

OBG

2017 ANNUAL REPORT – FINAL REPORT

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

**RACER TRUST
Detroit, Michigan**

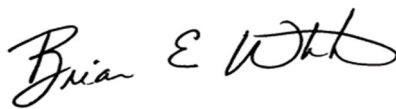
February 2018



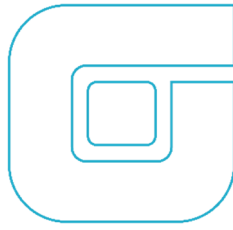
**Landfill Inspection
Coldwater Road Landfill
MID 005 356 860**

Flint, Michigan

Prepared for: RACER Trust
Detroit, Michigan



BRIAN E. WHITE, PE
SENIOR VICE PRESIDENT
O'BRIEN & GERE ENGINEERS, INC.



February 26 , 2018

Mr. Richard Conforti, P.E.
Environmental Engineer
Michigan Department of Environmental Quality
Office of Waste Management and Radiological Protection
P.O. Box 30473
Lansing, Michigan 48909-7973

RE: 2017 Annual Landfill Inspection Report
Coldwater Road Landfill, Flint, Michigan
MID 005 356 860
FILE: 15388 /64737/rep

Dear **Mr. Conforti**

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER), O'Brien & Gere Engineers, Inc. (OBG) is presenting this annual Landfill Inspection Report summarizing the 2017 Quarterly Post Closure Inspections at the hazardous waste landfill for the Coldwater Road Landfill facility in Flint, Michigan.

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
- An 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 [Appendix A](#). A Site Location Map ([Figure 1](#)), a Site Layout ([Figure 2](#)), and a 2017 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.

The following is a summary of the issues encountered on the cap and berms during the 2017 quarterly inspections.



Due possibly to a large rain event, two areas of erosion were discovered on July 13, 2017. The areas were on the east and west side of Cell E and washout (sand) was observed in the swale riprap. On September 8, 2017, the area that settled due to the erosion on the eastern side of Cell E was brought back to grade with sand and top soil and was seeded. The erosion on the western side of Cell E did not settle and no repair was needed.

Several hundred woody-stemmed plants were removed from the landfill cap between March 2017 and December 2017.

Mole activity was observed during the 3rd and 4th quarter inspections at Cell A, Cell B, Cell D, and Cell F. Mole traps were set along the trails where located.

One animal burrow was identified and closed in the 4th quarter. The animal burrow was photographically documented (before and after repair), and the approximate size and configuration of the burrow was documented and included in the Quarterly Status Report.

A trap was set at the opening of the animal burrow. The burrow was deemed inactive and filled in. The burrow was filled using methods approved by the Michigan Department of Environmental Quality (MDEQ), which included collecting the approximate length (1ft), depth (5 inches), and diameter (4 inches). No signs of liner damage were observed during the inspection and repair of the animal burrow. 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 filled and seeded. The animal burrow located during the quarterly inspection is noted on [Figure 3](#).

LEACHATE COLLECTION AST

The 15,000-gallon leachate accumulation 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 OBG and during quarterly inspections in accordance with the post-closure care plan (PCCP). No evidence of leakage was observed within the AST secondary containment area or the associated piping.

ACCESS ROADS

The landfill access and perimeter roads were inspected for sufficient gravel and proper drainage during the quarterly inspections.

During the 1st quarterly inspection the access road south and east of the landfill cap had areas of ponded water. The wet section of road was avoided until the road was dry. During the 3rd and 4th quarters gravel was added and spread to the access road around the landfill. No other problems to the access roads were observed during 2017.

SITE PERIMETER FENCING AND GATES

Damage to the site perimeter fence was noted at two locations during the 1st quarter and 4th quarter inspections. On January 12, 2017, a hole in the fence along the western perimeter near the Dollar General store was repaired. On December 21, 2017, a hole in the fence along Klein Street was repaired.

During the 1st quarter, 3rd quarter and 4th quarter, one previously repaired hole along the west perimeter fence had been reopened. The hole was repaired during the site inspections.

On March 24, 2017, the front gate was observed knocked off its track. The RACER grounds crew repaired the gate on March 27, 2017.

Areas of down barbwire along the western perimeter fence were repaired on June 28, 2017 and August 9, 2017.

An approximately 40-foot section of fence was knocked down along the west perimeter fence on Saginaw Road in 2016. The knocked down fence along Saginaw Road was propped back up by RACER maintenance during the fourth quarter 2016. The knocked down section of fence was repaired on May 18, 2017 and June 6, 2017. The location of repairs can be found on [Figure 3](#).

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. The alarm was found to be operating during each of the quarterly inspections.

