GM Sustainable Workplaces
VEC East, 5th Floor
30400 Van Dyke
Warren, MI 48093

October 15, 2019

Peter Ramanauskas
U.S. EPA Region 5
77 West Jackson Blvd.
Chicago, Illinois 60604-3590

Dear Mr. Ramanauskas:

Re: RCRA Corrective Action Administrative Order on Consent (AOC)
Progress Report 74, Third Quarter 2019
GM GPS – Bedford Facility, ID 006036099, Docket No. RCRA 05 2017 0011
Bedford, Indiana

This Progress Report is submitted by General Motors LLC (GM) in accordance with the GM Bedford Global Propulsion Systems (GPS) Facility Resource Conservation and Recovery Act (RCRA) Administrative Order on Consent (AOC – United States Environmental Protection Agency [U.S. EPA] Docket No. RCRA 05-2014-0011), executed on August 4, 2014. This report covers the period of the second calendar quarter of 2019 for the RCRA Corrective Action (CA) Project at the GM GPS – Bedford Facility (Facility) and select surrounding properties (Site), Bedford, Indiana.

The next RCRA progress report covering the fourth quarter of 2019 will be submitted on or before January 15, 2019.

1. List of Completed Activities

The following activities took place and the following documents were prepared and distributed during this quarter:

1. The Groundwater Treatment Plant (GWTP) collected and treated approximately 3,427,466 gallons of water from the Pilot Trench, Vault sumps, and wet wells during the third quarter of 2019. An estimated 0.04 pounds of PCBs were removed during the quarter through collection and treatment of the groundwater. A summary of the volumes and sample results used for this calculation is provided in Table 1. Monthly discharge monitoring reports have been submitted to the State of Indiana in conformance with the National Pollutant Discharge Elimination System (NPDES) Permit Number IN0064424.
2. The East Plant Area Vault Annual Report covering the Calendar Year of 2018 was submitted to U.S. EPA on June 11, 2019. On July 18, 2019, U.S. EPA asked a question related to the

reported LCS sump operation. As noted during the August 2019 monthly conference call, the operator noted that no samples were collected because the LCS pump did not prime due insufficient water level. Follow-up found that the pump can operate in manual mode. Samples will be collected.

3. Quarterly EI CA750 static groundwater monitoring was completed during the week of August 19, 2019. The second half of EI C70 sampling is scheduled for the end of November.
4. Veolia's Port Arthur Facility has resumed accepting waste after being temporarily shutdown for maintenance during June and July. Table 2 summarizes oil removal volumes (based on disposal weights) from the AOI-8 area.
   - An estimated 16.93 pounds of PCBs have been removed from CH-5A.
   - Collection from MW- X209Y053 began on March 25, 2019. Approximately 3.05 gallons of oil and an estimated 0.40 pounds of PCBs have been removed since.
   - Data from the February 2019 static groundwater monitoring event found oil at well MW-X227Y049. No oil was detected when GHD attempted to recover the oil in March 2019.
   - CAMW-2 was discovered to have a full column of oil. GHD will collect waste characterization samples.
5. Oil collection from CH-2A (solar sipper) is on-going. Routine maintenance activities at the end of August discovered a bad solenoid. A new solenoid has been received, and will be scheduled for installation.
6. Solids (PPE, spent absorbent socks) from the AOI-8 oil collection process was sent for disposal on August 2, 2019.
7. Response to U.S. EPA's additional comments on the RCRA Facility Investigation Report (RFI) were submitted to U.S. EPA on May 14, 2019. A conference call was held with U.S. EPA on June 3, 2019 to review the responses to comments. The revised responses to comments memo was submitted the U.S. EPA on September 17, 2019. U.S.EPA approved the response to comments on September 27, 2019.
8. Soil cuttings from the March 2019 pilot trench well installation project were thin spread in an area just east of the GWTP (as approved by U.S. EPA) on August 23, 2019. A portion of the soil remains in the drum and may be dislodged as the material dries. GHD will attempt to remove the balance of the material during the next site visit.
9. The Pilot Trench Monitoring Plan, incorporating responses to comments, was submitted to U.S EPA on August 16, 2019. Further clarification to EPA comments and questions were discussed in the conference between U.S EPA, IDEM, GHD and GM on September 19, 2019. U.S.EPA approved the Pilot Trench Monitoring Plan on September 25, 2019.
10. The draft Pilot Trench Construction Report, incorporating responses to comments, was submitted to U.S EPA on August 6, 2019, for approval of the proposed changes.
11. The EI CA750 Sampling Summary memo was submitted to U.S.EPA on August 14, 2019. U.S.EPA requested clarification by email dated August 15, 2019. Responses were provided the same day. Monthly conference calls/meetings were held with U.S. EPA and IDEM on July 18, August 15, and September 19, 2019 to discuss items related to the project.

12. The Final QAPP, incorporating responses to comments, was submitted to U.S. EPA on July 2, 2019. The QAPP including the signed signature pages were distributed on August 8, 2019.
13. Responses to comments on the clarifier work plan was submitted to U.S EPA on August 28, 2019.
14. On-site tailgate meetings for the reporting period were held daily, during field activities, to discuss safety and project scope.
15. RCRA Quarterly Progress Report #73, covering the second quarter of 2019, was submitted to the U.S. EPA and IDEM on July 12, 2019.
16. The memorandum summarizing the additional soil sampling completed at Incremental Sampling Decision Units WP10 and EP05 was submitted on June 28, 2019. U.S. EPA provided comments by email dated July 1, 2019. Responses were provided on July 1 and 3, 2019.

