



First Quarter 2016 Progress Report 60

GM CET – Bedford Facility
105 GM Drive
Bedford, Indiana
EPA ID# IND006036099
AOC Docket No. RCRA-05-2014-0011

651 Colby Drive Waterloo Ontario N2V 1C2 Canada
013968 | Report No 396 | April 15, 2016



**Global Environmental
Compliance & Sustainability**

April 15, 2016

Reference No. 013968

Mr. Peter Ramanauskas
Project Manager for IND 0060306099
Waste, Pesticide and Toxins Division
U.S. EPA Region 5
77 West Jackson Blvd. (DW-8J)
Chicago, IL 60604-3590

Dear Mr. Ramanauskas:

Re: RCRA Corrective Action Administrative Order on Consent (AOC)
Progress Report 60, First Quarter 2016
GM CET – Bedford Facility, IND 006036099, Docket No. RCRA 05-2014-0011
Bedford, Indiana

Please find enclosed the Progress Report 60 (First Quarter 2016) for the Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) project at the GM Castings, Engines, and Transmissions (CET; formerly Powertrain) Bedford Facility (Facility) at 105 GM Drive Bedford, Indiana, and select surrounding properties (Site). This report is being submitted in accordance with the Administrative Order on Consent, effective August 4, 2014 (United States Environmental Protection Agency (U.S. EPA) Docket No. RCRA 05-2014-011).

The next RCRA quarterly progress report covering the second Quarter of 2016 will be submitted on or before July 15, 2016.

Should you have any questions regarding this document, please do not hesitate to contact me at (313) 510-4328.

Yours truly,

General Motors LLC

Cheryl R. Hiatt
Project Manager

PG/jp/160
Encl.

c.c.: See Attached Distribution List

Mr. Ramanauskas
April 15, 2016

Page 2

GM Bedford Distribution List

Peter Ramanauskas	U.S. EPA, Region 5
Brad Stimple	U.S. EPA, OSC
Gerald O'Callaghan	IDEM Management
Carl Wodrich	Indiana Department of Natural Resources
Cheryl Hiatt/Ed Peterson	GM WFG Remediation
Lisa LaCouver	GM Bedford Environmental Compliance
James McGuigan	GHD Project Manager
Bill Steinmann	GHD Project Geologist
Katie Kamm	GHD Oversight Engineer
Stephen Song	Ramboll Environ

Table of Contents

1.	Introduction.....	1
2.	List of Completed Activities	1
3.	Summaries of all Problems and Planned Resolutions	4
4.	Summaries of all Changes Made in the Corrective Action (CA) During the Reporting Period	4
5.	Community Relations	4
6.	Changes in Personnel During the Reporting Period	4
7.	Projected Work for the Next Reporting Period	4
8.	Copies of Daily Reports, Inspection Reports, Laboratory/Monitoring Data	5

Table Index

Table 2.1	Spring 018 Sampling Results
Table 2.2	Storm Water and Groundwater Water Treatment Plant PCB Mass Removal Estimate
Table 2.3	SES WWTP Batch Sampling Results – January/February/March 2016

Appendices

Appendix A	First Quarter 2016 Cover System Inspection: Field Logs, Transect Figures, and Photograph Log
------------	---

1. Introduction

This Progress Report is submitted by General Motors LLC (GM) in accordance with the GM Bedford Castings, Engines, Transmissions (CET) 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 first calendar quarter of 2016 for the RCRA Corrective Action (CA) Project at the GM CET (formerly Powertrain) – Bedford Facility (Facility) and select surrounding properties (Site), Bedford, Indiana.

The next RCRA progress report covering the second quarter of 2016 will be submitted on or before July 15, 2016.

2. List of Completed Activities

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

- Results for samples collected from Spring 018 during the quarter are presented in Table 2.1. Sample results for the monthly sampling were previously emailed to U.S. EPA and Indiana Department of Environmental Management (IDEM) as they became available. As of the end of March 2016 sampling, the 12-month rolling average concentration of polychlorinated biphenyls (PCBs) in the Spring 018 discharge is 0.18 micrograms per liter ($\mu\text{g/L}$). Regular monthly sampling was conducted on January 13, February 10, and March 9, 2016. An opportunistic sample was collected on February 4, 2016 following a rainfall event of greater than 1 inch in 24-hours. The regular samples collected on January 13, and February 10 were non-detect for PCBs. The regular sample collected on March 9, 2016 resulted in an estimated concentration of 0.087J $\mu\text{g/L}$ for PCBs. The opportunistic sample was non-detect for PCBs.
- The 300 gallons per minute (gpm) design capacity (Site Source Control [SSC]) and 2,000 gpm design capacity water treatment plants (WTPs) collected and treated 25,286,000 gallons of water this past quarter. An estimated 0.15 pounds of PCBs were removed during the first quarter of 2016 through collection and treatment of the groundwater and an estimated 0.45 pounds of PCBs in the twelve months inclusive of April 2015. A summary of the volumes and sample results used for this calculation is provided in Table 2.2.
- Concrete filling of Pool #2 upstream of the confluence with Tributary 3 and Spring 018 is delayed pending the issuance of a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) AOC being prepared to allow GM LLC to conduct remaining creek work in the Spring 018 area. Following the execution of the AOC, the filling will be scheduled as the weather allows.
 - U.S. EPA provided comments on the CERCLA AOC on November 4, 2015.
 - GM responded to U.S. EPA's comments on April 4, 2016 (2nd Quarter of 2016) and has scheduled a meeting on April 27, 2016 to discuss the comments.

