



# ANNUAL COMPLIANCE REPORT

## EAST PLANT AREA TSCA VAULT CALENDAR YEAR 2010

GM CETC BEDFORD FACILITY  
105 GM DRIVE  
BEDFORD, INDIANA

EPA ID# IND006036099

Prepared For:  
General Motors LLC

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JULY 13, 2011  
REF. NO. 013968 (334)

Prepared by:  
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**Worldwide Facilities Group  
Remediation Team**

July 13, 2011

Reference No. 013968

Mr. Peter Ramanauskas  
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Land and Chemicals Division  
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Dear Mr. Ramanauskas:

Re: Annual Compliance Report - East Plant Area TSCA Vault - Calendar Year 2010  
GM CETC – Bedford Facility, IND 006036099  
Voluntary RCRA Corrective Action  
Bedford, Indiana

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Enclosed for your review, please find a copy of the report entitled Annual Compliance Report, East Plant Area Vault: Calendar Year 2010. This document has been submitted by Conestoga-Rovers & Associates (CRA), on behalf of General Motors LLC (GM), to present the requirements for annual reporting in accordance with the Conditions of Approval from October 26, 2006.

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

Yours truly,

General Motors LLC

A handwritten signature in black ink that reads "Cheryl R. Hiatt". The signature is written in a cursive style with a large initial 'C'.

Cheryl R. Hiatt  
Project Manager

Encl.

c.c.: See Attached Distribution List

***GM Bedford Distribution List***

Annual Compliance Report - East Plant Area TSCA Vault  
Calendar Year 2010

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## LIST OF TERMS AND ACRONYMS

Approval(s)	U.S. EPA and IDEM PCB Risk-Based Disposal Approvals
CA	Corrective Action
CFR	Code of Federal Regulations
CRA	Conestoga-Rovers & Associates, Inc.
CETC	Castings Engines Transmissions and Components
EQ tank	equalization tank
FA	Financial Assurance
Facility	GM CETC Bedford Facility in Bedford, Indiana
GM	General Motors LLC
HASP	Health and Safety Plan
IDEM	Indiana Department of Environmental Management
IM	Interim Measure
LCS	Leachate Collection System
LDS	Leak Detection System
mg/L	milligram-per-liter
NPDES	National Pollutant Discharge Elimination System
PCB	Polychlorinated biphenyl
ppm	part per million
QAPP	Quality Assurance Project Plan
RA	Removal Action
RCRA	Resource Conservation and Recovery Act
Report	East Plant Area Vault Annual Compliance Report Covering the Calendar Year of 2010
RFI	RCRA Facility Investigation
Site	Facility IM Work Areas
SSC	Site Source Control
TSCA	Toxic Substance Controls Act
U.S. EPA	United States Environmental Protection Agency
Vault	East Plant Area TSCA landfill vault
VOCs	Volatile organic compounds
WTP	Water Treatment Plant

## 1.0 INTRODUCTION

This Annual Compliance Report (Report) summarizes data from the calendar year of 2010 for the Toxic Substances Control Act (TSCA) landfill vault (Vault), located in the East Plant Area of the General Motors LLC (GM) Castings Engines Transmissions and Components (CETC, formerly Powertrain) Bedford Plant (Facility), in Lawrence County, Bedford, Indiana. This Report has been prepared by Conestoga-Rovers & Associates, Inc. (CRA) on behalf of GM in accordance with Condition 27 of the Conditions of Approval, presented in both the Risk-Based Polychlorinated Biphenyl (PCB) Disposal Approval and the TSCA Approval to Dispose PCBs (Approvals) issued by the Indiana Department of Environmental Management (IDEM) and United States Environmental Protection Agency (U.S. EPA), respectively, on October 26, 2006, for the Vault. The Vault is part of the cleanup activities being conducted at the Facility under the East Plant Area Interim Measure (IM) and concurrent with other IMs at the Facility (Site). The Approvals became effective on October 26, 2006, and were issued pursuant to 40 Code of Federal Regulations (CFR) § 761.61 (c) for the disposal of PCB contaminated waste in the Vault. The Vault was constructed as a component of the East Plant Area IM during Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) activities being conducted under a Performance-Based CA Agreement (effective March 20, 2001, and amended October 1, 2002, March 29, 2007, and May 9, 2008).for the Facility.

The next Annual Compliance Report for the East Plant Area Vault, covering the calendar year of 2011, will be submitted on or before July 15, 2012, or as amended by an approved Closure/Post Closure Plan to be submitted prior to closure of the vault which is anticipated to occur in 2011.

### 1.1 PURPOSE AND ORGANIZATION OF REPORT

This Report presents the requirements for current annual reporting in compliance with the conditions of the Approvals by U.S. EPA and IDEM for the Vault.

This Report is organized as follows:

#### Section 2.0 - Summary of Record Keeping Log

This section provides a summary of the daily waste information, quantity of liquid collected from the leachate collection system (LCS), leak detection system (LDS), and the underdrain system, water elevation in the underdrain system and over the primary liner, and the amount of water treated in the Site Source Control (SSC) Water Treatment Plant (WTP).

### **Section 3.0 - Analytical Results**

This section provides all analytical results from the monitoring of the air, groundwater, LCS, LDS, underdrain, and the water treatment facility.

### **Section 4.0 - Leachate and Leak Detection Water Disposal**

This section provides details related to the volume, PCB concentration, and disposal destination for leachate and leak detection water with a PCB concentrations equal to or greater than ( $\geq$ ) 1 part per million (ppm).

### **Section 5.0 - Summary of Water Elevation**

This section provides a summary of the water elevation over the primary liner and in the underdrain system.

### **Section 6.0 - Spill Cleanup Reports**

This section identifies any PCB spill cleanups that occurred outside of the Exclusion Zone established in accordance with the Site Health and Safety Plan (HASp).

### **Section 7.0 - Financial Assurance**

This section discusses the upcoming financial assurance for the Vault.

### **Section 8.0 - References**

This section presents references cited in this Report.



## **2.0 SUMMARY OF RECORD KEEPING LOG**

The following information is recorded as required by Condition 25 of the Conditions of Approval:

- a) Daily waste information:
  - i) Identification of the source of excavated material
  - ii) Estimated quantity of material excavated and placed in the Vault
- b) The quantity of liquid collected from the LCS
- c) The quantity of liquid collected from the LDS
- d) The quantity of liquid collected from the underdrain
- e) The water elevation in the underdrain and over the primary liner
- f) The amount of water (liquid) treated in the water treatment facility and the PCB concentration (if known)

### **2.1 DAILY WASTE INFORMATION SUMMARY**

Placement of all the  $\geq 50$  mg/kg PCB material in the Vault was completed on September 27, 2008. A summary of the daily waste information for all PCB material placed in the Vault was presented in the Annual Compliance Report for the East Plant Area Vault Covering Calendar Years 2006, 2007, and 2008 (CRA, June 2009), which was submitted to U.S. EPA on June 24, 2009.

### **2.2 SUMMARY OF LCS, LDS, AND UNDERDRAIN SYSTEM LOGS**

The water level in the LCS, LDS, and underdrain system has been monitored on a daily basis since the start of operation commencing on August 30, 2006; with the exception that water levels were not recorded on weekends (i.e. Saturday and/or Sunday) or holidays, unless a precipitation event had occurred within 24 hours, and with some additional exceptions due to weather, access limitations, or equipment malfunctions. The locations of the LCS, LDS, and underdrain manholes can be found on Figure 3.1. Summaries of the daily water levels for the LCS, LDS, and underdrain system are presented in Tables 2.1, 2.2, and 2.3, respectively. This monitoring is done on a daily basis by Severson Environmental Services as part of their East Plant Area construction activities and reported to CRA. A summary of the maximum water elevation in each of

the systems for each month of 2010 is presented in Table 2.4. Further discussion of the water elevations can be found in Section 5 of this report.

### **2.3            SUMMARY OF WATER TREATED IN THE WATER TREATMENT FACILITY**

Water removed from the Vault sumps is re-directed by permanent forcemain to the equalization tank (EQ tank) where it mixes with water from three wet well groundwater collection systems prior to treatment in the SSC WTP. The effluent from the SSC WTP was sampled monthly under the National Pollutant Discharge Elimination System (NPDES) permit (NPDES Permit No. IN0003573) to discharge at Outfall 003 and data collected during the 2010 calendar year was reported according to the permit.

### **3.0 ANALYTICAL RESULTS**

All sampling and analysis was performed in accordance with the Quality Assurance Project Plan (QAPP) Addendum No. 2 (CRA, July 19, 2006) for the RCRA CA Work Plans and IMs, and the Removal Action (RA) Work Plans.

#### **3.1 AIR MONITORING ANALYTICAL RESULTS**

The air monitoring program was terminated on October 7, 2008, as approved by U.S. EPA (formal request was submitted October 29, 2008). No air monitoring was conducted for Vault activities in 2010.

#### **3.2 GROUNDWATER MONITORING ANALYTICAL RESULTS**

Groundwater sampling proximate to the Vault did not occur through 2010. Groundwater samples are collected at the perimeter of the Facility on a semi-annual basis under the CA750, which is under a separate program for the RCRA Facility Investigation (RFI). Groundwater sampling locations in the vicinity of the Vault are presented on Figure 3.1.

#### **3.3 LEACHATE AND LEAK DETECTION WATER MONITORING ANALYTICAL RESULTS**

Water from the LCS and LDS is sampled monthly for PCBs before being sent to the SSC WTP, as required by Condition 8 of the Approval. All analytical data for samples collected from the LCS and LDS in 2010 are presented in Tables 3.1 and 3.2, respectively. The LCS samples were analyzed for volatile organic compounds (VOCs) and PCBs, while LDS samples were only analyzed for PCBs. No samples collected from the LCS and LDS exhibited results with PCB concentrations  $\geq 1$  milligram-per-liter (mg/L), therefore there was no TSCA material to report, as required by the October 26, 2006 approval. All water pumped from the LCS and LDS was treated in the on-Site SSC WTP during 2010.

#### **3.4 UNDERDRAIN ANALYTICAL RESULTS**

There were no samples collected from the underdrain system in 2010. Perforated drain pipes beneath the base of the Vault collect bedrock groundwater beneath the Vault and

direct it to a sump located outside (i.e. north side) the Vault footprint. All groundwater collected in the underdrain sump was directed for treatment in the SSC WTP. There have not been conditions at the LCS or LDS to warrant sampling of the underdrain system. Analytical results for samples collected from the SSC WTP are discussed in the following section.

### **3.5 WATER TREATMENT FACILITY ANALYTICAL RESULTS**

Water removed in 2010 from the LCS, LDS, and underdrain system sumps was directed by permanent forcemain to the SSC WTP for treatment. The effluent from the SSC WTP was sampled monthly in 2010 under the NPDES permit (NPDES Permit No. IN0003573) to discharge at Outfall 003 and data has been reported according to the permit. The analytical results for monthly samples collected from the SSC WTP effluent in 2010 are presented in Table 3.3.

#### 4.0 LEACHATE AND LEAK DETECTION WATER DISPOSAL

There were no analytical results with  $\geq 1$  mg/L PCBs for water samples collected from the LCS or LDS during the calendar year of 2010. All of the pumped leachate and leak detection water was treated in the SSC WTP.

## 5.0 SUMMARY AND REVIEW OF WATER ELEVATIONS

The level of water in the underdrain system and the level of water over the primary liner (i.e., the LCS) continued to be monitored daily throughout 2010. Any substantial accumulation of water was removed from each chamber/sump via pumping at the maximum achievable removal rate until the level in the underdrain and above the primary liner was reduced to the minimum acceptable level for appropriate pump operations (e.g., sufficient water present above the pump motor to prevent overheating). Accumulated water continues to be transported via forcemain and discharged for treatment to the on-Site SSC WTP, as required in the October 26, 2006 Approval. In addition, the LDS is monitored and manually pumped, when necessary, to maintain the levels below the base of the Vault. As previously described in Section 2.2, a summary of the water elevation in the underdrain system and above the primary liner are presented in Tables 2.3, 2.2, and 2.1, respectively. Summaries of the maximum monthly water elevations are presented in Table 2.4. A summary of the average monthly volume of water removed from LCS and LDS is presented on Figure 5.1

### LEACHATE COLLECTION SYSTEM

Pumping to reduce water elevations in the LCS occurred on seven occasions throughout 2010 (once a month in February, May, June, July, August, and twice in November for cleaning of the manhole). Between 0.5 to 4 feet of water was removed each time pumping occurred at the LCS manhole. A permanent pump was installed in the LCS manhole in November 2008 and this required an adjustment to the standard pumping operations. In order to prevent the pump from overheating, the motor must remain submerged at all times (i.e., not less than 2 feet of water depth). The depth of water in the LCS was maintained between 2 and 6 feet of water for the calendar year of 2010. The total amount of water removed from the LCS in 2010 was 2,453 gallons, with the amount pumped during the seven pumping occasions ranging from 63 to 783 gallons. To get a better perspective of the total water removed from the LCS, 2,453 gallons over the 3.5-acre vault represents an average 0.09 inch thickness of water over the entire vault footprint (based on 30 percent porosity).

