

2011 ANNUAL REPORT – FINAL REPORT

**Landfill Inspection Report  
Coldwater Road Landfill  
Flint, Michigan  
MID 005 356 860**

**RACER Trust  
Ypsilanti, Michigan**

February 2012



**Landfill Inspection  
Coldwater Road Landfill  
Flint, Michigan  
MID 005 356 860**

**Prepared for RACER Trust  
Ypsilanti, Michigan**



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**SCOTT L. CORMIER, P.E.  
VICE PRESIDENT  
O'BRIEN & GERE ENGINEERS, INC.**

February 24, 2012

**Mr. Richard Conforti, P.E.**  
Environmental Engineer  
Michigan Department of Natural Resources and Environment  
Waste and Hazardous Material Division  
P.O. Box 30241  
Lansing, Michigan 48909-7741

RE: 2011 Annual Landfill Inspection Report Coldwater Road Landfill  
Flint, Michigan  
FILE: 14774/47850 #5

Dear Mr. Conforti:

On behalf of Auto Communities Environmental Response Trust (RACER), O'Brien & Gere Engineers, Inc. (O'Brien & Gere) is pleased to present this annual Landfill Inspection Report summarizing the 2011 Quarterly Post Closure Inspections at the hazardous waste landfill for the Coldwater Road Landfill facility in Flint, Michigan. Mr. Kevin Schneider of O'Brien & Gere performed the four quarterly inspections of the closed hazardous waste landfill on March 31, 2011, June 17, 2011, September 29, 2011, and December 23, 2011, respectively.

Each quarterly inspection event consisted of the following activities:

- A visual inspection of the landfill cap and berms
- A visual inspection of the leachate accumulation above ground storage tank (AST)
- A visual inspection of the site access roads
- A visual inspection of the site perimeter fencing and gates
- A visual inspection of the leachate collection system
- Testing of the leachate detection alarm system
- A summary of the monthly removal of liquids from the leak detection vaults
- A visual inspection of site drainage structures.

A summary of the inspections is outlined in the following sections and copies of the quarterly inspection reports are included as Attachment A. A site location map (Figure 1), a site layout (Figure 2), and a 2011 incident location map (Figure 3) are also included.

### **CAP AND BERMS**

The cap and berms were visually inspected each quarter for deep root penetration, burrowing animals, soil erosion, slope failures, and ponding water in the ditch and/or washouts. No slope failures or ponding of water was observed during the 2011 quarterly inspections. The following is a summary of the issues encountered on the cap and berms during the 2011 quarterly inspections.

Several hundred woody-stemmed plants were removed by the root from the landfill cap between March 2011 and December 2011.

Ten animal burrows were identified during the quarterly inspections. Additional animal burrows were also identified and closed throughout the year. Animal burrows were photographically documented (before and after repair), and the approximate size and configuration of the burrows were documented and included as an attachment to the Quarterly Status Reports for the site.

Traps were set at the opening of each animal burrow that appeared to be active. After several days without animal activity, the burrows were filled using methods approved by the Michigan Department of Environmental Quality (MDEQ). Animal burrows located during the quarterly inspections are noted on Figure 3. A log of burrow activity throughout the year is maintained at the landfill. The log contains information on the date that a burrow was identified, response activities, and the date the burrow was closed.

### **LEACHATE COLLECTION AST**

The 15,000-gallon leachate collection AST is located in the containment/control building. An inspection of this AST system (tank, piping, containment) is completed and documented during each site visit by O'Brien & Gere and quarterly in accordance with the PCP. No evidence of leakage was observed within the AST secondary containment area or on the associated piping during the 2011 quarterly inspections, and during each site visit by a representative of O'Brien & Gere.

### **ACCESS ROADS**

The landfill access and perimeter roads were inspected for sufficient gravel and proper drainage during the quarterly inspections. During the December 23, 2011 inspection shallow ruts in the road were observed along the north perimeter road, north landfill access road, and east landfill access road (Figure 3). The shallow ruts will continue to be monitored and addressed if necessary. No other problems to the access roads were observed during 2011.

### **SITE PERIMETER FENCING AND GATES**

Damage to the site perimeter fence and/or the barbwire was noted at a number of locations during the quarterly inspections. During the March 31, 2011 inspection, two openings and five sections of downed or missing barbwire were observed along the west perimeter fence. During the September 29, 2011 inspection one previous repaired hole was reopened and a section of downed barbwire was observed along the west perimeter fence. A tree limb was also located lying on the fence along the north perimeter fence during the September 29, 2011 inspection.

