July 15, 2016

Mr. Chris Swain
Bureau of Remediation and Waste Management
Maine Department of Environmental Protection
17 State House Station
Augusta ME 04333

Subject: **First Quarter March 2016 Groundwater Monitoring Results**
Orrington Remediation Site
Orrington, Maine

Dear Mr. Swain:

Enclosed for your information is a report of the **first quarter 2016** groundwater sampling data for the monitoring performed at the Orrington Remediation Site by Sevee & Maher Engineers, Inc. (SME). The groundwater monitoring was performed using the low flow sampling protocols described in the Work Plan submitted July 8, 2010.

This groundwater monitoring report includes data summary tables, a figure showing the well locations sampled and field data sheets. Electronic data deliverables (EDDs) and laboratory analytical reports were previously submitted to Maine DEP on May 4, 2016, May 26, 2016 and July 12, 2016.

The second quarter 2016 groundwater monitoring event took place in June 2016. If you have any questions please feel free to contact me at 314-281-5947.

Sincerely,

Kathy Zeigler

Kathy Zeigler
Director, Environmental Remediation

Cc: John Beane, DEP
Audrey Snowden, Town Librarian, Town of Orrington
Paul White, Town Manager, Town of Orrington

SME
Sevee & Maher Engineers, Inc.

ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

July 12, 2016

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Kathryn Zeigler
Director, Environmental Remediation
Mallinckrodt US LLC
444 McDonnell Boulevard
Hazelwood, Missouri 63042

Subject: First Quarter 2016 Groundwater Monitoring Report
Orrington Remediation Site, Orrington, Maine

Dear Ms. Zeigler:

Enclosed are the groundwater quality results from the March 2016 first quarter sampling event at the Orrington Remediation Site in Orrington, Maine (Site). Groundwater samples were obtained from 27 monitoring wells located in the vicinity of the southwestern portion of the Site (Ferry Road Area), the former Manufacturing Area, Landfill 1 Area, Landfill 3, Landfill 4, and Landfill 5. Monitoring well locations are shown in the attached Figure 1. Sevee & Maher Engineers, Inc. (SME) also obtained water samples from two domestic wells (Haseltine and Safian) on Ferry Road that are routinely analyzed as part of the quarterly sampling event. An influent sample from the Landfill 1 Area groundwater Interim Extraction System (IES) was also obtained at the onsite water treatment plant for analysis. Four shallow Site monitoring wells, B-304-O1, B-306-B3, B-307-O1 and MW-503-O1, could not be sampled during the March 2016 round because they lacked an adequate volume of groundwater in the well screen. As mentioned in the December 2015 fourth quarter sampling report, the well screen pipe in B-309-B1 was obstructed or damaged and the well could not be sampled. With DEP's approval (verbal approval from John Beane, May 5, 2016), B-309-B1 was removed from the routine quarterly groundwater sampling program and abandoned on May 10, 2016.

Low-flow sampling protocols consistent with procedures requested by the Maine Department of Environmental Protection (MEDEP) in September 2010 were utilized to obtain unfiltered groundwater samples. In the conditional approval letter (dated May 4, 2015) to the Ferry Road Current Conditions Work Plan, MEDEP required that wells in the Ferry Road Area be

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purged of a volume of water equivalent to the length of the saturated well screen. Wells in the Ferry Road Current Condition Program were sampled according to the Purge and Sample Protocol, March 2016 Ferry Road Sampling, which was submitted to MEDEP on March 7, 2016. One of the Ferry Road Area wells, MW-505-B1, has a well screen length of 40 feet. To remove a well screen volume in MW-505-B1, MEDEP agreed that the well could be purged at a rate of 0.5 liters per minute compared to the 0.1 liter per minute low-flow purge rate used at the other monitoring wells. Regardless of the higher purge rate for MW-505-B1, there was only limited drawdown in the well and very low turbidity. Monitoring wells that continued to drawdown during low-flow purging of one well screen volume were allowed to recharge overnight before a groundwater sample was obtained. Purging procedures for the two residential Ferry Road wells were also modified for the March 2016 quarterly sampling round. As agreed with MEDEP, water from the two residential wells was purged from an interior faucet for a period of 30 minutes before a water sample was obtained using the methods consistent with previous sampling rounds. Because of excessive turbidity in the Safian water, a filtered sample was submitted for laboratory analysis of mercury, in addition to the unfiltered sample.

Groundwater quality results are summarized in attached Tables 1 through 8. SME field data sheets completed at each well sampled are also included in the attachments to this transmittal. Electronic data deliverables (EDDs) of Alpha Analytical (Alpha) laboratory analytical results from the March 2016 first quarter sampling round were previously submitted to MEDEP on May 4, 2016, May 26, 2016 and July 12, 2016.

QUALITY CONTROL REVIEW

Analytical results for parameters were quantified to the laboratory's method detection limit (MDL). Concentrations detected between the MDL and the laboratory's reporting limit (RL) were qualified by Alpha as estimated (J) values. Alpha notified SME after the sampling round that a number of sample containers for volatile organic analysis provided for the March 2016 quarterly sampling round were contaminated with low levels of acetone. The laboratory reports for the associated sample delivery groups (SDG) were identified by Alpha and documented in a letter (June 22, 2016) sent to SME, which is included in the Attachments to this report. This information was utilized by SME in the QC review and the affected water samples appropriately qualified to account for the extraneous acetone contamination. The QC data reviewed in the analytical laboratory reports was of acceptable quality for the March 2016 first quarter sampling round.

Groundwater analytical results were reviewed to ensure that they were representative of the area sampled using guidelines in the U.S.EPA *National Functional Guidelines* (NFG) *for Superfund Organic Methods*,[1] U.S.EPA *National Functional Guidelines for Inorganic Superfund Data Review* [2] and U.S.EPA *New England Environmental Data Review Supplement*.[3] Method blanks for volatile organic compounds (VOCs), metals and inorganics, laboratory control samples (LCS), matrix spikes (MS), matrix spike duplicates (MSD), laboratory duplicates, and VOC surrogate compound recoveries were evaluated. Relevant QC findings are summarized for the Site areas sampled for routine quarterly groundwater monitoring.

Ferry Road Area

- QC was within acceptance criteria for routine parameter analyses.
- Field duplicates were within acceptance criterion for relative percent difference (RPD).

Manufacturing Area

- Acetone detections in groundwater sample MW-502-O1 and field blank FB-1 were qualified as not detected (U) at the RL due to its presence in the associated trip blank.
- Two VOCs in the LCS/LCSDs were outside laboratory's acceptance criteria for spiked recovery and/or RPD; however, these parameters were not detected in the associated sample delivery group (SDG).
- Tert-butyl alcohol (TBA) was detected at an estimated concentration less than the laboratory's RL in a sample obtained from MW-510-O1 and the associated trip blank. The TBA result for MW-510-O1 was qualified as not detected at the RL.
- The field duplicate pair was within acceptable RPD criterion.