Events where the level was reduced below 2 feet coincided with pump maintenance. The few occasions where the water level rose quickly over the period of a day is the result of pulling the pump and the water contained in the line being allowed to drain back into the manhole. The water level was generally maintained through manual pumping between 2 and 6 feet, which is consistent with the operating procedures.

## LEACHATE DETECTION SYSTEM

Pumping at the LDS manhole was performed using a temporary pump, for which the typical water levels were reduced from 1 to 4 feet of water depth to approximately half a foot. Pumping at the LDS manhole occurred on six occasions throughout 2010, typically on the same day as pumping at the LCS, with the exception that the LDS was not pumped in July, was pumped in September, and was only pumped once in November. The total amount of water removed from the LDS in 2010 was 1,671 gallons, with the amount pumped during the six pumping occasions ranging from 63 to 783 gallons. This volume is considerably less than the volume removed from the LDS manhole in 2009 (6,641 gallons), demonstrating a continued, significant, downward trend.

Readily extractable water had been previously removed following the LDS flushing activities that were conducted in 2007 between January 23 and June 5. Remaining water from interstitial spaces is expected to gradually drain from the material (the total volume extracted from the LDS in 2010 represents less than 1 percent of the interstitial volume of the LDS).

The depth of water in the LDS was typically maintained between 0 and 2 feet of water (with the water level rising to 4.2 feet in November after adding two additional manhole riser sections ( the pump lines were drained back into the manhole during this activity). To better illustrate the total volume of water removed from the LDS in 2010, 1,671 gallons over the 3.5-acre vault represents 0.06 inches of water over the entire site (based on 30 percent porosity) although the actual distribution of the water under the vault is unknown.

In summary, LDS pumping events generally reduced the water level to less than 1 foot. The only significant rise in water level occurred when the manhole riser sections were added and the water lines were allowed to drain back into the manhole. In general, water level was kept between 0.5 feet and 2 feet, except in October and November when the pump was removed, as liner work was happening around the manhole (the LDS was pumped down again on November 28, 2010).

## UNDERDRAIN

A permanent pump (3-foot long vertical pump) was installed in the underdrain sump in November 2008, which requires the pump to remain submerged by at least 3 feet of water at all times in order to prevent overheating of the pump motor. Due to this

requirement, water depth in the underdrain was maintained at approximately 6.6 feet for all of 2010.

In summary, the measurement of the 6.6 feet level in the underdrain sump did not change noticeably (i.e. increase) over the year of monitoring. As the level did not change, the pump was not turned on. Therefore the measured level is representative of the groundwater level.



## 6.0 SPILL CLEANUP REPORTS

There were no on-Site PCB spills that occurred outside or inside the Exclusion Zone that was established in accordance with the Site HASP (CRA, August 2008). Additionally, there were no spills on public roads.

## 7.0 FINANCIAL ASSURANCE

Remedial construction of the IMs for the East Plant Area, which includes the Vault, is continuing at the Site. The Approvals from U.S. EPA TSCA and IDEM established that, "The financial assurance (FA) mechanism can be part of the financial assurance mechanism developed for the East Plant Area or the final Corrective Measures". GM continues to elect to obtain the FA mechanism for the Vault as part of the FA for the final Corrective Measures for the Facility. Upon construction completion of the Corrective Measures for the Site, FA will be established for all operation, maintenance, and monitoring activities.

## 8.0 REFERENCES

CRA, Modification Request to the Ambient Air Quality Monitoring Plan (AAQMP), correspondence on October 29, 2008.

CRA, Annual Compliance Report, East Plant Area Vault, Calendar Years 2006, 2007, and 2008, June 24, 2009.

CRA, Quality Assurance Project Plan (QAPP) Resource Conservation and Recovery Act (RCRA) Facility Investigation and Removal Action Work Plan: Addendum No. 2, July 19, 2006.

CRA, Consolidated GM Bedford Health and Safety Plan (HASP), August 2008.

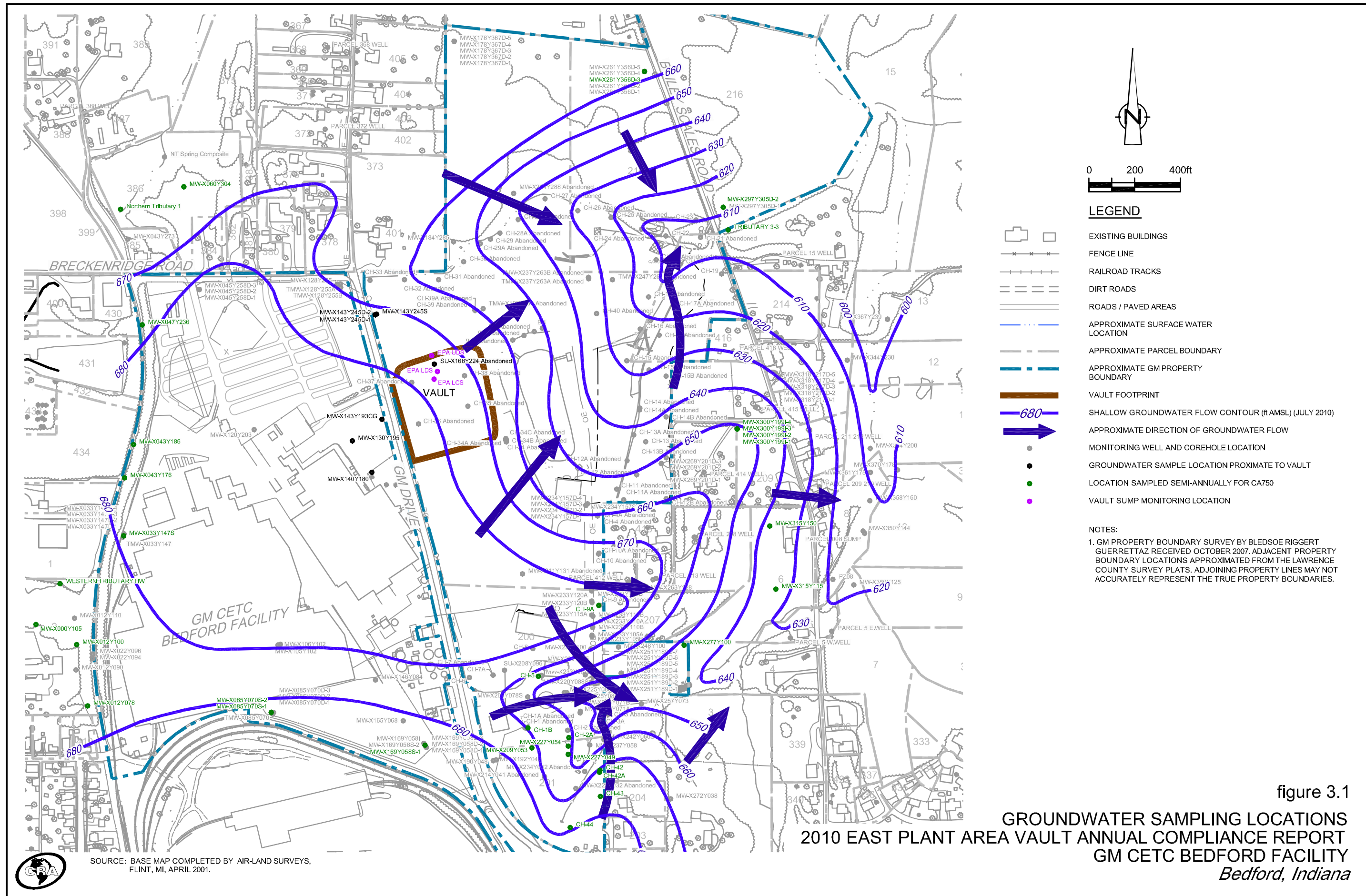
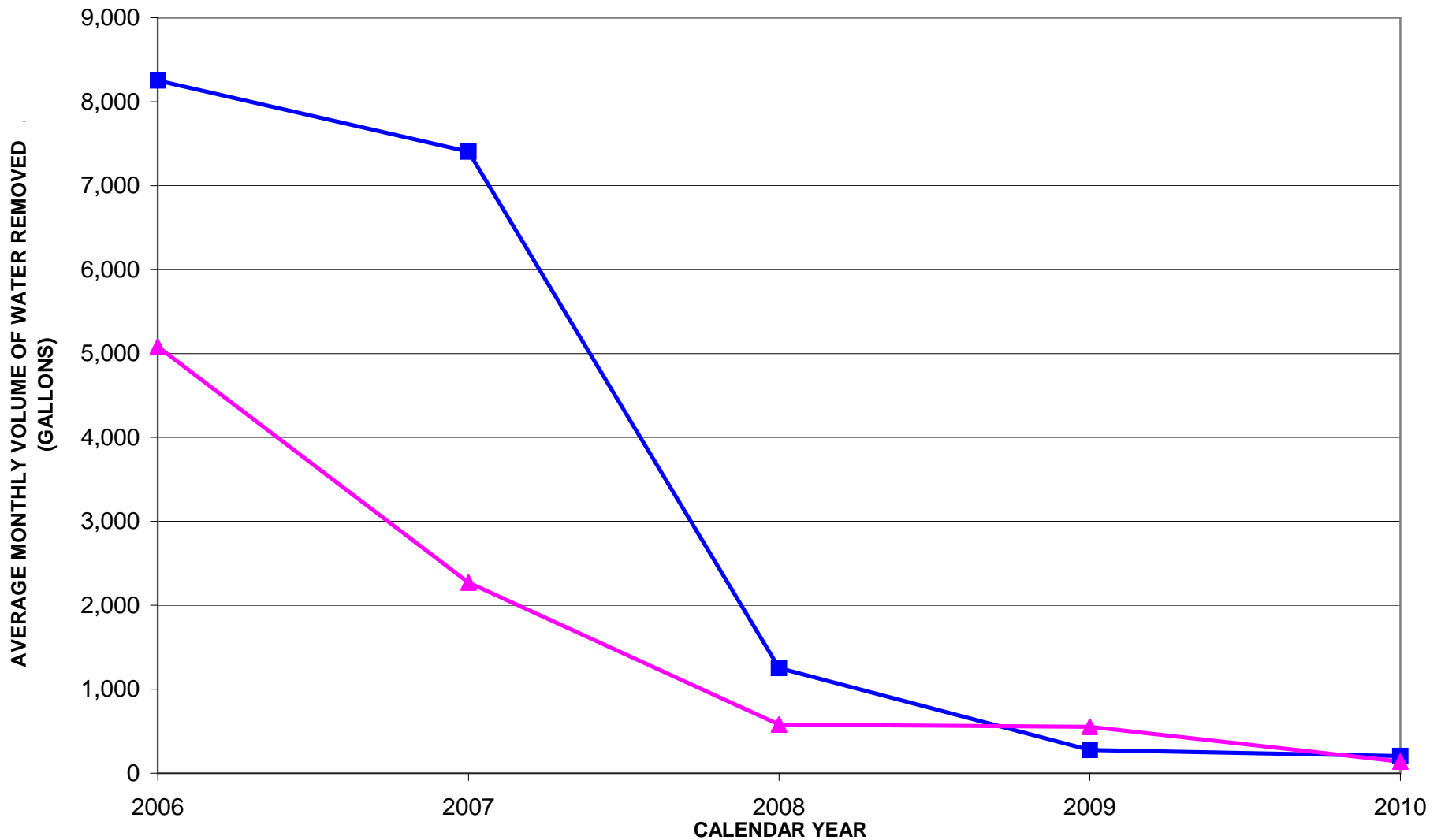


figure 3.1

**GROUNDWATER SAMPLING LOCATIONS**  
**2010 EAST PLANT AREA VAULT ANNUAL COMPLIANCE REPORT**  
**GM CETC BEDFORD FACILITY**  
*Bedford, Indiana*

SOURCE: BASE MAP COMPLETED BY AIR-LAND SURVEYS, FLINT, MI, APRIL 2001.





