

May 6, 2015

Ms. Stacy Ladner
Unit Manager
Division of Oil & Hazardous Waste Facility Regulation
Bureau of Remediation and Waste Management
Maine Department of Environmental Protection
17 State House Station
Augusta ME 04333

**Subject: Monthly Progress Report – April 2015
Orrington Remediation Site
Orrington, Maine**

Dear Ms. Ladner:

This Monthly Progress Report is submitted to Maine Department of Environmental Protection (MEDEP) in compliance with reporting requirements in the Board of Environmental Protection (BEP) Order (Order) effective April 3, 2014 for the Orrington Remediation Site (Site) in Orrington, Maine, which incorporates, with modifications, the Compliance Order issued by the MEDEP dated November 24, 2008. This Report covers the period from **April 1 – 30, 2015**, and is submitted on behalf of Mallinckrodt US LLC.

If you have any questions regarding this report please feel free to contact me at 314-281-5947.

Sincerely,



Kathy Zeigler
Director, Environmental Remediation

cc: Patricia Duft – Mallinckrodt US LLC
Melanie Loyzim - Maine Department of Environmental Protection
Paul White – Town of Orrington
Audrey Snowden – Orrington Town Library

**MONTHLY PROGRESS REPORT
ORRINGTON REMEDIATION SITE
Orrington, Maine
April 2015**

Report Date: May 6, 2015

This Monthly Progress Report is submitted to the Maine Department of Environmental Protection (MEDEP) documenting the activities completed by Mallinckrodt US LLC (Mallinckrodt) and/or its representatives at the Orrington Remediation Site (the Site) along with a description of upcoming activities.

1. A discussion of all tasks and actions completed during the reporting period toward achieving compliance with the Order

- Meet with MEDEP on April 30, 2015 to discuss the Logistics Work Plan, Landfill Ridge CMIP (Design), comments on the Landfills 1 & 2 Phase II Work Plan and the Plant Area Phase I PD Work Plan.
- Submitted payment to MEDEP for 2015 Oversight costs per the March 18, 2015 request.
- Submitted the Logistics Work Plan to MEDEP on April 15, 2015.
- Submitted a request to MEDEP on Apr 27, 2015 to approve the construction of certain site-wide features prior to beginning construction in the fall 2015. These include the temporary soil stockpile area, rail loading area and repair and paving of plant area access roads.
- Began drafting permit requests and applications for a number of agencies and activities. (Details of each permit will be provided in this monthly report once submitted.)
- Submitted information to the Maine Department of Inland Fisheries and Wildlife Regional Biologist on April 6, 2015 and received a response from the US Fish & Wildlife Maine Office on April 7, 2015 regarding resources in and/or near the Site.
- Mobilized and set up additional trailer for on-site laboratory on April 15, 2015.
- Responded to the Department of Health and Human Services (DHHS) comments (March 29, 2015) on April 14, 2015.
- Facility Dismantling Plan
 - Collected confirmation samples from the Leach Field and Nitromethane areas and surveyed sampling locations.
- Landfill Ridge Area
 - Submitted the CMIP (design) for the Landfill Ridge Area to MEDEP on April 15, 2015.
- Landfills 1-5
 - Received MEDEP comments on the Landfills 1 & 2 Phase II Pre-Design Work Plan on April 10, 2015.
 - Submitted a Phase 7 Addendum 1 Modification request to MEDEP on Apr 24, 2015 which would restore the Leach Field area to a flat area (with appropriate storm water runoff) instead of backfilling the excavations to the original elevations.
- Plant Area
 - Submitted the Plant Area Pre-Design Phase I Work Plan to MEDEP on April 3, 2015.
- Southern Cove
 - Began preparations for the Southern Cove Pre-Design field work.
- Comprehensive Monitoring Plan
 - Received MEDEP comments on the Landfill 2 Current Conditions Work Plan on April 10, 2015; submitted a response to comments and a Revised Landfill 2 Current Conditions Work Plan to MEDEP on April 23, 2015.
 - Submitted a response to comments and a Revised Ferry Road Current Conditions Work Plan to MEDEP on April 15, 2015.

