

Mr. Peter Ramanauskas  
U.S. Environmental Protection Agency Region 5  
77 West Jackson Boulevard, LU-9J  
Chicago, Illinois 60604-3590

Arcadis of Michigan, LLC  
28550 Cabot Drive  
Suite 500  
Novi  
Michigan 48377  
Tel 248 994 2240  
Fax 248 994 2241  
www.arcadis.com

Subject:  
Semi-Annual Progress Report, July 2018 – December 2018  
Performance Based Administrative Order on Consent  
Docket No. RCRA-5-2011- 0019; RACER Trust Pontiac North Campus  
Site 11970 - MID 005 356 886, MID 085470 102 & MID 005 356 910  
Pontiac, Michigan

ENVIRONMENT

Date:  
January 11, 2019

Contact:  
Brad Saunders

Phone:  
517 974 4441

Email:  
Brad.Saunders@arcadis.com

Our ref:  
B0064607.2019

Dear Mr. Ramanauskas:

This progress report has been prepared in accordance with Section VI (24b) of the Administrative Order of Consent (Docket Number RCRA-05-2011-0019) entered into by the Revitalizing Auto Communities Environmental Response Trust (RACER Trust) and the United States Environmental Protection Agency (USEPA) for the above referenced Site. The following summarizes the work performed, data collected, estimated percent complete, project schedule, and problems encountered for the period July 1, 2018 through December 31, 2018 for the portions of the Pontiac North Campus (PNC or Site) for which RACER Trust is responsible for remediation.

Work Performed from July 1, 2018 through December 31, 2018  
(Includes references to reports which provide relevant details and data collected)

- To more accurately delineate the horizontal and vertical extent of PCB impacts in soil greater than 100 ppm in AOI W-1/LNAPL Area No. 1/7, completed a summary report of additional PCB-impacted soil delineation activities conducted in June 2018 and submitted to USEPA on July 25, 2018.
- Refined proposed excavation limits at AOI W-1/LNAPL Area No. 1/7 based on additional delineation activities, and continued preparation of an Interim Measures Soil Removal Work Plan in accordance with RCRA and TSCA regulations to excavate PCB-impacted soils with concentrations exceeding 100 ppm.

- Completed field activities in July 2018 to develop LNAPL removal system specifications at monitoring well SB-08-14 (LNAPL Area #2A within AOI W-10), to further evaluate the feasibility of removing LNAPL at monitoring well locations SB-25-14 (LNAPL Area #2B within AOI W-10) and SB-43-14 (LNAPL Area #1/7 within AOI W-1), and re-evaluate the feasibility of removing LNAPL at monitoring well locations MWW8-65 and TWW8-01 (LNAPL Area #11 with AOI W-5). Based on the results of activities, completed and submitted a summary report to USEPA on August 27, 2018 which included a LNAPL Removal IM Work Plan at monitoring well location SB-08-14. Received USEPA approval to proceed with LNAPL recovery at SB-08-14 on September 11, 2018. Installed a 6-inch recovery well RW-08-14 via over-drilling SB-08-14 on October 22-23, 2018. Ordered the compressor-driven LNAPL recovery pump and a shed enclosure in December 2018, and retained a contractor to complete installation, which is planned for February 2019.
- Commenced preparation of a supplement to the June 13, 2018 1,4-D/VOC Memo Report applicable to the evaluation of groundwater at the southwest Fiero and USPS southwest property boundaries. The supplement consists of an evaluation of groundwater data compared to USEPA Screening Levels, planned for submittal to USEPA in January 2019.
- Installed an additional groundwater monitoring well MW-05-18 along the west-southwest Fiero property boundary on August 15, 2018 as recommended and approved by USEPA. Completed the 2018 Annual Groundwater Monitoring event on October 1-5, 2018, and commenced preparation of the report planned for submittal to USEPA in early 2019.
- Based on USEPA and MDEQ approval of the revised Montcalm Seep Interim Measures Work Plan in June 2018, completed the following work plan implementation activities: installed 6-inch injection well INJ-02-18 (the 2<sup>nd</sup> of two injection wells) on August 13-14, 2018; completed a general contractor bid project package on August 16, 2018; awarded Job Site Services general contracting services on September 28, 2018; completed baseline monitoring activities on October 1-5, 2018; and mobilized for field activities on October 22, 2018 which continued through the end of 2018. Work completed included verification of toe drain functionality, completion of an alteration around the previous sump, and installation of two new cleanouts; installation of approximately 1,600 feet of 2-inch conveyance pipe via horizontal drilling and installation of five conveyance line cleanouts; purchase and installation of a sump pump system and connection to the toe drain and conveyance pipe; installation of injection control valves and connection of conveyance piping to each of the two injection wells; and electrical conduit line installation, rack installation and permitting, and control panel build and shipment. Dewatering is ongoing pending the completion of electrical and telemetry components and utility connection planned for completion in January-February 2019.
- Continued support and coordination with existing property owners.