**LEGEND**

- Leachate Collection System
- ▲ Leak Detection System

**NOTES**

- <sup>(1)</sup> Operation of the LCS and LDS commenced on Aug. 30, 2006.
- <sup>(2)</sup> Water from the underdrain system entered the LDS Sept 8, 9, 10, 12, 2006.
- <sup>(3)</sup> Rehabilitation activities were conducted on the LDS (flushing) on Jan. 23 - June 5, 2007.

figure 5.1

SUMMARY OF AVERAGE MONTHLY VOLUME OF WATER REMOVED FROM LCS AND LDS  
 2010 EAST PLANT AREA VAULT ANNUAL COMPLIANCE REPORT  
 GM CETC BEDFORD FACILITY  
 Bedford, Indiana



TABLE 2.1

**2010 PUMPING DATA  
LEACHATE COLLECTION SYSTEM (LCS)  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

**Monitoring Location Information**

	depth until	new depth from
<i>Top of sump (datum reference)</i>	9/23/10	9/24/10
<i>Bottom of sump (feet BTOS)</i>	58.67	64.67
<i>Diameter of sump (feet)</i>	6	6

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
1/1/2010	54.2	4.47	14:28			Sunny
1/2/2010						Saturday (no w/l measurement)
1/3/2010						Sunday (no w/l measurement)
1/4/2010	54.2	4.47	13:41			Sunny and Cold
1/5/2010	54.1	4.57	14:35			Cold
1/6/2010	54.1	4.57	13:24			Cold and Snow
1/7/2010	54.1	4.57	11:31			Cold and Snow
1/8/2010	54.1	4.57	10:58			
1/9/2010						Saturday (no w/l measurement)
1/10/2010						Sunday (no w/l measurement)
1/11/2010	54.1	4.57	15:09			Cold
1/12/2010	54.1	4.57	15:38			Cold
1/13/2010	54.1	4.57	13:55			Cold
1/14/2010	54.0	4.67	11:09			Warm
1/15/2010	54.0	4.67	9:32			Warm
1/16/2010	54.0	4.67	13:46			Warm
1/17/2010	54.0	4.67	11:59			Warm
1/18/2010						Holiday (no w/l measurement)
1/19/2010	54.0	4.67	10:32			Warm
1/20/2010	54.0	4.67	14:35			Rain
1/21/2010	54.0	4.67	13:27			Rain
1/22/2010	54.0	4.67	9:34			Clear
1/23/2010						Saturday (no w/l measurement)
1/24/2010	54.0	4.67	14:15			Clear
1/25/2010	54.0	4.67	15:27			Snow
1/26/2010	54.0	4.67	14:06			Warm
1/27/2010	54.0	4.67	15:24			Warm
1/28/2010	54.0	4.67	14:31			Cold
1/29/2010	54.0	4.67	11:05			Cold
1/30/2010						Saturday (no w/l measurement)
1/31/2010						Sunday (no w/l measurement)
2/1/2010	54.0	4.67	12:22			
2/2/2010	53.9	4.77	12:16			
2/3/2010	53.8	4.87	14:47			
2/4/2010	53.8	4.87	13:32			
2/5/2010	53.6	5.07	15:26			
2/6/2010						Saturday (no w/l measurement)
2/7/2010						Sunday (no w/l measurement)
2/8/2010	53.5	5.17	11:10			
2/9/2010	53.5	5.17	14:20			
2/10/2010	53.5	5.17	9:48			
2/11/2010	53.5	5.17	15:35			

TABLE 2.1

**2010 PUMPING DATA  
LEACHATE COLLECTION SYSTEM (LCS)  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
2/12/2010	53.5	5.17	12:19			
2/13/2010						Saturday (no w/l measurement)
2/14/2010						Sunday (no w/l measurement)
2/15/2010	53.4	5.27	11:42			Snow
2/16/2010	53.3	5.37	12:27			
2/17/2010	53.3	5.37	13:20			
2/18/2010	53.3	5.37	13:57			
2/19/2010	53.3	5.37	13:42			
2/20/2010						Saturday (no w/l measurement)
2/21/2010						Sunday (no w/l measurement)
2/22/2010	54.6	4.07	14:21	1.30	275	(1)
2/23/2010	54.5	4.17	13:04			
2/24/2010	54.5	4.17	10:39			
2/25/2010	54.6	4.07	12:24			
2/26/2010	54.5	4.17	12:51			
2/27/2010						Saturday (no w/l measurement)
2/28/2010						Sunday (no w/l measurement)
3/1/2010	54.4	4.27	13:39			
3/2/2010	54.4	4.27	15:06			
3/3/2010	54.3	4.37	12:24			
3/4/2010	54.3	4.37	14:20			
3/5/2010	54.3	4.37	10:51			
3/6/2010						Saturday (no w/l measurement)
3/7/2010						Sunday (no w/l measurement)
3/8/2010	54.3	4.37	12:19			
3/9/2010	54.2	4.47	12:42			
3/10/2010	54.2	4.47	13:35			
3/11/2010	54.2	4.47	9:43			
3/12/2010	54.2	4.47	12:20			
3/13/2010	54.1	4.57	10:07			
3/14/2010	54.1	4.57	8:40			
3/15/2010	54.1	4.57	12:19			
3/16/2010	54.1	4.57	15:48			
3/17/2010	54.1	4.57	12:45			
3/18/2010	54.1	4.57	14:07			
3/19/2010	54.1	4.57	14:41			
3/20/2010						Saturday (no w/l measurement)
3/21/2010						Sunday (no w/l measurement)
3/22/2010	54.0	4.67	15:34			
3/23/2010	54.0	4.67	12:22			
3/24/2010	54.0	4.67	13:37			
3/25/2010	54.0	4.67	10:36			
3/26/2010	54.0	4.67	14:39			
3/27/2010						Saturday (no w/l measurement)
3/28/2010						Sunday (no w/l measurement)
3/29/2010	53.9	4.77	15:24			
3/30/2010	53.9	4.77	12:35			
3/31/2010	53.9	4.77	17:19			

TABLE 2.1

**2010 PUMPING DATA  
LEACHATE COLLECTION SYSTEM (LCS)  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
4/1/2010	53.9	4.77	14:53			Warm and windy (CRA tested pump)
4/2/2010						Holiday (no w/l measurement)
4/3/2010	53.9	4.77	13:59			Warm and Rain
4/4/2010	53.8	4.87	10:37			Sunny
4/5/2010	53.8	4.87	15:32			Sunny
4/6/2010	53.8	4.87	14:19			Sunny
4/7/2010	53.8	4.87	9:35			Cloudy
4/8/2010	53.7	4.97	11:31			Rain
4/9/2010	53.7	4.97	15:55			Warm
4/10/2010						Saturday (no w/l measurement)
4/11/2010						Sunday (no w/l measurement)
4/12/2010	53.6	5.07	13:31			Warm
4/13/2010	53.6	5.07	15:37			Warm
4/14/2010	53.6	5.07	14:43			Hot
4/15/2010	53.6	5.07	13:23			Hot
4/16/2010	53.6	5.07	10:29			Rain
4/17/2010						Saturday (no w/l measurement)
4/18/2010	53.6	5.07	12:27			
4/19/2010	53.6	5.07	11:03			Hot
4/20/2010	53.6	5.07	9:41			Cool
4/21/2010	53.6	5.07	11:27			Warm
4/22/2010	53.6	5.07	12:29			Cloudy (CRA tested pump)
4/23/2010	53.7	4.97	8:27			Cloudy
4/24/2010						Saturday (no w/l measurement)
4/25/2010						Sunday (no w/l measurement)
4/26/2010	53.6	5.07	11:22			Rain
4/27/2010	53.6	5.07	14:34			Rain
4/28/2010	53.6	5.07	14:55			Sunny
4/29/2010	53.6	5.07	10:34			Warm
4/30/2010	53.6	5.07	11:41			Warm
5/1/2010	53.5	5.17	11:34			
5/2/2010	53.4	5.27	9:17			
5/3/2010	53.3	5.37	14:25			
5/4/2010	53.3	5.37	10:28			
5/5/2010	56.2	2.47	16:49	2.90	613	
5/6/2010	56.2	2.47	15:34			
5/7/2010	56.2	2.47	14:35			
5/8/2010	56.1	2.57	16:39			
5/9/2010						Sunday, no w/l measurement
5/10/2010	56.1	2.57	12:40			
5/11/2010	56.0	2.67	11:10			
5/12/2010	55.8	2.87	10:47			
5/13/2010	55.8	2.87	13:38			
5/14/2010	55.8	2.87	14:25			
5/15/2010	55.8	2.87	11:07			
5/16/2010						Sunday, no w/l measurement
5/17/2010	55.6	3.07	15:21			
5/18/2010	55.6	3.07	10:04			CRA tested



TABLE 2.1

**2010 PUMPING DATA  
LEACHATE COLLECTION SYSTEM (LCS)  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
5/19/2010	55.7	2.97	8:31			
5/20/2010	55.7	2.97	10:41			
5/21/2010	55.7	2.97	14:04			
5/22/2010						Saturday, no w/l measurement
5/23/2010						Sunday, no w/l measurement
5/24/2010	55.4	3.27	9:34			
5/25/2010	55.4	3.27	10:39			
5/26/2010	55.4	3.27	12:10			
5/27/2010	55.3	3.37	10:12			
5/28/2010	55.3	3.37	10:37			
5/29/2010	55.3	3.37	8:41			
5/30/2010						Sunday, no w/l measurement
5/31/2010						Holiday, no w/l measurement
6/1/2010	55.3	3.37	16:35			
6/2/2010	55.3	3.37	14:48			
6/3/2010	55.2	3.47	12:34			
6/4/2010	55.2	3.47	15:16			
6/5/2010	55.1	3.57	10:49			
6/6/2010						Sunday, no w/l measurement
6/7/2010	56.8	1.87	11:38	1.70	360	
6/8/2010	56.7	1.97	13:13			
6/9/2010	56.7	1.97	9:41			
6/10/2010	56.7	1.97	14:26			
6/11/2010	56.6	2.07	15:55			
6/12/2010	56.6	2.07	14:26			
6/13/2010	56.6	2.07	14:09			
6/14/2010	56.4	2.27	13:42			
6/15/2010	56.3	2.37	16:01			
6/16/2010	56.4	2.27	17:24			CRA sampled
6/17/2010	56.3	2.37	9:41			
6/18/2010	56.3	2.37	10:33			
6/19/2010						Saturday, no w/l measurement
6/20/2010						Sunday, no w/l measurement
6/21/2010	56.1	2.57	14:34			
6/22/2010	56.0	2.67	12:29			
6/23/2010	56.0	2.67	10:53			
6/24/2010	56.0	2.67	12:34			
6/25/2010						Inspecting monitors, no levels measured
6/26/2010	53.8	4.87	14:56	-2.20	-465	(1)
6/27/2010						Sunday, no w/l measurement
6/28/2010	53.7	4.97	12:33			
6/29/2010	53.7	4.97	16:46			
6/30/2010	53.6	5.07	15:33			
7/1/2010	54.2	4.47	14:23	0.60	127	
7/2/2010	54.2	4.47	13:09			
7/3/2010						Saturday, no w/l measurement
7/4/2010						Sunday, no w/l measurement

TABLE 2.1

**2010 PUMPING DATA  
LEACHATE COLLECTION SYSTEM (LCS)  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
7/5/2010						Holiday, no w/l measurement
7/6/2010	54.1	4.57	13:15			CRA tested
7/7/2010	54.1	4.57	16:42			
7/8/2010	54.0	4.67	15:23			
7/9/2010	53.9	4.77	17:41			
7/10/2010	53.8	4.87	16:51			
7/11/2010						Sunday, no w/l measurement
7/12/2010	53.8	4.87	16:49			
7/13/2010	53.8	4.87	17:19			
7/14/2010	53.8	4.87	15:26			
7/15/2010	53.8	4.87	12:16			
7/16/2010	53.7	4.97	14:36			
7/17/2010	53.7	4.97	12:41			
7/18/2010						Sunday, no w/l measurement
7/19/2010	53.7	4.97	13:39			
7/20/2010	53.6	5.07	11:53			
7/21/2010	53.6	5.07	14:37			
7/22/2010	53.6	5.07	12:45			
7/23/2010	53.6	5.07	18:17			
7/24/2010	53.6	5.07	11:43			
7/25/2010						Sunday, no w/l measurement
7/26/2010	53.6	5.07	12:19			
7/27/2010	53.6	5.07	13:05			
7/28/2010	53.5	5.17	12:31			
7/29/2010	53.4	5.27	12:40			
7/30/2010	53.4	5.27	12:21			
7/31/2010	53.4	5.27	13:34			
8/1/2010						Sunday, no w/l measurement
8/2/2010	53.2	5.47	12:21			
8/3/2010	53.2	5.47	12:49			
8/4/2010	53.2	5.47	12:42			
8/5/2010	53.2	5.47	16:43			
8/6/2010	53.2	5.47	16:22			
8/7/2010	53.2	5.47	13:41			
8/8/2010	53.2	5.47	14:33			
8/9/2010	53.2	5.47	12:24			
8/10/2010	53.2	5.47	12:57			
8/11/2010	53.2	5.47	12:38			CRA sampled
8/12/2010	53.2	5.47	12:40			
8/13/2010	53.2	5.47	12:19			
8/14/2010	53.2	5.47	12:11			
8/15/2010						Sunday, no w/l measurement
8/16/2010	53.2	5.47	13:44			
8/17/2010	53.1	5.57	12:35			
8/18/2010	53.1	5.57	12:17			
8/19/2010	53.1	5.57	12:31			
8/20/2010	53.1	5.57	12:40			
8/21/2010	56.8	1.87	12:25	3.70	783	

