

MEMO

To: Brandon Pursel, USEPA
From: Francis Biehl, PE and Jason Martinez
CC: Grant Trigger, RACER Trust; David Favero, RACER Trust
Date: July 10, 2018

Project #: R2330024
Re: RACER Van Buren Landfill Site – Spring 2018 Semi-Annual Ground Water Sampling Results

Tables, Figures and Attachments Included in this Memo are:

- Table 1, Analytes for Semi-Annual Ground Water Monitoring
- Table 2, Summary of Groundwater Sample Results (Non-Residential)
- Table 3, Summary of Groundwater Sample Results (Residential)
- Table 4, Total Depth to Bottom of Wells and Estimated Sediment Accumulation
- Figure 1, Site Location Map
- Figure 2, Groundwater Elevation Contour Map (October 2016)
- Figure 3, Monitoring Well Analytical Summary Through October 2016
- Figure 4, Iron Concentration Contours (October 2016)
- Attachment 1, Low Flow Ground Water Field Sampling Forms
- Attachment 2, Laboratory Analytical Data Reports

The Mannik & Smith Group, Inc. (MSG) has been performing site investigation activities at the Van Buren Landfill (VBL) Property located northeast of the Ecorse Road / Michigan Avenue intersection in Van Buren Township, Wayne County, Michigan (Site) on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust. *Figure 1, Site Location Map*, depicts the location of the Site relative to nearby roads and major topographic features.

Previous phases of investigation and associated findings were documented in the following reports: *Phase IA Site Investigation*, dated February 19, 2013; *RACER Van Buren Landfill Site – Phase IB Site Investigation*, dated November 20, 2013; *Phase II Site Investigation*, dated March 12, 2014; *Phase III Site Investigation*, dated September 4, 2014; and *RACER Van Buren Landfill Site – Phase IV Site Investigation*, dated July 23, 2015. Previous Semi Annual Ground Water Sampling reports for the Fall, 2015, Spring and Fall 2016, and Spring and Fall 2017 semi-annual ground water sampling events were submitted in 2016, 2017, and 2018, respectively (results for all other semi-annual sampling events were discussed in the investigation reports).

The Spring 2018 Semi Annual Ground Water Sampling activities completed on the General Motors Property are summarized in a separate memo.

SPRING 2018 SEMI-ANNUAL GROUND WATER MONITORING EVENT

Since September 2012, MSG has conducted semi-annual ground water monitoring in accordance with *USEPA Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* and the *Site Sampling Analysis Plan (SAP)*. Proposed modifications to the Semi-Annual Ground Water Sampling Plan were approved by the USEPA Project Manager, Christopher Black via email on November 10, 2015. The modifications included analyzing for total and dissolved Aluminum, Iron and

Manganese from all monitoring wells and VOCs from MW-1, MW-23, and MW-24. *Table 1, Analytes for Semi-Annual Ground Water Monitoring* depicts the analyte list utilized during the Spring 2018 semi-annual ground water monitoring.

The Spring 2018 Semi-Annual Ground Water Sampling event was completed between April 23, 2018 to April 26, 2018 by Jason Martinez, Diane Shimshock and Olivia Sly and included sampling of monitoring wells associated with the Site. Furthermore, in order to assess ground water quality south of Ecorse Road and to assist in confirmation of background concentrations (primarily for dissolved iron, aluminum, and manganese), a monitoring well located at the former GM Willow Run Powertrain Plant (CRA-266M) was sampled and a static water level was measured to aid in the ground water flow assessment. Static ground water elevations were measured at three (3) other wells (CRA-265M, CRA-833M, and CRA-834M) that are close to CRA-266M to aid in ground water flow assessment. Finally, total well depths were measured at every well to calculate the amount of sediment accumulation in each well.

Ground water sampling field sheets can be found in *Attachment 1, April 2018 Field Sheets*. Ground water sampling activities were conducted in general accordance with *USEPA Low-flow (Minimal Drawdown) Ground-Water Sampling Procedures* and the Site *SAP/QAPP*. Samples were analyzed for total and dissolved Aluminum, Iron and Manganese. Samples from wells MW-1, MW-23, and MW-24 were analyzed for VOCs in addition to the dissolved metals listed above.

HYDROGEOLOGY

Depth to groundwater was measured in all existing monitoring wells located on the Van Buren Landfill Site and associated adjacent properties. Based on the collected data, ground water appears to flow radially from a local ground water high (ground water mounding) in the central portion of the Site similar to what has been presented in previous reports. Ground water elevation contours and ground water flow from the April 2018 ground water hydraulic monitoring data are illustrated on *Figure 2, Ground Water Elevation Contour Map (April 2018)*.

GROUND WATER SAMPLE RESULTS

A summary of ground water sample analytical results compared to non-residential cleanup criteria are summarized in *Table 2, Summary of Ground Water Sample Results (Non-Residential)*. Results compared to residential cleanup criteria are summarized in *Table 3 Summary of Ground Water Sample Results (Residential)*. In addition, total well depths along with estimated sediment accumulation for each well are summarized in *Table 4, Total Depth to Bottom of Wells and Estimated Sediment Accumulation*. The laboratory reports can be found in *Attachment 2, Laboratory Analytical Data Reports*. The distribution of contaminants detected at concentrations exceeding applicable criteria (Health-Based DW) are depicted on *Figure 3, Monitoring Well Analytical Summary through April 2018 Semi-Annual Ground Water Monitoring (Exceedances Only)*.

SUMMARY AND RECOMMENDATIONS

In summary, the ground water sample analytical results from the Spring 2018 Semi-Annual Ground Water Sampling Event were very similar to previous ground water sampling results. The results indicate that ground water samples collected to date from wells along the northern and western perimeter of the Site (monitoring wells MW-1, MW-7, MW-9, and MW-10) contain concentrations of dissolved iron above applicable criteria (MDEQ Part 201 Non-residential Health-Based DW criteria). Samples collected from MW-11 (also located at the northern perimeter of the Site) continue to contain dissolved aluminum, iron and manganese concentrations below MDEQ Part 201 Non-residential Health-Based DW criteria. Further north beyond MW-1, MW-10, MW-22 and MW-24 and on the adjacent property, samples collected from MW-26, MW-25 continue to contain dissolved aluminum, iron and manganese concentrations below MDEQ Part 201 Residential Health-Based DW criteria indicating the extent of migration.

The ground water sample analytical results indicate that ground water south of the Site along Ecorse Road in MW-20 contains dissolved iron at concentrations above MDEQ Part 201 Residential Health-Based DW criteria, the Willow Run Airport wells (MW-35 and MW-36) contain concentrations of dissolved Aluminum, Iron or Manganese below MDEQ Part 201 Residential Health-Based DW criteria, and that these concentrations have generally remained consistent for all sampling events.

Based on dissolved iron concentrations over time and (more importantly) within peripheral monitoring wells located off-Site (depicted in the attached supporting documentation), in conjunction with the length of time that the landfill has been closed (approximately 46 years) the contaminant plume related to the Site (i.e., existing area of groundwater contamination) appears to be stable.

There is a concern that the total metals results are being influenced by sediment build up in the wells and in turn, by turbidity of the water as a result of the sampling activities. Therefore, it is believed that dissolved metal concentrations are more representative of ground water quality compared to total metals.

Total Well Depths were compared to earlier well depths during development of the well and the amount of sediment accumulation in each well was calculated. The result was that ten (10) monitoring wells (excluding those monitoring wells on the GM Site and discussed in the report "General Motors Property – April 2018 Semi-Annual Ground Water Sampling Results") on and around the Site have an estimated sediment accumulation of over 0.5 feet. . All subsequent monitoring events will include the measurement and recording of sediment volume within each monitoring well and purging of water to attempt to lower turbidity to less than 10 NTU before a water sample is collected.

Lastly, as a note, the Michigan Department of Environmental Quality (MDEQ) is in the process of revising Part 201 Generic Cleanup Criteria draft criteria. Implementation of these new criteria would change residential and non-residential health-based drinking water criteria for dissolved iron from 2,000 ug/L to 4,200 ug/L and from 5,600 ug/L to 13,000 ug/L, respectively. The change in criteria along with the Van Buren Township Well Survey that did not identify any wells in the area of impact, would eliminate the need to further delineate dissolved iron to the east beyond what has already been done and further supports not performing further delineation to the northwest. The changes in the extent of exceedances reduces dramatically on the southern boundary where there would be no exceedances in wells off Site. Only one well would exceed the proposed non-residential health-based drinking water criteria to the east. Lastly, there would still be exceedances to the north above the proposed non-residential health-based drinking water criteria.

TABLES



Table 1
Proposed Analytes for Semi-Annual Ground Water Monitoring

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Monitoring Well (MW) ID	Location	Purpose of MW ¹	VOCs	Total Metals ²	Dissolved Metals ²
USEPA Testing Method			8260	6020A/7470	6020A/7470
MW-1	North Perimeter of Site	Hydro Assessment, Metals		√	√
MW-3	East Perimeter of Site	Hydro Assessment, Metals		√	√
MW-4	On-Site	Hydro Assessment, Metals		√	√
MW-5	North West Perimeter of Site	Hydro Assessment, Metals		√	√
MW-6	On-Site	Hydro Assessment, Metals		√	√
MW-7	South West Perimeter of Site	Hydro Assessment, Metals		√	√
MW-8	Ecorse Rd (westbound) ROW	Hydro Assessment, Metals		√	√
MW-9	West Perimeter of Site	Hydro Assessment, Metals		√	√
MW-10	North Perimeter of Site	Hydro Assessment, VOCs, Metals	√	√	√
MW-11	North East Perimeter of Site	Hydro Assessment, Metals		√	√
MW-12	On-Site	Hydro Assessment, Metals		√	√
MW-13	On-Site	Hydro Assessment			
MW-14	On-Site	Hydro Assessment			
MW-15	On-Site	Hydro Assessment			
MW-16	On-Site	Hydro Assessment			
MW-17	South East Perimeter of Site	Hydro Assessment, Metals		√	√
MW-18	Ecorse Rd (eastbound) ROW	Hydro Assessment, Metals		√	√
MW-19	Ecorse Rd (eastbound) ROW	Hydro Assessment, Metals		√	√
MW-20	Ecorse Rd (eastbound) ROW	Hydro Assessment, Metals		√	√
MW-21	North of Site (Smith Property)	Hydro Assessment, Metals		√	√
MW-22	North of Site (Smith Property)	Hydro Assessment, Metals		√	√
MW-23	North of Site (Smith Property)	Hydro Assessment, VOCs, Metals	√	√	√
MW-24	North of Site (Smith Property)	Hydro Assessment, VOCs, Metals	√	√	√
MW-25	North of Site (Smith Property)	Hydro Assessment, Metals		√	√
MW-26	North of Site (Smith Property)	Hydro Assessment, Metals		√	√
MW-27	East Perimeter of Site	Hydro Assessment, Metals		√	√
MW-28	On-Site	Hydro Assessment			
MW-29	Michigan Ave (Westbound) ROW	Hydro Assessment, Metals		√	√
MW-30	Michigan Ave (Westbound) ROW	Hydro Assessment, Metals		√	√
MW-31	GM Property	Hydro Assessment, Metals		√	√
MW-32	GM Property	Hydro Assessment, Metals		√	√
MW-33	GM Property	Hydro Assessment, Metals		√	√
MW-34	Rawsonville Rd/Michigan Ave	Hydro Assessment, Metals		√	√
Proposed ³	Willow Run Airport	Hydro Assessment, Metals		√	√
Proposed ³	Willow Run Airport	Hydro Assessment, Metals		√	√
CRA-265M	Willow Run Powertrain Plant	Hydro Assessment			
CRA-266M	Willow Run Powertrain Plant	Hydro Assessment, Metals		√	√
CRA-833M	Willow Run Powertrain Plant	Hydro Assessment			
CRA-834M	Willow Run Powertrain Plant	Hydro Assessment			
Total Number of Samples			3	31	31

Notes:

¹ = Constituents historically and/or currently detected in monitoring well exceeding applicable Michigan Part 201 Generic Cleanup Criteria.

² = Al, Fe, Mn (Method 6020A).

³ = Subject to being granted access and installed.

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-1	W-R2330009-043013-MJF-002	4/30/2013	<25	<1.0	<1.0	<50	<50	0.66 J	<1.0	<5.0	<1.0	7.3	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-1 ^A	W-R2330009-080713-ZTR-007	8/7/2013																		
MW-1	W-R2330009-080713-ZTR-007	8/7/2013	<25	<1.0	<1.0	<50	<50	0.78 J	<1.0	<5.0	<1.0	6.9	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-1 ^A	W-R2330009-111413-ACN-013	11/14/2013																		
MW-1	W-R2330009-111413-ACN-013	11/14/2013	<25	<1.0	<1.0	<50	6.9 J	0.81 J	<1.0	<5.0	<1.0	9.9	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-1 ^A	W-R2330012-032814-ACN-009	3/28/2014																		
MW-1	W-R2330012-032814-ACN-009	3/28/2014	<25	<1.0	<1.0	<50	<50	0.57 J	<1.0	<5.0	<1.0	5.1	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-1 ^A	W-R2330012-122114-JCH-026	12/2/2014																		
MW-1	W-R2330012-122114-JCH-026	12/2/2014	<25	<1.0	<1.0	<50	<50	0.59 J	<1.0	<5.0	<1.0	3.5 J	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-1 ^A (DUP)	W-R2330012-122114-JCH-027	12/2/2014																		
MW-1 (DUP)	W-R2330012-122114-JCH-027	12/2/2014	<25	<1.0	<1.0	<50	<50	0.60 J	<1.0	<5.0	<1.0	3.2 J	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-1 ^A	W-R2330017-031915-ACN-021	3/19/2015																		
MW-1	W-R2330017-031915-ACN-021	3/19/2015	<25	<1.0	<1.0	<50	<50	0.35 J	<1.0	<5.0	<1.0	4.3 J	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-1 ^A	W-R2330017-111915-AEP-021	11/19/2015																		
MW-1	W-R2330017-111915-AEP-021	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-042116-AFB-022	4/21/2016																		
MW-1	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-110216-JPM-018	11/2/2016																		
MW-1	W-R2330021-110216-JPM-018	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330022-042617-DMS-019	4/26/2017																		
MW-1	W-R2330022-042617-DMS-019	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330022-102717-AFB-032	10/27/2017																		
MW-1	W-R2330022-102717-AFB-032	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330024-042418-JPM-017	4/24/2018																		
MW-1	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330004-090512-MJF-01	9/5/2012	<25	<1.0	<1.0	<50	<50	0.66 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-3	W-R2330009-050213-MJF-009	5/2/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-3 ^A	W-R2330009-080713-ZTR-004	8/7/2013																		
MW-3	W-R2330009-080713-ZTR-004	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-3 ^A	W-R2330009-111213-ACN-002	11/12/2013																		
MW-3	W-R2330009-111213-ACN-002	11/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-3 ^A	W-R2330012-032714-ACN-007	3/27/2014																		
MW-3	W-R2330012-032714-ACN-007	3/27/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-3 ^A	W-R2330012-091514-ACN-001	9/15/2014																		
MW-3	W-R2330012-091514-ACN-001	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS
MW-3 ^A	W-R2330012-121114-JCH-019	12/1/2014																		
MW-3	W-R2330012-121114-JCH-019	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-3 ^A	W-R2330017-031915-JCH-015	3/19/2015																		
MW-3	W-R2330017-031915-JCH-015	3/19/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-3 ^A	W-R2330017-111915-JPM-018	11/19/2015																		
MW-3	W-R2330017-111915-JPM-018	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-042216-AFB-030	4/22/2016																		
MW-3	W-R2330021-042216-AFB-030	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-110416-JPM-029	11/4/2016																		
MW-3	W-R2330021-110416-JPM-029	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-042817-AFB-029	4/28/2017																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI,m}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NA	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-1	W-R2330009-043013-MJF-002	4/30/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	1.0 J	<5.0
MW-1 ^A	W-R2330009-080713-ZTR-007	8/7/2013																		
MW-1	W-R2330009-080713-ZTR-007	8/7/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-1 ^A	W-R2330009-111413-ACN-013	11/14/2013																		
MW-1	W-R2330009-111413-ACN-013	11/14/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-1 ^A	W-R2330012-032814-ACN-009	3/28/2014																		
MW-1	W-R2330012-032814-ACN-009	3/28/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-1 ^A	W-R2330012-12214-JCH-026	12/2/2014																		
MW-1	W-R2330012-12214-JCH-026	12/2/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	2.3 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-1 ^A (DUP)	W-R2330012-12214-JCH-027	12/2/2014																		
MW-1 (DUP)	W-R2330012-12214-JCH-027	12/2/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	2.5 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-1 ^A	W-R2330017-031915-ACN-021	3/19/2015																		
MW-1	W-R2330017-031915-ACN-021	3/19/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
MW-1 ^A	W-R2330017-111915-AEP-021	11/19/2015																		
MW-1	W-R2330017-111915-AEP-021	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-042116-AFB-022	4/21/2016																		
MW-1	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-110216-JPM-018	11/2/2016																		
MW-1	W-R2330021-110216-JPM-018	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330022-042617-DMS-019	4/26/2017																		
MW-1	W-R2330022-042617-DMS-019	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330022-102717-AFB-032	10/27/2017																		
MW-1	W-R2330022-102717-AFB-032	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330024-042418-JPM-017	4/24/2018																		
MW-1	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330004-090512-MJF-01	9/5/2012	<3.0	<10	<10	<5.0	<10	<10	<5.0	4.2 J	<5.0	<5.0	<5.0	<10	<5.0	0.85 J	<4.0	<5.0	<5.0	<5.0
MW-3	W-R2330009-050213-MJF-009	5/2/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-3 ^A	W-R2330009-080713-ZTR-004	8/7/2013																		
MW-3	W-R2330009-080713-ZTR-004	8/7/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-3 ^A	W-R2330009-111213-ACN-002	11/12/2013																		
MW-3	W-R2330009-111213-ACN-002	11/12/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-3 ^A	W-R2330012-032714-ACN-007	3/27/2014																		
MW-3	W-R2330012-032714-ACN-007	3/27/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-3 ^A	W-R2330012-091514-ACN-001	9/15/2014																		
MW-3	W-R2330012-091514-ACN-001	9/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	NS	NS
MW-3 ^A	W-R2330012-121114-JCH-019	12/1/2014																		
MW-3	W-R2330012-121114-JCH-019	12/1/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-3 ^A	W-R2330017-031915-JCH-015	3/19/2015																		
MW-3	W-R2330017-031915-JCH-015	3/19/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-3 ^A	W-R2330017-111915-JPM-018	11/19/2015																		
MW-3	W-R2330017-111915-JPM-018	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-042216-AFB-030	4/22/2016																		
MW-3	W-R2330021-042216-AFB-030	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-110416-JPM-029	11/4/2016																		
MW-3	W-R2330021-110416-JPM-029	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-042817-AFB-029	4/28/2017																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D,n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v-in}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-1	W-R2330009-043013-MJF-002	4/30/2013	1.7 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.1 J	0.43 J	15	1,500	<1.0	<1.0	1.1 J	2.8 J	1.3 J	<0.005	17,000
MW-1 ^A	W-R2330009-080713-ZTR-007	8/7/2013								67	0.21 J	23	1,700	<1.0	0.17 J	1.5 J	3.4 J	3.3 J		25,000
MW-1	W-R2330009-080713-ZTR-007	8/7/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	5.3 J	0.27 J	23	1,900	<1.0	0.10 J	1.3 J	3.7 J	1.2 J	<0.005	25,000
MW-1 ^A	W-R2330009-111413-ACN-013	11/14/2013								33 J	0.19 J	28	2,200	<1.0	<1.0	2.0 J	3.1 J	0.62 J		21,000
MW-1	W-R2330009-111413-ACN-013	11/14/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.8 J	0.21 J	27	2,200	<1.0	0.12 J	2.5 J	3.7 J	<4.0	0.0044 J	21,000
MW-1 ^A	W-R2330012-032814-ACN-009	3/28/2014								14 J	0.18 J	16 J	1,300	0.15 J	<1.0	0.78 J	2.6 J	2.4 J		17,000
MW-1	W-R2330012-032814-ACN-009	3/28/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	<100	0.19 J	16	1,600	0.19 J	0.18 J	2.7 J	3.0 J	2.0 J	6.7 J	18,000
MW-1 ^A	W-R2330012-12214-JCH-026	12/2/2014								120	0.23 J	26	1,700	<1.0	0.062 J	1.6 J	1.9 J	0.55 J		18,000
MW-1	W-R2330012-12214-JCH-026	12/2/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.0 J	0.24 J	25	1,700	<1.0	<1.0	1.2 J	2.0 J	<4.0	3.9 J	17,000
MW-1 ^A (DUP)	W-R2330012-12214-JCH-027	12/2/2014								74	0.19 J	25	1,800	<1.0	<1.0	1.4 J	2.0 J	0.17 J		18,000
MW-1 (DUP)	W-R2330012-12214-JCH-027	12/2/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	3.3 J	0.18 J	25	1,700	<1.0	<1.0	1.4 J	1.8 J	<4.0	4.6 J	17,000
MW-1 ^A	W-R2330017-031915-ACN-021	3/19/2015								30 J	0.26 J	27	1,900	<1.0	<1.0	1.3 J	2.3 J	1.1 J		21,000
MW-1	W-R2330017-031915-ACN-021	3/19/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	18 J	0.31 J	27	2,000	<1.0	<1.0	1.3 J	2.2 J	0.50 J	<5.0	21,000
MW-1 ^A	W-R2330017-111915-AEP-021	11/19/2015								210	NS	NS	NS	NS	NS	NS	NS	NS		23,000
MW-1	W-R2330017-111915-AEP-021	11/19/2015	NS	NS	NS	NS	NS	NS	NS	5.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	23,000
MW-1 ^A	W-R2330021-042116-AFB-022	4/21/2016								140	NS	NS	NS	NS	NS	NS	NS	NS		15,000
MW-1	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	NS	NS	NS	NS	NS	29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	18,000
MW-1 ^A	W-R2330021-110216-JPM-018	11/2/2016								420	NS	NS	NS	NS	NS	NS	NS	NS	NS	21,000
MW-1	W-R2330021-110216-JPM-018	11/2/2016	NS	NS	NS	NS	NS	NS	NS	8.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000
MW-1 ^A	W-R2330022-042617-DMS-019	4/26/2017								29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000
MW-1	W-R2330022-042617-DMS-019	4/26/2017	NS	NS	NS	NS	NS	NS	NS	9.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000
MW-1 ^A	W-R2330022-102717-AFB-032	10/27/2017								280	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000
MW-1	W-R2330022-102717-AFB-032	10/27/2017	NS	NS	NS	NS	NS	NS	NS	5.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000
MW-1 ^A	W-R2330024-042418-JPM-017	4/24/2018								16	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000
MW-1	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	NS	NS	NS	NS	NS	3.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000
MW-3	W-R2330004-090512-MJF-01	9/5/2012	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.0 J	0.29 J	14	900	<1.0	<1.0	1.1 J	4.2 J	0.39 J		9,300
MW-3	W-R2330009-050213-MJF-009	5/2/2013	1.4 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.51 J	1.5 J	220	<1.0	0.047 J	0.86 J	1.5 J	3.2 J	<0.005	2,000
MW-3 ^A	W-R2330009-080713-ZTR-004	8/7/2013								120	0.28 J	3.9 J	300	<1.0	0.11 J	0.84 J	0.95 J	5.4		4,000
MW-3	W-R2330009-080713-ZTR-004	8/7/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	5.2 J	0.40 J	3.8 J	320	<1.0	0.063 J	4.5 J	1.9 J	3.5 J	<0.005	4,000
MW-3 ^A	W-R2330009-111213-ACN-002	11/12/2013								190	0.33 J	3.3 J	260	<1.0	<1.0	1.1 J	1.0 J	2.1 J		3,800
MW-3	W-R2330009-111213-ACN-002	11/12/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.1 J	0.31 J	3.7 J	300	<1.0	<1.0	0.46 J	1.3 J	1.3 J	<0.005	3,900
MW-3 ^A	W-R2330012-032714-ACN-007	3/27/2014								450	0.22 J	0.76 J	130	<1.0	<1.0	0.48 J	0.84 J	2.6 J		2,000
MW-3	W-R2330012-032714-ACN-007	3/27/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	89 J	0.24 J	0.62 J	150 J	<1.0	<1.0	<10	1.5 J	2.1 J	<0.005	1,400
MW-3 ^A	W-R2330012-091514-ACN-001	9/15/2014								610	0.27 J	4.1 J	310	0.23 J	<1.0	0.97 J	1.5 J	3.0 J		4,900
MW-3	W-R2330012-091514-ACN-001	9/15/2014	NS	NS	NS	NS	NS	NS	NS	6.4 J	0.30 J	3.4 J	370	<1.0	<1.0	0.35 J	1.9 J	2.4 J	NS	4,700
MW-3 ^A	W-R2330012-12114-JCH-019	12/1/2014								820	0.24 J	2.7 J	340	<1.0	<1.0	1.5 J	1.5 J	3.5 J		5,200
MW-3	W-R2330012-12114-JCH-019	12/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.21 J	2.2 J	350	<1.0	<1.0	0.32 J	1.3 J	2.2 J	<5.0	4,400
MW-3 ^A	W-R2330017-031915-JCH-015	3/19/2015								260	0.28 J	2.8 J	290	<1.0	0.11 J	0.75 J	0.74 J	2.4 J		4,600
MW-3	W-R2330017-031915-JCH-015	3/19/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	8.4 J	0.41 J	1.7 J	370	<1.0	0.11 J	0.48 J	1.3 J	2.1 J	<5.0	5,000
MW-3 ^A	W-R2330017-111915-JPM-018	11/19/2015								240	NS	NS	NS	NS	NS	NS	NS	NS		11,000
MW-3	W-R2330017-111915-JPM-018	11/19/2015	NS	NS	NS><															

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-97}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-1	W-R2330009-043013-MJF-002	4/30/2013	<3.0	<50	130	<0.2	5.3 J	<5.0	<0.20	<2.0	1.4 J	9.1 J
MW-1 ^A	W-R2330009-080713-ZTR-007	8/7/2013	0.25 J	<50	120	<0.2	8.0 J	<5.0	<0.20	<2.0	2.0 J	6.0 J
MW-1	W-R2330009-080713-ZTR-007	8/7/2013	0.076 J	<50	120	<0.2	7.4 J	<5.0	<0.20	<2.0	1.7 J	5.6 J
MW-1 ^A	W-R2330009-111413-ACN-013	11/14/2013	0.17 J	<50	86	<0.2	7.7 J	<5.0	<0.20	<2.0	1.7 J	3.4 J
MW-1	W-R2330009-111413-ACN-013	11/14/2013	<3.0	<50	90	<0.2	8.2 J	<5.0	<0.20	<2.0	1.8 J	3.4 J
MW-1 ^A	W-R2330012-032814-ACN-009	3/28/2014	0.13 J	<50	69	<0.2	7.5 J	0.71 J	<0.2	<2.0	1.8 J	2.0 J
MW-1	W-R2330012-032814-ACN-009	3/28/2014	<3.0	<50	65	<0.2	7.5 J	<5.0	<0.2	<2.0	1.6 J	1.4 J
MW-1 ^A	W-R2330012-122114-JCH-026	12/2/2014	<3.0	<50	83	<0.2	4.0 J	<5.0	<0.20	<2.0	2.1 J	3.6 J
MW-1	W-R2330012-122114-JCH-026	12/2/2014	<3.0	<50	80	<0.2	3.8 J	<5.0	<0.20	<2.0	1.5 J	<50
MW-1 ^A (DUP)	W-R2330012-122114-JCH-027	12/2/2014	<3.0	<50	81	<0.2	3.5 J	<5.0	<0.20	<2.0	2.1 J	3.2 J
MW-1 (DUP)	W-R2330012-122114-JCH-027	12/2/2014	<3.0	<50	78	<0.2	3.6 J	<5.0	<0.20	<2.0	1.8 J	<50
MW-1 ^A	W-R2330017-031915-ACN-021	3/19/2015	<3.0	<50	81	<0.2	5.1 J	<5.0	<0.20	<2.0	2.1 J	3.3 J
MW-1	W-R2330017-031915-ACN-021	3/19/2015	<3.0	<50	81	<0.2	5.0 J	<5.0	<0.20	<2.0	1.6 J	3.5 J
MW-1 ^A	W-R2330017-111915-AEP-021	11/19/2015	NS	160,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-1	W-R2330017-111915-AEP-021	11/19/2015	NS	160,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	59	NS	NS	NS	NS	NS	NS	NS
MW-1	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	57	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-110216-JPM-018	11/2/2016	NS	NS	57	NS	NS	NS	NS	NS	NS	NS
MW-1	W-R2330021-110216-JPM-018	11/2/2016	NS	NS	42 J	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330022-042617-DMS-019	4/26/2017	NS	150,000	42 J	NS	NS	NS	NS	NS	NS	NS
MW-1	W-R2330022-042617-DMS-019	4/26/2017	NS	160,000	41 J	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330022-102717-AFB-032	10/27/2017	NS	NS	73	NS	NS	NS	NS	NS	NS	NS
MW-1	W-R2330022-102717-AFB-032	10/27/2017	NS	NS	60	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	48	NS	NS	NS	NS	NS	NS	NS
MW-1	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	48	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330004-090512-MJF-01	9/5/2012	0.12 J	<50	86	<0.2	15 J	0.91 J	<0.20	<2.0	0.60 J	3.7 J
MW-3	W-R2330009-050213-MJF-009	5/2/2013	0.11 J	<50	67	<0.2	4.9 J	0.98 J	<0.20	0.49 J	0.53 J	2.3 J
MW-3 ^A	W-R2330009-080713-ZTR-004	8/7/2013	0.24 J	<50	44 J	<0.2	5.6 J	3.6 J	<0.20	<2.0	0.75 J	4.4 J
MW-3	W-R2330009-080713-ZTR-004	8/7/2013	<3.0	<50	46 J	<0.2	7.2 J	3.6 J	<0.20	<2.0	0.60 J	2.4 J
MW-3 ^A	W-R2330009-111213-ACN-002	11/12/2013	0.30 J	<50	38 J	<0.2	6.4 J	5.6	<0.20	<2.0	0.88 J	4.3 J
MW-3	W-R2330009-111213-ACN-002	11/12/2013	<3.0	<50	36 J	<0.2	6.6 J	5.0 J	<0.20	<2.0	0.32 J	2.6 J
MW-3 ^A	W-R2330012-032714-ACN-007	3/27/2014	0.79 J	<50	33 J	<0.2	4.8 J	1.2 J	<0.20	<2.0	1.1 J	5.9 J
MW-3	W-R2330012-032714-ACN-007	3/27/2014	0.079 J	<50	23 J	<0.2	4.8 J	1.3 J	<0.20	<2.0	0.41 J	1.9 J
MW-3 ^A	W-R2330012-091514-ACN-001	9/15/2014	0.63 J	<50	130	0.057 J	8.9 J	0.76 J	<0.20	0.22 J	1.6 J	8.0 J
MW-3	W-R2330012-091514-ACN-001	9/15/2014	<3.0	<50	110	0.058 J	8.0 J	1.4 J	<0.20	<2.0	0.56 J	3.8 J
MW-3 ^A	W-R2330012-121114-JCH-019	12/1/2014	0.98 J	<50	74	<0.2	7.8 J	1.5 J	<0.20	<2.0	2.1 J	9.1 J
MW-3	W-R2330012-121114-JCH-019	12/1/2014	<3.0	<50	66	<0.2	7.0 J	1.6 J	<0.20	<2.0	0.56 J	4.2 J
MW-3 ^A	W-R2330017-031915-JCH-015	3/19/2015	<3.0	<50	37 J	<0.2	4.7 J	1.3 J	0.055 J	<2.0	0.65 J	4.5 J
MW-3	W-R2330017-031915-JCH-015	3/19/2015	<3.0	<50	39 J	<0.2	5.9 J	2.2 J	0.081 J	<2.0	<4.0	<50
MW-3 ^A	W-R2330017-111915-JPM-018	11/19/2015	NS	120,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330017-111915-JPM-018	11/19/2015	NS	120,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-042216-AFB-030	4/22/2016	NS	NS	13 J	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330021-042216-AFB-030	4/22/2016	NS	NS	14 J	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-110416-JPM-029	11/4/2016	ND	NS	140	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330021-110416-JPM-029	11/4/2016	NS	NS	140	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-042817-AFB-029	4/28/2017	NS	72,000	260	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L	Volatile Organic Compounds (VOCs)																			
	2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene		
	Non-residential Drinking Water Criteria (II)	38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	
	Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	
	Ground Water Surface Water Interface Criteria (GSI) (III)	2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270	
	GSI Final Acute Value (FAV)	40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	
	Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	
	Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)	18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	
	Water Solubility (VII)	2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	
	Flammability & Explosivity Screening Level (VIII)	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	
ID	SAMPLE ID	SAMPLE DATE	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
MW-3	W-R2330022-042817-AFB-029	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A (DUP)	W-R2330022-042817-AFB-030	4/28/2017																		
MW-3 (DUP)	W-R2330022-042817-AFB-030	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-102417-DMS-008	10/23/2017																		
MW-3	W-R2330022-102417-DMS-008	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330024-042518-DMS-022	4/25/2018																		
MW-3	W-R2330024-042518-DMS-022	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330004-090512-MJF-02	9/5/2012	<25	<1.0	<1.0	<50	12 J	0.39 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-4 (DUP)	W-R2330004-090512-MJF-03	9/5/2012	<25	<1.0	<1.0	<50	8.5 J	0.43 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-4	W-R2330009-050213-MJF-010	5/2/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-4 ^A	W-R2330009-080713-ZTR-005	8/7/2013																		
MW-4	W-R2330009-080713-ZTR-005	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-4 ^A	W-R2330009-111213-ACN-003	11/12/2013																		
MW-4	W-R2330009-111213-ACN-003	11/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-4 ^A	W-R2330012-032714-ACN-006	3/27/2014																		
MW-4	W-R2330012-032714-ACN-006	3/27/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-4 ^A	W-R2330012-121114-JCH-020	12/1/2014																		
MW-4	W-R2330012-121114-JCH-020	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-4 ^A	W-R2330017-031715-ACN-010	3/17/2015																		
MW-4	W-R2330017-031715-ACN-010	3/17/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-4 ^A	W-R2330017-112015-JPM-033	11/20/2015																		
MW-4	W-R2330017-112015-JPM-033	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-042116-AFB-028	4/21/2016																		
MW-4	W-R2330021-042116-AFB-028	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-110416-JPM-036	11/4/2016																		
MW-4	W-R2330021-110416-JPM-036	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-042817-AFB-034	4/28/2017																		
MW-4	W-R2330022-042817-AFB-034	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-102417-DMS-012	10/24/2017																		
MW-4	W-R2330022-102417-DMS-012	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330024-042518-DMS-026	4/25/2018																		
MW-4	W-R2330024-042518-DMS-026	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330009-050113-MJF-004	5/1/2013	<25	<1.0	<1.0	<50	6.9 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-5 (DUP)	W-R2330009-050113-MJF-005	5/1/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-5 ^A	W-R2330009-080813-ZTR-009	8/8/2013																		
MW-5	W-R2330009-080813-ZTR-009	8/8/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-5 ^A	W-R2330009-111213-ACN-004	11/12/2013																		
MW-5	W-R2330009-111213-ACN-004	11/12/2013	<25	<1.0	<1.0	<50	15 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-5 ^A	W-R2330012-032814-ACN-008	3/28/2014																		
MW-5	W-R2330012-032814-ACN-008	3/28/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-5 ^A	W-R2330012-122114-JCH-025	12/2/2014																		
MW-5	W-R2330012-122114-JCH-025	12/2/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-5 ^A	W-R2330017-031915-JCH-018	3/19/2015																		
MW-5	W-R2330012-031915-JCH-018	3/19/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-5 ^A	W-R2330017-112015-JPM-031	11/20/2015																		
MW-5	W-R2330017-112015-JPM-031	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L				Semivolatile Organic Compounds (SVOCs)																
				Xylenes	1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-3	W-R2330022-042817-AFB-029	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A (DUP)	W-R2330022-042817-AFB-030	4/28/2017																		
MW-3 (DUP)	W-R2330022-042817-AFB-030	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-102417-DMS-008	10/23/2017																		
MW-3	W-R2330022-102417-DMS-008	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330024-042518-DMS-022	4/25/2018																		
MW-3	W-R2330024-042518-DMS-022	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330004-090512-MJF-02	9/5/2012	<3.0	<10	<10	<5.0	<10	<10	<5.0	<1.1	<5.0	<5.0	<5.0	<10	<5.0	<0.84	<4.0	<5.0	<5.0	<5.0
MW-4 (DUP)	W-R2330004-090512-MJF-03	9/5/2012	<3.0	<10	<10	<5.0	<10	<10	<5.0	<1.1	<5.0	<5.0	<5.0	<10	<5.0	<0.84	<4.0	<5.0	<5.0	<5.0
MW-4	W-R2330009-050213-MJF-010	5/2/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-4 ^A	W-R2330009-080713-ZTR-005	8/7/2013																		
MW-4	W-R2330009-080713-ZTR-005	8/7/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-4 ^A	W-R2330009-111213-ACN-003	11/12/2013																		
MW-4	W-R2330009-111213-ACN-003	11/12/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-4 ^A	W-R2330012-032714-ACN-006	3/27/2014																		
MW-4	W-R2330012-032714-ACN-006	3/27/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-4 ^A	W-R2330012-121114-JCH-020	12/1/2014																		
MW-4	W-R2330012-121114-JCH-020	12/1/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-4 ^A	W-R2330017-031715-ACN-010	3/17/2015																		
MW-4	W-R2330017-031715-ACN-010	3/17/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-4 ^A	W-R2330017-112015-JPM-033	11/20/2015																		
MW-4	W-R2330017-112015-JPM-033	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-042116-AFB-028	4/21/2016																		
MW-4	W-R2330021-042116-AFB-028	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-110416-JPM-036	11/4/2016																		
MW-4	W-R2330021-110416-JPM-036	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-042817-AFB-034	4/28/2017																		
MW-4	W-R2330022-042817-AFB-034	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-102417-DMS-012	10/24/2017																		
MW-4	W-R2330022-102417-DMS-012	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330024-042518-DMS-026	4/25/2018																		
MW-4	W-R2330024-042518-DMS-026	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330009-050113-MJF-004	5/1/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	1.3 J	<5.0	<5.0	<10	<5.0	1.2 J	<4.0	<5.0	0.99 J	<5.0
MW-5 (DUP)	W-R2330009-050113-MJF-005	5/1/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	1.3 J	<5.0	<5.0	<10	<5.0	1.2 J	<4.0	<5.0	0.93 J	<5.0
MW-5 ^A	W-R2330009-080813-ZTR-009	8/8/2013																		
MW-5	W-R2330009-080813-ZTR-009	8/8/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-5 ^A	W-R2330009-111213-ACN-004	11/12/2013																		
MW-5	W-R2330009-111213-ACN-004	11/12/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-5 ^A	W-R2330012-032814-ACN-008	3/28/2014																		
MW-5	W-R2330012-032814-ACN-008	3/28/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-5 ^A	W-R2330012-122114-JCH-025	12/2/2014																		
MW-5	W-R2330012-122114-JCH-025	12/2/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-5 ^A	W-R2330017-031915-JCH-018	3/19/2015																		
MW-5	W-R2330012-031915-JCH-018	3/19/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-5 ^A	W-R2330017-112015-JPM-031	11/20/2015																		
MW-5	W-R2330017-112015-JPM-031	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P.R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-3	W-R2330022-042817-AFB-029	4/28/2017	NS	NS	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,300
MW-3 ^A (DUP)	W-R2330022-042817-AFB-030	4/28/2017								370	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,000
MW-3 (DUP)	W-R2330022-042817-AFB-030	4/28/2017	NS	NS	NS	NS	NS	NS	NS	7.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,300
MW-3 ^A	W-R2330022-102417-DMS-008	10/23/2017								78	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000
MW-3	W-R2330022-102417-DMS-008	10/23/2017	NS	NS	NS	NS	NS	NS	NS	4.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000
MW-3 ^A	W-R2330024-042518-DMS-022	4/25/2018								470	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,100
MW-3	W-R2330024-042518-DMS-022	4/25/2018	NS	NS	NS	NS	NS	NS	NS	28	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,100
MW-4	W-R2330004-090512-MJF-02	9/5/2012	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	7.6 J	0.097 J	1.4 J	470	<1.0	<1.0	1.1 J	1.2 J	<4.0	<0.005	14,000
MW-4 (DUP)	W-R2330004-090512-MJF-03	9/5/2012	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	11 J	0.14 J	1.2 J	480	<1.0	<1.0	0.85 J	1.3 J	0.26 J	<0.005	15,000
MW-4	W-R2330009-050213-MJF-010	5/2/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	13 J	0.21 J	<5.0	410	<1.0	<1.0	0.84 J	2.7 J	<4.0	<0.005	11,000
MW-4 ^A	W-R2330009-080713-ZTR-005	8/7/2013								4.5 J	0.22 J	<5.0	480	<1.0	0.29 J	0.80 J	2.4 J	2.7 J		16,000
MW-4	W-R2330009-080713-ZTR-005	8/7/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	170	0.12 J	<5.0	490	<1.0	0.29 J	1.4 J	1.5 J	2.6 J	<0.005	16,000
MW-4 ^A	W-R2330009-111213-ACN-003	11/12/2013								490	0.23 J	1.7 J	460	<1.0	<1.0	2.9 J	2.2 J	1.4 J		16,000
MW-4	W-R2330009-111213-ACN-003	11/12/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.19 J	1.1 J	460	<1.0	0.34 J	0.78 J	2.0 J	0.65 J	<0.005	15,000
MW-4 ^A	W-R2330012-032714-ACN-006	3/27/2014								2,800	0.40 J	5.1	480	0.095 J	<1.0	4.5 J	5.7 J	9.6 J		20,000
MW-4	W-R2330012-032714-ACN-006	3/27/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.0 J	0.23 J	2.9 J	450	<1.0	<1.0	0.37 J	2.4 J	2.0 J	3.4 J	15,000
MW-4 ^A	W-R2330012-121114-JCH-020	12/1/2014								500	0.35 J	2.8 J	430	<1.0	<1.0	1.3 J	2.0 J	1.9 J		14,000
MW-4	W-R2330012-121114-JCH-020	12/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.5 J	0.37 J	2.5 J	410	<1.0	<1.0	0.54 J	1.8 J	0.95 J	<5.0	12,000
MW-4 ^A	W-R2330017-031715-ACN-010	3/17/2015								3,100	0.33 J	2.3 J	500	<1.0	<1.0	4.7 J	3.4 J	7.8		20,000
MW-4	W-R2330017-031715-ACN-010	3/17/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	7.1 J	0.23 J	0.97 J	450	<1.0	<1.0	0.55 J	1.7 J	1.1 J	<5.0	16,000
MW-4 ^A	W-R2330017-112015-JPM-033	11/20/2015								84	NS	NS	NS	NS	NS	NS	NS	NS		12,000
MW-4	W-R2330017-112015-JPM-033	11/20/2015	NS	NS	NS	NS	NS	NS	NS	2.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-4 ^A	W-R2330021-042116-AFB-028	4/21/2016								81	NS	NS	NS	NS	NS	NS	NS	NS		15,000
MW-4	W-R2330021-042116-AFB-028	4/21/2016	NS	NS	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	17,000
MW-4 ^A	W-R2330021-110416-JPM-036	11/4/2016								210	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000
MW-4	W-R2330021-110416-JPM-036	11/4/2016	NS	NS	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000
MW-4 ^A	W-R2330022-042817-AFB-034	4/28/2017								21 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	10,000
MW-4	W-R2330022-042817-AFB-034	4/28/2017	NS	NS	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,600
MW-4 ^A	W-R2330022-102417-DMS-012	10/24/2017								28	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000
MW-4	W-R2330022-102417-DMS-012	10/24/2017	NS	NS	NS	NS	NS	NS	NS	6.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000
MW-4 ^A	W-R2330024-042518-DMS-026	4/25/2018								33	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,100
MW-4	W-R2330024-042518-DMS-026	4/25/2018	NS	NS	NS	NS	NS	NS	NS	8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,800
MW-5	W-R2330009-050113-MJF-004	5/1/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	15 J	0.17 J	31	1,300	<1.0	<1.0	1.5 J	2.3 J	<4.0	<0.005	5,300
MW-5 (DUP)	W-R2330009-050113-MJF-005	5/1/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	12 J	0.27 J	31	1,300	<1.0	<1.0	1.9 J	2.3 J	<4.0	<0.005	5,400
MW-5 ^A	W-R2330009-080813-ZTR-009	8/8/2013								330	2.2 J	34	1,500	<1.0	0.84 J	2.1 J	2.3 J	3.5 J		5,300
MW-5	W-R2330009-080813-ZTR-009	8/8/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.7 J	0.27 J	31	1,400	<1.0	0.16 J	1.6 J	3.1 J	2.1 J	<0.005	4,300
MW-5 ^A	W-R2330009-111213-ACN-004	11/12/2013								420	0.26 J	40	1,400	<1.0	0.98 J	2.6 J	2.6 J	3.5 J		6,500
MW-5	W-R2330009-111213-ACN-004	11/12/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	13 J	0.20 J	38	1,300	<1.0	0.57 J	2.9 J	2.6 J	<4.0	0.0016	5,900
MW-5 ^A	W-R2330012-032814-ACN-008	3/28/2014								1,100	0.50 J	40	1,300	0.25 J	0.49 J	3.3 J	3.1 J	8.0 J		8,100
MW-5	W-R2330012-032814-ACN-008	3/28/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	<2.0	0.25 J	31	1,200	<1.0	<1.0	0.61 J	2.6 J	1.0 J	2.6 J	4,500
MW-5 ^A	W-R2330012-122114-JCH-025	12/2/2014								280	0.20 J	33	1,400	<1.0	2.1	1.7 J	2.0 J	0.86 J		5,500
MW-5	W																			