Downed barbwire was observed at two areas along the northwest perimeter fence during the December 23, 2011 site inspection. During the quarterly inspections, or shortly thereafter, the holes in the perimeter fence and down barbwire were repaired by the addition of new materials. Fallen tree limbs were cut down and removed from the fence.

### **LEACHATE COLLECTION SYSTEM**

The leachate collection system was inspected quarterly for visible signs of damage. System components inspected include the control panels for the sumps and the leak detection vaults, as well as the visible portions of the vault piping. No evidence of damage was observed for the aboveground components of the system. Additionally, no signs of erosion/washouts were noticed in the areas around the control panels and posts.

### **LEACHATE DETECTION ALARM SYSTEM**

The PermAlert automated leak detection alarm was tested during each quarterly inspection in accordance with Section 4 of the Post Closure Care Plan and found to be operating during the March 31, 2011, June 17, 2011, September 29, 2011 and December 23, 2011 tests. The PermAlert system requires no maintenance other than replacing the battery for the clock, which is replaced as needed during the quarterly inspections, and was last replaced during the 2<sup>nd</sup> quarter 2011. The battery runs the clock up to one year when power fails.

## **VAULT LIQUID REMOVAL**

The leak detection vaults were pumped out monthly during the year. The volumes of liquid evacuated from each cell are provided in Table 1 and were reported in the Quarterly Status Reports.

## **DRAINAGE INSPECTION**

The perimeter of the landfill and berm, drainage trenches at the base of the landfill, the Remaining Materials Area (RMA, Figure 2), and the wetland area were inspected for potential drainage problems. During the March 31, 2011 inspection the soil around the new southwest manhole had settled 6 to 8 inches. The area was leveled using fill material on June 16, 2011. No other drainage issues were observed during the quarterly inspections.

This summary of the quarterly inspections fulfills the annual inspection reporting requirements for 2011. If you have any questions, feel free to contact either of us at (248) 477-5701.

Very truly yours,  
**O'BRIEN & GERE ENGINEERS, INC.**



Scott L. Cormier, P.E.  
Vice President

Very truly yours,  
**O'BRIEN & GERE ENGINEERS, INC.**



Clifford S. Yantz, P.G.  
Technical Associate

Enclosures

cc: David Favero – RACER Trust  
Kevin Schneider – O'Brien & Gere

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

On Behalf of RACER Trust



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Scott L. Cormier, P.E.  
Agent for RACER Trust

Vice President - O'Brien & Gere Engineers, Inc.

Title

February 24, 2012

Date

cc: file

*TABLES*

**Table 1**  
**Coldwater Road Landfill Facility**  
**Liquid Volumes Removed from LDS Vaults in 2011**

Date 2011	Vault A	Vault B	Vault C	Vault D	Vault E	Vault F	TOTAL LDS GALLONS
<b>18-Jan-11</b>	-	21	36	-	251	14	<b>322</b>
<b>15-Feb-11</b>	-	-	28	-	412	14	<b>454</b>
<b>17-Mar-11</b>	-	74	16	-	845	-	<b>935</b>
<b>29-Apr-11</b>	-	170	30	-	1,635	-	<b>1,835</b>
<b>18-May-11</b>	-	89	33	-	986	4	<b>1,112</b>
<b>14-Jun-11</b>	-	104	25	-	911	28	<b>1,068</b>
<b>14-Jul-11</b>	-	107	55	-	501	9	<b>672</b>
<b>17-Aug-11</b>	-	128	124	-	407	109	<b>768</b>
<b>14-Sep-11</b>	-	92	104	-	254	133	<b>583</b>
<b>13-Oct-11</b>	-	51	63	1,705	139	94	<b>2,052</b>
<b>10-Nov-11</b>	-	31	40	-	76	48	<b>195</b>
<b>07-Dec-11</b>	1,226	23	5	1,418	23	-	<b>2,695</b>
<b>YEAR END TOTAL</b>	<b>1,226</b>	<b>890</b>	<b>559</b>	<b>3,123</b>	<b>6,440</b>	<b>453</b>	<b>12,691</b>

Notes:

