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Ms. Susan Kaelber-Matlock
Saginaw Bay District Office
Michigan Department of Natural Resources and Environment
401 Ketchum Street, Suite B
Bay City, MI 48708

Subject:
Annual Progress Report – October 2009 through September 2010
Motors Liquidation Company Saginaw Malleable Iron Plant Property and the Green Point Landfill Property
Saginaw, Michigan

Date:
October 15, 2010

Contact:
Lisa Coffey

Phone:
315.671.9164

Email:
lisa.coffey@arcadis-us.com

Our ref:
B0050096 #2.04

Dear Ms. Kaelber-Matlock:

This progress report presents a summary of the work activities conducted during the period of October 2009 through September 2010 for the above-referenced Site, and a summary of the work activities anticipated for the next 12 month period. This report was prepared in accordance with the requirements specified in the Consent Judgment executed between the Michigan Department of Environmental Quality (MDEQ), the Michigan Attorney General's Office, General Motors Corporation (GM), and Waste Management Inc. (WMI), which was entered by the State of Michigan Circuit Court on March 16, 1998. An October 15 submittal date for the annual reports was established by the MDEQ in a letter dated October 22, 1999 (Brouillet, A., October 1999).

Significant RI/FS/RAP Activities and Correspondence

The following is a summary of significant Remedial Investigation/Feasibility Study/Remedial Action Plan (RI/FS/RAP) activities and correspondence for the period from October 1, 2009 through September 30, 2010.

Deliverables Submitted

The key deliverables submitted to the MDEQ are as follows:

- The annual progress report for October 2008 through September 2009 was submitted to the MDEQ on October 15, 2009.

Meetings

- A meeting was held at the Site on July 15, 2010, between you and representatives of the Motors Liquidation Company (MLC) (Doug Wagner and Tom Williams), and MLC's consultants, CRA (Mike Tomka and Steve Hoevemeyer) and ARCADIS (Lisa Coffey). The purpose of the meeting was to discuss the planned scope and schedule of project activities.

Key Correspondence and Communications

- On November 20, 2009, Mike Tomka (CRA) transmitted to you by email, the *Preliminary Draft Work Plan for Concrete Slab Remediation*.

- In an email dated June 2, 2010, you requested that MLC provide the Michigan Department of Natural Resources and Environment (MDNRE) with a schedule by July 29, 2010, for completion of the remaining site activities described in the RAP, including submittal of financial assurance, filing of restrictive covenants, and placement of permanent markers.

- In a letter to you dated July 29, 2010, Douglas Wagner (MLC) presented a schedule for completion of the remaining RAP-defined actions, and also a tentative schedule for completion of various other site actions. Key dates in that letter include:

    1. Any proposed changes to the existing restrictive covenant language will be submitted to the MDNRE by September 1, 2011, and the restrictions will be filed with Saginaw County within 30 days of receipt of approval from the MDNRE.

    2. Permanent markers will be placed by May 1, 2012.

    3. Additional sampling of the concrete slab – Spring 2011.

    4. Placement of a soil cover over the slab and grading to manage storm water – Summer/Fall 2011.

    5. Placement of oil absorbent socks in wells in the light non-aqueous phase liquid (LNAPL) area south of the plant to evaluate the appropriateness of implementing passive methods to recover residual LNAPL – July-August 2010.

6. Quench Pit Activities, including removal of residual sludge, placement of recovery wells in the former pits following removal of the lining material, backfilling of the pits with granular material, and placement of concrete over the former pits to limit infiltration – beginning in August 2010.

7. Initiation of systematic LNAPL recovery in the Quench Pit area – Spring 2011.

8. Collection of Groundwater samples from wells in the Green Point Landfill and river perimeter monitoring programs – Summer/Fall 2010.

9. Annual Report Submittal – by October 15, 2010.

- In a letter dated September 30, 2010, Lisa Coffey (ARCADIS) transmitted to you the results of an LNAPL recovery study completed in the LNAPL area south of the former plant building. The purpose of the study was to evaluate the potential appropriateness of using oil absorbent socks in this area of the site to recover residual LNAPL.

- In response to the September 30, 2010 letter, you requested by email on October 11, 2010, that MLC submit a work plan to the MDNRE for the use of oil absorbent socks to recover residual LNAPL in this part of the site.

Supplemental Site Activities

SMI Plant Area

- The plant building and surrounding ancillary structures were demolished during the 2010 construction season, and the demolition contractor is completing site work this month.

Saginaw River Berm Area

- Groundwater samples were collected on September 29-30, 2010, from five wells located in the river berm area. Six additional wells that are included in the annual monitoring program were dry and could not be sampled. Table 1 presents a summary of the monitoring wells sampled and the corresponding analytes.

Quench Pit LNAPL Recovery Program

- Sludge and residual LNAPL were removed from Quench Pits 1 through 3, recovery wells were placed in each pit, the pits were backfilled with coarse grained material, and concrete was placed over the top to prevent infiltration of precipitation.