VAULT LIQUID REMOVAL

The leak detection vaults were pumped out monthly during the year with the exception of the months of October and December 2017. Per the Post-Closure Care Plan, which was recently revised and approved on January 24, 2017, dewatering can occur on an every other month basis unless more than 300 gallons of liquid were removed from a vault during a dewatering event. If more than 300 gallons were removed from a vault, then that vault was dewatered the following month and continued to be dewatered on a monthly basis until less than 150 gallons were removed during a single dewatering event, after which dewatering for that vault reverted back to every other month. If three or more vaults had more than 300 gallons removed during a dewatering event, then the next monthly dewatering event included all the vaults. The volumes of liquid evacuated from each cell are provided in [Table 1](#) and were reported in the Quarterly Status Reports.

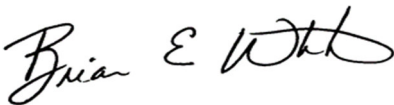
DRAINAGE INSPECTION

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. No drainage issues were observed during the quarterly inspections for 2017.

This summary of the quarterly inspections fulfills the annual inspection reporting requirements for 2017. If you have any questions, feel free to contact Cliff at (313) 333-0211.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



Brian E. White, PE
Senior Vice President

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



Clifford S. Yantz
Senior Hydrogeologist



ENCLOSURES:

Table 1 – Liquid Volumes Removed in 2017

Figure 1 – Site Location Map

Figure 2 – Site Layout

Figure 3 – Incident Location Map

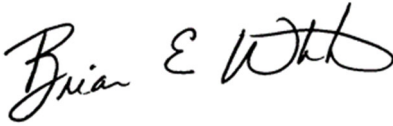
Appendix A – Inspection Logs

cc: David Favero – RACER Trust
Kevin Schneider – OBG



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



Brian E. White, PE
Senior Vice President – O'Brien & Gere Engineers, Inc.

Agent for RACER Trust

Date: February 26, 2018

cc: file





TABLE



TABLE 1**RACER Trust - Coldwater Road Landfill Facility****Liquid Volumes Removed from LDS Vaults in 2017**

| <i>Date</i> | <i>VAULT</i> | <i>VAULT</i> | <i>VAULT</i> | <i>VAULT</i> | <i>VAULT</i> | <i>VAULT</i> | <i>TOTAL LDS</i> |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|
| <i>2016</i> | <i>A</i> | <i>B</i> | <i>C</i> | <i>D</i> | <i>E</i> | <i>F</i> | <i>GALLONS</i> |
| 11-Jan-17 | - | 388 | - | - | 309 | - | 697 |
| 15-Feb-17 | 112 | 535 | 70 | 72 | 431 | 34 | 1,254 |
| 24-Mar-17 | - | 569 | - | - | 416 | - | 985 |
| 27-Apr-17 | 129 | 553 | 58 | 70 | 668 | 88 | 1,566 |
| 17-May-17 | - | 367 | - | - | 457 | - | 824 |
| 21-Jun-17 | 210 | 108 | 49 | 68 | 423 | 12 | 870 |
| 13-Jul-17 | - | - | - | - | 298 | - | 298 |
| 24-Aug-17 | 302 | 518 | 150 | 149 | 526 | 62 | 1,707 |
| 20-Sep-17 | 113 | 81 | 83 | 70 | 296 | 195 | 838 |
| 16-Oct-17 | - | - | - | - | - | - | 0 |
| 6-Nov-17 | 65 | 47 | 62 | 62 | 95 | 58 | 389 |
| 21-Dec-17 | - | - | - | - | - | - | 0 |
| YEAR END TOTAL | 931 | 3,166 | 472 | 491 | 3,919 | 449 | 9,428 |

Notes

Liquid volumes in gallons.

LDS - Leak Detection System

Pre the revised Post Closure Care Plan October 2014, dewatering occurred on an every other month basis unless more than 300 gallons

of liquid were removed from a vault during a dewatering event. If more than 300 gallons were removed from a vault, then that vault was dewatered the following month and continued to be dewatered on a monthly basis until less than 150 gallons were removed during a single dewatering event, after which dewatering for that vault reverted back to every other month.