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[1] U.S.EPA, 2014. *National Functional Guidelines for Superfund Organic Methods Data Review*; Office of Superfund Remediation and Technology Innovation, U.S.EPA-540-R-014-002; Washington, DC; August 2014.
[2] U.S.EPA, 2014. *National Functional Guidelines for Inorganic Superfund Data Review*; Office of Superfund Remediation and Technology Innovation, U.S.EPA-540-R-013-001; Washington, DC; August 2014.
[3] U.S.EPA New England, 2013; *Environmental Data Review Supplement*, Quality Assurance Unit, U.S.EPA New England; April 22, 2013.

Landfill 1

- An acetone detection in groundwater sample MW-501-O1 was qualified as not detected (U) at the laboratory's RL due to its presence in the associated trip blank.
- The field duplicate pair was within acceptable RPD criterion.

Landfills 3 and 4

- Acetone detections in groundwater samples P-2A and P-13 were qualified as not detected (U) at the laboratory's RL due to its presence in the associated trip blank.
- Two VOCs in LCS/LCSDs were outside the laboratory's acceptance criteria for spiked recovery and/or RPD; however, these parameters were not detected in the associated SDG.
- The field duplicate pair was within acceptable RPD criterion.

Landfill 5

- Acetone detections in groundwater samples were qualified as not detected (U) at the laboratory's RL due to its presence in the associated trip blank.
- TBA was detected at an estimated concentration less than the laboratory's RL in the trip blank. No qualification of result was necessary because TBA was not detected in the associated SDG.
- Manganese was detected in a method blank at a concentration greater than the MDL, but less than the laboratory's RL. Groundwater sample analytical results at a concentration between the laboratory's MDL and RL where qualified as not detected (U) at the RL. Results for manganese detections in groundwater samples greater than the RL were annotated with a blank qualifier (B) and accepted as reported by the laboratory based on professional judgement.
- The RPD for a laboratory chloride duplicate from B-307-B2 having concentrations greater than 5 times the laboratory's RL exceeded the acceptance criteria for RPD. The chloride concentration in the B-307-B2 sample was qualified as estimated (J).
- Total organic carbon (TOC) was detected in replicates for a field blank at concentrations between the laboratory's MDL and RL. Sample results greater than the MDL, but less than the RL were qualified as not detected (U) at the RL. TOC results in groundwater samples greater than the RL were qualified (B) based on professional judgement.

- Total recoverable phenolics were detected in a field blank at a concentration less than the laboratory's RL. Phenolics were also detected in B-304-B1 at a concentration less than the RL. The result for B-304-B1 was qualified as not detected (U) at the laboratory RL.
- The field duplicate pair was within acceptable RPD criterion.

Treatment Plant Influent

- Sulfate was detected in a method blank at a concentration greater than the laboratory's MDL and less than the RL. The sulfate concentration detected in the treatment plant influent sample was greater than the RL. The influent sample was accepted as reported by the laboratory and qualified (B) based on professional judgement.
- Surrogate recoveries in the Treatment Plant influent sample were less than the laboratory's QC acceptance limits. The influent sample was diluted so it could be quantitated within the calibrated range of the instrumentation. As a result, the 1,1,1,2-tetrachloroethane surrogate for the EPA 8011 analysis was diluted to below the acceptance criteria. Since re-extraction was not required, the results of the analysis were reported.
- Acetone was detected at less than the laboratory's RL in the trip blank associated with the Treatment Plant influent sample. Acetone was not detected in the Treatment Plant influent sample, which had an elevated detection limit due to dilution of the sample.
- Two VOCs in the LCS/LCSDs were outside laboratory's acceptance criteria for spiked recovery and/or RPD; however, these parameters were not detected in the associated SDG.

LABORATORY ANALYTICAL RESULTS

Mercury detections in monitoring wells sampled during March 2016 were distributed similarly to previous routine quarterly groundwater sampling rounds. Mercury concentrations greater than the laboratory's RL (0.2 micrograms per liter [µg/L]) were detected in 11 of the 27 monitoring wells sampled at the Site. Groundwater samples from eight monitoring wells exceeded the Site's Media Protection Standard (MPS) for mercury (2 µg/L) at concentrations ranging between 2.7 and 214 µg/L. The remaining mercury detections (0.06 µg/L to 1.2 µg/L) were less than the MPS. Between the fourth quarter of December 2015 and the first quarter of March 2016, mercury concentrations decreased in seven of the eight monitoring wells where mercury was greater than the MPS.

Groundwater beneath the Landfill 1 Area contained higher mercury concentrations compared to other areas of the Site sampled. The highest mercury concentration was associated with the area near the Lined Process Lagoon, where it was detected at a concentration of 214 µg/L in MW-501-O1. Mercury in groundwater near the toe of the Landfill 1 Area in MW-513-O1 and B-326-O2 was detected at concentrations of 14.1 µg/L and 12.4 µg/L. Landfill 1 Area interim extraction well EW-4[4], which is located approximately between MW-513-O1 and B-326-O2, had a similar concentration of mercury (14 µg/L) detected during the March 2016 quarterly sampling. Higher mercury concentrations near the downgradient margin of Landfill 1 Area are typically associated with extraction wells EW-1 and MW-601. During the March 2016 sampling round, mercury was detected at concentrations of 47 µg/L and 57 µg/L in EW-1 and MW-601, respectively.

A mercury concentration exceeding the MPS was detected in monitoring well MW-510-O1 (2.7 µg/L), located downgradient from the former salt storage pad in the former Manufacturing Area. Although the MPS exceedance was typical for the well, the mercury concentration has decreased in value over the last two quarters of monitoring. Detectable mercury in MW-502-O1 (0.35 µg/L) has also decreased over the last two quarterly sampling rounds, but the concentration has almost always been less than the MPS over the last several years of monitoring. Groundwater could not be obtained from MW-503-O1 during the first quarter March 2016 sampling round because of a lack of a sufficient amount of water in the well for a representative sample; however, a review of the last five years of monitoring of MW-503-O1 indicated mercury concentrations typically less than the MPS.

The ridge area to the north of the former Manufacturing Area includes Landfills 3, 4, and 5. Among these three landfills, the highest mercury concentration in the routine quarterly monitoring is associated with MW-506-B1 in Landfill 4. The well monitors groundwater in shallow bedrock, and contained a mercury concentration of 10.3 µg/L that exceeded the MPS during the March 2016 sampling round. The mercury concentration in MW-506-B1 has decreased over the last two quarterly sampling rounds.