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-3	W-R2330022-042817-AFB-029	4/28/2017	NS	69,000	230	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A (DUP)	W-R2330022-042817-AFB-030	4/28/2017	NS	71,000	250	NS	NS	NS	NS	NS	NS	NS
MW-3 (DUP)	W-R2330022-042817-AFB-030	4/28/2017	NS	67,000	230	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-102417-DMS-008	10/23/2017	NS	NS	93	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330022-102417-DMS-008	10/23/2017	NS	NS	88	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330024-042518-DMS-022	4/25/2018	NS	NS	240	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330024-042518-DMS-022	4/25/2018	NS	NS	230	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330004-090512-MJF-02	9/5/2012	<3.0	<50	56	<0.2	2.4 J	0.46 J	<0.20	<2.0	0.75 J	1.9 J
MW-4 (DUP)	W-R2330004-090512-MJF-03	9/5/2012	0.034 J	<50	55	<0.2	2.4 J	<5.0	<0.025	<2.0	0.73 J	2.4 J
MW-4	W-R2330009-050213-MJF-010	5/2/2013	<3.0	<50	490	<0.2	2.8 J	<5.0	<0.20	<2.0	0.85 J	1.1 J
MW-4 ^A	W-R2330009-080713-ZTR-005	8/7/2013	<3.0	<50	77	<0.2	4.0 J	<5.0	<0.20	<2.0	1.0 J	2.4 J
MW-4	W-R2330009-080713-ZTR-005	8/7/2013	0.30 J	<50	80	<0.2	4.0 J	1.0 J	<0.20	<2.0	1.4 J	3.5 J
MW-4 ^A	W-R2330009-111213-ACN-003	11/12/2013	1.2 J	<50	96	<0.2	8.4 J	<5.0	<0.20	<2.0	2.1 J	7.5 J
MW-4	W-R2330009-111213-ACN-003	11/12/2013	<3.0	<50	70	<0.2	4.7 J	<5.0	<0.20	<2.0	0.94 J	2.8 J
MW-4 ^A	W-R2330012-032714-ACN-006	3/27/2014	7.5	<50	700	<0.2	16 J	1.4 J	<0.20	0.12 J	8.5	35 J
MW-4	W-R2330012-032714-ACN-006	3/27/2014	<3.0	<50	410	<0.2	8.4 J	<5.0	<0.20	<2.0	0.74 J	20 J
MW-4 ^A	W-R2330012-121114-JCH-020	12/1/2014	0.71 J	<50	110	<0.2	6.2 J	<5.0	<0.20	<2.0	2.2 J	6.5 J
MW-4	W-R2330012-121114-JCH-020	12/1/2014	<3.0	<50	100	<0.2	5.4 J	<5.0	<0.20	<2.0	1.0 J	3.1 J
MW-4 ^A	W-R2330017-031715-ACN-010	3/17/2015	4.4	<50	140	<0.2	11 J	<5.0	0.029 J	<2.0	6.6	23 J
MW-4	W-R2330017-031715-ACN-010	3/17/2015	<3.0	<50	69	<0.2	4.4 J	<5.0	<0.20	<2.0	0.71 J	<50
MW-4 ^A	W-R2330017-112015-JPM-033	11/20/2015	NS	140,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330017-112015-JPM-033	11/20/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-042116-AFB-028	4/21/2016	NS	NS	490	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330021-042116-AFB-028	4/21/2016	NS	NS	560	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-110416-JPM-036	11/4/2016	NS	NS	72	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330021-110416-JPM-036	11/4/2016	NS	NS	60	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-042817-AFB-034	4/28/2017	NS	150,000	760	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330022-042817-AFB-034	4/28/2017	NS	140,000	730	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-102417-DMS-012	10/24/2017	NS	NS	62	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330022-102417-DMS-012	10/24/2017	NS	NS	60	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330024-042518-DMS-026	4/25/2018	NS	NS	680	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330024-042518-DMS-026	4/25/2018	NS	NS	690	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330009-050113-MJF-004	5/1/2013	0.3 J	<50	56	<0.2	3.5 J	0.69 J	<0.20	<2.0	1.3 J	1.1 J
MW-5 (DUP)	W-R2330009-050113-MJF-005	5/1/2013	0.061 J	<50	58	<0.2	3.9 J	0.67 J	<0.20	0.069 J	1.2 J	1.1 J
MW-5 ^A	W-R2330009-080813-ZTR-009	8/8/2013	2.1 J	<50	56	<0.2	4.9 J	0.75 J	<0.20	<2.0	2.2 J	10 J
MW-5	W-R2330009-080813-ZTR-009	8/8/2013	0.069 J	<50	50	<0.2	4.3 J	<5.0	<0.20	<2.0	1.4 J	3.1 J
MW-5 ^A	W-R2330009-111213-ACN-004	11/12/2013	4.9 J	<50	81 J	<0.2	6.3 J	<5.0	<0.20	<2.0	2.5 J	11 J
MW-5	W-R2330009-111213-ACN-004	11/12/2013	<3.0	<50	71 J	<0.2	5.9 J	<5.0	<0.20	<2.0	1.3 J	2.4 J
MW-5 ^A	W-R2330012-032814-ACN-008	3/28/2014	12 J	<50	93	<0.2	9.2 J	<5.0	0.051 J	<2.0	4.2	26 J
MW-5	W-R2330012-032814-ACN-008	3/28/2014	0.34	<50	57	<0.2	6.5 J	0.70 J	<0.20	<2.0	1.3 J	0.65 J
MW-5 ^A	W-R2330012-122114-JCH-025	12/2/2014	1.4 J	<50	79	<0.2	3.4 J	<5.0	0.029 J	<2.0	2.1 J	6.0 J
MW-5	W-R2330012-122114-JCH-025	12/2/2014	2.4 J	<50	73	<0.2	3.4 J	<5.0	<0.20	<2.0	1.5 J	<50
MW-5 ^A	W-R2330017-031915-JCH-018	3/19/2015	2.3 J	<50	81	<0.2	5.5 J	<5.0	<0.20	<2.0	2.2 J	9.3 J
MW-5	W-R2330012-031915-JCH-018	3/19/2015	<3.0	<50	73	<0.2	4.8 J	<5.0	<0.20	<2.0	1.5 J	<50
MW-5 ^A	W-R2330017-112015-JPM-031	11/20/2015	NS	150,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330017-112015-JPM-031	11/20/2015	NS	140,000	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-5 ^A	W-R2330021-042116-JPM-024	4/21/2016																		
MW-5	W-R2330021-042116-JPM-024	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330021-110216-AEM-013	11/2/2016																		
MW-5	W-R2330021-110216-AEM-013	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A (DUP)	W-R2330021-110216-AEM-014	11/2/2016																		
MW-5 (DUP)	W-R2330021-110216-AEM-014	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-042617-AFB-016	4/26/2017																		
MW-5	W-R2330022-042617-AFB-016	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-102717-AFB-029	10/27/2017																		
MW-5	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330024-042518-JPM-026	4/25/2018																		
MW-5	W-R2330024-042518-JPM-026	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330004-090512-MJF-04	9/5/2012	<25	<1.0	<1.0	<50	11 J	4.9	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-6	W-R2330009-050213-MJF-012	5/2/2013	<25	<1.0	<1.0	<50	<50	2.8	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-6 ^A	W-R2330009--080713-ZTR-002	8/7/2013																		
MW-6	W-R2330009--080713-ZTR-002	8/7/2013	<25	<1.0	<1.0	<50	<50	4.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-6 ^A	W-R2330009-111313-ACN-011	11/13/2013																		
MW-6	W-R2330009-111313-ACN-011	11/13/2013	<25	<1.0	<1.0	<50	<50	4.6	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-6 ^A	W-R2330012-032714-ACN-004	3/27/2014																		
MW-6	W-R2330012-032714-ACN-004	3/27/2014	<25	<1.0	<1.0	<50	<50	2.7	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-6 ^A	W-R2330012-12214-JCH-023	12/2/2014																		
MW-6	W-R2330012-12214-JCH-023	12/2/2014	<25	<1.0	<1.0	<50	<50	3.2	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	1.3 J	<1.0	<5.0	<1.0	<1.0
MW-6 ^A	W-R2330017-031715-ACN-012	3/17/2015																		
MW-6	W-R2330017-031715-ACN-012	3/17/2015	<25	<1.0	<1.0	<50	<50	2.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-6 ^A	W-R2330017-111915-JPM-023	11/19/2015																		
MW-6	W-R2330017-111915-JPM-023	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-042116-JPM-026	4/21/2016																		
MW-6	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-110416-JPM-037	11/4/2016																		
MW-6	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-042817-AFB-033	4/28/2017																		
MW-6	W-R2330022-042817-AFB-033	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-102817-AFB-035	10/28/2017																		
MW-6	W-R2330022-102817-AFB-035	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A DUP	W-R2330022-102817-AFB-036	10/28/2017																		
MW-6 DUP	W-R2330022-102817-AFB-036	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330024-042518-DMS-028	4/25/2018																		
MW-6	W-R2330024-042518-DMS-028	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330009-050213-MJF-008	5/2/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-7 ^A	W-R2330009-080613-ZTR-001	8/6/2013																		
MW-7	W-R2330009-080613-ZTR-001	8/6/2013	<25	<1.0	<1.0	<50	5.5 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-7 ^A	W-R2330009-111313-ACN-006	11/13/2013																		
MW-7	W-R2330009-111313-ACN-006	11/13/2013	<25	<1.0	<1.0	<50	12 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-7 ^A	W-R2330012-032614-ACN-001	3/26/2014																		
MW-7	W-R2330012-032614-ACN-001	3/26/2014	<25	<1.0	<1.0	<50	<50.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-7 ^A	W-R2330012-112614-JCH-015	11/26/2014																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i-95}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-5 ^A	W-R2330021-042116-JPM-024	4/21/2016																		
MW-5	W-R2330021-042116-JPM-024	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330021-110216-AEM-013	11/2/2016																		
MW-5	W-R2330021-110216-AEM-013	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A (DUP)	W-R2330021-110216-AEM-014	11/2/2016																		
MW-5 (DUP)	W-R2330021-110216-AEM-014	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-042617-AFB-016	4/26/2017																		
MW-5	W-R2330022-042617-AFB-016	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-102717-AFB-029	10/27/2017																		
MW-5	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330024-042518-JPM-026	4/25/2018																		
MW-5	W-R2330024-042518-JPM-026	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330004-090512-MJF-04	9/5/2012	<3.0	<10	<10	<5.0	<10	<10	<5.0	<1.1	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-6	W-R2330009-050213-MJF-012	5/2/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330009--080713-ZTR-002	8/7/2013																		
MW-6	W-R2330009--080713-ZTR-002	8/7/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<1.1	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330009-111313-ACN-011	11/13/2013																		
MW-6	W-R2330009-111313-ACN-011	11/13/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	0.47 J	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330012-032714-ACN-004	3/27/2014																		
MW-6	W-R2330012-032714-ACN-004	3/27/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330012-12214-JCH-023	12/2/2014																		
MW-6	W-R2330012-12214-JCH-023	12/2/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330017-031715-ACN-012	3/17/2015																		
MW-6	W-R2330017-031715-ACN-012	3/17/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	0.58 J	<5.0	<5.0
MW-6 ^A	W-R2330017-111915-JPM-023	11/19/2015																		
MW-6	W-R2330017-111915-JPM-023	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-042116-JPM-026	4/21/2016																		
MW-6	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-110416-JPM-037	11/4/2016																		
MW-6	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-042817-AFB-033	4/28/2017																		
MW-6	W-R2330022-042817-AFB-033	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-102817-AFB-035	10/28/2017																		
MW-6	W-R2330022-102817-AFB-035	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A DUP	W-R2330022-102817-AFB-036	10/28/2017																		
MW-6 DUP	W-R2330022-102817-AFB-036	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330024-042518-DMS-028	4/25/2018																		
MW-6	W-R2330024-042518-DMS-028	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330009-050213-MJF-008	5/2/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	1.1 J	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	0.95 J	<5.0
MW-7 ^A	W-R2330009-080613-ZTR-001	8/6/2013																		
MW-7	W-R2330009-080613-ZTR-001	8/6/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330009-111313-ACN-006	11/13/2013																		
MW-7	W-R2330009-111313-ACN-006	11/13/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	0.18 J	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330012-032614-ACN-001	3/26/2014																		
MW-7	W-R2330012-032614-ACN-001	3/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330012-112614-JCH-015	11/26/2014																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P.R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,m}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-5 ^A	W-R2330021-042116-JPM-024	4/21/2016								2,800	NS	NS	NS	NS	NS	NS	NS	NS		12,000
MW-5	W-R2330021-042116-JPM-024	4/21/2016	NS	NS	NS	NS	NS	NS	NS	140	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,900
MW-5 ^A	W-R2330021-110216-AEM-013	11/2/2016								860	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,300
MW-5	W-R2330021-110216-AEM-013	11/2/2016	NS	NS	NS	NS	NS	NS	NS	30 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500
MW-5 ^A (DUP)	W-R2330021-110216-AEM-014	11/2/2016								400	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,100
MW-5 (DUP)	W-R2330021-110216-AEM-014	11/2/2016	NS	NS	NS	NS	NS	NS	NS	12 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400
MW-5 ^A	W-R2330022-042617-AFB-016	4/26/2017								30 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,500
MW-5	W-R2330022-042617-AFB-016	4/26/2017	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,300
MW-5 ^A	W-R2330022-102717-AFB-029	10/27/2017								890	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,600
MW-5	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	NS	NS	NS	NS	NS	4.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,100
MW-5 ^A	W-R2330024-042518-JPM-026	4/25/2018								740	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,200
MW-5	W-R2330024-042518-JPM-026	4/25/2018	NS	NS	NS	NS	NS	NS	NS	61	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,200
MW-6	W-R2330004-090512-MJF-04	9/5/2012	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	17 J	0.16 J	9.4	580	<1.0	<1.0	1.0 J	2.4 J	0.31 J	<0.005	26,000
MW-6	W-R2330009-050213-MJF-012	5/2/2013	1.4 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	7.5 J	0.15 J	3.7 J	480	<1.0	<1.0	1.6 J	1.5 J	<4.0	<0.005	18,000
MW-6 ^A	W-R2330009-080713-ZTR-002	8/7/2013								47 J	0.11 J	6.0	540	<1.0	0.19 J	0.94 J	1.9 J	4.40		22,000
MW-6	W-R2330009-080713-ZTR-002	8/7/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.8 J	0.15 J	5.5	550	<1.0	0.25 J	0.75 J	2.4 J	3.5 J	<0.005	21,000
MW-6 ^A	W-R2330009-111313-ACN-011	11/13/2013								200 J	0.16 J	5.4 J	520	<1.0	0.25 J	1.8 J	1.7 J	1.4 J		18,000
MW-6	W-R2330009-111313-ACN-011	11/13/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	160	0.14 J	5.5 J	520	<1.0	0.43 J	2.2 J	1.7 J	1.3 J	<0.005	18,000
MW-6 ^A	W-R2330012-032714-ACN-004	3/27/2014								76	0.15 J	3.0 J	460	<1.0	<1.0	0.56 J	2.0 J	2.0 J		11,000
MW-6	W-R2330012-032714-ACN-004	3/27/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	8.6 J	0.17 J	3.4 J	460	<1.0	<1.0	0.37 J	1.4 J	1.9 J	1.3 J	10,000
MW-6 ^A	W-R2330012-12214-JCH-023	12/2/2014								320	0.17 J	4.5 J	570	<1.0	0.068 J	1.7 J	1.1 J	0.85 J		18,000
MW-6	W-R2330012-12214-JCH-023	12/2/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	5.6 J	0.17 J	4.8 J	540	<1.0	<1.0	0.53 J	1.0 J	<4.0	<5.0	17,000
MW-6 ^A	W-R2330017-031715-ACN-012	3/17/2015								300	0.35 J	3.1 J	430	<1.0	0.098 J	1.5 J	1.7 J	4.1		12,000
MW-6	W-R2330017-031715-ACN-012	3/17/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	3.3 J	0.41 J	1.9 J	360	<1.0	<1.0	0.42 J	1.5 J	2.0 J	<5.0	11,000
MW-6 ^A	W-R2330017-111915-JPM-023	11/19/2015								30 J	NS	NS	NS	NS	NS	NS	NS	NS		22,000
MW-6	W-R2330017-111915-JPM-023	11/19/2015	NS	NS	NS	NS	NS	NS	NS	7.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	22,000
MW-6 ^A	W-R2330021-042116-JPM-026	4/21/2016								100	NS	NS	NS	NS	NS	NS	NS	NS		5,800
MW-6	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	NS	NS	NS	NS	NS	7.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,300
MW-6 ^A	W-R2330021-110416-JPM-037	11/4/2016								76	NS	NS	NS	NS	NS	NS	NS	NS	NS	25,000
MW-6	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	NS	NS	NS	NS	NS	7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	25,000
MW-6 ^A	W-R2330022-042817-AFB-033	4/28/2017								83	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,600
MW-6	W-R2330022-042817-AFB-033	4/28/2017	NS	NS	NS	NS	NS	NS	NS	5.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,300
MW-6 ^A	W-R2330022-102817-AFB-035	10/28/2017								550	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-6	W-R2330022-102817-AFB-035	10/28/2017	NS	NS	NS	NS	NS	NS	NS	6.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,100
MW-6 ^A DUP	W-R2330022-102817-AFB-036	10/28/2017								140	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,600
MW-6 DUP	W-R2330022-102817-AFB-036	10/28/2017	NS	NS	NS	NS	NS	NS	NS	4.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,900
MW-6 ^A	W-R2330024-042518-DMS-028	4/25/2018								32	NS	NS	NS	NS	NS	NS	NS	NS	NS	560
MW-6	W-R2330024-042518-DMS-028	4/25/2018	NS	NS	NS	NS	NS	NS	NS	4.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	250
MW-7	W-R2330009-050213-MJF-008	5/2/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.4 J	0.84 J	0.87 J	450	<1.0	<1.0	1.4 J	3.4 J	2.1 J	<0.005	3,400
MW-7 ^A	W-R2330009-080613-ZTR-001	8/6/2013								39 J	0.39 J	18	520	<1.0	0.43 J	1.4 J	3.8 J	2.2 J		8,100
MW-7	W-R2330009-080613-ZTR-001	8/6/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	5.3 J	0.48 J	17	520	<1.0	0.21 J	1.2 J	4.3 J	3.1 J	<0.005	7,700
MW-7 ^A	W-R2330009-111313-ACN-006	11/13/2013								21 J	0.58 J	7.0 J	370	<1.0	1.2 J	1.3 J	3.6 J	2.4 J		5,700
MW-7	W-R2330009-111313-ACN-006	11/13/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.9 J	0.57 J	6.4 J	380	<1.0	0.92 J	1.3 J	4.1 J	1.5 J	0.0037 J	5,600
MW-7 ^A	W-R2330012-032614-ACN-001	3/26/2014								11 J	0.18 J	3.5 J	330	<1.0	0.54 J	0.72 J	3.8 J	7.9		8,900
MW-7	W-R2330012-0																			

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-97}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-5 ^A	W-R2330021-042116-JPM-024	4/21/2016	NS	NS	150	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330021-042116-JPM-024	4/21/2016	NS	NS	58	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330021-110216-AEM-013	11/2/2016	NS	NS	79	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330021-110216-AEM-013	11/2/2016	NS	NS	52	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A (DUP)	W-R2330021-110216-AEM-014	11/2/2016	NS	NS	72	NS	NS	NS	NS	NS	NS	NS
MW-5 (DUP)	W-R2330021-110216-AEM-014	11/2/2016	NS	NS	50	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-042617-AFB-016	4/26/2017	NS	140,000	56	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330022-042617-AFB-016	4/26/2017	NS	140,000	50 J	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	76	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	62	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330024-042518-JPM-026	4/25/2018	NS	NS	390	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330024-042518-JPM-026	4/25/2018	NS	NS	380	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330004-090512-MJF-04	9/5/2012	0.057 J	<50	500	<0.2	3.8 J	0.051 J	<0.025	<2.0	1.2 J	1.5 J
MW-6	W-R2330009-050213-MJF-012	5/2/2013	0.31 J	<50	640	<0.2	5.0 J	<5.0	<0.20	<2.0	0.99 J	2.1 J
MW-6 ^A	W-R2330009--080713-ZTR-002	8/7/2013	0.29 J	<50	790	<0.2	7.5 J	<5.0	<0.20	<2.0	1.3 J	3.8 J
MW-6	W-R2330009--080713-ZTR-002	8/7/2013	0.063 J	<50	750	<0.2	7.6 J	<5.0	<0.20	<2.0	1.3 J	3.2 J
MW-6 ^A	W-R2330009-111313-ACN-011	11/13/2013	0.55 J	<50	430	<0.2	8.5 J	<5.0	<0.20	<2.0	1.6 J	3.7 J
MW-6	W-R2330009-111313-ACN-011	11/13/2013	0.41 J	<50	430	<0.2	8.5 J	<5.0	<0.20	<2.0	1.6 J	3.3 J
MW-6 ^A	W-R2330012-032714-ACN-004	3/27/2014	0.31 J	<50	410	<0.2	11 J	<5.0	<0.20	0.084 J	1.2 J	5.0 J
MW-6	W-R2330012-032714-ACN-004	3/27/2014	<3.0	<50	410	<0.2	12 J	<5.0	<0.20	<2.0	0.99 J	3.0 J
MW-6 ^A	W-R2330012-12214-JCH-023	12/2/2014	<3.0	<50	420	<0.2	4.9 J	<5.0	0.027 J	<2.0	2.2 J	14 J
MW-6	W-R2330012-12214-JCH-023	12/2/2014	<3.0	<50	410	<0.2	4.2 J	<5.0	0.020 J	<2.0	1.8 J	<50
MW-6 ^A	W-R2330017-031715-ACN-012	3/17/2015	1.1 J	<50	500	<0.2	15 J	<5.0	<0.20	<2.0	1.9 J	42 J
MW-6	W-R2330017-031715-ACN-012	3/17/2015	<3.0	<50	470	<0.2	14 J	<5.0	<0.20	<2.0	0.84 J	33 J
MW-6 ^A	W-R2330017-111915-JPM-023	11/19/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330017-111915-JPM-023	11/19/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	320	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	360	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	500	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	490	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-042817-AFB-033	4/28/2017	NS	52,000	960	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330022-042817-AFB-033	4/28/2017	NS	47,000	910	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-102817-AFB-035	10/28/2017	NS	NS	410	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330022-102817-AFB-035	10/28/2017	NS	NS	360	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A DUP	W-R2330022-102817-AFB-036	10/28/2017	NS	NS	370	NS	NS	NS	NS	NS	NS	NS
MW-6 DUP	W-R2330022-102817-AFB-036	10/28/2017	NS	NS	370	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330024-042518-DMS-028	4/25/2018	NS	NS	260	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330024-042518-DMS-028	4/25/2018	NS	NS	250	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330009-050213-MJF-008	5/2/2013	0.074 J	<50	530	<0.2	11 J	<5.0	<0.20	<2.0	1.2 J	40 J
MW-7 ^A	W-R2330009-080613-ZTR-001	8/6/2013	0.47 J	<50	910	<0.2	14 J	<5.0	<0.20	<2.0	1.4 J	44 J
MW-7	W-R2330009-080613-ZTR-001	8/6/2013	0.096 J	<50	880	<0.2	14 J	<5.0	<0.20	<2.0	1.2 J	39 J
MW-7 ^A	W-R2330009-111313-ACN-006	11/13/2013	0.31 J	<50	490	<0.2	14 J	<5.0	<0.20	<2.0	2.2 J	22 J
MW-7	W-R2330009-111313-ACN-006	11/13/2013	<3.0	<50	480	<0.2	14 J	<5.0	<0.20	<2.0	2.3 J	6.6 J
MW-7 ^A	W-R2330012-032614-ACN-001	3/26/2014	0.39 J	<50	560	<0.2	18 J	0.84 J	<0.20	0.22 J	1.2 J	15 J
MW-7	W-R2330012-032614-ACN-001	3/26/2014	<3.0	<50	530	<0.2	16 J	<5.0	<0.20	<2.0	1.0 J	8.2 J
MW-7 ^A	W-R2330012-112614-JCH-015	11/26/2014	<3.0	<50	690	<0.2	8.4 J	<5.0	0.022 J	<2.0	2.1 J	6.3 J

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI,eq}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-7	W-R2330012-112614-JCH-015	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-7 ^A	W-R2330017-031715-JCH-013	3/17/2015																		
MW-7	W-R2330017-031715-JCH-013	3/17/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-7 ^A	W-R2330017-111615-AEP-005	11/16/2015																		
MW-7	W-R2330017-111615-AEP-005	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330021-041916-JPM-007	4/19/2016																		
MW-7	W-R2330021-041916-JPM-007	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330021-110116-AEM-007	11/1/2016																		
MW-7	W-R2330021-110116-AEM-007	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-042517-DMS-013	4/25/2017																		
MW-7	W-R2330022-042517-DMS-013	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-102717-DMS-028	10/27/2017																		
MW-7	W-R2330022-102717-DMS-028	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330024-042318-DMS-006	4/23/2018																		
MW-7	W-R2330024-042318-DMS-006	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330009-050313-MJF-013	5/3/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-8 ^A	W-R2330009-080713-ZTR-008	8/7/2013																		
MW-8	W-R2330009-080713-ZTR-008	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-8 ^A	W-R2330009-111213-ACN-005	11/12/2013																		
MW-8	W-R2330009-111213-ACN-005	11/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-8 ^A	W-R2330012-112614-JCH-014	11/26/2014																		
MW-8	W-R2330012-112614-JCH-014	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-8 ^A	W-R2330017-032015-JCH-029	3/20/2015																		
MW-8	W-R2330017-032015-JCH-029	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-8 ^A	W-R2330017-111615-AEP-004	11/16/2015																		
MW-8	W-R2330017-111615-AEP-004	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-041916-JPM-008	4/19/2016																		
MW-8	W-R2330021-041916-JPM-008	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-110116-AEM-008	11/1/2016																		
MW-8	W-R2330021-110116-AEM-008	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330022-102617-AFB-024	10/26/2017																		
MW-8	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330009-050113-MJF-007	5/1/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-9 ^A	W-R2330009-080813-ZTR-013	8/8/2013																		
MW-9	W-R2330009-080813-ZTR-013	8/8/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-9 ^A	W-R2330009-111413-ACN-012	11/14/2013																		
MW-9	W-R2330009-111413-ACN-012	11/14/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-9 ^A	W-R2330012-122114-JCH-024	12/2/2014																		
MW-9	W-R2330012-122114-JCH-024	12/2/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-9 ^A	W-R2330012-032614-ACN-003	3/26/2014																		
MW-9	W-R2330012-032614-ACN-003	3/26/2014	<25	<1.0	<1.0	<50	<50	0.36 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-9 ^A	W-R2330017-031915-JCH-017	3/19/2015																		
MW-9	W-R2330012-031915-JCH-017	3/19/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-9 ^A	W-R2330017-112015-AFB-030	11/20/2015																		
MW-9	W-R2330017-112015-AFB-030	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-042116-AFB-025	4/21/2016																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI,m}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NA	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-7	W-R2330012-112614-JCH-015	11/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330017-031715-JCH-013	3/17/2015																		
MW-7	W-R2330017-031715-JCH-013	3/17/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330017-111615-AEP-005	11/16/2015																		
MW-7	W-R2330017-111615-AEP-005	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330021-041916-JPM-007	4/19/2016																		
MW-7	W-R2330021-041916-JPM-007	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330021-110116-AEM-007	11/1/2016																		
MW-7	W-R2330021-110116-AEM-007	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-042517-DMS-013	4/25/2017																		
MW-7	W-R2330022-042517-DMS-013	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-102717-DMS-028	10/27/2017																		
MW-7	W-R2330022-102717-DMS-028	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330024-042318-DMS-006	4/23/2018																		
MW-7	W-R2330024-042318-DMS-006	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330009-050313-MJF-013	5/3/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-8 ^A	W-R2330009-080713-ZTR-008	8/7/2013																		
MW-8	W-R2330009-080713-ZTR-008	8/7/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-8 ^A	W-R2330009-111213-ACN-005	11/12/2013																		
MW-8	W-R2330009-111213-ACN-005	11/12/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-8 ^A	W-R2330012-112614-JCH-014	11/26/2014																		
MW-8	W-R2330012-112614-JCH-014	11/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-8 ^A	W-R2330017-032015-JCH-029	3/20/2015																		
MW-8	W-R2330017-032015-JCH-029	3/20/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
MW-8 ^A	W-R2330017-111615-AEP-004	11/16/2015																		
MW-8	W-R2330017-111615-AEP-004	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-041916-JPM-008	4/19/2016																		
MW-8	W-R2330021-041916-JPM-008	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-110116-AEM-008	11/1/2016																		
MW-8	W-R2330021-110116-AEM-008	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330022-102617-AFB-024	10/26/2017																		
MW-8	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330009-050113-MJF-007	5/1/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	1.1 J	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	0.91 J	0.92 J
MW-9 ^A	W-R2330009-080813-ZTR-013	8/8/2013																		
MW-9	W-R2330009-080813-ZTR-013	8/8/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-9 ^A	W-R2330009-111413-ACN-012	11/14/2013																		
MW-9	W-R2330009-111413-ACN-012	11/14/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-9 ^A	W-R2330012-122114-JCH-024	12/2/2014																		
MW-9	W-R2330012-122114-JCH-024	12/2/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-9 ^A	W-R2330012-032614-ACN-003	3/26/2014																		
MW-9	W-R2330012-032614-ACN-003	3/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-9 ^A	W-R2330017-031915-JCH-017	3/19/2015																		
MW-9	W-R2330012-031915-JCH-017	3/19/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-9 ^A	W-R2330017-112015-AFB-030	11/20/2015																		
MW-9	W-R2330017-112015-AFB-030	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-042116-AFB-025	4/21/2016																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L								Metals												
	D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)		
Non-residential Drinking Water Criteria (II)	2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)		
Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600		
Ground Water Surface Water Interface Criteria (GSI) (III)	9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA		
GSI Final Acute Value (FAV)	75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA		
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)	NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV		
Water Solubility (VII)	11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Flammability & Explosivity Screening Level (VIII)	NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID		
ID	SAMPLE ID	SAMPLE DATE																		
MW-7	W-R2330012-112614-JCH-015	11/26/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.4 J	0.18 J	3.2 J	420	<1.0	<1.0	0.81 J	2.5 J	<4.0	<5.0	9,400
MW-7 ^A	W-R2330017-031715-JCH-013	3/17/2015								130	0.21 J	2.9 J	320	<1.0	0.39 J	1.1 J	3.1 J	2.9 J		8,500
MW-7	W-R2330017-031715-JCH-013	3/17/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	3.1 J	0.26 J	2.4 J	330	<1.0	<1.0	0.87 J	3.2 J	1.6 J	<5.0	8,600
MW-7 ^A	W-R2330017-111615-AEP-005	11/16/2015								69	NS	NS	NS	NS	NS	NS	NS	NS		7,500
MW-7	W-R2330017-111615-AEP-005	11/16/2015	NS	NS	NS	NS	NS	NS	NS	35 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,600
MW-7 ^A	W-R2330021-041916-JPM-007	4/19/2016								6.6 J	NS	NS	NS	NS	NS	NS	NS	NS		11,000
MW-7	W-R2330021-041916-JPM-007	4/19/2016	NS	NS	NS	NS	NS	NS	NS	2.0 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-7 ^A	W-R2330021-110116-AEM-007	11/1/2016								23 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,900
MW-7	W-R2330021-110116-AEM-007	11/1/2016	NS	NS	NS	NS	NS	NS	NS	7.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,600
MW-7 ^A	W-R2330022-042517-DMS-013	4/25/2017								66	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,300
MW-7	W-R2330022-042517-DMS-013	4/25/2017	NS	NS	NS	NS	NS	NS	NS	4.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,900
MW-7 ^A	W-R2330022-102717-DMS-028	10/27/2017								17	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,000
MW-7	W-R2330022-102717-DMS-028	10/27/2017	NS	NS	NS	NS	NS	NS	NS	4.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,800
MW-7	W-R2330024-042318-DMS-006	4/23/2018								30	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,200
MW-7	W-R2330024-042318-DMS-006	4/23/2018	NS	NS	NS	NS	NS	NS	NS	4.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,000
MW-8	W-R2330009-050313-MJF-013	5/3/2013	1.4 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	11 J	0.21 J	1.2 J	380	<1.0	<1.0	0.56 J	1.5 J	<4.0	<0.005	6,200
MW-8 ^A	W-R2330009-080713-ZTR-008	8/7/2013								51	0.16 J	4.1 J	470	<1.0	0.12 J	1.2 J	1.5 J	3.8 J		8,200
MW-8	W-R2330009-080713-ZTR-008	8/7/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.3 J	0.20 J	3.9 J	460	<1.0	0.098 J	0.94 J	2.3 J	1.6 J	<0.005	8,100
MW-8 ^A	W-R2330009-111213-ACN-005	11/12/2013								98 J	0.12 J	3.7 J	420	<1.0	0.50 J	1.3 J	1.6 J	1.6 J		7,700
MW-8	W-R2330009-111213-ACN-005	11/12/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	8.4 J	0.13 J	3.6 J	440	<1.0	0.49 J	2.0 J	1.8 J	1.5 J	0.0015 J	7,500
MW-8 ^A	W-R2330012-112614-JCH-014	11/26/2014								1,200	0.11 J	4.7 J	370	<1.0	2.1	2.7 J	2.4 J	4.7		8,000
MW-8	W-R2330012-112614-JCH-014	11/26/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	<2.0	3.3 J	350	<1.0	<1.0	0.34 J	1.3 J	0.50 J	<5.0	4,900
MW-8 ^A	W-R2330017-032015-JCH-029	3/20/2015								440	<2.0	2.0 J	330	<1.0	0.73 J	3.2 J	1.2 J	2.7 J		7,100
MW-8	W-R2330017-032015-JCH-029	3/20/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	13 J	0.18 J	1.3 J	330	<1.0	<1.0	0.47 J	1.3 J	1.5 J	<5.0	5,900
MW-8 ^A	W-R2330017-111615-AEP-004	11/16/2015								540	NS	NS	NS	NS	NS	NS	NS	NS		3,300
MW-8	W-R2330017-111615-AEP-004	11/16/2015	NS	NS	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,300
MW-8 ^A	W-R2330021-041916-JPM-008	4/19/2016								140	NS	NS	NS	NS	NS	NS	NS	NS		6,500
MW-8	W-R2330021-041916-JPM-008	4/19/2016	NS	NS	NS	NS	NS	NS	NS	3.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,900
MW-8 ^A	W-R2330021-110116-AEM-008	11/1/2016								50 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,200
MW-8	W-R2330021-110116-AEM-008	11/1/2016	NS	NS	NS	NS	NS	NS	NS	8.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,900
MW-8 ^A	W-R2330022-102617-AFB-024	10/26/2017								23	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,000
MW-8	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,600
MW-9	W-R2330009-050113-MJF-007	5/1/2013	1.7 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.6 J	0.2 J	44	1,700	<1.0	<1.0	1.9 J	2.4 J	0.71 J	<0.005	28,000
MW-9 ^A	W-R2330009-080813-ZTR-013	8/8/2013								13 J	0.13 J	52	1,300	<1.0	0.22 J	1.0 J	1.4 J	2.1 J		31,000
MW-9	W-R2330009-080813-ZTR-013	8/8/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.7 J	0.21 J	52	1,300	<1.0	0.24 J	0.91 J	2.2 J	1.7 J	<0.005	30,000
MW-9 ^A	W-R2330009-111413-ACN-012	11/14/2013								43 J	0.16 J	59	2,100	<1.0	<1.0	2.0 J	1.7 J	<4.0		30,000
MW-9	W-R2330009-111413-ACN-012	11/14/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.7 J	0.17 J	60	2,200	<1.0	<1.0	1.0 J	1.7 J	<4.0	<0.005	29,000
MW-9 ^A	W-R2330012-12214-JCH-024	12/2/2014								42 J	0.18 J	59	1,800	<1.0	0.050 J	1.0 J	1.2 J	<4.0		31,000
MW-9	W-R2330012-12214-JCH-024	12/2/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	5.9 J	0.25 J	62	1,900	<1.0	<1.0	1.0 J	1.4 J	<4.0	<5.0	30,000
MW-9 ^A	W-R2330012-032614-ACN-003	3/26/2014								190	0.19 J	51	1,700	<1.0	<1.0	1.0 J	2.2 J	2.6 J		34,000
MW-9	W-R2330012-032614-ACN-003	3/26/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	7.8 J	0.15 J	47	1,900	<1.0	<1.0	0.70 J	2.2 J	1.4 J	2.1 J	34,000
MW-9 ^A	W-R2330017-031915-JCH-017	3/19/2015								260	0.19 J	49	1,700	<1.0	0.094 J	1.4 J	2.0 J	3.9 J		34,000
MW-9	W-R2330012-031915-JCH-017	3/19/2015	<5.0	<1.0	<5.0	<5.0	<2.0													