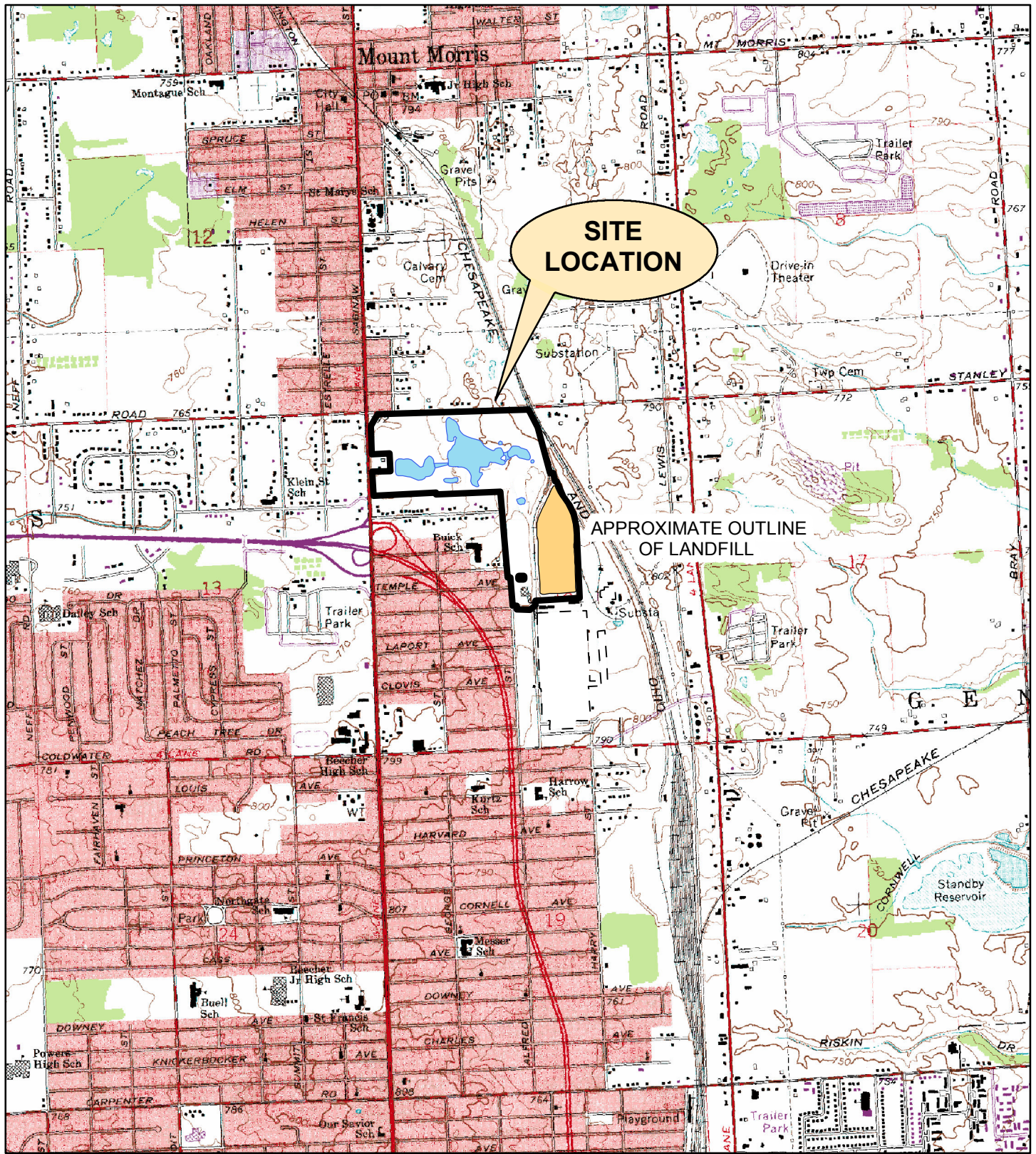
Liquid volumes in gallons.

LDS - Leak Detection System

***FIGURES***

I:\078\PROJECTS\15388 RACER Trust\147850\DOC\2012-2 A report\figures\001.MXD

PLOT DATE: 2/6/2012 kbs



RACER TRUST  
 COLDWATER ROAD LANDFILL FACILITY  
 FLINT, MICHIGAN

**SITE LOCATION MAP**

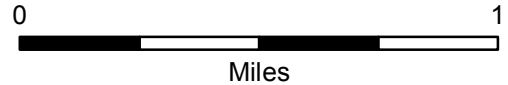






FIGURE 2

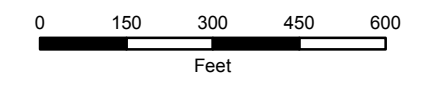


**LEGEND**

-  LEACHATE COLLECTION SUMP
-  ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST  
COLDWATER ROAD  
LANDFILL FACILITY  
FLINT, MICHIGAN