- Downstream Parcels Removal Action Construction Certification Addendum No. 1 and Responses to Comments were submitted to U.S. EPA on December 10, 2015.
 - U.S. EPA submitted additional comments on January 14, 2016. Responses were provided to U.S. EPA on January 14, and 27, 2016.
 - The Downstream Parcels Construction Certification Report Revision 1 was submitted to U.S. EPA on January 20, 2016, and U.S. EPA indicated they had no additional comments on the report on February 19, 2016.
 - The Downstream Parcels Monitoring Report was submitted to U.S. EPA on March 4, 2016.
- The revised Additional Soil Investigation for Unsampled Areas Work Plan was approved by U.S. EPA on March 29, 2016.
 - The finalized work plan was submitted on April 1, 2016.
 - GHD is currently in the process of scheduling sampling activities.
- The 2nd Half 2015 Semi-annual Environmental Indicator (EI) CA750 groundwater sampling and groundwater statics summary was submitted on February 23, 2016. Responses and corrections based on U.S. EPA comments were submitted on February 29, 2016.
 - U.S. EPA had specific comments on three locations on February 26, 2016.
 - All responses were provided to U.S. EPA by March 25, 2016.
- GHD is currently revising the Post Closure Plan, and Vault Certification based on the U.S. EPA approved responses to previous comments.
 - Revision 1 of the 2012 Vault Report was submitted on February 24, 2016.
 - Responses to comments from U.S. EPA on the 2014 Vault Report are currently under GHD Review.
- The first quarter 2016 EI CA750 monitoring of static groundwater levels were completed the week of February 1, 2016. The first half 2016 semi-annual groundwater quality sampling will be completed in the second quarter 2016 (currently scheduled to begin the week of April 25th).
- The Pilot Perimeter Groundwater Collection Trench Study (Pilot Trench) was submitted to the U.S. EPA and IDEM on December 2, 2014.
 - Revision 1 of the IM work plan was submitted on February 19, 2016.
 - SES continued operation of the temporary construction WTP.
 - Batch testing of the treated effluent water from the SES temporary WTP was initiated on November 2015. Table 2.3 presents a summary of the sample results from the batch testing, including effluent results.
 - SES has continued working on piping from the Pilot Trench and SSC sources to the new Groundwater Treatment Plant this past quarter.
 - U.S. EPA and IDEM toured the site on January 28, 2016 to view the Pilot Trench progress.
 - SES has completed cleaning out and placing piping in the north and south sides of the Pilot Trench alignment, and gravel backfill on the north side of the trench alignment.
 - SES is completing placement of the gravel backfill on the south side of the trench alignment.

- Construction of the new Groundwater Treatment Plant (GWTP) was completed this quarter. The GWTP will treat water from the Pilot Trench (and other sections of the Groundwater Trench to be designed and installed in the future).
 - A final NPDES permit has been issued by the State, effective February 1, 2016.
 - The new GWTP will be commissioned in April/May 2016.
 - Permanent power is currently being installed to the new GWTP.
- The Area of Interest (AOI) 8 Groundwater Source Collection System Interim Measure was submitted to the U.S. EPA and IDEM on December 31, 2014.
 - Approval of the AOI 8 IM Work Plan with additional U.S. EPA Comments was received on July 1, 2015.
 - Responses to additional comments on the plan were submitted on January 29, 2016.
 - GHD is currently working on the design and finalizing the Work Plan.
- Formal monitoring of the East Plant, West Plant and Vault cover systems for the First Quarter was completed on March 31, 2016.
 - U.S. EPA approved the Revision 1 Construction Certification Report on East Plant Area Cover System on February 19, 2016.
- The Parcel 400 Sampling Plan was approved with modifications by the U.S. EPA.
 - Additional delineation drilling/sampling was completed during this past quarter.
 - A revised excavation plan is currently being developed based on the results of the final delineation sampling.
- The Stormwater Pond Sediment Sampling Plan was provided to the U.S. EPA on March 24, 2016. U.S. EPA requested some clarification on components of the sampling plan, and responses were provided on March 24.
 - Sampling was completed in the week of April 4, 2016.
 - Sediment removal design anticipated to be completed during the second quarter 2016.
- The next Public and Community Liaison Panel meeting to provide an update on the project and address questions and concerns from local residents is scheduled for June 2016.
- Conference calls were held with U.S. EPA and IDEM on January 7, 21, February 4, 18, and March 3, 17, and 29, 2016, to discuss items related to the project.
- With the resumption of daily construction activities related to the construction of a new groundwater treatment plant and construction of the Pilot Trench, on-Site construction meetings for the reporting period have been held informally daily and formally as needed. Formal construction meetings during this quarter were held on January 6, 13, 20, 27, February 3, 10, 17, 24, and March 2, 9, and 16, 23, & 30, 2016.
- The RCRA/CERCLA Quarterly Progress Report #59, covering the fourth quarter of 2015, was submitted to the U.S. EPA and IDEM on January 15, 2016.

3. Summaries of all Problems and Planned Resolutions

Additional concrete sealing is planned for a swallet identified upgradient of Spring 018 in what is known as Pool 2. This work will be scheduled, weather pending, upon completion of the CERCLA AOC. It is thought that a further reduction in surface water infiltration to the epikarst supplying Spring 018 will provide further stabilization of the PCB detections at the spring. Monthly monitoring continues.

4. Summaries of all Changes Made in the Corrective Action (CA) During the Reporting Period

There were no changes made in the CA during the reporting period.

5. Community Relations

The telephone number for public contact is 812-277-8956 (Katie Kamm, GHD, formerly Conestoga-Rovers & Associates [CRA]). Individual meetings can be arranged to discuss project progress with residents as requested.

