

Ms. Christine Matlock
Hazardous Waste Section
Michigan Department of Environmental Quality
525 West Allegan Street
Constitution Hall, 1S
Lansing, Michigan 48909

Subject:
Quarterly Progress Report – 3rd Quarter 2018
RACER Lansing Plants 2, 3, and 6 Industrial Land
USEPA I.D.s MID980700827 and MID005356928
2801 West Saginaw St., 2800 West Saginaw St., and 401 Verlinden St.
Lansing, Michigan

Dear Ms. Matlock:

Arcadis of Michigan, LLC (Arcadis) is submitting this Quarterly Progress Report on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust for Lansing Plants 2, 3, and 6, Industrial Land, in Lansing, Michigan (the Sites). Please note that to the extent possible quarterly progress report submittals have been in the form of project update presentations that RACER has shared with the Michigan Department of Environment Quality (MDEQ) during update meetings. However, no such meeting was held near the end of the third quarter 2018 so this written progress report has been prepared. Future progress reports will be in the form of project update presentations whenever possible.

This Quarterly Progress Report covers the period of July 1, 2018 through September 30, 2018. The following briefly summarizes the work performed and project schedule for various activities.

Work Performed

- The biosparge pre-design study was ongoing from July 1 through September 30. During this period routine operations, maintenance and monitoring (OMM) and performance monitoring was completed. Routine performance monitoring and OMM included:
 - Performance Monitoring: Groundwater samples were collected and analyzed for 1,4-dioxane and propane during the 3Q groundwater sampling event from September 5 through September 8.
 - Routine OMM: Routine OMM on the system was completed on the same schedule as performance monitoring. Routine OMM included general equipment inspections; a check of propane levels; inspection of the desiccant dryer; inspection of the in-line filters and collection of (propane) Lower Explosive Level (LEL) readings at select wells.
 - The bioreactor building was removed from the Site on August 22.

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Environment

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October 15, 2018

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Our ref:
B0064479.2018

- Second Quarter Progress Report (presentation format) was submitted to the MDEQ on July 24, 2018.
- Per MDEQ approval of the Interim Measures Work Plan for Plant 3 Storm Sewer Modifications on June 1, 2018, the following activities have been completed during the third quarter related to the Plant 3 storm sewer modifications:
 - Request for Proposal for the required work was submitted to prospective contractors on July 30th.
 - An onsite pre-bid meeting was held with prospective contractors on August 2nd and a Request for Proposal Addendum was issued to prospective contractors on August 14th.
 - Bids were received from prospective contractors on August 21st and the work was awarded to Job Site Services on August 28th.
 - Topsoil and backfill materials were sampled and submitted for laboratory analysis on September 11th.
 - Approval from the MDEQ to allow bypass pumping of groundwater generated during the storm sewer modification activities was received on September 25th.
- A Summary of Water Well Search Results within ¼ Mile of RACER Lansing Site Property Boundaries was submitted to the MDEQ on July 31, 2018.
- A Notice of Migration for Dunnebacke and Westside Parks was submitted to the City of Lansing on August 8. The Notice of Migration was submitted based on confirmation of offsite migration of PFAS above Groundwater Surface Water Interface (GSI) Criteria for perfluorooctanesulfonic acid (PFOS).
- Requested Vapor Intrusion Site Specific Criteria was received from the MDEQ on August 15, 2018.
- In accordance with the Natural Source Zone Deletion (NSZD) Work Plan, submitted to MDEQ on March 20, 2018 and approved by MDEQ on May 16, 2018 the following work was performed during third quarter 2018:
 - Concrete cores were completed for installation of the CO₂ flux chambers during August 15th through 17th.
 - Initial data collection was completed from August 22nd through 26th, which included CO₂/methane flux measurements, temperature profiles, and soil vapor screening.
- Between September 4th and September 6th, the third quarter groundwater monitoring event was completed. This event included the following:
 - Gauging and sampling of thirty one (31) groundwater monitoring wells. Three (3) monitoring wells were analyzed for 1,4-dioxane; twenty (20) monitoring wells were analyzed for Per and Polyfluoroalkyl Substances (PFAS).
 - Gauging of 24 LNAPL monitoring wells.
- The Plant 2 and Plant 6 PFAS Sampling Memo, summarizing the Plant 2 and 6 PFAS monitoring well sampling results, was submitted to the MDEQ on September 13, 2018.

- The Plant 6 PFAS Delineation Work Plan was submitted to the MDEQ on September 17, 2018.
- Monthly Light Non-Aqueous Phase Liquid (LNAPL) gauging and recovery was completed during the third quarter of 2018.
 - A total of approximately 10.5 gallons of LNAPL was recovered during the third quarter.
- Several meetings were held during the third quarter 2018. The date and purpose of these meeting are summarized below:
 - A Site update meeting at MDEQ offices attended by RACER, Arcadis and other stakeholders took place on August 2nd, 2018 to provide a Site update. A Community meeting with the public was also completed on August 2, 2018 to update the public on activities completed at the Site to date and planned path forward.
 - A Site update meeting at MDEQ offices attended by RACER, Arcadis and the Lansing Board of Water and Light (LBWL) took place on August 30, 2018. The purpose of this meeting was to discuss the 1,4-dioxane biosparge remedy.

Work in Progress and Near-Term Milestones Anticipated During the 4th Quarter 2018

Activity	Schedule
Continue with the Biosparge pre-design pilot study	October-December 2018
Continue with NSZD data collection and data summary	October-December 2018
Submit Plant 2 LNAPL PFAS Sampling Work Plan to MDEQ	October 2018
Submit the Plant 6 PFAS Delineation Work Plan to MDEQ	October 2018
Submit the Biosparge IM Work Plan to MDEQ	October 2018
Submit the Plants 2 and 3 Additional Soil Delineation Work Plan	November 2018
Complete the field efforts associated with the Plant 3 Storm Sewer Modification	October-December 2018
Submittal of the 2018 Semi-Annual Summary Report	November 2018
Complete 4Q 2018 IGMP Groundwater Sampling Event	December 2018
Complete the field efforts associated with the Plant 6 PFAS Investigation and offsite well installation	December 2018

Ms. Christine Matlock
October 15, 2018

If you have any questions or comments regarding the information presented above, please contact Randy Christensen at Randy.Christensen@Arcadis.com or at 517.819.8800.

Sincerely,
Arcadis of Michigan, LLC



Randy Christensen
Project Manager

Copies:

Joe Rogers (MDEQ)
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Randy Seida (West Side Water)
Alec Melvetis (City of Lansing)
Sam Schultz (Lansing Township)
Angie Goodman (LBWL)
Cheryl Loudon (LWBL)
David Love (Ingham County Drain Commission)
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