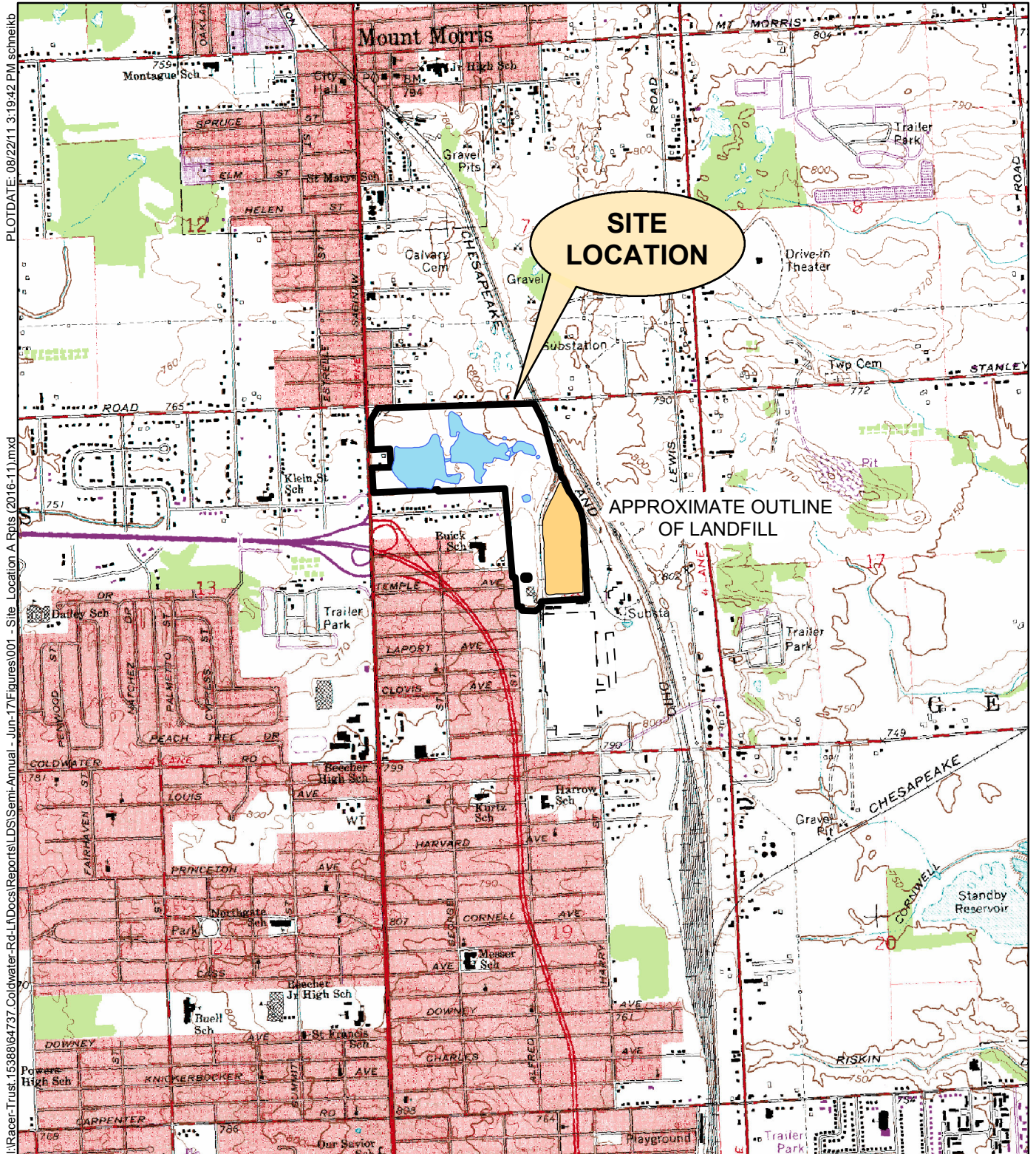
If three or more vaults had more than 300 gallons removed during a dewatering event, then the next monthly dewatering event included all the vaults.





FIGURES





PLOTDATE: 08/22/11 3:19:42 PM schmekb

I:\Racer-Trust_15388\64737_Coldwater-Rq-L-I\Docs\Reports\LD\Site-Annual - Jun-17\Figures\001 - Site_Location A Rpts (2016-11).mxd



RACER TRUST
 COLDWATER ROAD LANDFILL FACILITY
 FLINT, MICHIGAN

SITE LOCATION MAP



Miles





PLOTDATE: 02/10/15 1:31:49 PM schneikb

I:\Racer-Trust-15388\64737_Coldwater-Rd-LIDocs\Reports\LDS\Semi-Annual - Jun-17\Figures\002 - Site_Layout 2016 A Rpts (LDS-Rpt) (2016-11).mxd

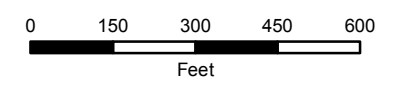


LEGEND

-  LEACHATE COLLECTION SUMP
-  ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SITE LAYOUT



15388/64737-002
JULY 2017









O'BRIEN & GERE ENGINEERS, INC.

PLOTDATE: 01/27/14 11:04:14 AM ONeilium

I:\Racer-Trust_15388\64737.Coldwater-Rd-L\Docs\Reports\Inspection\003 - Incident Location Map 2017 Annual Rpt.mxd

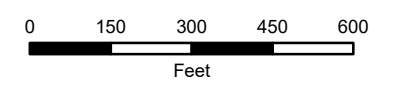


LEGEND

-  LEACHATE COLLECTION SUMP
-  ACCESS PORT FOR LEAK DETECTION VAULT
-  MONITORING WELL LOCATION
-  FENCE REPAIR
-  ANIMAL BURROW LOCATION (4th Quarter 2017)
-  MOLE ACTIVITY

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

**2017
INCIDENT LOCATION
MAP**



15388/62658
JANUARY 2017



O'BRIEN & GERE ENGINEERS, INC.