CLP and public meetings were held at the CRA trailers to the update the CLP and public on the status of the clean-up efforts on December 9, 2015. The next neighborhood/public meeting and CLP meeting are scheduled for June 2016. Presentations for past meetings are posted on the GM website at:

www.bedfordpowertraincorrectiveaction.com

The document repository continues to be located at the Bedford Public Library, with relevant project related documents available on compact disc (CD) in PDF format. Information will be updated periodically, as new documents become available. All data located in the Library repository can also be found on the aforementioned website.

6. Changes in Personnel During the Reporting Period

GHD oversight and SES personnel for on-going maintenance operations (e.g., stormwater and SSC water treatment, wet wells, Vault sumps etc.) and construction (e.g., Pilot Trench, GWTP) remain unchanged. On-Site staffing levels are expected to be reduced by the end of the next quarter as the Pilot Trench installation and GWTP commissioning is completed.

7. Projected Work for the Next Reporting Period

Work anticipated for the next reporting period includes:

- Completing the Stormwater Pond sampling and continuing evaluation of the Stormwater Pond dredging (Area of Interest [AOI] 10). Dredging is anticipated to be conducted in 2016.

- Completing the commissioning of the GWTP.
- Completing the installation of the Pilot Trench.
- Completing outstanding responses to comments on documentation and/or finalize reports for the following:
 - Vault Post-Closure Plan
 - Vault Construction Certification Report
 - 2014 Vault Report
 - Construction Certification Report for the West Plant Area IM
 - AOI 8 Groundwater Source Collection System IM
- Continuing monitoring Spring 018 on a monthly basis.
- Scheduling of Unsampled Areas Soil Sampling.
- Completing the second quarter EI CA750 static groundwater levels and first half 2016 groundwater sampling (scheduled to begin the week of April 25).
- Finalizing the proposed CERCLA Administrative Order on Consent for Removal Action (a meeting to resolve comments is currently scheduled for April 27).

8. Copies of Daily Reports, Inspection Reports, Laboratory/Monitoring Data

Table 2.1 presents the quarterly results from Spring 018 sampling. Table 2.2 presents the estimated PCB mass removal for the SSC systems for the past 12 months. Table 2.3 presents the quarterly results from the batch testing of treated effluent water from the SES temporary WTP.

Appendix A includes the field monitoring forms for the cover system inspections and a photographic log:

1. Weeds or clover growth was noted at most Transects in the East Plant Area and the West Plant Area. This is also typically accompanied by some bare patches.
2. Mole holes were identified over much of the East Plant cover system. GHD has contacted the liner companies and the moles do not burrow deep enough to damage the liner and so the vegetation will continue to be monitored, however, there is no immediate risk to the Cover.
3. Possible evidence of a burrowing animal was identified near EV6 during the fourth quarter 2015 inspection. Indiana Department of Natural Resources (IDNR) has been consulted on identifying, and subsequently live trapping and relocating the animal(s), if necessary. Soil and vegetation repairs will be made as necessary.
4. Light erosion was identified along EV4, EV5, and in ES6. These areas will be re-seeded this spring.
5. There are some erosion ruts along the east side of GM Drive, outside the cover system area adjacent to power poles. This does not appear to be due to any on-Site RCRA activities, but could have an impact on the liner system in the ditch. Work is still to be conducted on power

poles in this area by the utility company. Repairs will be addressed after the power pole work is completed.

6. Minor cracks are present along some of the seams in the asphalt cover system. The cracks do not extend the full depth of the asphalt thickness. SES is seeking a contractor that can meet GMs safety requirements to complete the asphalt repairs. Resealing of the asphalt will be completed this spring.
7. In 2014 the Facility repaired two fire hydrants along the far west side of the paved West Plant cover system. The Facility's contractor excavated the soils surrounding the hydrant, repaired the hydrant, backfilled, and SES/O'Mara Paving made the necessary repairs to the asphalt. There are currently signs of differential settlement under the repaved area as the new asphalt has sunk slightly. SES will hire an asphalt contractor to look at this area for recommended repairs.
8. Repairs to portions of the Cover System, including Detention Basin 4, affected by the Pilot Groundwater Collection Trench construction will commence in the second quarter.

Additional packages of analytical data have been, and will continue to be submitted to U.S. EPA as the validated data becomes available.

Table 2.1

Spring 018 Sampling Results - January/February/March 2016
GM CET Bedford Facility
Bedford, Indiana

Area		P015	P015	P015	P015
Sample Location:		Spring 018C	Spring 018C	Spring 018C	Spring 018C
Sample Identification:		SW-015-011316-GS-40358	SW-015-020416-GS-40260	SW-015-021016-GS-40261	SW-015-030916-GS-40374
Sample Date:		1/13/2016	2/4/2016	2/10/2016	3/9/2016
Sample Type:					
	Units				
PCBs					
Aroclor-1016 (PCB-1016)	ug/L	0.20 U	0.19 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	ug/L	0.20 U	0.19 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	ug/L	0.20 U	0.19 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	ug/L	0.20 U	0.19 U	0.19 U	0.087 Jp
Aroclor-1248 (PCB-1248)	ug/L	0.20 U	0.19 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	ug/L	0.20 U	0.19 U	0.19 UJ	0.19 U
Aroclor-1260 (PCB-1260)	ug/L	0.20 U	0.19 U	0.19 UJ	0.19 U
Total PCBs	ug/L	ND	ND	ND	0.087 Jp
Wet					
Total suspended solids (TSS)	ug/L	3300	5500	1800	3000 J

Notes:

U - Not detected at the associated reporting limit.