**SITE LAYOUT**



FEBRUARY 2012  
15388/47850-008



10781PROJECTS\RACER-15388\47850\DOC\RPT\INSP-SEC\013.MXD

PLOT DATE: 2/06/2012 kbs

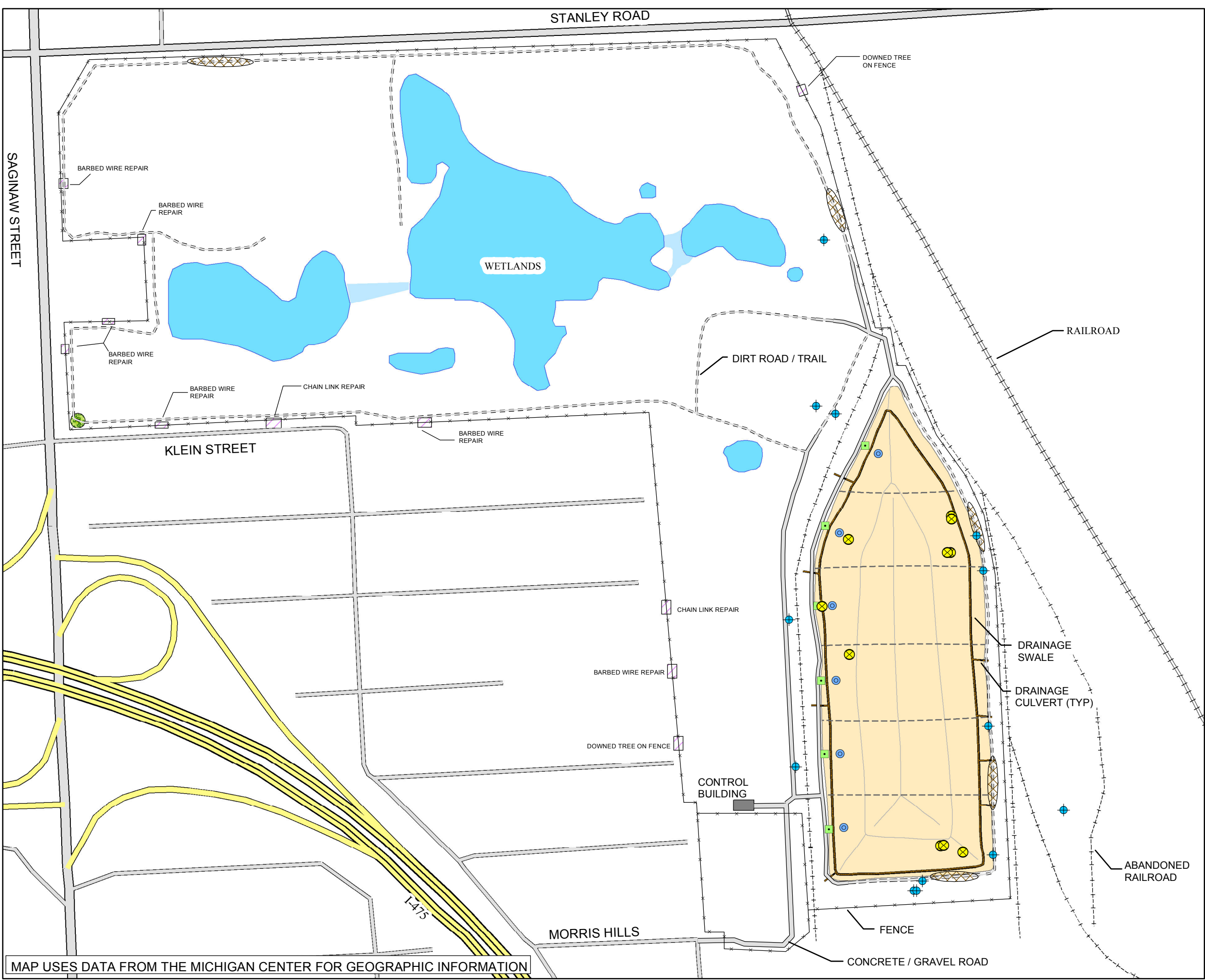









FIGURE 3

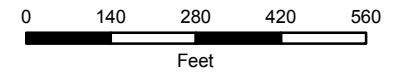


**LEGEND**

-  LEACHATE COLLECTION SUMP
-  ACCESS PORT FOR LEAK DETECTION VAULT
-  MONITORING WELL LOCATION
-  FENCE REPAIR
-  EROSION REPAIR
-  SHALLOW ROAD RUTS
-  ANIMAL BURROW LOCATION

RACER TRUST  
COLDWATER ROAD  
LANDFILL FACILITY  
FLINT, MICHIGAN

**2011  
INCIDENT LOCATION  
MAP**



FEBRUARY 2012  
15388/47850-013



MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

***ATTACHMENT A***  
***Inspection Logs***

**Quarterly Post Closure Inspection Log Sheet**  
**Coldwater Road Landfill Site – Operations and Maintenance**  
**Flint, Michigan**  
**Project No. 39196**

