12	Other areas of concern – Any area suspected of containing contaminants	Gas works (removed prior to RI). The gas works building was constructed in 1902. It occupied a footprint of approximately 110 feet by 80 feet.	RAW	08/08/2019
X	11 82 14 8	13	Environmental media – Media Ground water	Groundwater beneath and downgradient of the site is impacted by dissolved contaminants (primarily benzene and PAHs) derived from the Site.	RAW	08/08/2019
X	11 82 14 9	14	Environmental media – Media Sediment	Sediment adjacent to 11th Street storm sewer outfall in Great Egg Harbor Bay. Ubiquitous PAHs are apparently derived from other sources due to similar chemical fingerprints with reference samples.	RI	08/08/2019
X	11 82 15 0	15	Environmental media – Media Surface water	VOCs are discharging with groundwater into the Bay, but are diluted and not detected in Bay water.	RI	08/08/2019
X	82 13 7	2	Other areas of concern – Any area suspected of containing contaminants	Coke and coal piles (removed prior to RI). These stockpiles were above ground and of variable dimension.	RAW	08/08/2019
X	11 82 13 8	3	Storage tank and appurtenance – Above ground storage tank	Gas and oil tanks (removed prior to RI). Three oil tanks contained gas oil and ranged in size from 22,000 to 26,000 gallons. There was also a pressurized tank for gas.	RAW	08/08/2019
X	11 82 13 9	4	Storage tank and appurtenance – Unreg Under ground storage tank	Tar storage well (removed and/or buried and filled with solids prior to RI). Estimated volume capacity of 4500 gallons. This was a 10' diameter below ground cylindrical structure.	RAW	08/08/2019
X	11 82	5	Storage tank and appurtenance – Above ground storage tank	Northern relief gas holder (removed prior to RI). This was a 40' diameter	RAW	08/08/2019

	14 0									
X	11 82 14 1	6	Storage tank and appurtenance – Above ground storage tank	above ground tank that held unpurified gas. Gas-oil tank (removed prior to RI). This was a 22,000 gallon above ground tank that held gas oil.	Yes	RAW		08/08/2019		
X	11 82 14 2	7	Storage tank and appurtenance – Unreg Under ground storage tank	Tar separator and well (removed and/or buried and filled with solids prior to RI). These tar storage units were rectangular tanks that could contain 1000, 3500, and 7000 gallons.	Yes	RAW		08/08/2019		
X	11 82 14 3	8	Storage tank and appurtenance – Above ground storage tank	Tar Tank, still, separator, and condensers (removed prior to RI). These had volumetric capacities that ranged from 1500 to 5000 gallons.	Yes	RAW		08/08/2019		
X	11 82 14 4	9	Storage tank and appurtenance – Above ground storage tank	South relief gas holder (removed prior to RI). This gas holder was 65 feet in diameter and held unpurified gas.	Yes	RAW		08/08/2019		

Note: NJDEP recommends that you keep the NJDEP ID recorded in your Master Case Inventory Document Spreadsheet



State of New Jersey

Department of Environmental Protection
Air Quality, Energy and Sustainability
Division of Air Quality
Bureau of Stationary Sources
401 E. State Street, 2nd Floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

PHILIP D. MURPHY
Governor

CATHERINE R. McCABE
Commissioner

SHEILA Y. OLIVER
Lt. Governor

**Air Pollution Control
Preconstruction Permit and Certificate to Operate
Construction of a New Source**

Permit Activity Number: PCP190002

Program Interest No: 73433

Mailing Address	Plant Location
FRANK LAWSON SUPERV JCP&L CO PO BOX 1911 - 310 MADISON AVE Morristown, NJ 07962-1911	OCEAN CITY COAL GAS (JCP&L & NJNG) 11th St & West Ave Ocean City Cape May County, New Jersey

Approval Date: 08/21/2019
Expiration Date: 08/20/2024

The New Jersey Department of Environmental Protection (Department) has reviewed the above referenced air pollution control permit application. On the basis of the information provided, the Department concludes that the application satisfies all applicable requirements of the New Jersey Air Pollution Control regulations codified at N.J.A.C. 7:27 et seq. This permit allows for inspection and evaluation of the equipment by the Department to assure conformance with all provisions of N.J.A.C. 7:27 et seq. and any other applicable federal requirements codified at 40 CFR 52, 60, 61 and 63.

The equipment, that is authorized to be installed and operated under this approval, is described in Section A, Source Operations and Section D, Equipment Inventory. Equipment at the facility referenced by this Permit shall be operated in accordance with the Conditions of Approval set forth in Section D, Facility Specific Requirements.

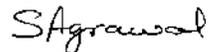
The Department hereby issues this permit and certificate under the authority of chapter 106, P.L. 1967(N.J.S.A 26:2C-9.2). You may construct, reconstruct, install, or modify the above referenced equipment and/or control apparatus consistent with the approval.

The approved Permit is available for download in PDF format which contains the facility's specific requirements (compliance plan) at: <http://www.nj.gov/dep/aqpp>. After accessing the web site, click on "Approved PCP Permits" listed under "Reports" and then type in your Program Interest (PI) Number, 73433, as instructed on the screen. You will be able to view, print or electronically store your permit. If you have any questions regarding this permit approval, please contact the Department at the Preconstruction Permit Help Line available from 9:00 AM to 4:00 PM daily, where you may speak to someone about any technical questions you may have. The Preconstruction Permit Technical Help Line number is 609-292-6716.

If, in your judgment as an applicant for an air pollution control permit, the Department is imposing any unreasonable Condition of Approval, you may contest the Department's decision and request a contested case hearing pursuant to the Administrative Code at N.J.A.C. 7:27-1.32(a). All requests for contested case hearings must be received in writing by the Department within twenty (20) calendar days of the date you receive this permit approval and must contain the information specified in the Administrative Hearing Request Checklist and Tracking Form.

If you have any non technical questions please use the Bureau's number 609- 292-0834. If you have any questions when filing a General Permit please use the General Permit Help number 609-633-2829.

Approved by:



Sunila Agrawal
Preconstruction Permits

Administrative Hearing Request Checklist and Tracking Form

I. Document Being Appealed

Name of the Facility	Facility ID Number	Permit Activity Number	Issuance Date
OCEAN CITY COAL GAS (JCP&L & NJNG)	73433	PCP190002	

II. Contact Information

Name of Person Requesting Hearing	Name of Attorney (if applicable)
Address:	Address:
Telephone:	Telephone:

III. Please include the following information as part of your request:

- A. The date the permittee received the permit decision;
- B. Two printed copies of the document being appealed – for submitting to address 1 below;
A PDF copy of the document being appealed on a CD – for submitting to address 2 below
- C. The legal and factual questions you are appealing;
- D. A statement as to whether or not you raised each legal and factual issues during the permit application process;
- E. Suggested revised or alternative permit conditions;
- F. An estimate of the time required for the hearing;
- G. A request, if necessary, for a barrier-free hearing location for physically disabled persons;
- H. A clear indication of any willingness to negotiate a settlement with the Department prior to the Departments processing of your hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

1. New Jersey Department of Environmental Protection
Office of Legal Affairs
Attention: Adjudicatory Hearing Requests
401 E. State Street, P.O. Box 402
Trenton, New Jersey 08625

2. Mail Code: 401-02
New Jersey Department of Environmental Protection
Air Quality Program
P.O. Box 420
Trenton, New Jersey 08625-0420
Phone: (609) 633-2829

Signature

Date

Administrative Hearing Request Checklist and Tracking Form

IV. If you are not the applicant but rather an interested person claiming to be aggrieved by the permit decision, please include the following information:

1. The date you or your agent received notice of the permit decision (include a copy of that permit decision with your hearing request);
2. Evidence that a copy of the request has been delivered to the applicant for the permit which is the subject of the permit decision;
3. A detailed statement of which findings of fact and/or conclusion of law you are challenging;
4. A description of your participation in any public hearings held in connection with the permit application and copies of any written comments you submitted;
5. Whether you claim a statutory or constitutional right to a hearing, and, if you claim such a right, a reference to the applicable statute or explanation of how your property interests are affected by the permit decision;
6. If the appeal request concerns a CAFRA permit decision, evidence that a copy of the request has been delivered to the clerks of the county and the municipality in which the project which is the subject of the permit decision is located;
7. Suggested revised or alternative permit conditions;
8. An estimate of the time required for the hearing;
9. A request, if necessary, for a barrier-free hearing location for physically disable persons;
10. A clear indication of any willingness to negotiate a settlement with the Department prior to the Department's transmittal of the hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

New Jersey Department of Environmental Protection
Office of Legal Affairs
Attention: Adjudicatory Hearing Requests
401 East State Street, P.O. Box 402
Trenton, New Jersey 08625-0402

Mail Code: 401-02
New Jersey Department of Environmental Protection
Air Quality Program
P.O. Box 420
Trenton, New Jersey 08625-0420
Phone: (609) 633-2829

Signature

Date

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Table of Contents

Facility Name: OCEAN CITY COAL GAS (JCP&L & NJNG)
Facility ID No.: 73433
Permit Activity No.: PCP190002

Section A

AUTHORIZED SOURCE OPERATIONS

Section B

ACRONYMS

Section C

GENERAL PROVISIONS AND AUTHORITIES

Section D

PERMIT INFORMATION

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section A

Facility Name: OCEAN CITY COAL GAS (JCP&L & NJNG)
Facility ID No.: 73433
Permit Activity No.: PCP190002

AUTHORIZED SOURCE OPERATIONS

This Preconstruction Permit and the Certificate to Operate for the following equipment is issued pursuant to N.J.A.C. 7:27-8.

Description of Source Activity

Source Operation Type: Groundwater Treatment (GWT) System

Source Operation Description: GWT system consisting of one oil-water separator, a process tank with maximum influent groundwater VOC (Total) concentration of 1000 ppb and Group 1 Toxic (Benzene) concentration of 610 ppb, and a carbon adsorption unit with minimum design VOC control efficiency of 95%.

Source Operation Details: The sources authorized by this permit shall be operated within the parameters specified in the Equipment, Control Device, and/or Emission Unit/Batch Process Operating Scenario Details of this permit. Operation of the authorized sources within these parameters is required in addition to compliance with the conditions specified in Section D- Facility Specific Requirements.

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section B

Facility Name: OCEAN CITY COAL GAS (JCP&L & NJNG)
Facility ID No.: 73433
Permit Activity No.: PCP190002

ACRONYMS

CEMS	Continuous Emissions Monitor System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitor System
EPA	United States Environmental Protection Agency
EMS	Emission Measurement Section - NJDEP
HAP	Hazardous Air Pollutant
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NOx	Oxides of Nitrogen
PM-2.5	All particulate matter having an aerodynamic diameter less than or equal to a nominal 2.5 microns
PM-10	All particulate matter having an aerodynamic diameter less than or equal to a nominal 10 microns
PST	Performance Specification Test
REO	Regional Enforcement Office - NJDEP
SO ₂	Sulfur Dioxide
TSP	Total Suspended Particulate Matter
VOC	Volatile Organic Compounds

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section C

Facility Name: OCEAN CITY COAL GAS (JCP&L & NJNG)

Facility ID No.: 73433

Permit Activity No.: PCP190002

GENERAL PROVISIONS AND AUTHORITIES
Preconstruction Permits

1. Notwithstanding compliance with other provisions of N.J.A.C. 7:27-1 et seq., no person shall cause, suffer, allow or permit to be emitted into the outdoor atmosphere substances in quantities which shall result in air pollution as defined at N.J.A.C. 7:27-5.1. [N.J.A.C. 7:27-5.2(a)]
2. The permittee shall not construct, reconstruct, install, or modify a significant source or control apparatus serving the significant source without first obtaining a preconstruction permit under N.J.A.C. 7:27-8. [N.J.A.C. 7:27-8.3(a)]
3. The permittee shall not operate (nor cause to be operated) a significant source or control apparatus serving the significant source without a valid operating certificate. [N.J.A.C. 7:27-8.3(b)]

4. Permit Revisions:

The permittee shall not take any action which requires a permit revision, compliance plan change, seven-day-notice change, amendment, or change to a batch plant permit, under any applicable provision at N.J.A.C. 7:27-8.17 through 8.23, without complying with that applicable provision.

The following summarize N.J.A.C. 7:27-8.18 through 8.21:

- a. The permittee shall file a permit revision request and receive approval from the Department prior to increasing any maximum allowable emission limit, increasing actual emissions, to a rate or concentration greater than a maximum allowable emission, causing the emissions of a new air contaminant, use a new raw material, reconstructing equipment, change the ground level concentration of an air contaminant in an area where the public has access, replace the permitted source, or constructing or installing a new significant source. [N.J.A.C. 7:27-8.18]
- b. The permittee shall file a compliance plan change request and receive approval from the Department prior to decreasing the frequency of testing, monitoring, recordkeeping, or reporting, changing the monitoring method, changing a level, rate, or limit of an operational parameter included in the conditions, or reducing a source's potential to emit. [N.J.A.C. 7:27-8.19]
- c. At least seven days prior to proceeding with a physical or operational change that is outside the scope of activities allowed by this permit, but will not increase emissions over the allowable emissions and will not alter the stack characteristics, the permittee shall file a seven-day-notice change. The permittee

may proceed with the proposed changes seven days after such notice is filed with the Department. [N.J.A.C. 7:27-8.20]

- d. The permittee shall file an amendment within 120 days of making any change of the information which allows the Department to identify and contact the permittee, changing the name, number or designation of any equipment or stack covered by this permit, changing the parameters of a stack in such a way to reduce the ground level concentration of an air contaminant, or correction of a typographical error that will not result in an increase of actual or allowable emissions. [N.J.A.C. 7:27-8.21]

The permittee shall review the provisions of N.J.A.C. 7:27-8.18 through 7:27-8.21 to determine the appropriate type of request to file.

5. The permittee shall make the preconstruction permit or certificate, together with any amendments, seven-day-notices, or other documents related to the permit and certificate, readily available for Department inspection on the operating premises. [N.J.A.C. 7:27-8.3(d)]
6. The permittee shall not use or cause to be used the equipment or control apparatus unless all components connected or attached to, or serving, the equipment or control apparatus, are functioning properly and are in compliance with the preconstruction permit and certificate and all conditions and provisions thereto. [N.J.A.C. 7:27-8.3(e)]
7. A preconstruction permit is not transferable either from the location authorized in the preconstruction permit to another location, or from any one piece of control apparatus or equipment to another piece of control apparatus or equipment. [N.J.A.C. 7:27-8.3(f)]
8. Once a permit or certificate is issued, the permittee is fully responsible for compliance with N.J.A.C. 7:27-8 and with the permit and certificate, including adequate design, construction, and operation of the source, even if employees, contractors, or others work on or operate the permitted source. If the Department issues any other requirement with the force of law, such as an order, which applies to the source, the permittee is also responsible for compliance with that requirement. [N.J.A.C. 7:27-8.3(g)]
9. Preconstruction permits and certificates do not any way relieve the permittee from the obligation to obtain necessary permits from other government agencies and to comply with all other applicable Federal, State, and local rules and regulations. [N.J.A.C. 7:27-8.3(h)]
10. The permittee shall not suffer, allow, or permit any air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in such quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant which occurs only in areas over which the permittee has exclusive use or occupancy. In determining whether an odor unreasonably interferes with the enjoyment of life or property, the Department shall consider all of the relevant facts and circumstances, including, but not limited to, the character, severity, frequency, and duration of the odor, and the number of persons affected thereby. In considering these and other relevant facts and circumstances, no one factor shall be dispositive, but each shall be considered relevant in determining whether an odor interferes with the enjoyment of life or property, and, if so, whether such interference is unreasonable considering all of the circumstances. [N.J.A.C.7:27-8.3(j)]

11. The Department and its representatives have the right to enter and inspect any facility or property in accordance with N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-8.3(m)]
12. There shall be an affirmative defense to liability for penalties for a violation of a preconstruction permit or certificate occurring as a result of an equipment malfunction, an equipment start-up, an equipment shutdown, or during the performance of necessary maintenance. The affirmative defense shall be asserted and established as required pursuant to P.L. 1993. c.89 (adding N.J.S.A. 26:2C-19.1 through 2C-19.5) and any rules the Department promulgates thereunder, and shall meet all of the requirements thereof. There shall also be an affirmative defense to liabilities for penalties or other sanctions for noncompliance with any technology based emission limitation in this permit or certificate, if the noncompliance was due to an emergency as defined at N.J.A.C. 7:27-22.1, provided that the affirmative defense is asserted and established in compliance with 40 CFR 70.6(g) and meets all requirements thereof. [N.J.A.C. 7:27-8.3(n)]
13. The permittee shall not cause or use the equipment specified in a preconstruction permit in a manner that will result in the emission of any air contaminant not listed in the Facility Specific Requirements in this Preconstruction Permit at a rate equal to or higher than the applicable reporting threshold in Table A in N.J.A.C. 7:27-8 Appendix 1 or 7:27-17.9(a). [N.J.A.C. 7:27-8.4(k)1]
14. No air contaminant, or category of air contaminant, where accepted by the Department, shall be emitted other than those approved in the preconstruction permit. [N.J.A.C. 7:27-8.13(a)]
15. Any person to whom the Department has issued a preconstruction permit or certificate shall comply with all terms and conditions of any order related to the preconstruction permit or certificate. [N.J.A.C. 7:27-8.13(a)]
16. The permittee shall maintain all records required in the preconstruction permit for a period of five (5) calendar years from the calendar year within which the record was generated. [N.J.A.C. 7:27-8.13(a)]
17. The Department may change the conditions of approval of any approved certificate to operate at the time of renewal of a temporary operating certificate; at the time of approval or renewal of a five-year operating certificate; or at any time during the period a certificate is in effect, if the Department determines that such change is necessary to protect human health or welfare or the environment. [N.J.A.C. 7:27-8.13(b)]
18. Upon request of the Department, the permittee shall submit to the Department information relevant to the operation of equipment and control apparatus including all information specified at N.J.A.C. 7:27-8.13(c). [N.J.A.C. 7:27-8.13(c)]
19. If the conditions of a preconstruction permit or certificate to operate require the Department to incur any of the following charges, the permittee shall reimburse the Department for the full amount of these charges: (1) The charges billed by any phone company for the maintenance of a dedicated telephone line required by this permit or the certificate to operate for the electronic transmission of data; or (2) The charges billed by any laboratory for performing the analysis of audit samples collected pursuant to testing or monitoring required by this permit or the certificate to operate. [N.J.A.C. 7:27-8.13(g)]
20. Any exceedance of the operating requirements or emission concentrations specified in a preconstruction permit shall be reported within three (3) business days, by writing to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13(h)]

21. The permittee shall, when requested by the Department, provide such testing facilities exclusive of instrumentation and sensing devices as may be necessary for the Department to determine the kind and amount of air contaminants emitted from the equipment or control apparatus. The testing facilities shall include the utilities, the structure to hold testing equipment and/or personnel, and any ports in stacks needed to carry out testing required by this permit. During testing by the Department, the equipment and control apparatus shall be operated under such conditions within their capacities as may be requested by the Department. The test facilities may be either permanent or temporary, at the discretion of the person responsible for their provision, and shall conform to all applicable laws, regulations, and rules concerning safe construction and safe practice. Testing facilities, which contain platforms and other means of personnel access, shall conform to OSHA standards. [N.J.A.C. 7:27-8.13(i)]
22. Upon request of the Department, the permittee shall submit to the Department any record relevant to any permit or certificate. Such records shall be submitted to the Department within thirty (30) days of the request by the Department or within a longer time period if approved in writing by the Department. [N.J.A.C. 7:27-8.15(a)]
23. The permittee shall submit any required report in a format and on a schedule approved by the Department. Such report shall be transmitted on paper, on computer disk, or electronically, at the discretion of the Department. [N.J.A.C. 7:27-8.15(b)]
24. Any report submitted to the Department, including but not limited to, a report submitted as an amendment of this permit or the certificate to operate pursuant to N.J.A.C. 7:27-8.3(c) shall include, as an integral part of the report, certifications complying with N.J.A.C. 7:27-1.39. [N.J.A.C. 7:27-8.15(c)]
25. Upon request of the Department, the permittee shall report on forms obtained from the Department the air contaminant actual emissions and information relevant thereto, of any air contaminant or category of air contaminant emitted by the equipment, control apparatus, or source operation. [N.J.A.C. 7:27-8.15(d)]
26. This listing of requirements reflects the state rules and regulations that apply to a majority of sources. If a specific requirement in a rule or regulation that applies to a permittee is not included in this section or in the Facility Specific Requirements it does not relieve the permittee from the obligation to comply with that regulation.
27. Process monitors must be operated at all times when the associated process equipment is operating except during outage time allowed by Department guidelines/procedures or as outlined in Technical Manual 1005. The Permittee must keep a service log as required.
28. Each permittee shall meet all requirements of the approved source emissions testing and monitoring protocol during the term of the operating permit. Whenever the facility makes a replacement, modification, change or repair of a certified CEMS or COMS that may significantly affect the ability of the system to accurately measure or record data, the facility must recertify the CEMS or COMS in accordance with Section V.B. and Appendix E of Technical Manual 1005. The facility is responsible for contacting the Emission Measurement Section to determine the need for recertification and/or to initiate the recertification process. The facility is responsible for any downtime associated with the replacement, modification, change or repair of the CEMS or COMS. [N.J.A.C. 7:27-8.13(d)]

29. The following Department offices may be referenced in a preconstruction permit. Please use the following addresses when submitting any correspondence to these offices:

Emission Measurement Section
Mail Code: 09-01, P.O. Box 420
Trenton, NJ 08625-0420

Central Regional Enforcement Office
P. O. Box 407
Trenton, NJ 08625-0407

Northern Regional Enforcement Office
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

Southern Regional Enforcement Office
2 Riverside Drive – Suite 201
Camden, NJ 08102

30. In accordance with the Air Pollution Control Act at N.J.S.A. 26:2C-19(e), any operation of the equipment which may cause off-property effect, including odors, shall be immediately reported by calling the NJDEP Environmental Action Hotline at (877) 927-6337.
31. In accordance with N.J.A.C. 7:27-21, facilities are required to submit annual emission statements of their actual emissions if the Potential-to-emit for the entire facility exceeds the following thresholds (including all emissions from the facility, both permitted and unpermitted). Additional information about Emission Statement reports can be obtained by calling (609) 984-5483.

AIR CONTAMINANT	Threshold in Tons per Year
VOC (Volatile Organic Compounds)	10
NO _x (Oxides of Nitrogen)	25
CO (Carbon Monoxide)	100
SO ₂ (Sulfur Dioxide)	100
TSP (Total Suspended Particulates)	100
PM _{2.5} (Particulate Matter ≤ 2.5 microns)	100
PM ₁₀ (Particulate Matter ≤ 10 microns)	100
NH ₃ (Ammonia)	100
Lead	5

32. In accordance with N.J.A.C. 7:27-22, facilities are required to submit a Title V Operating Permit application, within one year, if the potential-to-emit for the entire facility exceeds any of the following thresholds (including all emissions from the facility, both permitted and unpermitted). Additional Information about Operating Permits can be obtained by calling the Operating Permit Hotline at (609) 633-8248.

AIR CONTAMINANT	Threshold in Tons per Year
VOC (Volatile Organic Compounds)	25
NO _x (Oxides of Nitrogen)	25
CO (Carbon Monoxide)	100
SO ₂ (Sulfur Dioxide)	100
TSP (Total Suspended Particulates)	100
PM ₁₀ (Particulate Matter ≤ 10 microns)	100
Lead	10
Any HAP (Hazardous Air Pollutant)	10
All HAPs Collectively	25
Any other Air Contaminant	100

33. In accordance with N.J.A.C. 7:27-8.13(e), facilities are subject to 4 billable compliance inspections over the life of the Operating Certificate. Facilities will be invoiced for a service fee per inspection pursuant to N.J.A.C. 7:27-8.6 after the periodic compliance inspection is conducted.

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section D

Facility Name: OCEAN CITY COAL GAS (JCP&L & NJNG)

Facility ID No.: 73433

Permit Activity No.: PCP190002

PERMIT INFORMATION

FACILITY SPECIFIC REQUIREMENTS

REASON FOR APPLICATION

FACILITY PROFILE (GENERAL)

EQUIPMENT INVENTORY

CONTROL DEVICE INVENTORY

EMISSION POINT INVENTORY

EMISSION UNIT/BATCH PROCESS INVENTORY

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section D

Facility Name: OCEAN CITY COAL GAS (JCP&L & NJNG)

Facility ID No.: 73433

Permit Activity No.: PCP190002

FACILITY SPECIFIC REQUIREMENTS

PCP190002

New Jersey Department of Environmental Protection
 Facility Specific Requirements

Emission Unit: U1 Groundwater treatment system

Subject Item: CD1 Single, 200-lb vapor-phase carbon unit to treat vapors vented from OWS and Feed Tank

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Design Capacity: The carbon adsorption unit shall have the following manufacturer specifications: Manufacturer: Evoqua Model: VSC 200 Adsorber Type: Fixed (Regenerative) Maximum Gas Flowrate to Adsorber: 100 ACFM Maximum Pressure: 3 Psig Maximum Temperature: 140 degrees F Minimum control efficiency: 95% for VOC (Total) or TOC (total organic compounds) Maximum Total Weight of Adsorbent When Saturated: 200 lbs [N.J.A.C. 7:27- 8.13(a)]	Design Capacity: Monitored by documentation of construction once initially. Review manufacturer specifications and instructions to ensure compliance. [N.J.A.C. 7:27- 8.13(d)1]	Design Capacity: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and maintain a copy of the manufacturer document on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.
2	The permittee shall maintain records of carbon unit operations. [N.J.A.C. 7:27-16.16(g)3ii]	None.	Recordkeeping by certified lab analysis results at the approved frequency. The permittee shall record the date and time the carbon used in the control apparatus is regenerated or replaced; also maintain production records sufficient to demonstrate whether the processes conducted generate VOC emissions within the design parameters of the control apparatus and any other information required to document whether the control apparatus is being used and maintained in accordance with the manufacturer's recommended procedures. Such manufacturer's recommended procedures shall be readily available on the operating premises, and the person responsible for the source operation shall provide these to the Department upon request. [N.J.A.C. 7:27-16.16(g)3ii]	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Maximum Influent Vapor Concentration of Total Organic Compounds \leq 156 ppmv. [N.J.A.C. 7:27- 8.13(a)]	Total Organic Compounds: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per Department approved test method using PID readings and certified lab analysis results of Summa Canister sampling. The sampling frequency shall be as follows: PID readings: Every two weeks after startup; and Certified Lab Analysis Results (Summa Canister Sampling): Quarterly after start-up for one year and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)1]	Total Organic Compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	Other (provide description): As per the approved schedule, Permittee shall electronically submit a copy of the certified lab analysis results along with a certified summary of the results to the appropriate Regional Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]
4	Maximum Influent Vapor Concentration of Benzene \leq 88.45 ppmv. [N.J.A.C. 7:27- 8.13(a)]	Benzene: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using PID readings and certified Lab analysis results of Summa Canister sampling. The sampling frequency shall be as follows: PID readings: Every two weeks after startup; and Certified Lab Analysis Results (Summa Canister Sampling): Quarterly after start-up for one year and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)2]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: As per the approved schedule, Permittee shall electronically submit a copy of the certified lab analysis results along with a certified summary of the results to the appropriate Regional Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]
5	Maximum Influent Vapor Concentration of Ethylbenzene \leq 64.05 ppmv. [N.J.A.C. 7:27- 8.13(a)]	Ethylbenzene: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using PID readings and certified lab analysis results of Summa Canister sampling. The sampling frequency shall be as follows: PID readings: Every two weeks after startup; and Certified Lab Analysis Results (Summa Canister Sampling): Quarterly after start-up for one year and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)2]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: As per the approved schedule, Permittee shall electronically submit a copy of the certified lab analysis results along with a certified summary of the results to the appropriate Regional Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Maximum Influent Vapor Concentration of Naphthalene \leq 3.24 ppmv. [N.J.A.C. 7:27-8.13(a)]	Naphthalene: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using PID readings and certified lab analysis results of Summa Canister sampling. The sampling frequency shall be as follows: PID readings: Every two weeks after startup; and Certified Lab Analysis Results (Summa Canister Sampling): Quarterly after start-up for one year and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)2]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: As per the approved schedule. Permittee shall electronically submit a copy of the certified lab analysis results along with a certified summary of the results to the appropriate Regional Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]
7	Maximum Influent Vapor Concentration of Toluene \leq 0.59 ppmv. [N.J.A.C. 7:27-8.13(a)]	Toluene: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using PID readings and certified lab analysis results of Summa Canister sampling. The sampling frequency shall be as follows: PID readings: Every two weeks after startup; and Certified Lab Analysis Results (Summa Canister Sampling): Quarterly after start-up for one year and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)2]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: As per the approved schedule. Permittee shall electronically submit a copy of the certified lab analysis results along with a certified summary of the results to the appropriate Regional Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]
8	Maximum Concentration of Air Contaminants at Outlet of Primary Adsorption Units at Breakthrough \leq 78 ppmv or 50% of influent concentration, whichever is lesser. [N.J.A.C. 7:27- 8.13(a)]	Maximum Concentration of Air Contaminants at Outlet of Primary Adsorption Units at Breakthrough: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using PID readings and certified lab analysis results of Summa Canister sampling. The sampling frequency shall be as follows: PID readings: Every two weeks after startup; and Certified Lab Analysis Results (Summa Canister Sampling): Quarterly after start-up for one year and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)1]	Maximum Concentration of Air Contaminants at Outlet of Primary Adsorption Units at Breakthrough: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	<p>When breakthrough occurs, the GWT system shall be immediately shut down, and the carbon adsorber unit shall be taken out of service until the saturated or spent carbon is regenerated or replaced with a fresh one. The saturated carbon shall be properly stored and taken off-site for regeneration or disposal. [N.J.A.C. 7:27- 8.13(a)]</p>	<p>None.</p>	<p>Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Record the date and time when the carbon unit(s) are changed or regenerated and the breakthrough concentrations. All records shall be maintained on site at all times. [N.J.A.C. 7:27- 8.13(d)3]</p>	<p>Obtain an approved permit. As per the approved schedule Should the need to install and operate a secondary carbon adsorption unit arise, Permittee shall first obtain an approved permit by modifying the existing permit for installation of the secondary carbon unit.. [N.J.A.C. 7:27- 8.13(d)4]</p>

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1 Groundwater treatment system
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall post the name of the contact person, together with the address and phone number, on a permanent, legible sign in a conspicuous location on the work site prior to beginning the work to be performed in accordance with the permit. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	Submit a report: Upon occurrence of event. The permittee shall report any non-compliance within three working days after the event in writing to the Air Regional Enforcement Office. [N.J.A.C. 7:27- 8.13(d)4]
2	The GWT system operation shall be restricted to those remediation areas and limited to the maximum influent groundwater concentrations of the contaminants of concern as specified in the RADIUS permit application and supporting attachment documents. The certified lab analysis results for the influent groundwater shall be based on an approved applicable EPA Test Method(s) for sampling contaminated groundwater. [N.J.A.C. 7:27- 8.13(a)]	Monitored by wastewater sampling each month during operation. In lieu of conducting influent groundwater sampling, permittee may use the certified lab analysis results for the contaminated influent groundwater which are contained in the required monthly sampling reports submitted to the Department's Bureau of Site Remediation to ensure compliance. [N.J.A.C. 7:27- 8.13(d)1]	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and maintain all records on site at all times, including copy of the certified lab analysis results. [N.J.A.C. 7:27- 8.13(d)3]	None.
3	The permittee shall notify the appropriate Regional Air Compliance & Enforcement Office in writing within thirty days of the completion of the groundwater treatment system. [N.J.A.C. 7:27- 8.13(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: Upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)4]
4	The permittee shall notify the appropriate Regional Air Compliance & Enforcement Office in writing at least seven days prior to the start-up of the groundwater treatment system. [N.J.A.C. 7:27- 8.13(d)4]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: Once initially. [N.J.A.C. 7:27- 8.13(d)4]
5	Maximum GWT System Influent Groundwater Design Capacity <= 40 gal/min. [N.J.A.C. 7:27- 8.13(a)]	Design Capacity: Monitored by documentation of construction once initially. Review GWT system design and pump manufacturer specifications and instructions once initially to ensure compliance. [N.J.A.C. 7:27- 8.13(d)1]	Design Capacity: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and maintain all records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Contaminated Groundwater Total Throughput \leq 21,042 MMgal/yr. [N.J.A.C. 7:27- 8.13(a)]	Total Throughput: Monitored by waste feed/charge rate monitoring (liquid) continuously, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27- 8.13(d)2]	Total Throughput: Recordkeeping by manual logging of parameter or storing data in a computer; data system each month during operation and maintain all records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.
7	GWT System Maximum Influent Concentration of Total Organic Compounds \leq 1,000 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Total Organic Compounds: Monitored by calculations each month during operation using the certified lab analysis results for the contaminated influent groundwater which are contained in the required monthly sampling reports submitted to the Department's Bureau of Site Remediation to ensure compliance. [N.J.A.C. 7:27- 8.4(1)]	Total Organic Compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all records on site at all times, including copy of the certified lab analysis results. [N.J.A.C. 7:27- 8.13(d)3]	None.
8	The GWT system shall be equipped with an air pollution control carbon adsorption unit, operated and maintained in accordance with manufacturer specifications and instructions. [N.J.A.C. 7:27- 8.13(a)]	Monitored by documentation of construction once initially. Review GWT system design specifications once initially to ensure compliance. [N.J.A.C. 7:27- 8.13(d)1]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and maintain all records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.
9	All emitted air pollutants (including the HAP Contaminants of Concern) shall be below the Reporting Thresholds in N.J.A.C. 7:27-8, Appendix 1, Table A, and N.J.A.C. 7:27-17.9(b), based on maximum design air flowrate and maximum influent vapor concentrations. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
10	Opacity: No visible emissions: Equipment shall not be used in a manner that will cause visible emissions exclusive of condensed water vapor. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.

PCP190002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1 Groundwater treatment system

Operating Scenario: OS1 Oil water separator receiving groundwater with NAPL from recovery wells

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Design Capacity: The Oil-Water Separator Storage Tank shall have the following design specifications: Manufacturer: MAE2 Maximum Capacity =< 500 gals Shape of Storage Vessel: Rectangular Dimensions 5-4 H X 7-ft L X 3-ft W Fill Method: Pipe Maximum Fill Rate: 40 gpm [N.J.A.C. 7:27- 8.13(a)]	Design Capacity: Monitored by documentation of construction once initially. Review the manufacturer's design specifications and instructions to ensure compliance. [N.J.A.C. 7:27- 8.13(d)1]	Design Capacity: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and maintain all records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.
2	Permittee shall install, operate, and maintain the equipment in accordance with manufacturer specifications and instructions. [N.J.A.C. 7:27- 8.13(a)]	Monitored by documentation of construction once initially. Review manufacturer specifications and instructions to ensure compliance. [N.J.A.C. 7:27- 8.13(d)1]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.
3	Maximum Influent Concentration of Total Organic Compounds <= 1,000 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Total Organic Compounds: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per Department approved test method using certified lab analysis results based on Department-approved applicable EPA Test Method(s) for contaminated groundwater. The sampling frequency shall be as follows: Quarterly for the six months after start-up, and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)1]	Total Organic Compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: As per the approved schedule. Copy of the certified lab analysis results along with a certified summary of the the appropriate Regional Air Compliance & Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]
4	Groundwater Maximum Influent Concentration of Benzene <= 610 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Benzene: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using certified lab analysis results based on Department-approved applicable EPA Test Method(s) for contaminated groundwater. The sampling frequency shall be as follows: Quarterly for the six months after start-up, and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)1]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event pumps and VOC transfer source operations. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: As per the approved schedule. Copy of the certified lab analysis results shall be submitted electronically to the appropriate Regional Air Compliance & Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]

U1 Groundwater treatment system

OS1

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Groundwater Maximum Influent Concentration of Ethylbenzene <= 350 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Ethylbenzene: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using certified lab analysis results based on Department-approved applicable EPA Test Method(s) for contaminated groundwater. The sampling frequency shall be as follows: Quarterly for the six months after start-up, and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)1]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event pumps and VOC transfer source operations. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: As per the approved schedule. Copy of the certified lab analysis results shall be submitted electronically to the appropriate Regional Air Compliance & Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]
6	Groundwater Maximum Influent Concentration of Naphthalene <= 360 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Naphthalene: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using certified lab analysis results based on Department-approved applicable EPA Test Method(s) for contaminated groundwater. The sampling frequency shall be as follows: Quarterly for the six months after start-up, and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)1]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event pumps and VOC transfer source operations. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: At no specified schedule. Copy of the certified lab analysis results along with a certified summary of the results shall be submitted electronically to the appropriate Regional Air Compliance & Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]
7	Maximum Influent Groundwater Toluene <= 3.6 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Toluene: Monitored by periodic emission monitoring at the approved frequency, based on the averaging period as per approved sampling protocol using certified lab analysis results based on Department-approved applicable EPA Test Method(s) for contaminated groundwater. The sampling frequency shall be as follows: Quarterly for the six months after start-up, and semi-annually thereafter. [N.J.A.C. 7:27- 8.13(d)1]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event pumps and VOC transfer source operations. [N.J.A.C. 7:27- 8.13(d)3]	Submit a report: As per the approved schedule. Copy of the certified lab analysis results along with a certified summary of the results shall be submitted electronically to the appropriate Regional Air Compliance & Enforcement Office within 45 days from the date of sampling. [N.J.A.C. 7:27- 8.13(d)4]
8	All emitted air pollutants (including the HAP Contaminants of Concern) shall be below the Reporting Thresholds in N.J.A.C. 7:27-8, Appendix 1, Table A, and N.J.A.C. 7:27-17.9(b), based on maximum design air flowrate and maximum influent vapor concentrations. [N.J.A.C. 7:27- 8.13(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event pumps and VOC transfer source operations. [N.J.A.C. 7:27- 8.13(d)3]	None.

PCP190002

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1 Groundwater treatment system

Operating Scenario: OS2 Polyethylene process tank receiving water from OWS for transfer to filtration units for treatment

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Design Capacity: The Feed Process Tank shall have the following design specifications: Manufacturer: MAE2 Maximum Capacity =< 550 gals Shape of Storage Vessel: Cylindrical Dimensions: 2.5-t H X 7.7-ft L X 4-ft W Fill Method: Pipe Maximum Fill Rate: 40 gpm [N.J.A.C. 7:27-8.13(a)]	Design Capacity: Monitored by documentation of construction once initially. Review the manufacturer's design specifications and instructions to ensure compliance. [N.J.A.C. 7:27-8.13(d)1]	Design Capacity: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and maintain all records on site at all times. [N.J.A.C. 7:27-8.13(d)3]	None.
2	Permittee shall install, operate, and maintain the equipment in accordance with manufacturer specifications and instructions. [N.J.A.C. 7:27-8.13(a)]	Monitored by documentation of construction once initially. Review manufacturer specifications and instructions to ensure compliance. [N.J.A.C. 7:27-8.13(d)1]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all records on site at all times. [N.J.A.C. 7:27-8.13(d)3]	None.
3	Maximum Influent Concentration of Total Organic Compounds <= 1,000 ppbv. [N.J.A.C. 7:27-8.13(a)]	Total Organic Compounds: Monitored by calculations upon occurrence of event using certified lab analysis results. [N.J.A.C. 7:27-8.13(d)2]	Total Organic Compounds: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27-8.13(d)3]	None.
4	All emitted air pollutants (including the HAP Contaminants of Concern) shall be below the Reporting Thresholds in N.J.A.C. 7:27-8, Appendix 1, Table A, and N.J.A.C. 7:27-17.9(b). [N.J.A.C. 7:27-8.13(a)]	Monitored by calculations upon occurrence of event using certified lab analysis results. [N.J.A.C. 7:27-8.13(d)2]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27-8.13(d)3]	None.
5	Groundwater Maximum Influent Concentration of Benzene <= 610 ppbv. [N.J.A.C. 7:27-8.13(a)]	Benzene: Monitored by calculations upon occurrence of event using certified lab analysis results. [N.J.A.C. 7:27-8.13(d)2]	Benzene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27-8.13(d)3]	None.

New Jersey Department of Environmental Protection
 Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Groundwater Maximum Influent Concentration of Ethylbenzene <= 350 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Ethylbenzene: Monitored by calculations upon occurrence of event using certified lab analysis results. [N.J.A.C. 7:27- 8.13(d)2]	Ethylbenzene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.
7	Groundwater Maximum Influent Concentration of Naphthalene <= 360 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Naphthalene: Monitored by calculations upon occurrence of event using certified lab analysis results. [N.J.A.C. 7:27- 8.13(d)2]	Naphthalene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.
8	Maximum Influent Groundwater Toluene <= 3.6 ppbv. [N.J.A.C. 7:27- 8.13(a)]	Toluene: Monitored by calculations upon occurrence of event using certified lab analysis results. [N.J.A.C. 7:27- 8.13(d)2]	Toluene: Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event and maintain all related records on site at all times. [N.J.A.C. 7:27- 8.13(d)3]	None.
9	All emitted air pollutants (including the HAP Contaminants of Concern) shall be below the Reporting Thresholds in N.J.A.C. 7:27-8, Appendix 1, Table A, and N.J.A.C. 7:27-17.9(b), based on maximum design air flowrate and maximum influent vapor concentrations. [N.J.A.C. 7:27- 8.13(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event pumps and VOC transfer source operations. [N.J.A.C. 7:27- 8.13(d)3]	None.

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCP190002

Date: 8/21/2019

**New Jersey Department of Environmental Protection
Reason for Application**

Permit Being Modified

Permit Class: **Number:** 0

Description of Modifications: Installation of a groundwater pump-and-treat system as part of remedial action implementation.

See July 18, 2019 permit application cover letter for details including anticipated influent concentrations and process description.

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCP190002

Date: 8/21/2019

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Ocean City Coal Gas (JCP&L & NJNG)

Facility ID (AIMS): 73433

Street 11TH ST AND WEST AVE
Address: 1006 HAVEN AVE
1006 1044 WEST AVE
OCEAN CITY, NJ 08226

Mailing FRANK LAWSON
Address: 300 MADISON AVE
PO BOX 1911
MORRISTOWN, NJ 07962

County: Cape May
Location
Description:

State Plane Coordinates:	
X-Coordinate:	469,592
Y-Coordinate:	161,965
Units:	New Jersey State Plane 8
Datum:	NAD83
Source Org.:	NJ State Agency
Source Type:	Digital Image

Industry:	
Primary SIC:	
Secondary SIC:	
NAICS:	237130

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCP190002

Date: 8/21/2019

**New Jersey Department of Environmental Protection
Facility Profile (General)**

Contact Type: Air Permit Information Contact

Organization: Tetra Tech, Inc.

Org. Type: Commercial/Industry

Name: Peter A. Rich

NJ EIN:

Title: Principal Engineer

Phone: (410) 990-4607 x

Mailing Address: 980 Awald Road

Fax: (410) 990-4749 x

Suite 302
Annapolis, MD 21403

Other: () - x

Type:

Email: peter.rich@tetrattech.com

Contact Type: Consultant

Organization: Tetra Tech, Inc.

Org. Type: Commercial/Industry

Name: Peter A. Rich

NJ EIN:

Title: Principal Engineer

Phone: (410) 990-4607 x

Mailing Address: 980 Awald Road

Fax: (410) 990-4749 x

Suite 302
Annapolis, MD 21403

Other: () - x

Type:

Email: peter.rich@tetrattech.com

Contact Type: Environmental Officer

Organization: Jersey Central Power & Light Company

Org. Type: Corporation

Name: Frank Lawson

NJ EIN: 00210485010

Title: Supervisor, Site Remediation

Phone: (973) 401-8309 x

Mailing Address: 300 Madison Avenue

Fax: () - x

P.O. Box 1911
Morristown, NJ 07962

Other: () - x

Type:

Email: flawson@firstenergycorp.com

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCP190002

Date: 8/21/2019

**New Jersey Department of Environmental Protection
Facility Profile (General)**

Contact Type: Fees/Billing Contact

Organization: Jersey Central Power & Light Company

Org. Type: Corporation

Name: Frank Lawson

NJ EIN: 00210485010

Title: Supervisor, Site Remediation

Phone: (973) 401-8309 x

Mailing Address: 300 Madison Avenue

Fax: () - x

P.O. Box 1911

Other: () - x

Morristown, NJ 07962

Type:

Email: flawson@firstenergycorp.com

Contact Type: General Contact

Organization: Jersey Central Power & Light

Org. Type: Utility

Name: Frank Lawson

NJ EIN:

Title:

Phone: () - x

Mailing Address: PO Box 1911

Fax: () - x

300 Madsion Ave

Other: () - x

Morristown Town, NJ 07962

Type:

Email: flawson@firstenergycorp.com

Contact Type: Owner (Former)

Organization: Jersey Central Power & Light Company

Org. Type: Corporation

Name: Frank Lawson

NJ EIN: 00210485010

Title: Supervisor, Site Remediation

Phone: (973) 401-8309 x

Mailing Address: 300 Madison Avenue

Fax: () - x

P.O. Box 1911

Other: () - x

Morristown, NJ 07962

Type:

Email: flawson@firstenergycorp.com

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCP190002

Date: 8/21/2019

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Responsible Official

Organization: Jersey Central Power & Light Company

Org. Type: Corporation

Name: Frank Lawson

NJ EIN: 00210485010

Title: Supervisor, Site Remediation

Phone: (973) 401-8309 x

Mailing Address: 300 Madison Avenue

Fax: () - x

P.O. Box 1911

Other: () - x

Morristown, NJ 07962

Type:

Email: flawson@firstenergycorp.com

Contact Type: Responsible Party

Organization: Jersey Central Power & Light Company

Org. Type: Corporation

Name: Frank Lawson

NJ EIN: 00210485010

Title: Supervisor, Site Remediation

Phone: (973) 401-8309 x

Mailing Address: 300 Madison Avenue

Fax: () - x

P.O. Box 1911

Other: () - x

Morristown, NJ 07962

Type:

Email: flawson@firstenergycorp.com

Date: 8/21/2019

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCP190002

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E1	OWS	Oil water separator	Storage Vessel		1/10/2020			
E2	FeedProcTank	Polyethylene process tank	Storage Vessel		1/10/2020			

Date: 8/21/2019

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCP190002

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD1	VGAC VSC-200	Single, 200-lb vapor-phase carbon unit to treat vapors vented from OWS and Feed Tank	Adsorber	1/10/2020			

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCPI90002

Date: 8/21/2019

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equip. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT1	VGAC Stack	Vapor carbon unit discharge stack	Round	4	12	50	59.0	50.0	68.0	2.2	2.2	2.2	Up	

Date: 8/21/2019

OCEAN CITY COAL GAS (JCP&L & NJNG) (73433)
PCP190002

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

BP1

Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours		VOC Range	Flow (acfm)		Temp. (deg F)
								Min.	Max.		Min.	Max.	