AERIAL PHOTO PROVIDED BY ESRI



APPENDIX A
Inspection Logs

Quarterly Post Closure Inspection Log Sheet
Coldwater Road Landfill Site – Operations and Maintenance
Flint, Michigan
Project No. 64737

Inspector's Name/Title Kevin Schneider Scientist

Inspector's Signature/Date/Time 3/24/17

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 | Date Corrected |
|--------------------|-----------------|--------------|-----------------|----------|-----------|---------------------------|--|----------------|
| 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 | No | No | No | No | No | No | | |
| Berms | No | No | No | No | No | No | | |
| | | | | | | | | |

Woody Plant Removal Activities

Summarize monthly activities:

Removed a number of coniferous trees from berm and
landfill cap during 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 ___

| | |
|--|----------------|
| If yes to any, describe issue, location, and actions taken | Date Corrected |
| | |

Piping

- Is piping sagging, cracked or punctured? No Yes ___
- Liquid dripping or running from piping? No Yes ___
- Is the tank discharge valve open? No Yes ___
- Staining observed on the piping surface? No Yes ___

| | |
|--|----------------|
| If yes to any, describe issue, location, and actions taken | Date Corrected |
| | |

Emergency Response

- Are drums present in accumulation building? No ___ Yes
- Are sandbags present in accumulation building? No ___ Yes
- Are shovels present in accumulation building? No ___ Yes

| | |
|---|----------------|
| If no to any, describe issue, location, and actions taken | Date Corrected |
| | |

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? | Do areas around building and equipment need to be mowed? | Do access roads need to be mowed? | If yes, describe issue, and actions taken | Date Corrected |
|-------|---------------------------------------|-----------------------------|--|-----------------------------------|---|----------------|
| A | No | No | No | No | | |
| 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 issue, and actions taken | Date Corrected |
|---|--|-------------------------------|--|----------------|
| Roads located approx. west of landfill | could use additional gravel to fill in shallow rts | few areas with standing water | | |
| Roads located approx. east of landfill | could use additional gravel to fill in shallow rts | few areas with standing water | | |
| 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 Missing? | If yes to any, describe issue, and actions taken | Date Corrected |
|----------------------------------|---------------------|------------------------------|-----------------------------------|--|--|----------------|
| Fences along north property line | No | No | No | No | | |
| Fences along south property line | No | No | No | No | | |
| Fences along west property line | No | No | No | No | | |
| Fences along east property line | No | No | No | No | | |

- Front gate was off its track and would not open.
 RAGER property maintenance is aware of issue and will send company out to repair.

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? |
| | | | 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.

| Describe any issues and actions taken | Date Corrected |
|---------------------------------------|----------------|
| | |

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 | Date Corrected |
|--------------------|-----------------|--------------|-----------------|----------|-----------|--|----------------|
| 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 | Date Corrected |
|---------------------------------------|--|---------------------------|-------------|--------------------|----------------|
| 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 | | | | |