Monitoring wells MW-410-B1 and P-2A are in the flowpath of groundwater moving in a southerly direction downgradient from Landfill 3 and Landfill 4. Concentrations of mercury less than the MPS were detected in monitoring wells MW-410-B1 (0.93 µg/L) and P-2A (1.2 µg/L) during the March 2016 sampling round. Mercury was also detected in P-13, which is to the north of Landfill 3, but the concentration was qualified as an estimated value (0.06 µg/L) less than the laboratory's RL for the metal. Well B-309-B1, located north of

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[4] SME, May 4, 2016, 1st Quarter 2016 Interim Extraction System Operation Report, Orrington Extraction Site, Orrington, Maine.

Landfill 4, was properly abandoned in May 2016 and therefore has been removed from routine quarterly monitoring.

Nine monitoring wells around Landfill 5 were sampled during the March 2016 sampling round, which included four upgradient wells that serve as background wells (B-303-series). Mercury was not detected in any wells that monitor groundwater quality around Landfill 5. Three shallow wells around Landfill 5, B-304-O1, B-306-B3 and B-307-O1, could not be sampled because of an insufficient volume of water to obtain a representative sample. The six monitoring wells sampled in the southwestern portion of the Site between the former Manufacturing Area and Ferry Road, and the two residential wells sampled on Ferry Road, did not contain detectable mercury concentrations. These results are consistent with previous rounds of quarterly groundwater sampling.

Groundwater samples from former Manufacturing Area monitoring wells MW-502-O1 and MW-510-O1, and MW-501-O1 near the downgradient side of the Lined Process Lagoon in the Landfill 1 Area, were analyzed for chloropicrin. Monitoring well MW-510-O1 contained chloropicrin at a concentration of 6.65 µg/L, which was less than the MPS of 30 µg/L. Intermittent detections of chloropicrin less than the MPS have occurred over the last few years of monitoring. Detectable concentrations of chloropicrin were not present in MW-501-O1 and MW-502-O1, and typically have not been.

Samples were analyzed for VOCs from groundwater obtained in monitoring wells at the former Manufacturing Area, near the Lined Process Lagoon, and around Landfills 3, 4 and 5. One or more of 12 different VOCs were detected in eight Site monitoring wells in these areas. Chloroform and carbon tetrachloride were the most frequently detected VOCs, present in eight and six monitoring wells, respectively, followed by trichloroethene (TCE) in four monitoring wells. These three compounds are typically detected more often than other VOCs in the quarterly groundwater sampling rounds. The remaining VOCs detected less frequently included 1,2-dichloroethene (total), cis-1,2-dichloroethene, 1,1-dichloroethene, 1,1-dichloroethane, 1,1,1-trichloroethane, tetrachloroethene, dichlorodifluoromethane, toluene, and acetone. Carbon tetrachloride was the only VOC to exceed its MPS of 3 µg/L. Carbon tetrachloride concentrations decreased in a downgradient direction from MW-506-B1 (9.9 µg/L) screened beneath the middle of Landfill 4, to MW-410-B1 (6.4 µg/L) and P-2A (3.1 µg/L) downgradient of Landfills 3 and 4.

The first quarter March 2016 sampling round included semiannual detection monitoring at Landfill 5 for sodium, chloride, sulfate, iron, manganese, total recoverable phenolics, TOC and total organic halides (TOX) in wells B-304-B1, B-307-B1 and B-307-B2. Three shallow wells, i.e., B-304-O1, B-306-B3 and B-307-O1, did not have a sufficient volume of water in the well to obtain a groundwater sample.

Sodium concentrations (15,000 to 76,000 µg/L) in groundwater around Landfill 5 exceeded the Maine Maximum Exposure Guideline (MEG) of 20,000 µg/L in B-304-B1 and B-307-B1. Concentrations of chloride (2,600 to 51,000 µg/L) and sulfate (17,000 to 31,000 µg/L) were less than the Federal Secondary Maximum Contaminant Level of 250,000 µg/L for each parameter. The range of sodium, chloride and sulfate concentrations detected in March 2016 was similar to the results from the previous semiannual detection monitoring in September 2015. Trace to low concentrations of iron and manganese were present in the three detection monitoring wells sampled. However, manganese was detected in the laboratory method blank at a concentration between the MDL and the RL. Therefore, the manganese results were qualified consistent with the *National Functional Guidelines* (August 2014).[2] The maximum concentrations of manganese (14.4 µg/L) and iron (100 µg/L) were less than the MPS for manganese (500 µg/L) and the Maine MEG for iron (5,000 µg/L).

Total recoverable phenolics were detected in B-304-B1 at 15 µg/L, an estimated concentration that was less than the compound's RL, but not in the duplicate sample from B-304-B1. A field blank associated with the Landfill 5 samples also contained an estimated concentration of 19 µg/L of total recoverable phenolics. Therefore, the phenolics result for B-304-B1 was qualified as not detected at the laboratory's RL of 30 µg/L. For reference, the Maine MEG for phenol is 2,000 µg/L. Four replicate samples from B-304-B1 and its duplicate, and B-307-B1 and B-307-B2 were analyzed for TOC and TOX as part of detection monitoring at Landfill 5. TOC and TOX replicate results at each location were averaged. The TOC results were qualified because of the presence of TOC in the associated field blank at concentrations between the MDL and the laboratory RL. TOC concentrations in the B-304-B1 duplicate pair were greater than the RL; therefore, based on professional judgement the results were accepted as reported by the laboratory but qualified (B) to indicate TOC in the field blank. Detectable TOC concentrations in two of the B-307-B1 replicates and all four of the B-307-B2 replicates were between the MDL and RL, and the averaged replicate results were qualified as not detected at the RL. TOX was not detected in the replicate samples from the Landfill 5 area wells.

An influent sample from the combined flow from the Landfill 1 Area groundwater IES (MW-601, EW-1, EW-2, EW-3, and EW-4) was obtained at the Site Treatment Plant and submitted to the laboratory for analysis of a suite of parameters. Analytical results for the influent sample are summarized in Table 7. Mercury and chloropicrin concentrations were comparable with the historical ranges for these groundwater quality parameters detected in the Landfill 1 Area and in recent influent testing.

GROUNDWATER QUALITY SUMMARY

A comparison of the March 2016 first quarter sample results to the MPS for mercury and VOCs indicated the following groundwater quality:

- Landfill 1 Area – The MPS for mercury (2 µg/L) was exceeded in monitoring wells B-326-O2, B-326-O3, MW-402-O1, MW-501-O1, MW-512-O1 and MW-513-O1 (4.1 to 214 µg/L).