Although not included in the RCRA CA activities, GM continues to work with U.S. EPA and IDEM for the prescriptive removal of PCB-impacted soil at Parcels 400, 430 and 431. The following activities took place and the following documents were prepared and distributed during this quarter related to this work:

1. U.S. EPA requested additional information related to the Parcel 430-431 Request for Removal 40 CRF 761.61(c) on June 25, 2019. Responses were submitted on July 3, 2019.
2. GM met with Parcel 400 property owners on August 23, 2019 to review the access agreement and environmental restrictive covenant (ERC). At that meeting owners requested GM to assess whether only a portion of the property could be restricted. Later, GM contacted the owner to indicate that a partial restriction could not practically be accomplished based on the available information. In September GM made several unsuccessful attempts to re-contact the owners for their approval of the access agreement and ERC.

2. Summaries of Problems and Planned Resolutions

Attempts to remove of the GUS sump pump near the end of August were unsuccessful. GHD and GM are currently evaluating an alternative solutions, to either remove the pump or intercept the GUS.

3. Community Relations

There were no community contacts during the reporting period.

4. Changes in Personnel During the Reporting Period

There have been no changes in key project personnel during the reporting period.

5. Projected Work for the Next Reporting Period

Work anticipated for the next reporting period includes:

1. Continue OMM for the GWTP.
2. Continue GWTP discharge reporting under the NPDES permit.
3. Identify alternate means to remove the groundwater pump from GUS.
4. Collect quarterly groundwater static levels.
5. Collect NAPL from the AOI-8 area wells.
6. CAMW-2 oil waste characterization.
7. Inspect and repair cover system as needed.
8. Conduct semi-annual cover system inspection.
9. Conduct Second Half EI CA750 sampling.
10. Prepare for and conduct the dye trace study.
11. Repair the asphalt depression in the West Plant parking lot.
12. Submit the Final RCRA Facility Investigation Report.
13. Submit the Spring 018 Completion Report.
14. Repair the sewer broken during the clarifier area well installation.
15. Retain a remediation contractor for the removal action on Parcel 400, 430 and 431.
16. Prepare and submit the 2020 Financial Assurance cost estimate.
17. Submit a summary memorandum to report results of the video inspection of the cleanouts.
18. Finalize access agreements with Parcel 400 property owners.
19. Obtain necessary access agreements associated with Pilot Trench Monitoring Plan and initiate field work associated with plan.
20. Conduct monthly meetings with U.S. EPA.

6. Copies of Inspection Reports and Laboratory/Monitoring Data

Analytical data have been, and will continue to be, submitted to U.S. EPA as the validated data becomes available.

Please feel free to call me at 313-506-9465 if you have any questions concerning this information or otherwise regarding the Bedford GM LLC Project.

Sincerely,

Edward Peterson

Ed Peterson
Project Manager, Eco-Restorers
GM Sustainable Workplaces

JV/aj/185

Encl.

cc: Daniel Haag; U.S. EPA
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Table 1

GWTP PCB Mass Removal Estimate
GM Bedford GPS Facility
Bedford, Indiana

	Groundwater Treatment Plant (GWTP) Treated Volume (gallon)	PCB Influent Concentration (µg/L)	Mass PCB Treated (pound)
October 2018 [1]	1,240,147	1.9	0.020
November 2018 [1]	3,806,472	1.55	0.049
December 2018	4,226,766	1.29	0.046
January 2019	5,467,881	0.71	0.032
February 2019	5,393,116	ND	0.000
March 2019	4,916,870	0.92	0.038
April 2019	5,547,708	1.5	0.069
May 2019	3,670,000	1.3	0.040
June 2019	5,542,417	1.2	0.056
July 2019	1,743,512	1.6	0.023
August 2019	930,385	1.1	0.009
September 2019	753,569	1.6	0.010

Total Estimated Volume of Water Treated, Third Quarter 2019 (gallons)	3,427,466
Total Estimated Mass of PCB Treated, Third Quarter 2019 (pounds)	0.04
Total Estimated Mass of PCB Treated, Since October 2018 (pounds)	0.39

Notes:

[1] PCB concentration based on an average of parent and duplicate sample

Table 2

AOI-8 Oil Removal
GM Bedford GPS Facility
Bedford, Indiana

Date	Well	Weight (lbs)	PCB Weight (lbs) [1]
9/01/2019	CH-5A[1]	2.22	1.73
23/01/2019	CH-5A	2.16	1.68
11/02/2019	CH-5A	2.3	1.79
26/02/2019	CH-5A	2.33	1.82
7/03/2019	CH-5A	2.18	1.70
18/03/2019	CH-5A	2.29	1.79
1/04/2019	CH-5A	2.39	1.86
15/07/2019	CH-5A	2.85	2.22
31/07/2019	CH-5A	1.88	1.47
22/08/2019	CH-5A	1.1	0.86
Total PCB Removed			**16.93**
25/03/2019	MW-X209Y053[2]	25.02	0.33
15/07/2019	MW-X209Y053	2.45	0.03
31/07/2019	MW-X209Y053	1.98	0.03
22/08/2019	MW-X209Y053	1.1	0.01
Total PCB Removed			**0.40**
28/03/2019	Solar Sipper[3]	76.57	1.00

Notes:

[1] PCB weight based on analytical data from April 9, 2014
(CH-5: 780,000 mg/kg; CH-2A: 13,000 mg/kg)

[2] MW-X209Y053 PCB weight based on DNAPL density of 1.2 g/cc

[3] PCB weight from solar sipper is based on an approximate volume of oil removal