Min. Calc. Time:

Max. Calc. Time:

Min. User Time:

Max. User Time:

Batch Process Operating Scenario Run Time (hours)

U1 GWTS Groundwater treatment system

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.		Min.
OS1	OWS	Oil water separator receiving groundwater with NAPL from recovery wells	Normal - Steady State	E1	CD1 (P)	PT1		8,760.0	8,760.0	A	1.1	1.1	50.0	68.0
OS2	FeedProcTank	Polyethylene process tank receiving water from OWS for transfer to filtration units for treatment	Normal - Steady State	E2	CD1 (P)	PT1		8,760.0	8,760.0	A	1.1	1.1	50.0	68.0



State of New Jersey

PHIL MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Water Pollution Management Element
Bureau of Surface Water Permitting
P.O. Box 420 – 401 E State St
Trenton, NJ 08625-0420
Phone: (609) 292-4860 / Fax: (609) 984-7938

CATHERINE R. McCABE
Commissioner

SHEILA OLIVER
Lt. Governor

Via Email Only

August 29, 2019

Frank Lawson, Supervisor – Site Remediation
Jersey Central Power & Light Company
300 Madison Avenue
P.O. Box 1911
Morristown, NJ 07962

Re: Surface Water GPA New
Category: B4B - General Permit GW Petro Prod Cleanup
NJPDES Permit No. NJG0297569
Ocean City Coal Gas (JCP&L & NJNG)
Ocean City, Cape May County

Dear Mr. Lawson:

Enclosed is an Individual NJPDES/DSW General Permit Authorization under the General Groundwater Petroleum Product Cleanup (B4B) Permit which was issued by the Department on December 26, 2018. This General Permit Authorization is issued in accordance with the NJPDES Regulations (N.J.A.C. 7:14A-1 et seq.). Violation of any condition of this authorization may subject the permittee to significant penalties.

This individual General Permit Authorization allows for the discharge of treated groundwater through the discharge outfall specified on your permit authorization page. Approximately, an average flow of 0.046 million gallons per day (MGD) of groundwater will be pumped and treated via an oil/water separator, bag filters, organo-clay filters and granular activated carbon (GAC) units. The effluent will be discharged to the Great Egg Harbor Bay via a storm sewer. The Great Egg Harbor Bay is classified as FW2-NT/SE1(C2) waters.

A review of the influent data submitted with the application indicated that Ethylbenzene was detected at a level which was either close to or exceeding the standards at N.J.A.C. 7:14A-12, Appendix B. As a result, the Department has conservatively applied the standards for Ethylbenzene as effluent limits for this discharge. In addition, a monitoring and reporting requirement for Acenaphthene has also been imposed due to its presence in the application data.

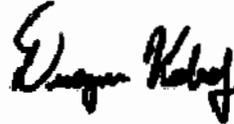
The enclosed Authorization to discharge groundwater under the General Permit shall expire on December 31, 2023. Applications for renewal of this Authorization must be submitted to the Department at least 180 days prior to expiration of the Individual Authorization pursuant to N.J.A.C. 7:14A-4.2(e)3. Application forms and the application checklist can be found on the Department's website at https://www.nj.gov/dep/dwq/forms_surfacewater.htm.

The NJPDES Monitoring Report Form (MRF) Reference Manual can be accessed at "http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf" for further information regarding reporting of monitoring data. Please note that if there is a discrepancy between the General Permit Authorization and the MRF Reference Manual, the General Permit Authorization always takes precedence.

All monitoring shall be conducted in accordance with the Department's "Field Sampling Procedures Manual" applicable at the time of sampling (N.J.A.C. 7:14A-6.5(b)4). The Field Sampling Procedures Manual can be found on the Department's website at "<http://www.nj.gov/dep/srp/guidance/fspm/>".

If you have questions or comments regarding the final action, please contact Shaza Rizvi, either by phone at (609) 292-4860 or by email at Shaza.L.Rizvi@dep.nj.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Dwayne Kobesky". The signature is written in a cursive, slightly slanted style.

Dwayne Kobesky, Environmental Specialist 3
Bureau of Surface Water Permitting

Enclosures

c: Permit Distribution List

Masterfile #: 63963; PI #: 811281

Table of Contents

This permit package contains the following items:

- 1. Cover Letter**
- 2. Table of Contents**
- 3. NJPDES Permit Authorization Page for NJG0297569**
- 4. NJPDES Permit Authorization Page for Master General Permit NJPDES No. NJ0102709**
- 5. USGS Map**
- 6. Facility Site Map**
- 7. Part I – General Requirements: NJPDES**
- 8. Part II – General Requirements: Discharge Categories**
- 9. Part III – Limits and Monitoring Requirements**
- 10. Part IV – Specific Requirements: Narrative**

New Jersey Department of Environmental Protection



Mail Code – 401-02B
Bureau of Surface Water Permitting
Water Pollution Management Element
PO Box 420 – 401 E State Street
Trenton, NJ 08625-0420
(609) 292-4860

**AUTHORIZATION TO DISCHARGE
B4B - General Permit GW Petro Prod Cleanup**

Facility Name: Ocean City Coal Gas (JCP&L & NJNG)

PI ID #: 811281

Type of Activity: Surface Water GPA New

NJPDES #: NJG0297569

Facility Address:

11th Street & West Avenue;
1006 Haven Avenue; and
1006-1044 West Avenue
Ocean City, Cape May County

Owner:

Atlantic City Electric
5100 Harding Highway
Mays Landing, NJ 08330

Operating Entity:

Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
P.O. Box 1911
Morristown, NJ 07962

Authorization Covered Under This Approval	Issuance Date:	Effective Date:	Expiration Date:
B4B - General Permit GW Petro Prod Cleanup Surface Water GPA New	8/29/2019	9/1/2019	12/31/2023

Outfall Number	Latitude	Longitude	Receiving Stream	Classification
DSN001A	39° 16' 39.1"	74° 34' 48.5"	Great Egg Harbor Bay via storm sewer	FW2/NT-SE1(C2)

Your Request for Authorization under NJPDES General Permit No. NJ0102709 has been approved by the New Jersey Department of Environmental Protection.

Dwayne Kobesky, Environmental Specialist 3
Bureau of Surface Water Permitting
Water Pollution Management Element
Division of Water Quality
New Jersey Department of Environmental Protection



NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJ0102709

Final: Surface Water Master General Permit Renewal

Permittee:

NJPDES Master General Permit Program Interest
Category B4B
Per Individual Notice of Authorization
Division of Water Quality
Mail Code: 401-02B, P.O. Box 420
401 East State Street
Trenton, NJ 08625

Co-Permittee:

Property Owner:

NJPDES Master General Permit Program Interest
Category B4B
Per Individual Notice of Authorization
Division of Water Quality
Mail Code: 401-02B, P.O. Box 420
401 East State Street
Trenton, NJ 08625

Location Of Activity:

NJPDES Master General Permit Program Interest
Category B4B
Per Individual Notice of Authorization
Division of Water Quality
Mail Code: 401-02B, P.O. Box 420
401 East State Street
Trenton, NJ 08625

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
B4B - General Permit GW Petroleum Product Cleanup - Renewal	12/26/2018	01/01/2019	12/31/2023

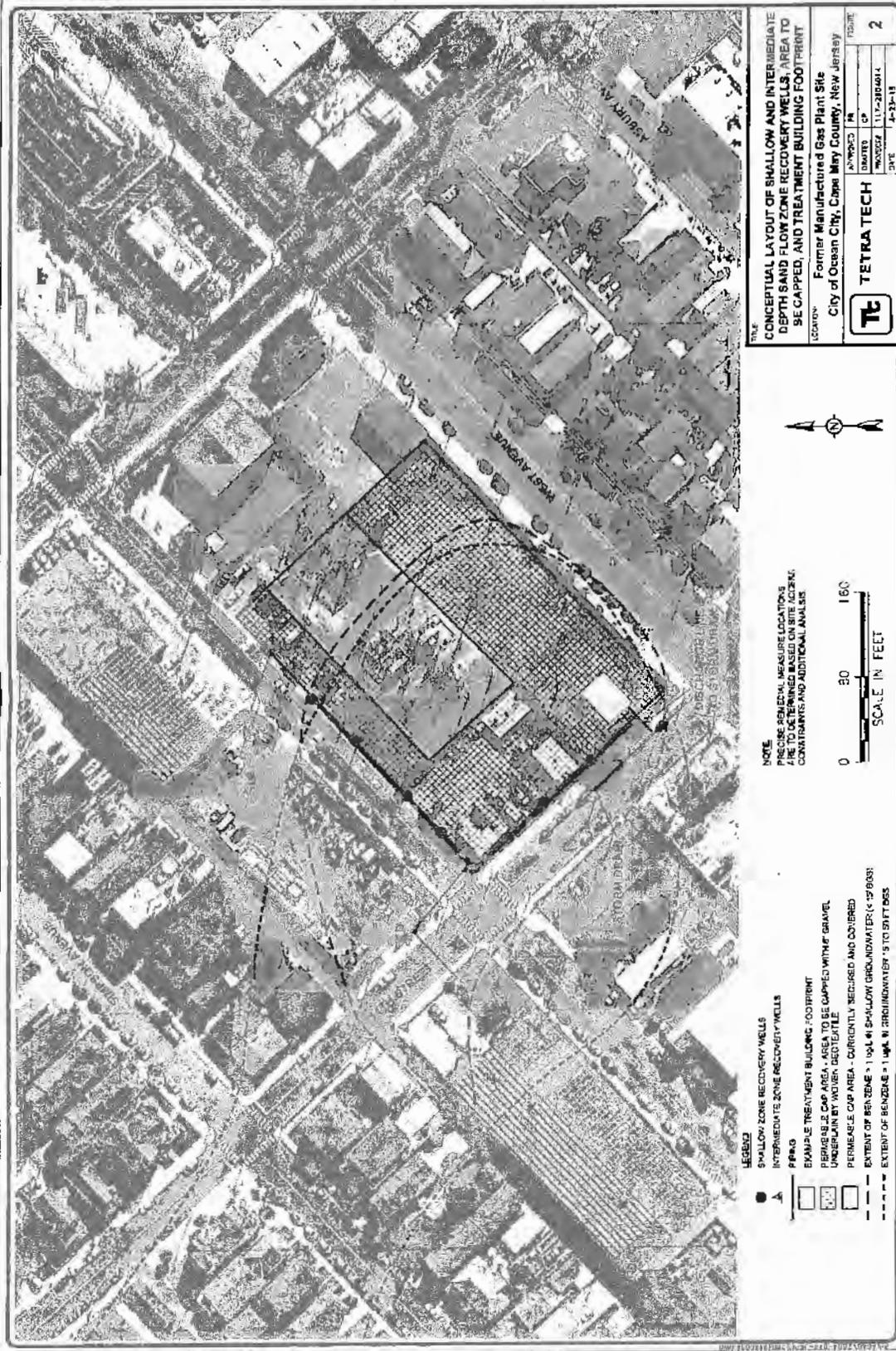
By Authority of:
Commissioner's Office

Susan Rosenwinkel

DEP AUTHORIZATION
Susan Rosenwinkel, Bureau Chief
Bureau of Surface Water Permitting
Water Pollution Management Element
Division of Water Quality

(Terms, conditions and provisions attached hereto)

Division of Water Quality



TITLE
CONCEPTUAL LAYOUT OF SHALLOW AND INTERMEDIATE DEPTH SAND FLOW ZONE RECOVERY WELLS, AREA TO BE CAPPED, AND TREATMENT BUILDING FOOTPRINT

LOCATION
Former Manufactured Gas Plant Site
City of Ocean City, Cape May County, New Jersey

APPROVED BY	DATE	FIGURE
PROJECT #	1117-2824014	2
DRAWN BY	DATE	
SCALE	A-23-13	

TETRA TECH

NOTE
PRECISE SPERICAL MEASURE LOCATIONS ARE TO BE DETERMINED BASED ON SITE ACCESS, CONSTRAINTS AND ADDITIONAL ANALYSIS.

DISCHARGE LINE TO STABILIZATION

SCALE IN FEET
0 80 160

LEGEND

- SHALLOW ZONE RECOVERY WELLS
- ▲ INTERMEDIATE ZONE RECOVERY WELLS
- EXAMPLE TREATMENT BUILDING FOOTPRINT
- ▨ PERMEABLE CAP AREA - AREA TO BE CAPPED WITH GRAVEL UNDERLAIN BY WOVEN DEDUSTLE
- ▩ IMPERMEABLE CAP AREA - CURRENTLY SECURED AND COVERED
- EXTENT OF BENTONITE - 1' TO 4' SHALLOW GROUNDWATER (± 2' GSI)
- EXTENT OF BENTONITE - 1' TO 4' IN AROUNDWATER (± 3' TO 5' GSI)

OCEAN CITY COAL GAS (JCP&L & NJNG)
Ocean City

Permit No. NJG0297569
Discharge to Surface Water
Surface Water GPA New

PART I GENERAL REQUIREMENTS: NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.

b. General Conditions

Penalties for Violations	N.J.A.C. 7:14-8.1 <u>et seq.</u>
Incorporation by Reference	N.J.A.C. 7:14A-2.3
Toxic Pollutants	N.J.A.C. 7:14A-6.2(a)4i
Duty to Comply	N.J.A.C. 7:14A-6.2(a)1 & 4
Duty to Mitigate	N.J.A.C. 7:14A-6.2(a)5 & 11
Inspection and Entry	N.J.A.C. 7:14A-2.11(e)
Enforcement Action	N.J.A.C. 7:14A-2.9
Duty to Reapply	N.J.A.C. 7:14A-4.2(e)3
Signatory Requirements for Applications and Reports	N.J.A.C. 7:14A-4.9
Effect of Permit/Other Laws	N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
Severability	N.J.A.C. 7:14A-2.2
Administrative Continuation of Permits	N.J.A.C. 7:14A-2.8
Permit Actions	N.J.A.C. 7:14A-2.7(c)
Reopener Clause	N.J.A.C. 7:14A-6.2(a)10
Permit Duration and Renewal	N.J.A.C. 7:14A-2.7(a) & (b)
Consolidation of Permit Process	N.J.A.C. 7:14A-15.5
Confidentiality	N.J.A.C. 7:14A-18.2 & 2.11(g)
Fee Schedule	N.J.A.C. 7:14A-3.1
Treatment Works Approval	N.J.A.C. 7:14A-22 & 23

c. Operation And Maintenance

Need to Halt or Reduce not a Defense	N.J.A.C. 7:14A-2.9(b)
Proper Operation and Maintenance	N.J.A.C. 7:14A-6.12

d. Monitoring And Records

Monitoring	N.J.A.C. 7:14A-6.5
Recordkeeping	N.J.A.C. 7:14A-6.6
Signatory Requirements for Monitoring Reports	N.J.A.C. 7:14A-6.9

e. Reporting Requirements

Planned Changes	N.J.A.C. 7:14A-6.7
Reporting of Monitoring Results	N.J.A.C. 7:14A-6.8
Noncompliance Reporting	N.J.A.C. 7:14A-6.10 & 6.8(h)
Hotline/Two Hour & Twenty-four Hour Reporting	N.J.A.C. 7:14A-6.10(c) & (d)
Written Reporting	N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
Duty to Provide Information	N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
Schedules of Compliance	N.J.A.C. 7:14A-6.4
Transfer	N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

- a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.
 - i. Surface Water Quality Standards N.J.A.C. 7:9B-1

B. General Conditions

1. Scope

- a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

2. Permit Renewal Requirement

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. Submit a complete permit renewal application at least 180 days prior to the expiration of the permit.

3. Notification of Non-Compliance

- a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).
- b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Notification of Changes

- a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.
- b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

5. Access to Information

- a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access / copy any records that must be kept under the conditions of this permit.

6. Operator Certification

- a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.
 - i. Notifications shall be submitted to:
NJDEP
Bureau of Licensing and Registration
Mail Code 401-04E
P.O. Box 420
Trenton, New Jersey 08625-0420
(609) 984-6507
- b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

7. Operation Restrictions

- a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condition for water or waste, except as specifically authorized by a valid NJPDES permit.

8. Residuals Management

- a. The permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:
 - i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;
 - ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;
 - iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;
 - iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;
 - v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and
 - vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.
 - vii. Residual that is disposed in a municipal solid waste landfill unit shall meet the requirements in 40 CFR Part 258 and/or N.J.A.C. 7:26 concerning the quality of residual disposed in a municipal solid waste landfill unit. (That is, passes the Toxicity Characteristic Leaching Procedure and does not contain "free liquids" as defined at N.J.A.C. 7:14A-1.2.)

- b. If any applicable standard for residual use or disposal is promulgated under section 405(d) of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.
- c. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtimes at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.
- d. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.
- e. The preparer must notify and provide information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements to the person who applies bulk residual to the land. This shall include, but not be limited to, the applicable recordkeeping requirements and certification statements of 40 CFR 503.17 as referenced at N.J.A.C. 7:14A-20.7(j).
- f. The preparer who provides residual to another person who further prepares the residual for application to the land must provide this person with notification and information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements.
- g. Any person who prepares bulk residual in New Jersey that is applied to land in a State other than New Jersey shall comply with the requirement at N.J.A.C. 7:14A-20.7(b)1.ix to provide written notice to the Department and to the permitting authority for the State in which the bulk residual is proposed to be applied.

9. Standard Reporting Requirements – Monitoring Report Forms (MRFs)

- a. MRF data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee.
- b. MRFs shall be submitted at the frequencies identified in Part III of this permit.
- c. All MRFs shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.
- d. The highest ranking official may delegate responsibility to certify the MRFs in his or her absence. Authorizations for other individuals to certify shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- e. Monitoring results shall be submitted in accordance with the current NJPDES Monitoring Report Form Reference Manual and any updates thereof.

OCEAN CITY COAL GAS (JCP&&L && NJNG), Ocean City

Permit No. NJG0297569
DSW190001 Surface Water GPA New

- f. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.
- g. If, for a monitored location, there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results by checking the "No Discharge this monitoring period" box on the paper or electronic version of the monitoring report submittal form.

10. Standard Reporting Requirements - Electronic Submission of NJPDES Information

- a. Effective December 21, 2020, the below identified documents and reports, if required to be submitted by this permit, shall be electronically submitted to the NJDEP via the Department's designated Electronic Submission Service.
 - i. General permit authorization requests (i.e. RFAs)
 - ii. General permit termination/revocation requests

PART III LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION: 001A Surface Water Outfall **RECEIVING STREAM:** Great Egg Harbor Bay **STREAM CLASSIFICATION:** FW2-NT/SE1(C2) **DISCHARGE CATEGORY(IES):** B4B - General Permit GW Petro Prod Cleanup

Location Description

Effluent sampling shall be performed after all treatment steps but prior to discharge to the Great Egg Harbor Bay via storm sewer at latitude 39° 16' 39.1" and longitude 74° 34' 48.5".

Contributing Waste Types

Groundwater Remediation

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

Parameter	Sample Point	PHASE Start Date:			PHASE End Date:			Units	Limit	Frequency	Sample Type
		Limit	Limit	Limit	Limit	Limit	Limit				
Flow, In Conduit, or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	*****	*****	*****	*****	*****	1/Month	Metered	
	QL	***	***	***	***	***	***	***			
pH	Effluent Gross Value	*****	*****	6.0 Monthly Minimum	*****	9.0 Monthly Maximum	SU	9.0 Monthly Maximum	1/Month	Grab	
	QL	***	***	***	***	***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	MG/L	40 Daily Maximum	1/Month	Grab	
	QL	***	***	***	***	***	***	***			
Petroleum Hydrocarbons	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	MG/L	15 Daily Maximum	1/Month	Grab	
	QL	***	***	***	***	***	***	***			
January thru December	QL	***	***	***	***	***	***	***			

Surface Water DMR Reporting Requirements:
Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

Parameter	Sample Point	PHASE Start Date:			PHASE End Date:			Units	Limit	Frequency	Sample Type
		Limit	Limit	Limit	Limit	Limit	Limit				
Carbon, Tot Organic (TOC)	Effluent Gross Value	*****	*****	*****	*****	*****	*****	REPORT Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	20 Daily Maximum	***			
Acenaphthene	Effluent Gross Value	*****	*****	*****	*****	*****	*****	REPORT Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	REPORT Daily Maximum	***			
January thru December	Effluent Gross Value	*****	*****	*****	*****	*****	*****	22 Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	59 Daily Maximum	***			
Naphthalene	Effluent Gross Value	*****	*****	*****	*****	*****	*****	REPORT Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	70 Daily Maximum	***			
January thru December	Effluent Gross Value	*****	*****	*****	*****	*****	*****	REPORT Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	7 Daily Maximum	***			
Methyl tert-butyl Ether	Effluent Gross Value	*****	*****	*****	*****	*****	*****	REPORT Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	32 Monthly Average	***			
January thru December	Effluent Gross Value	*****	*****	*****	*****	*****	*****	REPORT Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	108 Daily Maximum	***			
January thru December	Effluent Gross Value	*****	*****	*****	*****	*****	*****	32 Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	108 Daily Maximum	***			
January thru December	Effluent Gross Value	*****	*****	*****	*****	*****	*****	32 Monthly Average	1/Month	Grab	
	QL	***	***	***	***	***	108 Daily Maximum	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

Parameter	PHASE Start Date:			PHASE End Date:			Units	Limit	Frequency	Sample Type
	Sample Point	Limit	Limit	Units	Limit	Limit				
Tertiary Butyl Alcohol (TBA)	Effluent Gross Value	*****	*****	*****	500 Quarterly Average	REPORT Monthly Average	UG/L	REPORT Daily Maximum	1/Month	Grab
	QL	***	***	***	***	***		***		

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

General Permit GW Petro Prod Cleanup

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

- a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.
- b. The Permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136 unless other test procedures have been approved in writing or as otherwise specified in the permit..
- c. When more than one test procedure is approved for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 136, 40 CFR 122.21(e)(3), and 40 CFR 122.44(i)(1)(iv).
- d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.
- e. All monitoring shall be conducted as specified in Part III.
- f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.
- g. Flow shall be measured using a meter unless specified otherwise in the individual authorization.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

- a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit, 3) all data used to complete the application for a NJPDES permit, and 4) monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.
- b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

C. REPORTING

1. Standard Reporting Requirements

- a. Please refer to Part II, Section B.9 and B.10 for Standard Reporting Requirements

D. FACILITY MANAGEMENT

1. Discharge Requirements

- a. The permittee shall discharge at the location(s) specified in PART III of this permit.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that: 1) Forms objectionable deposits on the receiving water, 2) Forms floating masses producing a nuisance, or 3) Interferes with a designated use of the waterbody.
- c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.

2. Operation, Maintenance and Emergency conditions

- a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation & Maintenance Manual.
- b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with NJAC 7:14A-6.12(d).

3. Applicability of Discharge Limitations and Effective Dates

- a. Surface Water Discharge Monitoring Report (DMR) Form Requirements
 - i. Table 1: Chronic WET (if both the chronic WET requirement and a compliance schedule is applicable in the individual authorization) - For new authorizations, the initial phase requirement of monitoring and reporting as a minimum is effective on the effective date of the individual authorization. The final phase limit of 61% is effective three years from the date of commencement of pumping as specified in the individual authorizations. For renewal authorizations, the final limit becomes effective on the date specified in the individual authorization.

4. Toxicity Testing Requirements - Chronic Whole Effluent Toxicity (applicable only if a chronic toxicity requirement is specified in Part III)

- a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- b. Chronic toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- c. Any test that does not meet the specifications contained in the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Program" document must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- d. IC25 - Inhibition Concentration - Concentration of effluent which has an inhibitory effect on 25% of the test organisms for the monitored effect, as compared to the control (expressed as percent effluent).

- e. Test results shall be expressed as the IC25 for each test endpoint. Where a chronic toxicity testing endpoint yields IC25's from more than one test endpoint, the most sensitive endpoint will be used to evaluate effluent toxicity.
 - f. For new authorizations: Submit a Chronic Methodology Questionnaire within 60 days from the effective date of the permit (EDP).
 - g. For renewal authorizations: The permittee shall resubmit a Chronic Methodology Questionnaire within 60 days of any change in laboratory.
 - h. If a quarterly monitoring frequency is specified for Chronic WET: Submit a chronic whole effluent toxicity test report within twenty-five days after the end of every quarterly monitoring period beginning from the effective date of the permit (EDP).
 - i. If an annual monitoring frequency is specified for Chronic WET: Submit a chronic whole effluent toxicity test report due within twenty-five days after the end of every annual monitoring period beginning from the effective date of the permit.
 - j. Test reports shall be submitted to the Department's WET report mailbox at: biomonitoring@dep.nj.gov.
- 5. Toxicity Reduction Implementation Requirements (TRIR) (applicable only if a chronic toxicity limit is specified in Part III)**
- a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the toxicity limit specified in Part III of this permit.
 - i. If the exceedence of the toxicity limit is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.
 - b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limits in Part III. The monitoring frequency for toxicity testing shall be increased to semi-monthly (i.e. every two months). Up to 12 additional tests may be required.
 - i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the toxicity limit.
 - ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit in Part III, the permittee shall repeat the Toxicity Reduction Implementation Requirements.
 - c. The permittee shall initiate a preliminary toxicity identification (PTI) upon the fourth exceedence of the toxicity limit specified in Part III during the toxicity characterization.
 - i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.

- ii. As appropriate, the PTI shall include:
 - (1) treatment plant performance evaluation,
 - (2) evaluation of chemical use and processes at the facility, and
 - (3) an evaluation of toxic pollutants present in the effluent.
- iii. The permittee shall submit a Preliminary Toxicity Identification Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a CTI.
- d. The permittee must demonstrate compliance with the WET limitation in four consecutive WET tests to satisfy the requirements of the Toxicity Reduction Investigation Requirements. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.
- e. The permittee shall initiate a Comprehensive Toxicity Investigation (CTI) if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the toxicity limit in Part III can not be made.
 - i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.
 - ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the toxicity limit in Part III, a Comprehensive Toxicity Investigation Workplan must be prepared and submitted within 90 days.
 - iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.
 - iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.
- f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.
 - i. The permittee shall satisfy the requirements of the Toxicity Reduction Implementation Requirements and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the toxicity limit in Part III in four consecutive toxicity tests.
 - ii. If the implemented corrective measures do not result in consistent compliance with the toxicity limit in Part III, the permittee shall submit a plan for resuming the CTI.
 - iii. Documents regarding Toxicity Investigations shall be sent to the following:
New Jersey Department of Environmental Protection
Mail Code: 401-02B
Division of Water Quality
Bureau of Surface Water Permitting
401 East State Street
P.O. Box 420
Trenton, New Jersey 08625-0420

E. Conditions for modification

1. Causes for modification

- a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.
- b. For new dischargers where a chronic whole effluent toxicity requirement is imposed - the Department may issue a minor modification further deferring the effective date of the chronic whole effluent toxicity limitation if a facility is implementing the Toxicity Reduction Implementation Requirements (TRIR) in Part IV of this permit.
- c. The Department may modify individual authorizations under this permit through a minor modification in accordance with N.J.A.C. 7:14A-16.5(a)1 to reduce WET monitoring to either semi-annual, annual or once per permit cycle. The criteria for such reduction is a minimum of 4 data points with a result of >100. The Department may also consider site-specific characteristics such as discharge volume, location and wastewater constituents.
- d. The Department may modify individual authorizations under this permit through a minor modification in accordance with N.J.A.C. 7:14A-16.5(a)1 to reduce toxics and conventionals monitoring to quarterly or an alternate monitoring frequency provided that all parameters are consistently in compliance and in consideration of flow volumes.

F. Custom Requirements

1. Third Party Storm Sewers

- a. If the permittee proposes to discharge or discharges through an off-site public or private storm drainage system, please note that this GPPC permit authorization to discharge does not exempt, nor shall be construed to exempt, the permittee from compliance with rules, regulations, policies, and/or laws lodged in any agency or subdivision of the state having legal jurisdiction over the storm sewer system proposed for use as a wastewater conveyance.

2. Permanent Cessation of Discharge to Surface Waters

- a. If the permittee permanently discontinues its discharge to surface waters for 30 days or more the appropriate Regional Bureau of Water and Compliance Enforcement shall be notified:
 - i. NORTHERN BUREAU (Counties of Bergen, Essex, Hudson, Hunterdon, Morris, Passaic, Somerset, Sussex and Warren) - (973) 656-4099.
 - ii. CENTRAL BUREAU (Counties of Mercer, Middlesex, Monmouth, Ocean and Union) - (609) 292-3010.
 - iii. SOUTHERN BUREAU (Counties of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem) - (856) 614-3655.

3. Revocation of an Individual Authorization under the GPPC Permit.

- a. If the permittee has permanently ceased its discharge to surface water, the permittee shall request revocation of its individual authorization under the GPPC permit. The permittee can obtain the necessary revocation forms by accessing https://www.nj.gov/dep/dwq/pdf/revocation_form.pdf or by contacting the Department's Office of Permit Management at (609) 984-4428. The permittee can also contact the appropriate Regional Enforcement Office for further guidance on closure proceedings.
- b. Upon receipt of an administratively complete revocation request, the Department will verify with the appropriate Regional Enforcement Office that the discharge has ceased and that the treatment works has undergone closure, in conformance with N.J.A.C. 7:14A-23.34. The Department will then revoke such individual authorization by preparing a copy of the individual authorization page showing the revocation date of the individual authorization and sending such to the permittee.

4. Use of Treatment Additives

- a. If a permittee proposes addition of any chemical or treatment enhancement product in its treatment system in order to enhance treatment effectiveness and system performance, the permittee must obtain permission from the Department in writing prior to use of such compounds.
- b. The permittee shall submit a letter to the Department describing the use of such chemical addition agents, including information pertaining to dosage rates and frequency of dosage, and shall include a safety data sheet for the product(s) that contains toxicological data. The letter shall be submitted to the Bureau of Surface Water Permitting 30 days before the anticipated use where the address for such is included in the cover letter of the individual authorization. The Department will then evaluate the submittal and notify the permittee in writing as to whether the compound can be utilized under the conditions of the individual authorization. Please note that N.J.A.C. 7:14A-22.4(a)7 does not require a treatment works approval (TWA) modification for chemical addition where it is used for the purposes of improving treatment system performance.

5. Operational Requirements

- a. The treatment works shall operate at the optimal average design flow rate for maximum groundwater clean-up.
- b. No backwash from any treatment unit(s) for maintenance purposes or any other reasons shall be discharged through the authorized outfall(s).
- c. The permittee shall not attain any effluent limitations by dilution pursuant to N.J.A.C. 7:14A-6.2. Specifically, the permittee shall not pump from a recovery well and divert such waters to the treatment system for the purposes of diluting groundwater from other contaminated recovery wells.
- d. Samples taken in compliance with the specified monitoring requirements shall be taken at the discharge outfall(s) specified in Part III of this permit authorization at the nearest accessible point after final treatment but prior to actual discharge.

OCEAN CITY COAL GAS (JCP&&L && NJNG), Ocean City

Permit No. NJG0297569
DSW190001 Surface Water GPA New



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF LAND USE REGULATION
 Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420
 Telephone: (609) 777-0454 or Fax: (609) 777-3656
 www.nj.gov/dep/landuse



PERMIT

In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the terms, conditions, and limitations listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition, or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.		Approval Date September 23, 2019
		Expiration Date September 22, 2024
Permit Number(s): 0508-19-0022.1 LUP190001	Type of Approval(s): CZM GP11 Hazardous Site Investigation/Cleanup	Enabling Statute(s): NJS 13:19 et seq.
Permittee: Frank Lawson c/o First Energy 300 Madison Avenue PO Box 1911 Morristown, NJ 07962	Site Location: 1006-1004 West Avenue Block(s) & Lot(s): [1006, 1] [1006, 1.01] Municipality: Ocean City County: Cape May	
Description of Authorized Activities: Interim remedial activities associated with shallow soil and groundwater impacts from prior historic FMGP operations. Remedial activities shall include: <ul style="list-style-type: none"> • The use of existing or new permeable cap over on-site areas where contaminants exceed restricted use criteria in shallow soil; • Hydraulic containment of shallow and intermediate zone groundwater beneath and immediately downgradient of the FMGP site using recovery wells; • Light non-aqueous-phase liquid (LNAPL) recovery; • Treatment of recovered groundwater preferably at an on-site plant in the southeast corner of the ACE property prior to permitted discharge to the sanitary sewer system; • Excavation of FMGP site soil contamination "hot-spots"; • Use of engineering controls (existing or new fencing) and institutional controls (deed notices and establishment of a Classification Exception Area (CEA) to restrict groundwater use); • Sampling and abandonment of the former production well on the ACE property; and, • Either or both use of existing or installation of new recovery or monitoring wells as needed. 		
Prepared by: Magda Usarek-Witek	Received and/or Recorded by County Clerk:	
If the permittee undertakes any regulated activity, project, or development authorized under this permit, such action shall constitute the permittee's acceptance of the permit in its entirety as well as the permittee's agreement to abide by the requirements of the permit and all conditions therein.		
This permit is not valid unless authorizing signature appears on the last page.		

File No. 0508-19-0022.1 LUP190001
First Energy

SPECIAL CONDITIONS:

1. The Site Remediation Program Interest number associated with the project is No. G000006127. The Licensed Site Remediation Professional (LSRP) for this project is Jeffrey Hosterman license No. 574859. The remediation shall comply with the Interim Remedial Action Workplan dated March 2019 and any amendments thereto. Any modification or changes to the construction activities authorized by this permit and/or the approved plans shall be approved by the Department in writing.
2. All remediation activities shall conform to the Technical Requirements for Site Remediation (N.J.A.C. 7:26E).
3. All sediment barriers and other soil erosion control measures shall be installed prior to commencing any excavation, grading, stockpiling or construction onsite, and shall be maintained in proper working condition throughout the entire duration of the project.
4. Material that will be used to backfill excavation areas must meet the clean fill standards as provided in NJDEP SRP *Fill Material Guidance for SRP Sites*, dated April 2015.
5. All disturbed areas shall be restored to pre-existing conditions/elevations to the maximum degree practicable immediately following completion of the activity that caused the disturbance.
6. After excavation is completed, the ground elevations must be returned to the original elevations by either removal or replacement of suitable soil to pre-existing grade. If an area was mounded, the finished elevations shall match the surrounding topography.
7. Wells installation must be performed by a NJ licensed well driller of the proper class in accordance with N.J.A.C. 7:9D.

STANDARD CONDITIONS:

1. The issuance of a permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction or structure(s). Neither the State nor the Department shall, in any way, be liable for any loss of life or property that may occur by virtue of the activity or project conducted as authorized under a permit.
2. The issuance of a permit does not convey any property rights or any exclusive privilege.
3. The permittee shall obtain all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under a permit.
4. A permittee conducting an activity involving soil disturbance, the creation of drainage structures, or changes in natural contours shall obtain any required approvals from the Soil Conservation District or designee having jurisdiction over the site.
5. The permittee shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit.
6. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of the permit. The Department may,

File No. 0508-19-0022.1 LUP190001
First Energy

upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.

7. The permittee shall immediately inform the Department by telephone at (877) 927-6337 (WARN DEP hotline) of any noncompliance that may endanger public health, safety, and welfare, or the environment. The permittee shall inform the Division of Land Use Regulation by telephone at (609) 777-0454 of any other noncompliance within two working days of the time the permittee becomes aware of the noncompliance, and in writing within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter. The written notice shall include:
 - i. A description of the noncompliance and its cause;
 - ii. The period of noncompliance, including exact dates and times;
 - iii. If the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and
 - iv. The steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
8. Any noncompliance with a permit constitutes a violation of this chapter and is grounds for enforcement action, as well as, in the appropriate case, suspension and/or termination of the permit.
9. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the authorized activity in order to maintain compliance with the conditions of the permit.
10. The permittee shall employ appropriate measures to minimize noise where necessary during construction, as specified in N.J.S.A. 13:1G-1 et seq. and N.J.A.C. 7:29.
11. The issuance of a permit does not relinquish the State's tidelands ownership or claim to any portion of the subject property or adjacent properties.
12. The issuance of a permit does not relinquish public rights to access and use tidal waterways and their shores.
13. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:
 - i. Enter upon the permittee's premises where a regulated activity, project, or development is located or conducted, or where records must be kept under the conditions of the permit;
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - iii. Inspect, at reasonable times, any facilities, equipment, practices, or operations regulated or required under the permit. Failure to allow reasonable access under this paragraph shall be considered a violation of this chapter and subject the permittee to enforcement action;

File No. 0508-19-0022.1 LUP190001
First Energy

14. The permittee shall not cause or allow any unreasonable interference with the free flow of a regulated water by placing or dumping any materials, equipment, debris or structures within or adjacent to the channel while the regulated activity, project, or development is being undertaken. Upon completion of the regulated activity, project, or development, the permittee shall remove and dispose of in a lawful manner all excess materials, debris, equipment, and silt fences and other temporary soil erosion and sediment control devices from all regulated areas.
15. The permittee and its contractors and subcontractors shall comply with all conditions, site plans, and supporting documents approved by the permit.
16. All conditions, site plans, and supporting documents approved by a permit shall remain in full force and effect, so long as the regulated activity, project, or development, or any portion thereof, is in existence, unless the permit is modified pursuant to the rules governing the herein approved permits.
17. The permittee shall perform any mitigation required under the permit in accordance with the rules governing the herein approved permits.
18. If any condition or permit is determined to be legally unenforceable, modifications and additional conditions may be imposed by the Department as necessary to protect public health, safety, and welfare, or the environment.
19. Any permit condition that does not establish a specific timeframe within which the condition must be satisfied (for example, prior to commencement of construction) shall be satisfied within six months of the effective date of the permit.
20. A copy of the permit and all approved site plans and supporting documents shall be maintained at the site at all times and made available to Department representatives or their designated agents immediately upon request.
21. The permittee shall provide monitoring results to the Department at the intervals specified in the permit.
22. A permit shall be transferred to another person only in accordance with the rules governing the herein approved permits.
23. A permit can be modified, suspended, or terminated by the Department for cause.
24. The submittal of a request to modify a permit by the permittee, or a notification of planned changes or anticipated noncompliance, does not stay any condition of a permit.
25. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information.
26. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, PO Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulated activities.
27. The permittee shall record the permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site

File No. 0508-19-0022.1 LUP190001
First Energy

is located. The permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording, a copy of the recorded permit shall be forwarded to the Division of Land Use Regulation at the address listed on page one of this permit.

APPROVED PLAN(S):

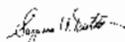
The drawing(s) hereby approved consist of one (1) sheet (Figure 1) prepared by Tetra Tech, dated July 3, 2019, unrevised, and entitled: "SITE PLAN; 1006-1004 WEST AVENUE; OCEAN CITY, CAPE MAY COUNTY, NEW JERSEY".

APPEAL OF DECISION:

Any person who is aggrieved by this decision may submit an adjudicatory hearing request within 30 calendar days after public notice of the decision is published in the DEP Bulletin (available at www.nj.gov/dep/bulletin). If a person submits the hearing request after this time, the Department shall deny the request. The hearing request must include a completed copy of the Administrative Hearing Request Checklist (available at www.nj.gov/dep/landuse/forms.html). A person requesting an adjudicatory hearing shall submit the original hearing request to: NJDEP Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, Mail Code 401-04L, P.O. Box 402, 401 East State Street, 7th Floor, Trenton, NJ 08625-0402. Additionally, a copy of the hearing request shall be submitted to the Director of the Division of Land Use Regulation at the address listed on page one of this permit. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see www.nj.gov/dep/odr for more information on this process.

If you need clarification on any section of this permit or conditions, please contact the Division of Land Use Regulation's Technical Support Call Center at (609) 777-0454.

Approved By:



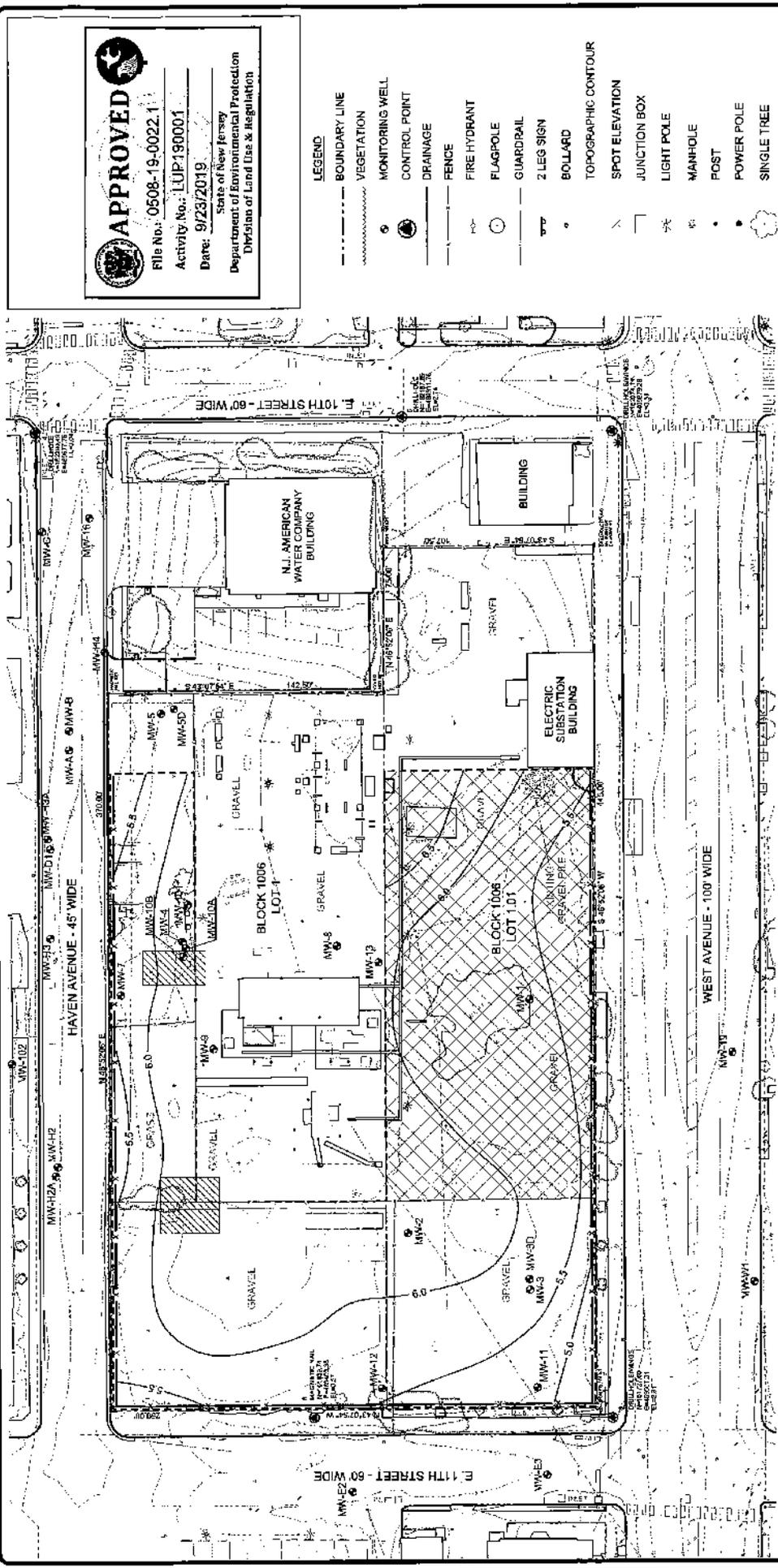
Digitally signed by Suzanne Dietrick
Date: 2019.09.23 11:21:03 -04'00'

Suzanne Dietrick
Division of Land Use Regulation

Date

c: Agent to record: Peter Rich – peter.rich@tetrattech.com
Permittee: Frank Lawson - flawson@firstenergycorp.com
Municipal Clerk of Ocean City: Melissa Rasner – mraser@ocnj.us

DocuSign Envelope ID: 6140967D-E09B-4EEB-B2EB-029D7746B3FF



APPROVED

File No.: 0508-19-0022.1
 Activity No.: LUP190001
 Date: 9/23/2019

State of New Jersey
 Department of Environmental Protection
 Division of Land Use & Regulation

- LEGEND**
- BOUNDARY LINE
 - VEGETATION
 - MONITORING WELL
 - CONTROL POINT
 - DRAINAGE
 - FENCE
 - FIRE HYDRANT
 - FLAGPOLE
 - GUARDRAIL
 - 2 LEG SIGN
 - BOLLARD
 - TOPOGRAPHIC CONTOUR
 - > SPOT ELEVATION
 - └ JUNCTION BOX
 - * LIGHT POLE
 - ⊕ MANHOLE
 - POST
 - POWER POLE
 - SINGLE TREE
 - SMALL SIGN
 - * TRAFFIC SIGNAL
 - VALVE

SITE PLAN

TITLE: _____
 LOCATION: 1006-1004 West Avenue
 Ocean City, Cape May County, New Jersey

APPROVED BY	APPROVED FOR
DATE	DATE
PROJECT	PROJECT
PROPERTY	PROPERTY
DATE	DATE

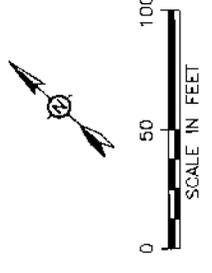
TETRA TECH

APPROVED BY: _____
 STATE OF NEW JERSEY
 PROFESSIONAL ENGINEER
 No. 6E45844
 Issued/Registered by: _____

- LEGEND:**
- APPROXIMATE TREATMENT PLANT FOOTPRINT
 - LIMIT OF DISTURBANCE
 - ▨ AREA TO BE EXCAVATED (TO 8 FOOT BGS) PRIOR TO CAPPING
 - ▩ FUTURE CAP AREA
 - x SILT FENCE
 - 6.0 PROPOSED TOPOGRAPHIC CONTOUR - 6-INCH MINIMUM CRUSHED STONE CAP OVER WOVEN GEOTEXTILE TO BE ADDED

NOTES:

- DATUM: NEW JERSEY STATE PLANE
 COORDINATES NAD 83_2011
 NAD 83
- SURVEY BY DENNIS W. SKLAR, INC.
 PROFESSIONAL LAND SURVEYOR
 2657 GARDEN AVENUE, BENSALEM, PA
 19020, (215) 268-7988.