J - Estimated concentration.

UJ - Not detected; associated reporting limit is estimated.

Twelve month average as of March 31, 2016 - 0.18 µg/L PCBs

Table 2.2

**300 gpm Design Capacity Water Treatment System PCB Mass Removal Estimate
GM Bedford CET Facility
Bedford, Indiana**

	300 gpm Design Capacity System Treated Volume (gallon)	PCB Influent Concentration (µg/L)	Mass PCB Treated (pound)
April 2015	2,510,870	2.3	0.048
May 2015	1,000,860	10	0.084
June 2015	1,603,546	3.3	0.044
July 2015	1,582,640	1.6	0.021
August 2015	1,026,256	1.3	0.011
September 2015	530,080	5.1	0.023
October 2015	347,000	5.6	0.016
November 2015	1,196,000	4.8	0.048
December 2015	1,545,000	ND (0.19U) ¹	0.001
January 2016	1,840,000	1.5 p / 1.2 p	0.021
February 2016	1,296,000	5	0.054
March 2016 ²	2,422,000	3.8	0.077
Total Estimated Volume of Water Treated, First Quarter 2016 (gallons)			5,558,000
Total Estimated Mass of PCB Treated, First Quarter 2016 (pounds)			0.15
Total Estimated Mass of PCB Treated, Since April 2015 (pounds)			0.45

Notes:

1. Used half of the detection limit value at the associated limit to calculate the mass PCB treated.
 2. Influent not sampled March 2016, so used average of previous 12 months inclusive of March 2015.
- P-TestAmerica: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Table 2.3

SES WWTP Batch Sampling Results – January/February/March 2016
 GM CET Bedford Facility
 Bedford, Indiana

Area		P216	P216	P216	P216
Sample Location:		SES WWTP Tag 1	SES WWTP Tag 1	SES WWTP Tag 1	SES WWTP Tag 3
Sample Identification:		WW-216-010516-PB-40357	WW-216-021616-PB-40357	WW-216-030716-PB-40373	WW-216-010516-PB-40356
Sample Date:		1/5/2016	2/16/2016	03/07/2016	1/5/2016
Sample Type:	Units	General Motors LLC - System Influent From Modutank	General Motors LLC - System Influent From Modutank	General Motors LLC - System Influent From Modutank	General Motors LLC - Sand Filter #1 Effluent
Polychlorinated biphenyl (PCBs)					
Aroclor-1016 (PCB-1016)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1248 (PCB-1248)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Total PCBs	ug/L	ND	ND	ND	ND

Notes:

U - Not detected at the associated reporting limit.

Table 2.3

SES WWTP Batch Sampling Results – January/February/March 2016
 GM CET Bedford Facility
 Bedford, Indiana

Area	P216	P216	P216	P216
Sample Location:	SES WWTP Tag 3	SES WWTP Tag 3	SES WWTP Tag 6	SES WWTP Tag 6
Sample Identification:	WW-216-021616-PB-40356	WW-216-030716-PB-40372	WW-216-010516-PB-40354	WW-216-021616-PB-40354
Sample Date:	2/16/2016	03/07/2016	1/5/2016	2/16/2016
Sample Type:	General Motors LLC - Sand Filter #1 Effluent	General Motors LLC - Sand Filter #1 Effluent	General Motors LLC - Carbon Unit #2 Effluent	General Motors LLC - Carbon Unit #2 Effluent
Units				
Polychlorinated biphenyl (PCBs)				
Aroclor-1016 (PCB-1016)	ug/L	0.19 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	ug/L	0.19 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	ug/L	0.19 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	ug/L	0.19 U	0.19 U	0.19 U
Aroclor-1248 (PCB-1248)	ug/L	0.19 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	ug/L	0.19 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	ug/L	0.19 U	0.19 U	0.19 U
Total PCBs	ug/L	ND	ND	ND

Notes:

U - Not detected at the associated reporting limit.

Table 2.3

SES WWTP Batch Sampling Results – January/February/March 2016
GM CET Bedford Facility
Bedford, Indiana

Area	P216		P216		P216	
Sample Location:	SES WWTP Tag 6		SES WWTP Tag 7		SES WWTP Tag 7	
Sample Identification:	WW-216-030716-PB-40369		WW-216-010516-PB-40355		WW-216-021616-PB-40355	
Sample Date:	03/07/2016		1/5/2016		2/16/2016	
Sample Type:	General Motors LLC - Carbon Unit #2 Effluent		General Motors LLC - Carbon Unit #1 Effluent (series)		General Motors LLC - Carbon Unit #1 Effluent (series)	
Units						
Polychlorinated biphenyl (PCBs)						
Aroclor-1016 (PCB-1016)	ug/L	0.19 U	0.19 U	0.20 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	ug/L	0.19 U	0.19 U	0.20 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	ug/L	0.19 U	0.19 U	0.20 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	ug/L	0.19 U	0.19 U	0.20 U	0.19 U	0.19 U
Aroclor-1248 (PCB-1248)	ug/L	0.19 U	0.19 U	0.20 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	ug/L	0.19 U	0.19 U	0.20 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	ug/L	0.19 U	0.19 U	0.20 U	0.19 U	0.19 U
Total PCBs	ug/L	ND	ND	ND	ND	ND

Notes:

U - Not detected at the associated reporting limit.