TABLE 2.1

**2010 PUMPING DATA  
LEACHATE COLLECTION SYSTEM (LCS)  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
8/22/2010						Sunday, no w/l measurement
8/23/2010	56.8	1.87	12:31			
8/24/2010	56.7	1.97	10:43			
8/25/2010	56.7	1.97	10:04			
8/26/2010	56.7	1.97	9:27			
8/27/2010	56.7	1.97	11:19			
8/28/2010	56.6	2.07	12:33			
8/29/2010						Sunday, no w/l measurement
8/30/2010	56.6	2.07	13:35			
8/31/2010	56.6	2.07	12:42			
9/1/2010	56.6	2.07	12:13			
9/2/2010	56.6	2.07	12:42			
9/3/2010	56.6	2.07	12:19			
9/4/2010	56.6	2.07	13:30			
9/5/2010	56.6	2.07	14:49			
9/6/2010						Holiday, no w/l measurement
9/7/2010	56.6	2.07	11:29			
9/8/2010	56.6	2.07	13:22			
9/9/2010	56.5	2.17	10:29			
9/10/2010	56.5	2.17	11:34			
9/11/2010	56.4	2.27	9:36			
9/12/2010						Sunday, no w/l measurement
9/13/2010	56.4	2.27	10:39			
9/14/2010	56.4	2.27	11:17			
9/15/2010	56.5	2.17	12:29			
9/16/2010	56.5	2.17	15:12			CRA sampled Pumped for 2 hours. Commence placement of creek soil fill in AOI-15 from Area G
9/17/2010	54.2	4.47	11:04	-2.3	-486	Pump equipment disconnected during placement of creek soil in the area. Water drained from lines.
9/18/2010	54.2	4.47	13:06			
9/19/2010						Sunday, no w/l measurement
9/20/2010	54.1	4.57	12:29			
9/21/2010	54.1	4.57	12:20			
9/22/2010	54.1	4.57	12:24			
9/23/2010	54.1	4.57	12:30			
9/24/2010	60.0	4.67	19:04			
9/25/2010	60.0	4.67	19:15			
9/26/2010	60.0	4.67	12:17			
9/27/2010						
9/28/2010	59.9	4.77	12:31			
9/29/2010	59.9	4.77	12:20			
9/30/2010	59.9	4.77	12:35			
10/1/2010	59.9	4.77	12:18			
10/2/2010	59.9	4.77	12:44			
10/3/2010	59.9	4.77	10:24			
10/4/2010	59.7	4.97	13:32			

TABLE 2.1

**2010 PUMPING DATA  
LEACHATE COLLECTION SYSTEM (LCS)  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
10/5/2010	59.6	5.11	14:23			
10/6/2010	59.6	5.07	11:36			
10/7/2010	59.6	5.07	11:04			
10/8/2010	59.5	5.17	12:24			
10/9/2010	59.5	5.17	10:29			
10/10/2010						Sunday, no w/l measurement
10/11/2010	59.4	5.27	12:27			
10/12/2010	59.4	5.27	12:21			
10/13/2010	59.4	5.27	12:44			
10/14/2010	59.4	5.27	11:33			
10/15/2010	59.3	5.37	10:28			
10/16/2010						Saturday, no w/l measurement
10/17/2010						Sunday, no w/l measurement
10/18/2010	59.3	5.37	14:33			
10/19/2010	59.3	5.37	9:45			
10/20/2010	59.3	5.37	8:49			
10/21/2010	59.3	5.37	9:22			
10/22/2010	59.2	5.47	10:31			
10/23/2010	59.2	5.47	11:44			
10/24/2010						Sunday, no w/l measurement
10/25/2010						
10/26/2010	59.1	5.57	8:45			
10/27/2010	59.1	5.57	11:34			
10/28/2010	59.1	5.57	10:16			
10/29/2010	59.0	5.67	9:39			
10/30/2010	59.0	5.67	12:22			
10/31/2010	59.0	5.67	10:21			
11/1/2010	59.0	5.67	11:21			
11/2/2010	59.0	5.67	10:30			
11/3/2010	59.0	5.67	9:58			
11/4/2010	59.0	5.67	14:24			
11/5/2010	59.0	5.67	11:32			
11/6/2010	59.0	5.67	9:31			
11/7/2010						Sunday, no w/l measurement
11/8/2010	59.0	5.67	11:17			
11/9/2010	59.0	5.67	10:30			
11/10/2010	58.9	5.77	11:15			
11/11/2010	59.0	5.67	10:04			
11/12/2010	59.0	5.67	10:20			
11/13/2010	59.0	5.67	11:40			
11/14/2010	59.0	5.67	14:26			
11/15/2010	59.0	5.67	13:44			
11/16/2010	58.9	5.77	10:37			
11/17/2010	58.9	5.77	11:44			
11/18/2010	58.9	5.77	13:22			
11/19/2010	58.8	5.87	14:41			
11/20/2010	58.8	5.87	13:34			
11/21/2010	58.8	5.87	10:30			
11/22/2010	58.8	5.87	13:40			
11/23/2010	59.9	4.77	14:31	1.10	233	Cleaning of Well

TABLE 2.1

**2010 PUMPING DATA  
LEACHATE COLLECTION SYSTEM (LCS)  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
11/24/2010	59.9	4.77	13:17			
11/25/2010	59.9	4.77	9:30			
11/26/2010						Holiday, no w/1 measurement
11/27/2010	59.9	4.77	11:44			
11/28/2010	59.9	4.77	11:03			Cleaning of Well
11/29/2010	60.2	4.47	11:27	0.30	63	
11/30/2010	60.2	4.47	14:30			
12/1/2010	60.2	4.47	11:25			
12/2/2010	60.2	4.47	14:26			
12/3/2010	60.2	4.47	10:41			
12/4/2010	60.2	4.47	9:22			
12/5/2010	60.2	4.47	13:35			
12/6/2010	60.2	4.47	11:24			
12/7/2010	60.2	4.47	12:35			
12/8/2010	60.2	4.47	10:49			
12/9/2010	60.2	4.47	11:35			
12/10/2010	60.2	4.47	8:39			
12/11/2010	60.2	4.47				
12/12/2010	60.2	4.47				
12/13/2010	60.2	4.47	9:45			
12/14/2010	60.2	4.47	14:09			
12/15/2010	60.2	4.47	8:43			
12/16/2010	60.2	4.47	11:26			
12/17/2010	60.2	4.47	14:30			
12/18/2010	60.2	4.47	11:09			
12/19/2010	60.2	4.47	11:34			
12/20/2010	60.2	4.47	9:40			
12/21/2010	60.2	4.47	11:05			
12/22/2010	60.0	4.67	9:12			
12/23/2010	60.2	4.47	10:57			
12/24/2010	60.2	4.47	13:24			
12/25/2010	60.2	4.47	9:27			
12/26/2010	60.2	4.47	11:38			
12/27/2010	60.1	4.57	10:29			
12/28/2010	60.1	4.57	9:37			
12/29/2010	60.1	4.57	8:56			
12/30/2010	60.1	4.57	11:43			
12/31/2010	60.1	4.57	9:22			

**Notes:**

w/1 - Water Level

Water level was kept between 2 feet and 5.5 feet, so pump was manually operated appropriately.

TABLE 2.2

**2010 PUMPING DATA  
LEAK DETECTION SYSTEM  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

**Monitoring Location Information**

	depth until	9/21/10 to	new depth from
<i>Top of sump (datum reference)</i>	9/20/10	9/22/10	9/23/10
<i>Bottom of sump (feet BTOS)</i>	51.8	57.8	63.8
<i>Diameter of sump (feet)</i>	6	6	6

<i>Date</i>	<i>Water Level feet (BTOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth feet (BTOS)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
1/1/2010	51.0	14:14	0.80			
1/2/2010						Saturday, no w/l measurement
1/3/2010						Sunday, no w/l measurement
1/4/2010	51.0	13:35	0.80			
1/5/2010	51.0	14:24	0.80			
1/6/2010	51.0	13:15	0.80			
1/7/2010	51.0	11:24	0.80			
1/8/2010	51.0	10:49	0.80			
1/9/2010	51.0	14:56	0.80			
1/10/2010						Saturday, no w/l measurement
1/11/2010						Sunday, no w/l measurement
1/12/2010	51.0	15:26	0.80			
1/13/2010	51.0	13:43	0.80			
1/14/2010	51.0	10:56	0.80			
1/15/2010	49.9	9:24	1.90	-1.10	-233	
1/16/2010	49.9	13:38	1.90			
1/17/2010	49.9	11:47	1.90			
1/18/2010						Holiday, no w/l measurement
1/19/2010	49.9	10:24	1.90			
1/20/2010	49.9	14:29	1.90			
1/21/2010	49.9	13:19	1.90			
1/22/2010	49.9	9:26	1.90			
1/23/2010	49.9	14:06	1.90			
1/24/2010						Sunday, no w/l measurement
1/25/2010	49.8	15:16	2.00			
1/26/2010	49.8	13:53	2.00			
1/27/2010	49.9	15:15	1.90			CRA tested
1/28/2010	49.9	14:24	1.90			
1/29/2010	49.9	10:54	1.90			
1/30/2010						Saturday, no w/l measurement
1/31/2010						Sunday, no w/l measurement
2/1/2010	49.9	12:16	1.90			
2/2/2010	49.9	12:11	1.90			
2/3/2010	49.9	14:35	1.90			
2/4/2010	49.9	13:26	1.90			
2/5/2010	49.8	15:17	2.00			
2/6/2010						Saturday, no w/l measurement
2/7/2010						Sunday, no w/l measurement
2/8/2010	49.8	10:56	2.00			
2/9/2010	49.8	14:04	2.00			
2/10/2010	49.8	9:35	2.00			
2/11/2010	49.8	15:21	2.00			

TABLE 2.2

**2010 PUMPING DATA  
LEAK DETECTION SYSTEM  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level feet (BTOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth feet (BTOS)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
2/12/2010	49.8	12:12	2.00			
2/13/2010						Saturday, no w/l measurement
2/14/2010						Sunday, no w/l measurement
2/15/2010	49.8	11:28	2.00			
2/16/2010	49.7	12:15	2.10			
2/17/2010	49.7	13:09	2.10			
2/18/2010	49.7	14:06	2.10			
2/19/2010	49.7	13:38	2.10			
2/20/2010						Saturday, no w/l measurement
2/21/2010						Sunday, no w/l measurement
2/22/2010	51.2	14:12	0.60	1.50	317	
2/23/2010	51.1	13:09	0.70			
2/24/2010	51.1	10:32	0.70			
2/25/2010	51.2	12:17	0.60			
2/26/2010	51.1	12:47	0.70			
2/27/2010						Saturday, no w/l measurement
2/28/2010						Sunday, no w/l measurement
3/1/2010	51.1	13:32	0.70			
3/2/2010	51.1	14:48	0.70			
3/3/2010	51.1	12:16	0.70			
3/4/2010	51.1	14:14	0.70			
3/5/2010	51.0	10:42	0.80			
3/6/2010						Saturday, no w/l measurement
3/7/2010						Sunday, no w/l measurement
3/8/2010	51.0	12:12	0.80			
3/9/2010	51.0	12:34	0.80			
3/10/2010	51.0	13:22	0.80			
3/11/2010	51.0	9:31	0.80			
3/12/2010	51.0	12:11	0.80			
3/13/2010	51.0	9:59	0.80			
3/14/2010	51.0	8:33	0.80			
3/15/2010	51.0	12:13	0.80			
3/16/2010	51.0	15:37	0.80			
3/17/2010	51.1	12:38	0.70			
3/18/2010	51.1	13:58	0.70			
3/19/2010	51.1	14:34	0.70			
3/20/2010						Saturday, no w/l measurement
3/21/2010						Sunday, no w/l measurement
3/22/2010	51.1	13:24	0.70			
3/23/2010	51.0	12:15	0.80			
3/24/2010	51.0	13:31	0.80			
3/25/2010	51.0	10:24	0.80			
3/26/2010	51.0	14:34	0.80			
3/27/2010						Saturday, no w/l measurement
3/28/2010						Sunday, no w/l measurement
3/29/2010	50.9	15:18	0.90			
3/30/2010	50.9	12:28	0.90			
3/31/2010	50.9	17:12	0.90			

TABLE 2.2

**2010 PUMPING DATA  
LEAK DETECTION SYSTEM  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level feet (BTOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth feet (BTOS)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
4/1/2010	50.9	14:45	0.90			
4/2/2010						Holiday, no w/l measurement
4/3/2010	50.8	13:53	1.00			
4/4/2010	50.8	10:31	1.00			
4/5/2010	50.8	15:28	1.00			
4/6/2010	50.8	14:13	1.00			
4/7/2010	50.8	9:26	1.00			
4/8/2010	50.7	11:24	1.10			
4/9/2010	50.7	15:47	1.10			
4/10/2010						Saturday, no w/l measurement
4/11/2010						Sunday, no w/l measurement
4/12/2010	50.7	13:24	1.10			
4/13/2010	50.7	15:26	1.10			
4/14/2010	50.7	14:25	1.10			
4/15/2010	50.7	13:16	1.10			
4/16/2010	50.7	10:24	1.10			
4/17/2010						Saturday, no w/l measurement
4/18/2010	50.8	12:19	1.00			
4/19/2010	50.8	10:53	1.00			
4/20/2010	50.8	9:34	1.00			
4/21/2010	50.8	11:19	1.00			
4/22/2010	50.8	12:21	1.00			
4/23/2010	50.9	8:17	0.90			
4/24/2010						Saturday, no w/l measurement
4/25/2010						Sunday, no w/l measurement
4/26/2010	50.8	11:15	1.00			
4/27/2010	50.8	14:21	1.00			
4/28/2010	50.8	14:48	1.00			
4/29/2010	50.8	10:27	1.00			
4/30/2010	50.8	11:34	1.00			
5/1/2010	50.8	11:21	1.00			
5/2/2010	50.8	9:10	1.00			
5/3/2010	50.7	14:09	1.10			
5/4/2010	50.7	10:21	1.10			
5/5/2010	51.1	16:42	0.70	0.40	85	
5/6/2010	51.1	15:28	0.70			
5/7/2010	51.1	14:21	0.70			
5/8/2010	51.1	16:32	0.70			
5/9/2010						Sunday, no w/l measurement
5/10/2010	51.1	12:31	0.70			
5/11/2010	51.0	11:02	0.80			
5/12/2010	50.9	9:35	0.90			
5/13/2010	50.9	13:32	0.90			
5/14/2010	50.9	12:18	0.90			
5/15/2010	50.9	10:56	0.90			
5/16/2010						Sunday, no w/l measurement
5/17/2010	50.8	14:17	1.00			
5/18/2010	50.8	9:55	1.00			