RECEIVED

OCT 24 2019

Environmental Div.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Compliance and Enforcement
Mail Code 401 -04B
P. O. Box 420
Trenton, New Jersey 08625 -0420

CATHERINE R. McCABE
Commissioner

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

October 11, 2019

OCEAN CITY COAL GAS (JCP&L & NJNG)
300 Madison Ave, Po Box 1911
Morristown, NJ 07962

Reference: OCEAN CITY COAL GAS (JCP&L & NJNG)
PROGRAM INTEREST ID # 811281
PROGRAM: Water Quality
INSPECTION DATE: September 25, 2019
Compliance Inspection # SCI 190001

Dear Sir or Madame:

On September 25, 2019, an inspection was conducted at your facility/site by Robert Siracusa, of the Water C&E Program. The inspector determined that your facility was in compliance with applicable Department regulations and/or Permit conditions. Therefore, the Department now considers this inspection closed.

Please note this letter pertains only to the observations of the equipment/area/conditions that were part of the inspection that occurred on September 25, 2019.

You may review the inspection report online at www.nj.gov/dep/inspections. Once you have accessed DEP's web site, please follow the instructions on the reverse side of page 2 of the enclosure. This web site also gives you the opportunity to provide us feedback about our operations. We would appreciate your input and will share all results with you upon your completion of a survey.

The Department appreciates the continued operation of your facility/site in an environmentally responsible manner.

If you have any questions regarding this inspection or correspondence, please contact Robert Siracusa, of the Water C&E Program, at (856) 614-3655.

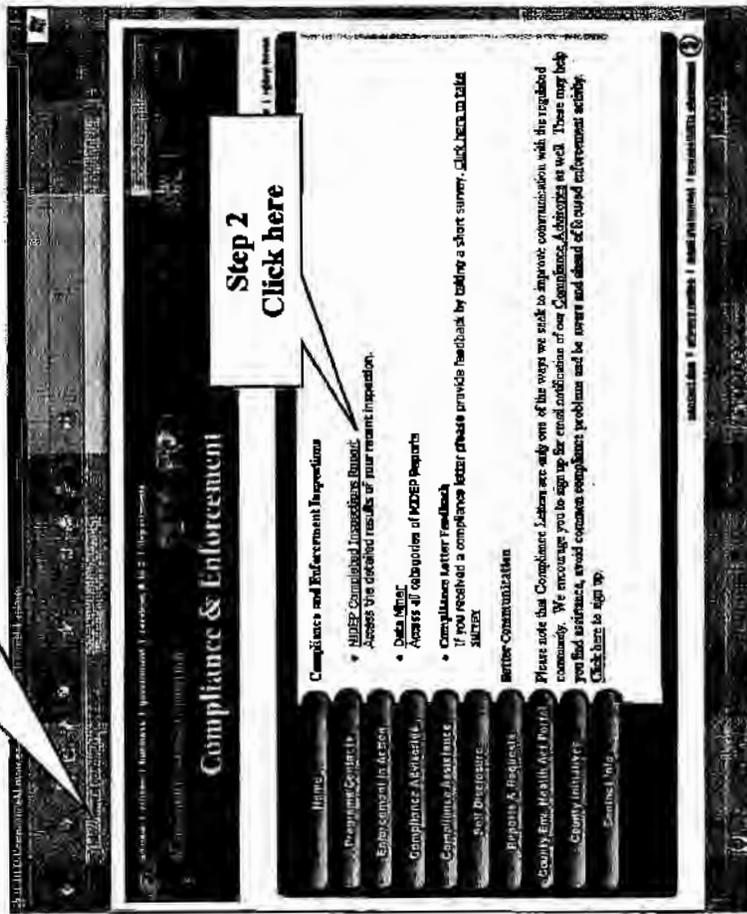
Very truly yours,

A handwritten signature in cursive script that reads "Paul Baldauf".

Paul Baldauf
Assistant Commissioner

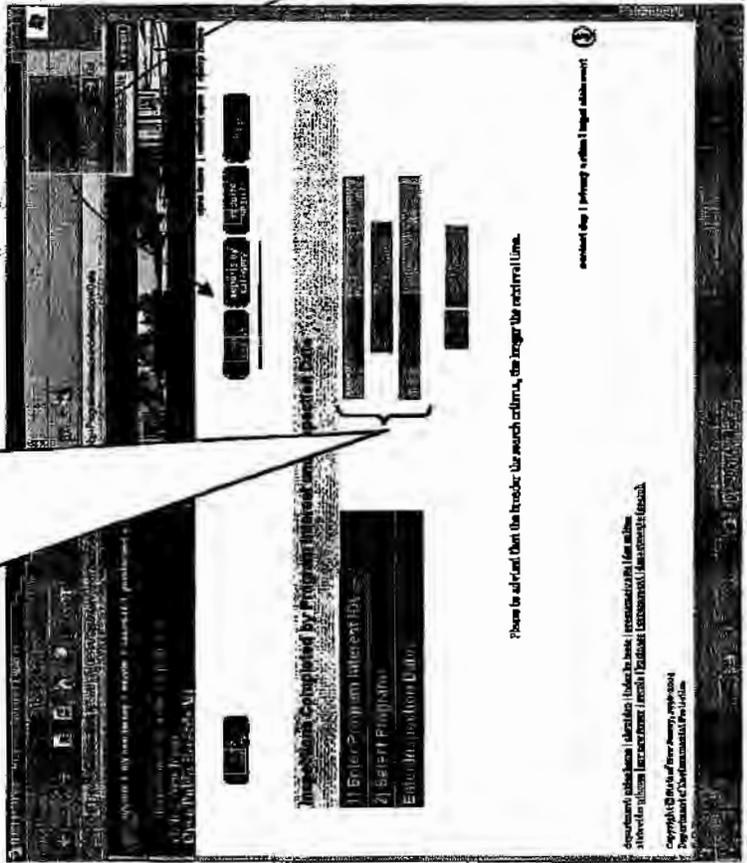
Enclosure

Step 1 – Type
www.nj.gov/dep/inspections
here, hit Enter or click “Go”



Step 2
Click here

Step 3
Enter information from Reference
section of letter



NOTE: You can access other DEP reports including enforcement histories back as far as 1998 (varies by program) by clicking on either the Site Search or Reports by Category buttons above.

COMPLIANCE & ENFORCEMENT
PROGRAMS & PHONE NUMBERS

Central Region

(Jurisdiction: Counties of Mercer, Middlesex, Monmouth, Ocean and Union)

Air:	(609) 292-3187
Hazardous Waste:	(609) 943-3019
Solid Waste:	(609) 292-6305
Water:	(609) 292-3010

Northern Region

(Jurisdiction: Counties of Bergen, Essex, Hudson, Hunterdon, Morris, Passaic, Somerset, Sussex and Warren)

Air:	(973) 656-4444
Hazardous Waste:	(973) 656-4470
Solid Waste:	(609) 292-6305
Water:	(973) 656-4099

Southern Region

(Jurisdiction: Counties of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem)

Air:	(856) 614-3601
Hazardous Waste:	(856) 614-3658
Solid Waste:	(609) 292-6305
Water:	(856) 614-3655

Coastal and Land Use Enforcement**Highlands Region – (908) 879-3769**

(Jurisdiction: Counties of Bergen*, Morris*, Passaic* and Warren)

Municipalities Breakdown*Bergen County – all except the 20 listed below in the Northern Region****Morris County – all except the 21 listed below in the Northern Region****Passaic County – all except the 11 listed below in the Northern Region****Northern Region – (609) 292-1240**

(Jurisdiction: Counties of Bergen*, Burlington*, Camden, Essex, Gloucester, Hudson, Hunterdon, Mercer, Middlesex, Morris*, Passaic*, Somerset, Sussex, Union and Warren)

Municipalities Breakdown*Bergen County – only Carlstadt, Cliffside Park, E. Rutherford, Edgewater, Fairview, Fort Lee, Hasbrouck Heights, Leonia, Little Ferry, Lyndhurst, Moonachie, N. Arlington, Palisades Park, Ridgefield, Ridgefield Park Village, Rutherford, S. Hackensack, Teterboro, Wallington, Woodbridge****Burlington County – all except the five listed below in the Southern Region****Morris County – only Boonton, Butler, Chatham, Denville, E. Hanover, Florham Park, Hanover, Harding, Kinnelon, Lincoln Park, Madison, Montville, Morris, Morris Plains, Morristown, Mount Lakes, Parsippany-Troy Hills, Pequannock, Riverdale, Rockaway****Passaic County – only Clifton, Haldeon, Hawthorne, Little Falls, N. Haledon, Passaic, Paterson, Prospect Park, Totowa, Wayne, W. Patterson****Southern Region – (732) 255-0787**

(Jurisdiction: Counties of Atlantic, Burlington*, Cape May, Cumberland, Monmouth, Ocean and Salem)

Municipalities Breakdown*Burlington County – only Bass River, Shamong, Tabernacle, Washington and Woodland****Pesticides Compliance – (609) 984-6568**



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Governor's Environmental Excellence Awards



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<http://www.nj.gov/dep/eeawards/>

**RECOGNIZING OUTSTANDING ENVIRONMENTAL PERFORMANCE,
PROGRAMS, AND PROJECTS UNDERTAKEN BY NEW JERSEY ORGANIZATIONS
AND INDIVIDUALS.**

To qualify for GEEA recognition an organization must:

- be located in New Jersey
- be active within the past year
- agree to have the details of its program publicized
- be nominated (either self nomination or third-party nomination with written authorization) and submit a completed application

Apply Online or By Mail:
NJ Department of Environmental Protection
Office of the Commissioner
P.O. Box 402/Mail Code 401-07
Trenton, NJ 08625
Attention: Caroline Kirkland
For information: Tanya Oznovich at (609) 984-9802 or Caroline Kirkland at (609) 633-7821

Nine Established Categories for Recognition

1. Clean Air
2. Water Resources
3. Healthy Ecosystems
4. Innovative Technology
5. Land Conservation
6. Environmental Stewardship
7. Environmental Education/Student Led Project
8. Healthy and Sustainable Communities/Businesses
9. Environmental Leadership

Application deadline in September of each year

**A SUCCESSFUL INSPECTION QUALIFIES AS A GOOD START,
CONSIDER THIS OPPORTUNITY FOR RECOGNITION...**



NJDEP Environmental Stewardship Program



For more information visit:
<http://stewardship.nj.gov>

RECOGNIZING NJ ORGANIZATIONS THAT DEMONSTRATE ENVIRONMENTALLY BENEFICIAL ACTIVITIES THAT EXCEED REGULATORY REQUIREMENTS AND FALL WITHIN THE 21 RECOGNIZED STEWARDSHIP CATEGORIES.

The NJDEP Environmental Stewardship Program recognizes sites, already visited by Department inspectors, that demonstrate environmentally beneficial activities that exceed regulatory requirements and industry norms. All information is gathered during routine compliance inspections.

***NO APPLICATION** is required for participation.

Stewardship Recognition is given for:

- ✓ Environmental Policy and Management Systems
- ✓ Pollution Prevention Programs
- ✓ Green Building
- ✓ Energy Efficiency
- ✓ Environmental Enhancement Projects
- ✓ Innovative Programs
- ✓ Federal Voluntary Programs

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5. For each of the same three MGP sites, provide a narrative description and organization chart for that site, showing the vendors and project control structure for the remediation effort. The response should show what entities supervise all significant contractors and subcontractors and which Company personnel are involved in site and remediation supervision and control.

Response:

See Attachment MFR-5a for a copy of a narrative description of consultant project management and cost-control practices. This description is applicable to all of the significant consultants associated with the remediation efforts at the Cape May, Newton II, and Ocean City MGP sites.

See Attachment MFR-5b for a copy of descriptions of the accounting and billing systems used by each of these consultants.

See Attachment MFR-5c for an organization chart for each of these sites showing the entities that supervise all significant contractors and subcontractors and the Company personnel involved in site and remediation supervision and control.

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2019 RAC Minimum Filing Requirements

Attachment MFR-5a

The Project Manager is responsible for managing subcontractors, supervising field operations and quality assurance/quality control (QA/QC) programs, analyzing data, preparing reports, attending meetings and maintaining/tracking the budget throughout the project. The Project Manager reviews the scope of the project as well as significant project issues with the Project Director/Project Advisor. In addition, the Project Manager ensures that individual Task Managers have a clear understanding of the work including schedule, budget, means and methods to complete the work, and deliverables. Staff assignments are made to ensure that the work is conducted in accordance with the project scope.

The Project Manager prepares a monthly invoice package. The invoice package includes an invoice for the previous month's work with backup documentation (time records, purchase receipts, etc.), a budget tracking report showing the status of the project budget, and a progress report. The progress report describes the activities that were completed during the reporting period, and out-of-scope activities, and any major upcoming activities.

Subcontractors' invoices are reviewed by the Project Manager for verification of charges/rates and are subsequently provided to the accounting department for coding into the accounting system. The accounting department generates a draft invoice of accumulated costs (labor, expenses, and subcontractors) for the reporting period and distributes the draft invoice to the Project Manager. The Project Manager reviews the invoice for proper rates and charges, modifies the invoice if required, and approves the invoice. After approval by the Project Manager, the draft invoice is submitted back to the accounting department for any required revisions. The invoice is then finalized by the accounting department submitted to the Client for payment.

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2019 RAC Minimum Filing Requirements

Attachment MFR-5b

ARCADIS Project Management System

Planning, Scheduling, and Budgeting

Upon receipt of the work authorization, the appropriate project team commences a planning meeting in which the appropriate Work Breakdown Structure (WBS) is determined and the appropriate roles are assigned to meet the scope of work. At a minimum the project planning team consists of the Certified Project Manager (CPM); Associated Project Manager (APM) and Task Managers (TM) as warranted; the lead technical expert and the quality consultant (QC).

Each project is required to have a Certified Project Manager (CPM) assigned to the project. In addition, based upon the size and complexity of the project, an Associate Project Manager (APM) may be assigned at the phase level and Task Manager may be assigned at the task level. Each member of the assigned management team has the ability to view, track and update the portion of the project which they are responsible.

The WBS is planned at a level that is required by the scope of to be performed by the work authorization. Resource for labor, subcontractor and expenses are budgeted and scheduled at the lowest level of the WBS. The cost for those resources are posted, monitored and updated at that lowest level such that assignment and tracking of the scope, schedule and budget can be performed at the lowest level of the WBS.

The planning, scheduling and budgeting program, is an Oracle ERP system that is integrated with the Accounting & Finance (A&F) database to provide job-to-date (JTD) actual costs, estimate to complete (ETC) costs and schedules to provide an estimate at completion (EAC) cost and schedule. The ERP project plan uses the WBS breakdown appropriate for work authorization. The data regarding the WBS and costs budgeted as a part of the planning process is uploaded from the ERP program into the A&F database as a method to allow for appropriate cost tracking against the budgets. When costs are incurred the data is posted simultaneously in the A&F database and into Oracle ERP. The project team on a regular basis updates the ETC costs in Oracle ERP to ensure any appropriate changes in the EAC is captured and submitted back to the A&F database for further tracking.

Within Oracle ERP, all Tasks within WBS have a specific ID, and can use the scheduling functionality including predecessor, successor interdependencies, scheduling on a Task bases and milestone management. The appropriate schedule and duration can also be planned for each resource and Task.

Oracle ERP is a resource loaded schedule that automatically sets a time-phased budget baseline at the control level upon the initial submittal of the resource loaded schedule. Revised baseline budgets are set upon the change in compensation/authorized task order amounts in the system. In addition, revised baselines can also be set at any time over the course of the project as needed.

Each Contract / Task Authorization is assigned a unique base Project number. Each Project number requires a minimum of one Phase and each phase requires a minimum of one Task. Each Phase and Task has a unique description and identifier in the system. Depending upon the size and complexity of the project and the WBS required to align with the contract and needed to appropriately manage the scope, the Project may have multiple Phases and the Phases may have multiple Tasks. There is not a limit to the number of Phases and Tasks that can be set up as to be able to accommodate a robust WBS.

Analysis and Management Reports

All projects are reported at the project level, and the project team has the ability to review costs down to the lowest level by proceeding to the next level of budget, JTD and EAC costs by opening the reporting up to that lower level. All JTD, ETC and EAC information at the project level is the sum of the lower levels. By providing the ability to review at both the summary and detail level at the Project, Phase, Task and chart of account level, the project team can review and control the project at any of the levels required.

As indicated in above, all activities and resources are planned and monitored using a resource loaded schedule individual to the project. Thus all resources have time-phased budgets established during the planning and monitoring functions and are used to monitor the completion of the activities and effort against the baseline. Ongoing reporting is provided indicating any variance of the actual performance to the budgeted performance.

Each employee has access to a report which enables each team member on the project to see the work that has been assigned to them to complete and the schedule they are responsible for to complete the assignment.

Labor is recorded daily and timesheets are posted weekly against all projects. Subcontractor and expenses are posted on a daily basis upon approval of the expense by management. All expenses are automatically updated in the Oracle ERP resource loaded schedule upon the posting of expense. Reporting of the budget versus actual JTD is available to the project team members and management on a daily basis allowing for the team to compare the budget earned and actual no less than weekly given the timing of the timesheet posts.

Projects are reviewed with management and the project team on a regular basis, and documented. Changes that may be required due to the review of the project earned value information are also documented and implemented as a part of the on-going project budget and schedule. Depending upon the result of the earned value information, cost budgets may be revised and reflected appropriately on the project, schedules may be revised upon concurrence with the client, and/or additional resources may be allocated or changed to proactively manage any change in the earned value information.

Estimates are revised on a regular basis based upon the weekly posting of costs, monthly reviews and ongoing management reviews. Information can be compared at the Project, Phase and Task

level based upon actual work performed against the baseline. Revised ETC are completed on a regular basis to provide a new EAC that can be monitored and reported to the client as required for any updates in funding and project status.

Revisions and Data Maintenance

Changes in approved work authorizations are documented in the system through a change order request log and forecast submittal history in the database. Changes to the approved work authorization requires a documented explanation before it can be submitted by the CPM and approved by management.

Authorized work compensation changes and re-planned budget changes are performed within the Oracle ERP program. Only the CPM may submit the changes to the database, which are then posted upon the approval of management. Changes to the budgets and baseline are recorded based upon the submittal of the changes to the database at the Project, Phase, and Task and resource level. Depending upon the revision that is being submitted (i.e. work authorization amount changes), the project budgets must also be reviewed and approved by a member of management to ensure that what is being changed in the system is in line with the contracted work authorization.

Cleary Government Services, LLC
1027 S. Rainbow Blvd, # 500, Las Vegas, NV 89145
Tel: 847/769-8264

February 14, 2020

Ms. Amy Fairbank
Senior Vice President,
Chief Financial Officer
Brown and Caldwell
1527 Cole Boulevard, Suite 300
Golden, CO 80401

Dear Ms. Fairbank:

In connection with our audits of Brown and Caldwell's FY 2019 and FY 2018 actual indirect rates, you have asked us for our views with respect to the suitability of Brown and Caldwell's accounting system for the purpose of adequately accounting for costs under federal and state government contracts, including flexibly-priced contracts. In short, we believe that Brown and Caldwell's accounting system in conjunction with other management and operating tools is adequate for government contracting purposes.

Brown and Caldwell's actual indirect rates and the accounting system used to generate those rates are the responsibility of management. Our responsibility was to express an opinion on Brown and Caldwell's actual indirect rates for FY 2019 and FY 2018, which we did. Copies of our reports are available upon request.

Background, BST Enterprise Software: Brown and Caldwell uses BST Enterprise Software (BST) as its accounting system. BST has an installed user base of over 500 users including numerous successful Federal Government contractors. The BST system is a fully-integrated accounting and project management system wherein the general ledger, project accounting, time reporting, billing, financial reporting, cash receipts, accounts payable and cash disbursements all interact on a real-time basis. During the course of our audits of the indirect rates, we did not note any instances where the BST software failed to perform as planned.

In conjunction with BST, Brown and Caldwell also uses a software tool called ProClarity to help manage and operate its business. ProClarity is primarily used as a financial-data warehouse wherein various financial reports and statistics are generated for use by Brown and Caldwell's management. Certain of the contract-specific data used for contract reporting is also generated through ProClarity.

Segregation of Individual Contract Costs: A key requirement of government contract accounting is the ability to identify and isolate direct costs to the appropriate contracts or projects. To accomplish this, Brown and Caldwell uses the BST project-based cost accounting system for the recording and accumulating of costs incurred under each of its contracts. Each contract is assigned a unique project number so that direct project costs can be properly segregated and accumulated in the project cost accounting system which is a fully-integrated module within BST. We are satisfied that Brown and Caldwell has the ability to adequately and reasonably account for all significant direct contract costs.

Segregation of Direct and Indirect Costs: Another critical requirement of government contract accounting is the ability to properly segregate direct project costs from indirect overhead and G&A costs. As noted above, Brown and Caldwell assigns each customer contract a unique project number which is the primary internal control in place to segregate direct costs from indirect costs. Brown and Caldwell also assigns a

Cleary Government Services, LLC

Ms. Amy Fairbank
February 14, 2020

Page 2

Segregation of Direct and Indirect Costs- continued:

Unique project number to certain indirect activities to further assist in identifying and segregating indirect activities and potential unallowable costs. In addition, every month Brown and Caldwell reviews the significant costs posted to the indirect accounts in the general ledger to ensure that significant indirect costs have been properly accounted for. In our audits of Brown and Caldwell's actual indirect rates, we specifically test the proper accounting for and segregation of direct costs and indirect costs, and based on our testing, we did not note any instances where significant direct or indirect costs were misclassified.

Labor and Time Reporting: Brown and Caldwell uses an electronic time reporting system to capture and report its employees' time. Each employee completes his or her own timesheet, and the reported labor is reconciled to payroll and the general ledger.

Because time reporting and direct labor costing are so fundamental to Brown and Caldwell's business and its indirect rates, we extensively tested labor costs. Our testing included reviewing a sample of the employees' timesheets where employees have charged both direct contracts (projects) and indirect overhead. We also reviewed the labor utilization report and its reconciliation to the general ledger. In addition, we reviewed the reconciliation of payroll costs to the direct and indirect labor recorded in the general ledger. Based on our testing, we are satisfied that Brown and Caldwell can properly and accurately capture and account for labor costs incurred on direct projects and indirect overhead.

Unallowable Costs: Brown and Caldwell use a combination of techniques to identify and eliminate unallowable costs from its claimed costs. These techniques include the use of specific general ledger accounts (e.g., bad debts, interest expense, etc.), statistical samples of groups of accounts (e.g., travel) and specific review of high-risk accounts (e.g., consultants, legal, etc.). In addition, the Company voluntarily excludes certain other costs from the indirect cost pools. Based on our testing of the accounts and our review of Brown and Caldwell's processes, we are satisfied that Brown and Caldwell has a reliable process in place to adequately identify and remove significant unallowable costs from its claimed costs.

Billing: Brown and Caldwell also uses the billing module in the BST system to prepare its customer invoices. The billing module in BST is fully-integrated with the projects, time reporting and accounts payable modules. That is, as direct time and project costs are captured and posted in the projects module, they are also automatically summarized and posted to the billing module by project by task. The customer invoices are then prepared within BST by applying the appropriate billing rates and multipliers to the employees' hours and other project costs based on the terms of the contract.

Our testing of Brown and Caldwell's billing practices was very limited in that we traced a sample of labor and other project costs from the customer invoice costs back to the source documents such as employee timesheets, vendor invoices, expense reports, etc. Conversely, we also selected a sample of labor and other project costs and traced those transactions to the customer invoices. Based on our testing and related inquiries, we are satisfied that Brown and Caldwell has a reliable process in place to accurately bill its customers for the work performed in accordance with the terms of the contract.

Cleary Government Services, LLC

Ms. Amy Fairbank
February 14, 2020

Page 3

The information presented herein and our views on the accounting system are based on our audits of Brown and Caldwell's actual indirect rates for FY 2019 and FY 2018. We completed the FY 2019 indirect rate audit on February 14, 2020, and we have not performed any additional testing or made any further inquiries since that date. Circumstances may have changed since that date which could have an effect on Brown and Caldwell's accounting system and/or system of internal controls.

Very truly yours,

A handwritten signature in black ink that reads "Cleary Government Services, LLC". The signature is written in a cursive, flowing style. The word "Cleary" is written in a larger, more prominent script, and "Government Services, LLC" follows in a similar but slightly smaller script. The signature is positioned above the typed name and title.

Cleary Government Services, LLC
By: Mark C. Cleary, CPA



LAND Remediation, Inc.
74 Hudson River Road
Waterford, New York 12188
(518) 766-4105

April 6, 2020

Elaine Comings
Jersey Central Power and Light (JCP&L)
First Energy Corp.
300 Madison Avenue
Morristown, NJ 07962

Re: Accounting Procedures

Dear Mrs. Comings,

LAND Remediation, Inc. (LRI) utilizes QuickBooks Enterprise: Contractor's Edition, an industry specific all-in-one accounting system provided by Intuit. This system integrates and works seamlessly with our payroll company, PrimePay for all employees' payroll benefits and documentation. The combination of these systems and our internal project controls allows for a comprehensive accounting platform the provides compliance in the following areas:

- Accounts Payable
- Accounts Receivable
- Employee Payroll and Expenses
- General Ledger Tracking
- Human Resources / Employee Benefits
- Job Cost Tracking and Documentation
- Subcontract Management
- Equipment / Asset purchases and depreciation cost tracking

LRI's accounting platform allows for the prompt weekly payment for all employees, payment of vendors and subcontractors based on the specific payment terms with each supplier, tracking of monthly receivables from our clients, recording and documenting of receivables and payables for the proper reporting of various required taxes on a monthly, quarterly and annual basis. LRI's accounting platform is consistent with generally accepted accounting principles related to this industry. In addition, LRI's annual financial statements are audited by an independent 3rd party certified public accountant. If you have any questions regarding this information, please feel free to contact me at 518-937-0473.

For additional information related to our accounting and payroll systems

- Intuit QuickBooks Enterprise: <https://quickbooks.intuit.com/desktop/enterprise/industry-solutions/contractor/>
- PrimePay: <https://primepay.com/payroll-service-bundle>

Sincerely,

A handwritten signature in black ink, appearing to read "William Lindheimer".

William Lindheimer

3.0 PROJECT CONTROL TEAM, CODING STRUCTURES, AND SYSTEMS

Tetra Tech uses a project coding structure common to estimating, scheduling, and cost control. The coding structure is designed to allow for full time and cost data integration through the scheduling and cost control systems.

3.1 Coding Structures

Establishing project wide structure for coding of project scope, cost, schedule and documents is essential to the effective control and reporting. At the onset of a project Tetra Tech establishes a Work Breakdown Structure (WBS) which will be the basis of all coding. The WBS forms the basis for development of cost and schedule coding.

Cost coding will allow for organization, sorting and filtering of the estimate, budget, commitments, actual costs, and forecasts per:

- Project phase (Engineering & Procurement, Construction, Commissioning)
- Any element of WBS
- Engineering or construction discipline
- Commodity type
- Work package
- Any useful custom grouping defined during project execution

The schedule organization will also follow the WBS. In addition, activity codes will be defined to allow for elaborate layout organization as required for control and reporting. In addition, schedule activities will be mapped to cost control accounts for time and cost integration.

3.2 Project Control Systems

Tetra Tech has sophisticated tools for planning, cost control, and reporting. Tetra Tech will use the following:

- MS Excel/MS Access based estimating system
- Primavera P6 for scheduling
- TetraLinx – internet-based Tetra Tech's cost collection database
- PRISM – database for cost control forecasting and reporting

Figure 1 shows cost and time data flow within the integrated project control system. All these systems will operate with the same coding structure so that data can be imported/exported between them easily using Excel templates.

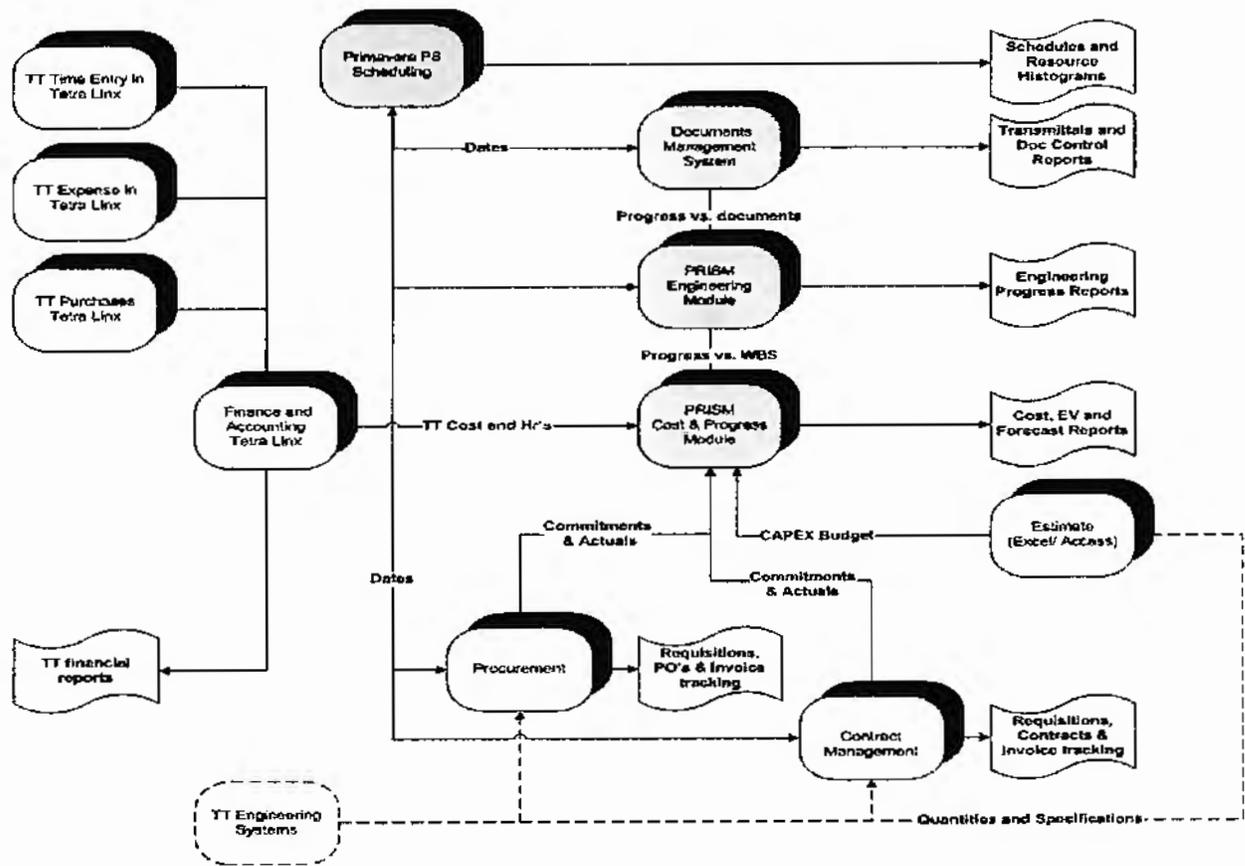


Figure 1 - Cost and Time Data Flow within Integrated Project Control System



Panther
Technologies Inc.

A Cascade Company

220 Route 70 E., Suite B
Medford, NJ 08055

Phone (609) 714-2420
Fax (609) 714-2495

March 26, 2020

Ms. Anna Sullivan
Jersey Central Power & Light (JCP&L)
300 Madison Avenue
Morristown, NJ 07962

email: afsullivan@firstenergycorp.com

Reference: Narrative Description – Project Costs, Billing and Management Systems

Dear Ms. Sullivan:

Panther Technologies, Inc. (Panther) is pleased to submit the requested information as follows:

Project Management and Cost Control:

Project Management and Cost Control begin with defining the work scope and establishing a budget and schedule for each project element. During project execution scope, cost and schedule are tracked on a task-by-task basis for each project element. Tracking is done by documenting the effort required vs. the amount budgeted & time allotted. **Panther's** project management team reviews progress using detailed daily field reports filed by the Site Supervisor that describe the resources (manpower, equipment and subcontractors) utilized. Daily reports also document changes in conditions that impact cost and schedule. Changed conditions are reported to the client in a timely manner. Project progress is discussed during regular weekly meetings with the client or client representative. Costs are documented and tracked using **Panther's** corporate accounting system, Spectrum ERP. Spectrum reports are reviewed by the project manager and senior management to ensure costs are correct and allocated properly.

Accounting and Billing Systems:

Panther's corporate accounting system is Spectrum ERP. Project costs tracked within Spectrum are directly integrated into accounting and billing via the Spectrum system. Client invoices are generated utilizing input from the Spectrum system.

Sincerely,



Mark L. Prostko
Senior Project Manager

cc: Jack Twomey- **Panther**
Jay Horvath- **Panther**

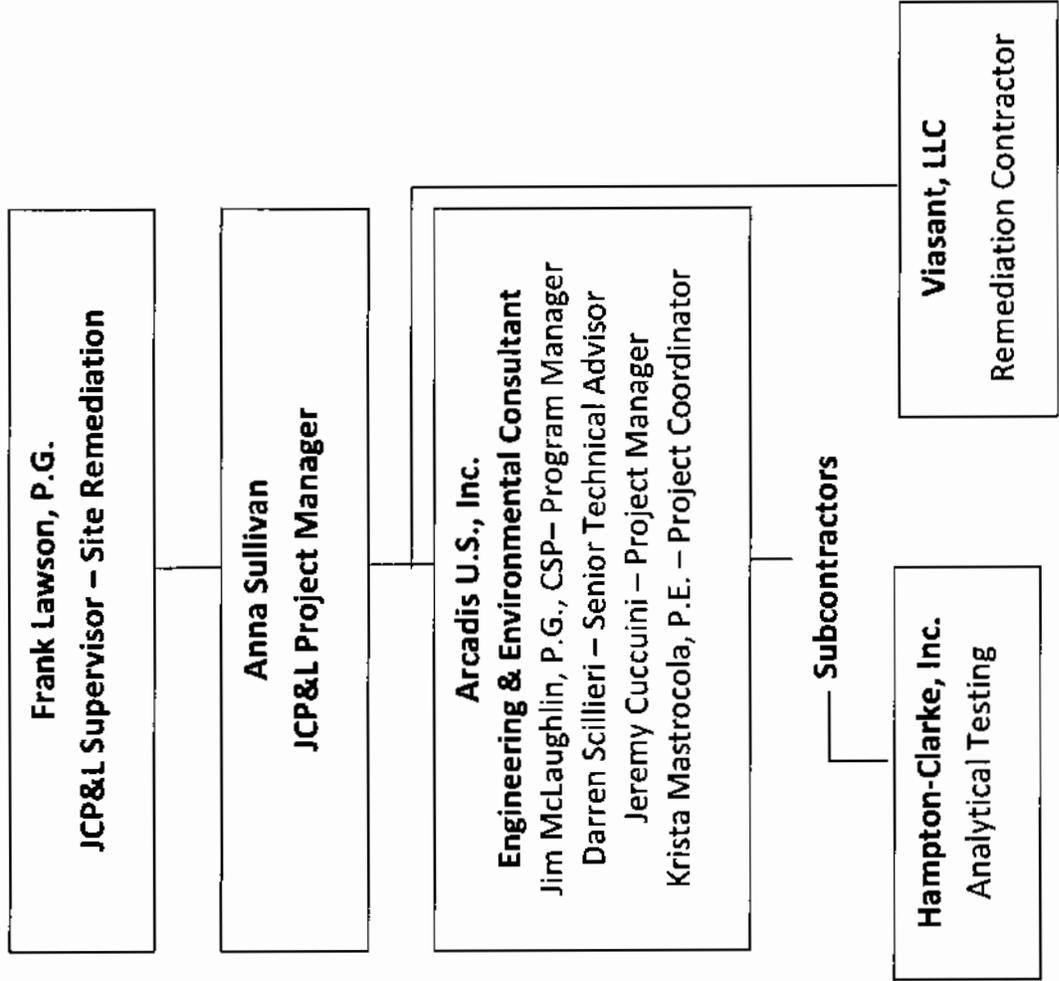
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2019 RAC Minimum Filing Requirements

Attachment MFR-5c

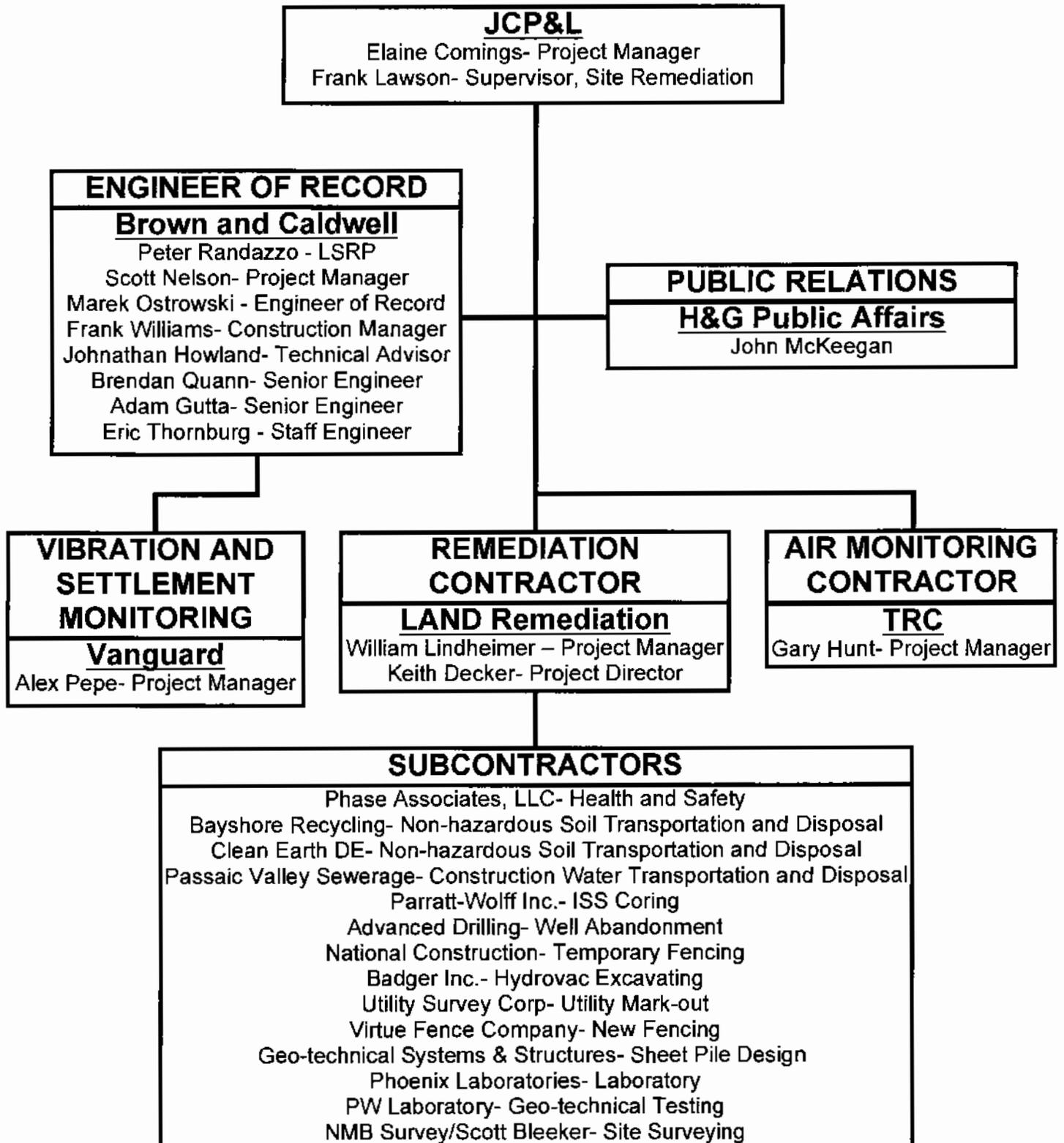
Project Organization Chart

Arcadis U.S., Inc.

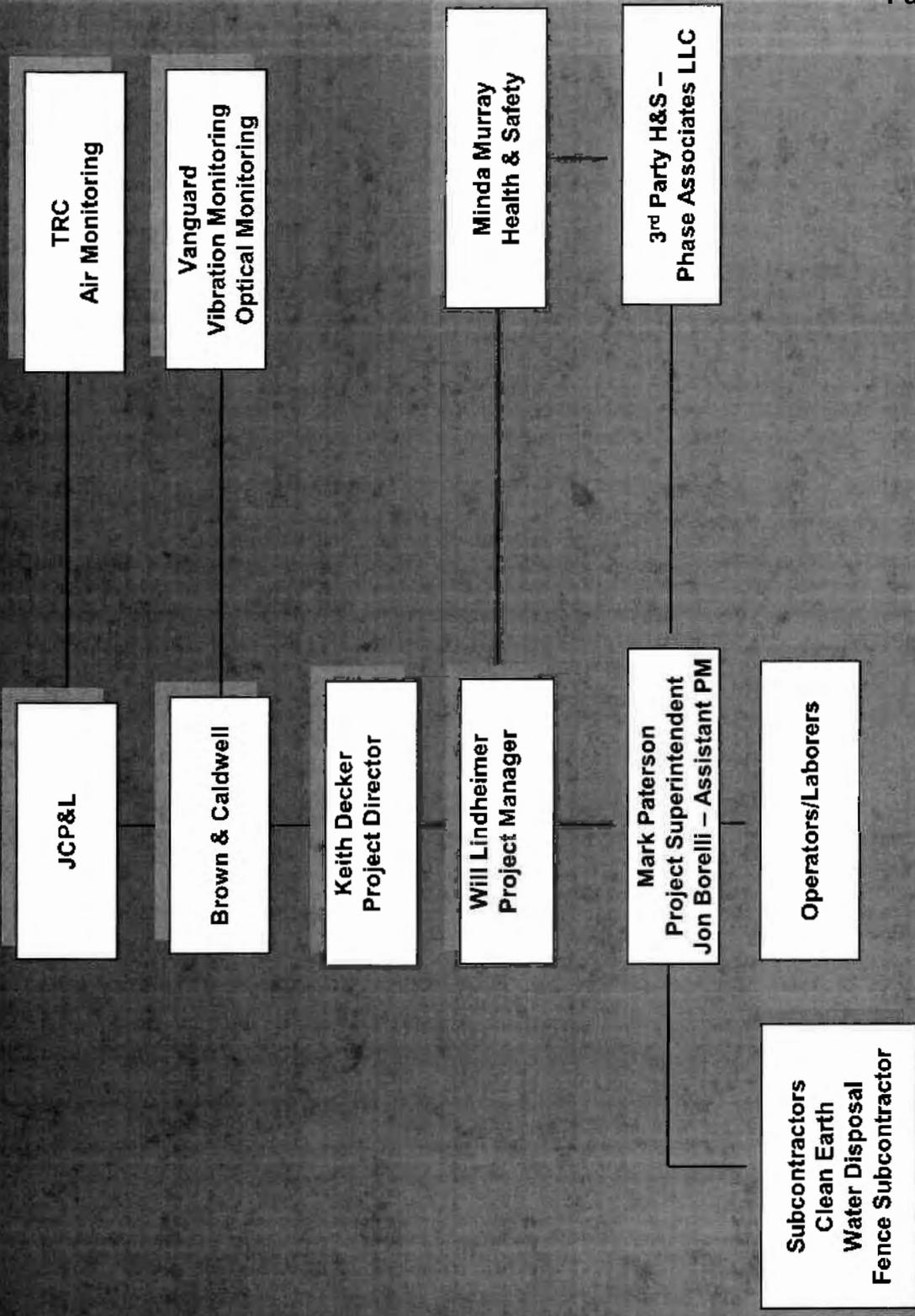
Cape May MGP Site



Newton Coal Gas II MGP Site Organizational Chart



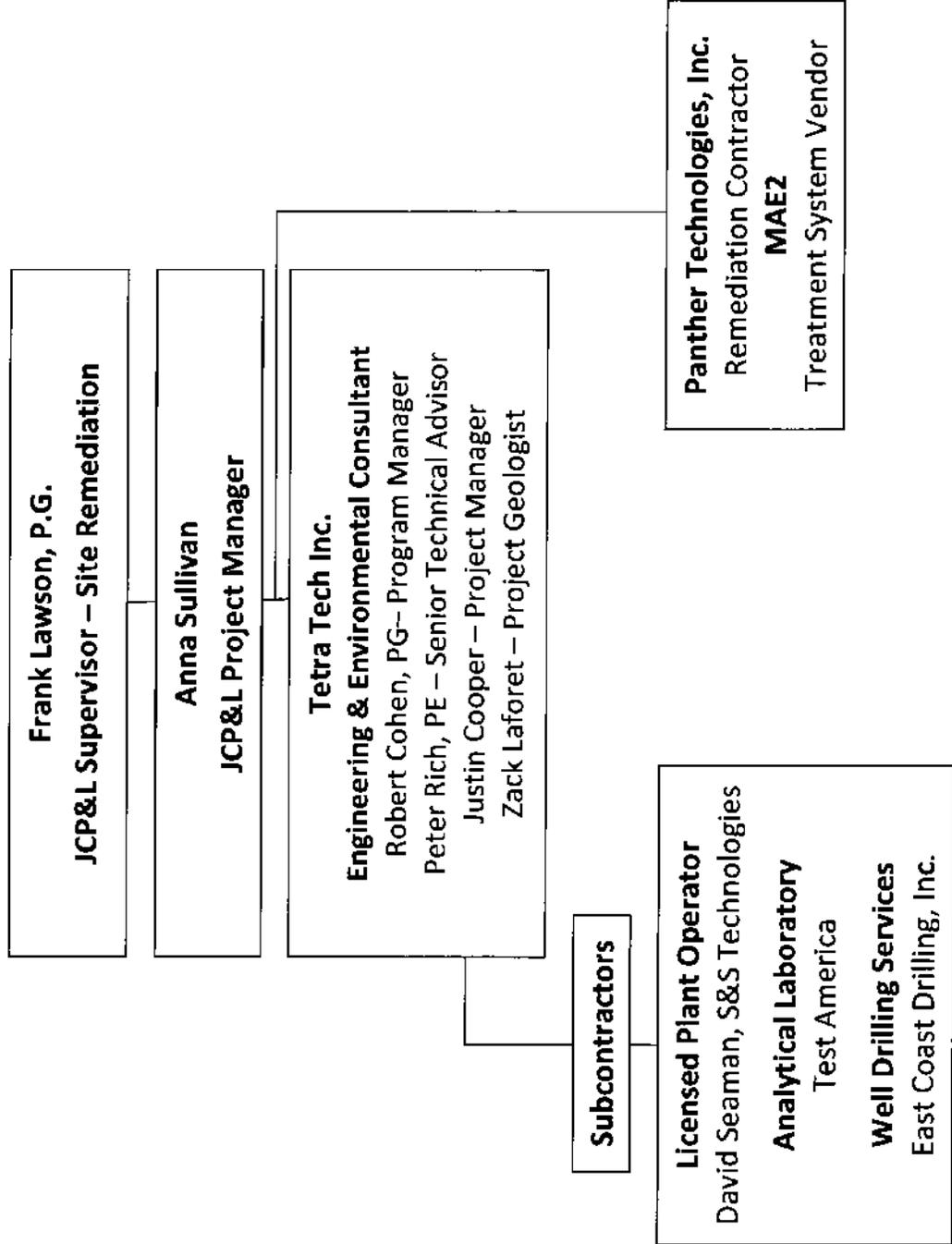
JCP&L-
In-Situ Stabilization, Former MGP Site Newton, NJ



Project Organization Chart

Tetra Tech, Inc.