Inspector's Name/Title Kevin Schneider Scientist

Inspector's Signature/Date/Time *K Schneider* 3/31/11 11:00

**Cap and Berm**

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken
Cell A	No	No	No	No	No	No	
Cell B	Yes	No	No	No	No	No	entry and exit burrow located on east side of cell B
Cell C	No	No	No	No	No	No	
Cell D	No	No	No	No	No	No	
Cell E	No	No	No	No	No	No	
Cell F	Yes	No	No	No	No	No	burrow located on south side of cell F
Berms	No	No	No	No	No	No	

**Woody Plant Removal Activities**

Summarize monthly activities:

landfill cap was snow covered during the first quarter 2011

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Leachate Tank Storage**

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

**Tank**

- Cracks or holes observed in tank? No X Yes
- Liquid dripping or running from tank? No X Yes
- Staining observed on the tank surface? No X Yes

**Piping**

- Is piping sagging, cracked or punctured? No X Yes
- Liquid dripping or running from piping? No X Yes
- Is the tank discharge valve closed and locked? No      Yes X
- Staining observed on the piping surface? No X Yes

**Emergency Response**

- Are drums present in accumulation building? No X Yes      } spill kit
- Are sandbags present in accumulation building? No X Yes
- Are shovels present in accumulation building? No      Yes X

**Vegetation**

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Areas around building and equipment mowed?	Access roads mowed and in good condition?
A	Mostly snow cover	None	Yes, mowed last fall snow cover	Yes, mowed last fall snow cover
B	↓	↓	↓	↓
C				
D				
E				
F				
Berms				

**Access Roads**

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe	
Roads located approx. west of landfill	↓ Mostly snow covered			
Roads located approx. east of landfill				
Roads located approx. north of wetlands				
Roads located approx. south of wetlands				
Roads located approx. west of wetlands			Ponded water in areas	
Roads located approx. east of wetlands				

**Site Perimeter Fence**

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	"Tresspassing Prohibited" and "Private Property" Signs Posted?
Fences along north property line	No	No	No	Yes
Fences along south property line	No	No	No	Yes
Fences along west property line	3 holes in fence 5 areas w/ missing or cut barb wire	No	No	Yes
Fences along east property line	No	No	No	Yes

**Leachate Collection System**

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

**Alarm Test**

- 1. Disconnect the sensor cable.
- 2. Reconnect the sensor cable. Alarm will reset.

**Cable Test**

- 1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
- 2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
Yes	Yes	Yes	No

**Battery Test**

- 1. Turn the power off.
- 2. Remove the processor card.
- 3. Remove the battery jumper.
- 4. Is the voltage across the terminals is < 3.6 VDC?
- 5. If yes, replace the battery.

**Remaining Materials Area**

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken
RMA	No	No	No	No	No	

**Drainage Inspections**

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions
Perimeter of landfill and berm	No			
Drainage trenches at base of landfill	No			
RMA	No			
Wetlands area	No			
Culverts around landfill	No			
Western drainage swale	No			
North landfill catch basin	No			



**Quarterly Post Closure Inspection Log Sheet**  
**Coldwater Road Landfill Site – Operations and Maintenance**  
**Flint, Michigan**  
**Project No. 47850**

Inspector's Name/Title Kevin Schneider - Scientist  
 Inspector's Signature/Date/Time *KS* 6/17/11 8:00

**Cap and Berm**

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken
Cell A	No	No	No	No	No	No	
Cell B	No	No	No	No	No	No	
Cell C	No	No	No	No	No	No	
Cell D	No	No	No	No	No	No	
Cell E	No	No	No	No	No	No	
Cell F	Yes	No	No	No	No	No	2 animal burrows found @ F4
Berms	No	No	No	No	No	No	

**Woody Plant Removal Activities**

Summarize monthly activities:

Removed Woody plants during quarterly inspection

**Leachate Tank Storage**

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

**Tank**

- Cracks or holes observed in tank? No  Yes \_\_\_
- Liquid dripping or running from tank? No  Yes \_\_\_
- Staining observed on the tank surface? No  Yes \_\_\_

**Piping**

- Is piping sagging, cracked or punctured? No  Yes \_\_\_
- Liquid dripping or running from piping? No  Yes \_\_\_
- Is the tank discharge valve closed and locked? No \_\_\_ Yes
- Staining observed on the piping surface? No  Yes \_\_\_

**Emergency Response**

- Are drums present in accumulation building? No  Yes \_\_\_
- Are sandbags present in accumulation building? No  Yes \_\_\_ *spill kit*
- Are shovels present in accumulation building? No \_\_\_ Yes

**Vegetation**

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Areas around building and equipment mowed?	Access roads mowed and in good condition?
A	None	None	Yes	Yes
B	↓	↓	↓	↓
C				
D				
E				
F				
Berms				