TABLE 2.2

**2010 PUMPING DATA  
LEAK DETECTION SYSTEM  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level feet (BTOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth feet (BTOS)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
5/19/2010	50.9	8:22	0.90			
5/20/2010	50.9	10:34	0.90			
5/21/2010	50.9	13:55	0.90			
5/22/2010						Saturday, no w/1 measurement
5/23/2010						Sunday, no w/1 measurement
5/24/2010	50.7	9:27	1.10			
5/25/2010	50.7	10:31	1.10			
5/26/2010	50.7	11:55	1.10			
5/27/2010	50.7	10:07	1.10			
5/28/2010	50.6	10:29	1.20			
5/29/2010	50.6	8:35	1.20			
5/30/2010						Sunday, no w/1 measurement
5/31/2010						Holiday, no w/1 measurement
6/1/2010	50.6	16:27	1.20			
6/2/2010	50.7	14:41	1.10			
6/3/2010	50.7	12:26	1.10			
6/4/2010	50.7	15:10	1.10			
6/5/2010	50.6	10:42	1.20			
6/6/2010						Sunday, no w/1 measurement
6/7/2010	51.2	11:27	0.60	0.60	127	
6/8/2010	51.2	13:09	0.60			
6/9/2010	51.2	9:34	0.60			
6/10/2010	51.1	14:17	0.70			
6/11/2010	51.1	15:48	0.70			
6/12/2010	51.1	14:17	0.70			
6/13/2010	51.1	14:04	0.70			
6/14/2010	51.0	13:31	0.80			
6/15/2010	50.9	15:51	0.90			
6/16/2010	50.9	17:17	0.90			
6/17/2010	50.9	9:35	0.90			
6/18/2010	50.9	10:25	0.90			
6/19/2010						Saturday, no w/1 measurement
6/20/2010						Sunday, no w/1 measurement
6/21/2010	50.7	14:21	1.10			
6/22/2010	50.6	12:23	1.20			
6/23/2010	50.6	10:46	1.20			
6/24/2010	50.6	12:26	1.20			
6/25/2010						Inspecting monitors, SES negated to measure levels
6/26/2010	50.2	14:45	1.60	-0.40	-85	
6/27/2010						Sunday, no w/1 measurement
6/28/2010	50.1	12:27	1.70			
6/29/2010	50.1	16:34	1.70			
6/30/2010	50.0	15:26	1.80			
7/1/2010	50.0	14:19	1.80			
7/2/2010	50.0	13:03	1.80			
7/3/2010						Saturday, no w/1 measurement
7/4/2010						Sunday, no w/1 measurement

TABLE 2.2

**2010 PUMPING DATA  
LEAK DETECTION SYSTEM  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level feet (BTOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth feet (BTOS)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
7/5/2010						Holiday, no w/l measurement
7/6/2010	50.0	13:08	1.80			CRA tested
7/7/2010	50.0	16:31	1.80			
7/8/2010	50.0	15:16	1.80			
7/9/2010	50.0	17:34	1.80			
7/10/2010	50.0	16:46	1.80			
7/11/2010	50.0	16:46	1.80			
7/12/2010						
7/13/2010	50.0	17:10	1.80			
7/14/2010	50.0	15:19	1.80			
7/15/2010	50.0	12:10	1.80			
7/16/2010	50.0	14:27	1.80			
7/17/2010	50.0	12:34	1.80			
7/18/2010						Sunday, no w/l measurement
7/19/2010	50.0	13:31	1.80			
7/20/2010	50.0	11:46	1.80			
7/21/2010	50.0	14:26	1.80			
7/22/2010	50.0	12:34	1.80			
7/23/2010	50.0	18:05	1.80			
7/24/2010	50.0	11:35	1.80			
7/25/2010						Sunday, no w/l measurement
7/26/2010	50.0	12:13	1.80			
7/27/2010	50.0	12:53	1.80			
7/28/2010	50.0	12:23	1.80			
7/29/2010	49.9	12:34	1.90			
7/30/2010	49.9	12:15	1.90			
7/31/2010	49.9	13:26	1.90			
8/1/2010						Sunday, no w/l measurement
8/2/2010	49.8	12:17	2.00			
8/3/2010	49.8	12:41	2.00			
8/4/2010	49.8	12:31	2.00			
8/5/2010	49.8	16:34	2.00			
8/6/2010	49.8	16:16	2.00			
8/7/2010	49.8	13:33	2.00			
8/8/2010	49.8	14:29	2.00			
8/9/2010	49.8	12:17	2.00			
8/10/2010	49.8	12:48	2.00			
8/11/2010	49.9	12:21	1.90			CRA sampled
8/12/2010	49.9	12:34	1.90			
8/13/2010	49.8	12:16	2.00			
8/14/2010	49.8	12:04	2.00			
8/15/2010						Sunday, no w/l measurement
8/16/2010	49.8	13:39	2.00			
8/17/2010	49.8	12:28	2.00			
8/18/2010	49.8	12:08	2.00			
8/19/2010	49.8	12:24	2.00			
8/20/2010	49.8	12:31	2.00			
8/21/2010	51.2	12:13	0.60	1.40	296	

TABLE 2.2

**2010 PUMPING DATA  
LEAK DETECTION SYSTEM  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level feet (BTOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth feet (BTOS)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
8/22/2010						Sunday, no w/1 measurement
8/23/2010	51.2	12:24	0.60			
8/24/2010	51.2	10:36	0.60			
8/25/2010	51.2	9:52	0.60			
8/26/2010	51.1	9:20	0.70			
8/27/2010	51.1	11:11	0.70			
8/28/2010	51.1	12:24	0.70			
8/29/2010						Sunday, no w/1 measurement
8/30/2010	51.0	13:29	0.80			
8/31/2010	51.0	12:35	0.80			
9/1/2010	51.0	12:08	0.80			
9/2/2010	51.0	12:34	0.80			
9/3/2010	51.0	12:12	0.80			
9/4/2010	51.0	13:24	0.80			
9/5/2010	51.0	14:41	0.80			
9/6/2010						Holiday, no w/1 measurement
9/7/2010	51.0	11:20	0.80			
9/8/2010	51.0	13:16	0.80			
9/9/2010	51.0	12:22	0.80			
9/10/2010	51.0	11:31	0.80			
9/11/2010	51.0	9:24	0.80			
9/12/2010						Sunday, no w/1 measurement
9/13/2010	51.0	10:32	0.80			
9/14/2010	51.0	11:10	0.80			
9/15/2010	51.0	12:24	0.80			CRA sampled
9/16/2010	51.0	15:04	0.80			
9/17/2010	51.3	10:51	0.50	0.30	63	
9/18/2010	51.3	12:59	0.50			
9/19/2010						Sunday, no w/1 measurement
9/20/2010	51.3	12:24	0.50			
9/21/2010	55.3	12:13	2.50			6 foot section added
9/22/2010	55.3	12:17	2.50			
9/23/2010	61.7	18:52	2.10			Additional 6 foot tile section added
9/24/2010	61.7	19:08	2.10			
9/25/2010	61.7	12:09	2.10			
9/26/2010						Sunday, no w/1 measurement
9/27/2010	61.6	12:10	2.20			
9/28/2010	60.7	12:24	3.10	-0.90	-190	
9/29/2010	60.7	12:11	3.10			
9/30/2010	60.7	12:26	3.10			
10/1/2010	60.7	12:10	3.10			
10/2/2010	60.7	12:34	3.10			
10/3/2010	60.7	10:17	3.10			
10/4/2010	60.6	13:24	3.20			
10/5/2010	60.1	14:17	3.70	-0.50	-106	
10/6/2010	60.1	11:24	3.70			
10/7/2010	60.1	10:52	3.70			
10/8/2010	60.1	12:16	3.70			

TABLE 2.2

**2010 PUMPING DATA  
LEAK DETECTION SYSTEM  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level feet (BTOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth feet (BTOS)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
10/9/2010	60.0	10:24	3.80			
10/10/2010						Sunday, no w/l measurement
10/11/2010	60.0	12:20	3.80			
10/12/2010	60.0	12:12	3.80			
10/13/2010	60.0	12:36	3.80			
10/14/2010	60.0	11:24	3.80			
10/15/2010	60.0	12:20	3.80			
10/16/2010						Saturday, no w/l measurement
10/17/2010						Sunday, no w/l measurement
10/18/2010	59.8	14:24	4.00			
10/19/2010	59.8	9:36	4.00			
10/20/2010	59.8	8:42	4.00			
10/21/2010	59.8	9:14	4.00			
10/22/2010	59.8	10:27	4.00			
10/23/2010	59.8	11:39	4.00			
10/24/2010						Sunday, no w/l measurement
10/25/2010						
10/26/2010	59.8	8:32	4.00			
10/27/2010	59.8	11:21	4.00			
10/28/2010	59.8	10:10	4.00			
10/29/2010	59.8	9:30	4.00			
10/30/2010	59.8	12:15	4.00			
10/31/2010	59.7	10:12	4.10			
11/1/2010	59.7	11:14	4.10			
11/2/2010	59.7	10:22	4.10			
11/3/2010	59.7	9:50	4.10			
11/4/2010	59.7	14:17	4.10			
11/5/2010	59.7	11:24	4.10			
11/6/2010	59.7	9:20	4.10			
11/7/2010						Sunday, no w/l measurement
11/8/2010	59.7	11:10	4.10			
11/9/2010	59.7	10:22	4.10			
11/10/2010	59.6	11:09	4.20			
11/11/2010	59.6	9:52	4.20			
11/12/2010	59.6	10:12	4.20			
11/13/2010	59.6	11:31	4.20			
11/14/2010	59.6	14:18	4.20			
11/15/2010	59.6	13:35	4.20			
11/16/2010	59.6	10:24	4.20			
11/17/2010	59.6	11:32	4.20			
11/18/2010	59.6	13:17	4.20			
11/19/2010	59.6	14:34	4.20			
11/20/2010	59.6	13:26	4.20			
11/21/2010	59.6	10:24	4.20			
11/22/2010	59.6	13:33	4.20			
11/23/2010	59.6	14:20	4.20			
11/24/2010	59.6	13:09	4.20			
11/25/2010	59.6	9:22	4.20			
11/26/2010						Holiday, no w/l measurement
11/27/2010	59.6	11:37	4.20			
11/28/2010	59.6	10:55	4.20			Pumped for cleaning of well

TABLE 2.2

**2010 PUMPING DATA  
LEAK DETECTION SYSTEM  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level feet (BTOS)</i>	<i>Time of Measurement (hh:mm)</i>	<i>Water Depth feet (BTOS)</i>	<i>Water Depth Removed (feet)</i>	<i>Volume Removed (gallons)</i>	<i>Comments</i>
11/29/2010	63.3	11:18	0.50	3.70	783	
11/30/2010	63.3	14:20	0.50			
12/1/2010	63.3	11:18	0.50			
12/2/2010	63.3	14:20	0.50			
12/3/2010	63.3	10:34	0.50			
12/4/2010	63.3	9:12	0.50			
12/5/2010	63.3	13:26	0.50			
12/6/2010	63.3	11:17	0.50			
12/7/2010	63.3	12:22	0.50			
12/8/2010	63.3	10:35	0.50			
12/9/2010	63.3	11:24	0.50			
12/10/2010	63.3	8:27	0.50			
12/11/2010	63.3	not recorded	0.50			
12/12/2010	63.3	not recorded	0.50			
12/13/2010	63.3	9:37	0.50			
12/14/2010	63.3	13:57	0.50			
12/15/2010	63.3	8:32	0.50			
12/16/2010	63.3	11:17	0.50			
12/17/2010	63.3	14:21	0.50			
12/18/2010	63.3	10:56	0.50			
12/19/2010	63.3	11:25	0.50			
12/20/2010	63.3	9:34	0.50			
12/21/2010	63.3	10:51	0.50			
12/22/2010	63.3	9:04	0.50			
12/23/2010	63.3	10:48	0.50			
12/24/2010	63.3	13:17	0.50			
12/25/2010	63.3	9:11	0.50			
12/26/2010	63.2	11:29	0.60			
12/27/2010	63.2	10:16	0.60			
12/28/2010	63.2	9:23	0.60			
12/29/2010	63.2	8:49	0.60			
12/30/2010	63.2	10:35	0.60			
12/31/2010	63.2	9:11	0.60			