Ocean City MGP Site



Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

6. Provide a detailed narrative describing Company activities and any reimbursements related to insurance claims or potentially responsible parties' liabilities for all of the Company's MGP sites. The narrative, with supporting documentation, should cover the prior RAC period. In addition, the Company will provide a listing of all insurance reimbursements received from each insurance company through the end of the year covered by the filing, but need not disclose the insurance company's identity.

Response:

For the purpose of this response, it is the Company's understanding that the potentially responsible parties (PRPs) being referred to are other than New Jersey Natural Gas Company (NJNG) and Elizabethtown Gas Company (ETG). There have been no other PRPs associated with the MGP sites at this time. There have been no reimbursements received from PRPs other than NJNG and ETG. There have also been no reimbursements related to insurance claims during the 2019 RAC period.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

7. Provide copies of any RAC audit reports or related materials prepared by the Board's Audit Staff, FERC, or the Company's internal or external auditors during the previous twelve months. To the degree applicable, please also provide any materials prepared in response to the audits or in compliance with any audit findings.

Response:

There were no audit activities during the 2019 period.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

8. Provide a narrative concerning all material events, whether related to NJDEP mandates or not, which could have an impact on the Company's ultimate MGP remediation liability, with claimed confidential information provided pursuant to a confidentiality agreement. The narrative should encompass all sites, whether or not active remediation efforts on the site are under way.

Response:

The Company interprets the MFR as seeking to identify potential events or activities that could affect the costs for managing the remediation liabilities related to its MGP sites. Whereas it is not reasonable to expect that all such potential events or activities can be defined at this time, we shall describe those that are currently known sources of material uncertainty to the Company's remediation program. In summary, they are: a) NJDEP's requirement for remediating free and/or residual product; b) NJDEP's requirement for property owners' approvals for establishing, and complying with, deed notices and remedial action permits; c) NJDEP's requirements concerning evaluating the potential for vapor intrusion from subsurface conditions into indoor air; d) potential litigation as a result of conducting the work at the MGP sites necessary to comply with the NJDEP's requirements; e) NJDEP's regulations for Public Participation in Site Remediation and Waste Management; f) NJDEP's formal and informal soil and groundwater cleanup criteria standards and policies, as now in effect and hereafter reexamined and revised, including for emerging contaminants of concern (most recently in 2019); g) NJDEP's Licensed Site Professional/Site Remediation Reform Program, including as amended (most recently in 2019); h) NJDEP's Remedial Priority Scoring System; i) NJDEP's requirements for ecological standards and receptors; and j) NJDEP's deadlines under Site Remediation Reform Act (SRRRA). Each is described and discussed below.

- a) The Technical Requirements for Site Remediation (TRSR) – (N.J.A.C. 7:26E-5.1(e)) provides “The person responsible for conducting the remediation shall treat or remove free product and residual product to the extent practicable or contain free product and residual product when treatment or removal is not practicable. Monitored natural attenuation of free product and residual product is prohibited.” NJDEP's definition of free and/or residual product is very broad. These requirements create the potential that, at any given site, the NJDEP (or a Licensed Site Remediation Professional (LSRP); **See** the response to part g below) may not agree to a protective remedial approach that uses a simple combination of engineering and institutional controls (e.g., physical barriers and deed notices) or monitoring or both in lieu of more aggressive, intrusive and costly remedial alternatives (e.g., excavation and disposal). Further the TRSR and related guidance are under regular reconsideration by NJDEP as part of the LSRP

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

program, remediation standard revisions, and otherwise, and the scope and extent of future changes cannot be predicted.

- b) N.J.S.A. 58:10B-13 requires: “When real property is remediated to a nonresidential soil remediation standard or engineering or institutional controls are used in lieu of remediating a site to meet an established remediation standard for soil, groundwater, or surface water, the person responsible for conducting the remediation shall, as a condition of the use of that standard or control measure: ... (2) with the consent of the owner of the real property, provide for the recording with the office of the county recording officer... a notice to inform prospective holders of an interest in the property that contamination exists on the property at a level that may statutorily restrict certain uses of or access to all or part of that property, a delineation of those restrictions, a description of all specific engineering or institutional controls at the property that exist and that shall be maintained in order to prevent exposure to contaminants remaining on the property, and the written consent to the notice by the owner of the property. The notice shall be recorded in the same manner as are deeds and other interests in real property. ...” This provision, and related NJDEP and LSRP practices and forms, requires the execution of a deed notice by the property owner, or the providing of a notice in lieu of deed notice in certain rare cases in which a deed into the owner is not of record (such as some roads), in order for the NJDEP or a LSRP to approve and implement a remedy employing an engineered solution, and after signature and recording, compliance by all future owners and operators with the requirements of and by reason the deed notice and associated remedial action permit (RAP). If the property owner does not consent to a deed notice (thereby requiring the complete removal or treatment of soil contamination above the most stringent NJDEP cleanup criteria), or breaches its or the RAP’s requirements (likely requiring the Company to cure the breach), the cost of the remedy would increase. There are approximately 100 third-party owned properties that have MGP contamination present. The need to obtain owner consent often results in extensive delays and owner demands. For example, in Cape May, the Cape May Housing Authority (CMHA) is exploring various options and having in-depth discussions with the Company regarding signing of a deed notice. In addition, the requirements for and by reason of deed notices and RAPs have been increased by NJDEP, which may bring additional risks and costs, for example by allowing NJDEP both earlier review of LSRP prior decisions (at the time of RAP application rather than at conclusion of the case) and ongoing review of the RAP site status (due to the periodic inspection and reporting requirements of and for such RAPs). In the event that the Company is unable to negotiate a favorable settlement for a deed notice, then by law the Company is compelled to remediate to unrestricted standards; such a remediation may be extraordinarily more complex, time consuming and expensive, and indeed it may be difficult to obtain the required consents and approvals to so proceed, including from

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

local municipalities and site owners. **See also** the Company's response to MFR-17.

- c) The NJDEP and LSRPs require Responsible Parties to investigate the potential for volatile chemicals in the subsurface to migrate into the indoor air of buildings located over or near areas of soil and groundwater contamination. Compliance with the Department's Vapor Intrusion Guidance Document can involve studies that can be highly complex due to the nature of this media and the ubiquitous presence of many volatile compounds in ambient air and associated with non-subsurface sources in the indoor air. Owners, purchasers and lenders are now more aware of and concerned with such issues and the Company has faced and expects to face increasing inquiries and demands about vapor intrusion (VI) issues. Despite this heightened awareness, the Company has not had to actively remediate any property for VI to date. These studies can be costly and hereafter could lead to possible remedial actions and other legal issues with and claims by property owners and tenants. The NJDEP has made the indoor air screening levels lower (more stringent) than as initially imposed, some by greater than an order of magnitude. It is unclear at this time if the NJDEP or LSRPs or others will require responsible parties to either re-evaluate or resample the properties that were previously determined to not be impacted. Also, the NJDEP is considering proposing that the screening levels be changed to remediation standards, instead of mere guidance, imposing more requirements and allowing less flexibility than currently applicable (**See** the response to part f below). If this proposal is adopted, New Jersey will become the first and only state imposing remediation standards versus screening levels for the evaluation of VI. The current use of screening levels allows the LSRP to use professional judgment and lines of evidence to determine if VI poses an actual unacceptable degree of risk at the subject property. Changing the screening levels to remediation standards could force the responsible parties to take action to comply with law even though the risks to occupants may not be scientifically recognized as requiring action. In addition, the Company is aware that at some other responsible party sites, but not yet any Company MGP Site, if VI sampling identifies an "Immediate Environmental Concern" (IEC), even if unrelated to that responsible party's contaminants, the sampling party and LSRP have responsibilities to report and address that IEC immediately. Consequently, this IEC may result in additional risks and costs.
- d) Although the Company has exercised prudent care and performs its activities under the NJDEP's oversight and approval, to the extent possible, and expects to continue to do so hereafter under LSRP oversight, the potential exists for litigation with third parties related to its MGP sites. Such litigation may be initiated by neighbors (e.g., seeking damages) or the Company (e.g., seeking access for investigation or remediation or seeking to enforce past agreements notwithstanding changes in SRRA or new

Jersey Central Power & Light Company 2019 RAC Minimum Filing Requirements

agreements addressing SRRA requirements) or others (e.g., environmental groups seeking different or expedited remediations). During Governor Christie's administration enforcement against the regulated community by NJDEP, for example by seeking fines, penalties or pursuing litigation, was relatively limited. During Governor Murphy's tenure, there are indications of increasing actual or threatened NJDEP enforcement against the regulated community. With mandatory deadlines fast approaching, the possibility for increased enforcement exists, if the Company is unable to meet those deadlines. **See** the response to part g below. The pursuit, defense and/or resolution of any such litigation have the potential to be costly.

- e) On August 2, 2006, legislation was enacted that mandated that the NJDEP issue regulations on public notification for the site remediation program. On September 2, 2008, the NJDEP adopted rules requiring those responsible for cleanups of contaminated sites to post signs or distribute notification letters informing local residents of work progress. The public notification regulations require periodic public and municipal notification (at a minimum biennially) and at the onset of both remedial investigation and remedial action and create a petition process for communities wishing more extensive outreach and communication. Such notifications also cause regular interactions with those near the Company's sites, increasing the risk of claims by displeased recipients of such notices. The Company has complied with these requirements as applicable to date. Additional costs are being incurred to comply with the new requirements. These requirements changed somewhat in 2012, to address LSRP roles, but the approach remains essentially the same.

- f) In June 2008, the NJDEP published new Soil Remediation Standards in the New Jersey Register. The Department's new standards include Residential Direct Contact and Non-Residential Direct Contact soil remediation standards that are substantially more stringent (lower) than the soil cleanup criteria the NJDEP has applied since February 1992 and that were last updated in May 1999. Additional costs are being incurred to comply with the new Standards. Revised soil standards may be proposed by NJDEP in 2020-21. It is also unclear at this time how the NJDEP will revise and implement the impact to groundwater standards for soils in the future. The NJDEP also issued interim ground water standards in 2015, later adopting, and periodically revising them since their adoption. **See** <https://www.nj.gov/dep/standards/>, for example. These standards are to be applied to all sites even though at the time of adoption the NJDEP certified laboratories were not fully equipped to analyze for these compounds. Moreover, the NJDEP required that changed standards and additional compounds were to be evaluated for sites with a May 7, 2016 Remedial Investigation deadline even if compliance may be difficult to achieve. Further changes are expected. In particular, NJDEP has expressed considerable interest in "contaminants of emerging concern," which

Jersey Central Power & Light Company 2019 RAC Minimum Filing Requirements

generally are not associated with MGP Sites but nonetheless may require additional sampling and review under changing NJDEP and LSRP guidance and requirements. For example, **see** <https://www.nj.gov/dep/srp/emerging-contaminants/>. Changing one or all of the standards or requirements has required and could require additional work and remediation, perhaps even requiring repetition or reexamination of prior work, resulting in delays, and potentially exposing the Company to arguments by NJDEP and third parties that it has failed to comply with the mandatory May 2016 deadline in SRRA for completion of remedial investigations and impending deadlines for completion of remedial actions. Future soil standards and ground water standards and requirements are generally expected to be more stringent than the existing standards, which will require the Company to incur additional costs when promulgated. In addition, as discussed in more detail in d) above, the NJDEP is expected to propose that the VI screening levels be changed to remediation standards.

g) On March 16, 2009, the New Jersey State Senate and Assembly passed the "Site Remediation Reform Act" (SRRA). On May 7, 2009, New Jersey Governor Corzine signed the bill into law and issued a related executive order. The NJDEP under SRRA adopted extensive new regulations that took full effect in May 2012, although revised forms, interpretations and guidance are issued by the NJDEP regularly. The goal of this law is to speed up the site remediation process in New Jersey and eliminate the backlog of 14,000 plus cases previously being handled by the NJDEP Site Remediation Program (SRP) unit. While many components of the law have been implemented, some remain in a state of change and uncertainty. There are several anticipated impacts of SRRA on the Company's remedial plans for its MGP Sites. Each of these items is described in more detail below. These impacts include:

- The use of LSRPs;
- Regulatory and mandatory deadlines (**See** the response to part j below);
- The use of presumptive remedies;
- Remedial Action Permits;
- NJDEP's reliance on LSRPs and forms;
- NJDEP's implementation of a Remedial Priority Scoring System and communications to the public concerning the same;
- The potential reexamination of prior work, and imposition of new requirements, by or on LSRPs now responsible for determining that prior decisions and work are adequate to protect the public and the environment; and
- Audits of LSRP decisions and approvals, and associated demands, including for new and prior work, by NJDEP and the Professional Board over LSRPs, and requirements of the Company for or by reason of same.

Jersey Central Power & Light Company **2019 RAC Minimum Filing Requirements**

Also, under SRRA, owing to changes in the technical regulations and guidance, the NJDEP Site Remediation Program underwent major programmatic changes. Since SRRA's adoption, many NJDEP personnel terminated their employment or retired, were reassigned from SRP case management to other SRP functions or transferred from the SRP program into other NJDEP programs. In late 2011/early 2012, letters were received by the Company indicating that the NJDEP case managers had been reassigned and that the NJDEP would not be assigning new case managers. The Company was advised to hire a LSRP prior to the mandatory May 7, 2012 date for conversion of remedial oversight from the NJDEP to the LSRP. The Company retained LSRPs for its sites, as required, and is now proceeding under LSRP direction and supervision, with significantly altered interactions with NJDEP.

Prior to SRRA's adoption, NJDEP delays were extended, sometimes beyond 12 months. Since SRRA's adoption and prior to the receipt of these reassignment letters, the unpredictability of the NJDEP review times for document submittals made it difficult to determine how best to proceed cost effectively. Upon receipt of the reassignment letters, the Company received limited to no project specific correspondence from the NJDEP. In 2014, NJDEP advised that, despite its obligations to review LSRP submissions, in some cases and to some extent, it would now perform only cursory completeness reviews and await final submission of the LSRP's Response Action Outcome (RAO) to review the entire file. This is known to be partially inaccurate in that pursuit and issuance of remedial action permits (RAPs) clearly result in some substantive review by NJDEP of then prior LSRP decisions, and as such may then result in new NJDEP demands and delays. But importantly, to the extent NJDEP in fact delays review until proposed case closing, this has and will result in a postponement of significant costs, and cause delays in closing cases, as NJDEP can engage in significant review, re-evaluating past LSRP decisions and completed Company projects, long after the fact, potentially under then existing NJDEP policies and guidance, if and to the extent that NJDEP has the resources, and elects, to apply them, to such a review. The NJDEP has acknowledged that their review times have increased with additional document submittals due to the number of submittals received by the May 7, 2016 Remedial Investigation deadline.

While the LSRPs have significant powers and responsibilities for remediation, they do not have sole power and responsibility. Permitting, (including land use permitting and remedial action permits for soil and groundwater) for example, remains under NJDEP control. In addition, LSRPs are required to submit periodic reports and forms to the NJDEP as the investigation and remediation work proceeds to give the NJDEP the opportunity to review and comment on that progress. Finally, at the

Jersey Central Power & Light Company 2019 RAC Minimum Filing Requirements

conclusion of the site remediation, the LSRP is to issue a RAO, and the NJDEP and the Licensing Board have a statutory three-year period to review all materials, filings and decisions in the case to assess the LSRP's performance. In anticipation of this, the LSRPs and the NJDEP are, in some cases, continuing to discuss various aspects of the investigation and the remediation process in advance of the NJDEP's audit of the work.

The paragraphs below highlight some examples of the potential impacts of SRRA on the Company.

- SRRA created a new licensed professional as a class of environmental consultants called Licensed Site Remediation Professionals (LSRPs). LSRPs and their decisions are regulated by NJDEP and a new Licensing Board. LSRPs are to act without direct NJDEP oversight in planning, approving and supervising remedial efforts, immediately for all new discharges occurring after November 2009. As of May 7, 2012, the Company was required to use LSRPs for all sites being investigated and/or remediated. A LSRP's primary duty is to protect health, safety and the environment, not to serve as an advocate or obey the Company.
- While SRRA requires a culture change from the prior NJDEP command and control policies to allowing LSRPs to be in charge of the remediation, the NJDEP and the Licensing Board have audit rights that permit either or both to review and modify or reverse LSRP decisions and/or discipline LSRPs. Some LSRPs are nervous about the threat of audit by the Board and NJDEP, and these LSRPs may sometimes engage in pre-decision discussions with NJDEP, as a result of which NJDEP continues to have a role in decision making at and for the Company's sites. Recent enforcement against and proposed new rules applicable to LSRPs has not resulted in a reduction in LSRP concerns and fears. **See** both (i)

http://www.nj.gov/lsrpboard/board/prof_conduct/case_summaries.html

and (ii) 1/5/2015 47 N.J.R. 45(a), N.J.A.C. 7:26I. It is still uncertain whether LSRPs in the future will be more liberal or conservative in their approach to the ultimate remediation than the NJDEP has been historically, although the trend remains that LSRPs tend to be more conservative than pre-SRRA practices, driven, for example, in part by NJDEP's decision to require LSRPs to revisit even prior NJDEP approvals and decisions and in part by audits of LSRP decisions by NJDEP and the LSRP Licensing Board. The LSRP's concern for protecting their licenses and for acting in a manner that is wholly consistent with the NJDEP's formal and informal guidance, and Board rules, seems to result in a more conservative approach to clean up each site, at least in certain contexts, which tends to increase the cost to remediate a site. It is uncertain whether the NJDEP will engage in more or less rigorous review of remedial work in its periodic review and post-

Jersey Central Power & Light Company **2019 RAC Minimum Filing Requirements**

Remedial Action Outcome audits of LSRP work and submissions, and interim discussions, than it has in the past. However, with the approval of the remedial action permits for soil and groundwater still under the control of the NJDEP, it is expected that delays and increases in costs will be incurred, particularly as NJDEP evaluates the remedial approach at the time of the applications for RAPs without assigned case managers and without a full review and appreciation of all relevant technical information. The likely effects of LSRP involvement on the Company, and changes in NJDEP's role and the new role of the Licensing Board, are not fully understood at this time.

- SRRA has imposed deadlines for completion of various stages of remedial work. The most significant previously was that remedial investigations of most existing sites be completed by May 2014 on failure of which NJDEP was required to undertake direct oversight. Other deadlines, such as Light Non-aqueous Phase Liquid recovery and ecological receptor evaluation time-frames were also implemented and enforced. If the Company failed to meet these deadlines, the NJDEP had extensive enforcement rights that could increase costs. As there was some concern and confusion on the part of the LSRPs as to the definition of a completed remedial investigation and how completion can be documented to the NJDEP's and Licensing Board's satisfaction, the NJDEP engaged the LSRP professional trade organization and other responsible parties in this discussion. Due to concerns raised by the Site Remediation Industry Network (SRIN) and other potentially responsible party groups, legislation was proposed in December 2013 and signed into law in January 2014 that, subject to compliance with specific requirements, extended the remedial investigation deadlines on certain sites, including several of the Company's, to May 2016. The Company made filings, and posted funds to a trust fund, to accept the benefit of this new legislation. As of this filing, the Company has met these and other deadlines. As this deadline was revised to May 7, 2016 the ultimate aggregate financial impact of this requirement has shown that at some sites additional work was required by the LSRP to complete this delineation on an expedited time frame.
- The most significant deadlines currently approaching are the mandatory deadlines for completion of site remediation. These are discussed at part j below.
- SRRA added additional requirements for remediation of properties involving childcare centers, schools, residential uses and sensitive populations. Some of the Company's MGP Sites are subject to these requirements. NJDEP guidance on these requirements is not yet finalized. LSRP implementation has not yet been experienced. The Company believes that it can meet any additional requirements without material changes in its remedial strategies for the affected sites.

Jersey Central Power & Light Company 2019 RAC Minimum Filing Requirements

However, changes by the NJDEP and/or LSRPs, and claims by affected owners and operators, hereafter could alter this view.

- SRRA created a new permitting scheme and requirements for a remediation involving engineering and institutional controls called remedial action permits (RAPs). There will be added costs for meeting these requirements including establishing ongoing financial assurance to show that the responsible party has the financial capabilities to perform operation and maintenance activities at the site. The Company has secured a limited number of remedial action permits for the sites. The cost for these has ranged from \$30,000 to \$200,000. Based on discussions with existing LSRPs and industry representatives, it is anticipated that financial assurance for these sites will range from \$30,000 to greater than \$200,000 per site, perhaps more at the most complex sites. As stated previously with the approval of the remedial action permits for soil and groundwater still under the control of the NJDEP, it is expected that delays and increases in costs will be incurred. **See also** the Company's response to MFR-17.
- One of the consequences of no longer having direct NJDEP involvement on these projects is that the NJDEP no longer has any "hands on" method to track the progress at the site and/or the various submittals for the site. Instead, the NJDEP is relying on the LSRP to submit numerous forms that were created by the NJDEP to track the site progress and submittals. The NJDEP downloads this information into their "Dataminer" computer database system. This system allows the NJDEP, and others, to track compliance of the Potentially Responsible Parties (PRPs) (known under SRRA as "persons responsible for conducting remediation") with the various requirements of SRRA and the TRSR. It is the goal of the NJDEP to use this database system in the future to determine if each site is in compliance, or subject to NJDEP direct oversight. This system, however, is not fully automated for use by the LSRPs/RPs, therefore not all forms can be completed online and some need to be manually input by NJDEP personnel. This has created issues with data not being timely logged in, or data entered incorrectly by the NJDEP, or both, thereby forcing the responsibility parties (RP) to resubmit the forms or associated data. In one prior instance, the Company resubmitted the Receptor Evaluation form for a site three times before the NJDEP acknowledged receipt and indicated that the site that is the subject of that form was in compliance. In addition, as data was migrated from the old pre-SRRA NJDEP database system to the new Dataminer system by NJDEP, information was lost or incorrectly logged. The Company has identified that for several Company sites the NJDEP is tracking the same site under more than one NJDEP "Program Identification" number, which again caused the Company to be "out of compliance" due to NJDEP tracking errors. The NJDEP has recognized these issues and continues to modify the database system.

Jersey Central Power & Light Company **2019 RAC Minimum Filing Requirements**

- Finally, the forms are constantly being revised by the NJDEP without adequate outreach to the regulated community and without revising the instructions for filing the forms on the NJDEP website, creating a range of issues, delays and corrective efforts. For example, in 2018 NJDEP changed its form of deed notice, potentially adversely affecting prior agreements between the Company and property owners as to obligations to sign prior forms. The financial impact on the Company cannot be readily determined for these NJDEP errors and the mandatory use of these forms, but it can be estimated to be at least \$1,000 to \$5,000 per form/per site and possibly significantly higher.
 - On August 29, 2019 the first material changes to SRRA became law and took effect. P.L. 2019, c. 263. While these amendments are not expected to materially or adversely affect the Company's compliance with SRRA at its sites, the key changes within these amendments are outlined in NJDEP materials at https://www.nj.gov/dep/srp/srra/stakeholder/cvp_srag/2019/srag_cvp_srra_2_0911.pdf and as relevant to the Company below. NJDEP's expanded use of municipal courts for quicker and more frequent minor enforcement is ratified.
 - Altered the definition of "immediate environmental concern" so as to potentially require more and faster efforts, especially at unoccupied structures.
 - Confirmation that a LSRP must be retained at sites subject of RAPs for the duration of the RAP.
 - Alterations in the requirements for NJDEP Direct Oversight, for example upon an RP missing mandatory deadlines, to allow NJDEP greater flexibility in some cases (for example, if access issues have delayed remedial efforts).
- h) Pursuant to N.J.S.A. 58:10-23.16, the NJDEP is mandated to rank contaminated sites for the purposes of allocating its resources. This ranking system is known as the Remedial Priority Scoring System (RPS). Reportedly, the NJDEP is using the Dataminer data, and other resources, to score each site and determine a priority for future enforcement and attention in its RPS. Once finalized, these scores are expected to be made available to the public, creating some increased risk of independent review, inquiry, interference and enforcement by public officials, neighbors, real estate brokers, and lawyers - perhaps resulting in potential claims for damages. The probability of such occurrences and the costs associated with them cannot be predicted. In 2019 the NJDEP has issued no revised time-frame as to the publication of the RPS.
- In 2011, the Company was asked by the NJDEP to serve as a BETA test company, whereby the NJDEP would rank the Company's sites

Jersey Central Power & Light Company **2019 RAC Minimum Filing Requirements**

using its computer model, and the Company could provide comments on the rankings, thereby gaining insight into the process and perhaps some influence on the final form of the RPS. As a result of that review, the Company commented that the RPS would not be representative of the real risks in some instances and would overestimate the risks in others. This was due to the NJDEP's "one size fits all" approach with the RPS. These issues occurred because of the inclusion of inaccurate information and the absence of any effort on the part of the NJDEP to verify the data used in the models. In addition, the NJDEP previously stated that not all sites were entered into the system, and that approximately 2,000 sites were not scored. The draft RPS information was provided to the Company in early summer 2012; while some information was corrected following the BETA testing, much of the information was still incorrect and either needed to be reissued or corrected. The inaccuracy of the data required the Company to seek to discuss with the NJDEP its use of such data and calculation of such scores and required the Company to engage our consultants to fix the inaccurate data and resubmit data where necessary. The regulated community also pointed out many of these errors and requested that the NJDEP delay issuing final scores until such data could be corrected.

- The RPS was scheduled by NJDEP to be published initially in late 2012. As of the end of 2019, the RPS has not been published. The NJDEP has not stated the revised time-frame for issuance of the RPS.
 - The NJDEP has informally indicated that problems with the model have delayed its publication date.
 - The consequences of the final promulgation of the RPS may not be known for some time thereafter. As the majority of the effort by the Company took place in 2012 and given the fact that the final RPS will not be published until some much later date, the overall costs associated with this NJDEP initiative cannot be assessed at this time.
- i) NJDEP has long delayed promulgation and implementation of ecological standards. NJDEP has required various efforts to assess the existence of impacts from discharges of hazardous substances on ecological receptors (such as wetlands and streams). The Company has been addressing these requirements at several of its MGP Sites for many years. Experiences continue to suggest that LSRPs are looking more carefully at ecological issues than previously. Further the standards or criteria used by NJDEP and LSRPs for those hazardous substances, while not yet adopted officially as regulatory standards, are the subject of uncertain and conflicting requirements, particularly relative to the need for additional investigations, the adequacy of remediations and the need for deed notices and remedial action permits, particularly when compared to residential standards instead of ecological criteria. NJDEP's staff with responsibility for ecological issues to date have declined to defer to LSRP views, using their own views to drive discussions about the adequacy of investigations and need for additional

Jersey Central Power & Light Company **2019 RAC Minimum Filing Requirements**

remediation, which in the absence of firm rules, standards and guidance, delay some efforts and cause added expense. As discussed more specifically in MFR-17, the application of ecological standards (including site specific standards by NJDEP) has been inconsistent and without basis. These and other ecological issues hereafter may bring additional risks and costs as NJDEP and LSRP approaches become more established.

- j) SRRA imposed various mandatory and regulatory deadlines for remediation, many of which have passed or are fast approaching. At the time of SRRA's adoption many believed these deadlines to be unrealistic, particularly at complex sites, such as the Company's MGP Sites. The Company, and many other members of the regulated community investigating and remediating complex sites, will not attain full compliance by all such deadlines: currently the most relevant deadlines are for the completion of remediation, at some Company sites by May 2021 and others by May 2023. The failure to meet these deadlines can result in enforcement, and prior to the August 2019 amendments to SRRA would result in mandatory NJDEP Direct Oversight of remediation (adding to costs and complicating completion). In many cases, NJDEP allows for requests for extension, if filed in advance of missing the particular deadline, for acceptable cause, but does not permit filing of such requests sooner than 60 days before the relevant deadline. NJDEP can reject requests for extension. The Company has requested extensions at most of its MGP Sites and may ask for further extensions, or more favorable treatment under the 2019 changes to the NJDEP Direct Oversight requirements. The Company expects NJDEP to accept such requests in most and perhaps all cases. If rejected, or if deadlines are likely to be missed, the Company will seek to negotiate with NJDEP an amicable approach (e.g., an administrative consent order) to allow more realistic deadlines and avoid some of the more intrusive and costly burdens of Direct Oversight. However, these and other scheduling issues hereafter may bring additional risks and costs as SRRA deadlines are extended or requests for extension are rejected. (**See** the response to part d above).

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

9. Provide schedules and supporting workpapers and documents, which show the reconciliation of the prior period RAC expenditures and recoveries as well as the derivation of the deferred tax credit and the interest accrual on any unamortized balances.

Response:

See Attachments A and G.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

10. Provide the Company's bid evaluation studies, reports, workpapers or other material related to the two largest MGP remediation contracts awarded during the previous RAC period. The response should include the criteria utilized for bid evaluation and the comparisons between the terms and conditions offered by the competitive bidders.

Response:

REDACTED

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

MFR-10a - Newton II Remediation Project

REDACTED

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

MFR-10b - Sea Isle City Duplex Reconstruction Project

REDACTED

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

11. Provide documentation relating to the two largest supplemental contract amendments authorized by the Company during the previous RAC period. The response should provide the contractor's request for supplemental funding, the reasons cited for the request, and the Company's evaluation and action taken concerning the request.

Response:

The documentation associated with the two largest supplemental contract amendments authorized by the Company during 2019 are included herewith as **Attachment MFR-11a** for the Dover MGP site and **Attachment MFR- 11b** for the Ocean City MGP site.

The amendment to the Creamer Environmental Inc. (Creamer) contract was issued in the amount of \$517,648.00 for the Dover MGP Site, Creamer is the remediation services contractor that was selected to perform Groundwater Remediation activities at the Dover MGP Site via a competitive bid process completed in June/July 2019. This phase of remediation to address groundwater impacts beneath the Site included installation of a stormwater sewer line made of an impermeable material (i.e., HDPE); installation of new storm sewer lines on Carrel Street and milling and re-paving portions of Carrel Street. The intent was to construct a watertight storm sewer network that does not allow infiltration of impacted groundwater into the piping or structures. During the conduct of associated construction activities, additional costs were incurred due to a requirement to extend the new storm water piping system onto an adjacent property impacted with MGP materials as well as various supplemental remedial activities required to address site conditions encountered during project execution.

The materials provided in **Attachment MFR-11a** include the contractor's request, the reasons for the request, and the Company's evaluation and action taken.

The amendment to the Tetra Tech, Inc. (Tetra Tech) contract in the amount of \$400,577.65 provided funding for the remediation of the Ocean City MGP Site and included approximately \$70,000.00 in drilling subcontractor fees. Tetra Tech has been successfully involved with this project over the long term and is the consultant that completed the remedial investigation of the site in 2016 and subsequently developed the plans and specifications for the remediation. This contract amendment allowed Tetra Tech to continue its role in supporting The Company's remediation efforts at the site. The activities covered in this contract amendment included coordination and oversight of the drilling subcontractor's installation of 17 wells to extract MGP-impacted groundwater, monitoring New Jersey American Water Company (NJAWC) sewer replacement activities in potential MGP-impacted areas, remediation

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

construction oversight during soil excavation and treatment system installation, groundwater treatment system startup, and quarterly performance monitoring of the 65 monitoring well network for one year following the remedial construction activities at the Ocean City MGP Site.

The materials provided in **Attachment MFR-11b** include the contractor's request, the reasons for the request, and the Company's evaluation and action taken.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-11a



CREAMER ENVIRONMENTAL INCORPORATED
12 OLD BRIDGE ROAD
CEDAR GROVE NJ 07009

Your number with us
210060750

Please deliver to:
FEU & Corporate Support
FirstEnergy Service Company
AKRON 44309

**Change to
Purchase Order**

PO number/date
55126540 / 07/09/2018
Contact person/Telephone
Michael Kovach/330-315-6765
Contact person Email
makovach
@firstenergycorp.com

Valid from: 06/25/2018
Valid to : 07/31/2019

Freight Charges & FOB Terms: No freight, FOB destination
Terms of payt.: within 10 days 2 % cash discount
within 45 days Due net

Currency USD

Change Order #1 dated 1/30/2019

"Purchaser" is FirstEnergy Service Company on its own behalf and on behalf of its affiliates. The ship-to address may name either the Purchaser as named above and/or a subsidiary or affiliate company of the Purchaser. If more than one company is identified as the purchaser, the liability of each company named shall be several and not joint and shall be limited to such company's interest as identified therein.

If a proposal/quote is attached or referenced in a purchase order, any terms or conditions contained within the proposal/quote shall be considered additional and material terms and conditions and are hereby objected to and rejected.

Vendor: Creamer Environmental, Inc.
Vendor Contact: Thomas J. Cawley, Jr., President
(201) 968-3300
tcawley@creamerenvironmental.com

FE Supply Chain Contact
Mike Kovach
330-315-6765
makovach@firstenergycorp.com

FE Technical Contact

CREAMER ENVIRONMENTAL INCORPORATED
 CEDAR GROVE NJ 07009

PO number/date
 55126540 / 07/09/2018

Page
 2

Elaine Comings
 Phone: 973-401-8784
 e-mail: ecomings@firstenergycorp.com

This change order is for adding \$517,648.39 to the existing PO to continue work on the Dover MGP site.

See letter from Elaine Comings dated January 7, 2019.

All Invoices to:
 Elaine Comings - Project Manager
 Jersey Central Power & Light
 300 Madison Avenue
 PO Box 1911
 Morristown, NJ 07920
 Phone: 973-401-8784
 Fax: 330-436-8159
 e-mail: ecomings@firstenergycorp.com

Text changed

Item	FE Material No. Order qty.	Unit	Price per unit	Net value
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00001

Scope of Work

Provide remediation services as required to complete storm water sewer installation and paving activities at the Dover MGP site.

Work is to be performed in accordance with JCP&L bid specifications dated 05/10/2018, Creamer Environmental, Inc. bid package dated 06/12/18, Creamer's bid clarification letter dated 06/14/18 and revised proposal dated 06/20/18.

Period of Performance: 6/25/18 to 6/30/19

Total Order Value Not to Exceed \$1,341,675.00

Change Order request to PO 55126540 to extend the period of performance through 7/31/19 and to provide additional funding associated with Groundwater Remediation activities completed at the Dover MGP Site. Additional costs incurred due to supplemental remedial activities required to address Site conditions encountered during project execution. Additional funding to be added under line item 01. See attached Creamer Environmental change order request letter dated 12/3/18 for description of services.

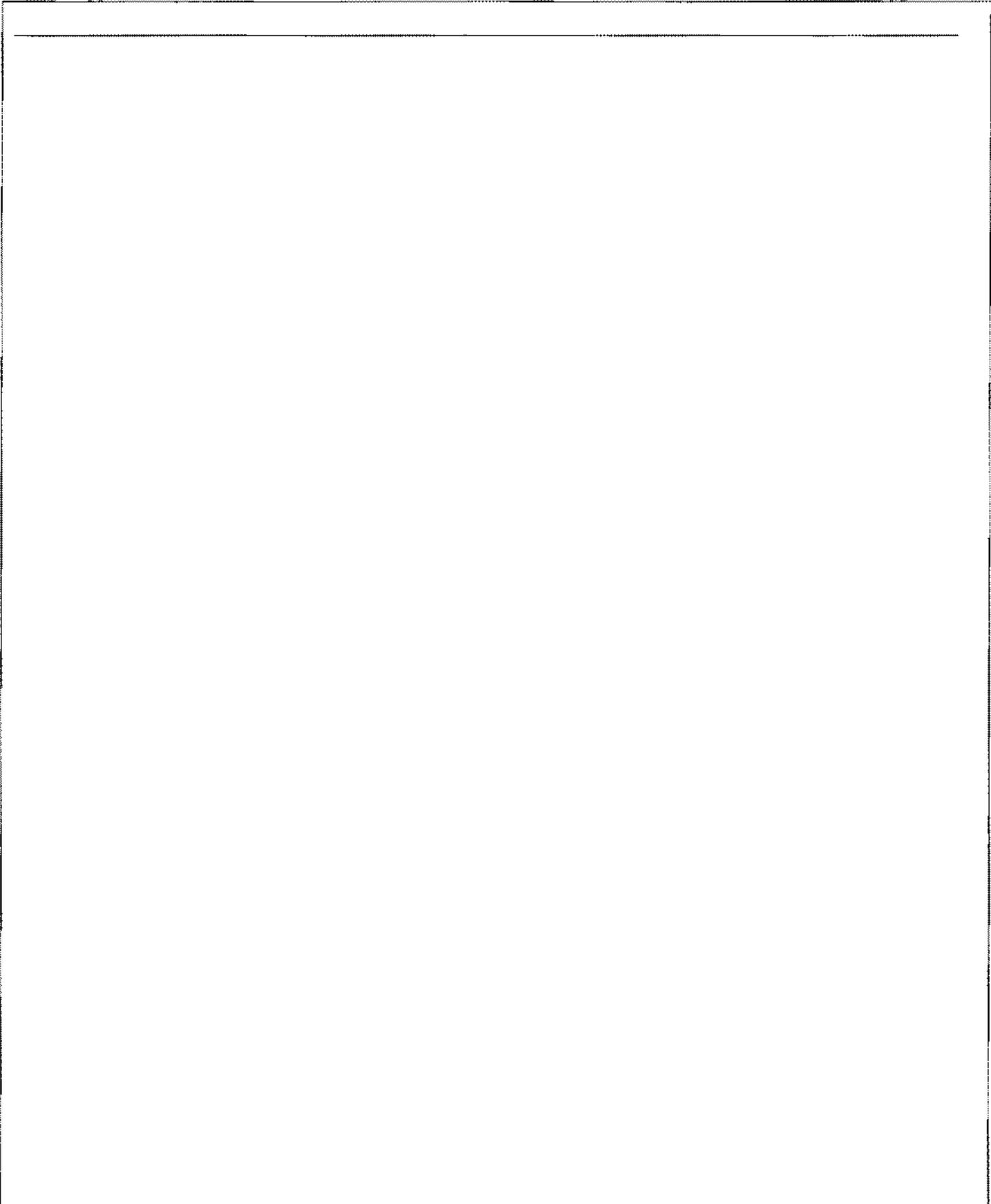
Change Order#1 added \$517,648.39 to the PO for a total of \$1,859,323.39.

Net price changed
 Text changed

1	1 EA	Storm Water Sewer Installation	1.00	1.00
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CREAMER ENVIRONMENTAL INCORPORATED
CEDAR GROVE NJ 07009

PO number/date
55126540 / 07/09/2018



CREAMER ENVIRONMENTAL INCORPORATED
CEDAR GROVE NJ 07009

PO number/date
55126540 / 07/09/2018

Page
4

Supplier or Contractor to execute this order and return a copy to the appropriate address below.

The Agreement may be executed in multiple counterparts, which taken together shall constitute an original without the necessity of all parties signing the same page or the same documents, and may be executed by signatures to electronically transmitted counterparts in lieu of original printed or photocopied documents. Signatures transmitted by facsimile shall be considered original signatures.

FirstEnergy
West Akron Campus
341 White Pond Drive
Akron, Ohio 44320
Attn: Mike Kovach
Email: makovach@firstenergycorp.com

Supplier or Contractor to retain a copy for Supplier's/Contractor's records.

Supplier or Contractor acknowledges receipt of and agreement to this writing and the terms contained herein and in the attached terms and conditions.

SIGNATURE LINE

Purchaser:

By:

Michael A. Kovach Kovach, Michael 43684
Jan 31 2019 10:02 AM
cosign

authorized agent of the entity named as Purchaser under this Purchase Order, and acting solely in its capacity as authorized agent.

Seller:



By: _____

Name: Thomas J. Cawley, Jr. Title: President

(Print) January 31, 2019

Date: _____



SUPPLY CHAIN REQUESTION
Form MFR-11a (Rev. 03/10) PAGE 1 OF 3

TRACKING NO.		DATE	TOTAL ESTIMATED COST	REQ. NO.	COMPARING	REGISTRATION NO.
		1/7/19	\$877,546.39	59129540	<input type="checkbox"/>	0012974592
RECEIVED BY OR SERVICE CENTER		FROM	DOCUMENT TYPE (if known)	DESCRIPTION OF USE	PRIOR NO.	TASK CODE
FROM 07/01/18 TO 07/31/18		07/01/18 TO 07/31/18	Remediation Services	Remediation Services		
Creeamer Environmental, Inc.		Thomas J. Conley, Jr.		GROUP TO (if Delay Due to Unusual Location or Plans)		
12 Old Bridge Road		President		GROUP REQUEST		
Cedar Grove, New Jersey 07009		(201) 988-3300 tomj@creeamerenvironmental.com		Dover MGP		
ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL PRICE	STATUS	DATE
001	Change order request to PD #55129540 to extend the period of performance through 7/31/2019 and to provide additional funding associated with Groundwater Remediation activities completed at the Dover MGP Site. Additional costs incurred due to supplemental remedial activities required to address Site conditions encountered during project execution. Additional funding to be added under Line Item 01. See attached Creeamer Environmental change order request letter dated December 3, 2018 for a description of services.					
COMPLETED BY (Print Name)		ESTIMATED NO.		PHONE NO.		
Frank D. Lawson / George Farah		287 / 92309		200-5309 / 828-1393		
DATE		DATE		DATE		
1-7-19		1-7-19		1-7-19		
001		500300	XXXXXX	5001018	XXXXXX	XXXXXX
APPROVAL AND SERVICES APPROVAL						



MEMORANDUM

**SUBJECT: Creamer Environmental, Inc.
Purchase Order # 55126540
Dover MGP Site**

FROM: Elaine Comings

**LOCATION: Site Remediation
Environmental Affairs
Morristown**

**TO: Michael Kovack
Supply Chain**

DATE: January 7, 2019

The following supply chain requisition has been prepared to provide additional funding requested for Creamer Environmental, Inc. (Creamer) Purchase Order #55126540. A summary of the field order changes for this contract and the required funding increase totaling \$517,648.39 is described below.

Creamer is the remediation services contractor that was selected to perform Groundwater Remediation activities at the Dover MGP Site via a competitive bid process completed in June/July 2018.

This phase of remediation to address groundwater impacts beneath the Site included installation of a stormwater sewer line made of an impemeable material (i.e. HDPE); installation of new storm sewer lines on Carrel Street and milling and re-paving portions of Carrel Street. The intent was to construct a water tight storm sewer network that does not allow infiltration of impacted groundwater into the piping or structures.

During the conduct of associated construction activities, additional costs were incurred due to a requirement to extend the new storm water piping system onto an adjacent property impacted with MGP materials as well as various supplemental remedial activities required to address site conditions encountered during project execution.

Details regarding the additional budget needed to address out of scope items, utilizing time and materials rates previously approved under the contract, are summarized within Creamer's change order request letter dated December 3, 2018. The supporting documentation for this change order has been reviewed and evaluated by AECOM, (JCP&L's consultant performing engineering and construction oversight) and by Site Remediation. Copies of the field change orders (reviewed and approved by AECOM) with supporting documentation are attached.

There were nine field change orders issued during this phase of remediation, amounting to a value of \$517,648.39. The original contract, including the base bid was issued for \$1,341,675. The final cost to complete the work under PO #55126540, including the

nine out of scope changes and contingencies, is estimated to be \$1,859,323.39. Therefore, the net change order amount required is \$517,648.39.

AECOM and Site Remediation find the costs to be justified and reasonable. Accordingly, please increase the overall budget of Line Item 1 for Purchase Order 55126540 by the amount of \$517,648.39.

Please note that the above referenced remedial work was required to maintain compliance with New Jersey Department of Environmental Protection (NJDEP) regulations and directives and the Site's remediation agreement.

I can be reached at extension 8784 (tie line 200) if you have any questions regarding this request.

Please provide a copy of the Change Order to me for the project file once it is issued.

Thank you for your assistance.



URS
1266 Broad Street, Suite 201
Clifton, New Jersey 07013
www.urscorp.com

973 883 8500 tel
973 883 8501 fax

December 10, 2018
First Energy/CEI # 210060750

Ms. Elaine Comings
Project Manager
Jersey Central Power & Light Company
300 Madison Avenue
P.O. Box 1911
Morristown, New Jersey 07952

RE: Change Order Request
Phase II Storm Water Sewer Installation
Creamer Environmental, Inc.
JCP&L Purchase Order #: 55126540

Dear Elaine:

URS has reviewed the attached Creamer Environmental Inc. (CEI) invoice change order request letter dated Dec 3, 2018 for the Jersey Central Power & Light Company (JCP&L) purchase order number 55126540.

The URS estimate to complete (ETC) the services included in the original purchase order no. 55126540, as well as the change orders authorized by JCP&L during the course of the project is presented in the attached URS ETC Table. As presented in the attached URS ETC Table:

Estimate to Complete (ETC)	\$ 1,419,782.66
Original Contract Value	\$ 1,341,675.00
ETC minus Contract Value	\$ 78,117.66

As depicted in the attached URS ETC Table, the additional required funds in the amount of \$78,117.66 (representing an increase of 5.8% from the original budget) to complete the original scope of services are mainly due to:

- under estimation of the transportation and disposal (T&D) costs for non-hazardous soil disposal at Bayshore Soil Management LLC (line item 12A) and debris (line item 11); and
- over estimation of the pre-treated groundwater transportation and disposal (T&D) costs at Passaic Valley Sewerage Commission (PVSC) (line item 10) and odor control foam concentrate (line item 13).

During the course of the project, JCP&L authorized nine (9) change orders (COs) for out-of-scope services. CEI submitted budgetary cost estimate prior to commencing each Change Order service. A list of the COs is presented at the bottom of the attached URS ETC Table. Six (6) of the COs were issued on a lump sum (LS) basis, while three (3) COs were issued on a time and material (T&M) basis. The original cost of the nine COs was estimated at \$437,159.35, while their estimate to complete is \$434,530.73, i.e. a cost savings in the amount of \$2,628.62 or approximately 0.6 % of the original value.



Based on the above and as depicted below, URS estimates that the net change order amount required to complete the original scope of services, as well as the JCP&L change orders issued during the course of the project is \$517,648.39.