**Access Roads**

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe
Roads located approx. west of landfill	Yes	Yes	
Roads located approx. east of landfill			
Roads located approx. north of wetlands			
Roads located approx. south of wetlands			
Roads located approx. west of wetlands			
Roads located approx. east of wetlands			

**Site Perimeter Fence**

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	"Trespassing Prohibited" and "Private Property" Signs Posted?
Fences along north property line	No	No	No	Yes
Fences along south property line				
Fences along west property line				
Fences along east property line				

**Leachate Collection System**

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

**Alarm Test**

1. Disconnect the sensor cable.
2. Reconnect the sensor cable. Alarm will reset.

**Cable Test**

1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
Yes	Yes	Yes	No

**Battery Test**

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

**Remaining Materials Area**

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken
RMA	No	No	No	No	No	

**Drainage Inspections**

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions
Perimeter of landfill and berm	No			
Drainage trenches at base of landfill	No			
RMA	No			
Wetlands area	No			
Culverts around landfill	No			
Western drainage swale	No			
North landfill catch basin	No			



**Quarterly Post Closure Inspection Log Sheet**  
**Coldwater Road Landfill Site – Operations and Maintenance**  
**Flint, Michigan**  
**Project No. 46317**

Inspector's Name/Title Kevin Schneider Scientist

Inspector's Signature/Date/Time [Signature] 9/29/11

**Cap and Berm**

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken
Cell A	No	No	No	No	No	No	
Cell B	Yes	No	No	No	No	No	1 burrow located on east side middle of slope. appeared inactive filled in
Cell C	No	No	No	No	No	No	
Cell D	Yes	No	No	No	No	No	1 burrow located on east side middle of slope. Trap was set no activity filled in
Cell E	No	No	No	No	No	No	
Cell F	No	No	No	No	No	No	
Berms	No	No	No	No	No	No	

**Woody Plant Removal Activities**

Summarize monthly activities:

woody plants were removed throughout the quarter during inspections of the landfill cap

**Leachate Tank Storage**

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

**Tank**

- Cracks or holes observed in tank? No  Yes \_\_\_
- Liquid dripping or running from tank? No  Yes \_\_\_
- Staining observed on the tank surface? No  Yes \_\_\_

**Piping**

- Is piping sagging, cracked or punctured? No  Yes \_\_\_
- Liquid dripping or running from piping? No  Yes \_\_\_
- Is the tank discharge valve closed and locked? No \_\_\_ Yes
- Staining observed on the piping surface? No  Yes \_\_\_

**Emergency Response**

- Are drums present in accumulation building? No  Yes \_\_\_
- Are sandbags present in accumulation building? No  Yes \_\_\_ \* spill Kit in building
- Are shovels present in accumulation building? No \_\_\_ Yes

**Vegetation**

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Areas around building and equipment mowed?	Access roads mowed and in good condition?
A	No		No have not been mowed since June	No, have not been mowed since June
B	No			
C	No			
D	No			
E	No			
F	No			
Berms	No			
			Scheduled for next quarter	

**Access Roads**

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe
Roads located approx. west of landfill	Yes	Yes	
Roads located approx. east of landfill	Yes	Yes	
Roads located approx. north of wetlands	Yes	Yes	
Roads located approx. south of wetlands	Yes	Yes	
Roads located approx. west of wetlands	Yes	Yes	
Roads located approx. east of wetlands	Yes	Yes	

**Site Perimeter Fence**

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	"Trespassing Prohibited" and "Private Property" Signs Posted?
Fences along north property line	No	No	No	Yes
Fences along south property line	No	No	No	Yes
Fences along west property line	1 hole in fence 1 area w/ down barbed wire	No	No	Yes
Fences along east property line	No	No	No	Yes

### Leachate Collection System

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

#### Alarm Test

1. Disconnect the sensor cable.
2. Reconnect the sensor cable. Alarm will reset.

#### Cable Test

1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>

#### Battery Test

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

### Remaining Materials Area

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken
RMA	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	

### Drainage Inspections

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions
Perimeter of landfill and berm	No			
Drainage trenches at base of landfill	No			
RMA	No			
Wetlands area	No			
Culverts around landfill	No			
Western drainage swale	No			
North landfill catch basin	No			