**Notes:**

w/1 - Water Level

The water level was kept between 0.5 feet and 2 feet, except from October through November when liner work was being completed in the area and the pump and water lines were removed. The LDS was pumped down again on 11/28/2010 following completion of the liner work

TABLE 2.3

2010 PUMPING DATA  
GRAVEL UNDERDRAIN SUMP  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA

Monitoring Location Information

Top of sump (datum reference)	708.81
Bottom of sump (feet BTOS)	46.67
Diameter of sump (feet)	1.5

Date	Water Level (feet BTOS)	Water Depth (feet AFOS)	Time of Water Level	Comments
			Measurement (hh:mm)	
1/1/2010	40.1	6.6	14:06	Sunny
1/2/2010				Saturday (no w/1 measurement)
1/3/2010				Sunday (no w/1 measurement)
1/4/2010	40.1	6.6	13:24	Sunny and Cold
1/5/2010	40.1	6.6	14:16	Cold
1/6/2010	40.1	6.6	13:06	Cold and Snow
1/7/2010	40.1	6.6	11:14	Cold and Snow
1/8/2010	40.1	6.6	10:37	
1/9/2010				Saturday (no w/1 measurement)
1/10/2010				Sunday (no w/1 measurement)
1/11/2010	40.1	6.6	14:47	Cold
1/12/2010	40.1	6.6	15:14	Cold
1/13/2010	40.1	6.6	13:30	Cold
1/14/2010	40.1	6.6	10:41	Warm
1/15/2010	40.1	6.6	9:18	Warm
1/16/2010	40.1	6.6	13:26	Warm
1/17/2010	40.1	6.6	11:35	Warm
1/18/2010				Holiday (no w/1 measurement)
1/19/2010	40.0	6.7	10:15	Warm
1/20/2010	40.0	6.7	14:23	Rain
1/21/2010	40.1	6.6	13:07	Rain
1/22/2010	40.1	6.6	9:17	Clear (changed out meter)
1/23/2010	40.1	6.6	13:51	Clear
1/24/2010				Sunday (no w/1 measurement)
1/25/2010	40.1	6.6	15:10	Snow
1/26/2010	40.1	6.6	13:44	Warm
1/27/2010	40.1	6.6	15:01	Warm
1/28/2010	40.1	6.6	14:16	Cold
1/29/2010	40.1	6.6	10:47	Cold
1/30/2010				Saturday (no w/1 measurement)
1/31/2010				Sunday (no w/1 measurement)
2/1/2010	40.1	6.6	12:05	
2/2/2010	40.1	6.6	12:01	
2/3/2010	40.1	6.6	14:27	
2/4/2010	40.1	6.6	13:14	
2/5/2010	40.1	6.6	15:02	
2/6/2010				Saturday (no w/1 measurement)
2/7/2010				Sunday (no w/1 measurement)
2/8/2010	40.1	6.6	10:41	
2/9/2010	40.1	6.6	13:50	
2/10/2010	40.1	6.6	9:27	
2/11/2010	40.1	6.6	15:09	
2/12/2010	40.1	6.6	12:05	
2/13/2010				Saturday (no w/1 measurement)
2/14/2010				Sunday (no w/1 measurement)
2/15/2010	40.1	6.6	11:19	Snow
2/16/2010	40.1	6.6	12:05	
2/17/2010	40.1	6.6	12:50	
2/18/2010	40.1	6.6	14:14	
2/19/2010	40.1	6.6	13:25	
2/20/2010				Saturday (no w/1 measurement)
2/21/2010				Sunday (no w/1 measurement)
2/22/2010	40.1	6.6	14:04	
2/23/2010	40.1	6.6	13:16	
2/24/2010	40.1	6.6	10:25	
2/25/2010	40.1	6.6	12:06	
2/26/2010	40.1	6.6	12:34	
2/27/2010				Saturday (no w/1 measurement)
2/28/2010				Sunday (no w/1 measurement)

TABLE 2.3

2010 PUMPING DATA  
GRAVEL UNDERDRAIN SUMP  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA

Date	Water Level (feet BTOS)	Water Depth (feet AFOS)	Time of Water Level	Comments
			Measurement (hh:mm)	
3/1/2010	40.1	6.6	13:21	
3/2/2010	40.1	6.6	14:42	
3/3/2010	40.1	6.6	12:15	
3/4/2010	40.1	6.6	14:08	
3/5/2010	40.1	6.6	10:30	
3/6/2010				Saturday (no w/1 measurement)
3/7/2010				Sunday (no w/1 measurement)
3/8/2010	40.1	6.6	12:08	
3/9/2010	40.1	6.6	12:25	
3/10/2010	40.1	6.6	13:14	
3/11/2010	40.1	6.6	9:27	
3/12/2010	40.1	6.6	12:05	
3/13/2010	40.1	6.6	9:52	
3/14/2010	40.1	6.6	8:24	
3/15/2010	40.1	6.6	12:07	
3/16/2010	40.1	6.6	15:28	
3/17/2010	40.1	6.6	12:31	
3/18/2010	40.1	6.6	13:50	
3/19/2010	40.1	6.6	14:27	
3/20/2010				Saturday (no w/1 measurement)
3/21/2010				Sunday (no w/1 measurement)
3/22/2010	40.1	6.6	15:16	
3/23/2010	40.1	6.6	12:09	
3/24/2010	40.1	6.6	13:24	
3/25/2010	40.1	6.6	10:15	
3/26/2010	40.1	6.6	14:28	
3/27/2010				Saturday (no w/1 measurement)
3/28/2010				Sunday (no w/1 measurement)
3/29/2010	40.1	6.6	15:10	
3/30/2010	40.1	6.6	12:20	
3/31/2010	40.1	6.6	17:06	
4/1/2010	40.1	6.6	14:36	Warm and windy
4/2/2010				Holiday (no w/1 measurement)
4/3/2010	40.1	6.6	13:47	Warm and Rain
4/4/2010	40.1	6.6	10:24	Sunny
4/5/2010	40.0	6.7	15:15	Sunny
4/6/2010	40.1	6.6	14:07	Sunny
4/7/2010	40.1	6.6	9:18	Cloudy
4/8/2010	40.1	6.6	11:10	Rain
4/9/2010	40.1	6.6	15:41	Warm
4/10/2010				Saturday (no w/1 measurement)
4/11/2010				Sunday (no w/1 measurement)
4/12/2010	40.0	6.7	13:16	Warm
4/13/2010	40.1	6.6	15:20	Warm
4/14/2010	40.1	6.6	14:28	Hot
4/15/2010	40.1	6.6	13:10	Hot
4/16/2010	40.1	6.6	10:15	Rain
4/17/2010				Saturday (no w/1 measurement)
4/18/2010	40.1	6.6	12:11	
4/19/2010	40.1	6.6	10:47	Hot
4/20/2010	40.1	6.6	9:25	Cool
4/21/2010	40.1	6.6	11:10	Warm
4/22/2010	40.1	6.6	12:15	Cloudy
4/23/2010	40.1	6.6	8:10	Cloudy
4/24/2010				Saturday (no w/1 measurement)
4/25/2010				Sunday (no w/1 measurement)
4/26/2010	40.1	6.6	11:06	Rain
4/27/2010	40.1	6.6	14:14	Rain
4/28/2010	40.1	6.6	14:40	Sunny
4/29/2010	40.1	6.6	10:15	Warm
4/30/2010	40.1	6.6	11:25	Warm

TABLE 2.3

2010 PUMPING DATA  
GRAVEL UNDERDRAIN SUMP  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA

Date	Water Level (feet BTOS)	Water Depth (feet AFOS)	Time of Water Level	
			Measurement (hh:mm)	Comments
5/1/2010	40.1	6.6	11:12	Cloudy
5/2/2010	40.1	6.6	9:02	Cloudy
5/3/2010	40.0	6.7	14:12	Sunny
5/4/2010	40.0	6.7	10:15	Sunny
5/5/2010	40.1	6.6	16:35	Sunny
5/6/2010	40.1	6.6	15:20	Sunny
5/7/2010	40.1	6.6	14:15	Sunny
5/8/2010	40.1	6.6	16:23	Cloudy
5/9/2010				Sunday (no w/1 measurement)
5/10/2010	40.1	6.6	12:20	Cloudy
5/11/2010	40.1	6.6	10:50	Cloudy
5/12/2010	40.0	6.7	9:27	Rain
5/13/2010	40.0	6.7	13:25	Cloudy
5/14/2010	40.0	6.7	12:10	Sunny
5/15/2010	40.0	6.7	10:42	Sunny
5/16/2010				Sunday (no w/1 measurement)
5/17/2010	40.1	6.6	14:10	Rain
5/18/2010	40.1	6.6	9:40	Cloudy - CRA tested system
5/19/2010	40.1	6.6	8:15	Cloudy
5/20/2010	40.1	6.6	10:25	Cloudy
5/21/2010	40.1	6.6	13:40	
5/22/2010				Saturday (no w/1 measurement)
5/23/2010				Sunday (no w/1 measurement)
5/24/2010	40.1	6.6	9:15	Warm
5/25/2010	40.1	6.6	10:20	Warm
5/26/2010	40.1	6.6	11:40	Hot
5/27/2010	40.1	6.6	9:50	Warm
5/28/2010	40.1	6.6	10:20	Hot
5/29/2010	40.1	6.6	8:30	Warm
5/30/2010				Saturday (no w/1 measurement)
5/31/2010				Sunday (no w/1 measurement)
6/1/2010	40.1	6.6	16:15	Hot
6/2/2010	40.1	6.6	14:35	Warm
6/3/2010	40.0	6.7	12:19	Cloudy, Windy
6/4/2010	40.1	6.6	15:02	Hot
6/5/2010	40.0	6.7	10:35	Cloudy, Windy
6/6/2010				Sunday (no w/1 measurement)
6/7/2010	40.1	6.6	11:15	Warm
6/8/2010	40.1	6.6	13:04	Warm, Muggy
6/9/2010	40.1	6.6	9:27	Warm
6/10/2010	40.1	6.6	14:10	Hot
6/11/2010	40.1	6.6	15:40	Cloudy
6/12/2010	40.1	6.6	14:10	Warm
6/13/2010	40.1	6.6	13:52	Hot
6/14/2010	40.0	6.7	13:20	Warm
6/15/2010	40.0	6.7	15:40	Hot, Muggy
6/16/2010	40.1	6.6	17:10	Hot
6/17/2010	40.1	6.6	9:27	Hot, Muggy
6/18/2010	40.1	6.6	10:14	Warm
6/19/2010				Saturday (no w/1 measurement)
6/20/2010				Sunday (no w/1 measurement)
6/21/2010	40.0	6.7	14:10	Hot
6/22/2010	40.1	6.6	12:14	Hot
6/23/2010	40.1	6.6	10:35	Hot, Muggy
6/24/2010	40.1	6.6	12:18	Hot
6/25/2010	40.0	6.7	10:30	Hot
6/26/2010	40.1	6.6	14:30	Hot
6/27/2010				Sunday (no w/1 measurement)
6/28/2010	40.1	6.6	12:15	Hot
6/29/2010	40.1	6.6	16:27	Warm
6/30/2010	40.1	6.6	15:18	Warm



TABLE 2.3

2010 PUMPING DATA  
GRAVEL UNDERDRAIN SUMP  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA

Date	Water Level (feet BTOS)	Water Depth (feet AFOS)	Time of Water Level	
			Measurement (hh:mm)	Comments
7/1/2010	40.1	6.6	14:15	
7/2/2010	40.1	6.6	12:50	Warm
7/3/2010				Saturday (no w/l measurement)
7/4/2010				Sunday (no w/l measurement)
7/5/2010				Holiday (no w/l measurement)
7/6/2010	40.1	6.6	12:51	
7/7/2010	40.1	6.6	16:26	Warm
7/8/2010	40.1	6.6	15:10	Hot
7/9/2010	40.1	6.6	17:26	
7/10/2010	40.1	6.6	16:38	Hot
7/11/2010				Sunday (no w/l measurement)
7/12/2010	40.1	6.6	16:36	Hot
7/13/2010	40.1	6.6	17:02	Warm
7/14/2010	40.1	6.6	15:10	Hot
7/15/2010	40.1	6.6	12:04	Hot
7/16/2010	40.1	6.6	14:15	Hot
7/17/2010	40.1	6.6	12:26	Hot
7/18/2010				Sunday (no w/l measurement)
7/19/2010	40.1	6.6	13:20	Warm
7/20/2010	40.1	6.6	11:35	Hot, cloudy
7/21/2010	40.1	6.6	14:19	Hot
7/22/2010	40.1	6.6	12:28	Hot
7/23/2010	40.1	6.6	17:57	Very Hot
7/24/2010	40.1	6.6	11:24	Hot
7/25/2010				Sunday (no w/l measurement)
7/26/2010	40.1	6.6	12:07	Hot
7/27/2010	40.1	6.6	12:40	Hot
7/28/2010	40.1	6.6	12:15	Warm
7/29/2010	40.1	6.6	12:25	Warm
7/30/2010	40.1	6.6	12:08	Hot
7/31/2010	40.1	6.6	13:15	Hot
8/1/2010				Sunday (no w/l measurement)
8/2/2010	40.1	6.6	12:04	Hot
8/3/2010	40.1	6.6	12:34	Hot
8/4/2010	40.1	6.6	12:27	Very Hot
8/5/2010	40.1	6.6	16:26	Warm
8/6/2010	40.1	6.6	16:08	Hot
8/7/2010	40.1	6.6	13:26	Hot
8/8/2010	40.1	6.6	14:24	Hot
8/9/2010	40.1	6.6	12:10	Hot
8/10/2010	40.1	6.6	12:42	Hot
8/11/2010	40.1	6.6	12:15	Warm
8/12/2010	40.1	6.6	12:27	Hot
8/13/2010	40.1	6.6	12:05	Very Warm
8/14/2010	40.1	6.6	11:57	Warm
8/15/2010				Sunday (no w/l measurement)
8/16/2010	40.1	6.6	13:34	Hot
8/17/2010	40.1	6.6	12:20	Hot
8/18/2010	40.1	6.6	12:00	Hot
8/19/2010	40.1	6.6	12:15	Warm
8/20/2010	40.1	6.6	12:25	Warm
8/21/2010	40.1	6.6	12:05	Warm and Rain
8/22/2010				Sunday (no w/l measurement)
8/23/2010	40.1	6.6	12:19	Warm
8/24/2010	40.1	6.6	10:28	Warm
8/25/2010	40.1	6.6	9:40	Warm
8/26/2010	40.1	6.6	9:10	Warm/Cool morning
8/27/2010	40.1	6.6	11:04	Warm
8/28/2010	40.1	6.6	12:16	Hot
8/29/2010				Sunday (no w/l measurement)
8/30/2010	40.1	6.6	13:19	Warm
8/31/2010	40.1	6.6	12:20	Hot