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- Groundwater
 - Submitted the March 2015 Interim Extraction System operation summary, including laboratory EGAD EDDs, to MEDEP on April 10, 2015.
 - Collected grab groundwater samples from the five extraction wells on April 13, 2015, and submitted for laboratory analysis of mercury, chloropicrin, and chloride.
 - Installed pressure transducers in piezometers PZ14-12 and PZ14-13 on April 27, 2015.
 - Recorded manual and transducer water levels at extraction wells and nearby monitoring wells on April 1, 2015.
 - Downloaded and reviewed pressure transducer data, and assessed water level elevations during operation of the interim extraction well system.
 - Began drafting the First Quarter 2015 Groundwater Quality Sampling Results.
 - Continued updates to the three-dimensional groundwater model.
 - Groundwater Treatment Plant (GWTP) Operation
 - Submitted the March eDMR to MEDEP on April 10, 2015.
 - Collected mercury compliance samples from Outfall 001 (3x/week with analysis per USEPA Method 1631) and Outfall 002 (one sample per discharge day with analysis per USEPA Method 245.1) for analysis by Katahdin Analytical Labs.
 - Collected additional samples on April 8, 2015 for volatiles, semivolatiles, herbicides, and manganese in compliance with the “new waste stream” requirements in the MEPDES permit. Samples were sent to Katahdin for analysis. This is the 4th month of the minimum 10 months required under the new wastestream sampling requirements.
 - Held a conference call on April 13, 2015 with Woodard & Curran, Geosyntec, CDM and Mallinckrodt to discuss contact water that may be generated during remedial activities.
 - Other Site Activities
 - Collected weather station data.
 - Completed routine maintenance activities.
2. **A detailed summary of all results of sampling, tests, shipments from the Site and other data received by Mallinckrodt in the prior (previous month) reporting period pursuant to this Order**
- Routine operational data is reported on the DMR per the MEPDES Permit. This will include the additional analyses for “new waste streams” as described above.
 - When applicable, weekly air monitoring data (Lumex readings) are provided to MEDEP via email.
 - Monthly weather station data is maintained electronically and available upon request.
 - Quarterly groundwater monitoring data is reported in the quarterly groundwater reports and/or the annual Landfill 5 monitoring report.
 - Analytical laboratory reports, including tables, laboratory EDDs, and complete EGAD EDDs, will be provided to MEDEP in a timely manner. These data packages will not be held until all data is received rather they will be provided to DEP on an ongoing basis so data can be reviewed and discussed as the work progresses.
 - Data submittals this month included:
 - March Interim Extraction System Operation summary and EDD
3. **A discussion of all tasks and actions scheduled for the coming reporting period including the date for initiating and completing such activities including percent completion where applicable.**
- Hold monthly conference call with MEDEP on May 6, 2015 to discuss site activities.
 - Receive and review responses to Site Review Requests from the various agencies.
 - Respond to any questions from MEDEP on the Logistics Work Plan.
 - Participate in the DHHS audit on May 7, 2015 regarding the DMA certification.

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- Facility Dismantling
 - Submit a modification request to MEDEP to install tarps over the remaining foundations without applying the sealant first.
 - Collect additional confirmation samples from the expanded Leach Field excavation area and backfill/grade all areas upon receipt of confirmation data below MPS criteria.
 - Submit the Phase 7 EGAD EDDs for all confirmatory sampling results from the Leach Field and Nitromethane Area.
 - Clean concrete and place tarps on chlorate building and laboratory concrete pads.
 - Groundwater
 - Collect grab groundwater quality samples from extraction wells, according to the revised Interim Extraction Well Work Plan and continue adjustments to system as needed.
 - Submit the April 2015 Interim Extraction System operation summary to MEDEP.
 - Comprehensive Monitoring Plan (CMP)
 - Receive MEDEP approval of the Ferry Road Current Conditions Assessment Work Plan.
 - Receive MEDEP's assessment of data gaps for the Plant Area and Landfill 1 areas.
 - Respond to MEDEP comments on the Revised Sediment Prevention Plan (July 2014).
 - Landfill Ridge Area
 - Respond to any questions from MEDEP on the Landfill Ridge Area CMIP.
 - Landfills 1-5
 - Install the gas probes at Landfill 4 in accordance with the follow-up information submitted to MEDEP on January 21 and 28, 2015. (weather permitting).
 - Plant Area
 - Respond to any questions from MEDEP on the Plant Area Pre-Design Phase I Work Plan.
 - Southern Cove
 - Receive MEDEP approval of the Revised Southern Cove Pre-Design Work Plan submitted March 25, 2015.
 - Groundwater Treatment Plant (GWTP) Operation
 - Participate in the planned GWTP visit/audit by MEDEP (Tanya Hovell) on May 5, 2015.
 - Continue compliance sampling of Outfall 001 and 002 as described above.
 - Continue the expanded monitoring and reporting program under the "new waste stream" requirement in the MEPDES permit as described above.
 - Submit April 2015 eDMR to MEDEP.
 - Submit the 2014 Annual Hazardous Waste Report and Universal Waste Reporting Form to MEDEP and USEPA (due date to be determined upon receipt of the Orrington Annual Hazardous Waste Report form from MEDEP.)
 - Other Site Activities
 - Complete routine maintenance activities.
 - Collect weather station data.
- 4. Tasks not completed as required, original and revised completion dates, reasons for delay, actions taken to minimize the delay and any other problems or anticipated problems**
- MEDEP approval on the Revised Southern Cove Pre-Design Work Plan is pending.
- 5. The quantity of waste shipped to the various disposal locations**
- None
- 6. Additional information regarding the progress of the work**
- None.