ETC minus Original Contract Amount	\$ 78,117.56
Approved Change Orders (Estimate To Complete)	\$ 434,530.73
Contingency	\$ 3,000.00
Final Net Change Order Amount Required	\$ 517,648.39

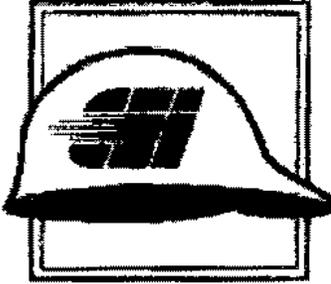
The URS ETC Table summarizing the estimate to complete the services, the URS change order log, and the CEI Dec 3, 2018 change order request letter are attached. If you have any questions or require further documentation regarding this request for the approval of a change order in the amount of \$517,648.39 for the JCP&L PO no 55126540, please do not hesitate to contact me.

Sincerely,

Claudia Maranhao, PE, MBA
Project Manager

Attachments:

- URS ETC Table
- URS Change Order Log dated 12/03/18
- CEI Dec 3, 2018 Change Order Request Letter



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD - CEDAR GROVE, NEW JERSEY 07009

(201) 998-3300 • FAX (201) 998-3501

December 3, 2018

Ms. Elaine Comings
Jersey Central Power & Light Company
300 Madison Avenue
Morristown, NJ 07962

Re: JCP&L Former Dover MGP Site Remedial Action - Phase II Storm Water Sewer Installation
Rockaway Township, New Jersey
Purchase Order 55126540
Change Order Required for Out-of-Scope Services

Dear Ms. Comings,

This letter is being provided to detail the out-of-scope services provided by Creamer Environmental, Inc. (CEI) under Purchase Order (PO) # 55126540 that were required to complete the work on the above referenced project. During the course of the project, a total of nine (9) change orders were issued by AECOM to address work that was not included in the original scope of services. For each change order issued CEI submitted a budgetary cost estimate prior to completing the work and AECOM reviewed and approved the cost estimate prior to issuing a Project Field Order. The attached Change Order Summary table presents the amount of each change order and provides a brief explanation for each change order issued. The nine change orders amounted to a total value of \$ 437,642.40.

The original contract was issued for a total of \$ 1,341,675.00. The cost at completion is estimated to be \$ 1,859,323.39. The net change order amount required is \$ 517,648.39. A table summarizing this cost detail is also attached to this letter.

Please do not hesitate to contact me if you have any questions or concerns regarding this matter.

Very Truly Yours,
Creamer Environmental, Inc.

Thomas J. Cawley, Jr.
President

URS Estimate To Complete (Dec 7)

JFF&L PO No. 09120440
Through: 31-Dec-18
Contractor: Creamer Environmental, Inc. (CEI)

ITEM	DESCRIPTION	Units	Current Contract Value			Estimate To Complete		Percent ETC
			Quantity	Unit Price	Amount	Quantity	Amount	
ORIGINAL PROPOSAL								
1	Mobilization and Demobilization	LS	1	\$ 75,000.00	\$ 75,000.00	100%	\$ 75,000.00	100%
2	Temporary Facilities and Controls	LS	1	\$ 136,000.00	\$ 136,000.00	100%	\$ 136,000.00	100%
3	Stormwater Diversion and Bypass Pumping - Setup	LS	1	\$ 124,000.00	\$ 124,000.00	100%	\$ 124,000.00	100%
4	Stormwater Diversion and Bypass Pumping - Operation	LS	1	\$ 60,000.00	\$ 60,000.00	100%	\$ 60,000.00	100%
5	RDPE Storm Sewer Pipe Replacement	LS	1	\$ 505,000.00	\$ 505,000.00	100%	\$ 505,000.00	100%
6	Card Street Storm Sewer	LS	1	\$ 32,000.00	\$ 32,000.00	100%	\$ 32,000.00	100%
7	Card Street Mill and Pave	LS	1	\$ 110,000.00	\$ 110,000.00	100%	\$ 110,000.00	100%
8	Water Pre-Treatment System Mobilization and Setup	LS	1	\$ 13,150.00	\$ 13,150.00	100%	\$ 13,150.00	100%
9	Water Pre-Treatment System Operation	LS	1	\$ 26,500.00	\$ 26,500.00	100%	\$ 26,500.00	100%
10	Water Disposal at Pease Valley Sewerage Commission (PVSC)	LS	1	\$ 108,050.00	\$ 108,050.00	707,000	\$ 108,050.00	71%
11	Transportation and Disposal: Debris	Ton						
12	Transportation and Disposal: Non-Hazardous Soils	Ton						
12 A	Buyshare Soil Management, LLC							
12 B	Chem Berth - Southeast Pennsylvania							
13	Odor Control Foam Concentrate - Expendables	LS	600	\$ 81.00	\$ 48,600.00	600	\$ 48,600.00	100%
14	Performance and Payment Bond	LS	1	\$ 6,500.00	\$ 6,500.00	100%	\$ 6,500.00	100%
					\$ 1,341,675.00		\$ 1,416,792.86	100%
APPROVED CHANGE ORDERS								
CO#1	Culvert Cleanout under Railroad Tracks	LS	1	\$ 98,875.00	\$ 98,875.00	100%	\$ 98,875.00	100%
CO#2	Coal Tar Mitigation - Oil Boom Maintenance in Stream	T&M		\$ 3,231.10	\$ 3,231.10	6%	\$ 203.81	6%
CO#3	Optical Monitoring of Tank Farm, Survey of GW Vaults and Recovery Wells	T&M		\$ 5,280.85	\$ 8,280.85	115%	\$ 6,081.80	115%
CO#4	Backflow Preventer Installation	LS	1	\$ 4,808.73	\$ 4,808.73	100%	\$ 4,808.73	100%
CO#5	GW Management during RING Work	T&M		\$ 4,038.11	\$ 4,038.11	96%	\$ 3,898.08	96%
CO#6	Additional Storm Sewer Installation - Fine Property Drainage Ditch	LS & T&M	1	\$ 315,037.50	\$ 315,037.50	100%	\$ 314,787.50	100%
CO#7	Fence Repair along Fiera Property	LS	1	\$ 1,470.00	\$ 1,470.00	100%	\$ 1,470.00	100%
CO#8	Drummed Soil Management	LS	1	\$ 1,057.96	\$ 1,057.96	100%	\$ 1,057.96	100%
CO#9	Office Trailer for additional month & Additional Concrete	LS	1	\$ 3,550.00	\$ 3,550.00	100%	\$ 3,550.00	100%
	Change Order Total				\$ 437,168.26		\$ 434,530.73	
					\$		\$	
					\$ 1,778,833.35		\$ 1,854,323.35	

ETC minus Original Contract Amount	\$ 76,117.66
Approved Change Orders (Estimate To Complete)	\$ 434,530.73
Contingency	\$ 5,000.00
Final Net Change Order Amount Required	\$ 514,648.39

Estimate to Complete (ETC)	\$ 1,416,792.86
Original Contract Value	\$ 1,341,675.00
ETC minus Contract Value	\$ 76,117.66

URS Change Order Log 12/03/18

CO No.	Title	Estimated Original Budget	Estimate To Complete (ETC)	Description
1	Culvert Cleanout under RR	98,875.00	98,875.00	Services required to clean the box culvert under the railroad tracks
2	Oil Boom Maintenance in Stream	3,231.10	203.81	Services required to maintain the oil absorbent booms in the drainage ditch
3	Optical Monitoring of Wall & Tank Farm	5,280.95	6,081.80	Services required to monitor the Spartan Oil Tank Farm and Wall
4	Backflow Preventer Installations	4,608.73	4,608.73	Services required to install backflow preventers in four groundwater treatment vaults
5	GW Mgmt during NJNG Work	4,036.11	3,896.03	Services required to manage impacted groundwater during lowering of gas line in Canal St.
6	Storm Sewer Installation at Fiore Property	315,037.50	314,787.50	Services required to install a storm sewer line at the Fiore property
7	Fence Repair along Fiore Property	1,470.00	1,470.00	Services required to repair damaged fence along Fiore property
8	Drummed Soil Management	1,057.96	1,057.96	Services required to manage the disposal of soil drilling cuts conditioned on 55-gallon steel drums
9	Office Trailer Rental & Addtl Concrete	3,550.00	3,550.00	Services required to rent an office trailer for an additional month and for additional concrete
		437,199.35	434,538.73	

**JCPL - Dover Former MGP Site
Phase II Storm Water Sewer Installation
Net Change Order Amount Required**

Total Amount Invoiced to Date, through Payment Application # 3 (Invoice # 575 , dated 12/3/2018)	\$ 1,461,628.54
Estimated Cost to Complete	\$ 392,694.85
Estimated Project Cost at Completion	\$ 1,854,323.39
Contingency Amount	\$ 5,000.00
Total Project Cost with Contingency	\$ 1,859,323.39
Original Contract Amount (PO # 55126540)	\$ 1,341,675.00
Final Net Change Order Amount Required	\$ 517,648.39

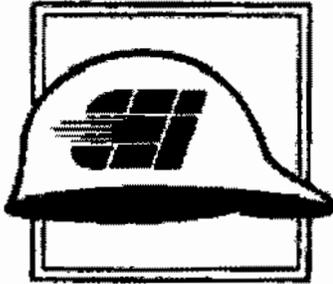
ITEM	DESCRIPTION	Units	Quantity	Current Contract Value		Current Application		Previous Applications		Completed To Date		Percent Complete
				Unit Price	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	
2A	Temporary Bypass and Controls	LS	1	\$ 80,000.00	\$ 80,000.00	100%	\$ 80,000.00	0%	\$ -	100%	\$ 80,000.00	100%
3A	Stormwater Diversion and Bypass Pumping - Setup	LS	1	\$ 10,450.00	\$ 10,450.00	100%	\$ 10,450.00	0%	\$ -	100%	\$ 10,450.00	100%
4A	Stormwater Diversion and Bypass Pumping - Operation	LS	1	\$ 15,100.00	\$ 15,100.00	100%	\$ 15,100.00	0%	\$ -	100%	\$ 15,100.00	100%
5A	HDPPE Storm Sewer Pipe Replacement	LS	1	\$ 113,875.00	\$ 113,875.00	100%	\$ 113,875.00	0%	\$ -	100%	\$ 113,875.00	100%
10A	Water Treatment at Passaic Valley Sewerage Commission (PVSC)	Gallon	960,000	\$ 0.19	\$ 54,038.00	960,000	\$ 54,038.00	-	\$ -	386,200	\$ 74,380.00	100%
11A	Transportation and Disposal: Debris	Ton	25	\$ 76.00	\$ 1,895.00	25.00	\$ 1,895.00	0.00	\$ -	25.00	\$ 1,895.00	100%
12	Transportation and Disposal: Non-Hazardous Soils	Ton	250	\$ 90.00	\$ 20,000.00	500.00	\$ 45,000.00	0.00	\$ -	500.00	\$ 40,000.00	200%
12A-1	Bypasses Seal Management, LLC	Ton	250	\$ 81.00	\$ 20,250.00		\$ -		\$ -	0%	\$ -	0%
12B-1	Clean Earth - Southeast Pennsylvania	Ton	250	\$ 11.25	\$ 2,812.50	10.00	\$ 112.50	0.00	\$ -	10.00	\$ 112.50	100%
13	Odor Control Foam Concentrate - Expedient	Gallon	10	\$ 301,787.00	\$ 3,017,870.00		\$ -		\$ -		\$ -	0%
	Change Order # 6 - Bypass Total without Water Disposal				\$ 3,017,870.00		\$ -		\$ -		\$ 3,017,870.00	100%
Water Disposal Options												
9A	Option 1 - Building Water Pre-Treatment System Operation	LS	1	\$ 13,250.00	\$ 13,250.00	100%	\$ 13,250.00	0.00	\$ -	100%	\$ 13,250.00	100%
9B	Option 2 - Collection of Groundwater with Storage in Erno Tanks	LS	1	\$ 5,250.00	\$ 5,250.00	0%	\$ -	0.00	\$ -	0.00	\$ -	0%
				Change Order # 8 Total with Water Disposal Option 1 (SA)		\$ 315,037.00		\$ -		\$ 314,787.00		\$ -

Jersey Central Power & Light
Contract No. 0612000
Change Order # 8 Backup
Pay App. # 4
Transect: 01-000-418
Contractor: Crescent Environmental, Inc.
Job #: 17-2782



ACM - Down Tower West Site
Phase B - Storm Water Flow Installation
Change Order Summary Table

Change Order Number	ACMOM Project File Order Number	Date ACMOM was issued	Change Order Description	Change Order Type	ACMOM Approved Budget	Final Amount Invoiced	Description of Change-Scope Services and Materials
1	1	9/27/2018	Cleaning Box Culvert under P.B. Thales / Box Culvert under "Big Cottage"	Lump Sum	\$ 80,975.00	\$ 80,975.00	Services required to clean the box culvert under the CA break
2	2	10/7/2018	Cost for Milligation Work / Project Storm Water Conveyance System and O&M	Time & Material	\$ 3,231.30	\$ 3,231.30	Services required to purchase the oil absorbent booms in drainage ditch
3	3	10/29/2018	Optical Monitoring of Spreader Oil Tankage and Surveys of CW Vaults and Recovery Wells / Optical Monitoring & Data Summary Report	Time & Material	\$ 5,290.96	\$ 5,080.80	Services required to monitor the Spreader Oil Tankage and Surveying of Groundwater Vaults and Recovery Wells
4	4	9/18/2018	Installation of Backflow Preventers / Installation of Backflow Preventers in the CW Treatment Vault	Time & Material	\$ 4,000.75	\$ 4,000.75	Services required to field verify the location of upstream identified during electromagnetic survey
5	5	10/12/2018	Groundwater Management Monitoring Wells Work / O&M Management during NING Work	Lump Sum	\$ 4,235.11	\$ 3,985.53	Services required to manage groundwater expressions during NING work related to relocation of gas main in Canal Basin
6	6	10/15/2018	Flow Property Exchange Check / Flow Property Exchange Check	Time & Material	\$ 315,037.60	\$ 314,787.50	Services required to field use methods and additional storm water pipe on the adjacent flow property
7	7	10/28/2018	Perce Repair along Stone Property / Perce Repair along Stone Property	Lump Sum	\$ 1,270.00	\$ 1,470.88	Services required to repair the 6" block, check the fence along Stone Property that was damaged on 10/11/18 by falling limbs from the adjacent flow property
8	8	10/29/2018	Groundwater Management / "Increase and Management"	Time & Material	\$ 1,087.96	\$ 1,037.96	Services required to manage & install ACMOM necessary well installation activities
9	9	11/12/2018	Office Trailer for additional month and Additional Concrete for pipe	Lump Sum	\$ 9,350.00	\$ 9,550.00	Services required to provide office trailer for December and install additional concrete sections of new HDPPE pipe
Total Change Order Amount					\$ 437,853.95	\$ 437,642.48	



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD - CEDAR GROVE, NEW JERSEY 07009

(201) 968-3300 • FAX (201) 968-3301

July 9, 2018

Claudius Maranhao, PE, MBA
AECOM
1255 Broad Street
Clifton, New Jersey 07013-3398

Re: Cleaning Box Culvert under R.R. Tracks
JCP&L Former MGP Site
5 Carrol Street
Rockaway Township, New Jersey 07866

Mr. Maranhao,

Creamer Environmental, Inc. (CEI) is pleased to provide our estimate for the removal and disposal of the sediment from within the box culvert under the R.R. tracks at the JCP&L Former MGP Site. Below is our proposed work plan based on our understanding of the project.

Work Plan:

Upon an award of a contract for this work, CEI will mobilize the required equipment to complete the removal and disposal of the sediment within the box culvert located under the R.R. tracks. The completion of this work will require the by-pass pumping of water from CB-2 and discharging this water downstream from the work area. The out-flow pipe within CB-2 would be blocked off with the use of plastic sheeting and sand bags. Pumps would be placed within CB-2 with discharge pipes running between the ties and discharging downstream from the work area. Additional pumps would be placed within the splitter box or close to the work area. These additional pumps would be to collect any additional water entering the splitter box originating from the twin 30-inch ductile iron pipes in MH-1 or from the 24-inch HDPE pipe located in the splitter box. These additional pumps would either discharge downstream from the work area or into CB-2.

The removal of the sediment from within the box culvert would be completed with the assistance of a vac truck. The removal of sediment would start with the vac truck staged near



PROJECT FIELD ORDER

F.O. NUMBER:	1	CLIENT:	JCP&L
DATE:	9/27/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project. #:	60390438
ISSUED BY:	Eric Acs	CC:	Dean Hall-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: Box Culvert under RR Cleaning			
Specification or Drawing No: n/a			
Reference: CEI Cost proposal			
Detail Of Field Order:			
<ol style="list-style-type: none"> 1) JCP&L accepts the revised cost proposal of \$98,875.00 as a not to exceed price; 2) JCP&L requires that all necessary H&S procedures and regulations regarding the proposed services be included as part of the CEI proposed activities; 3) Using BMP's CEI should use any and all practical environmental control as to limit and confine any oil sheen, blebs, sediment and turbid water from leaving the work area. Additionally CEI should use BMP's at the discharge point of the by-pass pumping to limit any and all of the above mentioned conditions. <ul style="list-style-type: none"> ➤ Work shall be conducted by CEI as a Change Order to the existing contract on a Lump Sum basis. ➤ Invoices seeking payment for these services shall be submitted as part of the CEI Monthly Invoices. 			

the downstream end of the box culvert. Laborers would work with hand tools to break up the sediment within the box culvert so the hose from the vac truck can remove the sediment. Sediment collected in the vac truck would be dumped into a lined 20-yard roll-off container to allow the sediment to settle out from the water. Any water that accumulates on the surface of the sediment would be pumped into frac tanks and sent off-site for disposal at the PVSC facility located in Newark, NJ. The sediment would be transferred to a second roll-off container and blended with Portland cement or a similar material to render it acceptable to the disposal facility. The sediment would then be transferred to a truck for off-site disposal.

Once the removal of the sediment has progressed to the mid-point of the box culvert, we would relocate the vac truck to the other end of the box culvert to complete the culvert cleaning process.

Exceptions and Exclusions:

1. Railroad insurance has been excluded from our proposal.
2. Proposal is based on Level D PPE with work hours from 7:00 AM to 3:30 PM, Monday through Friday.
3. Sediment and water is assumed to be non-hazardous and acceptable for disposal at Bayshore Soil Management and PVSC.
4. Waste class analytical for off-site disposal is excluded.
5. Any required access agreements to be provided by others.
6. Excludes any traffic control.
7. Proposal excludes any permits.
8. Proposal is based on work being performed in the 3rd quarter of 2018.
9. Proposal is based on CEI actively working on site with water treatment plant, office trailers, decontamination pad, etc. still available for our continued use.
10. Excludes any pressure washing of the culvert.

Please see the attached bid sheet for our pricing and estimated quantities. Should you have any questions concerning this estimate, please feel free to contact our office.

Sincerely,
Creamer Environmental, Inc.

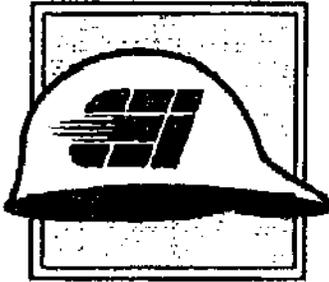
Carl Mills
Estimator

IC&L FORMER MGP SITE - TOWN OF DOVER/TOWNSHIP OF ROCKAWAY, NEW JERSEY				
PRICING FOR THE REMOVAL AND DISPOSAL OF SEDIMENT WITHIN THE BOX CULVERT				
CREAMER ENVIRONMENTAL, INC.				
Work Item	Units	Quantity	Unit Price	Total
General Conditions - Equipment mobilization, equipment decon, installation and removal of by-pass pumping system; Installation and removal of containment area for roll-off containers; and Health and Safety Plan.	Lump Sum	1	\$ 23,450.00	\$ 23,450.00
Removal and Sediment - Daily rate for work crew, vac truck, by pass pump operation, HSC, and work space air monitoring.	Days	5	\$ 13,725.00	\$ 68,625.00
T&D Of Sediment - Estimated quantity of amended excavated non-hazardous sediment for off-site disposal at Bayshore Soil Management.	Tons	50	\$ 76.00	\$ 3,800.00
Soil Amendments - Soil amendments such as portland to be added to sediment to render the sediment moisture level acceptable to the disposal facility.	Tons	10	\$ 200.00	\$ 2,000.00
T&D Of Sediment Water - Estimated quantity of nonhazardous sediment water for off-site disposal at Passaic County Sewage Commission.	Gallons	5,000	\$ 0.20	\$ 1,000.00
				\$ 98,875.00
Additional items such as soil management, odor control, concrete disposal and frac tanks will be invoiced at the unit prices listed in the contract.				
All quantities listed above are based on our best estimate and based on our understanding of the scope of work for this				



PROJECT FIELD ORDER

F.O. NUMBER:	02	CLIENT:	JCP&L
DATE:	10/03/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project. #:	60390438
ISSUED BY:	Eric Acs	CC:	Dean Hall-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: Project Storm Water Conveyance System and O&M.			
Specification or Drawing No: C-100 Existing Conditions.			
RFI Reference: N/a			
Detail Of Field Order:			
<ul style="list-style-type: none"> ➤ As requested by JCP&L and directed by AECOM CM. ○ Continue with the maintenance of oil absorbent booms previously installed between the splitter box and the entrance to the box culvert under East Blackwell Street; ○ For budgeting purposes, assume three events. Approval by the local AECOM Construction Manager is required prior to starting any of the maintenance activities; ○ Invoices seeking payment for these services shall be submitted as part of the CEI Monthly invoices and substantiated by detailed backup information including actual labor/equipment usage and a complete copy of any and all subcontractor and/or material invoice(s). 			



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD - CEDAR GROVE, NEW JERSEY 07009

(201) 968-3300 • FAX (201) 968-3301

October 3, 2018

Claudius Maranhao, PE, MBA
AECOM
1255 Broad Street
Clifton, New Jersey 07013-3398

Re: Cost Estimate for Coal Tar Mitigation Work
JCP&L Former MGP Site
5 Carrol Street
Rockaway Township, New Jersey 07866

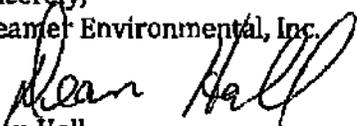
Mr. Maranhao,

Creamer Environmental, Inc. (CEI) is providing this proposal and cost estimate in accordance with your verbal direction on 10/3/18 to continue with the maintenance of absorbent booms within the drainage ditch between the railroad tracks and East Blackwell Street. For budgeting purposes, we have assumed a total of three (3) events where we will remove the old absorbent boom and install new booms. If additional events are required beyond the three events, we will need to increase the budget for this work item.

We will continue to perform this work on a time and material basis and provide the necessary backup and signed Time and Material (T&M) sheets with the invoices.

The estimated cost associated with this work is \$3,231.10. A detailed cost estimate is attached. Please see the attached cost estimate for our pricing and estimated quantities. Should you have any questions concerning this estimate, please feel free to contact me.

Sincerely,
Creamer Environmental, Inc.


Dean Hall
Project Manager

TIME & MATERIAL SHEET

Customer: JCP&L Date: 10/3/2018
 Project: Dover Former MGP Site Job #: 17-2192
 Location: 5 Canal Street Rockaway, NJ FCM #:

Scope of Work: Cost Estimate for MGP Ter Seepage Mitigation: Replacement of booms in splitter box and creek (Assumes 3 events)

Description	Name	Hours		Rate		Labor Cost
		Straight Time	Overtime	Straight Time	Overtime	
Labor Foreman	Manny Marquis	12		111.00		\$1,332.00
Laborer	AJ Dimpario	12		107.05		\$1,284.60
						\$0.00
						\$0.00
						\$0.00
						\$0.00
						\$0.00
						\$0.00
						\$0.00
Total Labor Cost:						\$2,616.60

Equipment	Hours	Rate	Equipment Cost
Labor Foreman Truck	12.00	\$27.00	\$324.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
Sales Tax			
Mark-Up (10%)			\$32.40
Total Equipment Cost:			\$386.40

Material Name	Quantity	Rate	Sales Tax	Markup (10%)	Material Cost
Absorbent Booms	3	73.77	4.89	\$7.39	\$258.10
			-	\$0.00	\$0.00
			-	\$0.00	\$0.00
			-	\$0.00	\$0.00
			-	\$0.00	\$0.00
			-	\$0.00	\$0.00
			-	\$0.00	\$0.00
			-	\$0.00	\$0.00
			-	\$0.00	\$0.00
Total Material Cost:					\$258.10

*Pricing to be provided at a later date

Subcontractor & Description of work	Cost	Markup (5%)	Subcontractor
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
Total Subcontractor Cost:			\$0.00

**Pricing to be provided at a later date

Labor Cost	\$2,616.60
Equipment Cost	\$386.40
Material Cost	\$258.10
Sub Cost	\$0.00

Total Extra for this Sheet: \$3,261.10

Creumar Environmental, Inc.

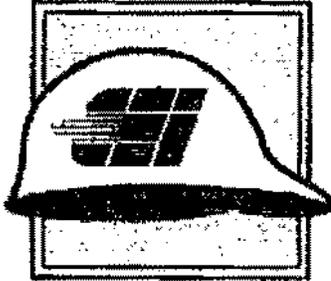
By: _____ Date: _____

By: _____ Date: _____



PROJECT FIELD ORDER

F.O. NUMBER:	03	CLIENT:	JCP&L
DATE:	10/3/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project #:	60390438
ISSUED BY:	Eric Acs	CC:	Dean Hall-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: Optical Monitoring & Other Surveying Work			
Specification or Drawing No: see attached plan.			
RFI Reference: n/a			
Detail Of Field Order:			
<ul style="list-style-type: none"> ➤ As requested by JCP&L and directed by AECOM CM. ○ Weber Surveying to continue Optical Monitoring of the Spartan Oil Tanks and Retaining Wall for two additional events; ○ Weber Surveying to provide coordinates and elevations of multiple points within the four (4) groundwater vaults; ○ Weber Surveying to prepare Form B's for newly installed recovery wells. ○ All cost associated with this change order will follow the agreed upon contract procedures and rates established for the project. ○ Work shall be conducted by CEI as a Change Order to the existing contract on a Time & Material (T&M) Basis and follow agreed upon contract procedures, i.e. CEI 5% markup on subcontractors. Copy of any and all subcontractor invoices shall be included in the CEI Monthly Invoice. 			



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD - CEDAR GROVE, NEW JERSEY 07009

(201) 998-3300 • FAX (201) 998-3301

October 3, 2018

Claudius Maranhao, PE, MSA
ABCOM
1255 Broad Street
Clifton, New Jersey 07013-3398

Re: Cost Estimate for Optical Monitoring of Spartan Oil Tanks/Wall and Surveying of GW
Vaults (4) and Recovery Wells (2)
JCP&L Former MGP Site
5 Carrol Street
Rockaway Township, New Jersey 07866

Dear Mr. Maranhao:

Creamer Environmental, Inc. (CEI) is providing this cost estimate in response to Project Field Order # 3, dated 10/3/18. This field order requests the continuing optical monitoring of the Spartan Oil Tanks/Wall for two events (10/15/18 and 11/15/18), the surveying of multiple points within the four groundwater vaults, as well as the surveying and preparation of Form B's for newly installed recovery wells (RW#8 and RW#9).

Our cost estimate for this work is \$5,290.95, including the CEI 5% markup on subcontractors. Pricing of this change order is based on daily rates provided by the surveyor. We will perform this work on a Time and Material (T&M) basis. All required backup documentation, including signed daily T&M sheets will be submitted with the invoice.

Sincerely,
Creamer Environmental, Inc.

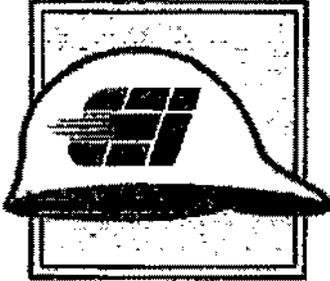
A handwritten signature in black ink that reads "Dean Hall". The signature is written in a cursive, flowing style.

Dean Hall
Project Manager



PROJECT FIELD ORDER

F.O. NUMBER:	04	CLIENT:	JCP&L
DATE:	9/18/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project. #:	60380438
ISSUED BY:	Eric Acs	CC:	Dean Hall-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: Installation of Backflow Preventers in the Groundwater Treatment Vaults			
Specification or Drawing No: na.			
Reference: CEI cost proposal			
Detail Of Field Order:			
<ul style="list-style-type: none"> ➤ As requested by JCP&L and directed by AECOM CM. <ul style="list-style-type: none"> ○ Install a backflow preventer in the effluent line at each of the four (4) groundwater treatment vaults. Backflow preventer shall be installed close to the wall of the groundwater treatment vaults; ○ Adjust and re-align the sampling and cleanout ports as close as possible to the center point of their respective covers; ○ Work shall be conducted by CEI as a Change Order to the existing contract on a Lump Sum basis. 			



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD - CEDAR GROVE, NEW JERSEY 07009
(201) 866-3300 • FAX (201) 868-3301

October 3, 2018

Claudius Maranhao, PE, MBA
AECOM
1255 Broad Street
Clifton, New Jersey 07013-3398

Re: Installation of Backflow Preventers
JCP&I Former MGP Site
5 Carrol Street
Rockaway Township, New Jersey 07866

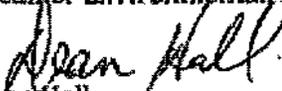
Mr. Maranhao,

Creamer Environmental, Inc. (CEI) is providing this revised proposal in accordance with your verbal direction on 10/3/18 to remove the surveying requirements from this cost estimate. This cost estimate only includes the installation of a backflow preventer in each of the four groundwater vaults on site.

Due to the fact that this work will be completed in conjunction with contract work, we are proposing that we perform this change order on a lump sum basis rather than on a time and material basis.

The proposed cost associated with the installation of the backflow preventers is \$4,608.73. A detailed cost estimate is attached. Please see the attached cost estimate for our pricing and estimated quantities. Should you have any questions concerning this estimate, please feel free to contact me.

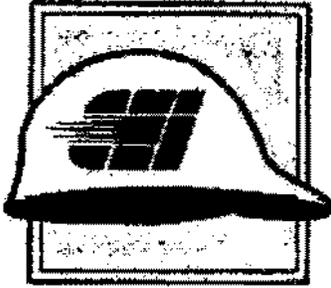
Sincerely,
Creamer Environmental, Inc.


Dean Hall
Project Manager



PROJECT FIELD ORDER

F.O. NUMBER:	5	CLIENT:	JCP&L
DATE:	10/16/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project. #:	60390438
ISSUED BY:	Eric Acs	CC:	Dean Hall-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: GW Management during NJNG Work			
Specification or Drawing No: n/a			
Reference: CEI Cost proposal			
Detail Of Field Order:			
<ol style="list-style-type: none"> 1) <i>Provide time and materials to support NJNG and its subcontractor (Gray Supply) in the management of impacted groundwater during the excavation and relocation of the gas pipeline on Camel Street.</i> 2) <i>CEI to provide 21,000 gallon frac tank to temporarily store the contaminated groundwater and labor to transfer the water from the frac tank to the on-site groundwater treatment system.</i> <ul style="list-style-type: none"> ➤ <i>Work shall be conducted by CEI as a Change Order to the existing Phase 2 contract on a Time & Material (T&M) basis and follow agreed upon contract procedures, i.e. CEI 5% markup on subcontractors. As per attached revised proposal, the estimated amount is \$4,038.11.</i> ➤ <i>Invoices seeking payment for these services shall be submitted as part of the CEI Monthly Invoices and substantiated by detailed backup information including actual labor/equipment usage and a complete copy of any and all subcontractor invoice(s).</i> 			



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD - CEDAR GROVE, NEW JERSEY, 07009

(201) 968-3300 • FAX (201) 968-3301

October 16, 2018

Claudius Maranhao, PE, MBA
AECOM
1255 Broad Street
Clifton, New Jersey 07013-3398

Re: Revised Cost Estimate for Groundwater Management during NJNG Work
JCP&L Former MGP Site
5 Carrol Street
Rockaway Township, New Jersey 07866

Mr. Maranhao,

Creamer Environmental, Inc. (CEI) is providing this revised proposal and cost estimate in accordance with your verbal direction on 10/10/18 and 10/16/18 to provide support to Gray Supply for the management of contaminated groundwater from their excavation during the work required to relocate the NJNG gas main in Carrol Street.

The cost estimate includes the manpower to set up a secondary containment, mobilization and demobilization and weekly rental of a 21,000 gallon frac tank to temporarily store the contaminated groundwater. As there was no water generated during the gas main relocation work performed on 10/15/18, CEI has removed the line items for frac tank cleaning and the transportation and disposal of treated groundwater. We have also removed the equipment costs for a trash pump to pump the water to the treatment system. In addition, we have decreased the monthly rental of the frac tank to just one week. The rates for frac tank mobilization and rental were the same rates used under the original contract (Alternates 15, 16 and 17). We will perform this work on a lump sum basis.

The estimated cost associated with this work is \$ 4,038.11. A detailed cost estimate is attached. Should you have any questions concerning this estimate, please feel free to contact me.

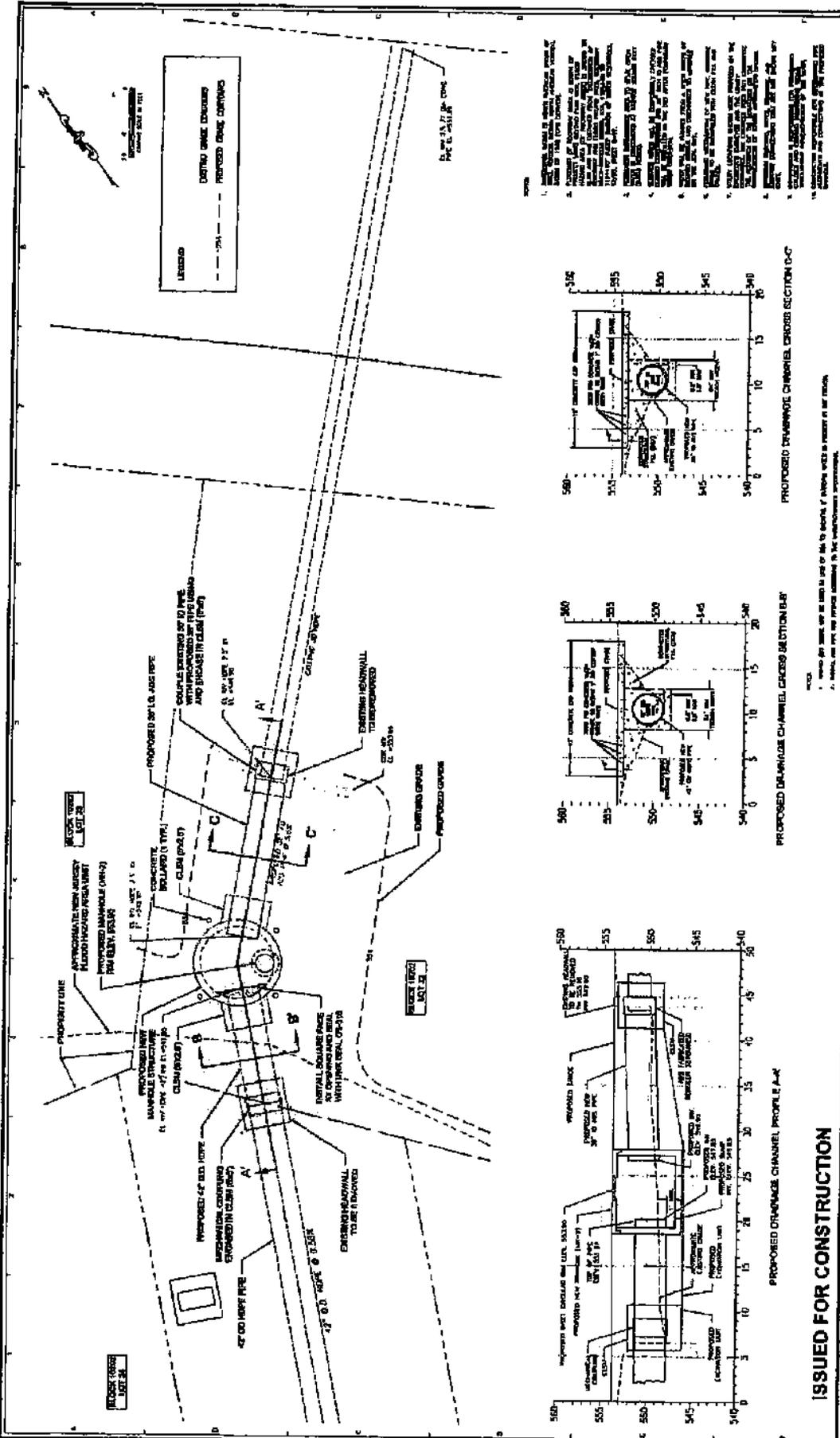
Sincerely,
Creamer Environmental, Inc.

Dean Hall
Project Manager



PROJECT FIELD ORDER

F.O. NUMBER:	8	CLIENT:	JCP&L
DATE:	10/15/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project. #:	60390438
ISSUED BY:	Eric Acs	CC:	Dean Hall-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: Fiore Property Drainage Ditch			
Specification or Drawing No: n/a			
Reference: CEI Proposal and Schedule A			
Detail Of Field Order:			
<p>1) <i>Provide service and materials to perform the scope of work detailed in the document titled "Request for Pricing for Additional Storm Sewer Installation at Fiore Property" dated September 26, 2018 transmitted to CEI by email dated Sep 26, 2018. Subsequent changes to the design drawing were transmitted to CEI and final drawing version is attached to the Field Order.</i></p> <p>➤ <i>Work shall be conducted by CEI as a Change Order to the existing Phase 2 contract on a Unit Price basis in accordance to the attached Schedule A. Copy of any and all subcontractor invoices and waste manifests shall be included in the CEI Monthly Invoice.</i></p> <p>➤ <i>CEI to manage impacted groundwater during services using Option 9A (Existing Water Pre-Treatment System Operation (Fiore Storm Sewer)).</i></p> <p>➤ <i>Project Schedule is attached and assumes mobilization no later than Dec 11, 2018 and completion by Dec 31, 2018. Estimated cost of services is \$315,037.50, i.e. (\$301,787.50 + \$13,250.00).</i></p> <p>➤ <i>Invoices seeking payment for these services shall be submitted as part of the CEI Monthly Invoices.</i></p>			



<p>ISSUED FOR CONSTRUCTION</p> <p>1. AS SHOWN ON THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AGENCIES OF THE STATE OF NEW JERSEY.</p> <p>2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AGENCIES OF THE STATE OF NEW JERSEY.</p>		<p>PROJECT NO. 10000000000000000000</p> <p>DATE: 09/18/18</p> <p>PROJECT: JERSEY CENTRAL POWER & LIGHT DOYER FORMER MCP SITE ROCKAWAY TOWNSHIP, NEW JERSEY</p> <p>PROJECT NUMBER: 10000000000000000000</p>	<p>ANALAM PROPERTY</p> <p>BLOCK 10002 LOT 32 ROCKAWAY TOWNSHIP, NJ</p>
<p>1. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>2. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>3. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>4. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>5. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>6. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>7. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>8. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>9. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p> <p>10. APPROXIMATE NEW JERSEY Flood Hazard Area (MNF) FROM BUREAU OF WATER RESOURCES</p>	<p>PROPOSED DRAINAGE CHANNEL CROSS SECTION B-B'</p> <p>PROPOSED DRAINAGE CHANNEL CROSS SECTION C-C'</p> <p>PROPOSED DRAINAGE CHANNEL CROSS SECTION D-D'</p>	<p>DRAINAGE CHANNEL PROPOSED CONDITIONS</p> <p>C-204</p>	<p>REVISIONS</p> <p>NO. 1</p>

ISSUED FOR CONSTRUCTION



CLARENCE MANAGED BY P.E. JACOBUSZAK

DATE: 09/18/18

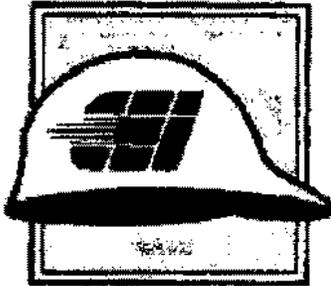
PROJECT: JERSEY CENTRAL POWER & LIGHT DOYER FORMER MCP SITE ROCKAWAY TOWNSHIP, NEW JERSEY

PROJECT NUMBER: 10000000000000000000

ANALAM PROPERTY

BLOCK 10002 LOT 32 ROCKAWAY TOWNSHIP, NJ

REVISIONS



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD - CEDAR GROVE, NEW JERSEY 07007

(201) 966-3300 • FAX (201) 966-3301

October 12, 2018

Claudius Maranhao, PE, MBA
AECOM
1255 Broad Street
Clifton, New Jersey 07013-3398

Re: Fiore Property Drainage Ditch
JCP&L Former MGP Site
5 Carrol Street
Rockaway Township, New Jersey 07866

Mr. Maranhao,

Creamer Environmental, Inc. (CEI) is pleased to provide our estimate for the installation of a manhole within the drainage ditch located on the Fiore property. Also, the extension of the new 42-inch HDPE pipe along with the extension of the existing 30-inch HDPE pipe with a transition to 36-inch HDPE pipe. Below is our proposed work plan based on our understanding of the scope of work required for this project.

Work Plan:

Upon an approval of this change order, CEI will provide submittals for the proposed materials required for this project. Our proposal is based on an anticipated schedule that provides for a lead time of up to 8 weeks for delivery of materials to the site, which includes time for preparation of shop drawings, submittal of shop drawings, submittal review and approval; and fabrication.

On-site work for this project will start with the modification of the manhole, once it has been delivered to the site. The modification of the manhole is required to allow for the proper installation of the link seal within the side wall of the manhole. The inside of the manhole will have additional concrete formed and poured to provide the proper wall thickness to permit for the proper installation of the link seal. Holes will be drilled so rebar dowels can be inserted into the manhole floor and side walls, around the perimeter of the opening for

the 42-inch HDPE pipe. Additional rebar will be connected to these rebar dowels prior to forming and pouring the additional concrete.

Once the modification has been completed on the manhole, CEI will install by-pass pumps to allow work to be performed within the stream bed. The temporary by-pass pumps will be installed to discharge water into Catch Basin 1 on the JCP&L property.

Limited jackhammering/saw cutting will be completed on each existing headwall to allow for installation of the two (2) pipe and their couplings. The complete removal of these two (2) headwalls is excluded from our proposal. Excavation will be completed in the streambed to permit the placement of the manhole along with the new HDPE pipe. CEI will install the section of 42-inch HDPE pipe, approximately 15 feet long, to connect the new manhole with the existing 42-inch HDPE pipe. A mechanical coupling will be installed to connect the new 42-inch HDPE pipe to the existing 42-inch HDPE pipe at the headwall location. Stiffeners will be installed inside each pipe at the location of the 42-inch pipe coupling. The connection of the 42-inch HDPE pipe to the new manhole will be completed with a link seal. The 36-inch HDPE pipe will be connected to the existing 30-inch HDPE pipe with the coupling as specified in the bid documents to allow for the transition in the pipe diameter. The connection of the new 36-inch diameter pipe to the manhole will be sealed with a non-shrink grout. Once the installation of the new HDPE pipes has been completed, CEI will remove the by-pass pump system.

Each of the four (4) pipe connections will be encased in CLSM prior to backfilling with DGA to subgrade and the installation of the 15-foot wide by 6-inch thick concrete pad between the two (2) headwalls to cover the HDPE pipe.

Any required dewatering of the existing drain ditch will be pumped to on-site frac tanks or our temporary water treatment system. This will depend on the selected option as listed below. Disposal of this groundwater will also be based one of the selected options as listed below.

Dewatering options:

CEI is providing two (2) options for groundwater:

Option 1:

CEI will leave the existing water treatment system on site idle for one (1) month. Groundwater will be pumped to the existing water treatment system and treated for off-site disposal at PVSC. The two (2) price components for this option, treating the groundwater under Option 1 and the T&D price, will apply as listed on the bid sheet.

Option 2:

CEI will provide two (2) frac tanks (no water treatment system) for the containment of groundwater. The price for the containment of the groundwater is listed on the bid sheet as

Option 2. AECOM will sample the groundwater to determine if it will meet the acceptance requirements for Passaic Valley Sewage Commission (PVSC). If the groundwater meets the acceptance criteria for PVSC, then the listed T&D unit price for PVSC will apply. If the water does not meet their acceptance criteria, CEI will locate an alternative disposal facility. The price for the T&D through the alternate disposal facility will be determined once analytical for the groundwater has been provided. This will result in a change condition for the T&D price for the groundwater.

Exceptions and Exclusions:

1. Proposal is based on Level D PPE with work hours from 7:00 AM to 3:30 PM, Monday through Friday.
2. Excavated sediment/soil is assumed to be non-hazardous and acceptable for disposal at Bayshore Soil Management.
3. Any required access agreements to be provided by others.
4. Proposal is based on work being performed in 2018.
5. Proposal excludes any compaction testing.
6. Proposal excludes any concrete repair or restoration of existing headwalls.
7. Due to the timing of this project, pavement restoration on the JCP&L property, near the 42-inch pipe connection, will be completed in the spring of 2019 unless asphalt plants are still open.
8. Moving or relocating stored material, owned by others, is excluded from our proposal.
9. Proposal excludes any costs associated with "chasing contaminated soil" such as additional excavation or additional backfill material.

Please see the attached bid sheet for our pricing based on the estimated quantities. Should you have any questions concerning this estimate, please feel free to contact our office.

Sincerely,
Creamer Environmental, Inc.