TABLE 2.3

2010 PUMPING DATA  
GRAVEL UNDERDRAIN SUMP  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA

Date	Water Level (feet BTOS)	Water Depth (feet AFOS)	Time of Water Level	
			Measurement (hh:mm)	Comments
9/1/2010	40.1	6.6	11:59	Hot
9/2/2010	40.1	6.6	12:20	Warm
9/3/2010	40.1	6.6	12:04	Warm, Windy
9/4/2010	40.1	6.6	13:15	Warm, Windy
9/5/2010	40.1	6.6	14:35	Windy
9/6/2010				Holiday (no w/l measurement)
9/7/2010	40.1	6.6	11:10	Cool, Windy
9/8/2010	40.1	6.6	13:04	Warm
9/9/2010	40.1	6.6	10:14	Cool, Cloudy
9/10/2010	40.1	6.6	11:25	Cloudy, Rain
9/11/2010	40.1	6.6	9:16	Cloudy, Cool, Rain
9/12/2010				Sunday (no w/l measurement)
9/13/2010	40.1	6.6	10:27	Warm
9/14/2010	40.1	6.6	11:00	Warm
9/15/2010	40.1	6.6	12:17	Warm
9/16/2010	40.1	6.6	14:50	Warm
9/17/2010	40.1	6.6	10:42	Warm
9/18/2010	40.1	6.6	12:48	Warm
9/19/2010				Sunday (no w/l measurement)
9/20/2010	40.1	6.6	12:15	Warm
9/21/2010	40.1	6.6	12:06	Warm
9/22/2010	40.1	6.6	12:10	Warm
9/23/2010	40.1	6.6	18:40	Warm
9/24/2010	40.1	6.6	19:00	Warm
9/25/2010	40.1	6.6	12:04	
9/26/2010				Sunday (no w/l measurement)
9/27/2010	40.1	6.6	12:02	Warm
9/28/2010	40.1	6.6	12:15	Warm
9/29/2010	40.1	6.6	12:04	Warm
9/30/2010	40.1	6.6	12:15	Warm
10/1/2010	40.1	6.6	12:00	Warm
10/2/2010	40.1	6.6	12:25	Rain
10/3/2010	40.1	6.6	10:10	Cool
10/4/2010	40.1	6.6	13:16	Cool
10/5/2010	40.1	6.6	14:04	Warm
10/6/2010	40.1	6.6	11:19	Warm
10/7/2010	40.1	6.6	10:40	Warm
10/8/2010	40.1	6.6	12:10	Warm
10/9/2010	40.1	6.6	10:17	Warm
10/10/2010				Sunday (no w/l measurement)
10/11/2010	40.0	6.7	12:14	Warm
10/12/2010	40.0	6.7	12:06	Warm
10/13/2010	40.1	6.6	12:30	Warm
10/14/2010	40.1	6.6	11:10	Warm
10/15/2010	40.1	6.6	10:14	Cool
10/16/2010				Saturday (no w/l measurement)
10/17/2010				Sunday (no w/l measurement)
10/18/2010	40.1	6.6	14:15	Warm
10/19/2010	40.1	6.6	9:20	Warm
10/20/2010	40.1	6.6	8:35	Cool
10/21/2010	40.1	6.6	9:00	Cool, Windy
10/22/2010	40.1	6.6	10:15	Cool
10/23/2010	40.1	6.6	11:30	Cool, Windy
10/24/2010				Saturday (no w/l measurement)
10/25/2010				Sunday (no w/l measurement)
10/26/2010	40.1	6.6	8:20	Cool, Windy
10/27/2010	40.1	6.6	11:10	Warm
10/28/2010	40.1	6.6	10:00	Cool
10/29/2010	40.1	6.6	9:14	Cool
10/30/2010	40.1	6.6	12:04	Warm
10/31/2010	40.1	6.6	10:00	Warm

TABLE 2.3

**2010 PUMPING DATA  
GRAVEL UNDERDRAIN SUMP  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

<i>Date</i>	<i>Water Level (feet BTOS)</i>	<i>Water Depth (feet AFOS)</i>	<i>Time of Water Level Measurement (hh:mm)</i>	<i>Comments</i>
11/1/2010	40.1	6.6	11:06	Warm
11/2/2010	40.1	6.6	10:14	Warm
11/3/2010	40.1	6.6	9:41	Cool
11/4/2010	40.1	6.6	14:10	Warm
11/5/2010	40.1	6.6	11:15	Cool, Cloudy
11/6/2010	40.1	6.6	9:00	Cool
11/7/2010				Sunday (no w/l measurement)
11/8/2010	40.0	6.7	11:02	Cool
11/9/2010	40.0	6.7	10:15	Cool
11/10/2010	40.1	6.6	11:00	Warm
11/11/2010	40.1	6.6	9:40	Cool
11/12/2010	40.1	6.6	10:00	Cool
11/13/2010	40.1	6.6	11:20	Warm
11/14/2010	40.1	6.6	14:10	Warm
11/15/2010	40.1	6.6	13:24	Warm
11/16/2010	40.1	6.6	10:15	Rain
11/17/2010	40.1	6.6	11:20	Warm
11/18/2010	40.1	6.6	13:10	Cool
11/19/2010	40.1	6.6	14:25	Warm
11/20/2010	40.1	6.6	13:15	Warm
11/21/2010	40.1	6.6	10:15	Warm, Windy
11/22/2010	40.1	6.6	13:25	Warm, Windy
11/23/2010	40.1	6.6	14:14	Warm
11/24/2010	40.1	6.6	13:00	Cool
11/25/2010	40.1	6.6	9:10	Cool
11/26/2010				Holiday (no w/l measurement)
11/27/2010	40.1	6.6	11:30	Cool
11/28/2010	40.1	6.6	10:40	Warm
11/29/2010	40.1	6.6	11:09	Cool
11/30/2010	40.1	6.6	14:14	Cold
12/1/2010	40.1	6.6	11:09	
12/2/2010	40.1	6.6	14:14	
12/3/2010	40.1	6.6	10:25	
12/4/2010	40.1	6.6	9:04	
12/5/2010	40.1	6.6	13:15	
12/6/2010	40.1	6.6	11:05	
12/7/2010	40.1	6.6	12:14	
12/8/2010	40.1	6.6	10:26	
12/9/2010	40.1	6.6	11:10	
12/10/2010	40.1	6.6	8:15	
12/11/2010	40.1	6.6		Saturday (no w/l measurement)
12/12/2010	40.1	6.6		Sunday (no w/l measurement)
12/13/2010	40.1	6.6	9:25	
12/14/2010	40.1	6.6	13:45	
12/15/2010	40.1	6.6	8:20	
12/16/2010	40.1	6.6	11:09	
12/17/2010	40.1	6.6	14:15	
12/18/2010	40.1	6.6	10:41	
12/19/2010	40.1	6.6	11:12	
12/20/2010	40.1	6.6	9:20	
12/21/2010	40.1	6.6	10:40	
12/22/2010	40.1	6.6	8:55	
12/23/2010	40.1	6.6	10:41	
12/24/2010	40.1	6.6	13:10	
12/25/2010	40.1	6.6	9:04	
12/26/2010	40.1	6.6	11:20	
12/27/2010	40.1	6.6	10:05	
12/28/2010	40.1	6.6	9:14	
12/29/2010	40.1	6.6	8:36	
12/30/2010	40.1	6.6	10:22	
12/31/2010	40.1	6.6	9:04	

**Notes:**

w/l - Water Level

The permanent pump installed in the underdrain sump on November 10, 2008 is a 3 foot vertical submersible pump that needs 2 to 3 feet of water above the pump intake in order to operate properly. Therefore, in order to ensure the motor remains cool, the water depth in the underdrain sump is expected to be maintained 5 to 6 feet above bottom. The water level in the underdrain did not change and the pump was not operated for the duration indicating the groundwater level is the observed level.

**TABLE 2.4**  
**MAXIMUM WATER ELEVATION SUMMARY**  
**EAST PLANT AREA VAULT**  
**GM CETC BEDFORD FACILITY**  
**BEDFORD, INDIANA**

<i>Date</i>	<i>Maximum Water Level, measured in feet</i>					
	<i>LCS<sup>1</sup></i>		<i>LDS<sup>2</sup></i>		<i>Underdrain System<sup>3</sup></i>	
	<i>BTOS</i>	<i>AFOS</i>	<i>BTOS</i>	<i>AFOS</i>	<i>BTOS</i>	<i>AFOS</i>
<i>Jan-10</i>	54.0	(4.7)	49.8	(2.0)	40.0	(6.67)
<i>Feb-10</i>	53.3	(5.4)	49.7	(2.1)	40.1	(6.57)
<i>Mar-10</i>	53.9	(4.8)	50.9	(0.9)	40.1	(6.57)
<i>Apr-10</i>	53.6	(5.1)	50.7	(1.1)	40.0	(6.67)
<i>May-10</i>	53.3	(5.4)	50.6	(1.2)	40.0	(6.67)
<i>Jun-10</i>	53.6	(5.1)	50.0	(1.8)	40.0	(6.67)
<i>Jul-10</i>	53.4	(5.3)	49.9	(1.9)	40.1	(6.57)
<i>Aug-10</i>	53.1	(5.6)	49.8	(2.0)	40.1	(6.57)
<i>Sep-10</i>	54.1	(4.8)	51.0	(3.1)	40.1	(6.57)
<i>Oct-10</i>	59.0	(5.7)	59.7	(4.1)	40.0	(6.67)
<i>Nov-10</i>	58.8	(5.9)	59.6	(4.2)	40.0	(6.67)
<i>Dec-10</i>	60.0	(4.7)	63.2	(0.6)	40.1	(6.57)

**Notes:**

BTOS - Below top of sump

AFOS - Above floor of sump

Top of sump (datum reference) = 0.0

Diameter of LCS and LDS sumps = 6.0 feet

Diameter of Underdrain sump = 1.5 feet

<sup>1</sup> LCS bottom of sump (BTOS) = 58.67 feet from January 1, 2010 to September 26, 2010, and 64.67 feet from September 24, 2010 through December 31, 2010.<sup>2</sup> LDS bottom of sump (BTOS) = 51.80 feet from January 1, 2010 until September 20, 2010, 57.8 feet from September 21 to 22, 2010, and 63.8 feet from September 23 to December 31, 2010.<sup>3</sup> Underdrain System bottom of sump (feet BTOS) = 46.67 throughout all of calendar year 2010. The permanent pump installed in the underdrain system sump is a 3 foot vertical submersible pump that requires 2 to 3 feet of water above the pump intake (at the top of the pump); however, it was advised that 5ft of water be maintained above the pump in order for the pump to operate properly; therefore, the water depth in the underdrain sump is expected to be in the 6 to 7 foot range.