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-7	W-R2330012-112614-JCH-015	11/26/2014	<3.0	<50	670	<0.2	7.6 J	<5.0	<0.20	<2.0	1.6 J	<50
MW-7 ^A	W-R2330017-031715-JCH-013	3/17/2015	0.42 J	<50	440	<0.2	12 J	<5.0	<0.20	<2.0	1.4 J	19 J
MW-7	W-R2330017-031715-JCH-013	3/17/2015	<3.0	<50	450	<0.2	12 J	<5.0	<0.20	<2.0	1.2 J	4.4 J
MW-7 ^A	W-R2330017-111615-AEP-005	11/16/2015	NS	150,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330017-111615-AEP-005	11/16/2015	NS	150,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330021-041916-JPM-007	4/19/2016	NS	NS	500	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330021-041916-JPM-007	4/19/2016	NS	NS	470	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330021-110116-AEM-007	11/1/2016	NS	NS	340	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330021-110116-AEM-007	11/1/2016	NS	NS	320	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-042517-DMS-013	4/25/2017	NS	170,000	490	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330022-042517-DMS-013	4/25/2017	NS	160,000	470	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-102717-DMS-028	10/27/2017	NS	NS	760	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330022-102717-DMS-028	10/27/2017	NS	NS	740	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330024-042318-DMS-006	4/23/2018	NS	NS	610	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330024-042318-DMS-006	4/23/2018	NS	NS	600	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330009-050313-MJF-013	5/3/2013	<3.0	<50	180	<0.2	4.4 J	<5.0	<0.20	<2.0	0.89 J	2.0 J
MW-8 ^A	W-R2330009-080713-ZTR-008	8/7/2013	0.80 J	<50	200	<0.2	6.8 J	<5.0	<0.20	<2.0	1.3 J	4.0 J
MW-8	W-R2330009-080713-ZTR-008	8/7/2013	0.074 J	<50	200	<0.2	6.6 J	<5.0	<0.20	<2.0	0.91 J	3.0 J
MW-8 ^A	W-R2330009-111213-ACN-005	11/12/2013	0.34 J	<50	200	<0.2	7.6 J	<5.0	<0.20	<2.0	1.5 J	3.2 J
MW-8	W-R2330009-111213-ACN-005	11/12/2013	<3.0	<50	210	<0.2	7.9 J	<5.0	<0.20	<2.0	0.89 J	2.4 J
MW-8 ^A	W-R2330012-112614-JCH-014	11/26/2014	4.7	<50	400	<0.2	19 J	<5.0	<0.20	<2.0	5.2	18 J
MW-8	W-R2330012-112614-JCH-014	11/26/2014	<3.0	<50	330	<0.2	10 J	<5.0	<0.20	<2.0	0.85 J	5.8 J
MW-8 ^A	W-R2330017-032015-JCH-029	3/20/2015	1.9 J	<50	210	<0.2	6.7 J	<5.0	<0.20	<2.0	2.0 J	11 J
MW-8	W-R2330017-032015-JCH-029	3/20/2015	<3.0	<50	200	<0.2	5.6 J	<5.0	<0.20	<2.0	0.74 J	<50
MW-8 ^A	W-R2330017-111615-AEP-004	11/16/2015	NS	92,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330017-111615-AEP-004	11/16/2015	NS	91,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-041916-JPM-008	4/19/2016	NS	NS	200	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330021-041916-JPM-008	4/19/2016	NS	NS	200	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-110116-AEM-008	11/1/2016	NS	NS	2,800	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330021-110116-AEM-008	11/1/2016	NS	NS	290	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	310	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	320	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330009-050113-MJF-007	5/1/2013	0.053 J	<50	760	<0.2	6.3 J	<5.0	<0.20	<2.0	1.2 J	7.5 J
MW-9 ^A	W-R2330009-080813-ZTR-013	8/8/2013	0.17 J	<50	440	<0.2	5.2 J	<5.0	<0.20	<2.0	1.5 J	4.6 J
MW-9	W-R2330009-080813-ZTR-013	8/8/2013	0.068 J	<50	430	<0.2	5.2 J	<5.0	<0.20	<2.0	1.4 J	2.9 J
MW-9 ^A	W-R2330009-111413-ACN-012	11/14/2013	0.30 J	<50	400	<0.2	6.9 J	<5.0	<0.20	0.14 J	1.5 J	3.7 J
MW-9	W-R2330009-111413-ACN-012	11/14/2013	0.083 J	<50	340	<0.2	6.3 J	<5.0	<0.20	<2.0	1.5 J	2.5 J
MW-9 ^A	W-R2330012-12214-JCH-024	12/2/2014	<3.0	<50	330	<0.2	3.2 J	<5.0	0.024 J	<2.0	1.9 J	3.7 J
MW-9	W-R2330012-12214-JCH-024	12/2/2014	<3.0	<50	300	<0.2	3.5 J	<5.0	<0.20	<2.0	1.6 J	<50
MW-9 ^A	W-R2330012-032614-ACN-003	3/26/2014	0.99 J	<50	600	<0.2	8.0 J	<5.0	<0.20	<2.0	1.9 J	5.3 J
MW-9	W-R2330012-032614-ACN-003	3/26/2014	0.21 J	<50	570	<0.2	7.9 J	<5.0	<0.20	<2.0	1.3 J	2.1 J
MW-9 ^A	W-R2330017-031915-JCH-017	3/19/2015	1.1 J	<50	390	<0.2	7.0 J	<5.0	<0.20	<2.0	2.1 J	11 J
MW-9	W-R2330012-031915-JCH-017	3/19/2015	<3.0	<50	370	<0.2	6.3 J	<5.0	<0.20	<2.0	1.2 J	3.9 J
MW-9 ^A	W-R2330017-112015-AFB-030	11/20/2015	NS	120,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330017-112015-AFB-030	11/20/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	500	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L	Volatile Organic Compounds (VOCs)																			
	2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene		
	Non-residential Drinking Water Criteria (II)	38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	
	Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	
	Ground Water Surface Water Interface Criteria (GSI) (III)	2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270	
	GSI Final Acute Value (FAV)	40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	
	Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	
	Groundwater Concentration for Vapor Intrusion (GW _{VIM}) (a)	18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	
	Water Solubility (VII)	2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	
	Flammability & Explosivity Screening Level (VIII)	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	
ID	SAMPLE ID	SAMPLE DATE	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
MW-9	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-110216-AEM-012	11/2/2016																		
MW-9	W-R2330021-110216-AEM-012	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-042617-DMS-015	4/26/2017																		
MW-9	W-R2330022-042617-DMS-015	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-102717-DMS-030	10/27/2017																		
MW-9	W-R2330022-102717-DMS-030	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330024-042618-DMS-033	4/26/2018																		
MW-9	W-R2330024-042618-DMS-033	4/26/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330009-050113-MJF-003	5/1/2013	<25	<1.0	<1.0	<50	4.3 J	8.6	<1.0	<5.0	25	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330009-080813-ZTR-010	8/8/2013																		
MW-10	W-R2330009-080813-ZTR-010	8/8/2013	<25	<1.0	<1.0	<50	<50	8.5	<1.0	<5.0	24	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A (DUP)	W-R2330009-080813-ZTR-011	8/8/2013																		
MW-10 (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	<25	<1.0	<1.0	<50	<50	8.2	<1.0	<5.0	23	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330009-111313-ACN-008	11/13/2013																		
MW-10	W-R2330009-111313-ACN-008	11/13/2013	<25	<1.0	<1.0	<50	16 J	13	<1.0	<5.0	36	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A (DUP)	W-R2330009-111313-ACN-009	11/13/2013																		
MW-10 (DUP)	W-R2330009-111313-ACN-009	11/13/2013	<25	<1.0	<1.0	<50	16 J	12	<1.0	<5.0	35	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330012-032814-ACN-010	3/28/2014																		
MW-10	W-R2330012-032814-ACN-010	3/28/2014	<25	<1.0	<1.0	<50	<50	8.2	<1.0	<5.0	24	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A (DUP)	W-R2330012-032814-ACN-011	3/28/2014																		
MW-10 (DUP)	W-R2330012-032814-ACN-011	3/28/2014	<25	<1.0	<1.0	<50	<50	8.2	<1.0	<5.0	25	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330012-122114-JCH-028	12/2/2014																		
MW-10	W-R2330012-122114-JCH-028	12/2/2014	<25	<1.0	<1.0	<50	<50	7.8	<1.0	<5.0	38	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330017-031915-ACN-019	3/19/2015																		
MW-10	W-R2330017-031915-ACN-019	3/19/2015	<25	<1.0	<1.0	<50	<50	10	<1.0	<5.0	28	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A (DUP)	W-R2330017-031915-ACN-020	3/19/2015																		
MW-10 (DUP)	W-R2330012-031915-ACN-020	3/19/2015	<25	<1.0	<1.0	<50	<50	10	<1.0	<5.0	27	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330017-111915-AEP-022	11/19/2015																		
MW-10	W-R2330017-111915-AEP-022	11/19/2015	<25	<1.0	0.48 J	<50	<50	12	<1.0	<5.0	44	<5.0	<1.0	<10	<5.0	<5.0	<1.0	0.29 J	<1.0	<1.0
MW-10 ^A	W-R2330021-042116-JPM-023	4/21/2016																		
MW-10	W-R2330021-042116-JPM-023	4/21/2016	<25	<1.0	<1.0	<50	5.5 J	7.4	<1.0	<5.0	24	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330021-110216-JPM-019	11/2/2016																		
MW-10	W-R2330021-110216-JPM-019	11/2/2016	<25	<1.0	.41 J	<50	1.8 J	11.0	<1.0	<5.0	41	<5.0	<1.0	.49 J	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330022-042617-DMS-017	4/26/2017																		
MW-10	W-R2330022-042617-DMS-017	4/26/2017	<25	<1.0	<1.0	<50	7.4 J	7.2	<1.0	<5.0	32	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-10 ^A	W-R2330022-102717-DMS-031	10/27/2017																		
MW-10	W-R2330022-102717-DMS-031	10/27/2017	<25	<1.0	<1.0	<50	3.5 J	9.8	<1.0	<5.0	34	<5.0	<1.0	<10	<5.0	<5.0	<1.0	0.22 J	<1.0	<1.0
MW-10 ^A	W-R2330024-042418-DMS-016	4/24/2018																		
MW-10	W-R2330024-042418-DMS-016	4/24/2018	<25	<1.0	<1.0	<50	3.5 J	6.4	<1.0	<5.0	30	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-11	W-R2330009-043013-MJF-001	4/30/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-11 ^A	W-R2330009-080713-ZTR-006	8/7/2013																		
MW-11	W-R2330009-080713-ZTR-006	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-11 ^A	W-R2330009-111213-ACN-001	11/12/2013																		
MW-11	W-R2330009-111213-ACN-001	11/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L				Semivolatile Organic Compounds (SVOCs)																
				Xylenes	1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIM}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NA	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-9	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-110216-AEM-012	11/2/2016																		
MW-9	W-R2330021-110216-AEM-012	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-042617-DMS-015	4/26/2017																		
MW-9	W-R2330022-042617-DMS-015	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-102717-DMS-030	10/27/2017																		
MW-9	W-R2330022-102717-DMS-030	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330024-042618-DMS-033	4/26/2018																		
MW-9	W-R2330024-042618-DMS-033	4/26/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330009-050113-MJF-003	5/1/2013	<3.0	<10	<10	<5.0	<10	<10	0.86 J	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	1.0 J	<5.0
MW-10 ^A	W-R2330009-080813-ZTR-010	8/8/2013																		
MW-10	W-R2330009-080813-ZTR-010	8/8/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-10 ^A (DUP)	W-R2330009-080813-ZTR-011	8/8/2013																		
MW-10 (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-10 ^A	W-R2330009-111313-ACN-008	11/13/2013																		
MW-10	W-R2330009-111313-ACN-008	11/13/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	0.28 J	<4.0	<5.0	<5.0	<5.0
MW-10 ^A (DUP)	W-R2330009-111313-ACN-009	11/13/2013																		
MW-10 (DUP)	W-R2330009-111313-ACN-009	11/13/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-10 ^A	W-R2330012-032814-ACN-010	3/28/2014																		
MW-10	W-R2330012-032814-ACN-010	3/28/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-10 ^A (DUP)	W-R2330012-032814-ACN-011	3/28/2014																		
MW-10 (DUP)	W-R2330012-032814-ACN-011	3/28/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-10 ^A	W-R2330012-122114-JCH-028	12/2/2014																		
MW-10	W-R2330012-122114-JCH-028	12/2/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	2.1 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-10 ^A	W-R2330017-031915-ACN-019	3/19/2015																		
MW-10	W-R2330017-031915-ACN-019	3/19/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
MW-10 ^A (DUP)	W-R2330017-031915-ACN-020	3/19/2015																		
MW-10 (DUP)	W-R2330012-031915-ACN-020	3/19/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.8 J	<5.0	<10	<10	<4.0	<5.0	<5.0
MW-10 ^A	W-R2330017-111915-AEP-022	11/19/2015																		
MW-10	W-R2330017-111915-AEP-022	11/19/2015	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330021-042116-JPM-023	4/21/2016																		
MW-10	W-R2330021-042116-JPM-023	4/21/2016	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330021-110216-JPM-019	11/2/2016																		
MW-10	W-R2330021-110216-JPM-019	11/2/2016	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330022-042617-DMS-017	4/26/2017																		
MW-10	W-R2330022-042617-DMS-017	4/26/2017	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330022-102717-DMS-031	10/27/2017																		
MW-10	W-R2330022-102717-DMS-031	10/27/2017	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330024-042418-DMS-016	4/24/2018																		
MW-10	W-R2330024-042418-DMS-016	4/24/2018	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330009-043013-MJF-001	4/30/2013	<3.0	0.56 J	<10	<5.0	<10	<10	<5.0	<10	1.1 J	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	0.92 J	<5.0
MW-11 ^A	W-R2330009-080713-ZTR-006	8/7/2013																		
MW-11	W-R2330009-080713-ZTR-006	8/7/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-11 ^A	W-R2330009-111213-ACN-001	11/12/2013																		
MW-11	W-R2330009-111213-ACN-001	11/12/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-11 ^A	W-R2330012-032614-ACN-002	3/26/2014																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P.R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{V,im}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-9	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	NS	NS	NS	NS	NS	8.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	33,000
MW-9 ^A	W-R2330021-110216-AEM-012	11/2/2016								270	NS	NS	NS	NS	NS	NS	NS	NS	NS	29,000
MW-9	W-R2330021-110216-AEM-012	11/2/2016	NS	NS	NS	NS	NS	NS	NS	7.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	29,000
MW-9 ^A	W-R2330022-042617-DMS-015	4/26/2017								<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	26,000
MW-9	W-R2330022-042617-DMS-015	4/26/2017	NS	NS	NS	NS	NS	NS	NS	18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	29,000
MW-9 ^A	W-R2330022-102717-DMS-030	10/27/2017								55	NS	NS	NS	NS	NS	NS	NS	NS	NS	26,000
MW-9	W-R2330022-102717-DMS-030	10/27/2017	NS	NS	NS	NS	NS	NS	NS	5.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	26,000
MW-9 ^A	W-R2330024-042618-DMS-033	4/26/2018								12	NS	NS	NS	NS	NS	NS	NS	NS	NS	30,000
MW-9	W-R2330024-042618-DMS-033	4/26/2018	NS	NS	NS	NS	NS	NS	NS	5.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	29,000
MW-10	W-R2330009-050113-MJF-003	5/1/2013	1.7 J	<1.0	1.1 J	<5.0	<2.0	<5.0	<5.0	6.1 J	0.19 J	7.4	1,800	<1.0	<1.0	1.8 J	2.6 J	<4.0	<0.005	17,000
MW-10 ^A	W-R2330009-080813-ZTR-010	8/8/2013								26 J	0.27 J	6.5	1,700	<1.0	0.29 J	2.2 J	3.1 J	3.4 J		17,000
MW-10	W-R2330009-080813-ZTR-010	8/8/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	8.1 J	0.31 J	6.7	1,800	<1.0	0.22 J	2.0 J	3.5 J	2.7 J	<0.005	17,000
MW-10 ^A (DUP)	W-R2330009-080813-ZTR-011	8/8/2013								25 J	0.26 J	6.7	1,700	<1.0	0.40 J	2.0 J	3.1 J	3.4 J		17,000
MW-10 (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	7.4 J	0.25 J	6.4	1,700	<1.0	0.27 J	2.0 J	3.1 J	2.4 J	<0.005	17,000
MW-10 ^A	W-R2330009-111313-ACN-008	11/13/2013								26 J	0.24 J	10	1,900	<1.0	1.7 J	3.7 J	3.3 J	1.8 J		2,300
MW-10	W-R2330009-111313-ACN-008	11/13/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	12 J	0.23 J	9.7 J	1,900	<1.0	1.4 J	2.7 J	3.8 J	1.1 J	0.0019 J	2,100
MW-10 ^A (DUP)	W-R2330009-111313-ACN-009	11/13/2013								26 J	0.23 J	10	1,900	<1.0	1.7 J	2.9 J	3.4 J	1.4 J		2,300
MW-10 (DUP)	W-R2330009-111313-ACN-009	11/13/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	8.8 J	0.20 J	9.2 J	1,900	<1.0	1.7 J	2.6 J	3.4 J	1.1 J	0.0023 J	2,100
MW-10 ^A	W-R2330012-032814-ACN-010	3/28/2014								32 J	0.20 J	6.6 J	1,700	<1.0	<1.0	1.6 J	3.0 J	1.9 J		24,000
MW-10	W-R2330012-032814-ACN-010	3/28/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	2.0 J	0.22 J	6.5 J	1,700	<1.0	<1.0	0.79 J	2.5 J	3.3 J	2.4 J	24,000
MW-10 ^A (DUP)	W-R2330012-032814-ACN-011	3/28/2014								45 J	0.23 J	7.1 J	1,800	<1.0	<1.0	1.6 J	2.9 J	1.5 J		25,000
MW-10 (DUP)	W-R2330012-032814-ACN-011	3/28/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.7 J	0.21 J	6.8 J	1,700	<1.0	<1.0	<10	3.0 J	1.1 J	4.1 J	23,000
MW-10 ^A	W-R2330012-122114-JCH-028	12/2/2014								21 J	0.23 J	7.1	2,100	<1.0	0.034 J	2.3 J	2.2 J	<4.0		22,000
MW-10	W-R2330012-122114-JCH-028	12/2/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	8.2 J	0.22 J	8.4	2,100	<1.0	<1.0	2.3 J	2.4 J	<4.0	<5.0	23,000
MW-10 ^A	W-R2330017-031915-ACN-019	3/19/2015								24 J	0.29 J	7.3	2,500	<1.0	0.028 J	2.5 J	2.3 J	0.51 J		23,000
MW-10	W-R2330017-031915-ACN-019	3/19/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	7.8 J	0.26 J	7.0	2,300	<1.0	<1.0	2.2 J	2.3 J	0.40 J	<5.0	22,000
MW-10 ^A (DUP)	W-R2330017-031915-ACN-020	3/19/2015								26 J	0.21 J	6.6	2,300	<1.0	<1.0	2.2 J	2.3 J	0.65 J		21,000
MW-10 (DUP)	W-R2330012-031915-ACN-020	3/19/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.24 J	7.2	2,400	<1.0	<1.0	2.6 J	2.7 J	0.27 J	<5.0	23,000
MW-10 ^A	W-R2330017-111915-AEP-022	11/19/2015								31 J	NS	NS	NS	NS	NS	NS	NS	NS		22,000
MW-10	W-R2330017-111915-AEP-022	11/19/2015	NS	NS	NS	NS	NS	NS	NS	7.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	22,000
MW-10 ^A	W-R2330021-042116-JPM-023	4/21/2016								190	NS	NS	NS	NS	NS	NS	NS	NS		22,000
MW-10	W-R2330021-042116-JPM-023	4/21/2016	NS	NS	NS	NS	NS	NS	NS	19 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	27,000
MW-10 ^A	W-R2330021-110216-JPM-019	11/2/2016								32 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	22,000
MW-10	W-R2330021-110216-JPM-019	11/2/2016	NS	NS	NS	NS	NS	NS	NS	6.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	22,000
MW-10 ^A	W-R2330022-042617-DMS-017	4/26/2017								110	NS	NS	NS	NS	NS	NS	NS	NS	NS	21,000
MW-10	W-R2330022-042617-DMS-017	4/26/2017	NS	NS	NS	NS	NS	NS	NS	4.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000
MW-10 ^A	W-R2330022-102717-DMS-031	10/27/2017								37	NS	NS	NS	NS	NS	NS	NS	NS	NS	18,000
MW-10	W-R2330022-102717-DMS-031	10/27/2017	NS	NS	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	17,000
MW-10 ^A	W-R2330024-042418-DMS-016	4/24/2018								75	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000
MW-10	W-R2330024-042418-DMS-016	4/24/2018	NS	NS	NS	NS	NS	NS	NS	7.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000
MW-11	W-R2330009-043013-MJF-001	4/30/2013	1.7 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.6 J	0.13 J	<5.0	26	<1.0	<1.0	0.69 J	0.41 J	0.76 J	<0.005	13 J
MW-11 ^A	W																			

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-9	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	540	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-110216-AEM-012	11/2/2016	NS	NS	260	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330021-110216-AEM-012	11/2/2016	NS	NS	240	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-042617-DMS-015	4/26/2017	NS	150,000	240	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330022-042617-DMS-015	4/26/2017	NS	140,000	230	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-102717-DMS-030	10/27/2017	NS	NS	220	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330022-102717-DMS-030	10/27/2017	NS	NS	220	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330024-042618-DMS-033	4/26/2018	NS	NS	230	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330024-042618-DMS-033	4/26/2018	NS	NS	230	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330009-050113-MJF-003	5/1/2013	0.054 J	<50	350	<0.2	4.9 J	0.66 J	<0.20	<2.0	2.3 J	2.4 J
MW-10 ^A	W-R2330009-080813-ZTR-010	8/8/2013	7.3	<50	600	<0.2	7.5 J	<5.0	<0.20	<2.0	2.4 J	9.6 J
MW-10	W-R2330009-080813-ZTR-010	8/8/2013	2.4 J	<50	600	<0.2	7.6 J	<5.0	<0.20	<2.0	2.3 J	5.2 J
MW-10 ^A (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	7.2	<50	580	<0.2	7.4 J	0.75 J	<0.20	<2.0	2.2 J	8.5 J
MW-10 (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	2.7 J	<50	600	<0.2	7.4 J	0.79 J	<0.20	<2.0	2.2 J	4.9 J
MW-10 ^A	W-R2330009-111313-ACN-008	11/13/2013	2.8 J	<50	460	<0.2	8.1 J	<5.0	<0.20	<2.0	3.0 J	7.0 J
MW-10	W-R2330009-111313-ACN-008	11/13/2013	0.16 J	<50	480	<0.2	8.1 J	<5.0	<0.20	<2.0	2.1 J	3.4 J
MW-10 ^A (DUP)	W-R2330009-111313-ACN-009	11/13/2013	2.8 J	<50	450	<0.2	8.0 J	<5.0	<0.20	<2.0	3.0 J	3.8 J
MW-10 (DUP)	W-R2330009-111313-ACN-009	11/13/2013	0.18 J	<50	470	<0.2	8.2 J	<5.0	<0.20	<2.0	2.3 J	5.0 J
MW-10 ^A	W-R2330012-032814-ACN-010	3/28/2014	1.6 J	<50	550	<0.2	8.1 J	<5.0	<0.20	<2.0	2.1 J	2.1 J
MW-10	W-R2330012-032814-ACN-010	3/28/2014	0.14 J	<50	540	<0.2	9.8 J	<5.0	<0.20	0.24 J	1.8 J	3.0 J
MW-10 ^A (DUP)	W-R2330012-032814-ACN-011	3/28/2014	1.7 J	<50	550	<0.2	7.9 J	0.84 J	<0.20	<2.0	2.3 J	2.1 J
MW-10 (DUP)	W-R2330012-032814-ACN-011	3/28/2014	0.14 J	<50	530	<0.2	8.0 J	0.83 J	<0.20	<2.0	1.9 J	<50
MW-10 ^A	W-R2330012-122114-JCH-028	12/2/2014	2.2 J	<50	420	<0.2	2.8 J	<5.0	<0.20	<2.0	3.2 J	3.7 J
MW-10	W-R2330012-122114-JCH-028	12/2/2014	<3.0	<50	430	<0.2	2.8 J	<5.0	<0.20	<2.0	3.2 J	<50
MW-10 ^A	W-R2330017-031915-ACN-019	3/19/2015	2.5 J	<50	450	<0.2	3.9 J	<5.0	<0.20	<2.0	2.8 J	3.4 J
MW-10	W-R2330017-031915-ACN-019	3/19/2015	<3.0	<50	420	<0.2	3.7 J	<5.0	<0.20	<2.0	2.3 J	<50
MW-10 ^A (DUP)	W-R2330017-031915-ACN-020	3/19/2015	2.1 J	<50	420	<0.2	3.8 J	<5.0	<0.20	<2.0	2.1 J	3.8 J
MW-10 (DUP)	W-R2330012-031915-ACN-020	3/19/2015	0.36 J	<50	430	<0.2	3.7 J	<5.0	0.021 J	<2.0	2.7 J	3.3 J
MW-10 ^A	W-R2330017-111915-AEP-022	11/19/2015	NS	160,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330017-111915-AEP-022	11/19/2015	NS	160,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330021-042116-JPM-023	4/21/2016	NS	NS	420	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330021-042116-JPM-023	4/21/2016	NS	NS	470	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330021-110216-JPM-019	11/2/2016	NS	NS	420	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330021-110216-JPM-019	11/2/2016	NS	NS	430	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330022-042617-DMS-017	4/26/2017	NS	160,000	430	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330022-042617-DMS-017	4/26/2017	NS	150,000	410	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330022-102717-DMS-031	10/27/2017	NS	NS	470	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330022-102717-DMS-031	10/27/2017	NS	NS	470	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330024-042418-DMS-016	4/24/2018	NS	NS	450	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330024-042418-DMS-016	4/24/2018	NS	NS	450	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330009-043013-MJF-001	4/30/2013	0.0079 J	<50	7.4 J	<0.2	1.2 J	1.7 J	<0.20	<2.0	<4.0	2.0 J
MW-11 ^A	W-R2330009-080713-ZTR-006	8/7/2013	<3.0	<50	58	<0.2	2.2 J	0.74 J	<0.20	<2.0	0.24 J	2.5 J
MW-11	W-R2330009-080713-ZTR-006	8/7/2013	<3.0	<50	61	<0.2	2.2 J	1.1 J	<0.20	<2.0	0.23 J	2.2 J
MW-11 ^A	W-R2330009-111213-ACN-001	11/12/2013	1.3 J	<50	75	<0.2	4.8 J	1.1 J	<0.20	0.24 J	2.1 J	8.6 J
MW-11	W-R2330009-111213-ACN-001	11/12/2013	<3.0	<50	60	<0.2	3.2 J	0.83 J	<0.20	<2.0	<4.0	3.1 J
MW-11 ^A	W-R2330012-032614-ACN-002	3/26/2014	0.37 J	<50	52	<0.2	3.4 J	1.3 J	<0.20	<2.0	0.34 J	0.91 J