Table 2.3

SES WWTP Batch Sampling Results – January/February/March 2016
 GM CET Bedford Facility
 Bedford, Indiana

Area	P216	P216	P216	P216	
Sample Location:	SES WWTP Tag 7	SES WWTP Tag 8	SES WWTP Tag 8	SES WWTP Tag 8	
Sample Identification:	WW-216-030716-PB-40371	WW-216-010516-PB-40353	WW-216-021616-PB-40353	WW-216-030716-PB-40368	
Sample Date:	03/07/2016	1/5/2016	2/16/2016	03/07/2016	
Sample Type:	Duplicate				
Units	General Motors LLC - Carbon Unit #1 Effluent (series)	General Motors LLC - Effluent Post Bag Filter	General Motors LLC - Effluent Post Bag Filter	General Motors LLC - Effluent Post Bag Filter	
Polychlorinated biphenyl (PCBs)					
Aroclor-1016 (PCB-1016)	ug/L	0.19 U	0.19 U	0.096 U	0.19 U
Aroclor-1221 (PCB-1221)	ug/L	0.19 U	0.19 U	0.096 U	0.19 U
Aroclor-1232 (PCB-1232)	ug/L	0.19 U	0.19 U	0.096 U	0.19 U
Aroclor-1242 (PCB-1242)	ug/L	0.19 U	0.19 U	0.096 U	0.19 U
Aroclor-1248 (PCB-1248)	ug/L	0.19 U	0.19 U	0.096 U	0.19 U
Aroclor-1254 (PCB-1254)	ug/L	0.19 U	0.19 U	0.096 U	0.19 U
Aroclor-1260 (PCB-1260)	ug/L	0.19 U	0.19 U	0.096 U	0.19 U
Total PCBs	ug/L	ND	ND	ND	ND

Notes:

U - Not detected at the associated reporting limit.

Appendix A
First Quarter 2016 Cover System Inspection:
Field Logs, Transect Figures,
and Photograph Log

TABLE D.1

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

Date of Inspection: 3-30-16 Weather: Sunny
 Inspector: M. Curtis/G. Seng Temperature: 64°

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
VEGETATED SOIL COVER SYSTEM					
<u>Transect EV1</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EXPOSURE OF LINER				
	- EROSION				
	- LOCALIZED SETTLEMENT/SLUMPING				
	- PONDING OF WATER/DRAINAGE				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect EV2</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EXPOSURE OF LINER				
	- EROSION				
	- LOCALIZED SETTLEMENT/SLUMPING				
	- PONDING OF WATER/DRAINAGE				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				

TABLE D.1

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
VEGETATED SOIL COVER SYSTEM (CONTINUED)					
<u>Transect EV3</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EXPOSURE OF LINER				
	- EROSION				
	- LOCALIZED SETTLEMENT/SLUMPING				
	- PONDING OF WATER/DRAINAGE				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect EV4</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EXPOSURE OF LINER				
	- EROSION	X		slight erosion	
	- LOCALIZED SETTLEMENT/SLUMPING				
	- PONDING OF WATER/DRAINAGE				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect EV5</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EXPOSURE OF LINER				
	- EROSION	X		slight erosion	
	- LOCALIZED SETTLEMENT/SLUMPING				
	- PONDING OF WATER/DRAINAGE				
	- SIGNS OF BURROWING BY ANIMALS				
	- ROOTING OF TREES				

TABLE D.1

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
VEGETATED SOIL COVER SYSTEM (CONTINUED)					
<u>Transect EV6</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EXPOSURE OF LINER				
	- EROSION				
	- LOCALIZED SETTLEMENT/SLUMPING				
	- PONDING OF WATER/DRAINAGE				
	- SIGNS OF BURROWING BY ANIMALS	X		groundhog hole	
	- ROOTING OF TREES				
<u>Transect EV7</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EXPOSURE OF LINER				
	- EROSION				
	- LOCALIZED SETTLEMENT/SLUMPING				
	- PONDING OF WATER/DRAINAGE				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect EV8</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EXPOSURE OF LINER				
	- EROSION				
	- LOCALIZED SETTLEMENT/SLUMPING				
	- PONDING OF WATER/DRAINAGE				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				

TABLE D.1

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED	
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED			
VEGETATED SOIL COVER SYSTEM (CONTINUED)						
	<u>Transect EV9</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
		- EXPOSURE OF LINER				
		- EROSION				
		- LOCALIZED SETTLEMENT/SUMPING				
		- PONDING OF WATER/DRAINAGE				
		- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
		- ROOTING OF TREES				
	<u>Transect WV1</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
		- EXPOSURE OF LINER				
		- EROSION				
		- LOCALIZED SETTLEMENT/SUMPING				
		- PONDING OF WATER/DRAINAGE				
		- SIGNS OF BURROWING BY ANIMALS				
		- ROOTING OF TREES				

TABLE D.1

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
HARD SURFACE COVER SYSTEMS					
	<u>Transect EA1</u>	- QUALITY OF ASPHALT COVER			
		- PRESENCE OF CRACKING OR DISCOLORATION	X		fill cracks,sealcoat
	<u>Transect EA2</u>	- QUALITY OF ASPHALT COVER			
		- PRESENCE OF CRACKING OR DISCOLORATION	X		fill cracks,sealcoat
	<u>Transect WA1</u>	- QUALITY OF ASPHALT COVER			
		- PRESENCE OF CRACKING OR DISCOLORATION	X		fill cracks,sealcoat
ACCESS ROAD					
	<u>ACCESS ROAD</u>	- EROSION	X		fill with gravel
		- OBSTRUCTIONS/DEBRIS			
		- POTHLES	X		fill with gravel
		- DAMAGE CAUSED BY VEHICULAR TRAFFIC	X		fill with gravel