Carl Mills
Estimator

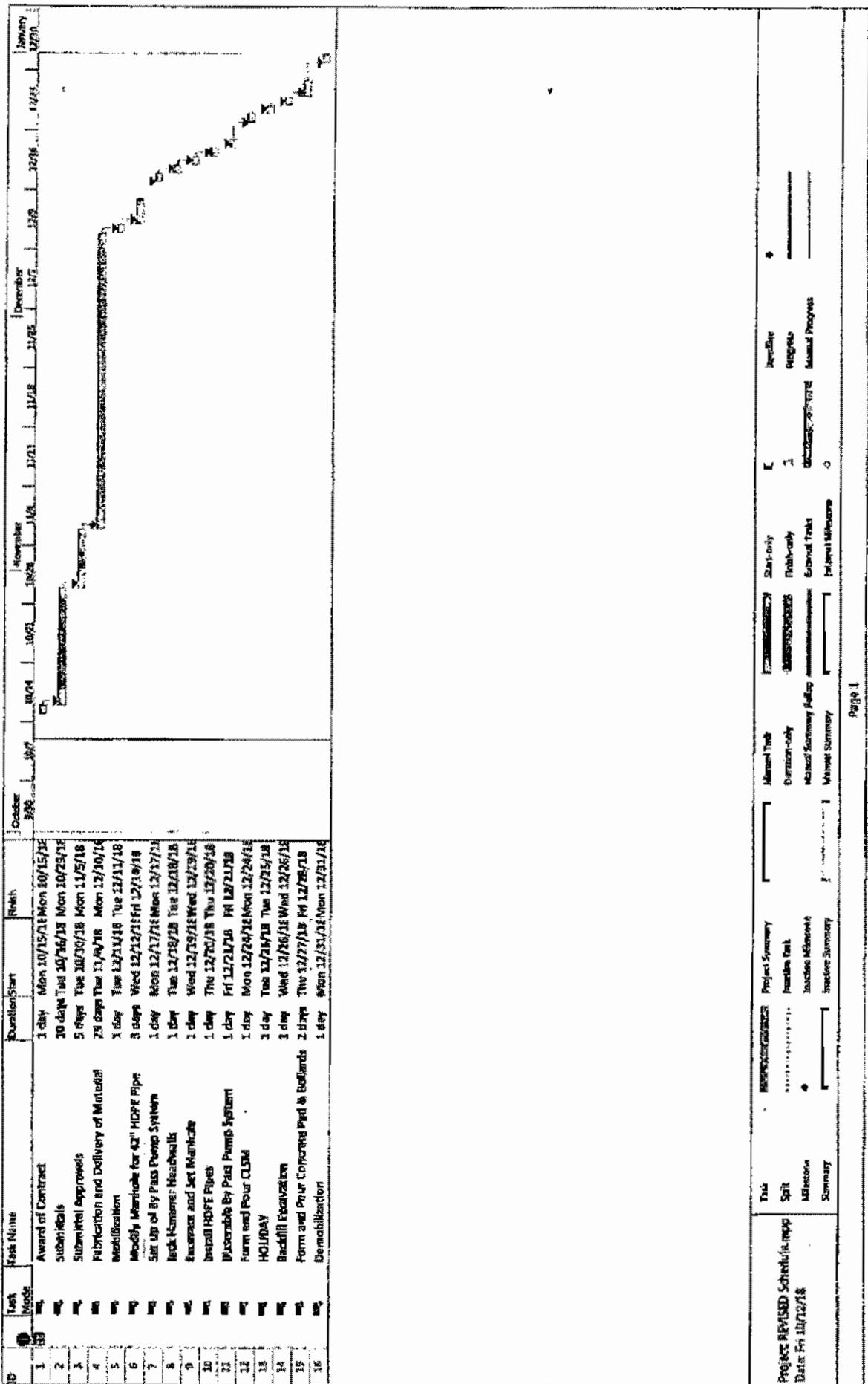
**SCHEDULE A
SCHEDULE OF QUANTITIES AND PRICES
Former Dover Manufactured Gas Plant
Morris County, New Jersey**

Bid prices listed in this Schedule are based on performance of the Work as specified in these Specifications and shall include all overhead, profit, handling, taxes, and all other related charges. The estimated quantities in this Schedule A are based on best judgment of Engineer and may vary from actual site conditions. The Contractor shall include a discount as a percentage of total cost for pre-payment of Contractor's invoices.

Bid Item	Unit	Estimated Quantity	Unit Price \$	Total Amount \$
2A Temporary Facilities and Controls (Flow Storm Sewer)	LS	1	\$ 66,000.00	\$ 66,000.00
3A Stormwater Diversion and Bypass Pumping - Setup (Flow Storm Sewer)	LS	1	\$ 10,450.00	\$ 10,450.00
4A Stormwater Diversion and Bypass Pumping - Operation (Flow Storm Sewer)	LS	1	\$ 15,100.00	\$ 15,100.00
5A Flow Storm Sewer Installation	LS	1	\$ 113,975.00	\$ 113,975.00
10A Water Disposal (Flow Storm Sewer) - To PVSC	GALLON	350,000	\$ 0.15	\$ 54,000.00
11A Transportation and Disposal: Debris (Flow Storm Sewer)	TON	25	\$ 78.00	\$ 1,950.00
12A Transportation and Disposal: Soil (Flow Storm Sewer)	TON			\$ -
12A-1 Bayshore Soil Management, LLC	TON	250	\$ 80.00	\$ 20,000.00
12A-2 Clean Earth - Southeast Pennsylvania	TON	250	\$ 81.00	\$ 20,250.00
13 Odor Control Foam Concentrate - Expandables	GALLON	10	\$ 11.25	\$ 112.50
Project Total =				\$ 301,787.50
9A OPTION 1: Existing Water Pre-Treatment System Operation (Flow Storm Sewer)	LS	1	\$ 13,250.00	\$ 13,250.00
9B OPTION 2: Collection of Groundwater with Storage in Frac Tanks	LS	1	\$ 5,250.00	\$ 5,250.00

Definitions:

- GY Denotes in Place Cubic Yard
- DAY Denotes Day of Work Completed
- GALLON Denotes U.S. Gallon
- HOUR Denotes Hour of Work Completed
- LS Denotes Lump Sum
- TON Denotes Short Ton (2,000 pounds)
- LF Denotes Linear Foot
- SF Denotes Square Foot

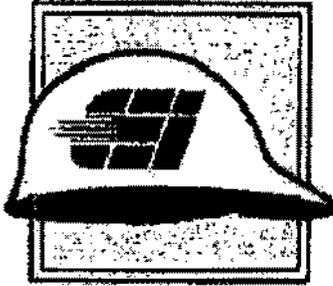


<p>Project REVISED Schedule.mpp Date: Fri 11/12/18</p>	<p>This</p> <p>Split</p> <p>Milestone</p> <p>Summary</p>	<p>Project Summary</p> <p>Resource Task</p> <p>Milestone Milestone</p> <p>Tasking Summary</p>	<p>Milestone Task</p> <p>Resource-only</p> <p>Milestone Summary</p>	<p>Task-only</p> <p>Resource-only</p> <p>External Tasks</p> <p>Project Milestone</p>	<p>Dependency</p> <p>Progress</p> <p>Milestone Progress</p>
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PROJECT FIELD ORDER

F.O. NUMBER:	7	CLIENT:	JCP&L
DATE:	10/23/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project #:	60390438
ISSUED BY:	Eric Acs	CC:	Dean Hail-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: Fence Repair along Fiore Property			
Specification or Drawing No: n/a			
Reference: CEI Proposal dated Oct 17, 2018 (attached)			
Detail Of Field Order:			
<ul style="list-style-type: none"> 1) <i>Repair 6-foot black chain link fence that was damaged on Oct 11, 2018 by falling mafia blocks from the adjacent Fiore property.</i> ➤ <i>Repair should be completed at the same time as the remaining fence work at the site;</i> ➤ <i>Work shall be conducted by CEI as a Change Order to the existing Phase 2 contract on a Unit Price basis for the black chain link fence. Estimated cost associated with the work is \$1,470.00; and</i> ➤ <i>Copy of any and all subcontractor invoice(s) seeking psyment for these services shall be submitted as part of the CEI Monthly Invoices.</i> 			



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD - CLEAR GROVE, NEW JERSEY 07009
(201) 968-3580 • FAX (201) 968-3301

October 17, 2018

Claudius Maranhao, PE, MBA
AECOM
1255 Broad Street
Clifton, New Jersey 07013-3398

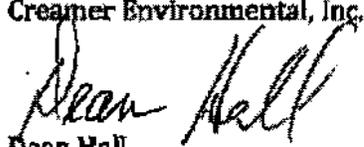
Re: Cost Estimate for Fence Repair along Fiore Property
JCP&L Former MGP Site
5 Carrol Street
Rockaway Township, New Jersey 07866

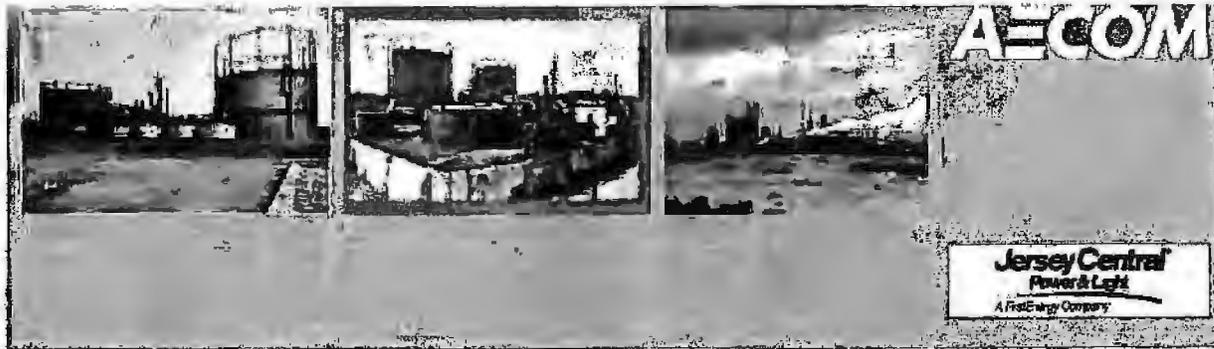
Mr. Maranhao,

Creamer Environmental, Inc. (CEI) is providing this proposal and cost estimate for the repair of the 6' black chain link fence that was damaged on October 11, 2018 by falling Mafia blocks from the adjacent Fiore property. This cost estimate is contingent on the repair work being completed at the same time as the remaining fence work on site. If the repairs are to be made before the remaining fence work is completed the price will increase to \$ 3,428.50.

The estimated cost associated with this work is \$ 1,470.00. A detailed cost estimate is attached. Should you have any questions concerning this estimate, please feel free to contact me.

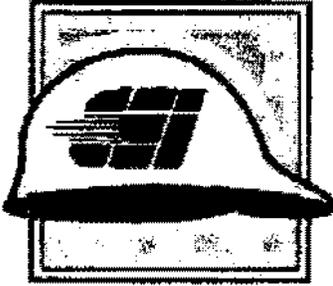
Sincerely,
Creamer Environmental, Inc.


Dean Hall
Project Manager



PROJECT FIELD ORDER

F.O. NUMBER:	8	CLIENT:	JCP&L
DATE:	10/23/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project #:	60390438
ISSUED BY:	Eric Acs	CC:	Dean Hall-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: Drummed Soil Management			
Specification or Drawing No: r/a			
Reference: CEI Proposal dated Oct 19, 2018 (attached)			
Detail Of Field Order:			
<p>1) <i>Provide services for the management of eight (8) 55-gallon steel drums filled with soils/well cuttings that were generated during recovery well installation activities.</i></p> <ul style="list-style-type: none"> ➤ <i>Transportation and disposal of the drummed soil to be carried out under the existing contract;</i> ➤ <i>Work shall be conducted by CEI as a Change Order to the existing Phase 2 contract on a time and material basis. Estimated cost associated with the work is \$1,057.96; and</i> ➤ <i>Invoices seeking payment for these services shall be submitted as part of the CEI Monthly Invoices and substantiated by detailed backup information including actual labor/equipment usage and a complete copy of any and all subcontractor invoice(s).</i> 			



CREAMER ENVIRONMENTAL, INC.

REMEDIATION CONTRACTORS

12 OLD BRIDGE ROAD • CEDAR GROVE, NEW JERSEY 07009

(201) 968-3300 • FAX (201) 968-3301

October 19, 2018

Claudius Maranhao, PE, MBA
AECOM
1255 Broad Street
Clifton, New Jersey 07013-3398

Re: Proposal and Cost Estimate for drummed soil management
JCP&L Former MGP Site
5 Carrol Street
Rockaway Township, New Jersey 07866

Mr. Maranhao,

Creamer Environmental, Inc. (CEI) is providing this revised proposal and budgetary cost estimate for the management of eight (8) 55-gallon drums filled with soils/well cuttings that were generated during AECOM's recent well installation activities. CEI will utilize the onsite excavator and a sling to lift the drums of soil and empty them into the existing stockpile of soil. Placement of the drums in the DNAPL enclosures will be by others. Transportation and disposal of soil will be done under the existing contract.

The estimated cost associated with this work is \$ 1,057.96. A detailed cost estimate is attached. Should you have any questions concerning this estimate, please feel free to contact me.

Sincerely,
Creamer Environmental, Inc.

Dean Hall
Project Manager



PROJECT FIELD ORDER

F.O. NUMBER:	9	CLIENT:	JCP&L
DATE:	11/12/18	SITE LOCATION:	Dover, NJ
CLIENT REVIEWER:	Claudius Maranhao	Project #:	60390438
ISSUED BY:	Eric Acs	CC:	Dean Hall-CEI Tom Cawley-CEI Tim Van Riper-CEI Andrew Samler-CEI Mike Gardner-AECOM
SUBJECT: Extend Demobilization Date for One On-Site Office Trailer (Dec 2018) and Provision of Additional Concrete overtop of 42-inch HDPE Pipe			
Specification or Drawing No: n/a			
Reference: CEI Proposal dated Nov 12, 2018 (attached). Total change order value is \$3,550.00			
Detail Of Field Order:			
<p>1) <i>Extend demobilization date for one on-site office trailer until the completion of the Fiore manhole/stormwater pipe installation (Dec 2018) and provision of additional nine (9) cubic yards of 3500 psi concrete, including installation services.</i></p> <p>➤ <i>Change Order is in accordance to Creamer Environmental Inc proposal dated Nov 12, 2018. Work shall be conducted by CEI as a Change Order to the existing Phase 2 contract on a Lump Sum (LS) basis for the on-site trailer and also for the additional concrete material and installation services.</i></p> <p>➤ <i>Lump sum cost associated with the one on-site trailer (Dec 2018) is \$1,650.00; and</i></p> <p>➤ <i>Lump sum cost associated with the provision and installation services of the additional nine (9) cubic yards of 3500 psi concrete is \$1,900.00.</i></p>			

Purchase requisition to provide supplemental remediation services as required to complete Groundwater remediation activities at the Dover MGP site. Request to establish change order to Line 01 and funding in the amount of \$517,648.39. Work is to be performed in accordance with JCP&L bid specifications dated 05/10/2018, Creamer Environmental, Inc. bid package dated 06/12/18 and Creamer's bid clarification and revised proposal dated 06/20/18 and approved Creamer change order request dated 12/03/2018.

Line 1 to be Entitled: Storm Water Sewer Installation

Site: Dover MGP

Change Order Amount: \$517,648.39

Tax Code: J1

Period of Performance: 07/01/18 to 07/31/19

Vendor: Creamer Environmental, Inc.
Point-of-Contact: Thomas J. Cawley, Jr., President
12 Old Bridge Road
Cedar Grove, NJ 07009
(201) 968-3300
tcawley@creamerenvironmental.com

SCOPE OF WORK:

Change order request to PO #55126540 to provide additional funding associated with Groundwater Remediation activities completed at the Dover MGP site. Additional costs incurred due to supplemental remedial activities required to address Site conditions encountered during project execution. Additional funding to be added under Line Item 01. See attached Creamer Environmental change order request letter dated December 3, 2018 for description of services.

All Invoices to:
Elaine Comings - Project Manager
Jersey Central Power & Light
300 Madison Avenue
PO Box 1911
Morristown, NJ 07920
Phone: 973-401-8784
Fax: 330-436-8159
e-mail: ecomings@firstenergycorp.com

Attachments:

- 1) Supply Chain Requisition dated 01/07/19;
- 2) Memo to Michael Kovack dated 01/07/19; and
- 3) Creamer Change Order Request letter dated December 3, 2018

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-11b



TETRA TECH INCORPORATED
45610 WOODLAND ROAD SUITE 400
STERLING VA 20166

**Change to
Purchase Order**

PO number/date
55117699 / 08/15/2013
Contact person/Telephone
Susan Shelton/440-380-5557
Contact person Email
skshelton
@firstenergycorp.com

Your number with us
210644315

Valid from: 06/28/2013
Valid to: 03/31/2021

Please deliver to:
Various Plants
FirstEnergy Service Company
44309

Freight Charges & FOB Terms: No freight, FOB destination
Terms of payt.: within 45 days Due net

Currency USD

Change Order #13, Dated 10/8/19, by Susan K. Shelton is issued to add funding to line item #5 for the Ocean City MGP Site.

"Purchaser" is FirstEnergy Service Company on its own behalf and on behalf of its affiliates. The ship-to address may name either the Purchaser as named above and/or a subsidiary or affiliate company of the Purchaser. If more than one company is identified as the purchaser, the liability of each company named shall be several and not joint and shall be limited to such company's interest as identified therein.

If a proposal/quote is attached or referenced in a purchase order, any terms or conditions contained within the proposal/quote shall be considered additional and material terms and conditions and are hereby objected to and rejected.

If Supplier engages FirstEnergy (FE) retirees in support of work under this PO, they shall identify these retirees by name to the FE contact person prior to the retiree performing any work under this PO. FE retirees shall not perform work under this PO unless and until receiving written approval from the FE contact person.

Critical Information (Internal): 13058976

Vendor: Bob Cohen
Phone: 703-444-7000
EMail: Bob.Cohen@tetratech.com

TETRA TECH INCORPORATED
STERLING VA 20166

PO number/date
5517699 / 08/15/2013

Page
2

Buyer: Susan K. Shelton
Phone: 440-280-5557
EMail: skshelton@firstenergycorp.com

Tech: Anna Sullivan, Project Manager
Phone: 973-401-8409
EMail: afsullivan@firstenergycorp.com

Proposal: Tetra Tech letter dated 10/2/2019

Period of Performance: 08/15/2013 to 3/31/2021

Invoicing

Questions about invoices or payments or electronic payment/presentation may be directed to the Accounts Payable help desk at (814)539-3200.

Please submit or view invoices electronically at the FirstEnergy's Supplier Portal: vendorportal.firstenergycorp.com.

Invoices must include pricing detail and must show the Purchase Order number, respective Purchase Order line item number, the transaction date, price data, taxpayer identification number, and the name of the FirstEnergy representative receiving the material or service. Each invoice must be sufficiently detailed to give the reviewer an accurate assessment of all the work performed by contractor.

Text changed

Item	FE Material No. Order qty.	Unit	Price per unit	Net value
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00005

Change Order #13 Dated 10/8/19

The activities for which this Change Order is being processed are summarized below.

Task 1 - Remediation Well Installation

This task includes installing 13 shallow zone and 4 intermediate zone groundwater extraction wells as detailed in the Licensed Site Remediation Professional (LSRP) approved Interim Remedial Action Work Plan (IRAWP) for the site. Additional drilling activities will be performed to collect in-situ waste characterization samples from planned hotspot excavation areas, rehabilitation work on existing wells, well development, and logistical efforts associated with site conditions. The drilling subcontractor's (ECDI's) estimate costs are attached. The estimated cost for this task is \$106,866.40.

Task 2 - Sewer Replacement Support

This task includes analysis and monitoring of dewatering impacts associated with NJAWC replacing the sanitary sewer line between West Avenue and Asbury Avenues. Due to concern that dewatering might induce migration of contaminants from the Site at 11th Street and West Avenue to the sewer replacement area, at the request of JCP&L, Tetra Tech provided analysis and oversight of NJAWC activities between May and September of 2019. The cost for this task is \$19,682.00

Task 3 - Remediation Construction Oversight and Support

TETRA TECH INCORPORATED
STERLING VA 20166

PO number/date
55117699 / 08/15/2013

In accordance with the IRAWP, the remediation work will include "hot-spot" excavation and disposal; connection of the 17 extraction wells to the treatment system with air and water lines installed in trenches; installation of well pumps and wellheads; capping of the specified areas; and placement, anchoring and start-up of the treatment system. Based on the selected general contractor's schedule, this work duration is expected to be approximately 8 weeks (October 21 to December 18). The cost request assumes an additional two weeks in January will be needed to complete work because of potential weather delays, completion of treatment system testing, and other unforeseen issues. Tetra Tech will provide full-time construction oversight and inspection for an estimated average of 50 hours per week including documentation of excavation areas and depths, trench material management and backfill compaction, pipe testing documentation, cap thickness and extent, site restoration and treatment system testing. Tetra Tech will provide traffic control when needed. The estimated cost for this task is \$ 99,979.00

Task 4 - First Year of Performance Monitoring

This task includes five monitoring events and will be performed in accordance with Appendix D - Performance Monitoring Plan of the LSRP-approved IRAWP. The monitoring includes a baseline sampling event prior to groundwater treatment system startup and quarterly sampling of 65 monitoring wells for a period of 1 year (5 sampling events). Samples will be analyzed for Volatile Organic Compounds (VOCs) during all sampling events. Samples will also be analyzed for Semi-volatile Organic Compounds (SVOCs) during the last quarterly sampling event (the 5th sampling event only). Sampling will be performed using passive diffusion bag sampling techniques. Groundwater levels will be measured prior to sampling and Tetra Tech will record, tabulate, plot, and interpret the hydraulic head data. Sampling will include influent and effluent at the treatment building. This task includes purchasing, installing and monitoring 14 automated water-level data loggers in offsite wells. This task includes sampling of bay surface water at 2 depths at six locations one year after the startup of the treatment system. The estimated cost of this task is \$160,053.25.

Task 5 - First Month of Groundwater Treatment System Operation, Monitoring and Maintenance (OM&M)

This task includes the labor and laboratory analytical costs for the first month of system operation after the pump-and-treat system has been delivered and tested. After the pump-and-treat system has been delivered, constructed, and tested, Tetra Tech will evaluate and request the costs for a full year of OM&M of the remediation system. The estimated cost of this task is \$8,482.00.

Task 6 Cape May Remediation Review Work

Tetra Tech, at JCP&L request, evaluated the groundwater treatment system at the Cape May former MGP site and provided input and recommendations for optimization. The cost of this task is \$5,495.00.

A description of the level of effort and costs for these remediation activities is provided in Tetra Tech's letter dated October 2, 2019.

FirstEnergy Contact and All Invoices to:
Anna Sullivan, Project Manager
Jersey Central Power & Light Company
300 Madison Avenue
P.O. Box 1911
Morristown, NJ 07962
E-mail: afsullivan@firstenergycorp.com
Tel: (973) 401-8409
Fax: (973) 644-4165

TETRA TECH INCORPORATED
STERLING VA 20166

PO number/date
55117699 / 08/15/2013

Page
4

Incremental change in Line item Total: \$400,557.65

Total Estimated Line Item Value: \$530,924.65

Net price changed
Text changed

TETRA TECH INCORPORATED
STERLING VA 20166

PO number/date
55117699 / 08/15/2013

NEW JERSEY STATE PREVAILING WAGE LAW

Pursuant to New Jersey state law, any construction, reconstruction, installation, demolition, restoration, and alternation of facilities for JCP&L is subject to the New Jersey State Prevailing Wage Law as set forth in N.J.S.A. 34:11 - 56.25 et seq. Excluded from this are operational work, including flaggers, snow plowing, vegetation management in and around JCP&L rights of way, mark outs, janitorial services, landscaping, leak surveyors, meter work, and miscellaneous repairs. Contractors performing work for JCP&L in accordance with the above must pay in accordance with the prevailing wage requirements.

The appropriate prevailing wage rates can be obtained from:

<https://www.nj.gov/labor/wagehour/content/prevwageapplication.html>, and may be viewed at https://www.nj.gov/labor/wagehour/wagerate/prevailing_wage_determinations.html. For more information generally, see the state of New Jersey website for the Department of Labor and Workplace Development.

Note, all contractors wishing to perform work on such projects must only employ individuals who have successfully completed all relevant OSHA-certified training.

Change Order

Except as amended herein, all terms, conditions, requirements, and provisions of the Purchase Order and any subsequent Change Orders thereto shall remain unchanged and in full force and effect.

Supplier or Contractor to execute this order and return a copy to the appropriate address below:

The Agreement may be executed in multiple counterparts, which taken together shall constitute an original without the necessity of all parties signing the same page or the same documents, and may be executed by signatures to electronically transmitted counterparts in lieu of original printed or photocopied documents. Signatures transmitted by facsimile shall be considered original signatures.

FirstEnergy Service Company (A-GO-9)
76 S. Main Street
Akron, Ohio 44308

Supplier or Contractor to retain a copy for Supplier's/Contractor's records.

Supplier or Contractor acknowledges receipt of and agreement to this writing and the terms contained herein and in the attached terms and conditions.

Name: _____ Date: _____
(Authorized Supplier/Contractor Signature)

(Print) Name: _____ Title: _____

TETRA TECH INCORPORATED
STERLING VA 20166

PO number/date
55117699 / 08/15/2013

DocuSigned by:
Susan K Shelton

10/8/2019 | 3:03:34 PM EDT

Name: _____
(Authorized Purchasing Representative Signature)

(Print) Name: Susan K. Shelton Title: Supply Chain Specialist V



Environmental Affairs
Site Remediation

Memorandum

To: Mark Vindivich

Date: October 3, 2019

From: Anna Sullivan

Subject: Supply Chain Requisition
Change Order Request to Purchase Order 55117699
Tetra Tech
Ocean City former MGP Site

Attached is a Supply Chain Requisition and supporting documentation for a Change Order Request to Purchase Order 55117699. The change order is for Remediation Well Installation, New Jersey American Water Company (NJAWC) Sewer Replacement Support, Remediation Construction Oversight, Treatment System Operation, and Performance Monitoring for one year for the planned remedial action of the Ocean City former MGP Site to comply with the New Jersey Department of Environmental Protection regulations and other agreements.

Please sign and date the Supply Chain Requisition and return to me via email at afsullivan@firstenergycorp.com and please send the original to Frank Lawson at Mail Stop M-MORG so we may complete the requisition process.

If you have any questions concerning this matter, please contact me at 200-8409 or Frank Lawson at 200-8309 at your earliest convenience.

Thank you.

cc: Frank Lawson



Environmental Affairs
Site Remediation

Memorandum

To: Susan Shelton

From: Anna Sullivan

Date: October 3, 2019

Subject: Change Order Request to Purchase Order # 55117699
Tetra Tech
Ocean City Former MGP Site

Attached is a Supply Chain Requisition to increase funding for the above-referenced Purchase Order for the Ocean City former MGP site. The increase in funding of \$400,557.65 for Tetra Tech is required for Remediation Well Installation, New Jersey American Water Company (NJAWC) Sewer Replacement Support, Remediation Construction Oversight, Treatment System Operation, and Performance Monitoring for one year for the planned remedial action of the Ocean City former MGP Site. The activities for which this Change Order Request is being submitted are summarized in the table and subsections below.

Task	Estimated Cost
Task 1 – Remediation Well Installation	\$106,866.40
Task 2 – 11 th Street Sewer Installation Oversight;	\$19,682.00
Task 3 - Remediation Work (oversight work including mobilization, excavation of hot spots and trenches, installation of piping and backfill, capping, wellhead work, treatment system construction and testing);	\$99,979.00
Task 4 – Performance Monitoring (sampling and analysis of 65 wells quarterly for one year); and	\$160,053.25
Task 5 – Initial System Operation.	\$8,482.00
Task 6 – Cape May Remediation Review Work	\$5,495.00
Total Estimated Cost	\$400,557.65

Task 1 - Remediation Well Installation

This task includes installing 13 shallow zone and 4 intermediate zone groundwater extraction wells as detailed in the Licensed Site Remediation Professional (LSRP) approved Interim Remedial Action Work Plan (IRAWP) for the site. Additional drilling activities will be performed to collect in-situ waste characterization samples from planned hotspot excavation areas, rehabilitation work on existing wells, well development, and logistical efforts associated with site conditions. The drilling subcontractor's (ECDI's) estimate costs are attached.

Task 2 - Sewer Replacement Support

This task includes analysis and monitoring of dewatering impacts associated with NJAWC replacing the sanitary sewer line between West Avenue and Asbury Avenues. Due to concern that dewatering might induce migration of contaminants from the Site at 11th Street and West Avenue to the sewer replacement area, at the request of JCP&L, Tetra Tech provided analysis and oversight of NJAWC activities between May and September of 2019.

Task 3 – Remediation Construction Oversight and Support

In accordance with the IRAWP, the remediation work will include “hot-spot” excavation and disposal; connection of the 17 extraction wells to the treatment system with air and water lines installed in trenches; installation of well pumps and wellheads; capping of the specified areas; and placement, anchoring and start-up of the treatment system. Based on the selected general contractor’s schedule, this work duration is expected to be approximately 8 weeks (October 21 to December 18). The cost request assumes an additional two weeks in January will be needed to complete work because of potential weather delays, completion of treatment system testing, and other unforeseen issues. Tetra Tech will provide full-time construction oversight and inspection for an estimated average of 50 hours per week including documentation of excavation areas and depths, trench material management and backfill compaction, pipe testing documentation, cap thickness and extent, site restoration and treatment system testing. Tetra Tech will provide traffic control when needed.

Task 4 – First Year of Performance Monitoring

This task includes five monitoring events and will be performed in accordance with Appendix D – Performance Monitoring Plan of the LSRP-approved IRAWP. The monitoring includes a baseline sampling event prior to groundwater treatment system startup and quarterly sampling of 65 monitoring wells for a period of 1 year (5 sampling events). Samples will be analyzed for Volatile Organic Compounds (VOCs) during all sampling events. Samples will also be analyzed for Semi-volatile Organic Compounds (SVOCs) during the last quarterly sampling event (the 5th sampling event only). Sampling will be performed using passive diffusion bag sampling techniques. Groundwater levels will be measured prior to sampling and Tetra Tech will record, tabulate, plot, and interpret the hydraulic head data. Sampling will include influent and effluent at the treatment building. This task includes purchasing, installing and monitoring 14 automated water-level data loggers in offsite wells. This task includes sampling of bay surface water at 2 depths at six locations one year after the startup of the treatment system.

Task 5 – First Month of Groundwater Treatment System Operation, Monitoring and Maintenance (OM&M)

This task includes the labor and laboratory analytical costs for the first month of system operation after the pump-and-treat system has been delivered and tested. After the pump-and-treat system has been delivered, constructed, and tested, Tetra Tech will evaluate and request the costs for a full year of OM&M of the remediation system.

Task 6 Cape May Remediation Review Work

Tetra Tech, at JCP&L request, evaluated the groundwater treatment system at the Cape May former MGP site and provided input and recommendations for optimization.

A description of the level of effort and costs for the tasks summarized above is provided in Tetra Tech’s letter dated October 32, 2019 a copy of which is attached. Anticipated costs for these tasks total \$400,557.65.

The supporting documentation provided by Tetra Tech has been evaluated and Environmental Affairs finds the costs for these activities and the labor rates by category to be justified and reasonable.

The amount of the Change Order requested is \$400,557.65. Please increase Line Item 5 – Remediation Activities by \$400,557.65 and extend the period of performance of the PO through March 2021 and ensure payment terms of the Purchase Order are net 45 days.

If you have any questions concerning this matter, please contact me at 200-8409 or Frank Lawson at 200-8309.

Thank you for your continued assistance.



October 2, 2019

Ms. Anna Sullivan, Project Manager
Jersey Central Power & Light Company (JCP&L)
300 Madison Avenue
Morristown, N.J. 07962-1911

RE: Request for additional funding for remediation activities at the former Ocean City
Manufactured Gas Plant Site

Dear Anna:

Shortly after August 23, 2019, we exceeded our budget (\$130,367.00) for Task 117-2804014. The original scope-of-work for this Task included completing the RAWP report (including 30% design), permitting work, completing a 100% remediation design, project management, and LNAPL recovery at MW-10b. As noted in an email that I sent to you on July 8, 2019, out-of-scope work costs that we incurred under this Task at the request of JCP&L included work reviewing remediation issues at the Cape May FMGP Site and work related to replacing the 11th Street sanitary sewer between West Avenue and Asbury Avenue. Since July, we have continued to perform out-of-scope work to support analysis and oversight of remediation issues at the FMGP in Ocean City, New Jersey on behalf of JCP&L.

Considering the upcoming remediation and performance monitoring work, Tetra Tech requests additional funding for the following tasks, two of which (Task 2 and Task 6) have been completed.

Task	Estimated Cost
Task 1 – Remediation Well Installation	\$106,866.40
Task 2 – 11 th Street Sewer Installation Oversight;	\$19,682.00
Task 3 - Remediation Work (oversight work including mobilization, excavation of hot spots and trenches, installation of piping and backfill, capping, wellhead work, treatment system construction and testing);	\$99,979.00
Task 4 – Performance Monitoring (sampling and analysis of 65 wells quarterly for one year); and	\$160,053.25
Task 5 – Initial System Operation.	\$8,482.00
Task 6 – Cape May Remediation Review Work	\$5,495.00
Total Estimated Cost	\$400,557.65



Detailed level-of-effort and cost estimates for each task are provided in **Table 1**.

Estimated **Task 1 Remediation Well Installation** costs include that to install 13 shallow zone wells and 4 intermediate zone wells at locations shown on **Figure 1**. A 10% drilling subcontractor cost contingency has been added to subcontractor price to account for drilling/sampling for waste characterization at multiple locations in the two hot-spot excavation areas, likely rehab work on existing well completions on adjacent streets, additional well development, hourly costs associated with having to move and re-drill at locations due to buried rubble/debris or other obstructions, and possible other drilling work. Estimated Tetra Tech labor for well construction activity oversight, management, health and safety monitoring, and traffic control includes 100 hours of Geologist Justin Cooper's time, 80 hours of Geologist Zach Laforet's time, 50 hours of Hydrogeologist/Project Manager Robert Cohen's time, and 10 hours of Principal Engineer Peter Rich's time. Per diem, vehicle rental, and miscellaneous ODC costs for Task 1 are also listed in **Table 1**.

Task 2 11th Street Sanitary Sewer Installation Oversight costs provided in **Table 1** are for analysis and monitoring of dewatering impacts associated with NJAWC replacing the sanitary sewer line between West Avenue and Asbury Avenues. Due to concern that dewatering might induce migration of contaminants from the Site at 11th Street and West Avenue to the sewer replacement area, at the request of JCP&L, Tetra Tech provided analysis and oversight of NJAWC activities between May and September of 2019. Robert Cohen worked 39 hours analyzing potential impacts of dewatering, designing plans for monitoring, data interpretation, and reporting. Justin Cooper worked 78 hours providing oversight of the pilot test and sewer replacement dewatering activities. Peter Rich worked 5 hours evaluating contingent treatment system design and procurement options in case MGP contamination was encountered during the dewatering and/or excavation work.

Task 3 Site Remediation Work, in accord with the IRAWP, will include "hot-spot" excavation and disposal; connection of the 17 extraction wells to the treatment system with air and water lines installed in trenches; installation of well pumps and wellheads; capping of the specified areas; and placement, anchoring and start-up of the treatment system. Based on the selected general contractor's schedule, this work duration is expected to be approximately 8 weeks (October 21 to December 18). We assume an additional two weeks in January will be needed to complete work because of potential weather delays, completion of treatment system testing, and other unforeseen issues. We will provide full-time construction oversight and inspection for an estimated average of 50 hours per week including documentation of excavation areas and depths, trench material management and backfill compaction, pipe testing documentation, cap thickness and extent, site restoration and treatment system testing. The on-site inspector, Justin Cooper or Zach LaForet, will provide daily progress reports, run weekly progress meetings and serve as an on-site liaison with ACE and Ocean City. We will also provide traffic control when needed. Peter Rich and Bob Cohen will communicate with the on-site inspector daily, participate in the weekly meetings and each visit the site two or three times including during treatment system testing.



The **Task 4 First Year Performance Monitoring Work** (including five monitoring events) will be performed in accord with the IRAWP (Appendix D Performance Monitoring Plan). Performance monitoring will include the following items.

- (1) Groundwater sampling and analysis will be performed at approximately 65 monitoring wells on a quarterly basis during the first year of recovery well operation. In addition, a baseline sampling event will be performed just prior to system startup. Thus, five sampling events are included during the first year.
- (2) Groundwater samples will be analyzed by VOCs only during the baseline and first three quarterly monitoring events, and for SVOCs and VOCs during the fifth event;
- (3) Sampling will be performed using low flow methods during the baseline event and during the event that occurs after one year of system operation (for VOC and SVOC analyses) and using passive diffusion bag samplers for VOCs during the first three quarterly events after startup of the remediation system.
- (4) Sampling of influent and effluent at the treatment building;
- (5) Tetra Tech will purchase, install, and monitor 14 automated water-level dataloggers in offsite wells. One barologger will also be purchased and deployed to allow compensation for barometric pressure changes.
- (6) Additional hydraulic head monitoring will be performed during at each sampled monitored well during sampling activities. Tetra Tech will record, tabulate, plot, and interpreted hydraulic head data.
- (7) Fluid thickness and elevation monitoring in extraction wells, and remediation system pumping rate monitoring, that is performed at as part of the remediation work will be incorporated into the analysis of system performance.
- (8) Sampling of bay surface water for VOCs will be conducted from shallow and deep intervals at six bay water sample locations one year after startup of the extraction system.
- (9) Well caps and keyed alike locks will be replaced on all wells that house water-level dataloggers, and possibly on all other program monitoring wells.

Specific quantities of chemical analyses, labor hours, and other costs estimated for the **Task 4 Performance Monitoring Work** are provided in **Table 1**.

Note that performance monitoring costs will decline greatly after the first year due to the change from quarterly monitoring to annual monitoring that will include SVOC analysis only every fifth year. We also anticipate that the number of wells included in the monitoring array may be reduced overtime based on data analysis.



Task 5 First Month Operation and Maintenance of Remediation System Work includes labor and lab testing for the first month of system operation after the pump-and-treat system has been delivered and tested. After the pump-and-treat system has been delivered, constructed, and tested, we will be in a better position to provide you with a cost estimate for full year Operation and Maintenance of the remediation system. Estimated labor for the initial month of O&M work includes 40 hours of Geologist Roy Wagner's time, 8 hours of Peter Rich's time, 6 hours of Engineer Belssi Chang's time, and \$2,000 for lab and supply costs.

Task 6 Cape May Remediation Review Work includes costs for the 27 hours worked by Principal Engineer Peter Rich at the request of JCP&L to assess treatment issues at the Cape May FMGP Site.

TABLE 1. Task	Units	Unit Type	Rate	Item Cost
Task 1 - Well / Drilling Costs				
Drilling Subcontractor Costs and Markup				
Well permits and reports	1	lump sum	\$ 2,800.00	\$ 2,800.00
Mark out & air knife	17	each	\$ 175.00	\$ 2,975.00
Decon and Potable water	1	lump sum	\$ 1,300.00	\$ 1,300.00
13 shallow wells	13	each	\$ 1,950.00	\$ 25,350.00
4 intermediate wells	4	each	\$ 3,975.00	\$ 15,900.00
Johnson Vee Wire Screens (extra cost)	17	each	\$ 250.00	\$ 4,250.00
Well development	17	hour	\$ 200.00	\$ 3,400.00
Waste management	1	lump sum	\$ 1,700.00	\$ 1,700.00
Split-spoon soil sampling	17	each	\$ 25.00	\$ 425.00
Base Price				\$ 58,100.00
10% Contingency				\$ 5,810.00
Driller Sum with Contingency				\$ 63,910.00
8% markup (Tetra Tech fee)				\$ 5,112.80
Total Drilling Cost Estimate				\$ 69,022.80
Tetra Tech Labor and ODCs				
Justin Cooper	100	hour	\$ 110.00	\$ 11,000.00
Zach Laforet	80	hour	\$ 77.00	\$ 6,160.00
Robert Cohen	50	hour	\$ 197.00	\$ 9,850.00
Peter Rich	10	hour	\$ 196.00	\$ 1,960.00
Somers Point motel	28	day	\$ 125.00	\$ 3,500.00
per diem (meals and miscellaneous)	28	day	\$ 40.00	\$ 1,120.00
PID rental and cal gas (including 8% markup)	1	month	\$ 885.60	\$ 885.60
Vehicle rental (including 8% markup)	4	week	\$ 702.00	\$ 2,808.00
Miscellaneous ODCs	28	day	\$ 20.00	\$ 560.00
Task 1 Total				\$ 106,866.40
Task 2 - 11th Street Sewer Installation Oversight				
Justin Cooper	78	hour	\$ 110.00	\$ 8,580.00
Robert Cohen	39	hour	\$ 197.00	\$ 7,683.00
Peter Rich	5	hour	\$ 196.00	\$ 980.00
PID rental - 1 week	2	week	\$ 250.00	\$ 500.00



TABLE 1. Task	Units	Unit Type	Rate	Item Cost
Somers Point motel	7	day	\$ 125.00	\$ 875.00
Per diem	7	day	\$ 40.00	\$ 280.00
Vehicle rental	7	days	\$ 60.00	\$ 420.00
Miscellaneous ODCs	1	lump	\$ 300.00	\$ 300.00
8% markup on equipment	1	lump	\$ 64.00	\$ 64.00
Task 2 Total				\$ 19,682.00
Task 3 - Remediation Work (Mob, Excavate AOC and Trenches, Piping and Backfill, Capping, Wellheads, Pump Installs, Treatment System Testing)				
Justin Cooper	290	hour	\$ 110.00	\$ 31,900.00
Zach LaForet	200	hour	\$ 77.00	\$ 15,400.00
Peter Rich	86	hour	\$ 196.00	\$ 16,856.00
Bob Cohen	64	hour	\$ 197.00	\$ 12,608.00
Roy Wagner	40	hour	\$ 84.00	\$ 3,360.00
Somers Point motel	63	day	\$ 125.00	\$ 7,875.00
per diem	63	day	\$ 40.00	\$ 2,520.00
PID rental and cal gas	3	month	\$ 820.00	\$ 2,460.00
Vehicle rental	10	week	\$ 650.00	\$ 6,500.00
Miscellaneous ODCs	1	lump	\$ 500.00	\$ 500.00
8% markup on PID and vehicle rental	1	lump	\$ 236.80	\$ 236.80
Task 3 Total				\$ 99,979.00
Task 4 - First Year Performance Monitoring (5 events, 65 wells, 5 VOC and 1 SVOC sample per well including baseline, datalogger purchase, well maintenance)				
Justin Cooper	420	hour	\$ 110.00	\$ 46,200.00
Zach LaForet	420	hour	\$ 77.00	\$ 32,340.00
Peter Rich	12	hour	\$ 196.00	\$ 2,352.00
Bob Cohen	90	hour	\$ 197.00	\$ 17,730.00
Lab VOC analysis	357	each	\$ 68.75	\$ 24,543.75
Lab SVOC analysis	72	each	\$ 137.50	\$ 9,900.00
PDB Bags	195	each	\$ 30.00	\$ 5,850.00
Datalogger cost	15	each	\$ 320.00	\$ 4,800.00
Boat rental	1	year	\$ 500.00	\$ 500.00
Replacement caps and locks	65	each	\$ 22.00	\$ 1,430.00
Somers Point motel	40	days	\$ 125.00	\$ 5,000.00
per diem	40	days	\$ 40.00	\$ 1,600.00
Vehicle rental	40	days	\$ 50.00	\$ 2,000.00
Other ODCs (shipping, tolls, ice, misc.)	1	lump	\$ 2,000.00	\$ 2,000.00
8% markup on equipment and lab costs	1	fee	\$ 3,807.50	\$ 3,807.50
Task 4 Total				\$ 160,053.25
Task 5 - First Month O&M Work				
Roy Wagner	48	hour	\$ 84.00	\$ 4,032.00



TABLE 1. Task	Units	Unit Type	Rate	Item Cost
Peter Rich	8	hour	\$ 196.00	\$ 1,568.00
Belssi Change	6	hour	\$ 147.00	\$ 882.00
ODCs (lab fees, travel, misc. supplies)	1	lump sum	\$ 2,000.00	\$ 2,000.00
Task 5 Total				\$ 8,482.00
Task 6 – Review of Cape May Remediation Issues				
Peter Rich	27	hours	\$ 196.00	\$ 5,292.00
ODCs	1	lump sum	\$ 203.00	\$ 203.00
Task 6 Total				\$ 5,495.00
Total of All Tasks				\$ 400,557.65

We understand that additional work will be performed on a Time-and-Materials basis in accord with our existing contract with FirstEnergy Corporation.

Please do not hesitate to contact me if you have any questions and need any additional information regarding the scope of work and/or costs presented herein. As always, we appreciate the opportunity to provide technical assistance to JCP&L and FirstEnergy Corporation.

Sincerely,

Robert M. Cohen, P.G.
Principal Hydrogeologist
Certified Professional Geologist



Environmental and Geotechnical Drilling Services

300 Century Parkway, Suite 8 • Mt. Laurel, NJ 08054
Phone: 856 722 1111 Fax: 856 722 1746

Tetra Tech
21335 Signal Hill Road
Suite 100
Sterling, VA 20164

July 23, 2019

ATTN: Robert M. Cohen, P.G.

RE: Proposal for Permanent Monitoring Well Installations for Ocean City, NJ Site.

Dear Bob:

In accordance with the Request for Proposal (RFP) received via e-mail on July 10 & 16, 2019, East Coast Drilling, Inc. (ECDI) is pleased to submit this proposal for your consideration. The field work consists of the installation of 17-groundwater monitoring wells. Upon review of the RFP documents and considering NJDEP Regulations please note the following topics:

SCOPE OF WORK

Shallow Monitoring Well Installations - 13 x 4" Ø PVC x 10.5' deep w/ 7' .020 screen.

Intermediate Double Cased Well Installations - 4 x 8" Ø PVC outer casing x 15' deep & 4" Ø PVC inner cased well x 43' deep w/ 10' .020 screen.

- **Utility Clearance** - ECDI will contact the New Jersey One-Call System for public utility markouts. Additionally, we propose to utilize an air knife to a depth of 5-feet at each well location to clear for any additional utilities or piping.
- **Well Installations** - ECDI proposes to install the Shallow Single Cased wells and the 8-inch outer casings associated with the Double Cased wells using the hollow stem auger (HSA) drilling method. We propose to utilize the mud rotary drilling method to install the inner cased wells.
- **Soil Sampling** - Should soil sampling be required ECDI proposes to utilize a split spoon sampler to obtain such. Split spoon samples are assessed at \$25.00/each
- **Investigative Derived Wastes (IDW)** - The drill cuttings will be transported from the well locations via support truck with liftgate and staged at a central location (11th St. & Haven Ave.) for disposal by others. The well development fluids, drilling mud and decon fluids will be contained in a frac tank or other container as supplied by Tetra Tech or owner. ECDI will utilize a poly tank mounted on a flatbed truck to transport the IDW fluids from the well locations to the container, assumed to be at the same central location.

ECDI estimates the equivalent of 36-drums of drill cuttings, 2,000-gallons of drill mud, 700-gallons of well development fluids and 300-gallons of decon fluids to be generated on this project. Should 55-gallon drums be requested to contain the drill cuttings they would be assessed at \$75.00/each.

Robert M. Cohen, P.G., Tetra Tech
RE: Proposal for Drilling Services for the Ocean City, NJ Site.