#### Data Collected

Data collected relevant to the Work Performed described above is included in the applicable report submittals.

#### Estimated Percent Complete

Project Management

Ongoing

Corrective Action – General

- Current Conditions Report submitted to USEPA (11/25/11) 100%
- 2012 Budget Authorization approved by USEPA (12/9/11) 100%
- Environmental Indicators Report submitted to USEPA (12/29/11) 100%
- 2012 Budget Amendment 1 approved (2/10/12) 100%
- Draft RFI Report submitted to USEPA (7/9/12) 100%
- 2012 Budget Amendment 2 approved by USEPA (9/19/12) 100%
- 2012 Budget Amendment 3 approved by USEPA (9/19/12) 100%
- 2013 Budget Authorization approved by USEPA (1/25/13) 100%
- Draft CMP Report submitted to USEPA (3/15/13) 100%
- 2013 Budget Amendment 1 approved by USEPA (7/18/13) 100%
- 2013 Budget Amendment 2 approved by USEPA (11/12/13) 100%
- 2014 Budget Authorization approved by USEPA (11/20/13) 100%
- 2014 Budget Amendment 1 approved by USEPA (5/23/14) 100%
- 2015 Budget Authorization approved by USEPA (11/20/14) 100%
- Fiero Focused CMS approved by USEPA (7/1/15) 100%
- Draft Fiero CMI Work Plan (10/7/15) 100%
- 2016 Budget Authorization approved by USEPA (11/20/15) 100%
- 2016 Budget Amendment 1 approved by USEPA (9/9/16) 100%
- 2017 Budget Authorization approved by USEPA (11/22/16) 100%
- 2018 Budget Authorization approved by USEPA (12/12/17) 100%
- Draft Fiero CA 725 and CA 750 submitted to USEPA (12/22/16) 100%
- Draft Duck Pond CACC submitted to USEPA (1/6/17) 100%
- Fiero CA 725 and 750 approved by USEPA (8/11/17) 100%
- Revised Draft PNC CMS submittal to USEPA (In progress) 85%
- 2018 Budget Amendment 1 approved by USEPA (07/18/18) 100%
- 2019 Budget Authorization approved by USEPA (11/23/18) 100%

Corrective Measures – Institutional Controls

- Draft Declaration of Restrictive Covenants (DRCs) 50%
- Recorded USEPA and MDEQ approved DRC for the Duck Pond property (Nov 2016/ Montcalm Street) 100%
- Recorded DRC for the former Plant 14 South property (Nov 2017) 100%
- Amendment to DRC for the former Plant 14 South property 25%
- Recorded DRC for the USPS property (April 2018) 100%

Corrective Measures – Soil

- AOI M-27 arsenic-impacted soil delineation completed (Mar 2013) 100%
- AOI M-27 arsenic-impacted soil removal (Dec 2013) 100%
- Draft Interim Measures Work Plan - TSCA Soil Cap (former Plant 14 south property) submitted to USEPA (5/13/15) 100%

- 2017 PCB Soil Delineation Summary Memo submitted to USEPA (02/27/17) 100%
- 2018 PCB Soil Delineation Summary Memo submitted to USEPA (05/08/18) 100%
- 2018 Additional PCB Soil Delineation Summary Memo submitted to USEPA (07/25/18) 100%
- PCB-impacted Soil Interim Measures Removal Work Plan 65%

Corrective Measures – Groundwater/LNAPL

- LNAPL investigation on USPS property (Sept-Nov 2012) 100%
- Quarterly monitoring of USPS transmissivity/sentry wells (Feb-Dec 2013) 100%
- LNAPL investigation at AOIs M-2 and W-8 (Aug-Nov 2013) 100%
- PCB delineation at AOIs M-2, LNAPL Areas 1/7, 2A, 2B (June-Dec 2014) 100%
- 2013/2014 LNAPL Investigation Tech Memo submitted to USEPA (1/30/15) 100%
- Draft PCB Investigation Summary Memo submitted to USEPA (2/6/15) 100%
- Additional PCB LNAPL Delineation Activities (Apr-June 2015) 100%
- Draft 2014-2015 PCB Investigation Summary Memo submitted to USEPA (8/17/15) 100%
- Supplemental Site (USPS Property) Characterization Summary Report submitted to USEPA (7/21/16) 100%
- Supplemental Soil Gas Data Evaluation Memo (USPS Property) submitted to USEPA (9/1/16) 100%
- Supplemental 1,4-Dioxane Investigation Summary Report submitted to USEPA (12/7/17) 100%
- LNAPL Interim Measures Feasibility Confirmation and Pre-Design Specification Testing memorandum submitted to USEPA (4/27/18) 100%
- Supplemental 1,4-Dioxane/VOC Groundwater Investigation Summary Report submitted to USEPA (6/13/18) 100%
- Additional LNAPL Pre-Design / Transmissivity Testing and Interim Measures Removal Work Plan submitted to USEPA (8/27/2018) 100%
- Supplement to June 13, 2018 1,4-D/VOC Memo Report; Evaluation of Groundwater Data Compared to USEPA Screening Levels 75%
- LNAPL Interim Measures Removal Implementation (In Progress) 40%