- Former Manufacturing Area – The detection of mercury in MW-510-O1 (2.7 µg/L) slightly exceeded the MPS. VOC and chloropicrin detections did not exceed the MPS.

- Landfills 3 and 4 – Mercury was detected at concentrations greater than the MPS in the groundwater obtained from MW-506-B1 (10.3 µg/L) at Landfill 4, but was less than the MPS in downgradient monitoring wells MW-410-B1 (0.93 µg/L) and P-2A (1.2 µg/L) near Landfills 3 and 4. Carbon tetrachloride was detected in concentrations greater than the MPS of 3 µg/L in MW-506-B1 (9.9 µg/L), MW-410-B1 (6.4 µg/L) and P-2A (3.1 µg/L). These results were consistent with previous quarterly sampling rounds at the Site.

- Landfill 5 – Detectable mercury was not present in the groundwater samples obtained from the wells sampled around Landfill 5. Detectable VOC concentrations were less than the MPS.

- Ferry Road Area and Residential Wells – Mercury was not detected above the laboratory RL, and thus not above the MPS, in the southwestern part of the Site or in the two residential wells sampled on Ferry Road, consistent with results from the last five years of routine water quality monitoring.

WATER LEVEL MONITORING

Groundwater levels along the landfill ridge area exhibited varying movement since the fourth quarter December 2015 sampling round. By the March 2016 quarterly sampling round, groundwater elevations in the deeper bedrock wells were about two feet higher than in December 2015, while over the same period water levels averaged a decrease of about one foot in wells screened in shallow bedrock and soil. In the lower topography (former Manufacturing Area, Landfill 1 Area, and Ferry Road Area), groundwater levels averaged about one foot lower than measured in the fourth quarter monitoring of 2015. Groundwater levels in several wells between the Penobscot River and the former Manufacturing Area fluctuate daily because of the effect of the daily tidal cycle in the Penobscot River. Therefore,

water level readings are not static in the tidally-influenced wells. To achieve a more refined estimate of groundwater elevations in the tidally-affected Landfill 1 Area wells sampled, a daily average groundwater elevation was calculated from the wells or nearby piezometers that were equipped with pressure transducers. The transducer data indicated the groundwater elevations associated with the Landfill 1 Area wells were about 0.2 to 0.5 feet higher in the March 2016 sampling round than the December 2015 sampling round.

Climatological data obtained from the on-site weather station recorded a similar amount of rainfall (about 14 inches) that preceded the 3-month period prior to the March 2016 and December 2015 quarterly sampling rounds. This is consistent with the comparable groundwater levels measured between the last two quarterly rounds.

Over an annual period, the groundwater levels in wells monitored along the landfill ridge averaged about 2.5 feet higher in March 2016 sampling round compared to March 2015. Averaged groundwater levels in the former Manufacturing Area wells were about 0.6 feet higher, but lower in the Ferry Road Area. Monthly transducer data averaged from the Landfill 1 Area wells sampled indicated about 0.8-foot higher groundwater elevation in March 2016 compared to March 2015.

Rainfall data from the on-site weather station recorded about twice as much precipitation in the 6-month period before March 2016 (about 27 inches) than the same period prior to March 2015 (about 15 inches). The additional rainfall provided adequate recharge to groundwater, which was reflected in the higher groundwater elevations, especially along the landfill ridge area. Abnormally dry conditions in the region surrounding the Site have not existed since the end of September 2015 (U.S. Drought Monitor).[5]

SCHEDULE FOR FUTURE MONITORING

The second quarter 2016 groundwater sampling event at the Orrington Remediation Site was completed during the week of June 6, 2016 after SME notified MEDEP of the schedule for the this monitoring event. In addition to the routine monitoring, groundwater samples were also obtained from the five interim groundwater extraction wells that are operating in the Landfill 1 Area. Results of the June 2016 sampling round will be forthcoming in the separate submittal.

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[5] *U.S. Drought Monitor*, (http://droughtmonitor.unl.edu), accessed June 10, 2016.

If you have any questions concerning the March 2016 groundwater quality results, please do not hesitate to contact Bill Metzger or me.

Very truly yours,

SEVEE & MAHER ENGINEERS, INC.

John E. Sevee, P.E., C.G.

Attachments:

Figure 1 – Well Locations
Groundwater Monitoring Results Summary - Tables 1 through 8
Data Tables
Relative Percent Difference for Duplicate Samples
Field Data Sheets
Alpha Analytical Correspondence - June 22, 2016