July 23, 2019
Page 2

- **Well Development** - ECDI proposes to use a surge block and low flow submersible pump to develop each well. We will use dedicated tubing for each well. The pump will be deconed between locations.
- **Decontamination** - ECDI will fabricate a temporary decon pad at the central location and decon tools and equipment between well locations.
- **Local Permits /Traffic Control** - ECDI has not addressed obtaining any local or street opening permits nor have we included maintenance and protection of traffic in our costs. We will establish an exclusion zone to distinguish our work areas from the general public.
- **Site Cleanup/Restoration** - ECDI realizes the sensitivity with conducting sub-surface investigations within residential areas. We have addressed clean up and restoration at each well site, to include a broom swept finish.
- **Potable Water Source** - ECDI assumes a potable water source (fire hydrant) is available for our use. Below, we have provided costs for purchasing water from the local M.U.A. or private water company.

COST ESTIMATE - Please refer to the attached format as printed in the RFP. Below, we have added other costs as may be required:

- | | |
|---|-------------|
| • 55-Gallon Drums - 1 @ \$75.00/Each | As Required |
| • Potable Water Usage Permit and Cost @ \$1,200.00 | As Required |
| • Standby Time @ \$225.00/Hour | As Required |
| • Split Spoon Samples - 1 @ \$25.00/Each | As Required |
| • 4-inch PVC Vee Wire Screen x 10' .020 - 1 @ \$450.00/Each | As Required |
| • 4-inch PVC Standard Mill Slot Screen x 10' .020 - 1 @ \$200.00/Each | Included |

COST ASSUMPTIONS

Our estimated cost is based on the following assumptions/conditions:

1. NJDEP requires the drilling contractor to submit GPS or Surveying Data for all newly installed wells. That data must be incorporated into the well records (completion reports) and submitted to NJDEP within 90-days of the date of installation. We have not addressed costs for providing this service. ECDI assumes Tetra Tech will forward the Survey Data within the required time frame; otherwise, ECDI will perform this service at an additional cost to comply with the new regulations.
2. All drilling locations will be readily accessible to rubber tired truck mounted equipment.
3. Drilling is to be performed in soils by Hollow Stem Auger (HSA) and Mud Rotary drilling methods. False starts due to encountering rubble/debris or obstructions or voids shall be charged in accordance with the standby time rate.

Robert M. Cohen, P.G., Tetra Tech
RE: Proposal for Drilling Services for the Ocean City, NJ Site.

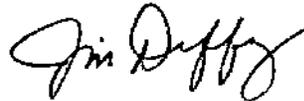
July 23, 2019
Page 3

4. All drilling and sampling may be performed at no higher level of personnel safety than Level D. If Level C needs to be incorporated, a charge of \$75.00 per crew hour will be assessed.
5. Estimated costs are based on labor rates and costs of materials in effect for a period of 180-days from the date of this proposal. Payment terms are net 45-days for the date of our invoice.
6. Standby Time due to delays caused by others will be assessed at \$225.00/Hour.

This scope of work, the attached cost estimate and cost assumptions constitute our complete proposal to you. We appreciate the opportunity to propose our services to assist you in the advancement of this investigation. Should you have any questions, do not hesitate to contact this office.

Very truly yours,

EAST COAST DRILLING, INC.



James W. Duffy
President

PROVIDE BID LUMP SUM COST TO OBTAIN WELL PERMITS AND SUBMIT WELL REPORTS: \$ 2,800.00/Lump sum

2. Drilling contractor shall provide a copy of its Health and Safety Plan for review by Tetra Tech. Work shall be performed using Level D protective gear.
3. Drilling contractor shall contact the New Jersey One-Call System for public utility mark-outs and use an air knife to a depth of 5-feet at each well location to clear for any additional utilities or piping.

PROVIDE BID COST FOR UTILITY MARK-OUT AND AIR-KNIFE CLEARANCE WORK PER WELL: \$ 175.00/PER well

4. Drilling contractor shall fabricate a temporary decontamination pad within the fenced Site area and decontaminate tools and drilling equipment between well locations.

PROVIDE COST IN ITEM 5.

5. Drilling contractor shall provide potable water for drilling and decontamination activities.

PROVIDE BID LUMP SUM COST FOR ITEMS 4 AND 5: \$ 1,300.00/Lump sum

6. Drilling contractor shall construct thirteen (13) shallow 4"-diameter, threaded, Schedule 40 PVC extraction wells (EW-S1 to EW-S13) using screen and pipe from Johnson Screens or an approved other. Each well shall be installed using hollow-stem auger methods in an 11' deep hole with (a) 0.020-inch slot screen extending from 3.0' to 10.5' bgs, (b) a cap or plug at the screen bottom (10.5' bgs), (c) a minimum 2-inch thick sand-pack consisting of U.S. Silica Filpro #00N from 1.0' to 11.0' bgs, (d) riser pipe extending from 3.0' to 0.5' bgs; (e) a 4"-diameter Koby Torquer lockable well plug (or approved other), and (f) an Emco Wheaton 24" x 24" x 24" model A0717-724VW lockable water-tight well vault.

PROVIDE BID COST PER WELL: \$ 1,950.00/PER well

7. Drilling contractor shall construct four (4) intermediate depth double-cased 4"-diameter, threaded, Schedule 40 PVC wells (EW-I1 to EW-I4) using screen and pipe from Johnson Screens or an approved other. Each well shall be installed using hollow-stem auger and mud-rotary methods with (a) an outer 8"-diameter PVC casing installed using hollow stem augers to 15' bgs, (b) bentonite grout in the annulus between the outer casing and borehole wall from 1.5' to 15' bgs; (c) 4"-diameter inner well screen and riser installed using mud rotary methods, guar-based drilling fluid, and no clay-based drilling mud additives; (d) 0.020-inch slot inner well screen extending from 33.0' to 43.0' bgs, (e) a cap or plug at the screen bottom (43.0'), (f) 4"-diameter riser pipe to 0.5' bgs; (g) a minimum 2-inch thick sand-pack consisting of U.S. Silica Filpro #00N from 31.0' to 44.0' bgs overlain by #00 sand-pack from 29.0' to 31.0' bgs, and then bentonite grout to 1.5' bgs (h) bentonite grout in the annulus between the inner and outer casings from 1.5' to 29.0' bgs; (i) a 4"-diameter Koby Torquer lockable well plug (or approved other), and (j) an Emco Wheaton 24" x 24" x 24" model A0717-724VW lockable water-tight well vault.

PROVIDE BID COST PER WELL: \$ 3,975.00/PER well

8. Drilling contractor shall contain drill cuttings in 55-gallon drums, mark each drum to identify the source of its contents, and transport drums to the a designated location inside the fence area of the Site. Waste personal protection gear and waste decontamination materials shall be placed in a separate drum.

PROVIDE COSTS IN ITEM 10.

9. Drilling contractor shall develop each well for a minimum of one hour using a surge block and submersible pump. Drilling contractor shall decontaminate development tools between locations.

PROVIDE BID HOURLY RATE COST FOR WELL DEVELOPMENT TIME: \$ 200.00 / HOUR

10. Drilling contractor shall contain and transport well development fluids, drilling mud, and decontamination fluids to a frac tank or a roll-off container located with the fenced area of the Site. The frac tank and/or roll-off container shall be supplied by Tetra Tech or JCP&L. At the end of the well construction and development activities, if requested, the drilling contractor shall pump decanted fluids from the roll-off to the frac tank.

PROVIDE BID COST TO CONTAIN, TRANSPORT, AND MANAGE WASTE MATERIALS AND SPECIFY PROPOSED PAYMENT UNITS: \$ 1,700.00 / Lump Sum

11. Tetra Tech or JCP&L will provide well location survey data after well completion to the drilling contractor.
12. Tetra Tech or JCP&L will obtain necessary road opening permits, other permits, and implement traffic control plans and management for drilling activities.

Thank you,
Bob

Robert M. Cohen, P.G. | Principal Hydrogeologist
Direct: 703.885.5440 | Main: 703.444.7000 | Fax: 703-444-1685
bob.cohen@tetrattech.com

Tetra Tech
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Supply Chain

Non-Competitive (Single/Sole Source) Justification

FirstEnergy utilizes competitive bidding as the preferred method of sourcing materials, equipment, and services. Supply Chain has established procedures and processes to define allowed exceptions, per the Supply Chain Procurement Policy SC-P-SRC-001 and Business Practice #6.3 Procurement. In those instances, for purchases greater than or equal to \$50,000, the Single/Sole Source form is required to provide internal justification for the non-competitive purchase.

Created By: Sullivan, Anna F (Lawson, Frank D)
 Approved By: Vindivich, Mark A On: 10/7/2019 5:43 AM Reason:
 Buyer Approval By: Shelton, Susan K. On: 10/8/2019 8:09 AM Reason:
 Request Number: A28450

Requisitioner	<input checked="" type="checkbox"/> Sullivan, Anna F (Lawson, Frank D)	* Ext.	973-401-8409
		* Location	Environmental Remediation
		Department	Environmental Remediation
* Date Created	10/3/2019	Required Date (If known)	10/3/2019
* SAP Requisition No.	0013058976	* Estimated Value	\$400,557.65
* Requested Supplier	Tetra Tech, Inc.	Secondary Approver	
* Approver	<input checked="" type="checkbox"/> Vindivich, Mark A	Third Approver	
Buyer	<input checked="" type="checkbox"/> Shelton, Susan K.	Source	Single

* Fields that are required.

DEFINITIONS

Single Source: A supplier that is specifically recommended to be utilized, even if other suppliers can provide the same material/service.

Single Source requests must be completed by a Business Unit representative.

Sole Source: The only approved supplier that can provide the requested material/service.

Sole Source requests must be completed by a Business Unit representative.

* For stock coded items: Supply Chain representatives have limited ability to complete a Single or Sole Source request.

GUIDELINES FOR PREPARATION OF NON-COMPETITIVE JUSTIFICATION

1. Each applicable category below must be addressed with pertinent detail provided to support the justification.
2. For purchases above \$10,000,000, additional approvals are required. Please consult the Governance Process for Resource Allocation available on the FirstEnergy Portal and your Vice President Level approver.

Levels of Approval as shown below must be followed:

LEVELS OF APPROVAL		
	PO Value	Approver
Corporate, FOSSIL, FENOC, and Energy Delivery	\$0 - \$49,999	None
	\$50,000 - \$499,999	Manager AND Director Level Approval
	\$500,000 & above	Manager AND Director AND Vice-President OR ABOVE Level Approval

Scope of Work

- Identify the capability and/or capacity of the proposed supplier/contractor that is necessary for the specific effort that makes it clearly the only source that should perform the work, or if applicable, that this is a sole source provider.

Tetra Tech (TT) has been requested to provide Remediation Construction Oversight work and support for the planned remedial action at the Ocean City Former MGP Site. Tetra Tech developed the LSRP-approved Interim Remedial Action Work Plan (IRAWP) and developed the remediation design to address MGP impacts associated with the Ocean City former MGP site in accordance with the New Jersey Department of Environmental Protection (NJDEP) rules and regulations. TT developed the plans and specifications for the remediation work and assisted JCP&L in the procurement of remediation vendors and contractors. TT has also coordinated and provided construction oversight for the City and its contractor for sewer replacement work within City right-of-way areas adjacent to the site where MGP impacts to the soil and ground water were known to exist. In addition, TT has been and continues maintenance activities at the site including the monitoring and recovery of product from an existing monitoring well, to conduct the required reporting, and project management support activities. TT is uniquely qualified to perform the remediation construction oversight and performance monitoring of the remediation system based on its in site-specific and historical knowledge of the project.

Prior History

- Brief statement of previous acquisition of the material/services, if any, and the unique requirements that may perpetuate the arrangement, e.g., special experience, unique compatibility with the material/services already in use, continuation of previous work/effort performed by the proposed supplier/contractor, patent, copyrights, licenses.
- Identify significant program changes, revised schedules, and/or technical requirements which require continued acquisition of the material/services from the recommended firm.

TT has been providing high quality environmental consulting services to JCP&L for the Ocean City former MGP site since 2000. TT completed the work scope to delineate the vertical and horizontal extent of groundwater impacts at and in the vicinity of the site and impacts to the sediments and pore water in the off-site Bay west of the site. TT evaluated remedial technologies to address the identified MGP impacts. TT developed the IRAWP, designed the planned site remediation, developed the plans and specifications for the remediation and assisted JCP&L in the procurement of remediation contractors and vendors. Since TT performed the remedial action planning and design, is already working at the site and because of its long-term involvement with the site, TT was requested to perform remediation construction oversight, OM&M and performance monitoring activities at the site.

Uniqueness of Material/Services

- Identify exclusive specialized capabilities of the proposed source.
- Identify facility/test equipment possessed by the proposed source that is unique to the requirement.
- Indicate if the proposed source has patent rights, copyrights, trade secrets, etc., which preclude competition.
- Indicate if drawings or specifications are inadequate to support competitive acquisitions and why this particular supplier/contractor is best able to perform under these circumstances. Include the reason why drawings/specifications are lacking and assessment of cost/schedule impact, e.g., Engineering/A-E costs if completion of drawings/specifications were required to support competitive solicitation.

TT has been providing high quality environmental consulting services to JCP&L for the Ocean City MGP site since 2000. TT was initially retained through a competitive bid solicitation to conduct a RI and develop a remedial strategy for the remediation of MGP-

impacted soil and groundwater at and in the vicinity of the site. Based on comments received from the NJDEP and in order to comply with changes in NJDEP rules and regulations, TT conducted extensive investigations in order to delineate the extent of MGP impacts. The delineation of MGP impacts has been completed and the RI Report was submitted to NJDEP in 2016. TT also completed evaluation of remedial alternatives to address the MGP impacts and performed an additional investigation of the bay. TT developed the IRAWP, designed the planned site remediation, developed the plans and specifications for the remediation and assisted JCP&L in the procurement of remediation contractors and vendors. This work is a continuation of the work for which TT was originally retained. Furthermore, TT possesses an understanding of site and off-site hydrologic and geologic conditions that cannot, without extensive review and at a substantial cost, be duplicated by other consultants. Therefore, TT was requested to perform remediation construction oversight, OM&M and performance monitoring activities at the site.

Other Material/Services Evaluated

- Identify other materials/services that were evaluated and reason for elimination.

TT has been providing high quality environmental consulting services to JCP&L for the Ocean City MGP site since 2000. TT was initially retained through a competitive bid solicitation to conduct a RI and develop a remedial strategy for the remediation of MGP-impacted soil and groundwater at and in the vicinity of the site. Based on comments received from the NJDEP and in order to comply with changes in NJDEP rules and regulations, TT conducted extensive investigations in order to delineate the extent of MGP impacts. The delineation of MGP impacts has been completed and the RI Report was submitted to NJDEP in 2016. TT also completed evaluation of remedial alternatives to address the MGP impacts and performed an additional investigation of the bay. TT developed the IRAWP, designed the planned site remediation, developed the plans and specifications for the remediation and assisted JCP&L in the procurement of remediation contractors and vendors. This work is a continuation of the work for which TT was originally retained. Furthermore, TT possesses an understanding of site and off-site hydrologic and geologic conditions that cannot, without extensive review and at a substantial cost, be duplicated by other consultants. Therefore, other service vendors were not evaluated for remediation construction oversight of the project, as they would not be competitive or as effective.

Economic Justification (Cost/Benefit)

- Indicate if proposed source has substantial investment in the materials/services that might require extensive expense in duplication via competitive acquisitions.
- Include a brief description of data used and assumptions made to support the best total cost/benefit from this arrangement.

TT was retained in 2000 to conduct a remedial investigation of the former MGP site. Those initial findings were reported to NJDEP and the RI implemented. During implementation of the RI the extent of MGP impacts was determined to be more widespread than initially anticipated. This required additional sample collection and analysis to determine the horizontal and vertical extents of these impacts. TT submitted the RI report to NJDEP in 2016. Since TT is already working at the site and possesses an understanding of the site and off-site conditions, and developed the IRAWP, designed the planned site remediation, developed the plans and specifications for the remediation and assisted JCP&L in the procurement of remediation contractors and vendors it is best suited to perform remediation construction oversight. It is in the best interests of the project and JCP&L for TT to conduct the work. It is more cost effective for TT to use their site knowledge to oversee and direct their remediation design than to begin anew with a consultant that does not possess the knowledge and understanding of the site.

Recommendation for Developing Future Competition

- Brief statement as to what actions have been taken or are proposed to eliminate this non-competitive situation in future acquisitions of like material/services, or provide a statement that the specified material/services will remain the only technically acceptable alternative for the foreseeable future. (If a "blanket approval" is appropriate, state a period of time during which this justification will be valid, i.e., 3 years.)

Future acquisition needs for competitive bidding opportunities will be evaluated as they arise. TT was originally retained through a competitive bid solicitation process for this project. JCP&L will retain, through the competitive bid

solicitation process, a remediation contractor for the remediation construction and for a contractor to perform perimeter air monitoring during construction of the remedy designed by TT.

Additional Comments

- Brief statement of other considerations, not covered by any of the categories of justification above, which clearly make the proposed supplier/contractor the only source due to overriding managerial, technical, or financial benefit to the Company.

Document Activity

Item was Created on 10/3/2019 1:12:03 PM

Item was Approved by Vindivich, Mark A on 10/7/2019 5:43:58 AM Item received Buyer Approval by Shelton, Susan K. on 10/8/2019 8:09:55 AM

Legacy Approver		Legacy Buyer	
Legacy Requisitioner		Legacy Buyer Approved By	

Attachments

Created at 10/3/2019 1:12 PM by ■ Sullivan, Anna F (Lawson, Frank D)

Last modified at 10/8/2019 8:10 AM by Workflow on behalf of ■ Sullivan, Anna F (Lawson, Frank D)



Change Order Request to PO # 55117699, Line Item 5 – Remediation Activities for Remediation Well Installation, New Jersey American Water Company (NJAWC) Sewer Replacement Support, Remediation Construction Oversight, Treatment System Operation, and Performance Monitoring for one year for the planned remedial action of the Ocean City former MGP Site. These activities are being performed by Tetra Tech to comply with New Jersey Department of Environmental Protection requirements and agreements for the Ocean City Former MGP Site.

Site: Ocean City MGP

Period of Performance: 10/3/2019 to 3/31/2021

Tax Code: J1 or S1

Change Order Amount: \$400,557.65

Vendor: Tetra Tech Inc
Point-of-Contact: Jen Montgomery
45610 Woodland Road, Suite 400
Sterling VA 2016
E-mail: jen.montgomery@tetratech.com
Tel: (703) 885-5455
Fax: (703) 444-3478

The activities for which this Change Order Request is being submitted are summarized below.

Task 1 - Remediation Well Installation

This task includes installing 13 shallow zone and 4 intermediate zone groundwater extraction wells as detailed in the Licensed Site Remediation Professional (LSRP) approved Interim Remedial Action Work Plan (IRAWP) for the site. Additional drilling activities will be performed to collect in-situ waste characterization samples from planned hotspot excavation areas, rehabilitation work on existing wells, well development, and logistical efforts associated with site conditions. The drilling subcontractor's (ECDI's) estimate costs are attached. The estimated cost for this task is \$106,866.40.

Task 2 - Sewer Replacement Support

This task includes analysis and monitoring of dewatering impacts associated with NJAWC replacing the sanitary sewer line between West Avenue and Asbury Avenues. Due to concern that dewatering might induce migration of contaminants from the Site at 11th Street and West Avenue to the sewer replacement area, at the request of JCP&L,

Tetra Tech provided analysis and oversight of NJAWC activities between May and September of 2019. The cost for this task is \$19,682.00

Task 3 – Remediation Construction Oversight and Support

In accordance with the IRAWP, the remediation work will include “hot-spot” excavation and disposal; connection of the 17 extraction wells to the treatment system with air and water lines installed in trenches; installation of well pumps and wellheads; capping of the specified areas; and placement, anchoring and start-up of the treatment system. Based on the selected general contractor’s schedule, this work duration is expected to be approximately 8 weeks (October 21 to December 18). The cost request assumes an additional two weeks in January will be needed to complete work because of potential weather delays, completion of treatment system testing, and other unforeseen issues. Tetra Tech will provide full-time construction oversight and inspection for an estimated average of 50 hours per week including documentation of excavation areas and depths, trench material management and backfill compaction, pipe testing documentation, cap thickness and extent, site restoration and treatment system testing. Tetra Tech will provide traffic control when needed. The estimated cost for this task is \$ 99,979.00

Task 4 – First Year of Performance Monitoring

This task includes five monitoring events and will be performed in accordance with Appendix D – Performance Monitoring Plan of the LSRP-approved IRAWP. The monitoring includes a baseline sampling event prior to groundwater treatment system startup and quarterly sampling of 65 monitoring wells for a period of 1 year (5 sampling events). Samples will be analyzed for Volatile Organic Compounds (VOCs) during all sampling events. Samples will also be analyzed for Semi-volatile Organic Compounds (SVOCs) during the last quarterly sampling event (the 5th sampling event only). Sampling will be performed using passive diffusion bag sampling techniques. Groundwater levels will be measured prior to sampling and Tetra Tech will record, tabulate, plot, and interpret the hydraulic head data. Sampling will include influent and effluent at the treatment building. This task includes purchasing, installing and monitoring 14 automated water-level data loggers in offsite wells. This task includes sampling of bay surface water at 2 depths at six locations one year after the startup of the treatment system. The estimated cost of this task is \$160,053.25.

Task 5 – First Month of Groundwater Treatment System Operation, Monitoring and Maintenance (OM&M)

This task includes the labor and laboratory analytical costs for the first month of system operation after the pump-and-treat system has been delivered and tested. After the pump-and-treat system has been delivered, constructed, and tested, Tetra Tech will evaluate and request the costs for a full year of OM&M of the remediation system. The estimated cost of this task is \$8,482.00.

Task 6 Cape May Remediation Review Work

Tetra Tech, at JCP&I request, evaluated the groundwater treatment system at the Cape May former MGP site and provided input and recommendations for optimization. The cost of this task is \$5,495.00.

A description of the level of effort and costs for these remediation activities is provided in Tetra Tech's letter dated October 2, 2019 a copy of which is attached.

The amount of the Change Order requested is \$400,557.65. Please increase Line Item 5 – Remediation Activities by \$400,557.65 and extend the period of performance of the PO through March 2021 and ensure payment terms of the Purchase Order are net 45 days. Please provide me with an electronic copy of the Purchase Order.

FirstEnergy Contact and All Invoices to:
Anna Sullivan, Project Manager
Jersey Central Power & Light Company
300 Madison Avenue
P.O. Box 1911
Morristown, NJ 07962
E-mail: afsullivan@firstenergycorp.com
Tel: (973) 401-8409
Fax: (973) 644-4165

Attachments:

1. Change Order Request Memo to Susan Shelton dated October 3, 2019;
2. Tetra Tech's October 2, 2019 letter requesting additional funding for remediation activities at the Ocean City MGP Site;
3. ECDI's well installation proposal dated July 23, 2019
4. Supply Chain Requisition dated October 3, 2019; and
5. Single Source Justification

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

12. Provide documentation relating to any instances during the previous RAC period where The Company sought to modify, change, or eliminate the NJDEP site remediation requirements for any of its MGP sites. The response should provide copies of any such Company requests, the NJDEP responses, and the ultimate outcome concerning the requests.

Response:

The Company continuously strives to perform the required investigative and remedial activities in a manner that provides the necessary technical information to properly address the MGP sites in a cost-effective and prudent manner. Since the inception of the Licensed Site Remediation Professional (LSRP) regulations the Company has been able to rely on the professional judgement of the LSRP to interpret rules and regulations, and to obtain formal variances from the NJDEP rules and regulations. An example in 2019 of the types of efforts that the Company makes to reduce the scope and cost of these projects is attached and described below.

Cape May MGP Site - In 2019, the Company requested NJDEP to allow abandonment and replacement of monitoring wells within current and prior permitted wetland areas rather than requiring the Company to apply for a new wetland permit. This request was made so that the work could be completed while all contractors were onsite in May 2019 and would allow the Company to minimize disruption to the wetland environment, fully utilize the restoration crew while they were onsite to address all components of planned site activities, implement remedy performance monitoring with a more comprehensive network sooner, and save time and cost on a mobilization and demobilization schedule.

Based on prior NJDEP precedent and approvals, the Company's request was made to abandon and replace the wells under our existing permits which expire in January 2022. Well replacement and abandonment activities were proposed to be accomplished with methods similar to previously received permit approvals associated with the original well installations, as well as our current permit authorization. Similar equipment had previously been utilized in this general area under the historic permit authorizations with minimal impacts. Furthermore, the Company proposed to complete all work in accordance with conditions of our current permit authorization, which included well abandonment and installation activities.

NJDEP denied the request on April 2, 2019 and required the Company to apply for and receive a new wetland permit prior to performing the work. The NJDEP denied the request because the permits for the original well installation were

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expired and no longer valid, and the proposed replacement monitoring well locations were outside the limits of disturbance of active site wetland permits. The wetland permit application submission was further delayed due to a transfer in ownership of one of the lots where work was proposed. The permit application was submitted on October 31, 2019. The NJDEP permit was not received in 2019. The monitoring well abandonment and replacement was therefore delayed until 2020. Copies of all correspondence to and from NJDEP regarding the Company's request are included in **Attachment MFR-12**.

All Sites - The Company actively participates in the New Jersey Site Remediation Industry Network (SRIN) and New Jersey Site Remediation Advisory Group (SRAG). As part of these groups, the Company routinely provides comments to NJDEP and meets with NJDEP personnel, including Assistant Commissioner Pedersen, to discuss impacts of current and proposed regulations and requirements. As part of the SRIN group and throughout 2018 and 2019, the Company assisted in providing comments to the NJDEP on various proposed revisions to the Site Remediation Reform Act (also known as SRRA 2.0) including on Remedial Action Permit requirements, deadlines and off-ramps for NJDEP direct oversight, financial assurance mechanisms and requirements and risk-based remediation standards. Unfortunately, the August 2019 amendments did not address most of these issues. There have been preliminary discussions about further amendments to SRRA (SRRA 2.1).

In February 2017, the Company and select members of SRIN met with Assistant Commissioner Pedersen and several NJDEP Land Use staff to discuss delays in obtaining land use permits for remediation projects, and how to streamline the process. The Company had experienced significant delays with obtaining land use permits for the Cape May MGP site remediation. This meeting expedited NJDEP review and approval of these permits.

Previously, as part of SRIN, the Company also worked with NJDEP on the successful implementation of the May 2014 remedial investigation (RI) extension deadline to May 2016. Specifically, in 2018, the Company evaluated the necessity for obtaining Remedial Action extensions at its MGP sites to meet the various mandatory and regulatory deadlines. In many cases, NJDEP allows for a two-year request for extension, if filed in advance of missing the particular deadline. However, the NJDEP does not permit filing of such requests sooner than 60-days before the deadline, therefore the requests were formally submitted to the NJDEP in 2019, in advance of the May 2019 deadlines. **See** MFR-8 and MFR-17 for additional information.

As part of this extension process, the NJDEP approved that sites could be "bundled" under one Remediation Trust Fund Agreement (RTFA) for all sites, rather than separate agreements for each site, which saved substantial time, effort and expense (including Trustee charges) during both the application process and moving forward with the RTFA. During 2017, monies from the trust

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

funds were returned to the Company and were credited to the specific projects' internal orders.

In 2019, the Company and SRIN began discussions with NJDEP about the problems in achieving mandatory deadlines under SRRA and the exposure of RPs to NJDEP enforcement and Direct Oversight, particularly at complex sites (such as the Company's) despite the good faith efforts of those RPs to meet those deadlines, and the expenditure of significant funds, both in the aggregate and at most sites, to do so. After the August 2019 amendments to SRRA, Assistant Commissioner Pedersen informally discussed with SRIN and the Company, NJDEP's receptiveness to possible relief from mandatory deadlines and enforcement and direct oversight provided that appropriate prior good faith efforts to achieve those deadlines have been made. These discussions are expected to continue hereafter.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

Attachment MFR-12

RECORD OF TELEPHONE CONVERSATION



Subject:

JCP&L Cape May Former MGP Site, Wetland Permit Determination For
Monitoring Well Replacements

Individual/Department:

Katherine Todoroff, NJDEP

Arcadis Project No.:

MD000776

Record by:

Jessie Murray

Issue Date

4/2/2019

Arcadis U.S., Inc.
50 Millstone Road
Building 200
Suite 220
East Windsor
New Jersey 08520
Tel 609 860 0590
Fax 609 448 0890

A call was placed with Katherine Todoroff of the New Jersey Department of Environmental Protection (NJDEP) Land Use Regulation Program on April 2, 2019 in follow up to the March 29, 2019 Arcadis email correspondence requesting replacement monitoring wells within wetland areas of the site be allowed under prior Freshwater Wetlands GP-4 (Permit Nos. 0502-93-0005.7 and 0502-93-0005.8) and Coastal Wetlands Permit (0502-93-0005.6) authorizations. Katie indicated that these former permits have expired, and are no longer valid, and that due to the proposed monitoring well locations in areas outside the limits of disturbance (LOD) of active site wetland permits, that new wetland permit authorizations would be required for the installation of monitoring wells in the proposed locations.

Kerr, Daniel W

From: Murray, Jessie <Jessie.Murray@arcadis.com>
Sent: Friday, March 29, 2019 12:59 PM
To: Davis, Mark; Todoroff, Katherine
Cc: Cuccuini, Jeremy; Sullivan, Anna F (Lawson, Frank D)
Subject: [EXTERNAL] Request for Well Activities - JCP&L Cape May
Attachments: FE-CAPEMAY-PRO MWL-1.pdf; 1999 12 21 NJDEP re MW install under existing permit.pdf; 1999 12 08 McLH req to NJDEP for Addl Work Under Ext Permit.pdf

Mark/Katie,

Hope all is well with the both of you. On behalf of Jersey Central Power and Light Company (JCP&L), we are reaching out to discuss and request the installation of several proposed replacement monitoring wells within current and prior permitted wetland areas at the Cape May former MGP site. In 2018, several existing monitoring wells in wetland areas downgradient of the recent remedial action limits of disturbance and restoration were reviewed for their operable condition to use as part of the ongoing site groundwater monitoring program. During this review, we recognized that several monitoring wells will need to be abandoned and replaced (wells of interest; attached Figure 1). Based on planned Site restoration activities scheduled for this May 2019, we would prefer to mobilize and complete the well replacements while all contractors are onsite performing work, and fully utilize the restoration crew while they are onsite to address all components of planned site activities.

To provide some background, original site investigation activities were permitted in a February 1996 approval under a Freshwater Wetlands GP-4 (Permit Nos. 0502-93-0005.7 and 0502-93-0005.8) and a Coastal Wetlands Permit (0502-93-0005.6). The original installation of the wells of interest was approved in December 1999 as an amendment to the February 1996 permit approval (see attached approval). Specifically, the wells of interest were located outside of the original permitted tax lots and limits of disturbance, but were requested to be installed under the 1996 approval given they were located in similar habitat conditions and rationale that their installation would continue to meet the terms and conditions of the existing permits (see permit modification request and approval letter attached).

Based on the prior precedent and approvals, on behalf of JCP&L, Arcadis is similarly requesting approval to abandon and replace the wells of interest, under our existing permits which expire in January 2022. Several of the wells of interest are located within the same tax lots permitted under our current permit approvals, which include (Owner, Block, Lot):

- City of Cape May, Block 1061, Lot 37.02
- City of Cape May Board of Education, Block 1061, Lot 38
- City of Cape May Board of Education, Block 1061, Lot 54

However, two locations are located in tax lots not included in our current approvals and include; (Owner, Block, Lot):

- City of Cape May, Block 1061, Lot 23
- NJDOT, Block 1061, Lot 21

Well replacement and abandonment activities are proposed to be accomplished similarly to the 1996/1999 permit approvals associated with their original installations, as well as our current permit authorization. The proposed replacement wells are located in the same coastal wetland areas indicated in our current permit approvals, which exhibit the same physical characteristics as historic permit approvals. The proposed replacement monitoring wells are also proposed to be installed similar to historic approvals utilizing a smaller, limited access drill rig with composite mats

(no wider than 4-feet) to be utilized in areas of soft ground surface to minimize disturbance to the underlying vegetation. As discussed, similar equipment has previously been utilized in this general area under the historic permit authorizations with minimal impacts. Furthermore, JCP&L proposes to complete all work in accordance with conditions of our current permit authorization, which includes well abandonment and installation activities.

Thank you for your consideration on this matter, feel free to let us know if you would like to discuss further or have any questions.

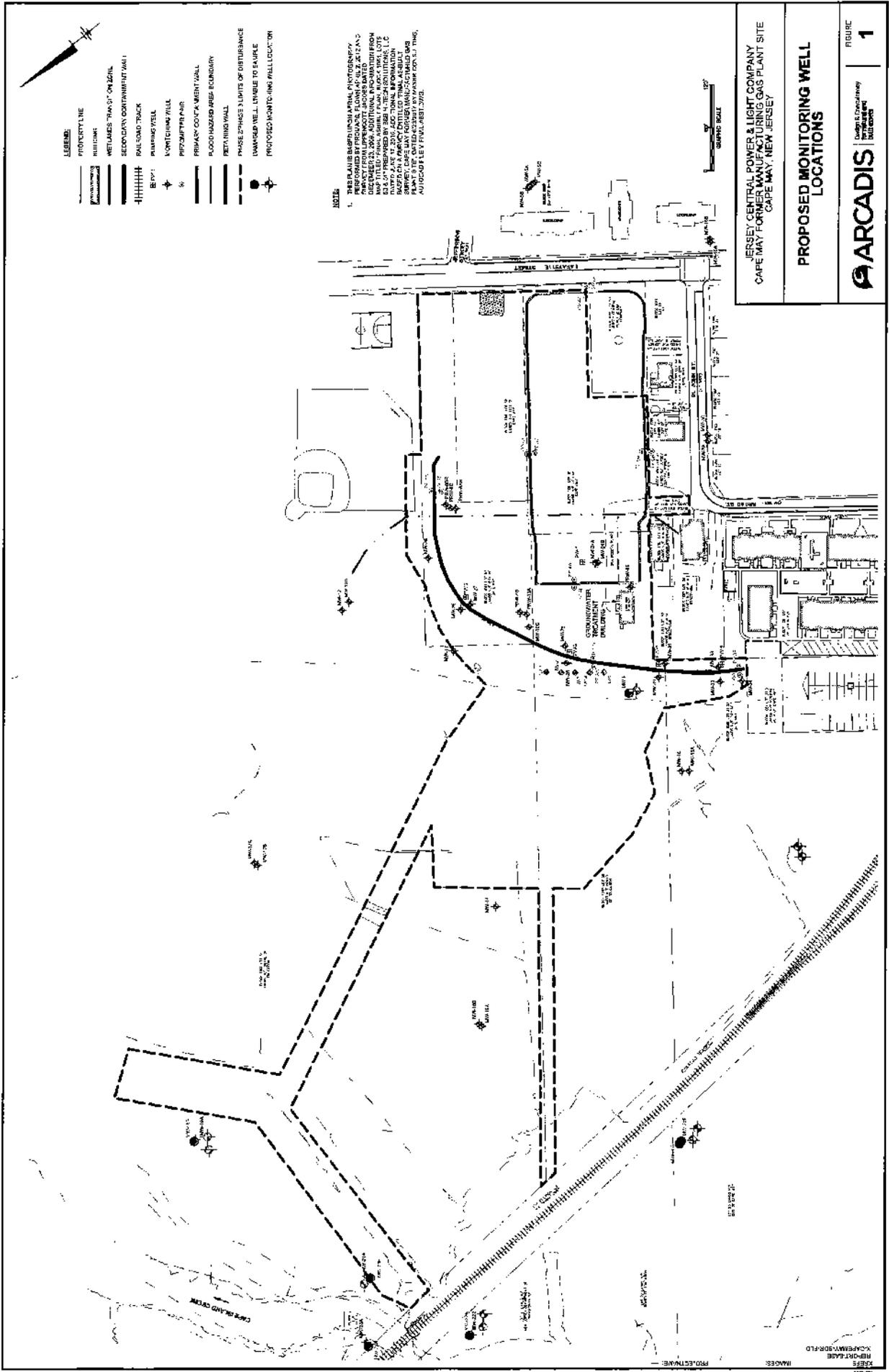
Jessie

Jessie Murray, MEM, CE | Project Ecologist | Jessie.Murray@arcadis.com
Arcadis U.S., Inc. | 50 Millstone Road, Building 200, Suite 220 | East Windsor | New Jersey | 08520 | USA
Direct +1 609 366 9027 | M. +1 732 567 4089

Connect with us! www.arcadis.com | [LinkedIn](#) | [Twitter](#) | [Facebook](#)



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SAU
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State of New Jersey

Department of Environmental Protection

Land Use Regulation Program
P.O. Box 439, Trenton, NJ 08625-0439
Fax # (609) 292-8115
Fax # (609) 777-3656

Christine Todd Whitman
Governor

Robert C. Shim, Jr.
Commissioner

DEC 21 1999

Michael C. Dupras
McLaren/Hart, Inc.
500 Scarborough Dr, Suite 102
Egg Harbor Township, NJ 08234-4858

RE: Coastal Wetlands Permit
File# 0502-93-0005.6
City of Cape May, Cape May County

Dear Mr. Dupras:

In response to your letter of December 9, 1999, I have reviewed the plan entitled: "GPU Energy and New Jersey Natural Gas Co., Phase IV Remedial Investigation, Proposed Monitoring Well Location Plan", prepared by McLaren Hart, dated December 7, 1999. Based on that review, I find that the above referenced plan continues to meet the terms and conditions of the coastal wetlands permit originally issued by the Program on February 22, 1996.

I trust the above address; your immediate concerns but should you have any questions, please contact me at (609) 984-0288.

Sincerely,

Kevin J. Broderick
Kevin J. Broderick, Section Chief
Bureau of Coastal Regulation

KJB:cms

Disk dec.99 file#0502-93-0005.6



December 8, 1999

Mr. Kevin Broderick, Section Chief
New Jersey Department of Environmental Protection
Land Use Regulation Program
5 Station Plaza
CN-401
Trenton, NJ 08625-0401

**SUBJECT: USE OF EXISTING WETLAND/COASTAL PERMITS FOR
ADDITIONAL REMEDIAL SITE INVESTIGATIONS
FORMER CAPE MAY MANUFACTURED GAS PLANT SITE
GPU ENERGY
BLOCK 1061, LOTS 38, 53, AND 54
CITY OF CAPE MAY, CAPE MAY COUNTY, NJ**

Dear Mr. Broderick:

Jersey Central Power and Light, doing business as GPU Energy (GPU Energy), and New Jersey Natural Gas Company (NJNG) have been performing remedial site investigations at the above referenced site (Site) under a Memorandum of Agreement with the New Jersey Department of Environmental Protection (NJDEP). Figure 1 (attached) indicates the location of the Site on a portion of the Cape May United States Geologic Quadrangle map.

Remedial site investigations have been historically (pre-1999) and recently (January through May 1999) performed in freshwater wetlands, associated freshwater wetland transition areas, and coastal wetlands. This work has been performed under the authorization of a Statewide General Permit No. 4, Water Quality Certification, and a Waiver of Transition Area for Access (Permit Nos. 0502-93-0005.7 and 0502-93-0005.8), and a Coastal Wetlands Permit (Permit No. 0502-93-0005.6). These permits are valid through February 22, 2001. On December 3, 1998, you approved additional activities (conducted between January and May 1999) that were beyond those activities covered by the original permits. The rationale for your approval of these activities was the fact that the proposed activities continued to meet the terms and conditions of the existing permits (see attached letter).

As per your conversation with Ms. Vicki Galofre, NJDEP Bureau of Case Management, the installation of seven additional wells is required in order to monitor potential Manufactured Gas Plant (MGP)-related impacts. The locations for these wells are depicted on Drawing 1 (attached). The proposed activities associated with the installation of these wells are consistent with those authorized by the previously referenced permits. Due to the potential extent of the impacted groundwater area, the required location of the monitoring wells is outside of the area previously permitted. The previously non-permitted tax block and lots include the following:

MR. KEVIN BRODERICK
NJDEP

Page 2
DECEMBER 8, 1999

City of Cape May, Block 1061, Lot 37.02
City of Cape May, Block 1061, Lot 23
City of Cape May, Block 1061, Lot 21
Borough of West Cape May, Block 11.01, Lot 1
Borough of West Cape May, Block 10, Lot 1

The proposed locations are situated within coastal wetlands which exhibit the similar physical characteristics as those locations previously permitted. It is proposed that the monitoring wells be installed with a low pressure-bearing drill rig and/or boat-accessed, and installed with a tripod. Similar equipment has previously been utilized in this general area with minimal impacts. Additionally, due to the early Winter season, it is expected that minimal impacts to vegetation will result from these activities.

GPU Energy and NJNG intend to continue to abide by all conditions of the existing permits. It is anticipated that these activities will be initiated during the first week of January 2000.

Due to the proposed nature of the additional investigations, it is not anticipated that restoration plantings will be required. Additionally, since these activities are part of an ongoing remedial investigation, consideration of whether disturbed areas may be part of a future remedial action will be required prior to the initiation of any permanent restoration activities.

As you are aware, GPU Energy and NJNG have recently requested a pre-application meeting to discuss a Interim Remedial Measure (IRM) which will involve the excavation of impacted surficial soil. The IRM will occur predominantly on upland residential properties; however, the backyard of one property contains some freshwater wetlands which currently exist as mowed grass. Minimal encroachment into these wetlands may be necessary. Due to the 150-foot transition area in this location, it is likely that encroachment into this area will occur. The area(s) proposed for the IRM are indicated on Drawing 1. As previously requested, we would like to discuss with you, or members of your staff, potential permitting requirements for the IRM.

We look forward to hearing from you, and thank you for your consideration of this matter.

Sincerely yours,
McLaren/Hart, Inc.



Michael C. Dupras
Supervising Environmental Scientist

cc: Debbie LaMond, GPU Energy
Thomas Merenda, NJNG
V. Galofre, NJDEP
L. Sassaman, M/H

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2019 RAC Minimum Filing Requirements

13. Provide a calculation of the carrying costs that the Company seeks to recover in this filing, including workpapers and supporting documentation.

Response:

See Attachment G.

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2019 RAC Minimum Filing Requirements

14. The Company currently provides a schedule that summarizes the expenditures incurred by major cost category by site on a quarterly basis. These data are, and will continue to be, reported as Attachment C with its annual filing.

Response:

See Attachment C.

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2019 RAC Minimum Filing Requirements

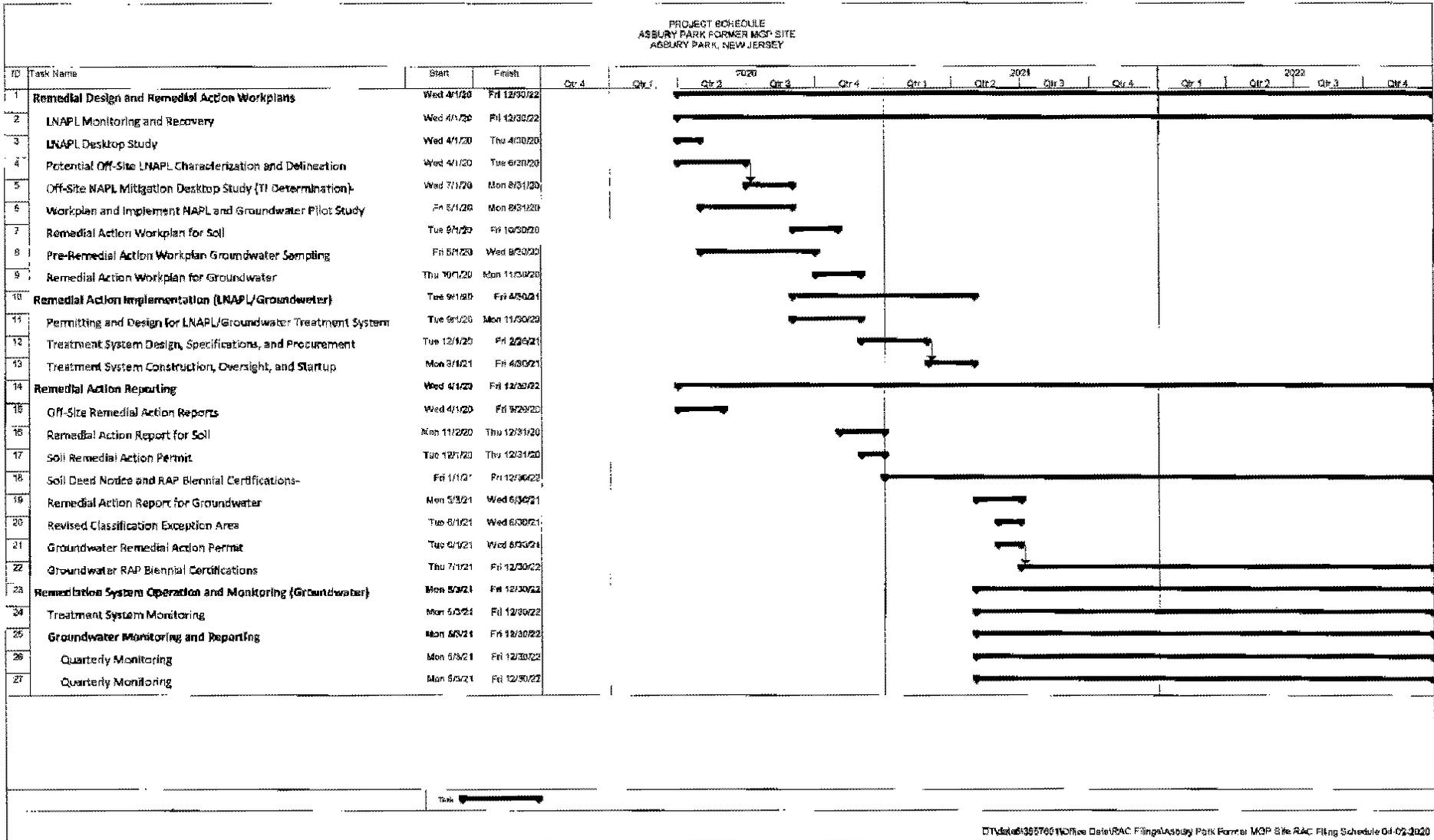
15. For each of the Company's MGP sites, provide a schedule showing the status of the remediation effort and estimated dates for the completion of remaining milestones, along with a discussion of major remediation problems. The Parties understand that the timeframes to complete the remediation efforts are subject to a great deal of uncertainty due to factors beyond the Company's control.

Response:

Copies of the schedules for the active Company MGP sites are provided as **Attachment MFR-15**.

The Company interprets the phrase "major remediation problems" in this MFR as seeking to identify events or activities by others (i.e., NJDEP, local authorities or property owners) that may have an adverse effect on the schedules for implementing the remediation activities related to its MGP sites. Whereas it is not reasonable to expect that all such potential events or activities can be defined at this time, the Company shall identify those that are currently known to its remediation program.