3/24/17

FIGURE 2



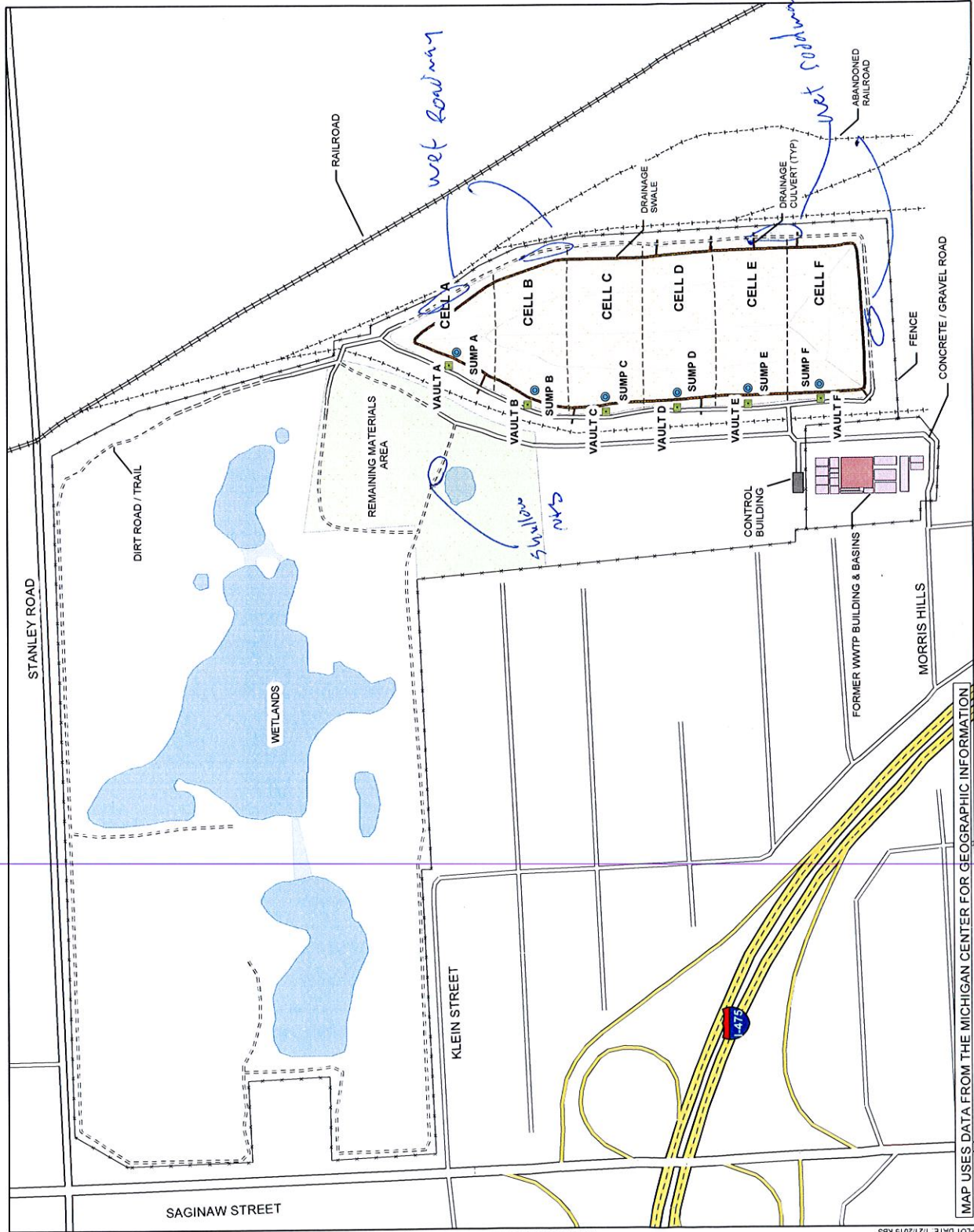
- LEGEND**
- LEACHATE COLLECTION SUMP
 - ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SITE LAYOUT



JANUARY 2017
1538662658-002



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. 39196

Inspector's Name/Title Clifford S. Yantz / Scientist-3

Inspector's Signature/Date/Time Clifford S. Yantz 6/29/17 / 12:35pm

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 | Not Present (N.P.) | N.P. | N.P. | N.P. | N.P. | N.P. | |
| Cell B | N.P. | | | | | | |
| Cell C | N.P. | | | | | | |
| Cell D | N.P. | | | | | | |
| Cell E | N.P. | | | | | | |
| Cell F | N.P. | | | | | | |
| Berms | N.P. | ↓ | ↓ | ↓ | ↓ | ↓ | |
| | | | | | | | |

Woody Plant Removal Activities

Summarize ~~monthly~~ activities:

Quarterly "Tree Pulling" on 8/9/17, 8/10/17, 8/11/17,
and 6/28/17

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
- 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 | N. P. (None) | Few - "removed" | Yes | Yes however, | | |
| B | ↓ | Few on west side top of cap - little on east side of cell - removed & treated | ↓ | eastern Access Road could use | | |
| C | | ↓ | | | | |
| D | | Few - removed (treated) | | | Some more gravel. | |
| E | | " | | | | |
| F | | " | | | | |
| Berms | | ↓ | | | ↓ | ↓ |
| | | | | | | |

Access Roads

aspect 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 | Minimal - could use some more gravel | Yes | East access roads are less used, but never got the gravel that the west roads received - could use more gravel as budget allows |
| Roads located approx. north of wetlands | roads generally in good shape | Yes | |
| Roads located approx. south of wetlands | roads in good shape | Yes | |
| Roads located approx. west of wetlands | roads generally in good shape | Yes | could possibly use a little more gravel near the wetlands |
| 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 | Some barbed wire still some needs repairing - was repaired on 6/28/12 | One opening along western side will be closed next site visit. | No | Yes |
| Fences along east property line | No - fixed one barbed wire stain | No | No | Yes |

need fence fabric to repair.