Groundwater Monitoring

- 2011 Annual Groundwater Report submitted to USEPA (1/5/12) 100%
- 2012 Annual Groundwater Report submitted to USEPA (2/9/13) 100%
- 2013 Annual Groundwater Report submitted to USEPA (4/16/14) 100%
- 2014 Annual Groundwater Report submitted to USEPA (12/18/14) 100%
- 2015 Annual Groundwater Report submitted to USEPA (12/23/15) 100%
- 2016 Annual Groundwater Report submitted to USEPA (12/29/16) 100%
- 2017 Annual Groundwater Report submitted to USEPA (2/30/18) 100%
- Well Abandonment Request submitted to USEPA (3/7/18) 100%
- Groundwater Monitoring Program Modification Request submitted to USEPA (8/27/18) 100%
- 2018 Annual Groundwater Report (Field Work Completed 10/2018; In Progress) 75%

Storm Sewers

- Montcalm toe drain swale construction (Feb 2012) 100%
- Sewer bulkheading activities completed (Apr 2012) 100%
- Swale/sidewalk construction (Sept 2012) 100%
- Montcalm discharge investigation completed (July-Sep 2013) 100%
- Discharge Request submitted to City of Pontiac (Oct 2013) 100%
- Montcalm Avenue Sidewalk Amendment (1-foot aggregate cover) installed on the sidewalk (May 2015) 100%
- Montcalm Discharge Feasibility Study/Data Collection (Jan - June 2015) 100%
- Montcalm Seep Assessment Memo submitted to USEPA (2/9/15) 100%
- Montcalm Seep IM Work Plan submitted to USEPA/MDEQ (11/10/17) 100%
- Montcalm Injection Test Summary Memo Report submitted to USEPA/MDEQ (1/31/18) 100%
- Montcalm Seep Interim Measures Revised Work Plan submitted to USEPA/MDEQ (4/13/18) – MDEQ Approval (6/8/2018), USEPA Approval (6/25/18) 100%
- Montcalm Seep Interim Measures Implementation (In Progress) 85%

Former RCRA Hazardous Waste Management Units (WMUs). Includes Fiero property WMU AOI F-3 (southern Fiero former hazardous waste drum storage pad), Fiero property AOI F-6 (northern Fiero former Plant 17 tank farm), and USPS property WMU AOI W-2 (west yard former hazardous waste storage)

- Soil/groundwater delineation completed during RFI activities (2001-2011) 100%
- Receipt of MDEQ letter “Referred to Corrective Action for Closure; Revitalizing Auto Communities Environmental Response (RACER) Trust, Former Fiero Assembly Plant, Pontiac, Michigan; MID 005 356 910” March 3, 2013. 100%
- Proposed corrective measures for WMUs (site-wide deed restrictions) incorporated into Fiero Focused CMS (USEPA approved on 7/1/15) and revised Draft PNC CMS (to be submitted). 100%
  - Anticipated deed restrictions will prohibit the use of groundwater, limit the use of the property to non-residential, and require soil management in accordance with Michigan regulations.
- MDEQ Waste Management Division inspection of 2 former waste management units (WMUs) on the Fiero property on April 15, 2015. No violations or comments. 100%
- MDEQ Waste Management division inspection of 2 former waste management units (WMUs) on the Fiero property on October 25, 2017. No violations or comments. 100%

Project Schedule – Work to be Completed During Next Reporting Period

A task-based Gant chart for the 2019 Project Schedule is attached. Items scheduled to be completed during the next reporting period:

- Complete and submit a Draft PCB Soil Removal IM Work Plan.
- Complete existing TSCA soil cap maintenance activities.
- Complete and submit the supplement to the June 13, 2018 1,4-D/VOC Memo Report.