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED	
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED			
SWALE/DRAINAGE DITCHES						
	<u>Transect ES1</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	trees need cut
		- EROSION				
		- OBSTRUCTIONS				
		- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
		- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
		- ROOTING OF TREES				
	<u>Transect ES2</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	trees need cut
		- EROSION				
		- OBSTRUCTIONS				
		- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
		- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
		- ROOTING OF TREES				
	<u>Transect ES3</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
		- EROSION				
		- OBSTRUCTIONS				
		- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
		- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
		- ROOTING OF TREES				

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
SWALE/DRAINAGE DITCHES (CONTINUED)					
<u>Transect ES4</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect ES5</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect ES6</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION	X		slight erosion	
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
SWALE/DRAINAGE DITCHES (CONTINUED)					
<u>Transect ES7</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect ES8</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect ES9</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				

TABLE D.1

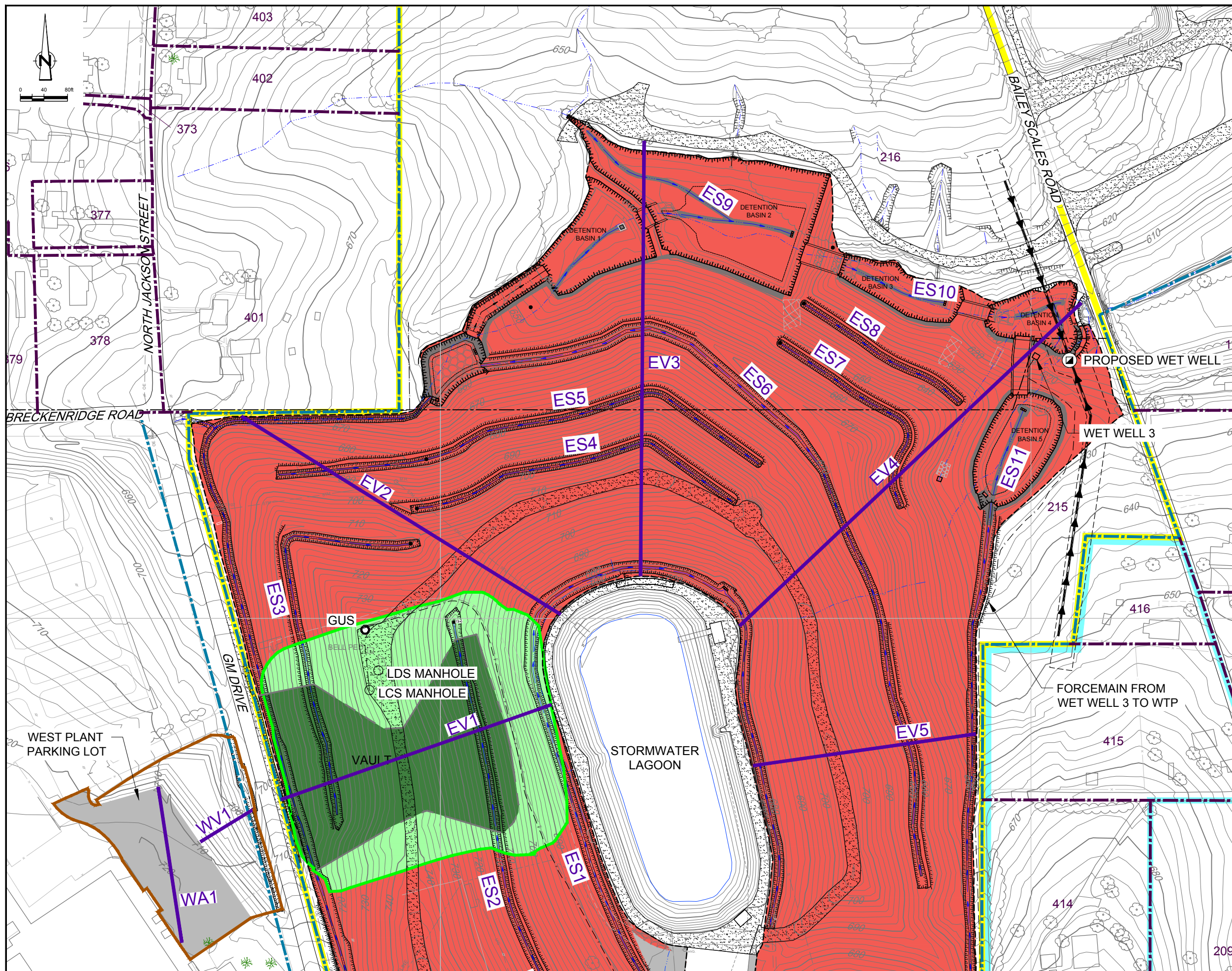
COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
SWALE/DRAINAGE DITCHES (CONTINUED)					
<u>Transect E510</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect E511</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS				
	- ROOTING OF TREES				
<u>Transect E512</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS				
	- ROOTING OF TREES				

TABLE D.1

COVER SYSTEMS INSPECTION LOG
 CONSTRUCTION CERTIFICATION REPORT EAST PLANT COVER SYSTEM
 GM CET BEDFORD FACILITY
 BEDFORD, INDIANA

ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
SWALE/DRAINAGE DITCHES (CONTINUED)					
<u>Transect ES13</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS	X		mole holes	
	- ROOTING OF TREES				
<u>Transect ES13</u>	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS	X		heavy weed growth and some bare spots	
	- EROSION				
	- OBSTRUCTIONS				
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION				
	- SIGNS OF BURROWING BY ANIMALS				
	- ROOTING OF TREES				