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? |
| | | | 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 | — | some could use treatment/cutting around culverts, but no problems/blockages | will treat/cut next time on site |
| Western drainage swale | No | — | — | — |
| North landfill catch basin | No | — | — | — |
| | | | | |

FIGURE 2

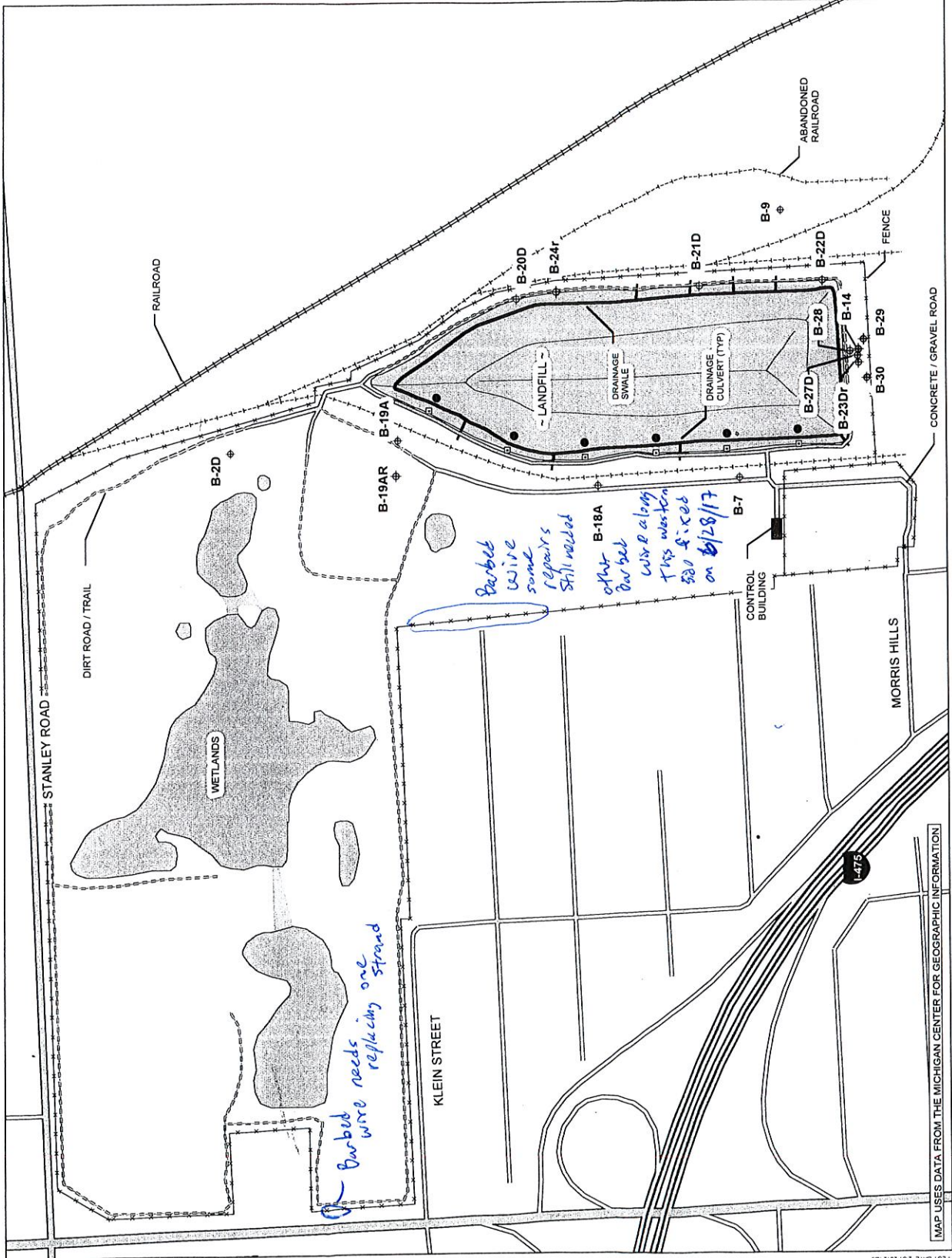


LEGEND

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

RACER TRUST
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. 64737

Inspector's Name/Title Kevin Schneider

Inspector's Signature/Date/Time  9/26/17 - 9/27/17

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 | Date Corrected |
|--------------------|-----------------|---|-----------------|----------|------------------------------------|---------------------------|--|----------------|
| Cell A | Mole activity | No | No | No | No | No | | |
| Cell B | Yes east side | No | No | No | No | No | trap set mole activity | |
| Cell C | No | No | No | No | No | No | | |
| Cell D | Mole activity | No | No | No | No | No | | |
| Cell E | No | area of erosion on east side repaired 9/28/17 | No | No | was put in riprap. No from erosion | No | 9/28/17 | 9/28/17 |
| Cell F | No | No | No | No | No | No | | |
| Berms | No | No | No | No | No | No | | |
| | | | | | | | | |

Woody Plant Removal Activities

Summarize monthly activities:

Repaired area of soil erosion. Removed woody plants from 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 X Yes ___
 Liquid dripping or running from tank? No X Yes ___
 Staining observed on the tank surface? No X Yes ___

| | |
|--|----------------|
| If yes to any, describe issue, location, and actions taken | Date Corrected |
| | |