LNAPL Recovery System

- As described above in the Key Correspondence section, an LNAPL recovery study was completed in the LNAPL recovery area located south of the plant building.

Green Point Landfill Property

- Twelve of the thirteen wells included in the annual Green Point Landfill groundwater monitoring program were sampled on September 28 through October 1, 2010. One additional well was dry and could not be sampled. Table 1 presents a summary of the monitoring wells sampled and the corresponding analytes.

- One well located in the south-west portion of the Green Point Landfill property (TWW-1) was sampled on September 29, 2010. This well is included in the annual monitoring program due to the discharge of volatile organic compounds to the subsurface from the neighboring property to the west.

- A Green Point Landfill Cap inspection was completed on September 30, 2010. Several holes in the fence were noted during the inspection.

Anticipated Site Activities

Although there continues to be some uncertainty associated with the scope of the activities to be completed during the next calendar year, the following activities are planned for completion during the period from October 2010 through September 2011:

- Submittal of a report presenting the results of groundwater sampling activities completed in September and October 2010.

- Completion of the annual groundwater monitoring program in the vicinity of the Green Point Landfill and along the Saginaw River berm, as described in the RAP.

- Additional sampling of the concrete slab and removal of polychlorinated biphenyl (PCB) hot spots.
- Design of an LNAPL recovery system for the Quench Pit area.
- Preparation of a work plan for the removal of residual LNAPL from the area south of the former plant building using oil absorbent socks.
- Identification of any proposed changes to the site restrictive covenants and submittal to the MDNRE for approval.
- Abandonment of additional monitoring wells in the vicinity of the vacant plant building that are not needed to implement future monitoring programs.
- Placement of a soil cover over the slab area.
- Completion of an inspection of the Green Point Landfill.

Please contact me if you have any questions regarding the enclosed.

Sincerely,

ARCADIS

Lisa R. Coffey
Principal Geologist

LRC/plf

Attachments:

Copies:
John Fordell Leone, Esq., Department of Attorney General
Mr. Douglas Wagner, MLC
Mr. Kent Bainbridge/Mr. Jim Forney, Waste Management, Inc.
Mike Tomka, P.E., CRA
Ms. Jo Ann Robertson, ARCADIS

Table 1. Summary of 2010 Groundwater Monitoring, SMI Green Point Landfill, Saginaw Michigan

Saginaw River Berm Sampling			
Monitoring Well ID	**Well Screen (ft bgs)**	**Sample Date**	**Analytical Plan Summary from RAP (2008)**
MW-107WT	4-9	dry	Ammonia nitrogen, phosphorus, DO, total arsenic, total manganese, and total thallium.
MW-107S1	12.5-17.5	9/30/2010	Ammonia nitrogen.
MW-108WT	2.5-7.5	dry	TCL SVOCs, DO, ammonia, phosphorus, and total manganese.
MW-108S2	22-27	9/29/1930	Ammonia nitrogen.
MW-110WTR	3-8	dry	PCBs (total and dissolved,) ammonia nitrogen, phosphorus, DO, TDS, total manganese, and thallium.
MW-111WT	5.5-10.5	dry	PCBs (total and dissolved), DO, ammonia, phosphorus, total thallium, and total manganese.
MW-114WT	3.5-8.5	dry	PCBs (total and dissolved), ammonia, phosphorus, DO total thallium, and total manganese.
MW-114S2	22.5-27.5	9/29/2010	Ammonia nitrogen.
MW-149WT	7-17	9/30/2010	Ammonia, phosphorus, total arsenic, and total thallium.
MW-185WT	31.5-7.65	dry	PCBs (total and dissolved), ammonia, phosphorus, DO, total manganese, and total thallium.
MW-186WT	8-18	9/30/2010	PCBs (total and dissolved), ammonia, phosphorus, DO total thallium, and total manganese.
Green Point Landfill Sampling			
Monitoring Well ID	**Well Screen (ft bgs)**	**Sample Date**	**Analytical Plan Summary from RAP (2008)**
MW-117WT	3-13	10/1/2010	Dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
MW-117S1	24.2-29.2	10/1/2010	Dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
MW-118WT	1.6-11.6	9/30/2010	Dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
MW-118S1	23.5-28.5	10/1/2010	Dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
MW-183WT	6-16	9/28/2010	Total and dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
X-4AR	6-9	dry	Total and dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
X-4CAUGR	14-19	9/28/2010	Total and dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
X-4D	40-45	9/28/2010	Total and dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
X-9AR	3-13	9/29/2010	Total and dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
X-9BR	26-31	9/28/2010	Total and dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
X-9CAUG	20-25	9/28/2010	Total and dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
X-9D	42.7-47.5	9/28/2010	Total and dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
X-10BR	26-31	9/29/2010	Dissolved site analyte list metals, dissolved cyanide, total dissolved solids, pH, chloride, sulfate, nitrate (as N), nitrite (as N), and ammonia nitrogen.
TWW-1	NA	9/29/2010	TCL VOCs.

Notes:

Site List Metals include:

- Arsenic
- Barium
- Iron
- Manganese
- Mercury
- Selenium
- Sodium