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L	Volatile Organic Compounds (VOCs)																			
	2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene		
	Non-residential Drinking Water Criteria (II)	38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	
	Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	
	Ground Water Surface Water Interface Criteria (GSI) (III)	2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270	
	GSI Final Acute Value (FAV)	40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	
	Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	
	Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)	18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	
	Water Solubility (VII)	2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	
	Flammability & Explosivity Screening Level (VIII)	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	
ID	SAMPLE ID	SAMPLE DATE	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
MW-11	W-R2330012-032614-ACN-002	3/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-11 ^A	W-R2330012-091514-ACN-003	9/15/2014																		
MW-11	W-R2330012-091514-ACN-003	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS
MW-11 ^A	W-R2330012-121114-JCH-017	12/1/2014																		
MW-11	W-R2330012-121114-JCH-017	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-11 ^A	W-R2330017-031715-ACN-009	3/17/2015																		
MW-11	W-R2330017-031715-ACN-009	3/17/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-11 ^A	W-R2330017-111915-AEP-019	11/19/2015																		
MW-11	W-R2330017-111915-AEP-019	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330021-042116-JPM-021	4/21/2016																		
MW-11	W-R2330021-042116-JPM-021	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330021-110116-JPM-010	11/1/2016																		
MW-11	W-R2330021-110116-JPM-010	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-042617-DMS-018	4/26/2017																		
MW-11	W-R2330022-042617-DMS-018	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-102717-AFB-034	10/28/2017																		
MW-11	W-R2330022-102717-AFB-034	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330024-042618-DMS-032	4/26/2018																		
MW-11	W-R2330024-042618-DMS-032	4/26/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330009-050213-MJF-011	5/2/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-12 ^A	W-R2330009-080713-ZTR-003	8/7/2013																		
MW-12	W-R2330009-080713-ZTR-003	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-12 ^A	W-R2330009-111313-ACN-007	11/13/2013																		
MW-12	W-R2330009-111313-ACN-007	11/13/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-12 ^A	W-R2330012-032714-ACN-005	3/27/2014																		
MW-12	W-R2330012-032714-ACN-005	3/27/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-12 ^A	W-R2330012-121114-JCH-021	12/1/2014																		
MW-12	W-R2330012-121114-JCH-021	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-12 ^A	W-R2330017-031715-ACN-011	3/17/2015																		
MW-12	W-R2330017-031715-ACN-011	3/17/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-12 ^A	W-R2330017-112015-AFB-032	11/20/2015																		
MW-12	W-R2330017-112015-AFB-032	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330017-112015-AFB-DUP2	11/20/2015																		
MW-12	W-R2330017-112015-AFB-DUP2	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330021-042116-AFB-027	4/21/2016																		
MW-12	W-R2330021-042116-AFB-027	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330021-110416-JPM-035	11/4/2016																		
MW-12	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-042817-AFB-032	4/28/2017																		
MW-12	W-R2330022-042817-AFB-032	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-102417-DMS-010	10/24/2017																		
MW-12	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A (DUP)	W-R2330022-102417-DMS-011	10/24/2017																		
MW-12 (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330024-042518-DMS-020	4/25/2018																		
MW-12	W-R2330024-042518-DMS-020	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-11	W-R2330012-032614-ACN-002	3/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-11 ^A	W-R2330012-091514-ACN-003	9/15/2014																		
MW-11	W-R2330012-091514-ACN-003	9/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	NS	NS
MW-11 ^A	W-R2330012-121114-JCH-017	12/1/2014																		
MW-11	W-R2330012-121114-JCH-017	12/1/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-11 ^A	W-R2330017-031715-ACN-009	3/17/2015																		
MW-11	W-R2330017-031715-ACN-009	3/17/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-11 ^A	W-R2330017-111915-AEP-019	11/19/2015																		
MW-11	W-R2330017-111915-AEP-019	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330021-042116-JPM-021	4/21/2016																		
MW-11	W-R2330021-042116-JPM-021	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330021-110116-JPM-010	11/1/2016																		
MW-11	W-R2330021-110116-JPM-010	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-042617-DMS-018	4/26/2017																		
MW-11	W-R2330022-042617-DMS-018	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-102717-AFB-034	10/28/2017																		
MW-11	W-R2330022-102717-AFB-034	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330024-042618-DMS-032	4/26/2018																		
MW-11	W-R2330024-042618-DMS-032	4/26/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330009-050213-MJF-011	5/2/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-12 ^A	W-R2330009-080713-ZTR-003	8/7/2013																		
MW-12	W-R2330009-080713-ZTR-003	8/7/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-12 ^A	W-R2330009-111313-ACN-007	11/13/2013																		
MW-12	W-R2330009-111313-ACN-007	11/13/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	0.24 J	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-12 ^A	W-R2330012-032714-ACN-005	3/27/2014																		
MW-12	W-R2330012-032714-ACN-005	3/27/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-12 ^A	W-R2330012-121114-JCH-021	12/1/2014																		
MW-12	W-R2330012-121114-JCH-021	12/1/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-12 ^A	W-R2330017-031715-ACN-011	3/17/2015																		
MW-12	W-R2330017-031715-ACN-011	3/17/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-12 ^A	W-R2330017-112015-AFB-032	11/20/2015																		
MW-12	W-R2330017-112015-AFB-032	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330017-112015-AFB-DUP2	11/20/2015																		
MW-12	W-R2330017-112015-AFB-DUP2	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330021-042116-AFB-027	4/21/2016																		
MW-12	W-R2330021-042116-AFB-027	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330021-110416-JPM-035	11/4/2016																		
MW-12	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-042817-AFB-032	4/28/2017																		
MW-12	W-R2330022-042817-AFB-032	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-102417-DMS-010	10/24/2017																		
MW-12	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A (DUP)	W-R2330022-102417-DMS-011	10/24/2017																		
MW-12 (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330024-042518-DMS-020	4/25/2018																		
MW-12	W-R2330024-042518-DMS-020	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L								Metals												
	Di-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P.R)	Iron (B)		
	Non-residential Drinking Water Criteria (II)	2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)	
	Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600	
	Ground Water Surface Water Interface Criteria (GSI) (III)	9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	
	GSI Final Acute Value (FAV)	75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	
	Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	
	Groundwater Concentration for Vapor Intrusion (GW _{v-i}) (a)	NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	
	Water Solubility (VII)	11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Flammability & Explosivity Screening Level (VIII)	NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID		
ID	SAMPLE ID	SAMPLE DATE																		
MW-11	W-R2330012-032614-ACN-002	3/26/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	7.4 J	0.096 J	<5.0	47 J	<1.0	<1.0	<10	0.80 J	0.96 J	<0.005	110 J
MW-11 ^A	W-R2330012-091514-ACN-003	9/15/2014								26 J	0.10 J	1.2 J	72 J	<1.0	0.047 J	<10	0.57 J	0.76 J		500
MW-11	W-R2330012-091514-ACN-003	9/15/2014	NS	NS	NS	NS	NS	NS	NS	2.7 J	0.15 J	1.1 J	75 J	<1.0	<1.0	<10	1.1 J	1.4 J	NS	500
MW-11 ^A	W-R2330012-121114-JCH-017	12/1/2014								47 J	<2.0	<5.0	58 J	<1.0	0.087 J	0.23 J	0.67 J	4.3		220
MW-11	W-R2330012-121114-JCH-017	12/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.7 J	<2.0	0.65 J	69 J	<1.0	0.052 J	<10	0.67 J	1.1 J	<5.0	320
MW-11 ^A	W-R2330017-031715-ACN-009	3/17/2015								65	<2.0	<5.0	20 J	<1.0	0.39 J	2.5 J	0.30 J	1.2 J		110 J
MW-11	W-R2330017-031715-ACN-009	3/17/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.17 J	<5.0	20 J	<1.0	0.29 J	0.16 J	0.47 J	0.78 J	<5.0	<200
MW-11 ^A	W-R2330017-111915-AEP-019	11/19/2015								17 J	NS	NS	NS	NS	NS	NS	NS	NS		480
MW-11	W-R2330017-111915-AEP-019	11/19/2015	NS	NS	NS	NS	NS	NS	NS	2.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	470
MW-11 ^A	W-R2330021-042116-JPM-021	4/21/2016								390	NS	NS	NS	NS	NS	NS	NS	NS		700
MW-11	W-R2330021-042116-JPM-021	4/21/2016	NS	NS	NS	NS	NS	NS	NS	7.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	230
MW-11 ^A	W-R2330021-110116-JPM-010	11/1/2016								350	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,700
MW-11	W-R2330021-110116-JPM-010	11/1/2016	NS	NS	NS	NS	NS	NS	NS	7.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,100
MW-11 ^A	W-R2330022-042617-DMS-018	4/26/2017								93	NS	NS	NS	NS	NS	NS	NS	NS	NS	350
MW-11	W-R2330022-042617-DMS-018	4/26/2017	NS	NS	NS	NS	NS	NS	NS	5.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	24 J
MW-11 ^A	W-R2330022-102717-AFB-034	10/28/2017								69	NS	NS	NS	NS	NS	NS	NS	NS	NS	310
MW-11	W-R2330022-102717-AFB-034	10/28/2017	NS	NS	NS	NS	NS	NS	NS	4.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	240
MW-11 ^A	W-R2330024-042618-DMS-032	4/26/2018								20	NS	NS	NS	NS	NS	NS	NS	NS	NS	150
MW-11	W-R2330024-042618-DMS-032	4/26/2018	NS	NS	NS	NS	NS	NS	NS	3.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	<80
MW-12	W-R2330009-050213-MJF-011	5/2/2013	1.2 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	14 J	0.22 J	1.4 J	1,100	<1.0	<1.0	1.9 J	4.0 J	<4.0	<0.005	15,000
MW-12 ^A	W-R2330009-080713-ZTR-003	8/7/2013								170	0.15 J	1.2 J	1,400	<1.0	0.27 J	1.2 J	1.4 J	6.1		18,000
MW-12	W-R2330009-080713-ZTR-003	8/7/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.9 J	0.26 J	0.93 J	1,500	<1.0	0.30 J	0.73 J	2.4 J	3.6 J	<0.005	17,000
MW-12 ^A	W-R2330009-111313-ACN-007	11/13/2013								89	0.16 J	0.79 J	1,600	0.13 J	0.33 J	1.0 J	1.5 J	1.5 J		12,000
MW-12	W-R2330009-111313-ACN-007	11/13/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.9 J	0.16 J	0.85 J	1,500	<1.0	0.68 J	0.99 J	1.9 J	1.3 J	<0.005	12,000
MW-12 ^A	W-R2330012-032714-ACN-005	3/27/2014								61	0.18 J	0.82 J	1,200	<1.0	<1.0	0.53 J	1.9 J	3.6 J		8,800
MW-12	W-R2330012-032714-ACN-005	3/27/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.9 J	0.19 J	<5.0	1,300	<1.0	<1.0	0.43 J	1.5 J	4.6	2.2 J	9,100
MW-12 ^A	W-R2330012-121114-JCH-021	12/1/2014								1,200	0.31 J	2.7 J	1,600	<1.0	0.090 J	2.6 J	1.3 J	3.9 J		14,000
MW-12	W-R2330012-121114-JCH-021	12/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	15 J	0.22 J	<5.0	1,600	<1.0	<1.0	0.55 J	0.86 J	<4.0	<5.0	12,000
MW-12 ^A	W-R2330017-031715-ACN-011	3/17/2015								1,000	0.31 J	1.4 J	1,800	<1.0	<1.0	2.2 J	1.9 J	7.6		14,000
MW-12	W-R2330017-031715-ACN-011	3/17/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	5.1 J	0.58 J	<5.0	1,500	<1.0	<1.0	0.58 J	1.4 J	1.3 J	<5.0	12,000
MW-12 ^A	W-R2330017-112015-AFB-032	11/20/2015								340	NS	NS	NS	NS	NS	NS	NS	NS		12,000
MW-12	W-R2330017-112015-AFB-032	11/20/2015	NS	NS	NS	NS	NS	NS	NS	7.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-12 ^A	W-R2330017-112015-AFB-DUP2	11/20/2015								380	NS	NS	NS	NS	NS	NS	NS	NS		12,000
MW-12	W-R2330017-112015-AFB-DUP2	11/20/2015	NS	NS	NS	NS	NS	NS	NS	7.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-12 ^A	W-R2330021-042116-AFB-027	4/21/2016								60	NS	NS	NS	NS	NS	NS	NS	NS		4,900
MW-12	W-R2330021-042116-AFB-027	4/21/2016	NS	NS	NS	NS	NS	NS	NS	13 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,100
MW-12 ^A	W-R2330021-110416-JPM-035	11/4/2016								150	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000
MW-12	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	NS	NS	NS	NS	NS	27 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000
MW-12 ^A	W-R2330022-042817-AFB-032	4/28/2017								36 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,400
MW-12	W-R2330022-042817-AFB-032	4/28/2017	NS	NS	NS	NS	NS	NS	NS	12 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,000
MW-12 ^A	W-R2330022-102417-DMS-010	10/24/2017								530	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000
MW-12	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	NS	NS	NS	NS	NS	8.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000
MW-12 ^A (DUP)	W-R2330022-102417-DMS-011	10/24/2017								410	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000
MW-12 (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	NS	NS	NS	NS	NS	6.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000
MW-12 ^A	W-R2330024-042518-DMS-020	4/25/2018																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-97}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-11	W-R2330012-032614-ACN-002	3/26/2014	<3.0	<50	54	<0.2	3.3 J	0.83 J	<0.20	0.098 J	0.28 J	<50.0
MW-11 ^A	W-R2330012-091514-ACN-003	9/15/2014	<3.0	<50	68	0.062 J	2.5 J	<5.0	<0.20	<2.0	0.28 J	2.8 J
MW-11	W-R2330012-091514-ACN-003	9/15/2014	<3.0	<50	68	0.064 J	2.6 J	<5.0	<0.20	<2.0	0.20 J	3.2 J
MW-11 ^A	W-R2330012-121114-JCH-017	12/1/2014	<3.0	<50	110	<0.2	3.3 J	<5.0	<0.20	<2.0	0.48 J	7.3 J
MW-11	W-R2330012-121114-JCH-017	12/1/2014	<3.0	<50	96	<0.2	2.9 J	0.93 J	<0.20	<2.0	<4.0	3.5 J
MW-11 ^A	W-R2330017-031715-ACN-009	3/17/2015	<3.0	<50	130	<0.2	3.5 J	0.92 J	<0.20	<2.0	<4.0	<50
MW-11	W-R2330017-031715-ACN-009	3/17/2015	<3.0	<50	4.8 J	<0.2	1.7 J	1.0 J	<0.20	<2.0	<4.0	<50
MW-11 ^A	W-R2330017-111915-AEP-019	11/19/2015	NS	29,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330017-111915-AEP-019	11/19/2015	NS	29,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330021-042116-JPM-021	4/21/2016	NS	NS	310	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330021-042116-JPM-021	4/21/2016	NS	NS	19 J	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330021-110116-JPM-010	11/1/2016	NS	NS	190	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330021-110116-JPM-010	11/1/2016	NS	NS	140	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-042617-DMS-018	4/26/2017	NS	29,000	95	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330022-042617-DMS-018	4/26/2017	NS	25,000	17 J	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-102717-AFB-034	10/28/2017	NS	NS	180	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330022-102717-AFB-034	10/28/2017	NS	NS	160	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330024-042618-DMS-032	4/26/2018	NS	NS	85	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330024-042618-DMS-032	4/26/2018	NS	NS	12	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330009-050213-MJF-011	5/2/2013	0.17 J	<50	1,500	<0.2	3.3 J	<5.0	<0.20	<2.0	0.99 J	8.8 J
MW-12 ^A	W-R2330009-080713-ZTR-003	8/7/2013	0.36 J	<50	470	<0.2	4.3 J	<5.0	<0.20	<2.0	1.7 J	4.5 J
MW-12	W-R2330009-080713-ZTR-003	8/7/2013	0.062 J	<50	420	<0.2	4.2 J	<5.0	<0.20	<2.0	1.2 J	2.7 J
MW-12 ^A	W-R2330009-111313-ACN-007	11/13/2013	0.26 J	<50	210	<0.2	4.5 J	<5.0	<0.20	0.12 J	1.3 J	3.4 J
MW-12	W-R2330009-111313-ACN-007	11/13/2013	<3.0	<50	190	<0.2	4.7 J	<5.0	<0.20	<2.0	0.97 J	2.2 J
MW-12 ^A	W-R2330012-032714-ACN-005	3/27/2014	0.24 J	<50	750	<0.2	7.0 J	<5.0	<0.20	<2.0	1.1 J	4.1 J
MW-12	W-R2330012-032714-ACN-005	3/27/2014	0.22 J	<50	660	<0.2	8.4 J	<5.0	<0.20	<2.0	1.1 J	5.8 J
MW-12 ^A	W-R2330012-121114-JCH-021	12/1/2014	1.3 J	<50	310	<0.2	3.5 J	<5.0	0.040 J	<2.0	4.5	8.1 J
MW-12	W-R2330012-121114-JCH-021	12/1/2014	<3.0	<50	340	<0.2	1.7 J	<5.0	0.064 J	<2.0	1.0 J	<50
MW-12 ^A	W-R2330017-031715-ACN-011	3/17/2015	2.2 J	<50	170	<0.2	6.5 J	<5.0	<0.20	<2.0	2.9 J	13 J
MW-12	W-R2330017-031715-ACN-011	3/17/2015	<3.0	<50	140	<0.2	4.4 J	<5.0	<0.20	<2.0	0.93 J	4.5 J
MW-12 ^A	W-R2330017-112015-AFB-032	11/20/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330017-112015-AFB-032	11/20/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330017-112015-AFB-DUP2	11/20/2015	NS	140,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330017-112015-AFB-DUP2	11/20/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330021-042116-AFB-027	4/21/2016	NS	NS	140	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330021-042116-AFB-027	4/21/2016	NS	NS	160	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	270	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	270	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-042817-AFB-032	4/28/2017	NS	66,000	740	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330022-042817-AFB-032	4/28/2017	NS	65,000	740	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	280	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	250	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	280	NS	NS	NS	NS	NS	NS	NS
MW-12 (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	260	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330024-042518-DMS-020	4/25/2018	NS	NS	400	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330024-042518-DMS-020	4/25/2018	NS	NS	420	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-17 ^A	W-R2330012-052014-ACN-029	5/20/2014																		
MW-17	W-R2330012-052014-ACN-029	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-17 ^A	W-R2330012-091514-ACN-004	9/15/2014																		
MW-17	W-R2330012-091514-ACN-004	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS
MW-17 ^A (DUP)	W-R2330012-091514-ACN-005	9/15/2014																		
MW-17 (DUP)	W-R2330012-091514-ACN-005	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS
MW-17 ^A	W-R2330012-112414-MCW-004	11/24/2014																		
MW-17	W-R2330012-112414-MCW-004	11/24/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-17 ^A	W-R2330017-031615-ACN-007	3/16/2015																		
MW-17	W-R2330017-031615-ACN-007	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-17 ^A	W-R2330017-111715-AFB-009	11/17/2015																		
MW-17	W-R2330017-111715-AFB-009	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330021-041916-AEP-012	4/19/2016																		
MW-17	W-R2330021-041916-AEP-012	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330021-110116-AEM-009	11/1/2016																		
MW-17	W-R2330021-110116-AEM-009	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330022-042517-AFB-011	4/25/2017																		
MW-17	W-R2330022-042517-AFB-011	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330022-102617-AFB-023	10/26/2017																		
MW-17	W-R2330022-102617-AFB-023	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330024-042418-DMS-018	4/24/2018																		
MW-17	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330012-052014-ACN-026	5/20/2014																		
MW-18	W-R2330012-052014-ACN-026	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-18 ^A	W-R2330012-112414-ACN-001	11/24/2014																		
MW-18	W-R2330012-112414-ACN-001	11/24/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-18 ^A	W-R2330017-031615-JCH-003	3/16/2015																		
MW-18	W-R2330017-031615-JCH-003	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.42 J
MW-18 ^A	W-R2330017-111715-JPM-007	11/17/2015																		
MW-18	W-R2330017-111715-JPM-007	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330021-041916-AEP-009	4/19/2016																		
MW-18	W-R2330021-041916-AEP-009	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330021-110316-AEM-025	11/3/2016																		
MW-18	W-R2330021-110316-AEM-025	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330022-042517-DMS-008	4/25/2017																		
MW-18	W-R2330022-042517-DMS-008	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330022-102517-AFB-018	10/25/2017																		
MW-18	W-R2330022-102517-AFB-018	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330024-042518-JPM-027	4/25/2018																		
MW-18	W-R2330024-042518-JPM-027	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-17 ^A	W-R2330012-052014-ACN-029	5/20/2014																		
MW-17	W-R2330012-052014-ACN-029	5/20/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-17 ^A	W-R2330012-091514-ACN-004	9/15/2014																		
MW-17	W-R2330012-091514-ACN-004	9/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	NS	NS
MW-17 ^A (DUP)	W-R2330012-091514-ACN-005	9/15/2014																		
MW-17 (DUP)	W-R2330012-091514-ACN-005	9/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	NS	NS
MW-17 ^A	W-R2330012-112414-MCW-004	11/24/2014																		
MW-17	W-R2330012-112414-MCW-004	11/24/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-17 ^A	W-R2330017-031615-ACN-007	3/16/2015																		
MW-17	W-R2330017-031615-ACN-007	3/16/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-17 ^A	W-R2330017-111715-AFB-009	11/17/2015																		
MW-17	W-R2330017-111715-AFB-009	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330021-041916-AEP-012	4/19/2016																		
MW-17	W-R2330021-041916-AEP-012	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330021-110116-AEM-009	11/1/2016																		
MW-17	W-R2330021-110116-AEM-009	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330022-042517-AFB-011	4/25/2017																		
MW-17	W-R2330022-042517-AFB-011	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330022-102617-AFB-023	10/26/2017																		
MW-17	W-R2330022-102617-AFB-023	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330024-042418-DMS-018	4/24/2018																		
MW-17	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330012-052014-ACN-026	5/20/2014																		
MW-18	W-R2330012-052014-ACN-026	5/20/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-18 ^A	W-R2330012-112414-ACN-001	11/24/2014																		
MW-18	W-R2330012-112414-ACN-001	11/24/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-18 ^A	W-R2330017-031615-JCH-003	3/16/2015																		
MW-18	W-R2330017-031615-JCH-003	3/16/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-18 ^A	W-R2330017-111715-JPM-007	11/17/2015																		
MW-18	W-R2330017-111715-JPM-007	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330021-041916-AEP-009	4/19/2016																		
MW-18	W-R2330021-041916-AEP-009	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330021-110316-AEM-025	11/3/2016																		
MW-18	W-R2330021-110316-AEM-025	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330022-042517-DMS-008	4/25/2017																		
MW-18	W-R2330022-042517-DMS-008	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330022-102517-AFB-018	10/25/2017																		
MW-18	W-R2330022-102517-AFB-018	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330024-042518-JPM-027	4/25/2018																		
MW-18	W-R2330024-042518-JPM-027	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330012-052014-ACN-027	5/20/2014																		
MW-19	W-R2330012-052014-ACN-027	5/20/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-19 ^A	W-R2330012-112414-ACN-002	11/24/2014																		
MW-19	W-R2330012-112414-ACN-002	11/24/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-19 ^A	W-R2330017-031615-JCH-004	3/16/2015																		
MW-19	W-R2330017-031615-JCH-004	3/16/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L								Metals												
	D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)		
Non-residential Drinking Water Criteria (II)	2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)		
Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600		
Ground Water Surface Water Interface Criteria (GSI) (III)	9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA		
GSI Final Acute Value (FAV)	75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA		
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV		
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)	NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV		
Water Solubility (VII)	11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Flammability & Explosivity Screening Level (VIII)	NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID		
ID	SAMPLE ID	SAMPLE DATE																		
MW-17 ^A	W-R2330012-052014-ACN-029	5/20/2014						1,400	0.11 J	5.6	160	<1.0	<1.0	2.4 J	0.98 J	2.8 J		4,200		
MW-17	W-R2330012-052014-ACN-029	5/20/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	51	0.063 J	4.5 J	<1.0	<1.0	<10	0.23 J	<4.0	<0.005	2,100	
MW-17 ^A	W-R2330012-091514-ACN-004	9/15/2014						980	0.063 J	5.8	150	<1.0	0.056 J	1.5 J	0.80 J	2.2 J		3,600		
MW-17	W-R2330012-091514-ACN-004	9/15/2014	NS	NS	NS	NS	NS	21 J	0.093 J	5.1	150	<1.0	<1.0	<10	0.65 J	0.96 J	NS	2,500		
MW-17 ^A (DUP)	W-R2330012-091514-ACN-005	9/15/2014						1,200	0.071 J	6.0	150	<1.0	<1.0	2.2 J	0.85 J	3.2 J		3,800		
MW-17 (DUP)	W-R2330012-091514-ACN-005	9/15/2014	NS	NS	NS	NS	NS	19 J	0.042 J	5.3	140	<1.0	<1.0	0.50 J	0.50 J	0.94 J	NS	2,500		
MW-17 ^A	W-R2330012-112414-MCW-004	11/24/2014						700	<2.0	6.3	190	<1.0	0.075 J	1.6 J	0.61 J	1.7 J		4,100		
MW-17	W-R2330012-112414-MCW-004	11/24/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	18 J	<2.0	5.8	<1.0	<1.0	<10	0.25 J	0.23 J	<5.0	3,000	
MW-17 ^A	W-R2330017-031615-ACN-007	3/16/2015						2,000	<2.0	5.1	260	<1.0	0.45 J	2.9 J	1.4 J	4.2		5,300		
MW-17	W-R2330017-031615-ACN-007	3/16/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	9.8 J	<2.0	2.7 J	<1.0	0.050 J	0.14 J	0.62 J	1.0 J	<5.0	2,300	
MW-17 ^A	W-R2330017-111715-AFB-009	11/17/2015						990	NS	NS	NS	NS	NS	NS	NS	NS		4,600		
MW-17	W-R2330017-111715-AFB-009	11/17/2015	NS	NS	NS	NS	NS	8.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,600		
MW-17 ^A	W-R2330021-041916-AEP-012	4/19/2016						310	NS	NS	NS	NS	NS	NS	NS	NS		3,600		
MW-17	W-R2330021-041916-AEP-012	4/19/2016	NS	NS	NS	NS	NS	6.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,400		
MW-17 ^A	W-R2330021-110116-AEM-009	11/1/2016						140	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,700		
MW-17	W-R2330021-110116-AEM-009	11/1/2016	NS	NS	NS	NS	NS	7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400		
MW-17 ^A	W-R2330022-042517-AFB-011	4/25/2017						1,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,500		
MW-17	W-R2330022-042517-AFB-011	4/25/2017	NS	NS	NS	NS	NS	17 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,300		
MW-17 ^A	W-R2330022-102617-AFB-023	10/26/2017						860	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,200		
MW-17	W-R2330022-102617-AFB-023	10/26/2017	NS	NS	NS	NS	NS	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,200		
MW-17 ^A	W-R2330024-042418-DMS-018	4/24/2018						400	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500		
MW-17	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400		
MW-18 ^A	W-R2330012-052014-ACN-026	5/20/2014						5,400	0.35 J	10	400	0.23 J	0.28 J	8.8 J	5.6 J	11		13,000		
MW-18	W-R2330012-052014-ACN-026	5/20/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	56	0.24 J	5.1	370	0.097 J	0.16 J	0.30 J	1.3 J	<4.0	<0.005	2,000
MW-18 ^A	W-R2330012-112414-ACN-001	11/24/2014						25,000	1.0 J	46	730	1.2	1.4	48	34	74		72,000		
MW-18	W-R2330012-112414-ACN-001	11/24/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	45 J	0.18 J	11	550	<1.0	0.088 J	<10	0.59 J	0.21 J	<5.0	3,600
MW-18 ^A	W-R2330017-031615-JCH-003	3/16/2015						28,000	1.3 J	51	740	0.77 J	1.4	35	25	60		60,000		
MW-18	W-R2330017-031615-JCH-003	3/16/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.16 J	6.7	450	<1.0	0.041 J	0.15 J	0.97 J	1.5 J	<5.0	2,800
MW-18 ^A	W-R2330017-111715-JPM-007	11/17/2015						2,200	NS	NS	NS	NS	NS	NS	NS	NS		7,200		
MW-18	W-R2330017-111715-JPM-007	11/17/2015	NS	NS	NS	NS	NS	22 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,900		
MW-18 ^A	W-R2330021-041916-AEP-009	4/19/2016						2,100	NS	NS	NS	NS	NS	NS	NS	NS		4,400		
MW-18	W-R2330021-041916-AEP-009	4/19/2016	NS	NS	NS	NS	NS	29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,300		
MW-18 ^A	W-R2330021-110316-AEM-025	11/3/2016						96	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,100		
MW-18	W-R2330021-110316-AEM-025	11/3/2016	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,800		
MW-18 ^A	W-R2330022-042517-DMS-008	4/25/2017						2,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,900		
MW-18	W-R2330022-042517-DMS-008	4/25/2017	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,300		
MW-18 ^A	W-R2330022-102517-AFB-018	10/25/2017						5,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	17,000		
MW-18	W-R2330022-102517-AFB-018	10/25/2017	NS	NS	NS	NS	NS	23	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,600		
MW-18 ^A	W-R2330024-042518-JPM-027	4/25/2018						7,500	NS	NS	NS	NS	NS	NS	NS	NS	NS	26,000		
MW-18	W-R2330024-042518-JPM-027	4/25/2018	NS	NS	NS	NS	NS	64	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,100		
MW-19 ^A	W-R2330012-052014-ACN-027	5/20/2014						1,900	0.089 J	6.2	350	<1.0	0.062 J	3.5 J	1.5 J	3.4 J		5,300		
MW-19	W-R2330012-052014-ACN-027	5/20/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	120	0.12 J	4.5 J	<1.0	<1.0	0.53 J	1.1 J	0.87 J	1.2 J	2,400	
MW-19 ^A	W-R2330012-112414-ACN-002	11/24/2014						7,900	0.49 J	14	380	0.34 J	0.27 J	16	6.7 J	17		16,000		
MW-19	W-R2330012-112414-ACN-002	11/24/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	74	0.15 J	6.3	<1.0	0.054 J	0.30 J	0.93 J	0.18 J	<5.0	2,000	
MW-19 ^A	W-R2330017-031615-JCH-004	3/16/2015						1,600	0.12 J	11	510	<1.0	<1.0	2.8 J	1.9 J	4.1		6,600		
MW-19	W-R2330017-031615-JCH-004	3/16/2015	0.78 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	18 J	0.14 J	5 J	<1.0	<1.0	0.3 J	0.91 J	1.8 J	<5.0	3,500	

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-17 ^A	W-R2330012-052014-ACN-029	5/20/2014	2.2 J	<50	210	<0.2	3.6 J	<5.0	<0.20	<2.0	4.3	7.9 J
MW-17	W-R2330012-052014-ACN-029	5/20/2014	0.052 J	<50	180	<0.2	1.2 J	<5.0	<0.20	<2.0	0.65 J	1.7 J
MW-17 ^A	W-R2330012-091514-ACN-004	9/15/2014	1.8 J	<50	240	0.064 J	4.4 J	<5.0	<0.20	<2.0	2.8 J	7.9 J
MW-17	W-R2330012-091514-ACN-004	9/15/2014	<3.0	<50	220	0.064 J	3.0 J	<5.0	<0.20	<2.0	0.36 J	3.1 J
MW-17 ^A (DUP)	W-R2330012-091514-ACN-005	9/15/2014	1.8 J	<50	240	0.063 J	4.7 J	<5.0	<0.20	<2.0	2.9 J	7.7 J
MW-17 (DUP)	W-R2330012-091514-ACN-005	9/15/2014	<3.0	<50	230	0.058 J	3.0 J	<5.0	<0.20	<2.0	0.32 J	2.9 J
MW-17 ^A	W-R2330012-112414-MCW-004	11/24/2014	1.5 J	<50	300	<0.2	2.2 J	<5.0	<0.20	<2.0	2.4 J	9.6 J
MW-17	W-R2330012-112414-MCW-004	11/24/2014	<3.0	<50	280	<0.2	0.74 J	<5.0	<0.20	<2.0	<4.0	3.4 J
MW-17 ^A	W-R2330017-031615-ACN-007	3/16/2015	3.4	<50	330	<0.2	6.4 J	<5.0	<0.20	<2.0	3.7 J	11 J
MW-17	W-R2330017-031615-ACN-007	3/16/2015	<3.0	<50	320	<0.2	3.5 J	<5.0	<0.20	<2.0	<4.0	3.2 J
MW-17 ^A	W-R2330017-111715-AFB-009	11/17/2015	NS	22,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330017-111715-AFB-009	11/17/2015	NS	21,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330021-041916-AEP-012	4/19/2016	NS	NS	400	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330021-041916-AEP-012	4/19/2016	NS	NS	380	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330021-110116-AEM-009	11/1/2016	NS	NS	3,900	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330021-110116-AEM-009	11/1/2016	NS	NS	410	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330022-042517-AFB-011	4/25/2017	NS	23,000	420	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330022-042517-AFB-011	4/25/2017	NS	23,000	430	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330022-102617-AFB-023	10/26/2017	NS	NS	440	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330022-102617-AFB-023	10/26/2017	NS	NS	440	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	510	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	500	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330012-052014-ACN-026	5/20/2014	6.9	<50	600	<0.2	15 J	1.6 J	0.047 J	0.18 J	16	27 J
MW-18	W-R2330012-052014-ACN-026	5/20/2014	0.20 J	<50	250	<0.2	3.1 J	<5.0	<0.20	0.21 J	0.61 J	2.9 J
MW-18 ^A	W-R2330012-112414-ACN-001	11/24/2014	52	<50	3,800	0.030 J	79	8.0	0.17 J	1.3 J	90	200
MW-18	W-R2330012-112414-ACN-001	11/24/2014	<3.0	<50	210	<0.2	1.9 J	<5.0	<0.20	<2.0	<4.0	3.6 J
MW-18 ^A	W-R2330017-031615-JCH-003	3/16/2015	45	<50	2700	<0.2	71	2.5 J	0.16 J	0.91 J	67	170
MW-18	W-R2330017-031615-JCH-003	3/16/2015	<3.0	<50	180	<0.2	5.3 J	<5.0	<0.20	<2.0	<4.0	4.6 J
MW-18 ^A	W-R2330017-111715-JPM-007	11/17/2015	NS	30,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330017-111715-JPM-007	11/17/2015	NS	25,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330021-041916-AEP-009	4/19/2016	NS	NS	220	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330021-041916-AEP-009	4/19/2016	NS	NS	140	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330021-110316-AEM-025	11/3/2016	NS	NS	180	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330021-110316-AEM-025	11/3/2016	NS	NS	180	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330022-042517-DMS-008	4/25/2017	NS	44,000	420	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330022-042517-DMS-008	4/25/2017	NS	18,000	150	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330022-102517-AFB-018	10/25/2017	NS	NS	880	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330022-102517-AFB-018	10/25/2017	NS	NS	160	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330024-042518-JPM-027	4/25/2018	NS	NS	1700	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330024-042518-JPM-027	4/25/2018	NS	NS	130	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330012-052014-ACN-027	5/20/2014	1.6 J	<50	350	<0.2	5.3 J	<5.0	<0.20	<2.0	6.3	9.2 J
MW-19	W-R2330012-052014-ACN-027	5/20/2014	0.088 J	<50	300	<0.2	1.9 J	<5.0	<0.20	<2.0	1.3 J	2.5 J
MW-19 ^A	W-R2330012-112414-ACN-002	11/24/2014	9.7	<50	560	<0.2	21	1.7 J	0.080 J	<2.0	24	53
MW-19	W-R2330012-112414-ACN-002	11/24/2014	<3.0	<50	350	<0.2	1.8 J	<5.0	<0.20	<2.0	0.48 J	3.9 J
MW-19 ^A	W-R2330017-031615-JCH-004	3/16/2015	1.7 J	<50	520	<0.2	9.4 J	0.82 J	<0.20	<2.0	4.2	11 J
MW-19	W-R2330017-031615-JCH-004	3/16/2015	<3.0	<50	460	<0.2	5.6 J	<5.0	<0.20	<2.0	0.53 J	3.7 J

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{V,im}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-19 ^A	W-R2330017-111715-AFB-008	11/17/2015																		
MW-19	W-R2330017-111715-AFB-008	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-041916-JPM-010	4/19/2016																		
MW-19	W-R2330021-041916-JPM-010	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	DUP 1	4/19/2016																		
MW-19	DUP 1	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-110316-AEM-027	11/3/2016																		
MW-19	W-R2330021-110316-AEM-027	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-042517-AFB-009	4/25/2017																		
MW-19	W-R2330022-042517-AFB-009	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-102517-DMS-019	10/25/2017																		
MW-19	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330024-042518-JPM-029	4/25/2018																		
MW-19	W-R2330024-042518-JPM-029	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330012-052014-ACN-028	5/20/2014																		
MW-20	W-R2330012-052014-ACN-028	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-20 ^A	W-R2330012-112414-ACN-003	11/24/2014																		
MW-20	W-R2330012-112414-ACN-003	11/24/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-20 ^A	W-R2330017-031615-ACN-005	3/16/2015																		
MW-20	W-R2330017-031615-ACN-005	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-20 ^A (DUP)	W-R2330017-031615-ACN-006	3/16/2015																		
MW-20 (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-20 ^A	W-R2330017-111715-JPM-010	11/17/2015																		
MW-20	W-R2330017-111715-JPM-010	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-041916-JPM-011	4/19/2016																		
MW-20	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-110316-JPM-026	11/3/2016																		
MW-20	W-R2330021-110316-JPM-026	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-042517-DMS-010	4/25/2017																		
MW-20	W-R2330022-042517-DMS-010	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A (DUP)	W-R2330022-042517-DMS-012	4/25/2017																		
MW-20 (DUP)	W-R2330022-042517-DMS-012	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-102617-AFB-022	10/26/2017																		
MW-20	W-R2330022-102617-AFB-022	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330024-042518-JPM-030	4/25/2018																		
MW-20	W-R2330024-042518-JPM-030	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330012-051914-ACN-021	5/19/2014																		
MW-21	W-R2330012-051914-ACN-021	5/19/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-21 ^A	W-R2330012-112514-ACN-006	11/25/2014																		
MW-21	W-R2330012-112514-ACN-006	11/25/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-21 ^A	W-R2330017-032015-JCH-023	3/20/2015																		
MW-21	W-R2330017-032015-JCH-023	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-21 ^A	W-R2330012-111815-JPM-013	11/18/2015																		
MW-21	W-R2330012-111815-JPM-013	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A (DUP)	DUP 1	11/18/2015																		
MW-21 (DUP)	DUP 1	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L				Semivolatile Organic Compounds (SVOCs)																
				Xylenes	1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	72	NA	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-19 ^A	W-R2330017-111715-AFB-008	11/17/2015																		
MW-19	W-R2330017-111715-AFB-008	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-041916-JPM-010	4/19/2016																		
MW-19	W-R2330021-041916-JPM-010	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	DUP 1	4/19/2016																		
MW-19	DUP 1	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-110316-AEM-027	11/3/2016																		
MW-19	W-R2330021-110316-AEM-027	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-042517-AFB-009	4/25/2017																		
MW-19	W-R2330022-042517-AFB-009	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-102517-DMS-019	10/25/2017																		
MW-19	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330024-042518-JPM-029	4/25/2018																		
MW-19	W-R2330024-042518-JPM-029	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330012-052014-ACN-028	5/20/2014																		
MW-20	W-R2330012-052014-ACN-028	5/20/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-20 ^A	W-R2330012-112414-ACN-003	11/24/2014																		
MW-20	W-R2330012-112414-ACN-003	11/24/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-20 ^A	W-R2330017-031615-ACN-005	3/16/2015																		
MW-20	W-R2330017-031615-ACN-005	3/16/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-20 ^A (DUP)	W-R2330017-031615-ACN-006	3/16/2015																		
MW-20 (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-20 ^A	W-R2330017-111715-JPM-010	11/17/2015																		
MW-20	W-R2330017-111715-JPM-010	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-041916-JPM-011	4/19/2016																		
MW-20	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-110316-JPM-026	11/3/2016																		
MW-20	W-R2330021-110316-JPM-026	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-042517-DMS-010	4/25/2017																		
MW-20	W-R2330022-042517-DMS-010	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A (DUP)	W-R2330022-042517-DMS-012	4/25/2017																		
MW-20 (DUP)	W-R2330022-042517-DMS-012	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-102617-AFB-022	10/26/2017																		
MW-20	W-R2330022-102617-AFB-022	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330024-042518-JPM-030	4/25/2018																		
MW-20	W-R2330024-042518-JPM-030	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330012-051914-ACN-021	5/19/2014																		
MW-21	W-R2330012-051914-ACN-021	5/19/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-21 ^A	W-R2330012-112514-ACN-006	11/25/2014																		
MW-21	W-R2330012-112514-ACN-006	11/25/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-21 ^A	W-R2330017-032015-JCH-023	3/20/2015																		
MW-21	W-R2330017-032015-JCH-023	3/20/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
MW-21 ^A	W-R2330012-111815-JPM-013	11/18/2015																		
MW-21	W-R2330012-111815-JPM-013	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A (DUP)	DUP 1	11/18/2015																		
MW-21 (DUP)	DUP 1	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			Di-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P.R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,m}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-19 ^A	W-R2330017-111715-AFB-008	11/17/2015								4,100	NS	NS	NS	NS	NS	NS	NS	NS		11,000
MW-19	W-R2330017-111715-AFB-008	11/17/2015	NS	NS	NS	NS	NS	NS	NS	370	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400
MW-19 ^A	W-R2330021-041916-JPM-010	4/19/2016								1,300	NS	NS	NS	NS	NS	NS	NS	NS		5,100
MW-19	W-R2330021-041916-JPM-010	4/19/2016	NS	NS	NS	NS	NS	NS	NS	25 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,100
MW-19 ^A	DUP 1	4/19/2016								1,300	NS	NS	NS	NS	NS	NS	NS	NS		5,100
MW-19	DUP 1	4/19/2016	NS	NS	NS	NS	NS	NS	NS	13 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,000
MW-19 ^A	W-R2330021-110316-AEM-027	11/3/2016								190	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,000
MW-19	W-R2330021-110316-AEM-027	11/3/2016	NS	NS	NS	NS	NS	NS	NS	26	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,600
MW-19 ^A	W-R2330022-042517-AFB-009	4/25/2017								820	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,100
MW-19	W-R2330022-042517-AFB-009	4/25/2017	NS	NS	NS	NS	NS	NS	NS	18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,200
MW-19 ^A	W-R2330022-102517-DMS-019	10/25/2017								320	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,100
MW-19	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	NS	NS	NS	NS	NS	13	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,900
MW-19 ^A	W-R2330024-042518-JPM-029	4/25/2018								740	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,200
MW-19	W-R2330024-042518-JPM-029	4/25/2018	NS	NS	NS	NS	NS	NS	NS	61	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,200
MW-20 ^A	W-R2330012-052014-ACN-028	5/20/2014								1,800	0.15 J	9.5	340	<1.0	0.061 J	3.8 J	1.6 J	5.1		9,600
MW-20	W-R2330012-052014-ACN-028	5/20/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	15 J	0.065 J	5.6	330	<1.0	<1.0	0.39 J	0.71 J	1.1 J	<0.005	4,900
MW-20 ^A	W-R2330012-112414-ACN-003	11/24/2014								330	<2.0	8.8	290	<1.0	<1.0	0.90 J	0.49 J	1.2 J		4,200
MW-20	W-R2330012-112414-ACN-003	11/24/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	100	<2.0	7.7	300	<1.0	<1.0	0.39 J	0.66 J	0.32 J	<5.0	3,600
MW-20 ^A	W-R2330017-031615-ACN-005	3/16/2015								1,600	0.14 J	7.5	250	<1.0	<1.0	2.8 J	1.5 J	4.9		7,000
MW-20	W-R2330017-031615-ACN-005	3/16/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	64	0.13 J	5.8	260	<1.0	<1.0	0.36 J	0.73 J	0.98 J	<5.0	4,200
MW-20 ^A (DUP)	W-R2330017-031615-ACN-006	3/16/2015								1,600	0.13 J	7.6	250	<1.0	<1.0	2.8 J	1.5 J	4.7		7,100
MW-20 (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	43 J	<2.0	6.1	250	<1.0	<1.0	0.28 J	0.61 J	0.93 J	<5.0	4,900
MW-20 ^A	W-R2330017-111715-JPM-010	11/17/2015								2,600	NS	NS	NS	NS	NS	NS	NS	NS		10,000
MW-20	W-R2330017-111715-JPM-010	11/17/2015	NS	NS	NS	NS	NS	NS	NS	93	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,200
MW-20 ^A	W-R2330021-041916-JPM-011	4/19/2016								46 J	NS	NS	NS	NS	NS	NS	NS	NS		3,500
MW-20	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	NS	NS	NS	NS	NS	4.0 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,600
MW-20 ^A	W-R2330021-110316-JPM-026	11/3/2016								120	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,700
MW-20	W-R2330021-110316-JPM-026	11/3/2016	NS	NS	NS	NS	NS	NS	NS	9.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400
MW-20 ^A	W-R2330022-042517-DMS-010	4/25/2017								200	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500
MW-20	W-R2330022-042517-DMS-010	4/25/2017	NS	NS	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,300
MW-20 ^A (DUP)	W-R2330022-042517-DMS-012	4/25/2017								200	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500
MW-20 (DUP)	W-R2330022-042517-DMS-012	4/25/2017	NS	NS	NS	NS	NS	NS	NS	8.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400
MW-20 ^A	W-R2330022-102617-AFB-022	10/26/2017								960	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,300
MW-20	W-R2330022-102617-AFB-022	10/26/2017	NS	NS	NS	NS	NS	NS	NS	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,900
MW-20 ^A	W-R2330024-042518-JPM-030	4/25/2018								680	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,900
MW-20	W-R2330024-042518-JPM-030	4/25/2018	NS	NS	NS	NS	NS	NS	NS	45	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,900
MW-21 ^A	W-R2330012-051914-ACN-021	5/19/2014								1,400	0.16 J	1.9 J	38 J	<1.0	<1.0	2.4 J	1.7 J	4.1		2,400
MW-21	W-R2330012-051914-ACN-021	5/19/2014	0.87 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	48 J	0.16 J	<5.0	31 J	<1.0	<1.0	<10	0.91 J	1.2 J	<0.005	56 J
MW-21 ^A	W-R2330012-112514-ACN-006	11/25/2014								480	0.15 J	1.1 J	81 J	<1.0	0.076 J	1.1 J	0.89 J	2.0 J		850
MW-21	W-R2330012-112514-ACN-006	11/25/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.24 J	0.70 J	72 J	<1.0	0.061 J	0.22 J	0.70 J	0.98 J	<5.0	42 J
MW-21 ^A	W-R2330017-032015-JCH-023	3/20/2015								3,000	0.23 J	2.2 J	73 J	<1.0	0.21 J	5.1 J	2.5 J	6.2		4,100
MW-21	W-R2330017-032015-JCH-023	3/20/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.19 J	<5.0	62 J	<1.0	0.078 J	0.14 J	0.89 J	0.41 J	<5.0	20 J
MW-21 ^A	W-R2330012-111815-JPM-013	11/18/2015								34 J	NS	NS	NS	NS	NS	NS	NS	NS		59 J
MW-21	W-R2330012-111815-JPM-013	11/18/2015	NS	NS	NS	NS	NS	NS	NS	3.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11 J
MW-21 ^A (DUP)	DUP 1	11/18/2015								27 J	NS	NS	NS	NS	NS	NS	NS	NS		47 J
MW-21 (DUP)	DUP 1	11/18/2015	NS	NS	NS	NS	NS	NS	NS	3.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 J