Piping

Is piping sagging, cracked or punctured? No X Yes ___
 Liquid dripping or running from piping? No X Yes ___
 Is the tank discharge valve open? No ___ Yes X during discharge
 Staining observed on the piping surface? No X Yes ___

| | |
|--|----------------|
| If yes to any, describe issue, location, and actions taken | Date Corrected |
| | |

Emergency Response

Are drums present in accumulation building? No ___ Yes X
 Are sandbags present in accumulation building? No ___ Yes X
 Are shovels present in accumulation building? No ___ Yes X

| | |
|---|----------------|
| If no to any, describe issue, location, and actions taken | Date Corrected |
| | |

Vegetation

Staining on floor

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? | Do areas around building and equipment need to be mowed? | Do access roads need to be mowed? | If yes, describe issue, and actions taken | Date Corrected | |
|-------|---------------------------------------|------------------------------|--|-----------------------------------|---|----------------|---------|
| A | No | No | Yes, scheduled for October | Yes, scheduled for October | | | |
| B | No | No | ↓ | ↓ | | | |
| C | No | No | | | | | |
| D | No | No | | | | | |
| E | No | Yes Repair during inspection | | | | | 9/27/17 |
| F | No | Yes Repair during inspection | | | | | 9/27/17 |
| 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 issue, and actions taken | Date Corrected |
|---|----------------------------|--------------------------|--|----------------|
| 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 Missing? | If yes to any, describe issue, and actions taken | Date Corrected |
|----------------------------------|---------------------------------|------------------------------|-----------------------------------|--|--|----------------|
| Fences along north property line | No | No | No | No | | |
| Fences along south property line | No | No | No | No | | |
| Fences along west property line | Openings from previous openings | No | No | No | | |
| Fences along east property line | No | No | No | No | | |

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? |
| | | | 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.

| Describe any issues and actions taken | Date Corrected |
|---------------------------------------|----------------|
| | |

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 | Date Corrected |
|--------------------|-----------------|--------------|-----------------|----------|-----------|--|----------------|
| 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 | Date Corrected |
|---------------------------------------|--|---------------------------|-------------|--------------------|----------------|
| 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 Qrt
9/26/17 / 9/27/17