FIGURE 1 – WELL LOCATIONS

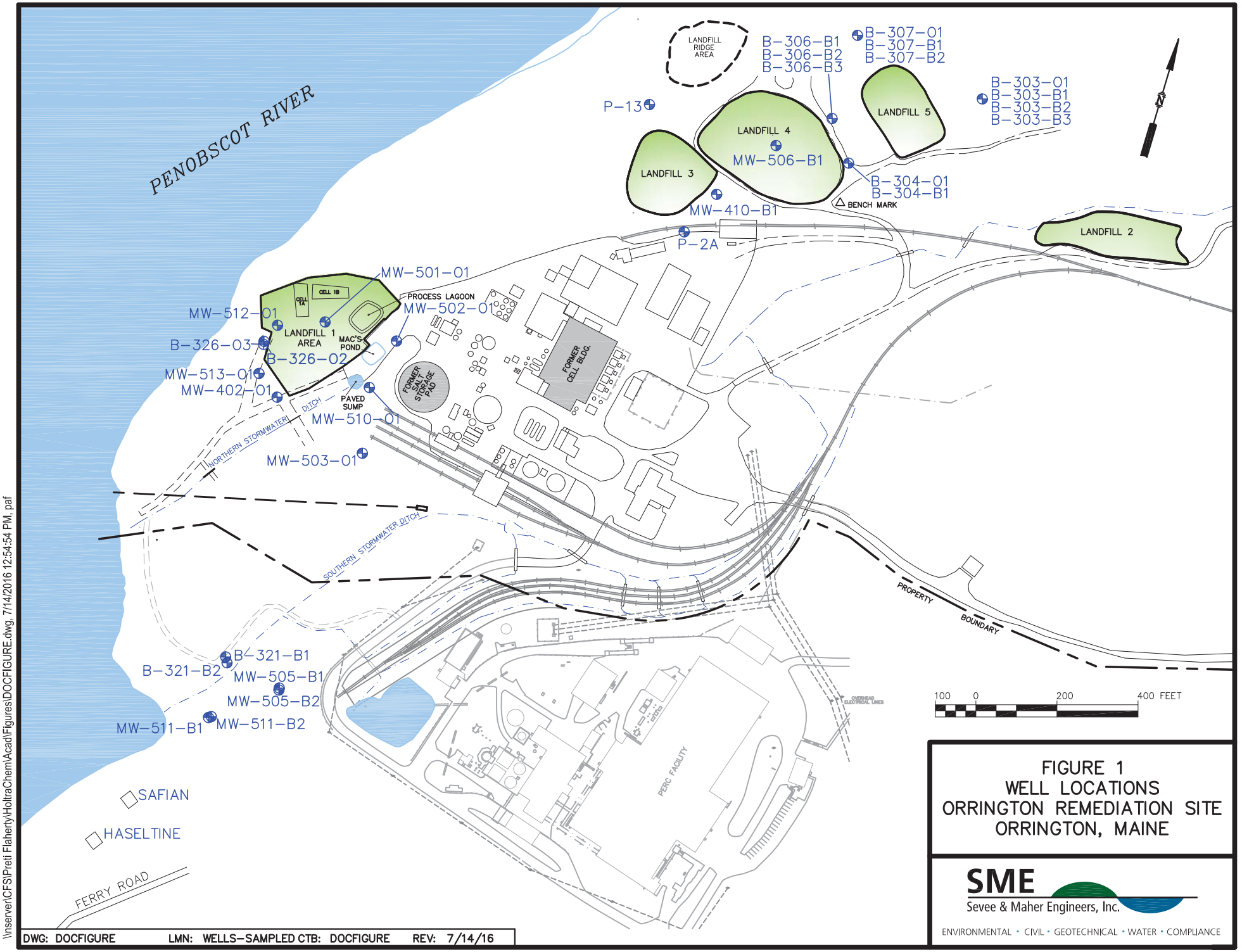

FIGURE 1
WELL LOCATIONS
ORRINGTON REMEDIATION SITE
ORRINGTON, MAINE

SME
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DWG: DOCFIGURE LMN: WELLS-SAMPLED CTB: DOCFIGURE REV: 7/14/16

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GROUNDWATER MONITORING RESULTS SUMMARY
TABLES 1 THROUGH 8

SME
Sevee & Maher Engineers, Inc.

TABLE 1
FIRST QUARTER MARCH 2016
GROUNDWATER MONITORING RESULTS

Parameters	Ferry Road Monitoring Well Locations								
	Haseltine	(DUP-2) Haseltine	Safian	B-321-B1	B-321-B2	MW-505-B1	MW-505-B2	MW-511-B1	MW-511-B2
	03/14/16	03/14/16	03/14/16	03/14/16	03/14/16	03/15/16	03/15/16	03/14/16	03/16/16
Mercury (mg/L)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chloride (mg/L)	1,300	1,300	690	2,000	790	2,300	2,000	2,400	2,400
Specific Conductance (µS/cm @25°C)	4,515	NA	2,541	5,579	2,820	7,937	7,051	8,004	7,855
pH (Standard Units)	7.56	NA	7.83	7.18	7.4	7.18	7.21	7.09	7.15
Temperature (Degrees Celcius)	8.1	NA	7.7	7.6	7.8	8.5	6.8	7.4	7.5
Salinity (g/L)	2.48	NA	1.35	3.11	1.51	4.54	4	4.58	4.49
Turbidity (field) (NTU)	2.9	NA	32.2	5	9.5	0.3	0.1	0.4	0.2
Dissolved Oxygen (mg/L)	7.9	NA	5.9	0.5	2	0.3	1	0.3	1.4
VOCs									
Acetone (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
m,p-Xylene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyltertiarybutylether (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichlorethene (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloropicrin (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA

Abbreviations:

NA = Parameter is not included in routine quarterly monitoring

< = Not detected above the reported sample detection limit

TABLE 2
FIRST QUARTER MARCH 2016
GROUNDWATER MONITORING RESULTS

Former Manufacturing Area Monitoring Well Locations					
Parameters	**MW-502-O1**	**MW-503-O1**	**MW-510-O1**	**(DUP-4) MW-510-O1**	**(FB-1) Field Blank**
	03/23/16	**03/14/16**	**03/14/16**	**03/14/16**	**03/23/16**
Mercury (mg/L)	0.00035	I	0.0027	0.00269	< 0.0002
Specific Conductance (µS/cm @25°C)	1,477	I	43,280	NA	NA
pH (Standard Units)	7.89	I	7.72	NA	NA
Temperature (Degrees Celcius)	8.3	I	7.2	NA	NA
Salinity (g/L)	0.76	I	28.83	NA	NA
Turbidity (field) (NTU)	0.3	I	0.6	NA	NA
Dissolved Oxygen (mg/L)	7.1	I	4.9	NA	NA
VOCs					
Acetone (µg/L)	5 U	I	2.5 J	2.4 J	5 U
Chloroform (µg/L)	1.6	I	7.6	8.3	< 0.75
Carbon Tetrachloride (µg/L)	< 0.5	I	0.16	0.115	< 0.5
Benzene (µg/L)	< 0.5	I	< 0.5	< 0.5	< 0.5
Toluene (µg/L)	< 0.75	I	0.52 J	0.47 J	< 0.75
Ethylbenzene (µg/L)	< 0.5	I	< 0.5	< 0.5	< 0.5
Carbon Disulfide (µg/L)	< 1	I	< 1	< 1	< 1
o-Xylene (µg/L)	< 1	I	< 1	< 1	< 1
m,p-Xylene (µg/L)	< 1	I	< 1	< 1	< 1
Methyltertiarybutylether (µg/L)	< 1	I	< 1	< 1	< 1
Trichloroethene (µg/L)	< 0.5	I	0.3 J	0.36 J	< 0.5
Naphthalene (µg/L)	< 1	I	< 1	< 1	< 1
1,1-Dichloroethene (µg/L)	< 0.5	I	0.38 J	0.44 J	< 0.5
Dibromochloromethane (µg/L)	< 0.5	I	< 0.5	< 0.5	< 0.5
Tetrachloroethene (µg/L)	< 0.5	I	< 0.5	< 0.5	< 0.5
Bromodichloromethane (µg/L)	< 0.5	I	< 0.5	< 0.5	< 0.5
Bromoform (µg/L)	< 1	I	< 1	< 1	< 1
1,1,1-Trichloroethane (µg/L)	< 0.5	I	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane (µg/L)	< 0.75	I	< 0.75	< 0.75	< 0.75
cis-1,2-Dichlorethene (µg/L)	< 0.5	I	< 0.5	< 0.5	< 0.5
Chloroethane (µg/L)	< 1	I	< 1	< 1	< 1
Chloromethane (µg/L)	< 2	I	< 2	< 2	< 2
Bromomethane (µg/L)	< 1	I	< 1	< 1	< 1
Dichlorodifluoromethane (µg/L)	< 2	I	1.8 J	2	< 2
Chloropicrin (µg/L)	< 0.212	I	6.65	6.4	< 0.208