**TABLE 3.1**  
**LEACHATE COLLECTION SYSTEM MONITORING ANALYTICAL RESULTS**  
**EAST PLANT AREA VAULT**  
**GM CETC BEDFORD FACILITY**  
**BEDFORD, INDIANA**

Sample Location		EPA LCS	EPA LCS	EPA LCS	EPA LCS	EPA LCS	EPA LCS	EPA LCS	EPA LCS
Sample Identification		WL-AO17-012710-GS-39289	WL-AO17-022510-GS-39292	WL-AO17-031710-GS-39336	WL-AO17-042210-GS-39364	WL-AO17-051810-GS-39383	WL-AO17-061610-GS-39399	WL-AO17-070710-SM-39427	WL-AO17-081110-GS-39449
Sample Date		1/27/2010	2/25/2010	3/17/2010	4/22/2010	5/18/2010	6/16/2010	7/7/2010	8/11/2010
Sample Type									
	Units								
<b>PCBs</b>									
Aroclor-1016 (PCB-1016)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	ug/L	0.20 U	0.38	0.20 U	0.55	0.55	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Total PCBs	ug/L	ND	0.38	ND	0.55	0.55	ND	ND	ND
<b>Volatile Organic Compounds</b>									
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethyl vinyl ether	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
<b>Field Parameters</b>									
Conductivity, field	mS/cm	1.78	1.922	1.987	2.667	1.979	2.23	2.434	2.612
pH, field	s.u.	7	6.99	6.41	7.04	6.32	6.6	6.41	6.94

## Notes:

U - Not present at or above the associated value (Reporting Limit)

J - Estimated concentration (Below Reporting Limit)

**TABLE 3.1**  
**LEACHATE COLLECTION SYSTEM MONITORING ANALYTICAL RESULTS**  
**EAST PLANT AREA VAULT**  
**GM CETC BEDFORD FACILITY**  
**BEDFORD, INDIANA**

Sample Location		EPA LCS	EPA LCS	EPA LCS	EPA LCS
Sample Identification		WL-AO17-091510-SM-39468	WL-AO17-101310-SM-39488	WL-AO17-111710-SM-39514	WL-AO17-121510-GS-39527
Sample Date		9/15/2010	10/13/2010	11/17/2010	12/15/2010
Sample Type					
	Units				
<b>PCBs</b>					
Aroclor-1016 (PCB-1016)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	ug/L	0.22	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	ug/L	0.20 U	0.20 U	0.20 U	0.20 U
Total PCBs	ug/L	0.22	ND	ND	ND
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	--
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	--
1,1-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	--
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	--
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	--
1,2-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	--
1,2-Dichloropropane	ug/L	1.0 U	1.0 U	1.0 U	--
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	--
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	--
2-Chloroethyl vinyl ether	ug/L	2.0 U	2.0 U	2.0 U	--
Benzene	ug/L	1.0 U	1.0 U	1.0 U	--
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U	--
Bromoform	ug/L	1.0 U	1.0 U	1.0 U	--
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	1.0 U	--
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U	--
Chlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	--
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U	--
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U	1.0 U	--
Chloromethane (Methyl chloride)	ug/L	1.0 U	1.0 U	1.0 U	--
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	--
Dibromochloromethane	ug/L	1.0 U	1.0 U	1.0 U	--
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	1.0 U	--
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	--
Methylene chloride	ug/L	1.0 U	1.0 U	1.0 U	--
Styrene	ug/L	1.0 U	1.0 U	1.0 U	--
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	--
Toluene	ug/L	1.0 U	1.0 U	1.0 U	--
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	--
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	--
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U	--
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	--
<b>Field Parameters</b>					
Conductivity, field	mS/cm	2.184	2.147	2.575	1.501
pH, field	s.u.	6.63	7.26	6.38	7.16

## Notes:

U - Not present at or above the associated value (Reporting Limit)

J - Estimated concentration (Below Reporting Limit)

TABLE 3.2

**LEAK DETECTION SYSTEM MONITORING ANALYTICAL RESULTS  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

Sample Location		<i>EPA LDS</i>	<i>EPA LDS</i>	<i>EPA LDS</i>	<i>EPA LDS</i>
Sample Identification		WL-AOI7-012710-GS-39290	WL-AOI7-012710-GS-39291	WL-AOI7-022510-GS-39293	WL-AOI7-031710-GS-39337
Sample Date		1/27/2010	1/27/2010	2/25/2010	2/25/2010
Sample Type			<i>Duplicate</i>		
	<i>Units</i>				
<b>PCBs</b>					
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.16 J	0.74	2.4
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Total PCBs	µg/L	ND	0.16 J	0.74	2.4

## Notes:

U - Not present at or above the associated value  
(Reporting Limit)

J - Estimated concentration (Below Reporting  
Limit)

TABLE 3.2

**LEAK DETECTION SYSTEM MONITORING ANALYTICAL RESULTS  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

Sample Location		<i>EPA LDS</i>	<i>EPA LDS</i>	<i>EPA LDS</i>	<i>EPA LDS</i>
Sample Identification		<i>WL-AOI7-042210-GS-39365</i>	<i>WL-AOI7-051810-GS-39384</i>	<i>WL-AOI7-061610-GS-39400</i>	<i>WL-AOI7-061610-GS-39401</i>
Sample Date		<i>4/22/2010</i>	<i>5/18/2010</i>	<i>6/16/2010</i>	<i>6/16/2010</i>
Sample Type					<i>Duplicate</i>
	<i>Units</i>				
<b>PCBs</b>					
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	2.2	0.52	2.3	0.72
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Total PCBs	µg/L	2.2	0.52	2.3	0.72

## Notes:

U - Not present at or above the associated value  
(Reporting Limit)

J - Estimated concentration (Below Reporting  
Limit)



TABLE 3.2

**LEAK DETECTION SYSTEM MONITORING ANALYTICAL RESULTS  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

Sample Location		<i>EPA LDS</i>	<i>EPA LDS</i>	<i>EPA LDS</i>	<i>EPA LDS</i>
Sample Identification		WL-AOI7-070710-SM-39428	WL-AOI7-081110-GS-39450	WL-AOI7-091510-SM-39469	WL-AOI7-101310-SM-39489
Sample Date		7/7/2010	8/11/2010	9/15/2010	10/13/2010
Sample Type					
	<i>Units</i>				
<i>PCBs</i>					
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.76	0.20 U	0.32	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Total PCBs	µg/L	0.76	ND	0.32	ND

## Notes:

U - Not present at or above the associated value  
(Reporting Limit)

J - Estimated concentration (Below Reporting  
Limit)

TABLE 3.2

**LEAK DETECTION SYSTEM MONITORING ANALYTICAL RESULTS  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

Sample Location	<i>EPA LDS</i>		<i>EPA LDS</i>
Sample Identification	<i>WL-AOI7-111710-SM-39515</i>		<i>WL-AOI7-121510-GS-39528</i>
Sample Date	<i>11/17/2010</i>		<i>12/15/2010</i>
Sample Type			
	<i>Units</i>		
<i>PCBs</i>			
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U
Total PCBs	µg/L	ND	ND

## Notes:

- U - Not present at or above the associated value  
(Reporting Limit)
- J - Estimated concentration (Below Reporting  
Limit)

TABLE 3.3

**SSC WTP (CRA WWTP TAG 66) EFFLUENT ANALYTICAL RESULTS  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

Sample Location		CRA WWTP Tag 66	CRA WWTP Tag 66	CRA WWTP Tag 66
Sample Identification		WW-AOI10-011410-KK-35268	WW-AOI10-012710-KK-35275	WW-AOI10-020110-GS-35276
Sample Date		1/14/2010	1/27/2010	2/1/2010
Sample Type				
	<i>Units</i>			
<i>PCBs</i>				
Aroclor-1016 (PCB-1016)	µg/L	0.10 U	--	0.10 U
Aroclor-1221 (PCB-1221)	µg/L	0.10 U	--	0.10 U
Aroclor-1232 (PCB-1232)	µg/L	0.10 U	--	0.10 U
Aroclor-1242 (PCB-1242)	µg/L	0.10 U	--	0.10 U
Aroclor-1248 (PCB-1248)	µg/L	0.10 U	--	0.10 U
Aroclor-1254 (PCB-1254)	µg/L	0.10 U	--	0.10 U
Aroclor-1260 (PCB-1260)	µg/L	0.10 U	--	0.10 U
Total PCBs	µg/L	ND	--	ND
<i>General Chemistry</i>				
Biochemical oxygen demand (carbonaceous)	µg/L	--	2000 U	--
Chemical oxygen demand (COD)	µg/L	14000 J	--	--
Nitrite/Nitrate	µg/L	600 J	--	--
Oil and grease (HEM), total	µg/L	6100 U	--	--
pH, field	none	8.0	--	7.8
pH, lab	none	--	--	--
Phosphorus	µg/L	100 U	--	--
Total kjeldahl nitrogen (TKN)	µg/L	4000 J	--	--
Total suspended solids (TSS)	µg/L	4000 U	--	--
Turbidity	NTU	0.3 B	--	--

## Notes:

U - Not present at or above the associated value (Reporting Limit)

J - Estimated concentration (Below Reporting Limit)

TABLE 3.3

**SSC WTP (CRA WWTP TAG 66) EFFLUENT ANALYTICAL RESULTS  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

Sample Location		CRA WWTP Tag 66	CRA WWTP Tag 66	CRA WWTP Tag 66
Sample Identification		WW-AOI10-031110-GS-35289	WW-AOI10-040610-KK-35302	WW-AOI10-040610-KK-35303
Sample Date		3/11/2010	4/6/2010	4/6/2010
Sample Type				Duplicate
	<i>Units</i>			
<b>PCBs</b>				
Aroclor-1016 (PCB-1016)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1221 (PCB-1221)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1232 (PCB-1232)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1242 (PCB-1242)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1248 (PCB-1248)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1254 (PCB-1254)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1260 (PCB-1260)	µg/L	0.10 U	0.10 U	0.10 U
Total PCBs	µg/L	ND	ND	ND
<b>General Chemistry</b>				
Biochemical oxygen demand (carbonaceous)	µg/L	--	--	--
Chemical oxygen demand (COD)	µg/L	--	--	--
Nitrite/Nitrate	µg/L	--	--	--
Oil and grease (HEM), total	µg/L	--	--	--
pH, field	none	7.6	--	--
pH, lab	none	--	7.6	7.5
Phosphorus	µg/L	--	--	--
Total kjeldahl nitrogen (TKN)	µg/L	--	--	--
Total suspended solids (TSS)	µg/L	--	--	--
Turbidity	NTU	--	--	--

Notes:

U - Not present at or above the associated value (Reporting Limit)

J - Estimated concentration (Below Reporting Limit)

TABLE 3.3

**SSC WTP (CRA WWTP TAG 66) EFFLUENT ANALYTICAL RESULTS  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

Sample Location		CRA WWTP Tag 66	CRA WWTP Tag 66	CRA WWTP Tag 66
Sample Identification		WW-AOI10-050410-GS-35310	WW-AOI10-060710-GS-35318	WW-AOI10-071410-JN-35326
Sample Date		5/4/2010	6/7/2010	7/14/2010
Sample Type				
	<i>Units</i>			
<i>PCBs</i>				
Aroclor-1016 (PCB-1016)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1221 (PCB-1221)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1232 (PCB-1232)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1242 (PCB-1242)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1248 (PCB-1248)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1254 (PCB-1254)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1260 (PCB-1260)	µg/L	0.10 U	0.10 U	0.10 U
Total PCBs	µg/L	ND	ND	ND
<i>General Chemistry</i>				
Biochemical oxygen demand (carbonaceous)	µg/L	--	--	--
Chemical oxygen demand (COD)	µg/L	--	--	--
Nitrite/Nitrate	µg/L	--	--	--
Oil and grease (HEM), total	µg/L	--	--	--
pH, field	none	7.6	7.3	7.2
pH, lab	none	--	--	--
Phosphorus	µg/L	--	--	--
Total kjeldahl nitrogen (TKN)	µg/L	--	--	--
Total suspended solids (TSS)	µg/L	--	--	--
Turbidity	NTU	--	--	--

## Notes:

U - Not present at or above the associated value (Reporting Limit)

J - Estimated concentration (Below Reporting Limit)

TABLE 3.3

**SSC WTP (CRA WWTP TAG 66) EFFLUENT ANALYTICAL RESULTS  
EAST PLANT AREA VAULT  
GM CETC BEDFORD FACILITY  
BEDFORD, INDIANA**

Sample Location		CRA WWTP Tag 66	CRA WWTP Tag 66	CRA WWTP Tag 66
Sample Identification		WW-AOI10-080410-GS-35334	WW-AOI10-092210-GS-35347	WW-AOI10-102010-GS-35354
Sample Date		8/4/2010	9/22/2010	10/20/2010
Sample Type				
	<i>Units</i>			
<i>PCBs</i>				
Aroclor-1016 (PCB-1016)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1221 (PCB-1221)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1232 (PCB-1232)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1242 (PCB-1242)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1248 (PCB-1248)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1254 (PCB-1254)	µg/L	0.10 U	0.10 U	0.10 U
Aroclor-1260 (PCB-1260)	µg/L	0.10 U	0.10 U	0.10 U
Total PCBs	µg/L	ND	ND	ND
<i>General Chemistry</i>				
Biochemical oxygen demand (carbonaceous)	µg/L	--	--	--
Chemical oxygen demand (COD)	µg/L	--	--	--
Nitrite/Nitrate	µg/L	--	--	--
Oil and grease (HEM), total	µg/L	--	--	--
pH, field	none	7.6	7.4	7.3
pH, lab	none	--	--	--
Phosphorus	µg/L	--	--	--
Total kjeldahl nitrogen (TKN)	µg/L	--	--	--
Total suspended solids (TSS)	µg/L	--	--	--
Turbidity	NTU	--	--	--

## Notes:

U - Not present at or above the associated value (Reporting Limit)

J - Estimated concentration (Below Reporting Limit)