In summary they are: a) NJDEP's requirement for remediating free and/or residual product; b) NJDEP's requirement for property owners' approvals for establishing deed notices; c) Third-party access issues (i.e., private and municipal property owners); d) NJDEP Site Remediation Program delays; and e) Municipal scheduling and permitting requirements and delays. Each of these potential issues is described in detail in **MFR-8** and **MFR-17**.



JOP&L
Projected Schedule
Belmar Former MGP Site, Belmar, New Jersey

ID	Task Name	Start	Finish	Duration	2019				2020				2021				2022			
					Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1	Belmar, NJ Former MGP Site - Remediation	Fri 1/10/03	Wed 10/12/22	5232 days	[Gantt bar spanning from 2019 Q1 to 2022 Q4]															
2	Remedial Action Progress Reporting (reports semi-annual)	Fri 1/10/03	Thu 12/31/20	4755 days	[Gantt bar spanning from 2019 Q1 to 2020 Q4]															
9	Soil Remedial Action	Fri 6/23/06	Wed 10/12/22	4246 days	[Gantt bar spanning from 2019 Q3 to 2022 Q4]															
10	Offsite Property Negotiations	Fri 6/23/06	Thu 9/2/21	3959 days	[Gantt bar spanning from 2019 Q3 to 2021 Q3]															
11	Deed Notices	Fri 6/23/06	Thu 9/2/21	3959 days	[Gantt bar spanning from 2019 Q3 to 2021 Q3]															
12	Revise Deed Notices	Fri 6/23/06	Thu 9/2/21	3959 days	[Gantt bar spanning from 2019 Q3 to 2021 Q3]															
19	Remedial Action Workplan (RAWP)	Thu 2/11/21	Wed 8/4/21	120 days	[Gantt bar spanning from 2021 Q1 to 2021 Q2]															
20	Prepare Draft RAWP	Thu 2/11/21	Wed 6/9/21	85 days	[Gantt bar spanning from 2021 Q1 to 2021 Q1]															
25	Prepare Final RAWP	Thu 6/10/21	Wed 8/4/21	46 days	[Gantt bar spanning from 2021 Q2 to 2021 Q2]															
30	Remedial Action Implementation	Thu 7/8/21	Wed 10/12/22	330 days	[Gantt bar spanning from 2021 Q3 to 2022 Q4]															
31	Procurement	Thu 7/8/21	Wed 9/22/21	55 days	[Gantt bar spanning from 2021 Q3 to 2021 Q3]															
36	Implementation	Thu 8/6/21	Wed 6/8/22	105 days	[Gantt bar spanning from 2021 Q3 to 2022 Q1]															
43	Post Remedial Action Activities	Thu 5/6/22	Wed 10/12/22	115 days	[Gantt bar spanning from 2022 Q2 to 2022 Q4]															

Project: Belmar Date: Tue 4/7/20	Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Progress	
	Split		External Tasks		Inactive Summary		Manual Summary		Split	
	Milestone		External MileTask		Manual Task		Start-only			
	Summary		Inactive Task		Duration-only		Finish-only			

Bars of Schedule = Calendar Days

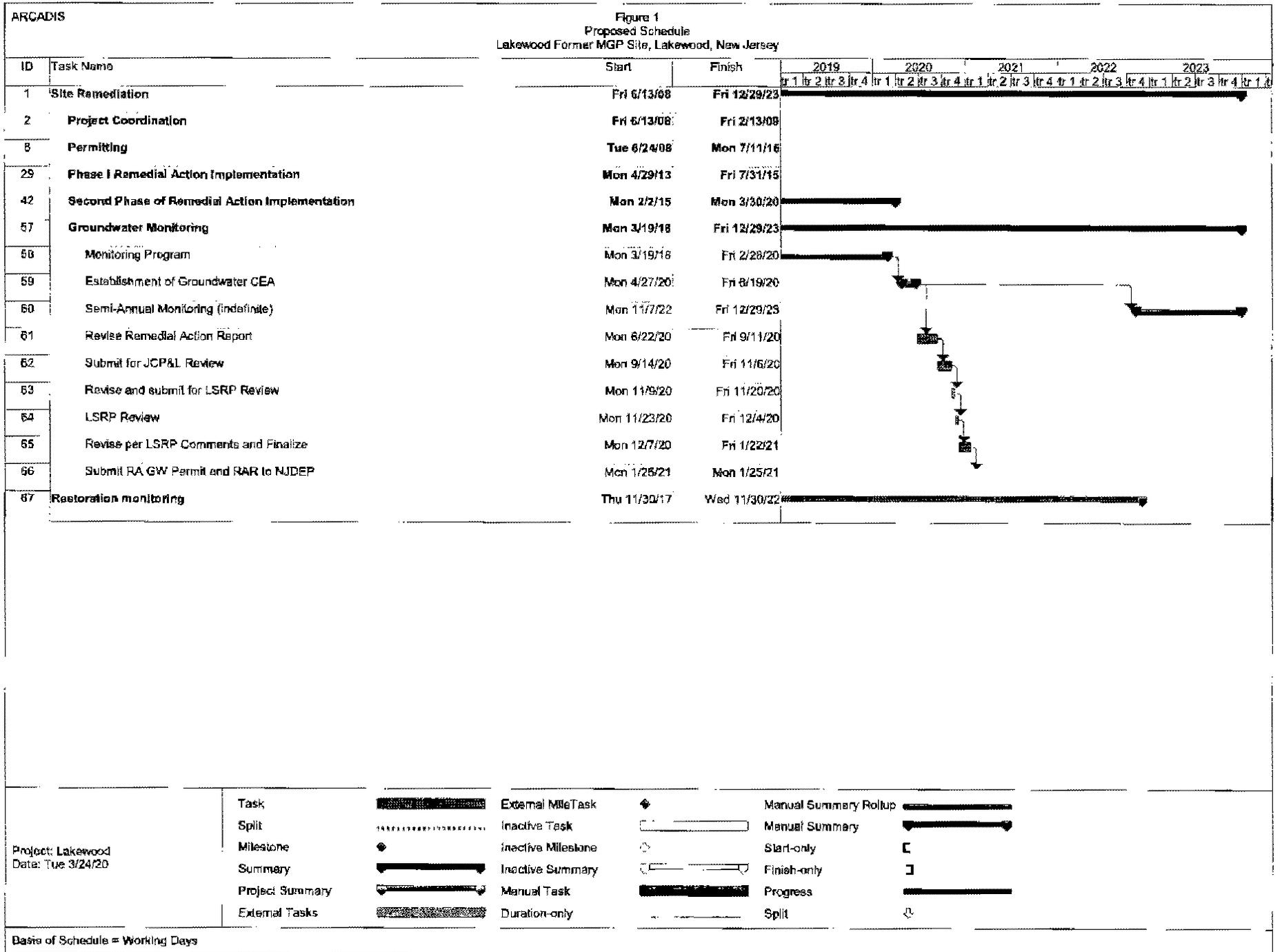
ARGADIS		JCP&L Projected Schedule Boonton, New Jersey, Former MGP Site																					
ID	Task Name	Start	Finish	2019				2020				2021				2022				2023			
				Q1	Q2	Q3	Q4																
1	Boonton, NJ Former MGP Site Remediation	Fri 1/10/03	Fri 1/31/25																				
2	Groundwater RI Activities and RAWP Development	Fri 8/28/09	Fri 6/15/18																				
3	CEA Investigation Activities and Development	Fri 8/28/09	Fri 6/15/18																				
29	Groundwater RAWP Implementation	Fri 5/31/19	Fri 1/20/23																				
30	Pre-Design Investigation	Fri 5/31/19	Tue 12/31/19																				
31	Design Process	Wed 1/1/20	Tue 3/31/20																				
32	Procurement	Wed 4/1/20	Tue 9/1/20																				
41	Implementation	Mon 7/16/20	Fri 3/26/21																				
47	Post Remedial Action Activities	Wed 1/27/21	Fri 1/20/23																				
67	Supplemental Soil RASR/RAWP - Conceptual Design	Mon 1/9/17	Thu 1/13/22																				
58	Conceptual Design	Mon 1/9/17	Thu 1/13/22																				
69	JCP&L procurement for surface soil sampling/analysis	Mon 1/9/17	Fri 3/31/17																				
60	Pre-design Activities	Mon 4/3/17	Tue 5/30/17																				
63	Deed Notices (offsite)	Mon 5/31/21	Thu 1/13/22																				
73	Supplemental Soil RAWP Preparation	Mon 9/7/20	Fri 5/14/21																				
74	RAWP Preparation	Mon 9/7/20	Fri 5/14/21																				
84	Supplemental Soil RAWP Implementation	Fri 1/10/03	Fri 1/20/23																				
85	Procurement	Mon 4/26/21	Fri 8/13/21																				
90	Implementation	Mon 10/19/20	Fri 1/7/22																				
96	Post Remedial Action Activities	Fri 1/10/03	Fri 1/20/23																				
106	Groundwater OM&M	Wed 3/31/21	Fri 1/31/25																				

Project: Boonton Date: Tue 3/24/20	Task		External MileTask		Manual Summary Rollup	
	Split		Inactive Task		Manual Summary	
	Milestone		Inactive Milestone		Start-only	
	Summary		Inactive Summary		Finish-only	
	Project Summary		Manual Task		Progress	
	External Tasks		Duration-only		Split	

1 of 1

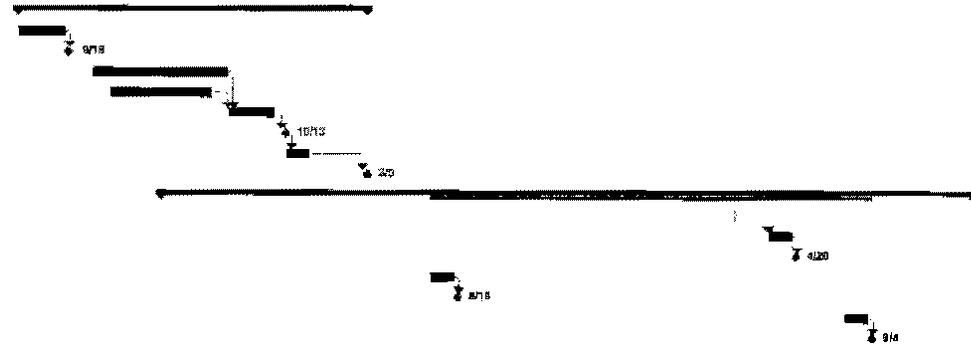
**JCP&L FORMER DOVER MGP SITE
SOIL AND GROUNDWATER REMEDIATION
2019 RAC FILING**

Task Name	Start Date	Finish Date	Duration	% Complete	2016	2017	2018	2019	2020	2021	2022	2023
Remedial Action Work Plan Submitted to NJDEP	8/22/17	8/22/17	1 day	100%								
Prepare Remedial Action Drawings and Specifications	5/2/16	10/10/17	498 days	100%								
Permitting	5/2/16	3/1/18	479 days	100%								
Bidding & Procurement	3/20/17	12/21/17	171 days	100%								
Remedial Construction (Phase I Services)	3/12/18	9/7/18	179 days	100%								
Additional Construction Activities (Phase II Services)	9/10/18	1/3/19	116 days	100%								
Start-up, Testing, and O&M Manual	8/6/18	10/30/20	765 days	75%								
Remedial Action Permit - Soil	5/1/20	5/7/21	371 days	0%								
Remedial Action Permit and CEA - Groundwater	5/1/20	5/7/21	371 days	0%								
Remedial Action Report	6/1/20	5/7/21	371 days	0%								
Remediation Systems Monitoring - In support of Soil and Groundwater RAPs	8/6/18	on-going	indefinite	20%								



**Proposed Site Remediation Schedule
Remediation Adjustment Clause (RAC)
Former Lambertville MGP Site
Lambertville, New Jersey**

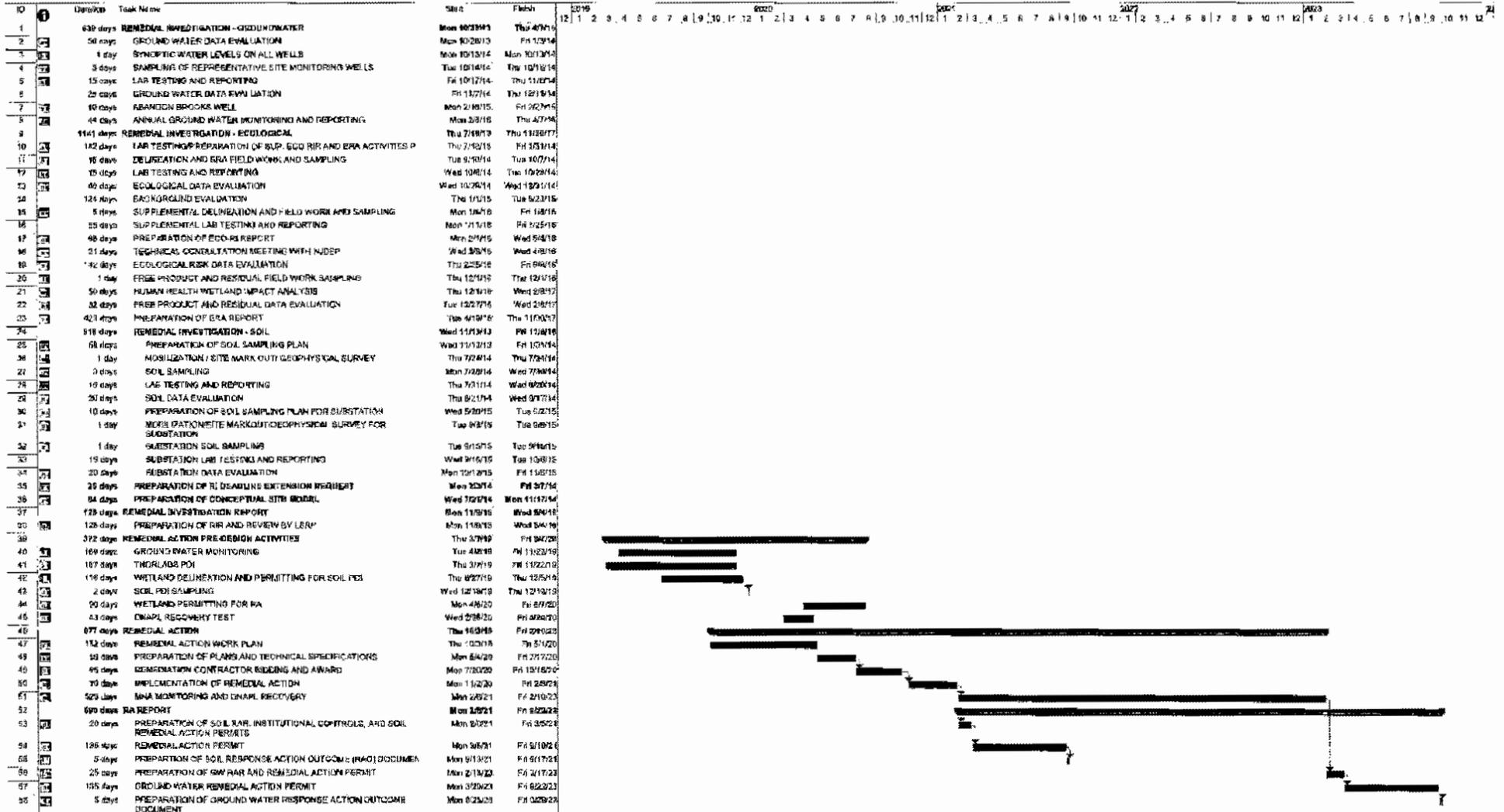
ID	Task Name	Duration	2019				2020				2021				2022				2023				2024			
			Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1	1 Prepare and Submit Annual Fee (2019)	1 day																								
2	2 Prepare and Submit Annual Fee (2020)	1 day																								
3	3 Prepare and Submit Annual Fee (2021)	1 day																								
4	4 Prepare and Submit Remedial Action Permit Fee (2022)	1 day																								
5	5 Prepare and Submit Remedial Action Permit Fee (2023)	1 day																								
6	6 Prepare and Submit Remedial Action Permit Fee (2024)	1 day																								
7	7 Implementation of Proposed Remedial Action	451 days																								
8	7.1 Prepare RAWP	60 days																								
9	7.2 LSRP Approval of RAWP	5 days																								
10	7.3 Remedy Implementation (Sediment removal/GW MNA)	173 days																								
11	7.4 Ground Water Monitoring	131 days																								
12	7.5 Preparation of RAR	60 days																								
13	7.6 LSRP Approval of RAR	15 days																								
14	7.7 Submit RAR / RA Permits to NJDEP	30 days																								
15	7.8 LSRP Issuance of Restricted Use RAO	79 days																								
16	8 Remedial Action Monitoring and Reporting	1044 days																								
17	8.1 Ground Water Monitoring	1 day																								
18	8.2 Biennial Certification for Ground Water Remedial Action Permit	30 days																								
19	8.3 LSRP Approval of Monitoring Report	5 days																								
20	8.4 Cap Inspection and Biennial Certification	30 days																								
21	8.5 LSRP Approval of Monitoring Report	5 days																								
22	8.6 Cap Inspection and Biennial Certification	30 days																								
23	8.7 LSRP Approval of Monitoring Report	5 days																								



Task	Summary	External Milestone	Inactive Summary	Manual Summary	Manual Summary (Setup)	Phase only
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Progress	
Milestone	External Tasks	Inactive Milestone	Duration-only	Summary	Summary	Deadline

* Note: Schedule begins once property access is obtained.

PROJECT SCHEDULE
NEWTON 1 FORMER MGP SITE
NEWTON, NEW JERSEY

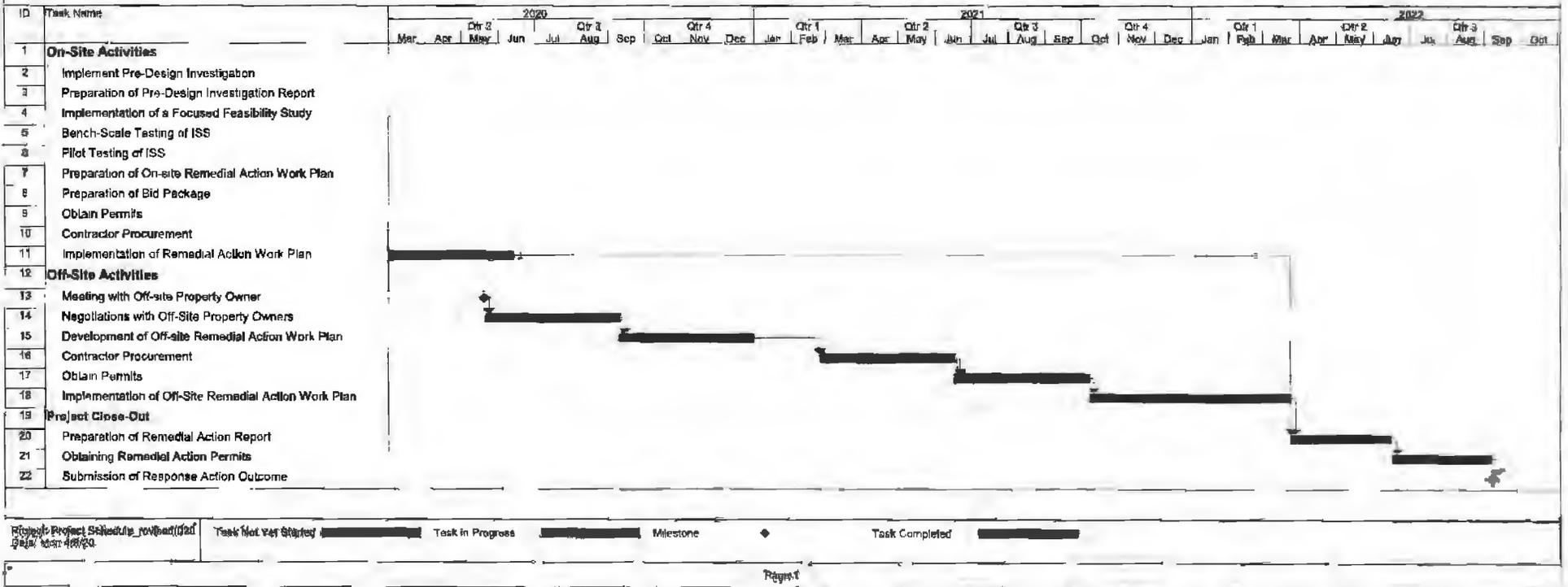


Project: 2016-13-former
Wed 4/19/18 8:14 AM
MFR001

Task	Summary	External Milestone	Inactive Milestone	Duration-only	Start-only	End-only
Soil	Project Summary	Inactive Task	Inactive Summary	Manual Summary Rollup	Multi-only	
Milestone	Federal Task	Inactive Task	Manual Task	Manual Summary	Progress	

Page 1

Project Schedule
Newton II Former MGP



Jersey Central Power & Light Co.
Former MGP Facility - Phillipsburg, NJ
Schedule of Environmental Events

EVENT	2019	2020	2021	2022
	Interim Removal of Historical Tar Well (COMPLETED in 2014)			
Interim Removal of Historic Gas Holders and Adjacent Soil (COMPLETED in 2016)				
Groundwater Bedrock Horizontal Delineation (COMPLETED 2019)	Completed			
Groundwater Bedrock Vertical Delineation		Q1 2020		
Submit RI for Soil and Groundwater	Completed			
Groundwater Remediation Pre-Design Data Collection	Completed			
Groundwater RASR and RAWP	Completed			
Implement Groundwater RA	Initial RA Completed	05/15/2020 Second Phase to be Initiated		
Remedial Action Reporting (RAR) - Soil			Q1 2021	
Remedial Action Permit - Groundwater ¹			TBD	TBD
LSRP RAO Preparation and Issuance - Soil				Q1 2022
Post-Remedial Action Activities - O&M			MNA	MNA

Footnote

1 - The Schedule for obtaining a Groundwater Action Permit can not be determined at this time until the groundwater RA is completed.

ACRONYMS

- RI - Remedial Investigation
- RASR - Remedial Action Selection Report
- RAWP - Remedial Action Work Plan
- RA - Remedial Action
- RAR - Remedial Action Report
- RAO - Remedial Action Outcome
- MNA - Monitored Natural Attenuation

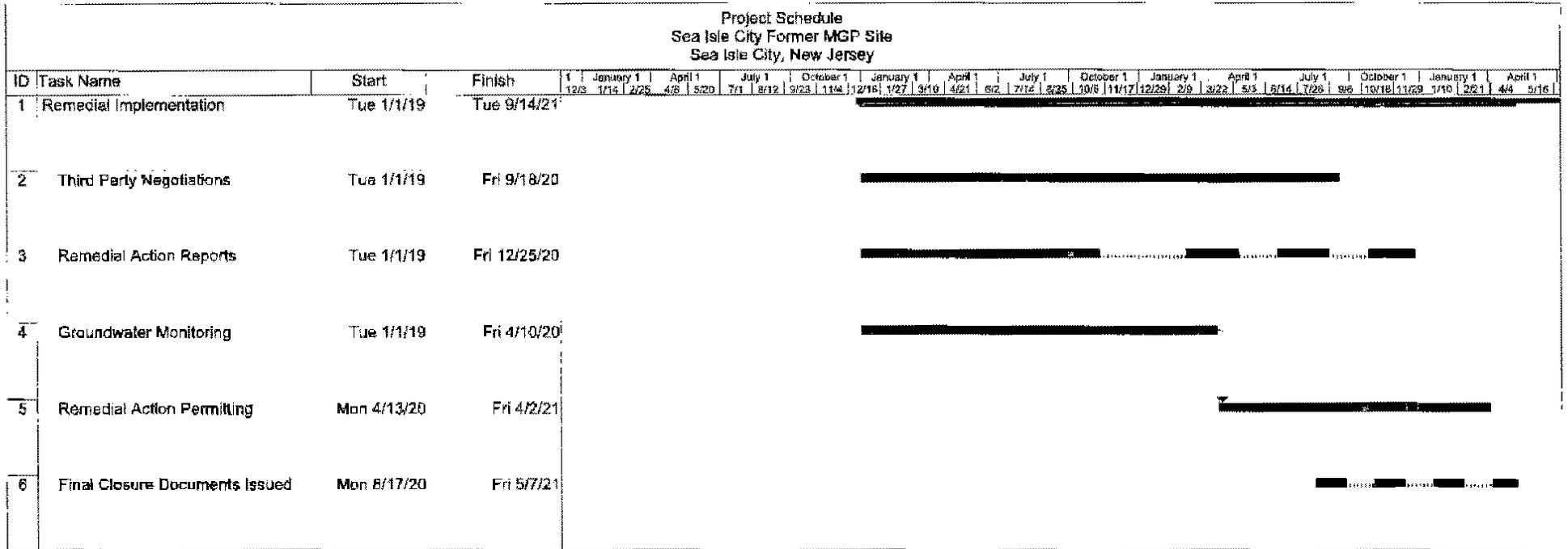
Project Schedule
Red Bank, Former MGP Site
Red Bank, New Jersey

April 8, 2020

TASK	2020												2021												2022													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Discuss Potential Remedial Options and Constraints with Property Owners	█	█	█	█																																		
Conduct Annual Groundwater Monitoring						█																																
Conduct Pre-Design Soil Sampling on Borough of Red Bank Property						█																																
Meet with NJDEP to Discuss Technical Impracticability Determination for NJDOT Right-of-Way						█																																
Prepare Final Design, Permit Applications, Remedial Action Work Plan and Technical Impracticability Determination Application for Remedial Action on Borough of Red Bank Property							█	█	█																													
Conduct Soil Sampling to Evaluate Clean Soil Cover for Engineering Control										█																												
Obtain Technical Impracticability Determination from NJDEP for NJDOT Right-of-Way											█																											
Implement Remedial Action on Borough of Red Bank Property													█	█																								
Submit Remedial Timeframe Notification Forms to NJDEP for Remedial Action Regulatory Timeframe Extension																█																						
Conduct Quarterly Groundwater Monitoring for Monitored Natural Attenuation Evaluation																		█				█													█			

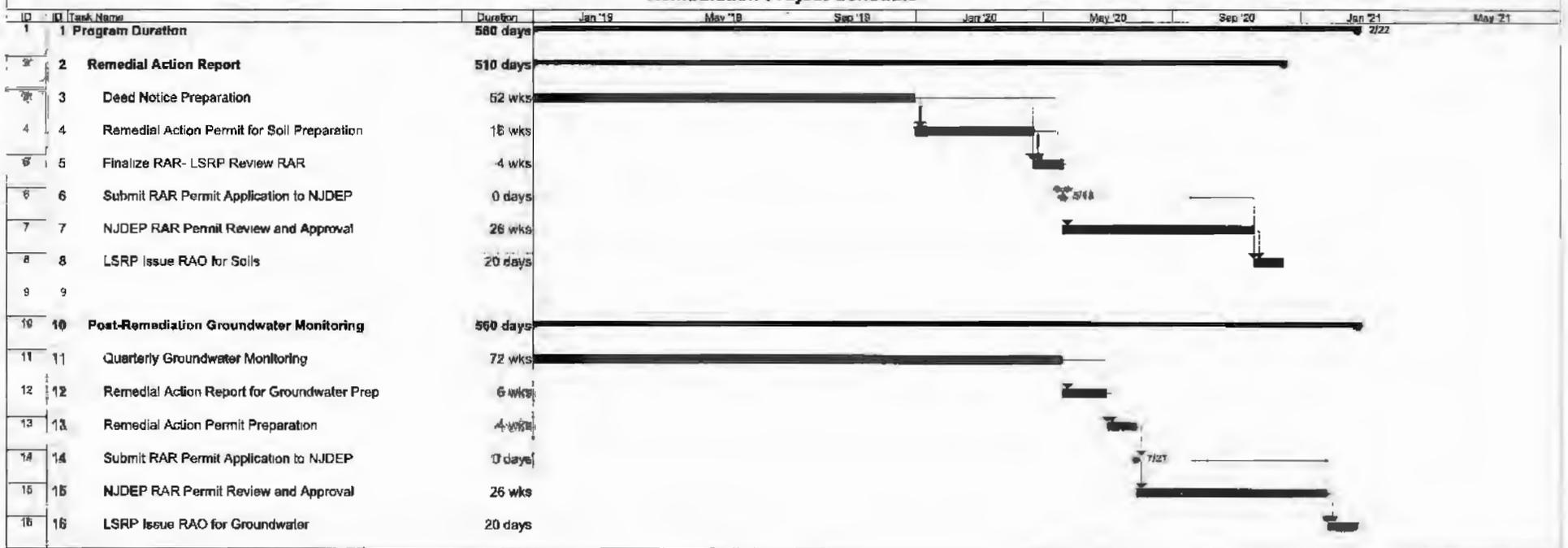
Notes:

- 1 All target completion dates are approximate and assumes full property owners and the New Jersey Department of Environmental Protection (NJDEP)
- 2 Schedule assumes approval of a Technical Impracticability Determination for the Red Bank Right-of-Way from NJDEP
- 3 Pre-design soil sampling and remedial action and schedule on the Borough of Red Bank property are dependent upon discussions with the Borough of Red Bank
- 4 Completion dates for each task are assumed to be the end of the month, unless otherwise specified

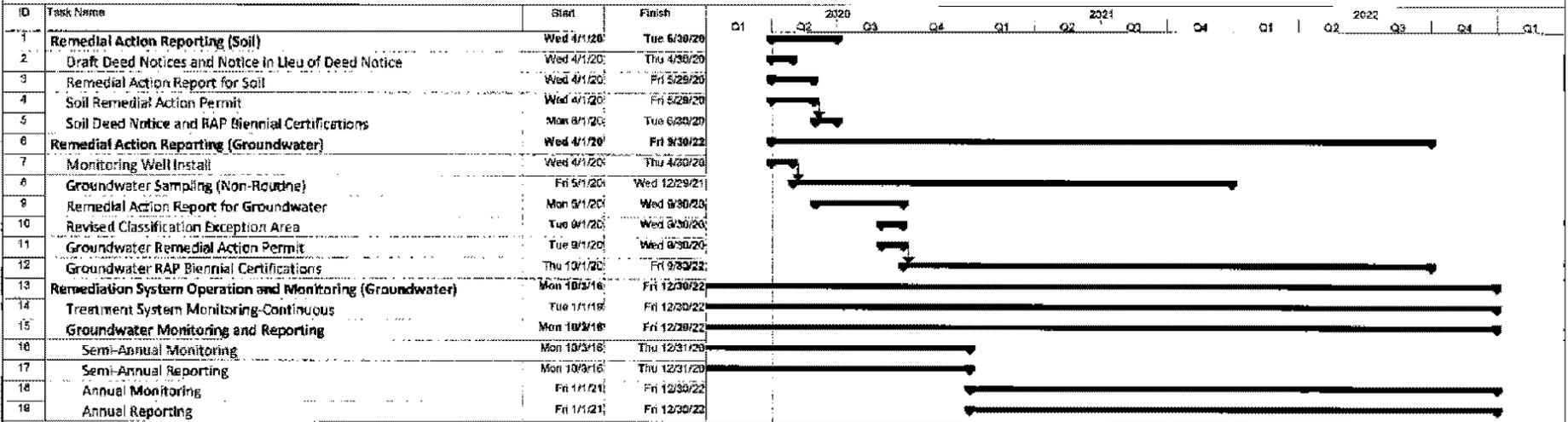


Project: SIC Summary Schedule 2019-2021 Date: Wed 3/25/20	Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Progress	
	Split		External Tasks		Inactive Summary		Manual Summary		Deadline	
	Milestone		External Milestones		Manual Task		Start-only			
	Summary		Inactive Task		Duration-only		Finish-only			

Former Washington MGP Remediation Project Schedule



DRAFT PROJECT SCHEDULE
WILLOWOOD FORMER MGP SITE
WILLOWOOD, NEW JERSEY



Project: Willowood Form MGP

Task

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

16. Provide an update concerning the status of discussions with the NJDEP concerning its NRD initiatives well as any other NRD-related activities with claimed confidential information provided pursuant to a confidentiality agreement. Such update will include information about NRD-related expenditures during the prior RAC period and related documentation, as well as total NRD-related expenses deferred to date.

Response:

In 2016, the Company completed its proposed settlement of NRD claims of the State of New Jersey against the Company with respect to the Company's MGP and other Sites under remediation before the NJDEP. In 2016, the Company also received the NJDEP release in the Company's and other Settling Parties' favor.

The sites subject to the settlement have known or suspected groundwater plumes and/or nearby ecological receptors, and the NJDEP asserts as trustee for the natural resources that it is entitled to redress for those historic damages. On-going monitoring of the NJDEP announcements on settlements confirms that the Company settlement is one of the largest and most complex that has been settled.

A separate cost collector within the Company's SAP Accounting System was established to separately track expenses related to Natural Resource Damage ("NRD") claims. There were no charges in 2019 to the NRD cost collector account.

Total NRD-related expenses deferred to date by year is provided in Footnote (c) on page 2 of Attachment A-1.

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

17. Provide information about unreasonable delays in remediation efforts caused by the inability to obtain requisite approvals, clearances, or other rights from the NJDEP, local authorities or property owners, or other circumstances that are unduly impeding remediation efforts. The Company will address issues that are outside of the ordinary experience for these matters.

Response:

The Company interprets this MFR as seeking to identify events or activities by others (i.e. NJDEP, local authorities, or property owners) that have had an adverse effect on the schedules for implementing the remediation activities related to its MGP sites. Whereas it is not reasonable to expect that all such potential events or activities can be defined at this time, the Company shall describe those that are currently known to its remediation program.

In general, they are: a) Third-party access issues (i.e. private and government property owners, including rail lines); b) NJDEP Site Remediation and other Program delays; c) Municipal and County scheduling and permitting requirements and delays and d) NJDEP Remedial Action Permit (RAP) process. Each of these potential issues is described below. In addition, the implementation and learning curves of dealing with Site Remediation Reform Act (SRRA) Licensed Site Remediation Professionals (LSRPs) and NJDEP have caused some unexpected delays and a transfer of internal and external resources from investigating/remediating sites to filling out forms and making sure that “all the proper boxes are checked” to insure that the proper information is provided in order to comply with the new 2012 regulations and guidance, at least in prior years. In 2014, NJDEP began to implement its new Remedial Action Permit process such that some added long term issues and delays are now evident. The Company has actively participated in the Site Remediation Industry Network (SRIN) and Site Remediation Advisory Group (SRAG) to provide comments and examples to the NJDEP where they have over-stepped their authority in reviewing these Remedial Action Permits. These are discussed below as well. **See** MFR-8 specifically 8g and 8i for additional information.

- a) There are approximately 100 third-party owned properties at which MGP contamination has been detected by sampling. In order to investigate and/or remediate these properties, agreements for purchase, access, deed notice, RAPs and/or settlement must be sought and obtained. Each agreement must be negotiated with each property owner, owners and/or operators, often having and using their own personnel, lawyers and experts, sometimes having little to no familiarity with environmental issues or requirements. These persons and entities often are not amenable to allowing access to the property or providing consent to the proposed remedial strategy. In several instances, these persons and entities have

Jersey Central Power & Light Company 2019 RAC Minimum Filing Requirements

been unresponsive to our requests, have delayed or denied access or approval, and/or made unacceptable demands for compensation or other contractual provisions (such as to bind the Company to remediate conditions for which the Company has no liability, such as off-site discharges by third parties or historic fill). Even when these persons or entities do not use delaying tactics, delays are encountered as the Company attempts to negotiate a settlement which is mutually acceptable to both parties. In isolated instances, persons signing such agreements may decline, at least somewhat, to honor their terms when and as required. While the Company recognizes that access for investigation or enforcement of agreements, or enforcement of signed agreements, deed notices and RAPs, may be obtained through litigation, and NJDEP seemingly requires such litigation, this may not be the most speedy or effective approach given that, as described in MFR-8, the requirements for site remediation include, for example, that the owner of the contaminated property must agree, in writing, to the implementation of the limited restricted use or restricted use remedial action and requirements for engineering and/or institutional controls. Therefore, for example, if an agreement cannot be reached and access for sampling or remediation through litigation is sought against the property owner, even if access is permitted either by settlement or the Judge, the property owner may nonetheless thereafter reject a request for a deed notice and require instead, as permitted by law, that the property be remediated to the most stringent NJDEP cleanup criteria. Similarly, for example, even if an agreement has been reached or signed, if a current owner declines to honor that agreement, perhaps because it was made by a prior owner (even if recorded so that the new owner had legal notice of it) or perhaps because NJDEP requirements have changed since the agreement was made (e.g., as to RAPs), the result of any litigation against the property owner may be uncertain or, even if successful, that property owner may thereafter be uncooperative, resulting in added costs and risks to the Company. In some of these cases, the result to the Company could be a requirement to implement a remedial strategy that is contrary to the objective of developing remedial actions that protect both human health and the environment and are cost effective. In addition, such a property owner could then assert other claims against the Company, which claims could have the effects of adverse publicity, adverse effects on local officials or other neighbors, or increased legal costs and other losses.

- b) Due to ongoing changes in the Licensed Site Remediation Professional (LSRP) program, Administrative Requirements for the Remediation of Contaminated Sites (ARRCS), and technical regulations and guidance, the NJDEP Site Remediation Program has undergone major programmatic changes. (**See** MFR-8 for additional information on these NJDEP initiatives). During the interim time period from the adoption of SRRA in May 2009 to the requirement to retain an LSRP in May 2012, many NJDEP personnel either terminated their employment or retired, were reassigned from SRP case management to other SRP functions, or transferred from

Jersey Central Power & Light Company **2019 RAC Minimum Filing Requirements**

the SRP program into other DEP programs. In late 2011/early 2012, letters were received by the Company indicating that the NJDEP case managers had been reassigned and that the NJDEP would not be assigning new case managers. In order to comply with the requirements of SRRA, the Company retained LSRPs prior to the mandatory May 2012 date for conversion of remedial oversight from NJDEP to a LSRP. Prior to SRRA's adoption, NJDEP delays were extended, sometimes beyond 12 months. Since SRRA's adoption and prior to conversion to LSRPs, such delays worsened, and prior to the receipt of these reassignment letters, it was difficult to predict the NJDEP review times for document submittals making it difficult to determine how best to proceed cost effectively. Since the Company's retention of LSRPs, initial efforts have been focused on properly preparing and filing NJDEP forms and checklists, and the completion of Remedial Investigations by the May 2014 or May 2016 deadlines to ensure that the sites remained in compliance. The future schedule for work may be expedited given the existence of mandatory NJDEP deadlines. In many cases, NJDEP allows for requests for extension, if filed in advance of missing the particular deadline, for acceptable cause, but does not permit filing of such requests sooner than 60 days before the relevant deadline. **See** MFR-8 specifically 8j for additional information. While the LSRPs have significant powers and responsibilities for remediation, they do not have sole power and responsibility. Permitting, (including land use permitting and remedial action permits for soil and groundwater) for example, remains under NJDEP control. The absence of continuity of personnel within NJDEP familiar with the Company's sites, sometimes results in inefficiencies as NJDEP questions materials submitted for permits or approvals, or fields questions from owners or neighbors, lacking knowledge of its own, and unwilling to fully defer to the Company or its LSRPs in such matters, increasing delays, inefficiencies and costs. Some staff at NJDEP have used the Remedial Action Permit (RAP) approval process as a means to provide comment on activities unrelated to the applicable permits, further unwilling to defer to the Company or its LSRPs in such matters, increasing delays, inefficiencies and costs. NJDEP has stated publicly that as a practical matter NJDEP staff view the application for a RAP as one of the last opportunities NJDEP has to question the LSRP about investigation and remedial efforts, decisions and alternatives. This is of particular concern to the Company as its sites are complex, have long histories going back to the 1980s, and are more susceptible to NJDEP demands for added review and justification, and potentially new work. Because of this, delays in RAP processing have increased, and it is expected that further delays and increases in costs will be incurred, perhaps more so hereafter as RAPs are sought on the MGP Sites as the Company's sites each approach its own mandatory deadlines.

With respect to land use permitting, the NJDEP routinely requests extensions to their 90-day review timeframe or provides minor comments or revisions to documents at the end of the review/extension timeframe. In

Jersey Central Power & Light Company **2019 RAC Minimum Filing Requirements**

accordance with the regulations, land use permits should be reviewed and issued within 90-120 days. Based on our experience, complex permits take 180 days or more for the review and approval process to be completed. Sites with ecological issues often take longer. This can add significant delays during the remediation process. As discussed with NJDEP, part of the issue is the complexity of the sites, while some of the delays can be attributed to the mandatory remediation deadlines causing an increase in permit submittals (with no increased NJDEP staff).

In 2016, (on two sites) the review and approval of Ecological Risk Assessments (ERAs) has caused significant delays in the remediation process. This NJDEP review continued into 2018 for one of the sites. The NJDEP allows for the use of Alternative Remediation Standards/ecological risk-based remediation goals. However, the NJDEP (and not the LSRP) is responsible for the approval of such alternative standards. The LSRP is responsible for providing the technical basis for calculating the alternative standards. The NJDEP, while allowing some flexibility with the alternate standards, has in both of the Company's cases, asked that the Company use alternate standards that were developed for other high profile sites/cases that are unrelated to our sites. No basis for the use of these standards has been provided by NJDEP.

In addition, NJDEP and the Board licensing LSRPs have increasingly turned some attention and effort to enforcement type processes and communications, including audits and reviews of filed documents, LSRP decisions, and issued or pursued demands for rescission, revision, withdrawal or complaints. While few of these have directly impacted Company matters, it is clear that LSRPs are behaving with greater reflection, delay and conservative approaches than previously in order to avoid the impact of such NJDEP and Board behaviors on them and their matters, including those of the Company. In some instances, there have been more rounds of review and revisions of documents prior to implementation, in whole or in part associated with such circumstances and others (e.g., changes in NJDEP forms and guidance). There is future risk of NJDEP and Board audit and review of LSRP decisions on Company matters, particularly as NJDEP's guidance rarely address complex sites with decades of history and data, such as most Company matters.

- c) Municipalities and counties can exercise jurisdiction over some aspects of remediation work. Some municipalities and counties require, for example, excavation permits, demolition permits, construction permits, site plan applications and approvals, and other reviews before work can proceed. In 2019, the NJDEP provided guidance to municipalities and has suggested adoption of consistent ordinances or regulations related to soil fill/clean fill requirements (e.g., addressing local fill concerns termed "Dirty Dirt" by the NJDEP). Currently municipalities seem free to adopt their own requirements for same. In compliance with the Town of Newton's ordinance for example,

Jersey Central Power & Light Company **2019 RAC Minimum Filing Requirements**

the Company needed to identify where the clean fill originated, and the Town had 90-days to review the plan. Because the Company had not yet bid the project, it could not identify where the clean fill was being obtained from, therefore delaying the start of the project until the successful bidder could provide that information. As local regulation of remediation and fill expand, if not pre-empted by NJDEP, further delays and costs are likely. Others impose restrictions on the periods, dates or times of such work. In addition, some MGP Sites are in multiple jurisdictions (e.g., Dover and Rockaway), posing some risk of added delays due to conflicting positions. In recent years, except as noted below, the Company's community relations efforts have made it easier to obtain most required municipal approvals in due course. This could change. Historically some municipalities (e.g., Belmar, Dover, and Rockaway) have been more difficult in providing approvals (including requiring site plan approval) than others (e.g., Wildwood). Also, many of the municipalities are more interested in governmental issues and require presentations to be made to either the planning board and/or to the Mayor and council (e.g., Dover, Rockaway, Cape May and Asbury Park). This can delay projects as it is necessary to get on the agendas. Many MGP sites are located within shore or tourist communities that place a restriction on major construction activities being undertaken during certain periods of the year (e.g., summer months in many shore communities; Christmas and other holidays in Cape May). In these locations, it can be necessary to delay initiation of some work, and/or schedule remedial activities in phases, so that these limits are observed. Historically, changes in municipal governance, for example, as a result of elections, creates added risks to the Company's efforts, even when prior written agreements have been executed. A recent late 2016 change within Cape May, for example, exposed the Company to concerns that the new administration might not fully understand and accept prior decisions of prior administrations. Also, for example, it is unclear whether the City of Cape May will fulfill its obligations to compel its affiliates (such as the Cape May Housing Authority [CMHA]) to provide a deed notice (as to which the CMHA is exploring options with the Company regarding signing a deed notice).

On many sites the Company's strategy has pursued partial excavations and removals rather than full remediation scenarios (e.g., in Cape May). This has saved some of the costs of excavation and disposal, as well as the costs of compensation, acquisition, restoration of damaged or demolished improvements. However, this results in the use of deed notices for soils and engineering controls (caps or covers, for instance) and classification exception areas (restricting groundwater use) to manage residual impacts. SRRRA created a new program requiring NJDEP to issue RAPs for each of the affected sites so remediated, with a range of requirements. Since 2014, the Company has experienced some of the new requirements for RAPs. The applications for RAPs are sometimes complex and often require assembly of organized electronic copies of past submissions and data, often not available in the form now required by NJDEP, to support the application, This requirement itself

Jersey Central Power & Light Company
2019 RAC Minimum Filing Requirements

takes significant time and effort. Satisfying this requirement sometimes identifies issues previously resolved by a decision of the NJDEP, which must be reexamined by the Company and LSRP if the application for the RAP is to rely on it. Sometimes the LSRP is reluctant to rely on that decision without further effort. This further effort itself delays pursuit of the RAP and all that depend on the RAP (such as issuance of a partial or final response action outcome (RAO), NJDEP's prior no further action letters. The RAP can require signatures and consents from various persons and entities. The effort to seek these items can consume time and resources, and often meets with new resistance because of the requirements imposed on those signing, even when the Company agrees to be responsible for the obligations and indemnifies those persons or entities. In 2014, the Company, in part with the assistance of its outside lawyer, succeeded in convincing NJDEP to rescind any requirement for site owner consent to the application for a RAP, if other evidence of consent to a deed notice was provided. (However, this is the exception as NJDEP generally insists upon owner consent.) The RAP imposed several new requirements and costs, including permit fees and in some cases the obligation for a permanent financial assurance. As noted earlier, NJDEP itself views the RAP application process as providing an opportunity for NJDEP to review and question the LSRP's work prior to application. Finally, the RAP process, and related biennial inspection and certification process, and the requirement for LSRP involvement (not expressly required in SRRA itself but clearly required under NJDEP 2014 policy announcements), not only increase costs to the Company but increases the risks of further future requirements, if and as future LSRPs question the effectiveness of current remedial decisions under current NJDEP requirements. Given the relative youth of the RAP aspects of NJDEP's remedial permits, further changes and requirements can be expected, some of which will result in added costs and risks. However, the RAP process is likely to have an adverse effect on the Company's ability to meet mandatory deadlines (although extensions may be available by law if and to the extent NJDEP scheduling delays issuance of necessary deadlines, without due cause by NJDEP to do so).