LEGEND

- 8'0" — EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL)
- — — — — EXISTING VEGETATION
- — — — — EXISTING BUILDINGS
- — — — — EXISTING FENCE LINE
- — — — — EXISTING RAILROAD TRACKS
- — — — — EXISTING DIRT ROADS
- — — — — EXISTING ROADS / PAVED AREAS
- — — — — EXISTING ELECTRICAL POWER LINE
- — — — — EXISTING FORCEMAIN TO TREATMENT FACILITY
- — — — — EXISTING OVERHEAD ELECTRICAL POWER LINE
- — — — — APPROXIMATE SURFACE WATER LOCATION
- — — — — APPROXIMATE GM PROPERTY BOUNDARY
- — — — — APPROXIMATE PROPERTY BOUNDARY
- — — — — EXISTING STORM SEWER
- — — — — WEST PLANT COVER LIMIT
- — — — — VAULT LIMIT
- — — — — EAST PLANT COVER LIMIT
- — — — — DRAINAGE DITCH
- — — — — ASPHALT PAVEMENT AREA
- — — — — LOW FLOW CHANNEL
- — — — — EAST PLANT AREA
- — — — — GM LLC OWNED RESIDENTIAL
- — — — — EAST PLANT COVER SYSTEM
- — — — — FINAL VAULT COVER SYSTEM AT SURFACE
- — — — — FINAL VAULT COVER SYSTEM BURIED BY EAST PLANT AREA COVER SYSTEM
- — — — — GRAVEL BED
- — — — — PAVED COVER SURFACE
- — — — — PROPOSED PILOT TRENCH
- — — — — VAULT GROUNDWATER UNDERDRAIN SYSTEM SUMP
- — — — — LEAK DETECTION SYSTEM SUMP
- — — — — LEACHATE COLLECTION SYSTEM SUMP
- — — — — TRANSECT

TRANSECT LABELING

- E EAST PLANT COVER
- V VEGETATIVE COVER
- A ASPHALT COVER
- W WEST PLANT COVER
- S SWALE

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

**GM CET BEDFORD FACILITY
BEDFORD, INDIANA**

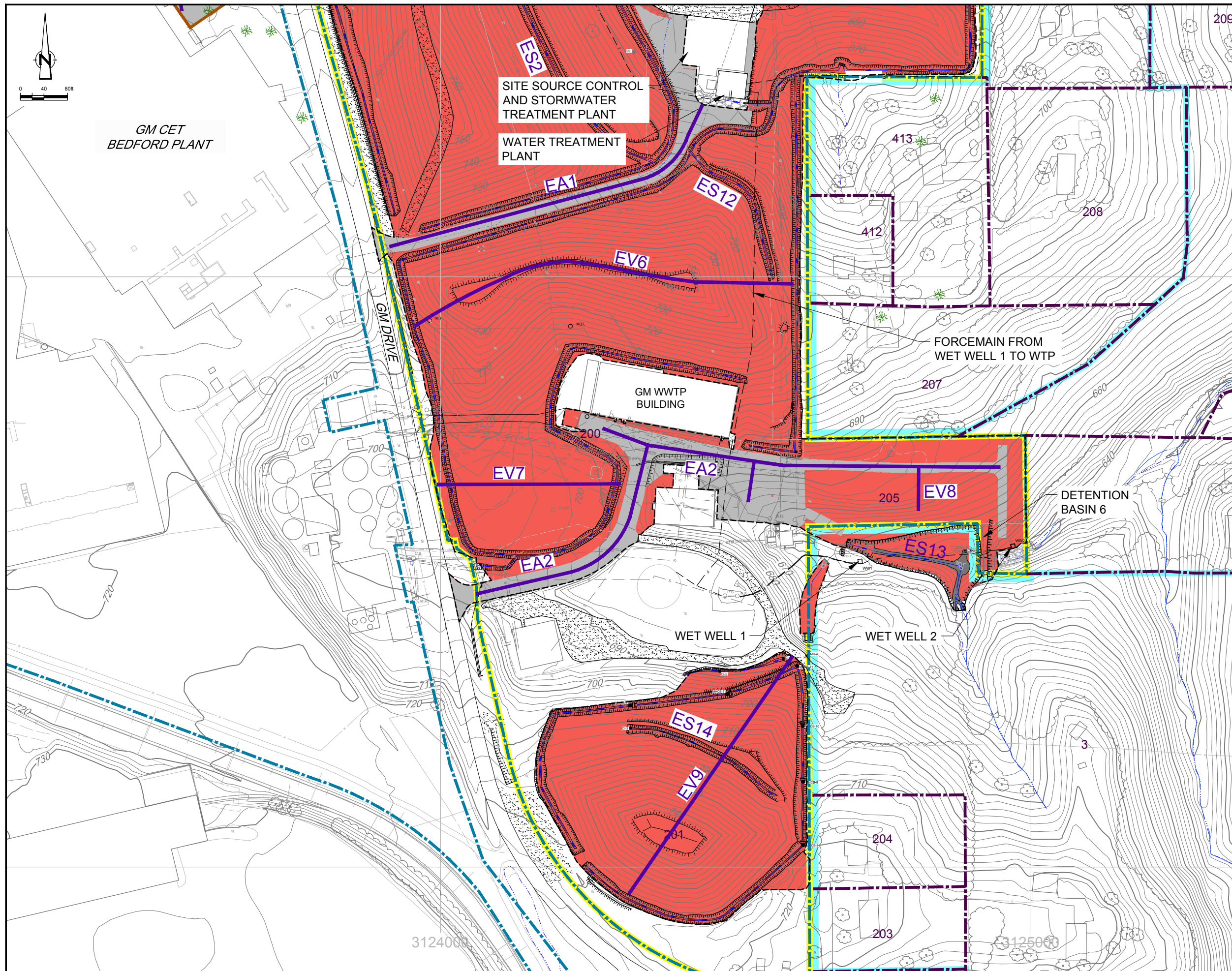
INTERIM OPERATIONS, MAINTENANCE AND MONITORING PLAN
EAST PLANT COVER SYSTEM
EAST PLANT COVER SYSTEM INSPECTIONS
NORTHERN SECTION AND WEST PLANT
COVER SYSTEM INSPECTIONS