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-19 ^A	W-R2330017-111715-AFB-008	11/17/2015	NS	38,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330017-111715-AFB-008	11/17/2015	NS	34,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-041916-JPM-010	4/19/2016	NS	NS	450	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330021-041916-JPM-010	4/19/2016	NS	NS	420	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	DUP 1	4/19/2016	NS	NS	450	NS	NS	NS	NS	NS	NS	NS
MW-19	DUP 1	4/19/2016	NS	NS	420	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-110316-AEM-027	11/3/2016	NS	NS	360	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330021-110316-AEM-027	11/3/2016	NS	NS	350	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-042517-AFB-009	4/25/2017	NS	27,000	360	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330022-042517-AFB-009	4/25/2017	NS	28,000	370	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	520	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	520	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330024-042518-JPM-029	4/25/2018	NS	NS	390	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330024-042518-JPM-029	4/25/2018	NS	NS	380	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330012-052014-ACN-028	5/20/2014	2.7 J	<50	280	<0.2	5.5 J	<5.0	<0.20	<2.0	6.4	11 J
MW-20	W-R2330012-052014-ACN-028	5/20/2014	<3.0	<50	200	<0.2	1.9 J	<5.0	<0.20	<2.0	0.57 J	1.1 J
MW-20 ^A	W-R2330012-112414-ACN-003	11/24/2014	0.69 J	<50	160	<0.2	1.9 J	<5.0	<0.20	<2.0	1.9 J	5.3 J
MW-20	W-R2330012-112414-ACN-003	11/24/2014	<3.0	<50	150	<0.2	1.4 J	<5.0	<0.20	<2.0	0.68 J	4.5 J
MW-20 ^A	W-R2330017-031615-ACN-005	3/16/2015	2.8 J	<50	210	<0.2	6.7 J	<5.0	<0.20	<2.0	4.0 J	12 J
MW-20	W-R2330017-031615-ACN-005	3/16/2015	<3.0	<50	170	<0.2	3.7 J	<5.0	<0.20	<2.0	0.52 J	<50
MW-20 ^A (DUP)	W-R2330017-031615-ACN-006	3/16/2015	2.8 J	<50	210	<0.2	6.7 J	<5.0	<0.20	<2.0	3.9 J	12 J
MW-20 (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<3.0	<50	170	<0.2	3.7 J	<5.0	<0.20	<2.0	0.55 J	<50
MW-20 ^A	W-R2330017-111715-JPM-010	11/17/2015	NS	56,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-20	W-R2330017-111715-JPM-010	11/17/2015	NS	55,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	140	NS	NS	NS	NS	NS	NS	NS
MW-20	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	150	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-110316-JPM-026	11/3/2016	NS	NS	170	NS	NS	NS	NS	NS	NS	NS
MW-20	W-R2330021-110316-JPM-026	11/3/2016	NS	NS	160	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-042517-DMS-010	4/25/2017	NS	46,000	180	NS	NS	NS	NS	NS	NS	NS
MW-20	W-R2330022-042517-DMS-010	4/25/2017	NS	50,000	180	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A (DUP)	W-R2330022-042517-DMS-012	4/25/2017	NS	46,000	180	NS	NS	NS	NS	NS	NS	NS
MW-20 (DUP)	W-R2330022-042517-DMS-012	4/25/2017	NS	50,000	190	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-102617-AFB-022	10/26/2017	NS	NS	160	NS	NS	NS	NS	NS	NS	NS
MW-20	W-R2330022-102617-AFB-022	10/26/2017	NS	NS	140	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330024-042518-JPM-030	4/25/2018	NS	NS	180	NS	NS	NS	NS	NS	NS	NS
MW-20	W-R2330024-042518-JPM-030	4/25/2018	NS	NS	160	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330012-051914-ACN-021	5/19/2014	1.4 J	<50	60	<0.2	5.5 J	0.68 J	<0.20	<2.0	3.8 J	9.9 J
MW-21	W-R2330012-051914-ACN-021	5/19/2014	<3.0	<50	9.1 J	<0.2	1.9 J	<5.0	<0.20	<2.0	0.32 J	1.9 J
MW-21 ^A	W-R2330012-112514-ACN-006	11/25/2014	0.72 J	<50	52	<0.2	3.0 J	<5.0	<0.20	<2.0	1.8 J	8.2 J
MW-21	W-R2330012-112514-ACN-006	11/25/2014	<3.0	<50	37 J	<0.2	2.0 J	<5.0	<0.20	<2.0	<4.0	4.5 J
MW-21 ^A	W-R2330017-032015-JCH-023	3/20/2015	2.9 J	<50	100	<0.2	7.7 J	<5.0	0.038 J	<2.0	8.5	18 J
MW-21	W-R2330017-032015-JCH-023	3/20/2015	<3.0	<50	25 J	<0.2	2.0 J	<5.0	<0.20	<2.0	<4.0	<50
MW-21 ^A	W-R2330012-111815-JPM-013	11/18/2015	NS	21,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330012-111815-JPM-013	11/18/2015	NS	21,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A (DUP)	DUP 1	11/18/2015	NS	20,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 (DUP)	DUP 1	11/18/2015	NS	21,000	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-21 ^A	W-R2330021-042016-JPM-015	4/20/2016																		
MW-21	W-R2330012-042016-JPM-015	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330021-110316-AEM-021	11/3/2016																		
MW-21	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-042717-DMS-021	4/27/2017																		
MW-21	W-R2330022-042717-DMS-021	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-102517-DMS-015	10/25/2017																		
MW-21	W-R2330022-102517-DMS-015	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330024-042418-JPM-013	4/24/2018																		
MW-21	W-R2330024-042418-JPM-013	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330012-051914-ACN-022	5/19/2014																		
MW-22	W-R2330012-051914-ACN-022	5/19/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-22 ^A	W-R2330012-112514-ACN-007	11/25/2014																		
MW-22	W-R2330012-112514-ACN-007	11/25/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-22 ^A (DUP)	W-R2330012-112514-ACN-008	11/25/2014																		
MW-22 (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-22 ^A	W-R2330017-032015-JCH-027	3/20/2015																		
MW-22	W-R2330017-032015-JCH-027	3/20/2015	<25	<1.0	<1.0	<50	12 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-22 ^A	W-R2330017-111815-JPM-014	11/18/2015																		
MW-22	W-R2330017-111815-JPM-014	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-042016-JPM-019	4/20/2016																		
MW-22	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-110216-JPM-017	11/2/2016																		
MW-22	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-042717-DMS-023	4/27/2017																		
MW-22	W-R2330022-042717-DMS-023	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-102517-AFB-014	10/25/2017																		
MW-22	W-R2330022-102517-AFB-014	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R220024-042418-JPM-015	4/24/2018																		
MW-22	W-R220024-042418-JPM-015	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330012-051914-ACN-023	5/19/2014																		
MW-23	W-R2330012-051914-ACN-023	5/19/2014	<25	<1.0	<1.0	<50	<50	3.7	<1.0	<5.0	40	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-23 ^A (DUP)	W-R2330012-051914-ACN-024	5/19/2014																		
MW-23 (DUP)	W-R2330012-051914-ACN-024	5/19/2014	<25	<1.0	<1.0	<50	<50	4.2	<1.0	<5.0	45	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-23 ^A	W-R2330012-112514-ACN-009	11/25/2014																		
MW-23	W-R2330012-112514-ACN-009	11/25/2014	<25	<1.0	<1.0	<50	<50	5.4	<1.0	<5.0	89	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-23 ^A	W-R2330017-032015-ACN-028	3/20/2015																		
MW-23	W-R2330017-032015-ACN-028	3/20/2015	<25	<1.0	<1.0	<50	<50	2.7	<1.0	<5.0	45	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-23 ^A	W-R2330017-111815-JPM-016	11/18/2015																		
MW-23	W-R2330017-111815-JPM-016	11/18/2015	<25	<1.0	<1.0	<50	<50	4.1	<1.0	<5.0	72	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-23 ^A	W-R2330021-042016-JPM-020	4/20/2016																		
MW-23	W-R2330021-042016-JPM-020	4/20/2016	<25	<1.0	<1.0	<50	<50	2.5	<1.0	<5.0	36	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-23 ^A	W-R2330021-110216-JPM-016	11/2/2016																		
MW-23	W-R2330021-110216-JPM-016	11/2/2016	<25	<1.0	<1.0	<50	3.2 J	1.2	<1.0	<5.0	18	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-23 ^A	W-R2330022-042717-DMS-024	4/27/2017																		
MW-23	W-R2330022-042717-DMS-024	4/27/2017	<25	<1.0	<1.0	<50	2.2 J	2.7	<1.0	<5.0	43	<5.0	<1.0	0.60 J	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NA	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-21 ^A	W-R2330021-042016-JPM-015	4/20/2016																		
MW-21	W-R2330012-042016-JPM-015	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330021-110316-AEM-021	11/3/2016																		
MW-21	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-042717-DMS-021	4/27/2017																		
MW-21	W-R2330022-042717-DMS-021	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-102517-DMS-015	10/25/2017																		
MW-21	W-R2330022-102517-DMS-015	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330024-042418-JPM-013	4/24/2018																		
MW-21	W-R2330024-042418-JPM-013	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330012-051914-ACN-022	5/19/2014																		
MW-22	W-R2330012-051914-ACN-022	5/19/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	1.5 J	<10	<4.0	<5.0	1.2 J	<5.0
MW-22 ^A	W-R2330012-112514-ACN-007	11/25/2014																		
MW-22	W-R2330012-112514-ACN-007	11/25/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.7 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-22 ^A (DUP)	W-R2330012-112514-ACN-008	11/25/2014																		
MW-22 (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.7 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-22 ^A	W-R2330017-032015-JCH-027	3/20/2015																		
MW-22	W-R2330017-032015-JCH-027	3/20/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.0 J	<5.0	<10	<10	<4.0	<5.0	<5.0
MW-22 ^A	W-R2330017-111815-JPM-014	11/18/2015																		
MW-22	W-R2330017-111815-JPM-014	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-042016-JPM-019	4/20/2016																		
MW-22	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-110216-JPM-017	11/2/2016																		
MW-22	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-042717-DMS-023	4/27/2017																		
MW-22	W-R2330022-042717-DMS-023	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-102517-AFB-014	10/25/2017																		
MW-22	W-R2330022-102517-AFB-014	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R220024-042418-JPM-015	4/24/2018																		
MW-22	W-R220024-042418-JPM-015	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330012-051914-ACN-023	5/19/2014																		
MW-23	W-R2330012-051914-ACN-023	5/19/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-23 ^A (DUP)	W-R2330012-051914-ACN-024	5/19/2014																		
MW-23 (DUP)	W-R2330012-051914-ACN-024	5/19/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	1.1 J	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-23 ^A	W-R2330012-112514-ACN-009	11/25/2014																		
MW-23	W-R2330012-112514-ACN-009	11/25/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-23 ^A	W-R2330017-032015-ACN-028	3/20/2015																		
MW-23	W-R2330017-032015-ACN-028	3/20/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.0	<5.0	1.6 J	<10	<4.0	<5.0	<5.0
MW-23 ^A	W-R2330017-111815-JPM-016	11/18/2015																		
MW-23	W-R2330017-111815-JPM-016	11/18/2015	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330021-042016-JPM-020	4/20/2016																		
MW-23	W-R2330021-042016-JPM-020	4/20/2016	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330021-110216-JPM-016	11/2/2016																		
MW-23	W-R2330021-110216-JPM-016	11/2/2016	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330022-042717-DMS-024	4/27/2017																		
MW-23	W-R2330022-042717-DMS-024	4/27/2017	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-21 ^A	W-R2330021-042016-JPM-015	4/20/2016								190	NS	NS	NS	NS	NS	NS	NS	NS		320
MW-21	W-R2330012-042016-JPM-015	4/20/2016	NS	NS	NS	NS	NS	NS	NS	20 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 J
MW-21 ^A	W-R2330021-110316-AEM-021	11/3/2016								16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	36 J
MW-21	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	NS	NS	NS	NS	NS	5.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14 J
MW-21 ^A	W-R2330022-042717-DMS-021	4/27/2017								120	NS	NS	NS	NS	NS	NS	NS	NS	NS	220
MW-21	W-R2330022-042717-DMS-021	4/27/2017	NS	NS	NS	NS	NS	NS	NS	6.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	36 J
MW-21 ^A	W-R2330022-102517-DMS-015	10/25/2017								140	NS	NS	NS	NS	NS	NS	NS	NS	NS	200
MW-21	W-R2330022-102517-DMS-015	10/25/2017	NS	NS	NS	NS	NS	NS	NS	5.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	15 J
MW-21	W-R2330024-042418-JPM-013	4/24/2018								270	NS	NS	NS	NS	NS	NS	NS	NS	NS	670
MW-21	W-R2330024-042418-JPM-013	4/24/2018	NS	NS	NS	NS	NS	NS	NS	8.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	190
MW-22 ^A	W-R2330012-051914-ACN-022	5/19/2014								8,100	0.78 J	14	540	<1.0	0.56 J	14	9.5 J	31		21,000
MW-22	W-R2330012-051914-ACN-022	5/19/2014	0.88 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.24 J	4.3 J	440	<1.0	<1.0	<10	2.2 J	0.64 J	1.3 J	3,100
MW-22 ^A	W-R2330012-112514-ACN-007	11/25/2014								200	0.18 J	16	1,300	<1.0	0.11 J	1.1 J	1.9 J	1.3 J		11,000
MW-22	W-R2330012-112514-ACN-007	11/25/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	12 J	0.22 J	15	1,300	<1.0	<1.0	0.70 J	1.7 J	<4.0	<5.0	11,000
MW-22 ^A (DUP)	W-R2330012-112514-ACN-008	11/25/2014								160	<2.0	16	1,300	<1.0	0.095 J	0.80 J	1.7 J	1.1 J		11,000
MW-22 (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	14 J	0.11 J	16	1,300	<1.0	<1.0	0.61 J	1.7 J	0.37 J	17	11,000
MW-22 ^A	W-R2330017-032015-JCH-027	3/20/2015								340	0.17 J	14	1,300	<1.0	<1.0	1.3 J	2.2 J	4.0		13,000
MW-22	W-R2330017-032015-JCH-027	3/20/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.1 J	0.23 J	13	1,400	<1.0	<1.0	0.54 J	2.1 J	1.8 J	6.0	12,000
MW-22 ^A	W-R2330017-111815-JPM-014	11/18/2015								95	NS	NS	NS	NS	NS	NS	NS	NS		7,000
MW-22	W-R2330017-111815-JPM-014	11/18/2015	NS	NS	NS	NS	NS	NS	NS	2.0 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,400
MW-22 ^A	W-R2330021-042016-JPM-019	4/20/2016								37 J	NS	NS	NS	NS	NS	NS	NS	NS		6,500
MW-22	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	NS	NS	NS	NS	NS	41 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-22 ^A	W-R2330021-110216-JPM-017	11/2/2016								58	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-22	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-22 ^A	W-R2330022-042717-DMS-023	4/27/2017								17 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,500
MW-22	W-R2330022-042717-DMS-023	4/27/2017	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,500
MW-22 ^A	W-R2330022-102517-AFB-014	10/25/2017								41	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000
MW-22	W-R2330022-102517-AFB-014	10/25/2017	NS	NS	NS	NS	NS	NS	NS	8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-22 ^A	W-R220024-042418-JPM-015	4/24/2018								18	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,400
MW-22	W-R220024-042418-JPM-015	4/24/2018	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,000
MW-23 ^A	W-R2330012-051914-ACN-023	5/19/2014								560	0.15 J	13	610	<1.0	<1.0	1.7 J	2.2 J	2.1 J		13,000
MW-23	W-R2330012-051914-ACN-023	5/19/2014	0.85 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	7.7 J	0.089 J	12	560	<1.0	<1.0	0.76 J	1.9 J	<4.0	<0.005	12,000
MW-23 ^A (DUP)	W-R2330012-051914-ACN-024	5/19/2014								590	0.11 J	12	580	<1.0	<1.0	1.7 J	2.1 J	2.2 J		13,000
MW-23 (DUP)	W-R2330012-051914-ACN-024	5/19/2014	0.91 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	8.5 J	0.076 J	12	550	<1.0	<1.0	0.70 J	1.8 J	<4.0	<0.005	11,000
MW-23 ^A	W-R2330012-112514-ACN-009	11/25/2014								6,700	1.1 J	46	1,300	0.31 J	0.68 J	18	9.3 J	37		35,000
MW-23	W-R2330012-112514-ACN-009	11/25/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	21 J	0.20 J	26	1,100	<1.0	0.037 J	1.3 J	2.4 J	0.18 J	<5.0	18,000
MW-23 ^A	W-R2330017-032015-ACN-028	3/20/2015								650	0.20 J	17	940	<1.0	<1.0	2.2 J	3.1 J	3.7 J		17,000
MW-23	W-R2330017-032015-ACN-028	3/20/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.7 J	0.21 J	16	860	<1.0	<1.0	0.96 J	2.8 J	2.3 J	<5.0	16,000
MW-23 ^A	W-R2330017-111815-JPM-016	11/18/2015								180	NS	NS	NS	NS	NS	NS	NS	NS		14,000
MW-23	W-R2330017-111815-JPM-016	11/18/2015	NS	NS	NS	NS	NS	NS	NS	5.0 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000
MW-23 ^A	W-R2330021-042016-JPM-020	4/20/2016								190	NS	NS	NS	NS	NS	NS	NS	NS		15,000
MW-23	W-R2330021-042016-JPM-020	4/20/2016	NS	NS	NS	NS	NS	NS	NS	9.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000
MW-23 ^A	W-R2330021-110216-JPM-016	11/2/2016								570	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000
MW-23	W-R2330021-110216-JPM-016	11/2/2016	NS	NS	NS	NS	NS	NS	NS	11 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,000
MW-23 ^A	W-R2330022-042717-DMS-024	4/27/2017								110	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000
MW-23	W-R2330022-042717-DMS-024	4/27/2017	NS	NS	NS	NS	NS	NS	NS	4.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,00

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-9}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-21 ^A	W-R2330021-042016-JPM-015	4/20/2016	NS	NS	4.6 J	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330012-042016-JPM-015	4/20/2016	NS	NS	3.8 J	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	35 J	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	36 J	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-042717-DMS-021	4/27/2017	NS	19,000	33 J	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330022-042717-DMS-021	4/27/2017	NS	20,000	24 J	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-102517-DMS-015	10/25/2017	NS		46	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330022-102517-DMS-015	10/25/2017	NS		43	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330024-042418-JPM-013	4/24/2018	NS	NS	150	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330024-042418-JPM-013	4/24/2018	NS	NS	120	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330012-051914-ACN-022	5/19/2014	19	<50	730	<0.2	23	2.7 J	<0.20	<2.0	24	81
MW-22	W-R2330012-051914-ACN-022	5/19/2014	0.079 J	<50	360	<0.2	3.2 J	<5.0	<0.20	<2.0	0.64 J	2.2 J
MW-22 ^A	W-R2330012-112514-ACN-007	11/25/2014	0.62 J	<50	250	<0.2	4.4 J	<5.0	<0.20	<2.0	1.1 J	6.8 J
MW-22	W-R2330012-112514-ACN-007	11/25/2014	<3.0	<50	240	<0.2	3.7 J	<5.0	<0.20	<2.0	<4.0	23 J
MW-22 ^A (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<3.0	<50	270	<0.2	4.4 J	<5.0	<0.20	<2.0	0.75 J	5.6 J
MW-22 (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<3.0	<50	260	<0.2	3.8 J	<5.0	<0.20	<2.0	<4.0	4.6 J
MW-22 ^A	W-R2330017-032015-JCH-027	3/20/2015	2.3 J	<50	270	<0.2	6.5 J	<5.0	<0.20	<2.0	1.5 J	8.6 J
MW-22	W-R2330017-032015-JCH-027	3/20/2015	<3.0	<50	250	<0.2	5.9 J	<5.0	<0.20	<2.0	0.71 J	5.9 J
MW-22 ^A	W-R2330017-111815-JPM-014	11/18/2015	NS	120,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330017-111815-JPM-014	11/18/2015	NS	120,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	88	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	82	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	91	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	91	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-042717-DMS-023	4/27/2017	NS	93,000	140	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330022-042717-DMS-023	4/27/2017	NS	90,000	130	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-102517-AFB-014	10/25/2017	NS	NS	72	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330022-102517-AFB-014	10/25/2017	NS	NS	67	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R220024-042418-JPM-015	4/24/2018	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R220024-042418-JPM-015	4/24/2018	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330012-051914-ACN-023	5/19/2014	1.2 J	<50	180	<0.2	4.4 J	0.92 J	<0.20	<2.0	2.5 J	7.2 J
MW-23	W-R2330012-051914-ACN-023	5/19/2014	0.067 J	<50	160	<0.2	3.3 J	<5.0	<0.20	<2.0	1.1 J	2.2 J
MW-23 ^A (DUP)	W-R2330012-051914-ACN-024	5/19/2014	1.3 J	<50	180	<0.2	4.4 J	0.72 J	<0.20	<2.0	2.6 J	7.3 J
MW-23 (DUP)	W-R2330012-051914-ACN-024	5/19/2014	<3.0	<50	150	<0.2	3.1 J	<5.0	<0.20	<2.0	0.84 J	1.9 J
MW-23 ^A	W-R2330012-112514-ACN-009	11/25/2014	30	<50	310	<0.2	25	2.8 J	0.059 J	<2.0	29	100
MW-23	W-R2330012-112514-ACN-009	11/25/2014	<3.0	<50	78	<0.2	3.8 J	<5.0	<0.20	<2.0	1.5 J	4.5 J
MW-23 ^A	W-R2330017-032015-ACN-028	3/20/2015	2.6 J	<50	120	<0.2	7.4 J	0.76 J	0.023 J	<2.0	3.3 J	9.2 J
MW-23	W-R2330017-032015-ACN-028	3/20/2015	0.82 J	<50	99	<0.2	6.3 J	<5.0	0.020 J	<2.0	1.2 J	4.1 J
MW-23 ^A	W-R2330017-111815-JPM-016	11/18/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330017-111815-JPM-016	11/18/2015	NS	130,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330021-042016-JPM-020	4/20/2016	NS	NS	89	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330021-042016-JPM-020	4/20/2016	NS	NS	99	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330021-110216-JPM-016	11/2/2016	NS	NS	100	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330021-110216-JPM-016	11/2/2016	NS	NS	92	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330022-042717-DMS-024	4/27/2017	NS	110,000	85	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330022-042717-DMS-024	4/27/2017	NS	110,000	80	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L	Volatile Organic Compounds (VOCs)																			
	2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene		
	Non-residential Drinking Water Criteria (II)	38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)	
	Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	
	Ground Water Surface Water Interface Criteria (GSI) (III)	2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270	
	GSI Final Acute Value (FAV)	40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	
	Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)	
	Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)	18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000	
	Water Solubility (VII)	2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05	
	Flammability & Explosivity Screening Level (VIII)	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	
ID	SAMPLE ID	SAMPLE DATE	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
MW-23 ^A	W-R2330022-102517-DMS-016	10/25/2017																		
MW-23	W-R2330022-102517-DMS-016	10/25/2017	<25	<1.0	<1.0	<50	<50	4.0	<1.0	<5.0	65	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-23 ^A	W-R2330024-042418-DMS-014	4/24/2018																		
MW-23	W-R2330024-042418-DMS-014	4/24/2018	<25	<1.0	<1.0	<50	<50	2.1	<1.0	<5.0	42	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24 ^A	W-R2330012-052014-ACN-030	5/20/2014																		
MW-24	W-R2330012-052014-ACN-030	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24 ^A	W-R2330012-112614-JCH-013	11/26/2014																		
MW-24	W-R2330012-112614-JCH-013	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24 ^A	W-R2330017-032015-ACN-026	3/20/2015																		
MW-24	W-R2330017-032015-ACN-026	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24 ^A	W-R2330017-111815-AFB-015	11/18/2015																		
MW-24	W-R2330017-111815-AFB-015	11/18/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24 ^A	W-R2330021-042116-AFB-018	4/21/2016																		
MW-24	W-R2330021-042116-AFB-018	4/21/2016	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24 ^A	W-R2330021-110316-JPM-022	11/3/2016																		
MW-24	W-R2330021-110316-JPM-022	11/3/2016	<25	<1.0	<1.0	<50	1.6 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24 ^A	W-R2330022-042717-DMS-027	4/27/2017																		
MW-24	W-R2330022-042717-DMS-027	4/27/2017	<25	<1.0	<1.0	<50	2.8 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24 ^A	W-R2330022-102517-AFB-017	10/25/2017																		
MW-24	W-R2330022-102517-AFB-017	10/25/2017	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-24	W-R2330024-042418-DMS-009	4/24/2018																		
MW-24	W-R2330024-042418-DMS-009	4/24/2018	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-25 ^A	W-R2330012-051914-ACN-025	5/19/2014																		
MW-25	W-R2330012-051914-ACN-025	5/19/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-25 ^A	W-R2330012-112614-JCH-012	11/26/2014																		
MW-25	W-R2330012-112614-JCH-012	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-25 ^A	W-R2330017-032015-JCH-025	3/20/2015																		
MW-25	W-R2330017-032015-JCH-025	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-25 ^A	W-R2330017-111815-AFB-011	11/18/2015																		
MW-25	W-R2330017-111815-AFB-011	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-042016-AEP-017	4/20/2016																		
MW-25	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-110316-AEM-023	11/3/2016																		
MW-25	W-R2330021-110316-AEM-023	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-042717-DMS-026	4/27/2017																		
MW-25	W-R2330022-042717-DMS-026	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-102817-AFB-037	10/28/2017																		
MW-25	W-R2330022-102817-AFB-037	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330024-042418-DMS-010	4/24/2018																		
MW-25	W-R2330024-042418-DMS-010	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330012-051914-ACN-020	5/19/2014																		
MW-26	W-R2330012-051914-ACN-020	5/19/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-26 ^A	W-R2330012-112614-JCH-011	11/26/2014																		
MW-26	W-R2330012-112614-JCH-011	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-26 ^A	W-R2330017-032015-ACN-024	3/20/2015																		
MW-26	W-R2330017-032015-ACN-024	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIS}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-23 ^A	W-R2330022-102517-DMS-016	10/25/2017																		
MW-23	W-R2330022-102517-DMS-016	10/25/2017	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330024-042418-DMS-014	4/24/2018																		
MW-23	W-R2330024-042418-DMS-014	4/24/2018	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330012-052014-ACN-030	5/20/2014																		
MW-24	W-R2330012-052014-ACN-030	5/20/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-24 ^A	W-R2330012-112614-JCH-013	11/26/2014																		
MW-24	W-R2330012-112614-JCH-013	11/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-24 ^A	W-R2330017-032015-ACN-026	3/20/2015																		
MW-24	W-R2330017-032015-ACN-026	3/20/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
MW-24 ^A	W-R2330017-111815-AFB-015	11/18/2015																		
MW-24	W-R2330017-111815-AFB-015	11/18/2015	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330021-042116-AFB-018	4/21/2016																		
MW-24	W-R2330021-042116-AFB-018	4/21/2016	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330021-110316-JPM-022	11/3/2016																		
MW-24	W-R2330021-110316-JPM-022	11/3/2016	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330022-042717-DMS-027	4/27/2017																		
MW-24	W-R2330022-042717-DMS-027	4/27/2017	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330022-102517-AFB-017	10/25/2017																		
MW-24	W-R2330022-102517-AFB-017	10/25/2017	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330024-042418-DMS-009	4/24/2018																		
MW-24	W-R2330024-042418-DMS-009	4/24/2018	<3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330012-051914-ACN-025	5/19/2014																		
MW-25	W-R2330012-051914-ACN-025	5/19/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-25 ^A	W-R2330012-112614-JCH-012	11/26/2014																		
MW-25	W-R2330012-112614-JCH-012	11/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-25 ^A	W-R2330017-032015-JCH-025	3/20/2015																		
MW-25	W-R2330017-032015-JCH-025	3/20/2015	<3.0	<10	<10	0.40 J	<10	<10	<5.0	<10	<5.0	0.30 J	<5.0	<10	<5.0	<10	<10	0.38 J	<5.0	<5.0
MW-25 ^A	W-R2330017-111815-AFB-011	11/18/2015																		
MW-25	W-R2330017-111815-AFB-011	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-042016-AEP-017	4/20/2016																		
MW-25	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-110316-AEM-023	11/3/2016																		
MW-25	W-R2330021-110316-AEM-023	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-042717-DMS-026	4/27/2017																		
MW-25	W-R2330022-042717-DMS-026	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-102817-AFB-037	10/28/2017																		
MW-25	W-R2330022-102817-AFB-037	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330024-042418-DMS-010	4/24/2018																		
MW-25	W-R2330024-042418-DMS-010	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330012-051914-ACN-020	5/19/2014																		
MW-26	W-R2330012-051914-ACN-020	5/19/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-26 ^A	W-R2330012-112614-JCH-011	11/26/2014																		
MW-26	W-R2330012-112614-JCH-011	11/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-26 ^A	W-R2330017-032015-ACN-024	3/20/2015																		
MW-26	W-R2330017-032015-ACN-024	3/20/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{V,im}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-23 ^A	W-R2330022-102517-DMS-016	10/25/2017								65	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000
MW-23	W-R2330022-102517-DMS-016	10/25/2017	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000
MW-23 ^A	W-R2330024-042418-DMS-014	4/24/2018								190	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000
MW-23	W-R2330024-042418-DMS-014	4/24/2018	NS	NS	NS	NS	NS	NS	NS	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000
MW-24 ^A	W-R2330012-052014-ACN-030	5/20/2014								310	<2.0	5.7	170	<1.0	<1.0	0.57 J	0.50 J	1.6 J		5,300
MW-24	W-R2330012-052014-ACN-030	5/20/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	4.8 J	0.074 J	5.2	160	<1.0	<1.0	<10	0.76 J	0.75 J	<0.005	4,700
MW-24 ^A	W-R2330012-112614-JCH-013	11/26/2014								12 J	<2.0	4.6 J	130	<1.0	0.051 J	0.13 J	0.25 J	<4.0		2,500
MW-24	W-R2330012-112614-JCH-013	11/26/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	<50	<2.0	4.9 J	130	<1.0	<1.0	<10	0.19 J	<4.0	<5.0	2,100
MW-24 ^A	W-R2330017-032015-ACN-026	3/20/2015								84	<2.0	7.4	140	<1.0	0.24 J	0.68 J	0.56 J	1.8 J		5,900
MW-24	W-R2330017-032015-ACN-026	3/20/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	3.8 J	0.19 J	3.2 J	130	<1.0	0.066 J	<10	0.57 J	1.3 J	<5.0	2,600
MW-24 ^A	W-R2330017-111815-AFB-015	11/18/2015								260	NS	NS	NS	NS	NS	NS	NS	NS		5,900
MW-24	W-R2330017-111815-AFB-015	11/18/2015	NS	NS	NS	NS	NS	NS	NS	7.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,700
MW-24 ^A	W-R2330021-042116-AFB-018	4/21/2016								170	NS	NS	NS	NS	NS	NS	NS	NS		4,900
MW-24	W-R2330021-042116-AFB-018	4/21/2016	NS	NS	NS	NS	NS	NS	NS	39 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,800
MW-24 ^A	W-R2330021-110316-JPM-022	11/3/2016								730	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000
MW-24	W-R2330021-110316-JPM-022	11/3/2016	NS	NS	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,400
MW-24 ^A	W-R2330022-042717-DMS-027	4/27/2017								19 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,700
MW-24	W-R2330022-042717-DMS-027	4/27/2017	NS	NS	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400
MW-24 ^A	W-R2330022-102517-AFB-017	10/25/2017								27	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,000
MW-24	W-R2330022-102517-AFB-017	10/25/2017	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,600
MW-24	W-R2330024-042418-DMS-009	4/24/2018								13	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400
MW-24	W-R2330024-042418-DMS-009	4/24/2018	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,600
MW-25 ^A	W-R2330012-051914-ACN-025	5/19/2014								2,600	0.24 J	1.9 J	83 J	<1.0	<1.0	3.8 J	1.5 J	7.4		3,800
MW-25	W-R2330012-051914-ACN-025	5/19/2014	0.80 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	51	0.21 J	0.63 J	68 J	<1.0	<1.0	<10	0.59 J	3.7 J	<0.005	110 J
MW-25 ^A	W-R2330012-112614-JCH-012	11/26/2014								400	0.18 J	0.85 J	72 J	<1.0	0.11 J	1.3 J	0.53 J	3.2 J		570
MW-25	W-R2330012-112614-JCH-012	11/26/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	5.9 J	0.15 J	<5.0	66 J	<1.0	0.071 J	<10	0.33 J	2.9 J	<5.0	16 J
MW-25 ^A	W-R2330017-032015-JCH-025	3/20/2015								450	0.22 J	0.88 J	72 J	<1.0	0.060 J	0.84 J	0.77 J	4.2		620
MW-25	W-R2330017-032015-JCH-025	3/20/2015	<5.0	<1.0	0.13 J	0.71 J	<2.0	<5.0	<5.0	12 J	0.28 J	<5.0	67 J	<1.0	0.061 J	<10	0.63 J	6.2	<5.0	28 J
MW-25 ^A	W-R2330017-111815-AFB-011	11/18/2015								6,000	NS	NS	NS	NS	NS	NS	NS	NS		14,000
MW-25	W-R2330017-111815-AFB-011	11/18/2015	NS	NS	NS	NS	NS	NS	NS	46 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	63 J
MW-25 ^A	W-R2330021-042016-AEP-017	4/20/2016								1,400	NS	NS	NS	NS	NS	NS	NS	NS		2,400
MW-25	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	NS	NS	NS	NS	NS	24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	180 J
MW-25 ^A	W-R2330021-110316-AEM-023	11/3/2016								250	NS	NS	NS	NS	NS	NS	NS	NS	NS	490
MW-25	W-R2330021-110316-AEM-023	11/3/2016	NS	NS	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	13 J
MW-25 ^A	W-R2330022-042717-DMS-026	4/27/2017								720	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,500
MW-25	W-R2330022-042717-DMS-026	4/27/2017	NS	NS	NS	NS	NS	NS	NS	18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	26 J
MW-25 ^A	W-R2330022-102817-AFB-037	10/28/2017								190	NS	NS	NS	NS	NS	NS	NS	NS	NS	350
MW-25	W-R2330022-102817-AFB-037	10/28/2017	NS	NS	NS	NS	NS	NS	NS	7.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11 J
MW-25	W-R2330024-042418-DMS-010	4/24/2018								1,200	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,700
MW-25	W-R2330024-042418-DMS-010	4/24/2018	NS	NS	NS	NS	NS	NS	NS	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	26 J
MW-26 ^A	W-R2330012-051914-ACN-020	5/19/2014								900	0.37 J	2.7 J	37 J	<1.0	<1.0	1.8 J	1.2 J	4.6		1,900
MW-26	W-R2330012-051914-ACN-020	5/19/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	36 J	0.39 J	1.5 J	34 J	<1.0	<1.0	<10	1.1 J	1.0 J	<0.005	55 J
MW-26 ^A	W-R2330012-112614-JCH-011	11/26/2014								210	0.22 J	<5.0	25 J	<1.0	0.13 J	0.52 J	0.65 J	2.0 J		360
MW-26	W-R2330012-112614-JCH-011	11/26/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	8.4 J	0.16 J	<5.0	24 J	<1.0	0.079 J	<10	0.54 J	1.0 J	<5.0	<200
MW-26 ^A	W-R2330017-032015-ACN-024	3/20/2015								2,200	0.33 J	3.5 J	34 J	<1.0	0.16 J	4.5 J	2.1 J	7.8		4,300
MW-26	W-R2330017-032015-ACN-024	3/20/2015	<5.0																	

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-23 ^A	W-R2330022-102517-DMS-016	10/25/2017	NS	NS	90	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330022-102517-DMS-016	10/25/2017	NS	NS	91	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330024-042418-DMS-014	4/24/2018	NS	NS	79	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330024-042418-DMS-014	4/24/2018	NS	NS	73	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330012-052014-ACN-030	5/20/2014	0.38 J	<50	640	<0.2	3.8 J	0.69 J	<0.20	<2.0	0.69 J	4.9 J
MW-24	W-R2330012-052014-ACN-030	5/20/2014	<3.0	<50	620	<0.2	2.9 J	<5.0	<0.20	<2.0	<4.0	1.7 J
MW-24 ^A	W-R2330012-112614-JCH-013	11/26/2014	<3.0	<50	690	<0.2	1.7 J	<5.0	<0.20	<2.0	<4.0	4.7 J
MW-24	W-R2330012-112614-JCH-013	11/26/2014	<3.0	<50	670	<0.2	0.93 J	<5.0	<0.20	<2.0	<4.0	5.4 J
MW-24 ^A	W-R2330017-032015-ACN-026	3/20/2015	0.47 J	<50	740	<0.2	3.1 J	<5.0	<0.20	<2.0	<4.0	4.6 J
MW-24	W-R2330017-032015-ACN-026	3/20/2015	0.36 J	<50	700	<0.2	2.8 J	<5.0	<0.20	<2.0	<4.0	<50
MW-24 ^A	W-R2330017-111815-AFB-015	11/18/2015	NS	48,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330017-111815-AFB-015	11/18/2015	NS	47,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330021-042116-AFB-018	4/21/2016	NS	NS	840	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330021-042116-AFB-018	4/21/2016	NS	NS	920	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330021-110316-JPM-022	11/3/2016	NS	NS	820	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330021-110316-JPM-022	11/3/2016	NS	NS	760	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330022-042717-DMS-027	4/27/2017	NS	50,000	990	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330022-042717-DMS-027	4/27/2017	NS	49,000	970	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330022-102517-AFB-017	10/25/2017	NS	NS	700	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330022-102517-AFB-017	10/25/2017	NS	NS	710	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330024-042418-DMS-009	4/24/2018	NS	NS	1000	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330024-042418-DMS-009	4/24/2018	NS	NS	960	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330012-051914-ACN-025	5/19/2014	2.5 J	<50	190	<0.2	6.3 J	2.4 J	<0.20	<2.0	6.8	12 J
MW-25	W-R2330012-051914-ACN-025	5/19/2014	0.25 J	<50	150	<0.2	2.3 J	1.7 J	<0.20	<2.0	0.35 J	2.2 J
MW-25 ^A	W-R2330012-112614-JCH-012	11/26/2014	0.59 J	<50	340	<0.2	6.5 J	1.1 J	<0.20	<2.0	1.4 J	6.1 J
MW-25	W-R2330012-112614-JCH-012	11/26/2014	<3.0	<50	250	<0.2	4.4 J	<5.0	<0.20	<2.0	<4.0	4.4 J
MW-25 ^A	W-R2330017-032015-JCH-025	3/20/2015	0.57 J	<50	310	<0.2	4.9 J	1.2 J	<0.20	<2.0	1.5 J	6.3 J
MW-25	W-R2330017-032015-JCH-025	3/20/2015	0.37 J	<50	110	<0.2	4.8 J	1.1 J	<0.20	<2.0	<4.0	8.4 J
MW-25 ^A	W-R2330017-111815-AFB-011	11/18/2015	NS	30,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330017-111815-AFB-011	11/18/2015	NS	16,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	990	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	68	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-110316-AEM-023	11/3/2016	NS	NS	370	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330021-110316-AEM-023	11/3/2016	NS	NS	230	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-042717-DMS-026	4/27/2017	NS	19,000	580	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330022-042717-DMS-026	4/27/2017	NS	18,000	95	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-102817-AFB-037	10/28/2017	NS	NS	570	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330022-102817-AFB-037	10/28/2017	NS	NS	320	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330024-042418-DMS-010	4/24/2018	NS	NS	1,100	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330024-042418-DMS-010	4/24/2018	NS	NS	45	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330012-051914-ACN-020	5/19/2014	1.1 J	<50	110	<0.2	4.3 J	0.9 J	<0.20	<2.0	3.1 J	7.3 J
MW-26	W-R2330012-051914-ACN-020	5/19/2014	<3.0	<50	86	<0.2	0.23 J	<5.0	<0.20	<2.0	0.41 J	1.6 J
MW-26 ^A	W-R2330012-112614-JCH-011	11/26/2014	<3.0	<50	69	<0.2	2.7 J	0.86 J	<0.20	<2.0	0.98 J	4.5 J
MW-26	W-R2330012-112614-JCH-011	11/26/2014	<3.0	<50	65	<0.2	2.4 J	<5.0	<0.20	<2.0	<4.0	3.0 J
MW-26 ^A	W-R2330017-032015-ACN-024	3/20/2015	3.4	<50	100	<0.2	7.5 J	<5.0	<0.20	<2.0	7.0	16 J
MW-26	W-R2330017-032015-ACN-024	3/20/2015	<3.0	<50	25 J	<0.2	2.9 J	<5.0	<0.20	<2.0	<4.0	<50

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{V,in}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-26 ^A	W-R2330017-111815-AFB-012	11/18/2015																		
MW-26	W-R2330017-111815-AFB-012	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-042016-AEP-016	4/20/2016																		
MW-26	W-R2330021-042016-AEP-016	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-110316-JPM-024	11/3/2016																		
MW-26	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-042717-DMS-025	4/27/2017																		
MW-26	W-R2330022-042717-DMS-025	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-102817-AFB-038	10/28/2017																		
MW-26	W-R2330022-102817-AFB-038	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330024-042418-DMS-012	4/24/2018																		
MW-26	W-R2330024-042418-DMS-012	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330012-091514-ACN-002	9/15/2014																		
MW-27	W-R2330012-091514-ACN-002	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS
MW-27 ^A	W-R2330012-121114-JCH-018	12/1/2014																		
MW-27	W-R2330012-121114-JCH-018	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-27 ^A	NS	NS																		
MW-27	W-R2330017-031915-JCH-016	3/19/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-27 ^A	W-R2330017-111915-JPM-020	11/19/2015																		
MW-27	W-R2330017-111915-JPM-020	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330021-042216-AFB-031	4/22/2016																		
MW-27	NS	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330021-110416-JPM-033	11/4/2016																		
MW-27	W-R2330021-110416-JPM-033	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A (DUP)	W-R2330021-110416-JPM-034	11/4/2016																		
MW-27 (DUP)	W-R2330021-110416-JPM-034	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-042817-AFB-031	4/28/2017																		
MW-27	W-R2330022-042817-AFB-031	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-102417-DMS-009	10/24/2017																		
MW-27	W-R2330022-102417-DMS-009	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330024-042518-DMS-024	4/25/2018																		
MW-27	W-R2330024-042518-DMS-024	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330012-020515-ACN-001	2/5/2015																		
MW-29	W-R2330012-020515-ACN-001	2/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-29 ^A (DUP)	W-R2330012-020515-ACN-002	2/5/2015																		
MW-29 (DUP)	W-R2330012-020515-ACN-002	2/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-29 ^A	W-R2330017-031615-JCH-001	3/16/2015																		
MW-29	W-R2330017-031615-JCH-001	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-29 ^A	W-R2330017-112015-AFB-028	11/20/2015																		
MW-29	W-R2330017-112015-AFB-028	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-042216-AFB-033	4/22/2016																		
MW-29	W-R2330021-042216-AFB-033	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-110416-AEM-031	11/4/2016																		
MW-29	W-R2330021-110416-AEM-031	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330022-042517-JPM-006	4/25/2017																		
MW-29	W-R2330022-042517-JPM-006	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NA	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-26 ^A	W-R2330017-111815-AFB-012	11/18/2015																		
MW-26	W-R2330017-111815-AFB-012	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-042016-AEP-016	4/20/2016																		
MW-26	W-R2330021-042016-AEP-016	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-110316-JPM-024	11/3/2016																		
MW-26	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-042717-DMS-025	4/27/2017																		
MW-26	W-R2330022-042717-DMS-025	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-102817-AFB-038	10/28/2017																		
MW-26	W-R2330022-102817-AFB-038	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330024-042418-DMS-012	4/24/2018																		
MW-26	W-R2330024-042418-DMS-012	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330012-091514-ACN-002	9/15/2014																		
MW-27	W-R2330012-091514-ACN-002	9/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<5.0	NS	NS
MW-27 ^A	W-R2330012-121114-JCH-018	12/1/2014																		
MW-27	W-R2330012-121114-JCH-018	12/1/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-27 ^A	NS	NS																		
MW-27	W-R2330017-031915-JCH-016	3/19/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-27 ^A	W-R2330017-111915-JPM-020	11/19/2015																		
MW-27	W-R2330017-111915-JPM-020	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330021-042216-AFB-031	4/22/2016																		
MW-27	NS	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330021-110416-JPM-033	11/4/2016																		
MW-27	W-R2330021-110416-JPM-033	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A (DUP)	W-R2330021-110416-JPM-034	11/4/2016																		
MW-27 (DUP)	W-R2330021-110416-JPM-034	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-042817-AFB-031	4/28/2017																		
MW-27	W-R2330022-042817-AFB-031	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-102417-DMS-009	10/24/2017																		
MW-27	W-R2330022-102417-DMS-009	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330024-042518-DMS-024	4/25/2018																		
MW-27	W-R2330024-042518-DMS-024	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330012-020515-ACN-001	2/5/2015																		
MW-29	W-R2330012-020515-ACN-001	2/5/2015	<3.0	<11	<11	<5.3	<11	<10	<5.3	<11	<5.3	<5.3	<5.3	<11	<5.3	<11	<4.2	<5.0	<5.3	<5.3
MW-29 ^A (DUP)	W-R2330012-020515-ACN-002	2/5/2015																		
MW-29 (DUP)	W-R2330012-020515-ACN-002	2/5/2015	<3.0	<11	<11	<5.3	<11	<10	<5.3	<11	<5.3	<5.3	<5.3	<11	<5.3	<11	<4.2	<5.0	<5.3	<5.3
MW-29 ^A	W-R2330017-031615-JCH-001	3/16/2015																		
MW-29	W-R2330017-031615-JCH-001	3/16/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-29 ^A	W-R2330017-112015-AFB-028	11/20/2015																		
MW-29	W-R2330017-112015-AFB-028	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-042216-AFB-033	4/22/2016																		
MW-29	W-R2330021-042216-AFB-033	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-110416-AEM-031	11/4/2016																		
MW-29	W-R2330021-110416-AEM-031	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330022-042517-JPM-006	4/25/2017																		
MW-29	W-R2330022-042517-JPM-006	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{V,im}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-26 ^A	W-R2330017-111815-AFB-012	11/18/2015								910	NS	NS	NS	NS	NS	NS	NS			2,300
MW-26	W-R2330017-111815-AFB-012	11/18/2015	NS	NS	NS	NS	NS	NS	NS	9.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	19 J
MW-26 ^A	W-R2330021-042016-AEP-016	4/20/2016								1,200	NS	NS	NS	NS	NS	NS	NS			2,100
MW-26	W-R2330021-042016-AEP-016	4/20/2016	NS	NS	NS	NS	NS	NS	NS	59	NS	NS	NS	NS	NS	NS	NS	NS	NS	160 J
MW-26 ^A	W-R2330021-110316-JPM-024	11/3/2016								500	NS	NS	NS	NS	NS	NS	NS	NS	NS	910
MW-26	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	NS	NS	NS	NS	NS	150	NS	NS	NS	NS	NS	NS	NS	NS	NS	310
MW-26 ^A	W-R2330022-042717-DMS-025	4/27/2017								290	NS	NS	NS	NS	NS	NS	NS	NS	NS	790
MW-26	W-R2330022-042717-DMS-025	4/27/2017	NS	NS	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	23 J
MW-26 ^A	W-R2330022-102817-AFB-038	10/28/2017								250	NS	NS	NS	NS	NS	NS	NS	NS	NS	480
MW-26	W-R2330022-102817-AFB-038	10/28/2017	NS	NS	NS	NS	NS	NS	NS	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	21 J
MW-26	W-R2330024-042418-DMS-012	4/24/2018								290	NS	NS	NS	NS	NS	NS	NS	NS	NS	470
MW-26	W-R2330024-042418-DMS-012	4/24/2018	NS	NS	NS	NS	NS	NS	NS	14	NS	NS	NS	NS	NS	NS	NS	NS	NS	<80
MW-27 ^A	W-R2330012-091514-ACN-002	9/15/2014								190	0.61 J	4.7 J	240	<1.0	0.097 J	0.69 J	2.4 J	3.7 J		1,700
MW-27	W-R2330012-091514-ACN-002	9/15/2014	NS	NS	NS	NS	NS	NS	NS	5.8 J	0.58 J	4.5 J	240	<1.0	<1.0	<10	2.9 J	1.9 J	NS	1,500
MW-27 ^A	W-R2330012-121114-JCH-018	12/1/2014								460	0.25 J	2.7 J	200	<1.0	0.063 J	1.2 J	2.5 J	4.2		1,900
MW-27	W-R2330012-121114-JCH-018	12/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	32 J	0.18 J	2.2 J	290	<1.0	<1.0	0.22 J	2.1 J	1.4 J	<5.0	2,600
MW-27 ^A	NS	NS								270	0.43 J	0.97 J	210	<1.0	0.13 J	0.76 J	1.9 J	2.3 J		2,200
MW-27	W-R2330017-031915-JCH-016	3/19/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	3.8 J	0.67 J	0.75 J	260	<1.0	0.23 J	0.35 J	2.4 J	1.3 J	<5.0	1,900
MW-27 ^A	W-R2330017-111915-JPM-020	11/19/2015								54	NS	NS	NS	NS	NS	NS	NS	NS		2,400
MW-27	W-R2330017-111915-JPM-020	11/19/2015	NS	NS	NS	NS	NS	NS	NS	2.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,400
MW-27 ^A	W-R2330021-042216-AFB-031	4/22/2016								59	NS	NS	NS	NS	NS	NS	NS	NS		4,700
MW-27	NS	4/22/2016	NS	NS	NS	NS	NS	NS	NS	3.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,100
MW-27 ^A	W-R2330021-110416-JPM-033	11/4/2016								120	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,300
MW-27	W-R2330021-110416-JPM-033	11/4/2016	NS	NS	NS	NS	NS	NS	NS	5.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,000
MW-27 ^A (DUP)	W-R2330021-110416-JPM-034	11/4/2016								110	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,200
MW-27 (DUP)	W-R2330021-110416-JPM-034	11/4/2016	NS	NS	NS	NS	NS	NS	NS	5.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,000
MW-27 ^A	W-R2330022-042817-AFB-031	4/28/2017								71	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,600
MW-27	W-R2330022-042817-AFB-031	4/28/2017	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,000
MW-27 ^A	W-R2330022-102417-DMS-009	10/24/2017								35	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,800
MW-27	W-R2330022-102417-DMS-009	10/24/2017	NS	NS	NS	NS	NS	NS	NS	8.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500
MW-27 ^A	W-R2330024-042518-DMS-024	4/25/2018								170	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,200
MW-27	W-R2330024-042518-DMS-024	4/25/2018	NS	NS	NS	NS	NS	NS	NS	4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,900
MW-29 ^A	W-R2330012-020515-ACN-001	2/5/2015								530	<2.0	2.5 J	200	<1.0	0.046 J	1.3 J	1.4 J	1.6 J		3,200
MW-29	W-R2330012-020515-ACN-001	2/5/2015	<5.3	<1.1	<5.3	<5.3	<2.1	<5.3	<5.3	8.8 J	<2.0	2.3 J	200	<1.0	<1.0	<10	1.1	0.35 J	<5.0	2,400
MW-29 ^A (DUP)	W-R2330012-020515-ACN-002	2/5/2015								370	<2.0	2.1 J	200	<1.0	0.065 J	1.3 J	1.3 J	0.88 J		2,900
MW-29 (DUP)	W-R2330012-020515-ACN-002	2/5/2015	<5.3	<1.1	<5.3	<5.3	<2.1	<5.3	<5.3	11 J	<2.0	2.4	200	<1.0	<1.0	<10	1.3 J	<4.0	<5.0	2,500
MW-29 ^A	W-R2330017-031615-JCH-001	3/16/2015								1,400	0.11 J	6.2	220	<1.0	0.11 J	3.3 J	2.0 J	5.6		5,400
MW-29	W-R2330017-031615-JCH-001	3/16/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	<50	<2.0	3.1 J	220	<1.0	0.048 J	<10	1.0 J	1.3 J	<5.0	2,800
MW-29 ^A	W-R2330017-112015-AFB-028	11/20/2015								420	NS	NS	NS	NS	NS	NS	NS	NS		4,100
MW-29	W-R2330017-112015-AFB-028	11/20/2015	NS	NS	NS	NS	NS	NS	NS	5.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,300
MW-29 ^A	W-R2330021-042216-AFB-033	4/22/2016								110	NS	NS	NS	NS	NS	NS	NS	NS		5,400
MW-29	W-R2330021-042216-AFB-033	4/22/2016	NS	NS	NS	NS	NS	NS	NS	2.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,700
MW-29 ^A	W-R2330021-110416-AEM-031	11/4/2016								54	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,000
MW-29	W-R2330021-110416-AEM-031	11/4/2016	NS	NS	NS	NS	NS	NS	NS	5.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,000
MW-29 ^A	W-R2330022-042517-JPM-006	4/25/2017								18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400
MW-29	W-R2330022-042517-JPM-006	4/25/2017	NS	NS	NS	NS	NS	NS	NS	20 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,700