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- Complete implementation of the LNAPL IM Removal Work Plan and commence operations and maintenance activities.
- Complete and submit the annual 2018 groundwater monitoring report.
- Complete implementation of the Montcalm Seep IM Work Plan, submit a completion report with baseline monitoring results, and commence operations and maintenance activities.
- Support the final decision process and continue updating and development of the CMS.
- Respond to any comments received from USEPA or MDEQ on submittals or other matters.

Problems Encountered

None

Should you have any questions on the information provided within this progress report, please feel free to contact me.

Sincerely,

Arcadis of Michigan, LLC



Brad Saunders, PE (MI)  
Principal Engineer

Copies:

Dan Dailey, MDEQ  
Dave Favero, RACER  
File

Enclosure:

**Attachment**

- 1 2019 Project Schedule

ID	Task Name	Duration	Start	January		February		March		April		May		June		July		August		September		October		November		December		Ja				
				12/30	1/13	1/27	2/10	2/24	3/10	3/24	4/7	4/21	5/5	5/19	6/2	6/16	6/30	7/14	7/28	8/11	8/25	9/8	9/22	10/6	10/20	11/3	11/17		12/1	12/15	12/29	
1	<b>Task 1 - Project Management</b>	<b>263 days</b>	<b>Tue 1/1/19</b>																													
2	<b>Monthly PM Activities</b>	<b>229 days</b>	<b>Fri 2/1/19</b>																													
15	Prepare & Submit 2020 Budget Authorization	60 days	Tue 9/3/19																													
16	<b>Task 2 - Corrective Action (General)</b>	<b>263 days</b>	<b>Tue 1/1/19</b>																													
17	<b>Semi-Annual Progress Report Prep/Submittal</b>	<b>138 days</b>	<b>Tue 1/1/19</b>																													
20	Revise and Refine CMS based on IMs	220 days	Tue 1/1/19																													
21	Statement of Basis Preparation/Final Decision Process Support	263 days	Tue 1/1/19																													
22	<b>Task 3 - Corrective Measures Institutional Controls</b>	<b>263 days</b>	<b>Tue 1/1/19</b>																													
23	<b>Task 4 - Corrective Measures - Soil</b>	<b>263 days</b>	<b>Tue 1/1/19</b>																													
24	Supplemental PCB Delineation Activities (If Necessary)	86 days?	Wed 1/2/19																													
25	PCB-Impacted Soil Removal IM work plan development & agency review	109 days?	Wed 1/2/19																													
26	PCB-Impacted Soil Removal Design/Procurement Activities	66 days	Wed 5/1/19																													
27	PCB-Impacted Soil Removal IM Implementation	45 days?	Thu 8/1/19																													
28	PCB-Impacted Soil Removal IM Reporting	66 days?	Tue 10/1/19																													
29	Soil Cap Maintenance, Staking and Survey	23 days?	Mon 4/15/19																													
30	Annual Soil Cap Inspection	1 day	Tue 8/13/19																													
31	<b>Task 5 - Corrective Measures - GW / LNAPL</b>	<b>263 days</b>	<b>Tue 1/1/19</b>																													
32	LNAPL Recovery System Procurement SB-08-14	43 days	Tue 1/1/19																													
33	LNAPL Recovery System Installation SB-08-14	65 days	Tue 1/1/19																													
34	LNAPL Recovery System O&M SB-08-14	263 days?	Tue 1/1/19																													
35	LNAPL Remedy Evaluation/Testing/Decision Trees	263 days?	Tue 1/1/19																													
36	SW Fiero Boundary Data Evaluation/Investigation Activities	263 days	Tue 1/1/19																													
37	<b>Task 6 - Groundwater Monitoring</b>	<b>263 days</b>	<b>Tue 1/1/19</b>																													
38	Finalize & Submit 2018 Report	43 days?	Tue 1/1/19																													
39	Annual Groundwater Sampling	5 days	Mon 9/30/19																													
40	Prepare & Submit 2019 Report	50 days	Mon 10/7/19																													
41	Well Repair, Protection and Abandonment Activities	263 days	Tue 1/1/19																													
42	<b>Task 7 - Storm Sewers (Seep)</b>	<b>263 days</b>	<b>Tue 1/1/19</b>																													
43	Seep Reinjection System Installation Completion, As-Built Documentation and Reporting	65 days	Tue 1/1/19																													
44	Seep Reinjection System OM&M	263 days	Tue 1/1/19																													

Project: PNC 2019 Schedule  
Date: Thu 12/27/18

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Progress	
Split		External Tasks		Inactive Summary		Manual Summary		Deadline	
Milestone		External Milestone		Manual Task		Start-only			
Summary		Inactive Task		Duration-only		Finish-only			