CRA CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI, APRIL 2001
AND CRA SURVEYS 2002 TO 2008

Project Manager: J.M.	Reviewed By: P.G.	Date: FEBRUARY 2015
Scale: 1:80	Project N°: 13968-00	Report N°: 350
		Drawing N°: figure D.1

13968-00(350)GN-WA007 FEB 25/2015



LEGEND

- EXISTING GROUND SURFACE ELEVATION CONTOURS (feet AMSL)
- EXISTING VEGETATION
- EXISTING BUILDINGS
- EXISTING FENCE LINE
- EXISTING RAILROAD TRACKS
- EXISTING DIRT ROADS
- EXISTING ROADS / PAVED AREAS
- EXISTING ELECTRICAL POWER LINE
- EXISTING FORCEMAIN TO TREATMENT FACILITY
- EXISTING OVERHEAD ELECTRICAL POWER LINE
- APPROXIMATE SURFACE WATER LOCATION
- APPROXIMATE GM PROPERTY BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY
- EXISTING STORM SEWER
- WEST PLANT COVER LIMIT
- VAULT LIMIT
- EAST PLANT COVER LIMIT
- DRAINAGE DITCH
- ASPHALT PAVEMENT AREA
- LOW FLOW CHANNEL
- EAST PLANT AREA
- GM LLC OWNED RESIDENTIAL
- EAST PLANT COVER SYSTEM
- FINAL VAULT COVER SYSTEM AT SURFACE
- FINAL VAULT COVER SYSTEM BURIED BY EAST PLANT AREA COVER SYSTEM
- GRAVEL BED
- PAVED COVER SURFACE
- PROPOSED PILOT TRENCH
- VAULT GROUNDWATER UNDERDRAIN SYSTEM SUMP
- LEAK DETECTION SYSTEM SUMP
- LEACHATE COLLECTION SYSTEM SUMP
- TRANSECT

TRANSECT LABELING

- E EAST PLANT COVER
- V VEGETATIVE COVER
- A ASPHALT COVER
- W WEST PLANT COVER
- S SWALE

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

**GM CET BEDFORD FACILITY
BEDFORD, INDIANA**

INTERIM OPERATIONS, MAINTENANCE AND MONITORING PLAN
EAST PLANT COVER SYSTEM

**EAST PLANT COVER SYSTEM INSPECTIONS
SOUTHERN SECTION**

CRA CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI, APRIL 2001
AND CRA SURVEYS 2002 TO 2008

Project Manager: J.M.	Reviewed By: P.G.	Date: FEBRUARY 2015
Scale: 1:80	Project N ^o : 13968-00	Report N ^o : 350 Drawing N ^o : figure D.2

13968-00(350)GN-WA007 FEB 25/2015



Photo 1: ES6 south of EV5 East Plant Area Cover facing North



Cover System Inspection 1ST Quarter 2016



Photo 2: Looking north toward ES11 East Plant Area Cover



Cover System Inspection 1ST Quarter 2016



Photo 3: Looking Northeast along EV4 East Plant Area Cover toward ES7, ES8, ES10, and ES11



Photo 4: Looking Northeast along EV4 East Plant Area Cover



Cover System Inspection 1ST Quarter 2016



Photo 5: EV3 East Plant Area Cover facing North toward ES9 (Detention Basins 1 and 2) and ES6



Photo 6: Looking along ES5 East Plant Area Cover facing West



Cover System Inspection 1ST Quarter 2016



Photo 7: ES6 East Plant Area Cover facing South



Cover System Inspection 1ST Quarter 2016



Photo 8: ES5 East Plant Area Cover, east of EV2, facing West



**Cover System Inspection
1ST Quarter 2016**



Photo 9: EV1 Vault Cover System, looking South along ES3



Photo 10: Looking West at WV1 West Plant Area Cover System



Cover System Inspection 1ST Quarter 2016



Photo 11: Facing East toward ES1 East Plant Area Cover



Photo 12: Bare spots near ES2 East Plant Area Cover System facing West



Cover System Inspection 1ST Quarter 2016



Photo 13: Weed growth and bare spots along ES1 East Plant Area Cover System facing South



Cover System Inspection 1ST Quarter 2016



Photo 14: EV8 East Plant Area cover (Parcel 205) facing East



Photo 15: ES12 East Plant Area Cover System looking North



Cover System Inspection 1ST Quarter 2016



Photo 16: Looking South toward EA2 East Plant Area Cover at EV7



Photo 17: Evidence of burrowing at EV7 East Plant Area Cover



Cover System Inspection 1ST Quarter 2016



Photo 18: EV9 East Plant Area Cover System at ES14



Photo 19: EV9 (Parcel 201) East Plant Area Cover looking East



Cover System Inspection 1ST Quarter 2016

www.ghd.com