FIGURE 2



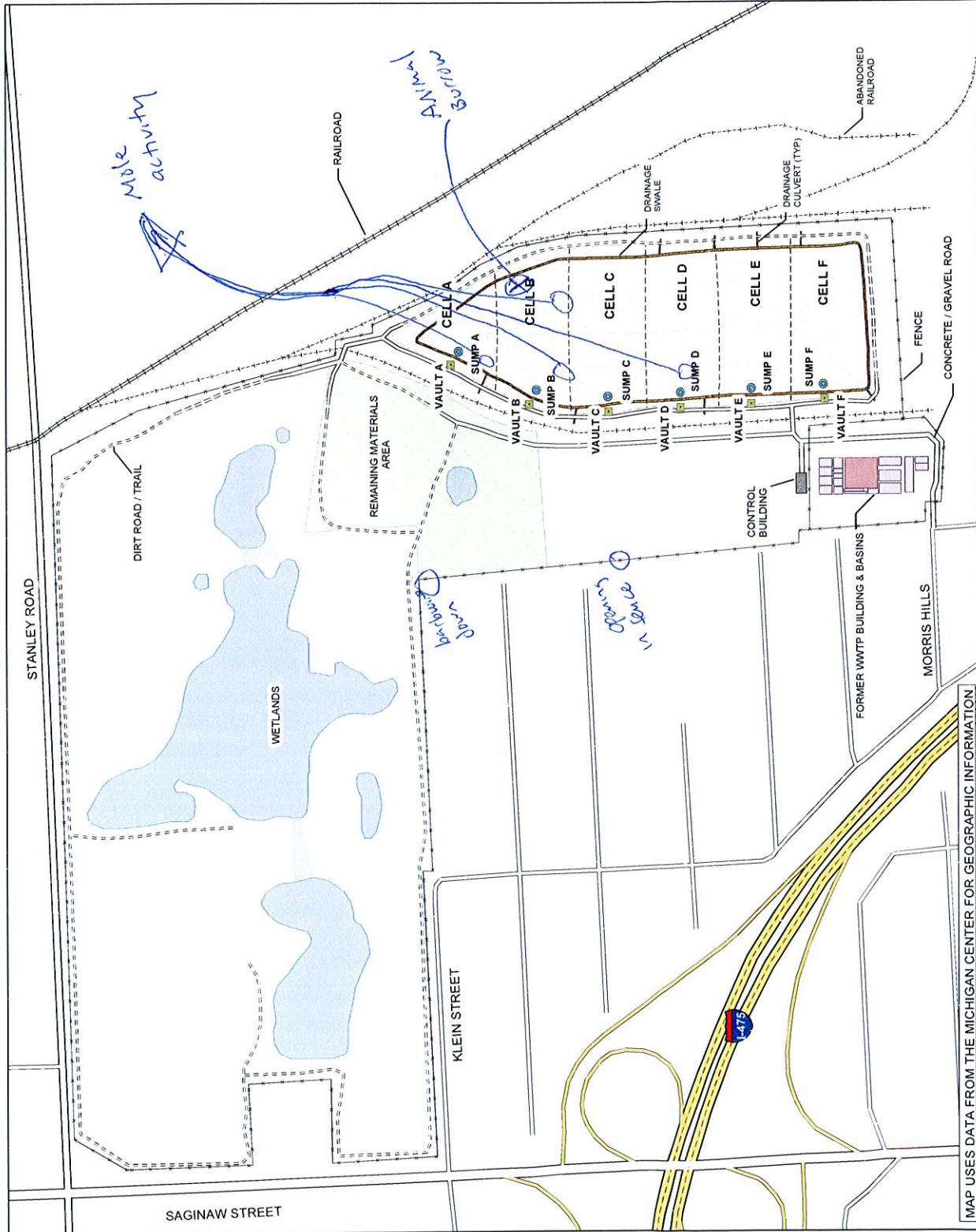
- LEGEND**
- LEACHATE COLLECTION SUMP
 - ACCESS PORT FOR LEAK DETECTION VAULT

RACER TRUST
COLDWATER ROAD
LANDFILL FACILITY
FLINT, MICHIGAN

SITE LAYOUT



JANUARY 2017
153880268-002



Quarterly Post Closure Inspection Log Sheet
Coldwater Road Landfill Site – Operations and Maintenance
Flint, Michigan
Project No. 64737

Inspector's Name/Title Kevin Schneider Scientist

Inspector's Signature/Date/Time K Schneider 12/21/17 800

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 | Date Corrected |
|--------------------|--------------------------|--------------|-----------------|----------|-----------|---------------------------|--|----------------|
| Cell A | Mole activity cell A1 | NO | No | No | No | No | | |
| Cell B | Mole activity cell B1 | No | No | No | No | No | filled in animal burrow @ cell B3 after no activity | 10/25/17 |
| Cell C | No | NO | No | No | No | No | | |
| Cell D | Mole activity cell D1 | No | No | No | No | No | | |
| Cell E | NO | No | No | No | No | No | | |
| Cell F | Cell F1/F3 Mole activity | No | No | No | No | No | | |
| Berms | No | No | No | No | No | No | | |
| | | | | | | | | |

Woody Plant Removal Activities

Summarize monthly activities: removed woody plants earlier in quarter

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 ___

| | |
|--|----------------|
| If yes to any, describe issue, location, and actions taken | Date Corrected |
| | |

Piping

- Is piping sagging, cracked or punctured? No Yes ___
- Liquid dripping or running from piping? No Yes ___
- Is the tank discharge valve open? No Yes ___
- Staining observed on the piping surface? No Yes ___

| | |
|--|----------------|
| If yes to any, describe issue, location, and actions taken | Date Corrected |
| | |

Emergency Response

- Are drums present in accumulation building? No ___ Yes
- Are sandbags present in accumulation building? No ___ Yes
- Are shovels present in accumulation building? No ___ Yes

| | |
|---|----------------|
| If no to any, describe issue, location, and actions taken | Date Corrected |
| | |

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? | Do areas around building and equipment need to be mowed? | Do access roads need to be mowed? | If yes, describe issue, and actions taken | Date Corrected |
|-------|---------------------------------------|-----------------------------|--|-----------------------------------|---|----------------|
| A | No | No | No | No | | |
| 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 issue, and actions taken | Date Corrected |
|---|----------------------------|--------------------------|--|-----------------------------|
| Roads located approx. west of landfill | Yes | Yes | added and spread gravel during quarter | spread 10/25/17 10/26/17 |
| 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 Missing? | If yes to any, describe issue, and actions taken | Date Corrected |
|----------------------------------|------------------------------|------------------------------|-----------------------------------|--|--|-------------------------------------|
| Fences along north property line | No | No | No | No | | |
| Fences along south property line | No | No | No | No | | |
| Fences along west property line | opening from previous repair | opening along Klein st | No | No | | repaired during inspection 12/01/17 |
| Fences along east property line | No | No | No | No | | |

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? |
| | | | 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.

| Describe any issues and actions taken | Date Corrected |
|---------------------------------------|----------------|
| | |

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 | Date Corrected |
|--------------------|-----------------|--------------|-----------------|----------|-----------|--|----------------|
| 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 | Date Corrected |
|---------------------------------------|--|---------------------------|-------------|--------------------|----------------|
| 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 | | | | |

OBG

THERE'S A WAY