Abbreviations:

I = The location yielded insufficient quantity of water to collect a sample

J = Analyte was positively identified/Associated value is an estimate below reporting limit

U = Sample result qualified as not detected at the reporting limit due to presence in an associated blank

NA = Parameter was not analyzed

< = Not detected above the reported sample detection limit

TABLE 3
FIRST QUARTER MARCH 2016
GROUNDWATER MONITORING RESULTS

Parameters	Landfill 1 Area Monitoring Well Locations							
	B-326-O2	B-326-O3	MW-402-O1	MW-501-O1	MW-512-O1	MW-513-O1	(DUP-1) MW-513-O1	(FB-2) Field Blank
	03/22/16	03/22/16	03/23/16	03/23/16	03/22/16	03/22/16	03/22/16	03/22/16
Mercury (mg/L)	0.0124	0.00414	0.00669	0.214	0.00485	0.0141	0.0141	< 1
Chloride (mg/L)	240	32	780	NA	94	260	250	< 0.5
Specific Conductance (µS/cm @25°C)	1,069	507	2,864	1,402	601	1,140	NA	NA
pH (Standard Units)	7.32	6.88	7.46	7.03	6.96	7.36	NA	NA
Temperature (Degrees Celcius)	8.5	8.2	9.2	8.9	8.5	10	NA	NA
Salinity (g/L)	0.55	0.25	1.53	0.72	0.3	0.58	NA	NA
Turbidity (field) (NTU)	0.5	1	0.2	1.2	0.1	0.4	NA	NA
Dissolved Oxygen (mg/L)	5.1	7.7	10.7	4.7	8.8	4.8	NA	NA
VOCs								
Acetone (µg/L)	NA	NA	NA	5 U	NA	NA	NA	NA
Chloroform (µg/L)	NA	NA	NA	3.1	NA	NA	NA	NA
Carbon Tetrachloride (µg/L)	NA	NA	NA	0.15 J	NA	NA	NA	NA
Benzene (µg/L)	NA	NA	NA	< 0.5	NA	NA	NA	NA
Toluene (µg/L)	NA	NA	NA	< 0.75	NA	NA	NA	NA
Ethylbenzene (µg/L)	NA	NA	NA	< 0.5	NA	NA	NA	NA
Carbon Disulfide (µg/L)	NA	NA	NA	< 1	NA	NA	NA	NA
o-Xylene (µg/L)	NA	NA	NA	< 1	NA	NA	NA	NA
m,p-Xylene (µg/L)	NA	NA	NA	< 1	NA	NA	NA	NA
Methyltertiarybutylether (µg/L)	NA	NA	NA	< 1	NA	NA	NA	NA
Trichloroethene (µg/L)	NA	NA	NA	4	NA	NA	NA	NA
Naphthalene (µg/L)	NA	NA	NA	< 1	NA	NA	NA	NA
1,1-Dichloroethene (µg/L)	NA	NA	NA	< 0.5	NA	NA	NA	NA
Dibromochloromethane (µg/L)	NA	NA	NA	< 0.5	NA	NA	NA	NA
Tetrachloroethene (µg/L)	NA	NA	NA	0.93	NA	NA	NA	NA
Bromodichloromethane (µg/L)	NA	NA	NA	< 0.5	NA	NA	NA	NA
Bromoform (µg/L)	NA	NA	NA	< 1	NA	NA	NA	NA
1,1,1-Trichloroethane (µg/L)	NA	NA	NA	0.32 J	NA	NA	NA	NA
1,1,2-Trichloroethane (µg/L)	NA	NA	NA	< 0.75	NA	NA	NA	NA
cis-1,2-Dichlorethene (µg/L)	NA	NA	NA	0.2 J	NA	NA	NA	NA
Chloroethane (µg/L)	NA	NA	NA	< 1	NA	NA	NA	NA
Chloromethane (µg/L)	NA	NA	NA	< 2	NA	NA	NA	NA
Bromomethane (µg/L)	NA	NA	NA	< 1	NA	NA	NA	NA
Dichlorodifluoromethane (µg/L)	NA	NA	NA	0.62 J	NA	NA	NA	NA
Chloropicrin (µg/L)	NA	NA	NA	< 0.206	NA	NA	NA	NA

Abbreviations:

J = Analyte was positively identified/Associated value is an estimate below reporting limit

U = Sample result qualified as not detected at the reporting limit due to presence in an associated blank

NA = Parameter was not analyzed

< = Not detected above the reported sample detection limit

TABLE 4
FIRST QUARTER MARCH 2016
GROUNDWATER MONITORING RESULTS

Landfills 3 & 4 Monitoring Well Locations					
Parameters	**P-2A**	**(DUP-5) P-2A**	**P-13**	**MW-410-B1**	**MW-506-B1**
	03/23/16	**03/23/16**	**03/22/16**	**03/24/16**	**03/24/16**
Mercury (mg/L)	0.00119	0.001	0.00006	0.00093	0.0103
Specific Conductance (µS/cm @25°C)	516	NA	292	487	1,438
pH (Standard Units)	7	NA	7.7	6.8	7.38
Temperature (Degrees Celcius)	6.8	NA	7.3	6.8	6.1
Salinity (g/L)	0.26	NA	0.15	0.24	0.74
Turbidity (field) (NTU)	0.3	NA	0.3	0.5	2.1
Dissolved Oxygen (mg/L)	7.3	NA	11.9	5	2.9
VOCs					
Acetone (µg/L)	5 U	5 U	5 U	< 5	1.6 J
Chloroform (µg/L)	3.3	3.2	0.35 J	4.4	4.3
Carbon Tetrachloride (µg/L)	3.1	3	0.58	6.4	9.9
Benzene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Toluene (µg/L)	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75
Ethylbenzene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Disulfide (µg/L)	< 1	< 1	< 1	< 1	< 1
o-Xylene (µg/L)	< 1	< 1	< 1	< 1	< 1
m,p-Xylene (µg/L)	< 1	< 1	< 1	< 1	< 1
Methyltertiarybutylether (µg/L)	< 1	< 1	< 1	< 1	< 1
Trichloroethene (µg/L)	< 0.5	< 0.5	< 0.5	0.2 J	0.65
Naphthalene (µg/L)	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	0.21 J
Bromodichloromethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform (µg/L)	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane (µg/L)	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75
cis-1,2-Dichlorethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane (µg/L)	< 1	< 1	< 1	< 1	< 1
Chloromethane (µg/L)	< 2	< 2	< 2	< 2	< 2
Bromomethane (µg/L)	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane (µg/L)	< 2	< 2	< 2	< 2	< 2
Chloropicrin (µg/L)	NA	NA	NA	NA	NA