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-97}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-26 ^A	W-R2330017-111815-AFB-012	11/18/2015	NS	21000	NS	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330017-111815-AFB-012	11/18/2015	NS	20000	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-042016-AEP-016	4/20/2016	NS	NS	58	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330021-042016-AEP-016	4/20/2016	NS	NS	11 J	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	45 J	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	250	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-042717-DMS-025	4/27/2017	NS	14,000	19 J	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330022-042717-DMS-025	4/27/2017	NS	13,000	5.8 J	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-102817-AFB-038	10/28/2017	NS	NS	71	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330022-102817-AFB-038	10/28/2017	NS	NS	62	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330024-042418-DMS-012	4/24/2018	NS	NS	17	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330024-042418-DMS-012	4/24/2018	NS	NS	5.4	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330012-091514-ACN-002	9/15/2014	0.70 J	<50	160	0.064 J	9.1 J	<5.0	<0.20	<2.0	1.1 J	7.0 J
MW-27	W-R2330012-091514-ACN-002	9/15/2014	0.076 J	<50	160	0.062 J	8.8 J	<5.0	<0.20	<2.0	0.55 J	5.0 J
MW-27 ^A	W-R2330012-121114-JCH-018	12/1/2014	1.2 J	<50	140	<0.2	9.3 J	1.1 J	<0.20	<2.0	1.9 J	11 J
MW-27	W-R2330012-121114-JCH-018	12/1/2014	<3.0	<50	110	<0.2	7.5 J	0.79 J	<0.20	<2.0	0.66 J	4.2 J
MW-27 ^A	NS	NS	0.62 J	<50	72	<0.2	5.7 J	<5.0	<0.20	<2.0	1.5 J	4.0 J
MW-27	W-R2330017-031915-JCH-016	3/19/2015	<3.0	<50	80	<0.2	6.8 J	0.97 J	0.095 J	<2.0	<4.0	3.1 J
MW-27 ^A	W-R2330017-111915-JPM-020	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27	W-R2330017-111915-JPM-020	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330021-042216-AFB-031	4/22/2016	NS	NS	94	NS	NS	NS	NS	NS	NS	NS
MW-27	NS	4/22/2016	NS	NS	100	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330021-110416-JPM-033	11/4/2016	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
MW-27	W-R2330021-110416-JPM-033	11/4/2016	NS	NS	100	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A (DUP)	W-R2330021-110416-JPM-034	11/4/2016	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
MW-27 (DUP)	W-R2330021-110416-JPM-034	11/4/2016	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-042817-AFB-031	4/28/2017	NS	75,000	100	NS	NS	NS	NS	NS	NS	NS
MW-27	W-R2330022-042817-AFB-031	4/28/2017	NS	69,000	90	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-102417-DMS-009	10/24/2017	NS	NS	92	NS	NS	NS	NS	NS	NS	NS
MW-27	W-R2330022-102417-DMS-009	10/24/2017	NS	NS	91	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330024-042518-DMS-024	4/25/2018	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
MW-27	W-R2330024-042518-DMS-024	4/25/2018	NS	NS	100	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330012-020515-ACN-001	2/5/2015	2.0 J	<50	410	<0.2	4.4 J	<5.0	<0.20	<2.0	1.2 J	6.8 J
MW-29	W-R2330012-020515-ACN-001	2/5/2015	<3.0	<50	380	<0.2	3.3 J	<5.0	<0.20	<2.0	<4.0	3.6 J
MW-29 ^A (DUP)	W-R2330012-020515-ACN-002	2/5/2015	0.60 J	<50	400	<0.2	4.3 J	<5.0	<0.20	<2.0	0.99 J	6.4 J
MW-29 (DUP)	W-R2330012-020515-ACN-002	2/5/2015	<3.0	<50	400	<0.2	3.5 J	<5.0	<0.20	<2.0	<4.0	3.4 J
MW-29 ^A	W-R2330017-031615-JCH-001	3/16/2015	2.8 J	<50	400	<0.2	8.0 J	<5.0	<0.20	<2.0	3.4 J	17 J
MW-29	W-R2330017-031615-JCH-001	3/16/2015	<3.0	<50	400	<0.2	3.9 J	<5.0	<0.20	<2.0	<4.0	5.4 J
MW-29 ^A	W-R2330017-112015-AFB-028	11/20/2015	NS	21,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-29	W-R2330017-112015-AFB-028	11/20/2015	NS	20,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-042216-AFB-033	4/22/2016	NS	NS	260	NS	NS	NS	NS	NS	NS	NS
MW-29	W-R2330021-042216-AFB-033	4/22/2016	NS	NS	250	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-110416-AEM-031	11/4/2016	NS	NS	300	NS	NS	NS	NS	NS	NS	NS
MW-29	W-R2330021-110416-AEM-031	11/4/2016	NS	NS	290	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330022-042517-JPM-006	4/25/2017	NS	21,000	240	NS	NS	NS	NS	NS	NS	NS
MW-29	W-R2330022-042517-JPM-006	4/25/2017	NS	22,000	250	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{V,im}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-29 ^A	W-R2330022-102617-AFB-024	10/26/2017																		
MW-29	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330024-042518-JPM-023	4/25/2018																		
MW-29	W-R2330024-042518-JPM-023	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330012-020515-ACN-003	2/5/2015																		
MW-30	W-R2330012-020515-ACN-003	2/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-30 ^A	W-R2330017-031615-ACN-002	3/16/2015																		
MW-30	W-R2330017-031615-ACN-002	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
MW-30 ^A	W-R2330017-112015-JPM-029	11/20/2015																		
MW-30	W-R2330017-112015-JPM-029	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-042216-JPM-034	4/22/2016																		
MW-30	W-R2330021-042216-JPM-034	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	DUP 2	4/22/2016																		
MW-30	DUP 2	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-110416-AEM-032	11/4/2016																		
MW-30	W-R2330021-110416-AEM-032	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330022-042517-DMS-007	4/25/2017																		
MW-30	W-R2330022-042517-DMS-007	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330022-102617-AFB-025	10/26/2017																		
MW-30	W-R2330022-102617-AFB-025	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330024-042518-JPM-025	4/25/2018																		
MW-30	W-R2330024-042518-JPM-025	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330017-060515-ACN-001	6/5/2015																		
MW-31	W-R2330017-060515-ACN-001	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330017-111615-AEP-001	11/16/2015																		
MW-31	W-R2330017-111615-AEP-001	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-041816-JPM-003	4/18/2016																		
MW-31	W-R2330021-041816-JPM-003	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-103116-AEM-003	10/31/2016																		
MW-31	W-R2330021-103116-AEM-003	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-042417-DMS-002	4/24/2017																		
MW-31	W-R2330022-042417-DMS-002	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-102317-DMS-003	10/23/2017																		
MW-31	W-R2330022-102617-DMS-003	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330024-042318-DMS-003	4/23/2018																		
MW-31	W-R2330024-042318-DMS-003	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-060515-ACN-002	6/5/2015																		
MW-32	W-R2330017-060515-ACN-002	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-111615-AEP-002	11/16/2015																		
MW-32	W-R2330017-111615-AEP-002	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-041816-AEP-004	4/18/2016																		
MW-32	W-R2330021-041816-AEP-004	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-103116-JPM-004	10/31/2016																		
MW-32	W-R2330021-103116-JPM-004	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330022-042417-AFB-001	4/24/2017																		
MW-32	W-R2330022-042417-AFB-001	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIS}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-29 ^A	W-R2330022-102617-AFB-024	10/26/2017																		
MW-29	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330024-042518-JPM-023	4/25/2018																		
MW-29	W-R2330024-042518-JPM-023	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330012-020515-ACN-003	2/5/2015																		
MW-30	W-R2330012-020515-ACN-003	2/5/2015	<3.0	<11	<11	<5.3	<11	<10	<5.3	<11	<5.3	<5.3	<5.3	<11	<5.3	<11	<4.2	<5.0	<5.3	<5.3
MW-30 ^A	W-R2330017-031615-ACN-002	3/16/2015																		
MW-30	W-R2330017-031615-ACN-002	3/16/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
MW-30 ^A	W-R2330017-112015-JPM-029	11/20/2015																		
MW-30	W-R2330017-112015-JPM-029	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-042216-JPM-034	4/22/2016																		
MW-30	W-R2330021-042216-JPM-034	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	DUP 2	4/22/2016																		
MW-30	DUP 2	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-110416-AEM-032	11/4/2016																		
MW-30	W-R2330021-110416-AEM-032	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330022-042517-DMS-007	4/25/2017																		
MW-30	W-R2330022-042517-DMS-007	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330022-102617-AFB-025	10/26/2017																		
MW-30	W-R2330022-102617-AFB-025	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330024-042518-JPM-025	4/25/2018																		
MW-30	W-R2330024-042518-JPM-025	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330017-060515-ACN-001	6/5/2015																		
MW-31	W-R2330017-060515-ACN-001	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330017-111615-AEP-001	11/16/2015																		
MW-31	W-R2330017-111615-AEP-001	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-041816-JPM-003	4/18/2016																		
MW-31	W-R2330021-041816-JPM-003	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-103116-AEM-003	10/31/2016																		
MW-31	W-R2330021-103116-AEM-003	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-042417-DMS-002	4/24/2017																		
MW-31	W-R2330022-042417-DMS-002	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-102317-DMS-003	10/23/2017																		
MW-31	W-R2330022-102617-DMS-003	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330024-042318-DMS-003	4/23/2018																		
MW-31	W-R2330024-042318-DMS-003	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-060515-ACN-002	6/5/2015																		
MW-32	W-R2330017-060515-ACN-002	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-111615-AEP-002	11/16/2015																		
MW-32	W-R2330017-111615-AEP-002	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-041816-AEP-004	4/18/2016																		
MW-32	W-R2330021-041816-AEP-004	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-103116-JPM-004	10/31/2016																		
MW-32	W-R2330021-103116-JPM-004	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330022-042417-AFB-001	4/24/2017																		
MW-32	W-R2330022-042417-AFB-001	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-29 ^A	W-R2330022-102617-AFB-024	10/26/2017								12	NS	NS	NS	NS	NS	NS	NS	NS	2,900	
MW-29	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	2,400	
MW-29 ^A	W-R2330024-042518-JPM-023	4/25/2018								42	NS	NS	NS	NS	NS	NS	NS	NS	4,100	
MW-29	W-R2330024-042518-JPM-023	4/25/2018	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	3,400	
MW-30 ^A	W-R2330012-020515-ACN-003	2/5/2015								580	0.30 J	4.3 J	120	<1.0	0.53 J	1.7 J	0.30 J	3.9 J	500	
MW-30	W-R2330012-020515-ACN-003	2/5/2015	<5.3	<1.1	<5.3	<5.3	<2.1	<5.3	<5.3	11 J	0.39 J	3.2 J	110	<1.0	0.45 J	<10	0.28 J	1.1 J	5.0	18 J
MW-30 ^A	W-R2330017-031615-ACN-002	3/16/2015								110	0.28 J	1.6 J	95 J	<1.0	0.54 J	0.34 J	0.19 J	2.2 J	100 J	
MW-30	W-R2330017-031615-ACN-002	3/16/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	5.8 J	0.44 J	2.3 J	110	<1.0	0.22 J	<10	0.62 J	1.6 J	<5.0	180 J
MW-30 ^A	W-R2330017-112015-JPM-029	11/20/2015								54	NS	NS	NS	NS	NS	NS	NS	NS	310	
MW-30	W-R2330017-112015-JPM-029	11/20/2015	NS	NS	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	740	
MW-30 ^A	W-R2330021-042216-JPM-034	4/22/2016								21 J	NS	NS	NS	NS	NS	NS	NS	NS	710	
MW-30	W-R2330021-042216-JPM-034	4/22/2016	NS	NS	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	530	
MW-30 ^A	DUP 2	4/22/2016								18 J	NS	NS	NS	NS	NS	NS	NS	NS	650	
MW-30	DUP 2	4/22/2016	NS	NS	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	530	
MW-30 ^A	W-R2330021-110416-AEM-032	11/4/2016								28 J	NS	NS	NS	NS	NS	NS	NS	NS	1,000	
MW-30	W-R2330021-110416-AEM-032	11/4/2016	NS	NS	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	990	
MW-30 ^A	W-R2330022-042517-DMS-007	4/25/2017								35 J	NS	NS	NS	NS	NS	NS	NS	NS	1,000	
MW-30	W-R2330022-042517-DMS-007	4/25/2017	NS	NS	NS	NS	NS	NS	NS	6.1 J	NS	NS	NS	NS	NS	NS	NS	NS	1,000	
MW-30 ^A	W-R2330022-102617-AFB-025	10/26/2017								480	NS	NS	NS	NS	NS	NS	NS	NS	1,300	
MW-30	W-R2330022-102617-AFB-025	10/26/2017	NS	NS	NS	NS	NS	NS	NS	38	NS	NS	NS	NS	NS	NS	NS	NS	920	
MW-30 ^A	W-R2330024-042518-JPM-025	4/25/2018								70	NS	NS	NS	NS	NS	NS	NS	NS	620	
MW-30	W-R2330024-042518-JPM-025	4/25/2018	NS	NS	NS	NS	NS	NS	NS	6.7 J	NS	NS	NS	NS	NS	NS	NS	NS	340	
MW-31 ^A	W-R2330017-060515-ACN-001	6/5/2015								330	NS	NS	NS	NS	NS	NS	NS	NS	490	
MW-31	W-R2330017-060515-ACN-001	6/5/2015	NS	NS	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	55 J	
MW-31 ^A	W-R2330017-111615-AEP-001	11/16/2015								3,400	NS	NS	NS	NS	NS	NS	NS	NS	5,900	
MW-31	W-R2330017-111615-AEP-001	11/16/2015	NS	NS	NS	NS	NS	NS	NS	16	NS	NS	NS	NS	NS	NS	NS	NS	130	
MW-31 ^A	W-R2330021-041816-JPM-003	4/18/2016								12	NS	NS	NS	NS	NS	NS	NS	NS	130	
MW-31	W-R2330021-041816-JPM-003	4/18/2016	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	110	
MW-31 ^A	W-R2330021-103116-AEM-003	10/31/2016								14 J	NS	NS	NS	NS	NS	NS	NS	NS	160 J	
MW-31	W-R2330021-103116-AEM-003	10/31/2016	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	110 J	
MW-31 ^A	W-R2330022-042417-DMS-002	4/24/2017								350	NS	NS	NS	NS	NS	NS	NS	NS	870	
MW-31	W-R2330022-042417-DMS-002	4/24/2017	NS	NS	NS	NS	NS	NS	NS	13 J	NS	NS	NS	NS	NS	NS	NS	NS	150 J	
MW-31 ^A	W-R2330022-102317-DMS-003	10/23/2017								16	NS	NS	NS	NS	NS	NS	NS	NS	110	
MW-31	W-R2330022-102617-DMS-003	10/23/2017	NS	NS	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	65 J	
MW-31 ^A	W-R2330024-042318-DMS-003	4/23/2018								480	NS	NS	NS	NS	NS	NS	NS	NS	1,800	
MW-31	W-R2330024-042318-DMS-003	4/24/2018	NS	NS	NS	NS	NS	NS	NS	31	NS	NS	NS	NS	NS	NS	NS	NS	65 J	
MW-32 ^A	W-R2330017-060515-ACN-002	6/5/2015								1,400	NS	NS	NS	NS	NS	NS	NS	NS	4,700	
MW-32	W-R2330017-060515-ACN-002	6/5/2015	NS	NS	NS	NS	NS	NS	NS	6.1 J	NS	NS	NS	NS	NS	NS	NS	NS	2,000	
MW-32 ^A	W-R2330017-111615-AEP-002	11/16/2015								920	NS	NS	NS	NS	NS	NS	NS	NS	6,300	
MW-32	W-R2330017-111615-AEP-002	11/16/2015	NS	NS	NS	NS	NS	NS	NS	120	NS	NS	NS	NS	NS	NS	NS	NS	4,700	
MW-32 ^A	W-R2330021-041816-AEP-004	4/18/2016								160	NS	NS	NS	NS	NS	NS	NS	NS	670	
MW-32	W-R2330021-041816-AEP-004	4/18/2016	NS	NS	NS	NS	NS	NS	NS	4.0 J	NS	NS	NS	NS	NS	NS	NS	NS	410	
MW-32 ^A	W-R2330021-103116-JPM-004	10/31/2016								780	NS	NS	NS	NS	NS	NS	NS	NS	5,700	
MW-32	W-R2330021-103116-JPM-004	10/31/2016	NS	NS	NS	NS	NS	NS	NS	170	NS	NS	NS	NS	NS	NS	NS	NS	4,000	
MW-32 ^A	W-R2330022-042417-AFB-001	4/24/2017								1,600	NS	NS	NS	NS	NS	NS	NS	NS	3,100	
MW-32	W-R2330022-042417-AFB-001	4/24/2017	NS	NS	NS	NS	NS	NS	NS	19 J	NS	NS	NS	NS	NS	NS	NS	NS	810	

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-29 ^A	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	210	NS	NS	NS	NS	NS	NS	NS
MW-29	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	210	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330024-042518-JPM-023	4/25/2018	NS	NS	250	NS	NS	NS	NS	NS	NS	NS
MW-29	W-R2330024-042518-JPM-023	4/25/2018	NS	NS	250	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330012-020515-ACN-003	2/5/2015	1.3 J	<50	72	<0.2	3.0 J	<5.0	<0.20	<2.0	1.6 J	8.0 J
MW-30	W-R2330012-020515-ACN-003	2/5/2015	<3.0	<50	67	<0.2	1.6 J	<5.0	<0.20	<2.0	0.68 J	3.8 J
MW-30 ^A	W-R2330017-031615-ACN-002	3/16/2015	<3.0	<50	47 J	<0.2	2.0 J	<5.0	<0.20	<2.0	0.96 J	4.6 J
MW-30	W-R2330017-031615-ACN-002	3/16/2015	<3.0	<50	110	<0.2	1.7 J	<5.0	<0.20	<2.0	0.91 J	5.3 J
MW-30 ^A	W-R2330017-112015-JPM-029	11/20/2015	NS	14,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-30	W-R2330017-112015-JPM-029	11/20/2015	NS	13,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-042216-JPM-034	4/22/2016	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
MW-30	W-R2330021-042216-JPM-034	4/22/2016	NS	NS	130	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	DUP 2	4/22/2016	NS	NS	120	NS	NS	NS	NS	NS	NS	NS
MW-30	DUP 2	4/22/2016	NS	NS	120	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-110416-AEM-032	11/4/2016	NS	NS	94	NS	NS	NS	NS	NS	NS	NS
MW-30	W-R2330021-110416-AEM-032	11/4/2016	NS	NS	100	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330022-042517-DMS-007	4/25/2017	NS	12,000	75	NS	NS	NS	NS	NS	NS	NS
MW-30	W-R2330022-042517-DMS-007	4/25/2017	NS	12,000	96	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330022-102617-AFB-025	10/26/2017	NS	NS	75	NS	NS	NS	NS	NS	NS	NS
MW-30	W-R2330022-102617-AFB-025	10/26/2017	NS	NS	70	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330024-042518-JPM-025	4/25/2018	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
MW-30	W-R2330024-042518-JPM-025	4/25/2018	NS	NS	92	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330017-060515-ACN-001	6/5/2015	NS	<50	240	NS	NS	NS	NS	NS	NS	NS
MW-31	W-R2330017-060515-ACN-001	6/5/2015	NS	<50	240	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330017-111615-AEP-001	11/16/2015	NS	27,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-31	W-R2330017-111615-AEP-001	11/16/2015	NS	17,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-041816-JPM-003	4/18/2016	NS	NS	360	NS	NS	NS	NS	NS	NS	NS
MW-31	W-R2330021-041816-JPM-003	4/18/2016	NS	NS	390	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-103116-AEM-003	10/31/2016	NS	NS	400	NS	NS	NS	NS	NS	NS	NS
MW-31	W-R2330021-103116-AEM-003	10/31/2016	NS	NS	370	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-042417-DMS-002	4/24/2017	NS	18,000	410	NS	NS	NS	NS	NS	NS	NS
MW-31	W-R2330022-042417-DMS-002	4/24/2017	NS	18,000	420	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-102317-DMS-003	10/23/2017	NS		440	NS	NS	NS	NS	NS	NS	NS
MW-31	W-R2330022-102617-DMS-003	10/23/2017	NS		430	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330024-042318-DMS-003	4/23/2018	NS		630	NS	NS	NS	NS	NS	NS	NS
MW-31	W-R2330024-042318-DMS-003	4/24/2018	NS		400	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-060515-ACN-002	6/5/2015	NS	<50	95	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330017-060515-ACN-002	6/5/2015	NS	<50	62	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-111615-AEP-002	11/16/2015	NS	66,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330017-111615-AEP-002	11/16/2015	NS	66,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-041816-AEP-004	4/18/2016	NS	NS	81	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330021-041816-AEP-004	4/18/2016	NS	NS	87	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-103116-JPM-004	10/31/2016	NS	NS	100	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330021-103116-JPM-004	10/31/2016	NS	NS	82	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330022-042417-AFB-001	4/24/2017	NS	25,000	46 J	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330022-042417-AFB-001	4/24/2017	NS	24,000	29 J	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L	Volatile Organic Compounds (VOCs)																		
	2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	
	Non-residential Drinking Water Criteria (II)	38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
	Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
	Ground Water Surface Water Interface Criteria (GSI) (III)	2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
	GSI Final Acute Value (FAV)	40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
	Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
	Groundwater Concentration for Vapor Intrusion (GW _{v,i,eq}) (a)	18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
	Water Solubility (VII)	2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
	Flammability & Explosivity Screening Level (VIII)	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																	
MW-32 ^A	W-R2330022-102317-DMS-004	10/23/2017																	
MW-32	W-R2330022-102317-DMS-004	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330024-042318-JPM-004	4/23/2018																	
MW-32	W-R2330024-042318-JPM-004	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-060515-ACN-003	6/5/2015																	
MW-33	W-R2330017-060515-ACN-003	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-111615-AEP-003	11/16/2015																	
MW-33	W-R2330017-111615-AEP-003	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330021-041816-JPM-005	4/18/2016																	
MW-33	W-R2330021-041816-JPM-005	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330021-103116-JPM-005	10/31/2016																	
MW-33	W-R2330021-103116-JPM-005	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330022-042417-DMS-003	4/24/2017																	
MW-33	W-R2330022-042417-DMS-003	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330022-102617-DMS-005	10/23/2017																	
MW-33	W-R2330022-102617-DMS-005	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330024-042318-DMS-005	4/23/2018																	
MW-33	W-R2330024-042318-DMS-005	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330017-060515-ACN-004	6/5/2015																	
MW-34	W-R2330017-060515-ACN-004	6/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0
MW-34 ^A	W-R2330017-111815-JPM-017	11/18/2015																	
MW-34	W-R2330017-111815-JPM-017	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330021-041916-JPM-013	4/19/2016																	
MW-34	W-R2330021-041916-JPM-013	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330021-110416-AEM-030	11/4/2016																	
MW-34	W-R2330021-110416-AEM-030	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330022-042417-DMS-004	4/24/2017																	
MW-34	W-R2330022-042417-DMS-004	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330022-102617-DMS-006	10/23/2017																	
MW-34	W-R2330022-102617-DMS-006	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330024-042318-DMS-007	4/23/2018																	
MW-34	W-R2330024-042318-DMS-007	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330021-041816-AEP-001	4/18/2016																	
MW-35	W-R2330021-041816-AEP-001	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330021-103116-JPM-002	10/31/2016																	
MW-35	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330022-050117-AFB-036	5/1/2017																	
MW-35	W-R2330022-050117-AFB-036	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330022-102317-DMS-002	10/23/2017																	
MW-35	W-R2330022-102317-DMS-002	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330024-042318-DMS-001	4/23/2018																	
MW-35	W-R2330024-042318-DMS-001	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330021-041816-JPM-002	4/18/2016																	
MW-36	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330021-103116-AEM-001	10/31/2016																	
MW-36	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																
			Xylenes	1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate
Non-residential Drinking Water Criteria (II)	280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05	
Non-residential Health-Based Drinking Water Value (E)	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ground Water Surface Water Interface Criteria (GSI) (III)	41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA	
GSI Final Acute Value (FAV)	730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA	
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV	
Groundwater Concentration for Vapor Intrusion (GW _{VI,m}) (a)	10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA	
Water Solubility (VII)	1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06	
Flammability & Explosivity Screening Level (VIII)	70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA	
ID	SAMPLE ID	SAMPLE DATE																	
MW-32 ^A	W-R2330022-102317-DMS-004	10/23/2017																	
MW-32	W-R2330022-102317-DMS-004	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-32 ^A	W-R2330024-042318-JPM-004	4/23/2018																	
MW-32	W-R2330024-042318-JPM-004	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-33 ^A	W-R2330017-060515-ACN-003	6/5/2015																	
MW-33	W-R2330017-060515-ACN-003	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-33 ^A	W-R2330017-111615-AEP-003	11/16/2015																	
MW-33	W-R2330017-111615-AEP-003	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-33 ^A	W-R2330021-041816-JPM-005	4/18/2016																	
MW-33	W-R2330021-041816-JPM-005	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-33 ^A	W-R2330021-103116-JPM-005	10/31/2016																	
MW-33	W-R2330021-103116-JPM-005	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-33 ^A	W-R2330022-042417-DMS-003	4/24/2017																	
MW-33	W-R2330022-042417-DMS-003	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-33 ^A	W-R2330022-102617-DMS-005	10/23/2017																	
MW-33	W-R2330022-102617-DMS-005	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-33 ^A	W-R2330024-042318-DMS-005	4/23/2018																	
MW-33	W-R2330024-042318-DMS-005	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-34 ^A	W-R2330017-060515-ACN-004	6/5/2015																	
MW-34	W-R2330017-060515-ACN-004	6/5/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	
MW-34 ^A	W-R2330017-111815-JPM-017	11/18/2015																	
MW-34	W-R2330017-111815-JPM-017	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-34 ^A	W-R2330021-041916-JPM-013	4/19/2016																	
MW-34	W-R2330021-041916-JPM-013	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-34 ^A	W-R2330021-110416-AEM-030	11/4/2016																	
MW-34	W-R2330021-110416-AEM-030	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-34 ^A	W-R2330022-042417-DMS-004	4/24/2017																	
MW-34	W-R2330022-042417-DMS-004	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-34 ^A	W-R2330022-102617-DMS-006	10/23/2017																	
MW-34	W-R2330022-102617-DMS-006	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-34 ^A	W-R2330024-042318-DMS-007	4/23/2018																	
MW-34	W-R2330024-042318-DMS-007	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-35 ^A	W-R2330021-041816-AEP-001	4/18/2016																	
MW-35	W-R2330021-041816-AEP-001	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-35 ^A	W-R2330021-103116-JPM-002	10/31/2016																	
MW-35	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-35 ^A	W-R2330022-050117-AFB-036	5/1/2017																	
MW-35	W-R2330022-050117-AFB-036	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-35 ^A	W-R2330022-102317-DMS-002	10/23/2017																	
MW-35	W-R2330022-102317-DMS-002	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-35 ^A	W-R2330024-042318-DMS-001	4/23/2018																	
MW-35	W-R2330024-042318-DMS-001	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-36 ^A	W-R2330021-041816-JPM-002	4/18/2016																	
MW-36	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-36 ^A	W-R2330021-103116-AEM-001	10/31/2016																	
MW-36	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L								Metals											
	D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P.R)	Iron (B)	
	Non-residential Drinking Water Criteria (II)	2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
	Non-residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
	Ground Water Surface Water Interface Criteria (GSI) (III)	9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
	GSI Final Acute Value (FAV)	75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
	Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
	Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)	NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
	Water Solubility (VII)	11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)	NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	
ID	SAMPLE ID	SAMPLE DATE																	
MW-32 ^A	W-R2330022-102317-DMS-004	10/23/2017							7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,200
MW-32	W-R2330022-102317-DMS-004	10/23/2017	NS	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,100
MW-32 ^A	W-R2330024-042318-JPM-004	4/23/2018							2,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,800
MW-32	W-R2330024-042318-JPM-004	4/23/2018	NS	NS	NS	NS	NS	NS	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,100
MW-33 ^A	W-R2330017-060515-ACN-003	6/5/2015							1,000	NS	NS	NS	NS	NS	NS	NS	NS		4,500
MW-33	W-R2330017-060515-ACN-003	6/5/2015	NS	NS	NS	NS	NS	NS	18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,200
MW-33 ^A	W-R2330017-111615-AEP-003	11/16/2015							860	NS	NS	NS	NS	NS	NS	NS	NS		3,400
MW-33	W-R2330017-111615-AEP-003	11/16/2015	NS	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,700
MW-33 ^A	W-R2330021-041816-JPM-005	4/18/2016							67	NS	NS	NS	NS	NS	NS	NS	NS		2,700
MW-33	W-R2330021-041816-JPM-005	4/18/2016	NS	NS	NS	NS	NS	NS	3.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,700
MW-33 ^A	W-R2330021-103116-JPM-005	10/31/2016							400	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,100
MW-33	W-R2330021-103116-JPM-005	10/31/2016	NS	NS	NS	NS	NS	NS	16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,300
MW-33 ^A	W-R2330022-042417-DMS-003	4/24/2017							820	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,300
MW-33	W-R2330022-042417-DMS-003	4/24/2017	NS	NS	NS	NS	NS	NS	16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,200
MW-33 ^A	W-R2330022-102617-DMS-005	10/23/2017							430	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,700
MW-33	W-R2330022-102617-DMS-005	10/23/2017	NS	NS	NS	NS	NS	NS	39	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,300
MW-33 ^A	W-R2330024-042318-DMS-005	4/23/2018							5.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,100
MW-33	W-R2330024-042318-DMS-005	4/23/2018	NS	NS	NS	NS	NS	NS	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400
MW-34 ^A	W-R2330017-060515-ACN-004	6/5/2015							1,700	0.24 J	4.2 J	120	<1.0	<1.0	2.6 J	2.2 J	5.0		2,800
MW-34	W-R2330017-060515-ACN-004	6/5/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	20 J	0.23 J	3.0 J	110	<1.0	<1.0	1.3 J	1.0 J	0.75 J	<0.005	120 J
MW-34 ^A	W-R2330017-111815-JPM-017	11/18/2015							28 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,000
MW-34	W-R2330017-111815-JPM-017	11/18/2015	NS	NS	NS	NS	NS	NS	2.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	930
MW-34 ^A	W-R2330021-041916-JPM-013	4/19/2016							120	NS	NS	NS	NS	NS	NS	NS	NS		1,200
MW-34	W-R2330021-041916-JPM-013	4/19/2016	NS	NS	NS	NS	NS	NS	5.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	850
MW-34 ^A	W-R2330021-110416-AEM-030	11/4/2016							300	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,500
MW-34	W-R2330021-110416-AEM-030	11/4/2016	NS	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,900
MW-34 ^A	W-R2330022-042417-DMS-004	4/24/2017							120	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,300
MW-34	W-R2330022-042417-DMS-004	4/24/2017	NS	NS	NS	NS	NS	NS	12 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,900
MW-34 ^A	W-R2330022-102617-DMS-006	10/23/2017							180	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,800
MW-34	W-R2330022-102617-DMS-006	10/23/2017	NS	NS	NS	NS	NS	NS	7.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,500
MW-34 ^A	W-R2330024-042318-DMS-007	4/23/2018							42	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,800
MW-34	W-R2330024-042318-DMS-007	4/23/2018	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,600
MW-35 ^A	W-R2330021-041816-AEP-001	4/18/2016							110	NS	NS	NS	NS	NS	NS	NS	NS	NS	320
MW-35	W-R2330021-041816-AEP-001	4/18/2016	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	11 J
MW-35 ^A	W-R2330021-103116-JPM-002	10/31/2016							50 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	190 J
MW-35	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	NS	NS	NS	NS	8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	13 J
MW-35 ^A	W-R2330022-050117-AFB-036	5/1/2017							220	NS	NS	NS	NS	NS	NS	NS	NS	NS	790
MW-35	W-R2330022-050117-AFB-036	5/1/2017	NS	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	21 J
MW-35 ^A	W-R2330022-102317-DMS-002	10/23/2017							33	NS	NS	NS	NS	NS	NS	NS	NS	NS	110
MW-35	W-R2330022-102317-DMS-002	10/23/2017	NS	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4.6
MW-35 ^A	W-R2330024-042318-DMS-001	4/23/2018							61	NS	NS	NS	NS	NS	NS	NS	NS	NS	210
MW-35	W-R2330024-042318-DMS-001	4/23/2018	NS	NS	NS	NS	NS	NS	4.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	87
MW-36 ^A	W-R2330021-041816-JPM-002	4/18/2016							59	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,100
MW-36	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	NS	NS	NS	NS	4.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	930
MW-36 ^A	W-R2330021-103116-AEM-001	10/31/2016							58	NS	NS	NS	NS	NS	NS	NS	NS	NS	490
MW-36	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	NS	NS	NS	NS	7.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	340