3rd Quarter  
9/29/11

FIGURE 2

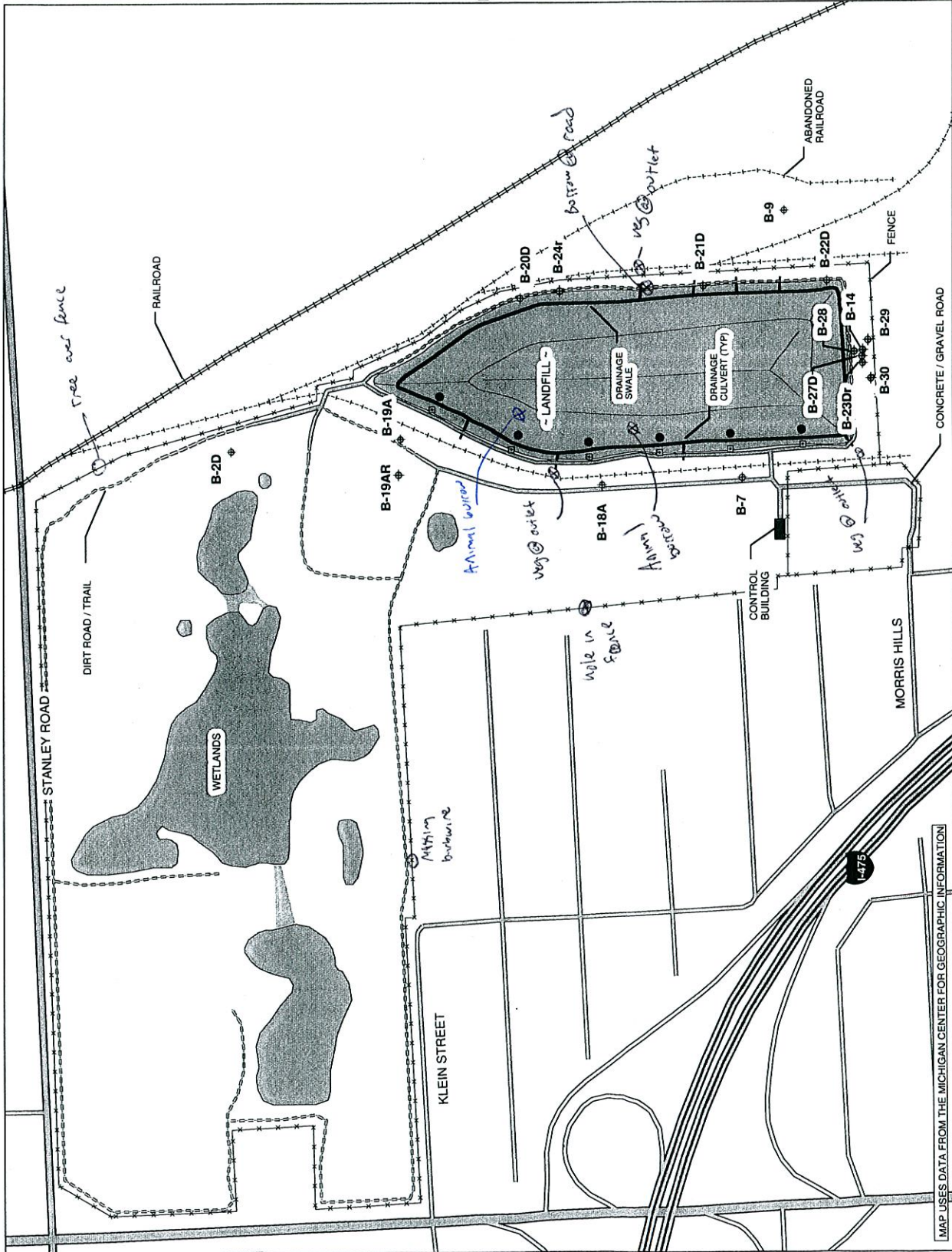


**LEGEND**

- LEACHATE COLLECTION SUMP
- ◻ ACCESS PORT FOR LEAK DETECTION VAULT
- ⊕ MONITORING WELL
- ⊖ ABANDONED WELL

MOTORS LIQUIDATION COMPANY  
COLDWATER ROAD  
LANDFILL FACILITY  
FLINT, MICHIGAN

**SITE LAYOUT**



MAP USES DATA FROM THE MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

**Quarterly Post Closure Inspection Log Sheet**  
**Coldwater Road Landfill Site – Operations and Maintenance**  
**Flint, Michigan**  
**Project No. 47850**

Inspector's Name/Title Kevin Schneider

Inspector's Signature/Date/Time *[Signature]* 12/23/11 9:00 am

**Cap and Berm**

Inspect the landfill cap and berms for burrowing animals, soil erosion, slope failures, ponding, washouts, and liner damage/exposure. Indicate the presence or absence of each item. Note identified issues on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	Liner damage or exposure?	If yes to any, describe issue, location, and actions taken
Cell A	No	No	No	No	No	No	
Cell B	Yes	No	No	No	No	No	one burrow on east slope appeared inactive - filled in entry + exit
Cell C	Yes	No	No	No	No	No	one burrow on west on edge of culvert filled in burrow
Cell D	No	No	No	No	No	No	
Cell E	No	No	No	No	No	No	
Cell F	No	No	No	No	No	No	
Berms	No	No	No	No	No	No	

**Woody Plant Removal Activities**

Summarize monthly activities:

woody plants were removed throughout the quarter  
during inspections of the landfill

**Leachate Tank Storage**

Inspect for evidence of leakage, and presence of drums, sandbags, shovels at each leachate tank storage location.