Abbreviations:

J = Analyte was positively identified/Associated value is an estimate below reporting limit

U = Sample result qualified as not detected at the reporting limit due to presence in an associated blank

NA = Parameter was not analyzed

< = Not detected above the reported sample detection limit

TABLE 5
FIRST QUARTER MARCH 2016
GROUNDWATER MONITORING RESULTS

Parameters	Landfill 5 Monitoring Well Locations													
	B-303-B1	B-303-B2	B-303-B3	B-303-O1	B-304-B1	(DUP-3) B-304-B1	B-304-O1	B-306-B1	B-306-B2	B-306-B3	B-307-B1	B-307-B2	B-307-O1	(FB-3) Field Blank
	03/22/16	03/22/16	03/22/16	03/22/16	03/23/16	03/23/16	03/23/16	03/22/16	03/22/16	03/23/16	03/23/16	03/23/16	03/23/16	03/23/16
Mercury (mg/L)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	I	< 0.0002	< 0.0002	I	< 0.0002	< 0.0002	I	< 0.0002
Chloride (mg/L)	NA	NA	NA	NA	51	51	I	NA	NA	I	2.6	2.6 J [2]	I	< 0.5
Sulfate (mg/L)	NA	NA	NA	NA	17	17	I	NA	NA	I	31	24	I	< 1.0
Total Organic Carbon (mg/L) [1]	NA	NA	NA	NA	0.77 B	0.73 B	I	NA	NA	I	0.5 U	0.5 U	I	0.22 J
Total Recoverable Phenolics (ug/L)	NA	NA	NA	NA	30 U	< 30	I	NA	NA	I	< 30	< 30	I	19 J
Total Organic Halides (mg/L) [1]	NA	NA	NA	NA	< 0.1	< 0.1	I	NA	NA	I	< 0.1	< 0.1	I	< 0.1
Specific Conductance (µS/cm @25°C)	162	157	145	152	500	NA	I	1724	1348	I	269	226	I	NA
pH (Standard Units)	7.93	7.48	7.37	7.1	7.24	NA	I	8.47	7.48	I	8.38	8.85	I	NA
Temperature (Degrees Celcius)	10.4	10.1	11.2	6.7	0.7	NA	I	0.8	6.3	I	1.6	1.1	I	NA
Salinity (g/L)	0.08	0.08	0.07	0.08	0.25	NA	I	0.9	0.69	I	0.13	0.11	I	NA
Turbidity (field) (NTU)	7.4	7.4	6	5.2	6.2	NA	I	6.7	6.9	I	6.4	6.4	I	NA
Dissolved Oxygen (mg/L)	0.1	< 0.05	0.6	0.4	0.2	NA	I	1.5	0.5	I	4.2	1.3	I	NA
Iron (mg/L)	NA	NA	NA	NA	0.036 J	< 0.05	I	NA	NA	I	0.1	< 0.05	I	< 0.05
Manganese (mg/L)	NA	NA	NA	NA	0.0144 B	0.0129 B	I	NA	NA	I	0.01 U	< 0.01	I	< 0.01
Sodium (mg/L)	NA	NA	NA	NA	76	75	I	NA	NA	I	27	15	I	< 2.0
VOCs														
Acetone (µg/L)	5 U	5 U	5 U	5 U	NA	NA	NA	5 U	5 U	NA	NA	NA	NA	35 B
Chloroform (µg/L)	< 0.75	< 0.75	< 0.75	< 0.75	NA	NA	NA	1.4	< 0.75	NA	NA	NA	NA	< 0.75
Carbon Tetrachloride (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Benzene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Toluene (µg/L)	< 0.75	< 0.75	< 0.75	< 0.75	NA	NA	NA	< 0.75	< 0.75	NA	NA	NA	NA	< 0.75
Ethylbenzene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Carbon Disulfide (µg/L)	< 1	< 1	< 1	< 1	NA	NA	NA	< 1	< 1	NA	NA	NA	NA	< 1
o-Xylene (µg/L)	< 1	< 1	< 1	< 1	NA	NA	NA	< 1	< 1	NA	NA	NA	NA	< 1
m,p-Xylene (µg/L)	< 1	< 1	< 1	< 1	NA	NA	NA	< 1	< 1	NA	NA	NA	NA	< 1
Methyltertiarybutylether (µg/L)	< 1	< 1	< 1	< 1	NA	NA	NA	< 1	< 1	NA	NA	NA	NA	< 1
Trichloroethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Naphthalene (µg/L)	< 1	< 1	< 1	< 1	NA	NA	NA	< 1	< 1	NA	NA	NA	NA	< 1
1,1-Dichloroethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Dibromochloromethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Tetrachloroethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Bromodichloromethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Bromoform (µg/L)	< 1	< 1	< 1	< 1	NA	NA	NA	< 1	< 1	NA	NA	NA	NA	< 1
1,1,1-Trichloroethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
1,1,2-Trichloroethane (µg/L)	< 0.75	< 0.75	< 0.75	< 0.75	NA	NA	NA	< 0.75	< 0.75	NA	NA	NA	NA	< 0.75
cis-1,2-Dichlorethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	NA	NA	NA	NA	< 0.5
Chloroethane (µg/L)	< 1	< 1	< 1	< 1	NA	NA	NA	< 1	< 1	NA	NA	NA	NA	< 1
Chloromethane (µg/L)	< 2	< 2	< 2	< 2	NA	NA	NA	< 2	< 2	NA	NA	NA	NA	< 2
Bromomethane (µg/L)	< 1	< 1	< 1	< 1	NA	NA	NA	< 1	< 1	NA	NA	NA	NA	< 1
Dichlorodifluoromethane (µg/L)	< 2	< 2	< 2	< 2	NA	NA	NA	< 2	< 2	NA	NA	NA	NA	< 2
Chloropicrin (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Abbreviations:

B = Sample result greater than the reporting limit, parameter detected in an associated blank

I = The location yielded insufficient quantity of water to collect a sample

J = Analyte was positively identified/Associated value is an estimate below reporting limit

U = Sample result qualified as not detected at the reporting limit due to presence in an associated blank

NA = Parameter was not analyzed

< = Not detected above the reported sample detection limit

Notes:

1. Value for total organic carbon and total organic halides is the average of four replicates.
2. Qualified (J) due to a Relative Percent Difference exceeding 20% between B-307-B2 and its laboratory duplicate.