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-32 ^A	W-R2330022-102317-DMS-004	10/23/2017	NS		90	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330022-102317-DMS-004	10/23/2017	NS		80	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330024-042318-JPM-004	4/23/2018	NS		42	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330024-042318-JPM-004	4/23/2018	NS		33	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-060515-ACN-003	6/5/2015	NS	<50	120	NS	NS	NS	NS	NS	NS	NS
MW-33	W-R2330017-060515-ACN-003	6/5/2015	NS	<50	80	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-111615-AEP-003	11/16/2015	NS	84,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-33	W-R2330017-111615-AEP-003	11/16/2015	NS	85,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330021-041816-JPM-005	4/18/2016	NS	NS	81	NS	NS	NS	NS	NS	NS	NS
MW-33	W-R2330021-041816-JPM-005	4/18/2016	NS	NS	84	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330021-103116-JPM-005	10/31/2016	NS	NS	78	NS	NS	NS	NS	NS	NS	NS
MW-33	W-R2330021-103116-JPM-005	10/31/2016	NS	NS	64	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330022-042417-DMS-003	4/24/2017	NS	96,000	100	NS	NS	NS	NS	NS	NS	NS
MW-33	W-R2330022-042417-DMS-003	4/24/2017	NS	98,000	89	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330022-102617-DMS-005	10/23/2017	NS	NS	72	NS	NS	NS	NS	NS	NS	NS
MW-33	W-R2330022-102617-DMS-005	10/23/2017	NS	NS	68	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330024-042318-DMS-005	4/23/2018	NS	NS	84	NS	NS	NS	NS	NS	NS	NS
MW-33	W-R2330024-042318-DMS-005	4/23/2018	NS	NS	90	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330017-060515-ACN-004	6/5/2015	2.4 J	<50	320	<0.2	7.4 J	<5.0	<0.20	<2.0	3.3 J	13 J
MW-34	W-R2330017-060515-ACN-004	6/5/2015	<3.0	<50	270	<0.2	3.6 J	<5.0	<0.20	<2.0	<4.0	<50
MW-34 ^A	W-R2330017-111815-JPM-017	11/18/2015	NS	20,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-34	W-R2330017-111815-JPM-017	11/18/2015	NS	19,000	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330021-041916-JPM-013	4/19/2016	NS	NS	300	NS	NS	NS	NS	NS	NS	NS
MW-34	W-R2330021-041916-JPM-013	4/19/2016	NS	NS	290	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330021-110416-AEM-030	11/4/2016	NS	NS	520	NS	NS	NS	NS	NS	NS	NS
MW-34	W-R2330021-110416-AEM-030	11/4/2016	NS	NS	490	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330022-042417-DMS-004	4/24/2017	NS	24,000	230	NS	NS	NS	NS	NS	NS	NS
MW-34	W-R2330022-042417-DMS-004	4/24/2017	NS	24,000	240	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330022-102617-DMS-006	10/23/2017	NS	NS	290	NS	NS	NS	NS	NS	NS	NS
MW-34	W-R2330022-102617-DMS-006	10/23/2017	NS	NS	290	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330024-042318-DMS-007	4/23/2018	NS	NS	280	NS	NS	NS	NS	NS	NS	NS
MW-34	W-R2330024-042318-DMS-007	4/23/2018	NS	NS	280	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330021-041816-AEP-001	4/18/2016	NS	NS	16 J	NS	NS	NS	NS	NS	NS	NS
MW-35	W-R2330021-041816-AEP-001	4/18/2016	NS	NS	6.3 J	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	19 J	NS	NS	NS	NS	NS	NS	NS
MW-35	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	1.7 J	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330022-050117-AFB-036	5/1/2017	NS	15,000	29 J	NS	NS	NS	NS	NS	NS	NS
MW-35	W-R2330022-050117-AFB-036	5/1/2017	NS	13,000	1.8 J	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330022-102317-DMS-002	10/23/2017	NS		12	NS	NS	NS	NS	NS	NS	NS
MW-35	W-R2330022-102317-DMS-002	10/23/2017	NS		7.6	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330024-042318-DMS-001	4/23/2018	NS	NS	18	NS	NS	NS	NS	NS	NS	NS
MW-35	W-R2330024-042318-DMS-001	4/23/2018	NS	NS	3.4 J	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	160	NS	NS	NS	NS	NS	NS	NS
MW-36	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	150	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	150	NS	NS	NS	NS	NS	NS	NS
MW-36	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	130	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
MW-36 ^A	W-R2330022-050117-AFB-037	5/1/2017																		
MW-36	W-R2330022-050117-AFB-037	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330022-102317-DMS-001	10/23/2017																		
MW-36	W-R2330022-102317-DMS-001	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330024-042318-DMS-002	4/23/2018																		
MW-36	W-R2330024-042318-DMS-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330017-032015-ACN-030	3/20/2015																		
CRA-266M	W-R2330017-032015-ACN-030	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
CRA-266M ^A	W-R2330017-111715-JPM-006	11/17/2015																		
CRA-266M	W-R2330017-111715-JPM-006	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-042216-JPM-032	4/22/2016																		
CRA-266M	W-R2330021-042216-JPM-032	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-110216-JPM-015	11/2/2016																		
CRA-266M	W-R2330021-110216-JPM-015	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330022-042717-AFB-022	4/27/2017																		
CRA-266M	W-R2330022-042717-AFB-022	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330022-102617-AFB-021	10/26/2017																		
CRA-266M	W-R2330022-102617-AFB-021	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330024-042518-JPM-021	4/25/2018																		
CRA-266M	W-R2330024-042518-JPM-021	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SB-13 ^A	W-R2330009-121013-AJL-008	12/10/2013																		
SB-13	W-R2330009-121013-AJL-008	12/10/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.37 J
SB-14 ^A	W-R2330009-121013-AJL-007	12/10/2013																		
SB-14	W-R2330009-121013-AJL-007	12/10/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-15 ^A	W-R2330009-120913-AJL-006	12/9/2013																		
SB-15	W-R2330009-120913-AJL-006	12/9/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.31 J
SB-21 ^A	W-R2330009-120513-RD-001	12/5/2013																		
SB-21	W-R2330009-120513-RD-001	12/5/2013	<25	<1.0	<1.0	<50	<50	6.7	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	1.4	2.5 J	<1.0	0.44 J
SB-22 ^A	W-R2330009-120513-RD-002	12/5/2013																		
SB-22	W-R2330009-120513-RD-002	12/5/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	0.72 J	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-23 ^A	W-R2330009-120513-RD-003	12/5/2013																		
SB-23	W-R2330009-120513-RD-003	12/5/2013	<25	<1.0	<1.0	<50	<50	2.4	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-24 ^A	W-R2330009-120613-RD-004	12/6/2013																		
SB-24	W-R2330009-120613-RD-004	12/6/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.29 J
SB-25 ^A	W-R2330009-120613-RD-005	12/6/2013																		
SB-25	W-R2330009-120613-RD-005	12/6/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.48 J
SB-26 ^A	W-R2330009-121013-AJL-009	12/10/2013																		
SB-26	W-R2330009-121013-AJL-009	12/10/2013	<25	<1.0	<1.0	<50	3.2 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.28 J
SB-27 ^A	W-R2330009-121113-AJL-010	12/11/2013																		
SB-27	W-R2330009-121113-AJL-010	12/11/2013	<25	<1.0	<1.0	<50	6.1 J	<1.0	<1.0	0.53 J	<1.0	2.9 J	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-27 ^A (DUP)	W-R2330009-121113-AJL-011	12/11/2013																		
SB-27 (DUP)	W-R2330009-121113-AJL-011	12/11/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	4.3 J	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-28 ^A	W-R2330009-121113-AJL-012	12/11/2013																		
SB-28	W-R2330009-121113-AJL-012	12/11/2013	<25	<1.0	<1.0	<50	3.6 J	<1.0	<1.0	0.53 J	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-29 ^A	W-R2330009-121213-AJL-014	12/12/2013																		
SB-29	W-R2330009-121213-AJL-014	12/12/2013	<25	1.3	2.6	<50	4.7 J	12.0	<1.0	<5.0	<1.0	<5.0	<1.0	0.84 J	<5.0	<5.0	14.0	6.0	<1.0	39

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
MW-36 ^A	W-R2330022-050117-AFB-037	5/1/2017																		
MW-36	W-R2330022-050117-AFB-037	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330022-102317-DMS-001	10/23/2017																		
MW-36	W-R2330022-102317-DMS-001	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330024-042318-DMS-002	4/23/2018																		
MW-36	W-R2330024-042318-DMS-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330017-032015-ACN-030	3/20/2015																		
CRA-266M	W-R2330017-032015-ACN-030	3/20/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
CRA-266M ^A	W-R2330017-111715-JPM-006	11/17/2015																		
CRA-266M	W-R2330017-111715-JPM-006	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-042216-JPM-032	4/22/2016																		
CRA-266M	W-R2330021-042216-JPM-032	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-110216-JPM-015	11/2/2016																		
CRA-266M	W-R2330021-110216-JPM-015	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330022-042717-AFB-022	4/27/2017																		
CRA-266M	W-R2330022-042717-AFB-022	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330022-102617-AFB-021	10/26/2017																		
CRA-266M	W-R2330022-102617-AFB-021	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330024-042518-JPM-021	4/25/2018																		
CRA-266M	W-R2330024-042518-JPM-021	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SB-13 ^A	W-R2330009-121013-AJL-008	12/10/2013																		
SB-13	W-R2330009-121013-AJL-008	12/10/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	0.28 J	<10	<4.0	<5.0	<5.0	<5.0
SB-14 ^A	W-R2330009-121013-AJL-007	12/10/2013																		
SB-14	W-R2330009-121013-AJL-007	12/10/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	0.77 J	<5.0	<5.0	<10	0.34 J	<10	<4.0	<5.0	<5.0	<5.0
SB-15 ^A	W-R2330009-120913-AJL-006	12/9/2013																		
SB-15	W-R2330009-120913-AJL-006	12/9/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	0.56 J	<10	<4.0	<5.0	<5.0	<5.0
SB-21 ^A	W-R2330009-120513-RD-001	12/5/2013																		
SB-21	W-R2330009-120513-RD-001	12/5/2013	4.2	<10	<10	0.19 J	<10	0.41 J	<5.0	<10	1.6 J	0.54 J	0.22 J	0.79 J	<5.0	<10	0.41 J	<5.0	0.35 J	<5.0
SB-22 ^A	W-R2330009-120513-RD-002	12/5/2013																		
SB-22	W-R2330009-120513-RD-002	12/5/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	0.12 J	<5.0	0.51 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-23 ^A	W-R2330009-120513-RD-003	12/5/2013																		
SB-23	W-R2330009-120513-RD-003	12/5/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-24 ^A	W-R2330009-120613-RD-004	12/6/2013																		
SB-24	W-R2330009-120613-RD-004	12/6/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-25 ^A	W-R2330009-120613-RD-005	12/6/2013																		
SB-25	W-R2330009-120613-RD-005	12/6/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-26 ^A	W-R2330009-121013-AJL-009	12/10/2013																		
SB-26	W-R2330009-121013-AJL-009	12/10/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-27 ^A	W-R2330009-121113-AJL-010	12/11/2013																		
SB-27	W-R2330009-121113-AJL-010	12/11/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	0.26 J	<5.0	<5.0	<10	0.28 J	<10	<4.0	<5.0	<5.0	<5.0
SB-27 ^A (DUP)	W-R2330009-121113-AJL-011	12/11/2013																		
SB-27 (DUP)	W-R2330009-121113-AJL-011	12/11/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	0.29 J	<10	<4.0	<5.0	<5.0	<5.0
SB-28 ^A	W-R2330009-121113-AJL-012	12/11/2013																		
SB-28	W-R2330009-121113-AJL-012	12/11/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	0.46 J	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-29 ^A	W-R2330009-121213-AJL-014	12/12/2013																		
SB-29	W-R2330009-121213-AJL-014	12/12/2013	74.0	<10	0.67 J	1.6 J	0.46 J	2.0 J	<5.0	<10	<5.0	6.0 J	1.0 J	1.2 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
MW-36 ^A	W-R2330022-050117-AFB-037	5/1/2017								240	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,100
MW-36	W-R2330022-050117-AFB-037	5/1/2017	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	380
MW-36 ^A	W-R2330022-102317-DMS-001	10/23/2017								25	NS	NS	NS	NS	NS	NS	NS	NS	NS	450
MW-36	W-R2330022-102317-DMS-001	10/23/2017	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	490
MW-36 ^A	W-R2330024-042318-DMS-002	4/23/2018								220	NS	NS	NS	NS	NS	NS	NS	NS	NS	580
MW-36	W-R2330024-042318-DMS-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	6.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	87
CRA-266M ^A	W-R2330017-032015-ACN-030	3/20/2015								150	0.15 J	9.1	24 J	<1.0	0.18 J	0.41 J	0.86 J	1.6 J		750
CRA-266M	W-R2330017-032015-ACN-030	3/20/2015	<5.0	0.13 J	<5.0	<5.0	<2.0	<5.0	<5.0	<50	0.15 J	2.8 J	21 J	<1.0	0.23 J	0.16 J	0.60 J	1.1 J	<5.0	43 J
CRA-266M ^A	W-R2330017-111715-JPM-006	11/17/2015								8.6 J	NS	NS	NS	NS	NS	NS	NS	NS		480
CRA-266M	W-R2330017-111715-JPM-006	11/17/2015	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	31
CRA-266M ^A	W-R2330021-042216-JPM-032	4/22/2016								22 J	NS	NS	NS	NS	NS	NS	NS	NS		440
CRA-266M	W-R2330021-042216-JPM-032	4/22/2016	NS	NS	NS	NS	NS	NS	NS	33 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	360
CRA-266M ^A	W-R2330021-110216-JPM-015	11/2/2016								4.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	140 J
CRA-266M	W-R2330021-110216-JPM-015	11/2/2016	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	130 J
CRA-266M ^A	W-R2330022-042717-AFB-022	4/27/2017								29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	890
CRA-266M	W-R2330022-042717-AFB-022	4/27/2017	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	180 J
CRA-266M ^A	W-R2330022-102617-AFB-021	10/26/2017								<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	420
CRA-266M	W-R2330022-102617-AFB-021	10/26/2017	NS	NS	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	440
CRA-266M ^A	W-R2330024-042518-JPM-021	4/25/2018								<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	360
CRA-266M	W-R2330024-042518-JPM-021	4/25/2018	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	380
SB-13 ^A	W-R2330009-121013-AJL-008	12/10/2013								120,000	2.8 J	300	730 J	5.9 J	4.0 J	240	140 J	510		310,000
SB-13	W-R2330009-121013-AJL-008	12/10/2013	0.21 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.37 J	<2.0	59 J	<1.0	0.071 J	<10	8.0 J	2.3 J	<0.005	71 J
SB-14 ^A	W-R2330009-121013-AJL-007	12/10/2013								2,100	0.54 J	2.1 J	65 J	0.12 J	0.20 J	4.6 J	9.6 J	7.4		3,500
SB-14	W-R2330009-121013-AJL-007	12/10/2013	0.25 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	14 J	0.37 J	<2.0	49 J	<1.0	0.064 J	<10	5.4 J	1.9 J	<0.005	150 J
SB-15 ^A	W-R2330009-120913-AJL-006	12/9/2013								790	0.32 J	2.0 J	33 J	<1.0	0.052 J	5.2 J	1.5 J	2.9 J		1,600
SB-15	W-R2330009-120913-AJL-006	12/9/2013	0.23 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.9 J	0.43 J	0.77 J	34 J	<1.0	<1.0	<10	2.2 J	2.0 J	2.3 J	770
SB-21 ^A	W-R2330009-120513-RD-001	12/5/2013								38,000 J	13 J	37 J	2,900	1.7 J	11	75 J	38 J	320		73,000
SB-21	W-R2330009-120513-RD-001	12/5/2013	<5.0	<1.0	0.94 J	<5.0	<2.0	<5.0	0.44 J	24 J	0.97 J	2.3 J	2,000	<1.0	<1.0	1.7 J	5.5 J	2.3 J	6.9	13,000
SB-22 ^A	W-R2330009-120513-RD-002	12/5/2013								1,900	2.2 J	<5.0	1000	<1.0	<1.0	8.1 J	4.3 J	40 J		16,000
SB-22	W-R2330009-120513-RD-002	12/5/2013	0.14 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.99 J	2.0 J	960	<1.0	<1.0	1.1 J	3.9 J	2.8 J	3.6 J	12,000
SB-23 ^A	W-R2330009-120513-RD-003	12/5/2013								3,200	2.8 J	72	880 J	1.8 J	<1.0	130	40 J	150		8,600
SB-23	W-R2330009-120513-RD-003	12/5/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	17 J	0.39 J	23	690	<1.0	<1.0	2.3 J	3.0 J	1.5 J	31	12,000
SB-24 ^A	W-R2330009-120613-RD-004	12/6/2013								6,700	2.6 J	130	860 J	3.5 J	2.9 J	130	77 J	220		190,000
SB-24	W-R2330009-120613-RD-004	12/6/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	52 J	0.60 J	6.7	410	<1.0	<1.0	<10	2.5 J	2.5 J	9.2	4,700
SB-25 ^A	W-R2330009-120613-RD-005	12/6/2013								250,000	2.6 J	470	1300	9.8 J	13	540	270	700		520,000
SB-25	W-R2330009-120613-RD-005	12/6/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	930	4.3	11	84 J	<1.0	0.10 J	1.4 J	4.0 J	1.5 J	46.0	1,100
SB-26 ^A	W-R2330009-121013-AJL-009	12/10/2013								15,000	5.0 J	610	970 J	12	17	1,000	310	1,100		700,000
SB-26	W-R2330009-121013-AJL-009	12/10/2013	0.16 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	60	22	8.6	57 J	<1.0	<1.0	<10	2.8 J	1.4 J	1.0 J	1,900
SB-27 ^A	W-R2330009-121113-AJL-010	12/11/2013								62,000	2.5 J	86	610 J	3.2 J	3.2 J	290	57 J	220		140,000
SB-27	W-R2330009-121113-AJL-010	12/11/2013	0.22 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	22 J	0.56 J	2.1 J	160	<1.0	<1.0	<10	5.3 J	2.8 J	1.5 J	7,400
SB-27 ^A (DUP)	W-R2330009-121113-AJL-011	12/11/2013								17,000	1.1 J	18 J	300 J	<1.0	0.61 J	59 J	13 J	46		38,000
SB-27 (DUP)	W-R2330009-121113-AJL-011	12/11/2013	0.19 J	<1.0	<5.0	<5.0														

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
MW-36 ^A	W-R2330022-050117-AFB-037	5/1/2017	NS	15,000	250	NS	NS	NS	NS	NS	NS	NS
MW-36	W-R2330022-050117-AFB-037	5/1/2017	NS	13,000	140	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330022-102317-DMS-001	10/23/2017	NS	NS	190	NS	NS	NS	NS	NS	NS	NS
MW-36	W-R2330022-102317-DMS-001	10/23/2017	NS	NS	200	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330024-042318-DMS-002	4/23/2018	NS	NS	190	NS	NS	NS	NS	NS	NS	NS
MW-36	W-R2330024-042318-DMS-002	4/23/2018	NS	NS	130	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330017-032015-ACN-030	3/20/2015	1.3 J	<50	210	<0.2	3.7 J	<5.0	<0.20	<2.0	0.76 J	7.8 J
CRA-266M	W-R2330017-032015-ACN-030	3/20/2015	<3.0	<50	72	<0.2	2.4 J	<5.0	<0.20	<2.0	<4.0	<50
CRA-266M ^A	W-R2330017-111715-JPM-006	11/17/2015	NS	12,000	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M	W-R2330017-111715-JPM-006	11/17/2015	NS	12,000	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-042216-JPM-032	4/22/2016	NS	NS	110	NS	NS	NS	NS	NS	NS	NS
CRA-266M	W-R2330021-042216-JPM-032	4/22/2016	NS	NS	100	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-110216-JPM-015	11/2/2016	NS	NS	72	NS	NS	NS	NS	NS	NS	NS
CRA-266M	W-R2330021-110216-JPM-015	11/2/2016	NS	NS	68	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330022-042717-AFB-022	4/27/2017	NS	12,000	610	NS	NS	NS	NS	NS	NS	NS
CRA-266M	W-R2330022-042717-AFB-022	4/27/2017	NS	13,000	130	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330022-102617-AFB-021	10/26/2017	NS	NS	800	NS	NS	NS	NS	NS	NS	NS
CRA-266M	W-R2330022-102617-AFB-021	10/26/2017	NS	NS	830	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330024-042518-JPM-021	4/25/2018	NS	NS	96	NS	NS	NS	NS	NS	NS	NS
CRA-266M	W-R2330024-042518-JPM-021	4/25/2018	NS	NS	98	NS	NS	NS	NS	NS	NS	NS
SB-13 ^A	W-R2330009-121013-AJL-008	12/10/2013	250	<50	5,300	0.98	410	13 J	0.78 J	7.6 J	380	1,500
SB-13	W-R2330009-121013-AJL-008	12/10/2013	0.072 J	<50	610	<0.2	14 J	<5.0	<0.20	<2.0	0.20 J	4.0 J
SB-14 ^A	W-R2330009-121013-AJL-007	12/10/2013	4.0	<50	800	<0.2	22	0.68 J	<0.20	0.35 J	7.3	22 J
SB-14	W-R2330009-121013-AJL-007	12/10/2013	0.11 J	<50	470	<0.2	12 J	0.68 J	<0.20	<2.0	0.19 J	4.8 J
SB-15 ^A	W-R2330009-120913-AJL-006	12/9/2013	0.79 J	<50	53	<0.2	10 J	0.77 J	<0.20	<2.0	2.4 J	8.1 J
SB-15	W-R2330009-120913-AJL-006	12/9/2013	<3.0	<50	53	<0.2	8.5 J	0.84 J	<0.20	<2.0	0.17 J	3.0 J
SB-21 ^A	W-R2330009-120513-RD-001	12/5/2013	1,700	<50	1,800	0.39	86 J	<5.0	2.7	<2.0	86	2,200
SB-21	W-R2330009-120513-RD-001	12/5/2013	0.49 J	<50	530	<0.2	10 J	<5.0	<0.20	1.1 J	1.3 J	26 J
SB-22 ^A	W-R2330009-120513-RD-002	12/5/2013	59	<50	550	<0.2	20 J	<5.0	<0.20	<2.0	4.0 J	210 J
SB-22	W-R2330009-120513-RD-002	12/5/2013	0.21 J	<50	560	<0.2	16 J	<5.0	<0.20	0.081 J	0.77 J	24 J
SB-23 ^A	W-R2330009-120513-RD-003	12/5/2013	86	<50	1,600	0.12 J	130 J	12 J	<0.20	0.96 J	9.3	420 J
SB-23	W-R2330009-120513-RD-003	12/5/2013	0.084 J	<50	70	<0.2	9.1 J	0.76 J	<0.20	<2.0	1.7 J	5.6 J
SB-24 ^A	W-R2330009-120613-RD-004	12/6/2013	150	<50	4,100	0.30	210	9.8 J	0.53 J	2.4 J	86	580
SB-24	W-R2330009-120613-RD-004	12/6/2013	<3.0	<50	360	<0.2	14 J	0.73 J	<0.20	<2.0	0.38 J	4.8 J
SB-25 ^A	W-R2330009-120613-RD-005	12/6/2013	440	<50	9,200	0.95	1,100	27 J	1.7 J	6.3 J	590	1,700
SB-25	W-R2330009-120613-RD-005	12/6/2013	0.63 J	<50	530	<0.2	5.0 J	<5.0	<0.20	0.26 J	3.2 J	4.5 J
SB-26 ^A	W-R2330009-121013-AJL-009	12/10/2013	640	<50	14,000	0.51	1,100	47 J	2.5	13 J	660	2,900
SB-26	W-R2330009-121013-AJL-009	12/10/2013	0.11 J	<50	92	<0.2	14 J	0.75 J	<0.20	<2.0	0.67 J	14 J
SB-27 ^A	W-R2330009-121113-AJL-010	12/11/2013	100	<50	2,800	<0.2	210	9.4 J	<0.20	2.3 J	180	680
SB-27	W-R2330009-121113-AJL-010	12/11/2013	<3.0	<50	310	<0.2	25	<5.0	<0.20	<2.0	0.46 J	19 J
SB-27 ^A (DUP)	W-R2330009-121113-AJL-011	12/11/2013	19 J	<50	730	<0.2	53 J	<5.0	<0.20	<2.0	46	140 J
SB-27 (DUP)	W-R2330009-121113-AJL-011	12/11/2013	<3.0	<50	300	<0.2	24	<5.0	<0.20	<2.0	<4.0	18 J
SB-28 ^A	W-R2330009-121113-AJL-012	12/11/2013	200	<50	4,100	0.23	310	13 J	0.75 J	3.3 J	320	800
SB-28	W-R2330009-121113-AJL-012	12/11/2013	<3.0	<50	180	<0.2	15 J	<5.0	<0.20	<2.0	0.49 J	4.2 J
SB-29 ^A	W-R2330009-121213-AJL-014	12/12/2013	330	<50	980	0.13	51 J	<5.0	<0.20	<2.0	24 J	470 J
SB-29	W-R2330009-121213-AJL-014	12/12/2013	<3.0	<50	580	<0.2	12 J	<5.0	<0.20	<2.0	1.7 J	18 J

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
SB-30 ^A	W-R2330009-121213-AJL-016	12/12/2013																		
SB-30	W-R2330009-121213-AJL-016	12/12/2013	<25	<1.0	0.98 J	<50	<50	21.0	<1.0	<5.0	<1.0	<5.0	<1.0	5.5 J	<5.0	<5.0	0.29 J	2.0 J	<1.0	0.33 J
SB-31 ^A	W-R2330009-121213-AJL-018	12/12/2013																		
SB-31	W-R2330009-121213-AJL-018	12/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	0.44 J
SB-32 ^A	W-R2330009-121213-AJL-015	12/12/2013																		
SB-32	W-R2330009-121213-AJL-015	12/12/2013	<25	<1.0	<1.0	<50	<50	1.1	<1.0	<5.0	1.4	<5.0	<1.0	<10	<5.0	<5.0	<1.0	1.3 J	<1.0	0.27 J
SB-33 ^A	W-R2330009-121213-AJL-017	12/12/2013																		
SB-33	W-R2330009-121213-AJL-017	12/12/2013	<25	<1.0	<1.0	<50	3.9 J	0.71 J	<1.0	0.44 J	1.2	<5.0	<1.0	<10	<5.0	<5.0	<1.0	0.62 J	<1.0	0.29 J
SB-34 ^A	W-R2330009-121313-AJL-018	12/13/2013																		
SB-34	W-R2330009-121313-AJL-018	12/13/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.44 J
SB-34 ^A (DUP)	W-R2330009-121313-AJL-019	12/13/2013																		
SB-34 (DUP)	W-R2330009-121313-AJL-019	12/13/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.38 J
SB-16	W-R2330012-033114-ACN-001	3/31/2014	<25	<1.0	<1.0	<50	14 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-17	W-R2330012-033114-ACN-002	3/31/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	6.2	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-18	W-R2330012-033114-ACN-003	3/31/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-19	W-2330012-040114-ACN-004	4/1/2014	<25	<1.0	<1.0	<50	3.3 J	0.36 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	1.1	0.62 J
SB-20	W-2330012-040114-ACN-005	4/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.25 J
SB-35	W-2330012-040114-ACN-006	4/1/2014	<25	<1.0	1.5	<50	3.3 J	6.1	<1.0	<5.0	2.0	<5.0	<1.0	1.5	<5.0	<5.0	0.18 J	1.4 J	1.1	0.25 J
SB-36	W-R2330012-040314-ACN-007	4/3/2014	<25	<1.0	<1.0	<50	7.1 J	2.5	<1.0	<5.0	1.2	<5.0	<1.0	<10	<5.0	<5.0	0.84 J	1.9 J	<1.0	0.54 J
SB-36 (DUP)	W-R2330012-040314-ACN-008	4/3/2014	<25	<1.0	<1.0	<50	7.8 J	2.7	<1.0	<5.0	1.4	<5.0	<1.0	1.4 J	<5.0	<5.0	0.86 J	2.0 J	<1.0	0.52 J
SB-37	W-R2330012-040314-ACN-009	4/3/2014	<25	<1.0	<1.0	<50	6.9 J	2.6	<1.0	1.3 J	<1.0	<5.0	<1.0	<10	<5.0	<5.0	0.84 J	<5.0	<1.0	0.82 J
SB-38	W-R2330012-040314-ACN-010	4/3/2014	2.2 J	<1.0	0.98 J	<50	16 J	2.8	<1.0	1.4 J	0.96 J	<5.0	<1.0	<10	<5.0	<5.0	<1.0	1.6 J	<1.0	0.38 J
SB-39	W-R2330012-040314-ACN-011	4/3/2014	<25	<1.0	0.91 J	<50	11 J	17	<1.0	1.6 J	90	<5.0	<1.0	2.0 J	<5.0	<5.0	<1.0	2.0 J	<1.0	0.30 J
SB-46	W-R2330012-041114-ACN-015	4/11/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.30 J
SB-47	W-R2330012-041114-ACN-016	4/11/2014	<25	<1.0	<1.0	<50	<50	0.31 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.49 J
SB-48	W-R2330012-040314-ACN-013	4/9/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.35 J
SB-49	W-R2330012-040314-ACN-014	4/9/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SB-50	W-R2330012-040314-ACN-012	4/9/2014	<25	<1.0	<1.0	<50	<50	0.29 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.39 J
SW-1	W-R2330009-050313-MJF-015	5/3/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SW-1	W-R2330012-041514-ACN-017	4/15/2014	<25	<1.0	<1.0	1.4 J	7.5 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SW-2	W-R2330009-050313-MJF-014	5/3/2013	<25	<1.0	<1.0	<50	4.0 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
SW-2	W-R2330012-041514-ACN-019</																			

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Xylenes	Semivolatile Organic Compounds (SVOCs)																
				1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NLV	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
SB-30 ^A	W-R2330009-121213-AJL-016	12/12/2013																		
SB-30	W-R2330009-121213-AJL-016	12/12/2013	1.0 J	<10	3.1 J	2.9 J	<10	<10	<5.0	<10	<5.0	1.2 J	<5.0	0.92 J	<5.0	<10	0.64 J	<5.0	<5.0	<5.0
SB-31 ^A	W-R2330009-121213-AJL-018	12/12/2013																		
SB-31	W-R2330009-121213-AJL-018	12/12/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	0.65 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-32 ^A	W-R2330009-121213-AJL-015	12/12/2013																		
SB-32	W-R2330009-121213-AJL-015	12/12/2013	1.0 J	<10	<10	1.2 J	<10	<10	<5.0	<10	0.46 J	<5.0	<5.0	0.85 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-33 ^A	W-R2330009-121213-AJL-017	12/12/2013																		
SB-33	W-R2330009-121213-AJL-017	12/12/2013	1.3 J	<10	<10	0.29 J	<10	0.40 J	<5.0	<10	0.59 J	0.39 J	<5.0	0.73 J	<5.0	<10	<4.0	<5.0	0.37 J	<5.0
SB-34 ^A	W-R2330009-121313-AJL-018	12/13/2013																		
SB-34	W-R2330009-121313-AJL-018	12/13/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	0.65 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-34 ^A (DUP)	W-R2330009-121313-AJL-019	12/13/2013																		
SB-34 (DUP)	W-R2330009-121313-AJL-019	12/13/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	0.69 J	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-16	W-R2330012-033114-ACN-001	3/31/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-17	W-R2330012-033114-ACN-002	3/31/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-18	W-R2330012-033114-ACN-003	3/31/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-19	W-2330012-040114-ACN-004	4/1/2014	1.0 J	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-20	W-2330012-040114-ACN-005	4/1/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-35	W-2330012-040114-ACN-006	4/1/2014	1.9 J	<10	<10	2.4 J	<10	1.6 J	<5.0	<10	<5.0	1.7 J	<5.0	<10	<5.0	1.9 J	<4.0	<5.0	<5.0	<5.0
SB-36	W-R2330012-040314-ACN-007	4/3/2014	2.8 J	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-36 (DUP)	W-R2330012-040314-ACN-008	4/3/2014	2.8 J	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-37	W-R2330012-040314-ACN-009	4/3/2014	1.7 J	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-38	W-R2330012-040314-ACN-010	4/3/2014	1.5 J	<10	<10	1.5 J	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-39	W-R2330012-040314-ACN-011	4/3/2014	1.5 J	<10	<10	1.2 J	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-46	W-R2330012-041114-ACN-015	4/11/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-47	W-R2330012-041114-ACN-016	4/11/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-48	W-R2330012-040314-ACN-013	4/9/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-49	W-R2330012-040314-ACN-014	4/9/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SB-50	W-R2330012-040314-ACN-012	4/9/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SW-1	W-R2330009-050313-MJF-015	5/3/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SW-1	W-R2330012-041514-ACN-017	4/15/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SW-2	W-R2330009-050313-MJF-014	5/3/2013	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SW-2	W-R2330012-041514-ACN-019	4/15/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
SW-3	W-R2330009-051013-MJF-016	5/10/2013	<3.0	<80	<10	<5.0	<10	<10	<80	<80	<40	<5.0	<5.0	<10	<5.0	<80	<4.0	<5.0	<40	<40

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																	
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P.R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
SB-30 ^A	W-R2330009-121213-AJL-016	12/12/2013								7,300	3.1 J	6.8 J	2,700	<1.0	2.4 J	22 J	7.2 J	58		41,000
SB-30	W-R2330009-121213-AJL-016	12/12/2013	0.21 J	<1.0	1.1 J	2.2 J	<2.0	<5.0	0.40 J	18 J	0.43 J	<5.0	2,100	<1.0	<1.0	<10	3.6 J	<4.0	3.9 J	29,000
SB-31 ^A	W-R2330009-121213-AJL-018	12/12/2013								2,000	0.34 J	5.7 J	84 J	0.1 J	<1.0	14	2.5 J	14		8,400
SB-31	W-R2330009-121213-AJL-018	12/12/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	60 J	0.46 J	23 J	520 J	<10	<10	4.3 J	5.9 J	<40	2.1 J	21,000
SB-32 ^A	W-R2330009-121213-AJL-015	12/12/2013								1,600	1.7 J	<5.0	1,600	<1.0	2.4 J	12 J	6.2 J	31 J		30,000
SB-32	W-R2330009-121213-AJL-015	12/12/2013	0.37 J	<1.0	0.17 J	1.0 J	<2.0	<5.0	<5.0	21 J	0.53 J	<5.0	1,500	<1.0	<1.0	4.7 J	5.4 J	<4.0	3.7 J	26,000
SB-33 ^A	W-R2330009-121213-AJL-017	12/12/2013								45,000	95	66	3,400	2.0 J	42	320	51 J	1,100		170,000
SB-33	W-R2330009-121213-AJL-017	12/12/2013	0.26 J	<1.0	<5.0	0.20 J	<2.0	<5.0	<5.0	30 J	1.6 J	<5.0	1,500	<1.0	<1.0	3.5 J	6.8 J	<4.0	60	23,000
SB-34 ^A	W-R2330009-121313-AJL-018	12/13/2013								2,000	0.34 J	5.7	84 J	0.10 J	<1.0	14	2.5 J	14		8,400
SB-34	W-R2330009-121313-AJL-018	12/13/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	60 J	0.46 J	23 J	520 J	<1.0	<1.0	4.3 J	5.9 J	<4.0	2.1 J	21,000
SB-34 ^A (DUP)	W-R2330009-121313-AJL-019	12/13/2013								11,000	0.97 J	12	150	0.49 J	0.26 J	59	11 J	50		31,000
SB-34 (DUP)	W-R2330009-121313-AJL-019	12/13/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	75 J	0.89 J	9.3 J	700 J	<1.0	<1.0	<10	4.6 J	<4.0	4.5 J	38,000
SB-16	W-R2330012-033114-ACN-001	3/31/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	35 J	1.2 J	44	540	<1.0	0.12 J	0.97 J	4.1 J	0.76 J	<0.005	11,000
SB-17	W-R2330012-033114-ACN-002	3/31/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	38 J	0.16 J	5.7	370	<1.0	0.046 J	0.65 J	3.9 J	<4.0	<0.005	7,000
SB-18	W-R2330012-033114-ACN-003	3/31/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	380	0.33 J	6.2	58 J	<1.0	0.053 J	1.4 J	3.9 J	1.5 J	<0.005	13,000
SB-19	W-2330012-040114-ACN-004	4/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	39 J	0.46 J	5.3	140	<1.0	<1.0	<10	5.8 J	0.54 J	2.1	2,100
SB-20	W-2330012-040114-ACN-005	4/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	300	0.19 J	<5.0	21 J	<1.0	<1.0	<10	1.8 J	1.2 J	1.3	490
SB-35	W-2330012-040114-ACN-006	4/1/2014	<5.0	<1.0	1.3 J	1.9 J	1.9 J	<5.0	<5.0	43 J	0.81 J	4.3 J	1,000	<1.0	<1.0	3.6 J	3.2 J	<4.0	2.4 J	25,000
SB-36	W-R2330012-040314-ACN-007	4/3/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	160 J	0.75 J	4.3 J	2,800	<1.0	<1.0	1.6 J	6.4 J	<4.0	2.5 J	27,000
SB-36 (DUP)	W-R2330012-040314-ACN-008	4/3/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	130 J	0.43 J	4.4 J	2,600	<1.0	<1.0	1.4 J	6.6 J	<4.0	6.3 J	27,000
SB-37	W-R2330012-040314-ACN-009	4/3/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	66 J	1.5 J	24 J	640	<1.0	<1.0	3.5 J	8.8 J	<4.0	9.5 J	16,000
SB-38	W-R2330012-040314-ACN-010	4/3/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	13 J	2.5 J	14 J	380	<1.0	<1.0	<10	6.2 J	<4.0	5.2 J	2,200
SB-39	W-R2330012-040314-ACN-011	4/3/2014	<5.0	<1.0	<5.0	0.80 J	<2.0	<5.0	<5.0	75	0.61 J	2.3 J	2,100	<1.0	<1.0	4.4 J	4.6 J	2.3 J	6.6 J	25,000
SB-46	W-R2330012-041114-ACN-015	4/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	38 J	0.40 J	6.4 J	100 J	<1.0	<1.0	1.8 J	3.1 J	2.7 J	<0.005	5,100
SB-47	W-R2330012-041114-ACN-016	4/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	39 J	0.43 J	2.8 J	160	<1.0	<1.0	0.95 J	6.7 J	2.4 J	<0.005	3,200
SB-48	W-R2330012-040314-ACN-013	4/9/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	170 J	1.4 J	<5.0	69 J	<1.0	<1.0	<10	7.7 J	6.1 J	<0.005	280 J
SB-49	W-R2330012-040314-ACN-014	4/9/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	21 J	<2.0	<5.0	9.3 J	<1.0	<1.0	<10	0.17 J	0.65 J	2.3 J	31 J
SB-50	W-R2330012-040314-ACN-012	4/9/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	74 J	0.43 J	<5.0	44 J	<1.0	0.58 J	<10	2.6 J	<4.0	2.6 J	200 J
SW-1	W-R2330009-050313-MJF-015	5/3/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	25 J	0.40 J	<5.0	27 J	<1.0	<1.0	1.1 J	1.5 J	4.0	<0.005	50 J
SW-1	W-R2330012-041514-ACN-017	4/15/2014	<5.0	1.6 H	<5.0	<5.0	<2.0	0.69 H	<5.0	16 J	1.3 J	<5.0	34 J	<1.0	0.4 J	4.3 J	1.7 J	36 J	110	33 J
SW-2	W-R2330009-050313-MJF-014	5/3/2013	1.3 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	3.4 J	1.1 J	0.93 J	93 J	<1.0	0.063 J	0.44 J	0.55 J	5.2 J	0.0012 J	170 J
SW-2	W-R2330012-041514-ACN-019	4/15/2014	<5.0	1.3 H	<5.0	<5.0	<2.0	<5.0	<5.0	<250	1.4 J	<25	78 J	<1.0	0.23 J	<10	1.3 J	5.9 J	<0.005	250 J
SW-3	W-R2330009-051013-MJF-016	5/10/2013	<40	<1.0	<40	<5.0	<2.0	<5.0	<5.0	26 J	0.43 J	4.6 J	340	<1.0	0.046 J	1.2 J	3.4 J	13 J	<0.005	4,100
SW-3	W-R2330012-041514-ACN-018	4/15/2014	<5.0	1.3 H	<5.0	<5.0	<2.0	<5.0	<5.0	11 J	0.52 J	<5.0	150 J	<1.0	<1.0	<10	0.93 J	5.7 J	<0.005	<100
SW-3 ^A	W-R2330024-042418-JPM-011	4/24/2018	NS	NS	NS	NS	NS	NS	NS	1500	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,900
SW-3	W-R2330024-042418-JPM-011	4/24/2018	NS	NS	NS	NS	NS	NS	NS	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	45 J
Equipment Blank	W-R2330004-090512-MJF-05	9/5/2012	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	2.9 J	<2.0	<5.0	0.59 J	<1.0	<1.0	0.14 J	0.26 J	0.70 J	<0.005	24 J
Equipment Blank	W-R2330009-050113-MJF-006	5/1/2013	1.7 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	2.4 J	0.11 J	<5.0	3.1 J	<1.0	<1.0	0.59 J	0.79 J	0.57 J	<0.005	23 J
Equipment Blank ^A	W-R2330009-080813-ZTR-012	8/8/2013								3.4 J	<2.0	<5.0	2.7 J	<1.0	0.049 J	0.28 J	<20	1.5 J		26 J
Equipment Blank	W-R2330009-080813-ZTR-012	8/8/2013	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	1.7 J	0.080 J	<5.0	2.2 J	<1.0	<1.0	<10	0.46 J	1.1 J	<0.005	21 J
Equipment Blank ^A	W-R2330009-121113-AJL-013	12/11/2013								7.0 J	<2.0	<5.0	0.085 J	<1.0	<1.0	<10	<20	0.72 J		12 J
Equipment Blank	W-R2330009-121113-AJL-013	12/11/2013	0.16 J	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	2.7 J	<2.0	<5.0	0.11 J	<1.0	<1.0	<10	0.14 J	<4.0	<0.005	10 J
Equipment Blank ^A	W-R2330012-032814-ACN-012	3/28/2014								51	0.094 J	<5.0	14 J	0.15 J	<1.0	<1.0	0.17 J	65 J		17 J
Equipment Blank	W-R2330012-032814-ACN-012	3/28/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	150	0.48 J	<5.0	7.5 J	91 J	<1.0	<1.0	0.076 J	53 J	1.4 J	29 J
Equipment Blank ^A	W-R2330012-052014-ACN-031	5/20/2014								5.0 J	<2.0	<5.0	0.28 J	<1.0	<1.0	<1.0	<20	0.56 J		8.4 J
Equipment Blank	W-R2330012-052014-ACN-031	5/20/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	9.4 J	<2.0	<5.0	0.35 J	<1.0	<1.0	<1.0	<20	<4.0	<0.005	13 J