**Tank**

- Cracks or holes observed in tank? No  Yes \_\_\_
- Liquid dripping or running from tank? No  Yes \_\_\_
- Staining observed on the tank surface? No  Yes \_\_\_

**Piping**

- Is piping sagging, cracked or punctured? No  Yes \_\_\_
- Liquid dripping or running from piping? No  Yes \_\_\_
- Is the tank discharge valve closed and locked? No \_\_\_ Yes
- Staining observed on the piping surface? No  Yes \_\_\_

**Emergency Response**

- Are drums present in accumulation building? No  Yes \_\_\_
- Are sandbags present in accumulation building? No  Yes \_\_\_ *spill kit in building*
- Are shovels present in accumulation building? No \_\_\_ Yes

**Vegetation**

Inspect landfill cap and berm for areas with sparse vegetation, deep-rooted plants and proper height around equipment and access roads. Describe any identified issues and note on an attached drawing. If no issues are found, indicate "none" in the appropriate box.

Cell	Areas with sparse vegetation present?	Deep-rooted plants present?	Areas around building and equipment mowed?	Access roads mowed and in good condition?
A	No	No	Yes	Yes
B	No	No		
C	No	No		
D	No	No		
E	No	No		
F	No	No		
Berms	No	No		

**Access Roads**

Inspect for sufficient gravel and proper drainage. Note identified issues on an attached drawing.

Area	Sufficient gravel present?	Proper drainage present?	If no, describe
Roads located approx. west of landfill	Yes	Yes	
Roads located approx. east of landfill	Yes	Yes	
Roads located approx. north of wetlands	Yes	No	water ponded in cuts
Roads located approx. south of wetlands	Yes	Yes	
Roads located approx. west of wetlands	Yes	Yes	
Roads located approx. east of wetlands	Yes	Yes	

**Site Perimeter Fence**

Inspect all perimeter fencing and gates for damage or unauthorized entry, and proper warning signs. Note identified issues on an attached drawing.

Area	Any damage present?	Signs of unauthorized entry?	Broken or damaged locks on gates?	"Trespassing Prohibited" and "Private Property" Signs Posted?
Fences along north property line	barbwire down in two sections	No	No	Yes
Fences along south property line	No	No	No	Yes
Fences along west property line	No	No	No	Yes
Fences along east property line	No	No	No	Yes

**Leachate Collection System**

Conduct the alarm test, cable test and battery test on a yearly basis as outlined in Section 4 of the post Closure Care Plan. Inspect the system panel boxes for visible signs of damage.

**Alarm Test**

1. Disconnect the sensor cable.
2. Reconnect the sensor cable. Alarm will reset.

**Cable Test**

1. Wet a short length of cable to activate the alarm by wetting a section of the cable stored in the containment vault.
2. Dry the cable after the test.

Alarm Test		Cable Test	
Did the system show a fault in the cable?	Was the alarm activated?	Was the alarm activated?	Any damage noted to system panel boxes?
Yes	Yes	Yes	ND

**Battery Test**

1. Turn the power off.
2. Remove the processor card.
3. Remove the battery jumper.
4. Is the voltage across the terminals is < 3.6 VDC?
5. If yes, replace the battery.

**Remaining Materials Area**

Inspect the soil cover for deep root penetration, burrowing animals, soil erosion, ponding of water and slope failures. Note problems on an attached drawing.

Area of Inspection	Animal Burrows?	Soil Erosion	Slope Failures?	Ponding?	Washouts?	If yes to any, describe issue, location, and actions taken
RMA	No	No	No	No	No	

**Drainage Inspections**

Inspect the perimeter of the landfill and berm, drainage trenches at the base of the landfill, RMA and wetlands area for potential drainage problems. Check culverts around landfill, western drainage swale and north landfill catch basin for blockage.

Area Inspected	Drainage problem or blockage observed?	Location (note on figure)	Description	Corrective Actions
Perimeter of landfill and berm	No			
Drainage trenches at base of landfill	No			
RMA	No			
Wetlands area	No			
Culverts around landfill	No			
Western drainage swale	No			
North landfill catch basin	No			