TABLE 6
FIRST QUARTER MARCH 2016
GROUNDWATER MONITORING RESULTS

Parameters	Landfill 5 Monitoring Well Locations							
	B-304-B1	(DUP-3) B-304-B1	B-304-O1	B-306-B3	B-307-B1	B-307-B2	B-307-O1	(FB-3) Field Blank
	03/23/16	03/23/16	03/23/16	03/23/16	03/23/16	03/23/16	03/23/16	03/23/16
Total Organic Halides - 1 (mg/L)	< 0.1	< 0.1	I	I	< 0.1	< 0.1	I	< 0.1
Total Organic Halides - 2 (mg/L)	< 0.1	< 0.1	I	I	< 0.1	< 0.1	I	< 0.1
Total Organic Halides - 3 (mg/L)	< 0.1	< 0.1	I	I	< 0.1	< 0.1	I	< 0.1
Total Organic Halides - 4 (mg/L)	< 0.1	< 0.1	I	I	< 0.1	< 0.1	I	< 0.1
Total Organic Carbon - 1 (mg/L)	0.81 B	0.75 B	I	I	0.5 U	0.5 U	I	0.21 J
Total Organic Carbon - 2 (mg/L)	0.75 B	0.75 B	I	I	0.58 B	0.5 U	I	0.20 J
Total Organic Carbon - 3 (mg/L)	0.76 B	0.69 B	I	I	0.5 U	0.5 U	I	0.24 J
Total Organic Carbon - 4 (mg/L)	0.74 B	0.73 B	I	I	0.54 B	0.5 U	I	0.23 J

Abbreviations:

B = Sample result greater than the reporting limit, parameter detected in an associated blank

I = The location yielded insufficient quantity of water to collect a sample

J = Analyte was positively identified/Associated value is an estimate below reporting limit

U = Sample result qualified as not detected at the reporting limit due to presence in an associated blank

< = Not detected above the reported sample detection limit

TABLE 7
FIRST QUARTER MARCH 2016
GROUNDWATER MONITORING RESULTS

Groundwater Treatment Plant	
Parameters	**IEW Influent [1]**
	03/22/16
Mercury (mg/L)	0.0205
Chloride (mg/L)	250
Sulfate (mg/L)	26 B
Alkalinity (mg/L as $CaCO_3$)	158
Specific Conductance (µS/cm @25°C)	1,134
pH (Standard Units)	7.36
Temperature (Degrees Celcius)	10.4
Salinity (g/L)	0.58
Turbidity (field) (NTU)	0.3
Dissolved Oxygen (mg/L)	7.5
Iron (mg/L)	0.02 J
Manganese (mg/L)	0.0457
Sodium (mg/L)	179
VOCs	
Acetone (µg/L)	< 50
Chloroform (µg/L)	< 7.5
Carbon Tetrachloride (µg/L)	< 5 (< 1.3)[2]
Benzene (µg/L)	< 5
Toluene (µg/L)	< 7.5
Ethylbenzene (µg/L)	< 5
Carbon Disulfide (µg/L)	< 10
o-Xylene (µg/L)	< 10
m,p-Xylene (µg/L)	< 10
Methyltertiarybutylether (µg/L)	< 10
Trichloroethene (µg/L)	< 5
Naphthalene (µg/L)	< 10
1,1-Dichloroethene (µg/L)	< 5 (< 1.4)[2]
Dibromochloromethane (µg/L)	< 5
Tetrachloroethene (µg/L)	< 5
Bromodichloromethane (µg/L)	< 5
Bromoform (µg/L)	< 10
1,1,1-Trichloroethane (µg/L)	< 5
1,1,2-Trichloroethane (µg/L)	< 7.5
cis-1,2-Dichlorethene (µg/L)	< 5
Chloroethane (µg/L)	< 10
Chloromethane (µg/L)	< 20
Bromomethane (µg/L)	< 10
Dichlorodifluoromethane (µg/L)	< 20
Chloropicrin (µg/L)	4,600

Note:

1. Influent represents combined flow from the five Landfill 1 Area Interim Extraction Wells (IEWs)
2. Reporting limit (method detection limit)

Abbreviations:

B = Sample result greater than the reporting limit, parameter detected in an associated blank

J = Analyte was positively identified/Associated value is an estimate below reporting limit

< = Not detected above the reported sample detection limit.

TABLE 8
FIRST QUARTER MARCH 2016
GROUNDWATER MONITORING RESULTS

Trip Blanks						
Parameters	**QCBT (8F0)**	**QCBT (8F1)**	**QCBT (8F2)**	**QCBT (8F3)**	**RE QCBT (8G6)**	**QCBT (8G7)**
	03/22/16	**03/22/16**	**03/22/16**	**03/24/16**	**03/22/16**	**03/23/16**
VOCs						
Acetone (µg/L)	4.9 J	5.3	4.3 J	< 5	NA	NA
Chloroform (µg/L)	< 0.75	< 0.75	< 0.75	< 0.75	NA	NA
Carbon Tetrachloride (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Benzene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Toluene (µg/L)	< 0.75	< 0.75	< 0.75	< 0.75	NA	NA
Ethylbenzene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Carbon Disulfide (µg/L)	< 1	< 1	< 1	< 1	NA	NA
o-Xylene (µg/L)	< 1	< 1	< 1	< 1	NA	NA
m,p-Xylene (µg/L)	< 1	< 1	< 1	< 1	NA	NA
Methyltertiarybutylether (µg/L)	< 1	< 1	< 1	< 1	NA	NA
Trichloroethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Naphthalene (µg/L)	< 1	< 1	< 1	< 1	NA	NA
1,1-Dichloroethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Dibromochloromethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Tetrachloroethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Bromodichloromethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Bromoform (µg/L)	< 1	< 1	< 1	< 1	NA	NA
1,1,1-Trichloroethane (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
1,1,2-Trichloroethane (µg/L)	< 0.75	< 0.75	< 0.75	< 0.75	NA	NA
cis-1,2-Dichlorethene (µg/L)	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA
Chloroethane (µg/L)	< 1	< 1	< 1	< 1	NA	NA
Chloromethane (µg/L)	< 2	< 2	< 2	< 2	NA	NA
Bromomethane (µg/L)	< 1	< 1	< 1	< 1	NA	NA
Dichlorodifluoromethane (µg/L)	< 2	< 2	< 2	< 2	NA	NA
Chloropicrin (µg/L)	NA	NA	NA	NA	< 0.206	< 0.205

Abbreviations:

J = Analyte was positively identified/Associated value is an estimate below reporting limit

NA = Parameter was not analyzed

< = Not detected above the reported sample detection limit