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
SB-30 ^A	W-R2330009-121213-AJL-016	12/12/2013	940	<50	380 J	0.15	22 J	<5.0	<0.20	<2.0	19 J	950
SB-30	W-R2330009-121213-AJL-016	12/12/2013	1.1 J	<50	260 J	<0.2	8.2 J	<5.0	<0.20	<2.0	<4.0	<500
SB-31 ^A	W-R2330009-121213-AJL-018	12/12/2013	11	<50	130	0.1	9.7 J	<5.0	<2.0	<2.0	6.6	44
SB-31	W-R2330009-121213-AJL-018	12/12/2013	<3.0	<50	170 J	<0.2	19 J	<5.0	<2.0	<2.0	<4.0	<27
SB-32 ^A	W-R2330009-121213-AJL-015	12/12/2013	120	<50	290 J	<0.2	31 J	<5.0	<0.20	<2.0	2.4 J	210 J
SB-32	W-R2330009-121213-AJL-015	12/12/2013	<3.0	<50	270 J	<0.2	19 J	<5.0	<0.20	<2.0	2.4 J	16 J
SB-33 ^A	W-R2330009-121213-AJL-017	12/12/2013	3,200	<50	2,200	2.2	320	<5.0	16	<2.0	90	9,900
SB-33	W-R2330009-121213-AJL-017	12/12/2013	<3.0	<50	420 J	<0.2	16 J	<5.0	<0.20	<2.0	2.3 J	61 J
SB-34 ^A	W-R2330009-121313-AJL-018	12/13/2013	11	<50	130	0.11	9.7 J	<5.0	<2.0	<2.0	6.6	44 J
SB-34	W-R2330009-121313-AJL-018	12/13/2013	<3.0	<50	170 J	<0.2	19 J	<5.0	<2.0	<2.0	<4.0	27 J
SB-34 ^A (DUP)	W-R2330009-121313-AJL-019	12/13/2013	77	<50	610	0.43	40	2.6 J	0.18 J	0.37 J	30	140
SB-34 (DUP)	W-R2330009-121313-AJL-019	12/13/2013	<3.0	<50	1,500	<0.2	26 J	<5.0	<2.0	<2.0	1.7 J	34 J
SB-16	W-R2330012-033114-ACN-001	3/31/2014	<3.0	<50	270	<0.2	31	0.98 J	<0.2	<2.0	0.86 J	360
SB-17	W-R2330012-033114-ACN-002	3/31/2014	<3.0	<50	390	<0.2	7.5 J	1.7 J	<0.2	<2.0	0.69 J	19 J
SB-18	W-R2330012-033114-ACN-003	3/31/2014	0.44 J	<50	660	<0.2	11 J	<5.0	<0.2	<2.0	1.4 J	140
SB-19	W-2330012-040114-ACN-004	4/1/2014	0.081 J	<50	930	<0.2	18 J	0.84 J	<0.20	<2.0	0.46 J	62
SB-20	W-2330012-040114-ACN-005	4/1/2014	0.13 J	<50	98	<0.2	2.6 J	0.73 J	<0.20	<2.0	1.3 J	2.8 J
SB-35	W-2330012-040114-ACN-006	4/1/2014	0.43 J	<50	550	<0.2	10 J	<5.0	<0.20	<2.0	2.2 J	16 J
SB-36	W-R2330012-040314-ACN-007	4/3/2014	0.47 J	<50	260	<0.2	9.7 J	<5.0	<0.20	<2.0	3.3 J	2.9 J
SB-36 (DUP)	W-R2330012-040314-ACN-008	4/3/2014	0.41 J	<50	250 J	<0.2	9.6 J	<5.0	<0.20	<2.0	3.3 J	2.5 J
SB-37	W-R2330012-040314-ACN-009	4/3/2014	3.1 J	<50	530	<0.2	31 J	<5.0	<0.20	<2.0	1.1 J	340
SB-38	W-R2330012-040314-ACN-010	4/3/2014	0.47 J	<50	430	<0.2	15 J	<5.0	<0.20	<2.0	<4.0	21 J
SB-39	W-R2330012-040314-ACN-011	4/3/2014	1.5 J	<50	300	<0.2	11 J	1.1 J	<0.20	1.5 J	1.1 J	6.9 J
SB-46	W-R2330012-041114-ACN-015	4/11/2014	1.2 J	<50	960	<0.2	9.6 J	<5.0	<0.20	<2.0	<4.0	7.8 J
SB-47	W-R2330012-041114-ACN-016	4/11/2014	0.18 J	<50	1,200	<0.2	17 J	7.2	<0.2	<2.0	0.59 J	9.0 J
SB-48	W-R2330012-040314-ACN-013	4/9/2014	<3.0	<50	410	<0.2	20 J	5.4 J	<0.20	<2.0	2.4 J	21J
SB-49	W-R2330012-040314-ACN-014	4/9/2014	0.62 J	<50	59	<0.2	1.4 J	<5.0	<0.20	<2.0	<4.0	1.3 J
SB-50	W-R2330012-040314-ACN-012	4/9/2014	14 J	<50	110 J	<0.2	4.3 J	<5.0	<0.20	<2.0	<4.0	8.0 J
SW-1	W-R2330009-050313-MJF-015	5/3/2013	0.069 J	<50	22 J	<0.2	6.4 J	<5.0	<0.20	<2.0	<4.0	1.9 J
SW-1	W-R2330012-041514-ACN-017	4/15/2014	2.3 J	<50	51 J	<0.2	4.0 J	<5.0	<0.20	<2.0	1.2 J	38 J
SW-2	W-R2330009-050313-MJF-014	5/3/2013	0.25 J	<50	69	<0.2	4.8 J	<5.0	<0.20	<2.0	0.28 J	10 J
SW-2	W-R2330012-041514-ACN-019	4/15/2014	0.77 J	<50	460 J	<0.2	5.2 J	<5.0	<0.20	<2.0	<4.0	80 J
SW-3	W-R2330009-051013-MJF-016	5/10/2013	1.7 J	<50	880	<0.2	13 J	<50	<0.20	0.093 J	1.1 J	51
SW-3	W-R2330012-041514-ACN-018	4/15/2014	2.6 J	<50	6.2 J	<0.2	4.2 J	<5.0	<0.20	<2.0	<4.0	8.8 J
SW-3 ^A	W-R2330024-042418-JPM-011	4/24/2018	NS	NS	180	NS	NS	NS	NS	NS	NS	NS
SW-3	W-R2330024-042418-JPM-011	4/24/2018	NS	NS	38	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330004-090512-MJF-05	9/5/2012	0.27 J	<50	1.5 J	<0.2	0.42 J	0.48 J	<0.025	<2.0	<0.30	15 J
Equipment Blank	W-R2330009-050113-MJF-006	5/1/2013	0.0053 J	<50	2.3 J	<0.2	0.6 J	<5.0	<0.20	<2.0	<4.0	1.8 J
Equipment Blank ^A	W-R2330009-080813-ZTR-012	8/8/2013	0.053 J	<50	0.38 J	<0.2	<20	<5.0	<0.20	<2.0	<4.0	4.1 J
Equipment Blank	W-R2330009-080813-ZTR-012	8/8/2013	<3.0	<50	1.0 J	<0.2	0.46 J	<5.0	<0.20	<2.0	<4.0	3.1 J
Equipment Blank ^A	W-R2330009-121113-AJL-013	12/11/2013	<3.0	<50	0.13 J	<0.2	<20	<5.0	<0.20	<2.0	<0.3 J	2.2 J
Equipment Blank	W-R2330009-121113-AJL-013	12/11/2013	<3.0	<50	0.31 J	<0.2	<20	<5.0	<0.20	<2.0	<4.0	1.7 J
Equipment Blank ^A	W-R2330012-032814-ACN-012	3/28/2014	0.16 J	<50	0.17 J	<0.2	1.3 J	<5.0	<0.20	<2.0	<4.0	5.3 J
Equipment Blank	W-R2330012-032814-ACN-012	3/28/2014	0.037 J	<50	1.2 J	<0.2	0.57 J	<5.0	<0.20	<2.0	<4.0	2.1 J
Equipment Blank ^A	W-R2330012-052014-ACN-031	5/20/2014	0.054 J	<50	0.25 J	<0.2	<20	<5.0	<0.20	<2.0	<4.0	0.57 J
Equipment Blank	W-R2330012-052014-ACN-031	5/20/2014	<3.0	<50	0.39 J	<0.2	<20	<5.0	<0.20	<2.0	<4.0	0.87 J

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.75E+06	1.0E+09	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
Equipment Blank ^A	W-R2330012-112414-ACN-005	11/24/2014																		
Equipment Blank	W-R2330012-112414-ACN-005	11/24/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330012-112514-ACN-010	11/25/2014																		
Equipment Blank	W-R2330012-112514-ACN-010	11/25/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330012-112614-JCH-016	11/26/2014																		
Equipment Blank	W-R2330012-112614-JCH-016	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330012-121114-JCH-022	12/1/2014																		
Equipment Blank	W-R2330012-121114-JCH-022	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	7.2	<5.0	<1.0	<5.0	15	<10	3.4 J	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330012-122114-JCH-029	12/2/2014																		
Equipment Blank	W-R2330012-122114-JCH-029	12/2/2014	<25	<1.0	<1.0	<50	<50	<1.0	2.2	<5.0	<1.0	<5.0	5.7	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330012-020515-ACN-004	2/5/2015																		
Equipment Blank	W-R2330012-020515-ACN-004	2/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330017-031615-ACN-008	3/16/2015																		
Equipment Blank	W-R2330017-031615-ACN-008	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330017-031715-ACN-014	3/17/2015																		
Equipment Blank	W-R2330017-031715-ACN-014	3/17/2015	<25	<1.0	<1.0	<50	5.1 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330017-031915-ACN-022	3/19/2015																		
Equipment Blank	W-R2330017-031915-ACN-022	3/19/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330017-032015-ACN-031	3/20/2015																		
Equipment Blank	W-R2330017-032015-ACN-031	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0
Equipment Blank ^A	W-R2330017-111615-AEP-024	11/16/2015																		
Equipment Blank	W-R2330017-111615-AEP-024	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330017-111715-JPM-025	11/17/2015																		
Equipment Blank	W-R2330017-111715-JPM-025	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330017-111815-AFB-026	11/18/2015																		
Equipment Blank	W-R2330017-111915-AEP-027	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-041816-AEP-006	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-041916-AEP-014	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-042116-AFB-029	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-042216-JPM-035	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEM-006	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEP-011	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEM-020	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-110316-JPM-028	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-110416-JPM-038	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042417-DMS-005	4/24/2017																		
Equipment Blank	W-R2330022-042417-DMS-005	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042517-JPM-014	4/25/2017																		
Equipment Blank	W-R2330022-042517-JPM-014	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042617-DMS-020	4/26/2017																		
Equipment Blank	W-R2330022-042617-DMS-020	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042717-DMS-028	4/27/2017																		
Equipment Blank	W-R2330022-042717-DMS-028	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042817-AFB-035	4/28/2017																		
Equipment Blank	W-R2330022-042817-AFB-035	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-050117-AFB-038	5/1/2017																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																	
			Xylenes	1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate	Dimethyl phthalate
Non-residential Drinking Water Criteria (II)			280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05
Non-residential Health-Based Drinking Water Value (E)			10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA
GSI Final Acute Value (FAV)			730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v,i}) (a)			10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NA	NLV	NA	NA	NA	NA
Water Solubility (VII)			1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06
Flammability & Explosivity Screening Level (VIII)			70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	NA	NA
ID	SAMPLE ID	SAMPLE DATE																		
Equipment Blank ^A	W-R2330012-112414-ACN-005	11/24/2014																		
Equipment Blank	W-R2330012-112414-ACN-005	11/24/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
Equipment Blank ^A	W-R2330012-112514-ACN-010	11/25/2014																		
Equipment Blank	W-R2330012-112514-ACN-010	11/25/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
Equipment Blank ^A	W-R2330012-112614-JCH-016	11/26/2014																		
Equipment Blank	W-R2330012-112614-JCH-016	11/26/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
Equipment Blank ^A	W-R2330012-121114-JCH-022	12/1/2014																		
Equipment Blank	W-R2330012-121114-JCH-022	12/1/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
Equipment Blank ^A	W-R2330012-122114-JCH-029	12/2/2014																		
Equipment Blank	W-R2330012-122114-JCH-029	12/2/2014	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
Equipment Blank ^A	W-R2330012-020515-ACN-004	2/5/2015																		
Equipment Blank	W-R2330012-020515-ACN-004	2/5/2015	<3.0	<11	<11	<5.3	<11	<10	<5.3	<11	<5.3	<5.3	<5.3	<11	<5.3	<11	<4.2	<5.0	<5.3	<5.3
Equipment Blank ^A	W-R2330017-031615-ACN-008	3/16/2015																		
Equipment Blank	W-R2330017-031615-ACN-008	3/16/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
Equipment Blank ^A	W-R2330017-031715-ACN-014	3/17/2015																		
Equipment Blank	W-R2330017-031715-ACN-014	3/17/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<4.0	<5.0	<5.0	<5.0
Equipment Blank ^A	W-R2330017-031915-ACN-022	3/19/2015																		
Equipment Blank	W-R2330017-031915-ACN-022	3/19/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
Equipment Blank ^A	W-R2330017-032015-ACN-031	3/20/2015																		
Equipment Blank	W-R2330017-032015-ACN-031	3/20/2015	<3.0	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0
Equipment Blank ^A	W-R2330017-111615-AEP-024	11/16/2015																		
Equipment Blank	W-R2330017-111615-AEP-024	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330017-111715-JPM-025	11/17/2015																		
Equipment Blank	W-R2330017-111715-JPM-025	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330017-111815-AFB-026	11/18/2015																		
Equipment Blank	W-R2330017-111915-AEP-027	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-041816-AEP-006	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-041916-AEP-014	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-042116-AFB-029	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-042216-JPM-035	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEM-006	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEP-011	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEM-020	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-110316-JPM-028	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-110416-JPM-038	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042417-DMS-005	4/24/2017																		
Equipment Blank	W-R2330022-042417-DMS-005	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042517-JPM-014	4/25/2017																		
Equipment Blank	W-R2330022-042517-JPM-014	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042617-DMS-020	4/26/2017																		
Equipment Blank	W-R2330022-042617-DMS-020	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042717-DMS-028	4/27/2017																		
Equipment Blank	W-R2330022-042717-DMS-028	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042817-AFB-035	4/28/2017																		
Equipment Blank	W-R2330022-042817-AFB-035	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-050117-AFB-038	5/1/2017																		

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																	
			D-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P.R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{v-in}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
Equipment Blank ^A	W-R2330012-112414-ACN-005	11/24/2014								3.3 J	<2.0	<5.0	<100	<1.0	<1.0	<1.0	<20	6.3		<200
Equipment Blank	W-R2330012-112414-ACN-005	11/24/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.3 J	<2.0	<5.0	<100	<1.0	0.027 J	<10	<20	6.3	<5.0	<200
Equipment Blank ^A	W-R2330012-112514-ACN-010	11/25/2014								3.6 J	<2.0	<5.0	0.67 J	<1.0	<1.0	<10	<20	2.3 J		17 J
Equipment Blank	W-R2330012-112514-ACN-010	11/25/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	3.2 J	<2.0	<5.0	0.58 J	<1.0	<1.0	<10	<20	2.2 J	<5.0	<200
Equipment Blank ^A	W-R2330012-112614-JCH-016	11/26/2014								3.8 J	<2.0	<5.0	<100	<1.0	0.091 J	<10	<20	6.2		<200
Equipment Blank	W-R2330012-112614-JCH-016	11/26/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	6.2 J	<2.0	<5.0	<100	<1.0	0.27 J	0.37 J	<20	5.9	<5.0	21 J
Equipment Blank ^A	W-R2330012-121114-JCH-022	12/1/2014								23 J	0.15 J	<5.0	16 J	<1.0	0.032 J	0.30 J	<20	170		33 J
Equipment Blank	W-R2330012-121114-JCH-022	12/1/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.16 J	<5.0	15 J	<1.0	0.034 J	<10	<20	160	<5.0	27 J
Equipment Blank ^A	W-R2330012-122114-JCH-029	12/2/2014								<50	<2.0	<5.0	1.4 J	<1.0	<1.0	<10	<20	<4.0		<200
Equipment Blank	W-R2330012-122114-JCH-029	12/2/2014	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	<50	<2.0	<5.0	0.45 J	<1.0	<1.0	0.13 J	<20	<4.0	<5.0	<200
Equipment Blank ^A	W-R2330012-020515-ACN-004	2/5/2015								12 J	<2.0	<5.0	6.8 J	<1.0	<1.0	<10	0.21 J	83		<200
Equipment Blank	W-R2330012-020515-ACN-004	2/5/2015	<5.3	<1.1	<5.3	<5.3	<2.1	<5.3	<5.3	<50	<2.0	<5.0	<100	<1.0	<1.0	<10	<20	2.0 J	<5.0	<200
Equipment Blank ^A	W-R2330017-031615-ACN-008	3/16/2015								<50	<2.0	<5.0	<100	<1.0	<1.0	0.21 J	<20	1.1 J		<200
Equipment Blank	W-R2330017-031615-ACN-008	3/16/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	<50	<2.0	<5.0	<100	<1.0	<1.0	0.19 J	<20	1.1 J	<5.0	<200
Equipment Blank ^A	W-R2330017-031715-ACN-014	3/17/2015								<50	<2.0	<5.0	<100	<1.0	0.027 J	0.17 J	<20	1.0 J		<200
Equipment Blank	W-R2330017-031715-ACN-014	3/17/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	<50	<2.0	<5.0	<100	<1.0	<1.0	0.19 J	<20	1.1 J	<5.0	<200
Equipment Blank ^A	W-R2330017-031915-ACN-022	3/19/2015								21 J	<2.0	<5.0	3.3 J	<1.0	<1.0	<10	<20	1.4 J		22 J
Equipment Blank	W-R2330017-031915-ACN-022	3/19/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	18 J	<2.0	<5.0	1.5 J	<1.0	<1.0	<10	<20	1.3 J	<5.0	<200
Equipment Blank ^A	W-R2330017-032015-ACN-031	3/20/2015								<50	<2.0	<5.0	<100	<1.0	<1.0	0.21 J	<20	1.4 J		43 J
Equipment Blank	W-R2330017-032015-ACN-031	3/20/2015	<5.0	<1.0	<5.0	<5.0	<2.0	<5.0	<5.0	<50	<2.0	<5.0	<100	<1.0	<1.0	0.21 J	<20	1.1 J	<5.0	<200
Equipment Blank ^A	W-R2330017-111615-AEP-024	11/16/2015								<50	NS	NS	NS	NS	NS	NS	NS	NS		33 J
Equipment Blank	W-R2330017-111615-AEP-024	11/16/2015	NS	NS	NS	NS	NS	NS	NS	1.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	<200
Equipment Blank ^A	W-R2330017-111715-JPM-025	11/17/2015								2.7 J	NS	NS	NS	NS	NS	NS	NS	NS		100 J
Equipment Blank	W-R2330017-111715-JPM-025	11/17/2015	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	<200
Equipment Blank ^A	W-R2330017-111815-AFB-026	11/18/2015								1.8 J	NS	NS	NS	NS	NS	NS	NS	NS		<200
Equipment Blank	W-R2330017-111915-AEP-027	11/19/2015	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	<200
Equipment Blank	W-R2330021-041816-AEP-006	4/18/2016	NS	NS	NS	NS	NS	NS	NS	67	NS	NS	NS	NS	NS	NS	NS	NS	NS	88 J
Equipment Blank	W-R2330021-041916-AEP-014	4/19/2016	NS	NS	NS	NS	NS	NS	NS	16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	98 J
Equipment Blank	W-R2330021-042116-AFB-029	4/21/2016	NS	NS	NS	NS	NS	NS	NS	91	NS	NS	NS	NS	NS	NS	NS	NS	NS	340
Equipment Blank	W-R2330021-042216-JPM-035	4/22/2016	NS	NS	NS	NS	NS	NS	NS	71	NS	NS	NS	NS	NS	NS	NS	NS	NS	460
Equipment Blank	WR2330021-103116-AEM-006	10/31/2016	NS	NS	NS	NS	NS	NS	NS	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	11
Equipment Blank	WR2330021-103116-AEP-011	11/1/2016	NS	NS	NS	NS	NS	NS	NS	28	NS	NS	NS	NS	NS	NS	NS	NS	NS	120
Equipment Blank	WR2330021-103116-AEM-020	11/2/2016	NS	NS	NS	NS	NS	NS	NS	48	NS	NS	NS	NS	NS	NS	NS	NS	NS	150
Equipment Blank	W-R2330021-110316-JPM-028	11/3/2016	NS	NS	NS	NS	NS	NS	NS	7.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	19
Equipment Blank	W-R2330021-110416-JPM-038	11/4/2016	NS	NS	NS	NS	NS	NS	NS	89	NS	NS	NS	NS	NS	NS	NS	NS	NS	350
Equipment Blank ^A	W-R2330022-042417-DMS-005	4/24/2017								5.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.2 J
Equipment Blank	W-R2330022-042417-DMS-005	4/24/2017	NS	NS	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.8 J
Equipment Blank ^A	W-R2330022-042517-JPM-014	4/25/2017								13 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	52 J
Equipment Blank	W-R2330022-042517-JPM-014	4/25/2017	NS	NS	NS	NS	NS	NS	NS	7.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	93 J
Equipment Blank ^A	W-R2330022-042617-DMS-020	4/26/2017								16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	58 J
Equipment Blank	W-R2330022-042617-DMS-020	4/26/2017	NS	NS	NS	NS	NS	NS	NS	31 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	100 J
Equipment Blank ^A	W-R2330022-042717-DMS-028	4/27/2017								13 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	56 J
Equipment Blank	W-R2330022-042717-DMS-028	4/27/2017	NS	NS	NS	NS	NS	NS	NS	24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	140 J
Equipment Blank ^A	W-R2330022-042817-AFB-035	4/28/2017								16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	66 J
Equipment Blank	W-R2330022-042817-AFB-035	4/28/2017	NS	NS	NS	NS	NS	NS	NS	7.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	81 J
Equipment Blank ^A	W-R2330022-050117-AFB-038	5/1/2017								18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	70 J

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Non-residential Drinking Water Criteria (II)			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-95}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE										
Equipment Blank ^A	W-R2330012-112414-ACN-005	11/24/2014	<3.0	<50	0.53 J	<0.2	0.63 J	<5.0	<0.20	<2.0	<4.0	3.7 J
Equipment Blank	W-R2330012-112414-ACN-005	11/24/2014	<3.0	<50	0.22 J	<0.2	0.67 J	<5.0	<0.20	<2.0	<4.0	3.4 J
Equipment Blank ^A	W-R2330012-112514-ACN-010	11/25/2014	<3.0	<50	0.28 J	<0.2	<20	<5.0	<0.20	<2.0	<4.0	3.4 J
Equipment Blank	W-R2330012-112514-ACN-010	11/25/2014	<3.0	<50	0.23 J	<0.2	<20	<5.0	<0.20	<2.0	<4.0	3.4 J
Equipment Blank ^A	W-R2330012-112614-JCH-016	11/26/2014	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank	W-R2330012-112614-JCH-016	11/26/2014	<3.0	<50	0.24 J	<0.2	0.68 J	<5.0	0.026 J	<2.0	<4.0	3.5 J
Equipment Blank ^A	W-R2330012-121114-JCH-022	12/1/2014	<3.0	<50	3.5 J	<0.2	1.1 J	<5.0	0.043 J	<2.0	<4.0	14 J
Equipment Blank	W-R2330012-121114-JCH-022	12/1/2014	<3.0	<50	3.2 J	<0.2	1.0 J	<5.0	0.022 J	<2.0	0.54 J	14 J
Equipment Blank ^A	W-R2330012-122114-JCH-029	12/2/2014	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank	W-R2330012-122114-JCH-029	12/2/2014	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank ^A	W-R2330012-020515-ACN-004	2/5/2015	<3.0	<50	8.1 J	<0.2	1.4 J	<5.0	<0.20	<2.0	<4.0	8.6 J
Equipment Blank	W-R2330012-020515-ACN-004	2/5/2015	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank ^A	W-R2330017-031615-ACN-008	3/16/2015	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank	W-R2330017-031615-ACN-008	3/16/2015	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank ^A	W-R2330017-031715-ACN-014	3/17/2015	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank	W-R2330017-031715-ACN-014	3/17/2015	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank ^A	W-R2330017-031915-ACN-022	3/19/2015	<3.0	<50	0.26 J	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank	W-R2330017-031915-ACN-022	3/19/2015	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank ^A	W-R2330017-032015-ACN-031	3/20/2015	<3.0	<50	0.20 J	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank	W-R2330017-032015-ACN-031	3/20/2015	<3.0	<50	<50	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
Equipment Blank ^A	W-R2330017-111615-AEP-024	11/16/2015	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330017-111615-AEP-024	11/16/2015	NS	66 J	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330017-111715-JPM-025	11/17/2015	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330017-111715-JPM-025	11/17/2015	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330017-111815-AFB-026	11/18/2015	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330017-111915-AEP-027	11/19/2015	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-041816-AEP-006	4/18/2016	NS	NS	5.2 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-041916-AEP-014	4/19/2016	NS	NS	1.4 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-042116-AFB-029	4/21/2016	NS	NS	6.5 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-042216-JPM-035	4/22/2016	NS	NS	2.9 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEM-006	10/31/2016	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEP-011	11/1/2016	NS	NS	3.1	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	WR2330021-103116-AEM-020	11/2/2016	NS	NS	3	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-110316-JPM-028	11/3/2016	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330021-110416-JPM-038	11/4/2016	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042417-DMS-005	4/24/2017	NS	130 J	<50	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330022-042417-DMS-005	4/24/2017	NS	250 J	<50	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042517-JPM-014	4/25/2017	NS	59 J	1.1 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330022-042517-JPM-014	4/25/2017	NS	920	4.3 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042617-DMS-020	4/26/2017	NS	75 J	2.5 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330022-042617-DMS-020	4/26/2017	NS	190 J	7.6 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042717-DMS-028	4/27/2017	NS	150 J	2.5 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330022-042717-DMS-028	4/27/2017	NS	200 J	8.7 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-042817-AFB-035	4/28/2017	NS	190 J	2.9 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank	W-R2330022-042817-AFB-035	4/28/2017	NS	150 J	2.0 J	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-050117-AFB-038	5/1/2017	NS	170 J	2.6 J	NS	NS	NS	NS	NS	NS	NS

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																	
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene
Non-residential Drinking Water Criteria (II)			38,000	600 (A)	75 (A)	5,200	2,100	5.0 (A)	80 (A,W)	2,300	100 (A)	1,700	80 (A,W)	NA	80 (A,W)	4,800	74 (E)	2,300	NA	790 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200 (X)	ID	ID	25	1,100 (X)	350	NA	ID	ID	18	28	NA	270
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+05 (S)	74,000 (S)	2.0E+07 (S)	1.0E+09 (D,S)	35,000	37,000	5.5E+05	4.7E+05 (S)	5.7E+06 (S)	1.8E+05	NA	1.10E+05	3.0E+05	1.7E+05 (S)	56,000 (S)	NA	5.3E+5 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI,m}) (a)			18,000	32,000	380	4,400,000	34,000,000	1.4E+02	NA	9,900	4,600	180,000	7.2E+02	8,100	NA	NA	2.6E+03	53	NA	150,000
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.0E+05	1.69E+05	56,000	NA	5.26E+05
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000
ID	SAMPLE ID	SAMPLE DATE																		
Equipment Blank	W-R2330022-050117-AFB-038	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Equipment Blank ^A	W-R2330022-102317-DMS-007	10/23/2017																		
Equipment Blank ^A	W-R2330022-102417-DMS-013	10/24/2017																		
Equipment Blank ^A	W-R2330022-102517-AFB-020	10/25/2017																		
Equipment Blank ^A	W-R2330022-102617-AFB-027	10/26/2017																		
Equipment Blank ^A	W-R2330022-102717-AFB-033	10/27/2017																		
Equipment Blank ^A	W-R2330022-102817-AFB-039	10/28/2017																		
Equipment Blank ^A	W-R230024-042318-DMS-008	4/23/2018																		
Equipment Blank	W-R230024-042318-DMS-008	4/23/2018																		
Equipment Blank ^A	W-R2330024-042418-JPM-019	4/24/2018																		
Equipment Blank	W-R2330024-042418-JPM-019	4/24/2018																		
Equipment Blank ^A	W-R2330024-042518-DMS-031	4/25/2018																		
Equipment Blank	W-R2330024-042518-DMS-031	4/25/2018																		
Equipment Blank ^A	W-R2330024-042618-DMS-035	4/26/2018																		
Equipment Blank	W-R2330024-042618-DMS-035	4/26/2018																		

Notes:
Bold indicates concentration above method detection limits.
Roman numerals indicate DEQ criterion number.
A = Total Metals sample collected for comparison to dissolved metals analytical results.
E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of NREPA.
G = Calculated value based on a hardness of 150 mg/L.
H = Analyzed outside of holding time.
J = Analyte detected below quantitation limit.
NS = Not Sampled or Not Analyzed.

Exceeds Generic Drinking Water Cleanup Criteria (II)

Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)

Exceeds Generic Ground Water Surface Water Interface Criteria (III)

Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)

Exceeds GSI Final Acute Value (FAV), also exceeds others

Notes in parentheses and standard abbreviations from MDEQ Operational Memorandum 1, Attachment 1, dated September 28, 2012 or MDEQ Guidance Document for the Vapor Intrusion Pathway, dated May 2013.

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L				Semivolatile Organic Compounds (SVOCs)																
				Xylenes	1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Carbazole	Dibenzofuran	Dichlorodifluoromethane	Diethyl phthalate
Non-residential Drinking Water Criteria (II)	280 (E)	ID	130	750	1,000	1,000	1,000	NA	6.0 (A)	3,800	4,400	NA	2,700 (S)	350	ID	4,800	16,000	2.1E+05		
Non-residential Health-Based Drinking Water Value (E)	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Ground Water Surface Water Interface Criteria (GSI) (III)	41	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67 (X)	10 (M); 4.0	4.0	ID	110	NA		
GSI Final Acute Value (FAV)	730	ID	NA	340	NA	1,400	2,700	ID	285	200	NA	NA	NA	72	NA	ID	2,000	NA		
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	1.9E+05 (S)	ID	1.1E+06	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	10,000 (S)	3.0E+05	NLV	NLV		
Groundwater Concentration for Vapor Intrusion (GW _{VI,m}) (a)	10,000 (d)	ID	NA	3,900	NA	NA	NA	NA	NA	2.30E+05	NA	NA	NA	NLV	NA	NA	NA	NA		
Water Solubility (VII)	1.86E+5 (S)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.69E+03	7,480	10,000	3.0E+05	1.08E+06	4.19E+06		
Flammability & Explosivity Screening Level (VIII)	70,000	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	ID	ID	ID	ID	NA	NA	
ID	SAMPLE ID	SAMPLE DATE																		
Equipment Blank	W-R2330022-050117-AFB-038	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Equipment Blank ^A	W-R2330022-102317-DMS-007	10/23/2017																		
Equipment Blank ^A	W-R2330022-102417-DMS-013	10/24/2017																		
Equipment Blank ^A	W-R2330022-102517-AFB-020	10/25/2017																		
Equipment Blank ^A	W-R2330022-102617-AFB-027	10/26/2017																		
Equipment Blank ^A	W-R2330022-102717-AFB-033	10/27/2017																		
Equipment Blank ^A	W-R2330022-102817-AFB-039	10/28/2017																		
Equipment Blank ^A	W-R230024-042318-DMS-008	4/23/2018																		
Equipment Blank	W-R230024-042318-DMS-008	4/23/2018																		
Equipment Blank ^A	W-R2330024-042418-JPM-019	4/24/2018																		
Equipment Blank	W-R2330024-042418-JPM-019	4/24/2018																		
Equipment Blank ^A	W-R2330024-042518-DMS-031	4/25/2018																		
Equipment Blank	W-R2330024-042518-DMS-031	4/25/2018																		
Equipment Blank ^A	W-R2330024-042618-DMS-035	4/26/2018																		
Equipment Blank	W-R2330024-042618-DMS-035	4/26/2018																		

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- Exceeds Generic Drinking Water Cleanup Criteria (II)
- Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)
- Exceeds Generic Ground Water Surface Water Interface Criteria (III)
- Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)
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Notes in parentheses and standard abbreviations from MDEQ Operational Memorandum 1, Attachment 1, dated September 28, 2012 or MDEQ Guidance Document for the Vapor Intrusion Pathway, dated May 2013.

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L										Metals										
			Di-n-butyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)
Non-residential Drinking Water Criteria (II)			2,500	210 (S)	2,000 (S)	1,500	150	140 (S)	13,000	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	100	1,000 (E)	200 (A)	300 (E)
Non-residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	NA	NA	NA	NA	NA	4,000	NA	5,600
Ground Water Surface Water Interface Criteria (GSI) (III)			9.7	1.6	12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA
GSI Final Acute Value (FAV)			75	220	200	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			NLV	210 (S)	2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI,m}) (a)			NA	NA	300,000	1,200	4.8E+2	1.7E+06	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV
Water Solubility (VII)			11,200	206	1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			NA	ID	ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																		
Equipment Blank	W-R2330022-050117-AFB-038	5/1/2017	NS	NS	NS	NS	NS	NS	NS	7.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	30 J
Equipment Blank ^A	W-R2330022-102317-DMS-007	10/23/2017								12	NS	NS	NS	NS	NS	NS	NS	NS	NS	24 J
Equipment Blank ^A	W-R2330022-102417-DMS-013	10/24/2017								12	NS	NS	NS	NS	NS	NS	NS	NS	NS	90
Equipment Blank ^A	W-R2330022-102517-AFB-020	10/25/2017								9.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	38 J
Equipment Blank ^A	W-R2330022-102617-AFB-027	10/26/2017								18	NS	NS	NS	NS	NS	NS	NS	NS	NS	190
Equipment Blank ^A	W-R2330022-102717-AFB-033	10/27/2017								13	NS	NS	NS	NS	NS	NS	NS	NS	NS	91
Equipment Blank ^A	W-R2330022-102817-AFB-039	10/28/2017								10	NS	NS	NS	NS	NS	NS	NS	NS	NS	32 J
Equipment Blank ^A	W-R230024-042318-DMS-008	4/23/2018								5.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	30 J
Equipment Blank	W-R230024-042318-DMS-008	4/23/2018								18	NS	NS	NS	NS	NS	NS	NS	NS	NS	42 J
Equipment Blank ^A	W-R2330024-042418-JPM-019	4/24/2018								6.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	19 J
Equipment Blank	W-R2330024-042418-JPM-019	4/24/2018								10 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	32 J
Equipment Blank ^A	W-R2330024-042518-DMS-031	4/25/2018								3.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	<300
Equipment Blank	W-R2330024-042518-DMS-031	4/25/2018								<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	<300
Equipment Blank ^A	W-R2330024-042618-DMS-035	4/26/2018								320	NS	NS	NS	NS	NS	NS	NS	NS	NS	5000
Equipment Blank	W-R2330024-042618-DMS-035	4/26/2018								20	NS	NS	NS	NS	NS	NS	NS	NS	NS	4200

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E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of NREPA.
G = Calculated value based on a hardness of 150 mg/L.
H = Analyzed outside of holding time.
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NS = Not Sampled or Not Analyzed.

- Exceeds Generic Drinking Water Cleanup Criteria (II)
- Exceeds Generic Drinking Water Cleanup Criteria (II) and the Generic Health-Based Drinking Water Value (E)
- Exceeds Generic Ground Water Surface Water Interface Criteria (III)
- Exceeds Two or More DW (II), GSI (III) and/or Generic Health-Based Drinking Water Value (E)
- Exceeds GSI Final Acute Value (FAV), also exceeds others

Per the approval from the EPA, ground water analytical suite was modified prior to the November 2015 monitoring event.
Notes in parentheses and standard abbreviations from MDEQ Operational Memorandum 1, Attachment 1, dated September 28, 2012 or MDEQ Guidance Document for the Vapor Intrusion Pathway, dated May 2013.

Table 2
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Non-Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L													
			Lead (B)	Magnesium (B)	Manganese (B)	Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc	
			4.0 (L)	1.1E+06	50 (E)	2.0 (A)	100 (A)	50 (A)	98	2.0 (A)	62	5,000 (E)	
			Non-residential Drinking Water Criteria (II)										
			Non-residential Health-Based Drinking Water Value (E)	NA	NA	2,500	NA	NA	NA	NA	NA	NA	
			Ground Water Surface Water Interface Criteria (GSI) (III)	29	NA	2,800 (G)	0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
			GSI Final Acute Value (FAV)	551	NA	12,112 (G)	2.8	1,320 (G)	120	1.1	94	220	330 (G)
			Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	NLV	NLV	NLV	56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
			Groundwater Concentration for Vapor Intrusion (GW _{VI,eq}) (a)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
			Water Solubility (VII)	NA	NA	NA	56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	ID	ID		
ID	SAMPLE ID	SAMPLE DATE	ID	ID	ID	ID	ID	ID	ID	ID	ID		
Equipment Blank	W-R2330022-050117-AFB-038	5/1/2017	NS	120 J	0.88 J	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330022-102317-DMS-007	10/23/2017	NS		1.2 J	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330022-102417-DMS-013	10/24/2017	NS		0.79 J	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330022-102517-AFB-020	10/25/2017	NS		1.8 J	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330022-102617-AFB-027	10/26/2017	NS		2.3 J	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330022-102717-AFB-033	10/27/2017	NS		1.5 J	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330022-102817-AFB-039	10/28/2017	NS		7.00	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R230024-042318-DMS-008	4/23/2018			1.5 J	NS	NS	NS	NS	NS	NS		
Equipment Blank	W-R230024-042318-DMS-008	4/23/2018			1.7 J	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330024-042418-JPM-019	4/24/2018	NS	NS	1.5 J	NS	NS	NS	NS	NS	NS		
Equipment Blank	W-R2330024-042418-JPM-019	4/24/2018	NS	NS	1.9 J	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330024-042518-DMS-031	4/25/2018	NS	NS	<50	NS	NS	NS	NS	NS	NS		
Equipment Blank	W-R2330024-042518-DMS-031	4/25/2018	NS	NS	<50	NS	NS	NS	NS	NS	NS		
Equipment Blank ^A	W-R2330024-042618-DMS-035	4/26/2018	NS	NS	74	NS	NS	NS	NS	NS	NS		
Equipment Blank	W-R2330024-042618-DMS-035	4/26/2018	NS	NS	64	NS	NS	NS	NS	NS	NS		

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VLI-200}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE	ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
MW-1	W-R2330009-043013-MJF-002	4/30/2013	<25	<1.0	<1.0	<50	<50	0.66 J	<1.0	<5.0	<1.0	7.3	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-1 ^A	W-R2330009-080713-ZTR-007	8/7/2013																			
MW-1	W-R2330009-080713-ZTR-007	8/7/2013	<25	<1.0	<1.0	<50	<50	0.78 J	<1.0	<5.0	<1.0	6.9	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-1 ^A	W-R2330009-111413-ACN-013	11/14/2013																			
MW-1	W-R2330009-111413-ACN-013	11/14/2013	<25	<1.0	<1.0	<50	6.9 J	0.81 J	<1.0	<5.0	<1.0	9.9	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-1 ^A	W-R2330012-032814-ACN-009	3/28/2014																			
MW-1	W-R2330012-032814-ACN-009	3/28/2014	<25	<1.0	<1.0	<50	<50	0.57 J	<1.0	<5.0	<1.0	5.1	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-1 ^A	W-R2330012-12214-JCH-026	12/2/2014																			
MW-1	W-R2330012-12214-JCH-026	12/2/2014	<25	<1.0	<1.0	<50	<50	0.59 J	<1.0	<5.0	<1.0	3.5 J	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-1 ^A (DUP)	W-R2330012-12214-JCH-027	12/2/2014																			
MW-1 (DUP)	W-R2330012-12214-JCH-027	12/2/2014	<25	<1.0	<1.0	<50	<50	0.60 J	<1.0	<5.0	<1.0	3.2 J	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-1 ^A	W-R2330017-031915-ACN-021	3/19/2015																			
MW-1	W-R2330017-031915-ACN-021	3/19/2015	<25	<1.0	<1.0	<50	<50	0.35 J	<1.0	<5.0	<1.0	4.3 J	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-1 ^A	W-R2330017-111915-AEP-021	11/19/2015																			
MW-1	W-R2330017-111915-AEP-021	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-042116-AFB-022	4/21/2016																			
MW-1	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-110216-JPM-018	11/2/2016																			
MW-1	W-R2330021-110216-JPM-018	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330022-042617-DMS-019	4/26/2017																			
MW-1	W-R2330022-042617-DMS-019	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330022-102717-AFB-032	10/27/2017																			
MW-1	W-R2330022-102717-AFB-032	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330024-042418-JPM-017	4/24/2018																			
MW-1	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330004-090512-MJF-01	9/5/2012	<25	<1.0	<1.0	<50	<50	0.66 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-3	W-R2330009-050213-MJF-009	5/2/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-3 ^A	W-R2330009-080713-ZTR-004	8/7/2013																			
MW-3	W-R2330009-080713-ZTR-004	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-3 ^A	W-R2330009-111213-ACN-002	11/12/2013																			
MW-3	W-R2330009-111213-ACN-002	11/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-3 ^A	W-R2330012-032714-ACN-007	3/27/2014																			
MW-3	W-R2330012-032714-ACN-007	3/27/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-3 ^A	W-R2330012-091514-ACN-001	9/15/2014																			
MW-3	W-R2330012-091514-ACN-001	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0		NS	NS	NS	NS	NS
MW-3 ^A	W-R2330012-121114-JCH-019	12/1/2014																			
MW-3	W-R2330012-121114-JCH-019	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-3 ^A	W-R2330017-031915-JCH-015	3/19/2015																			
MW-3	W-R2330017-031915-JCH-015	3/19/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-3 ^A	W-R2330017-111915-JPM-018	11/19/2015																			
MW-3	W-R2330017-111915-JPM-018	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-042216-AFB-030	4/22/2016																			
MW-3	W-R2330021-042216-AFB-030	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-110416-JPM-029	11/4/2016																			
MW-3	W-R2330021-110416-JPM-029	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-042817-AFB-029	4/28/2017																			
MW-3	W-R2330022-042817-AFB-029	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A (DUP)	W-R2330022-042817-AFB-030	4/28/2017																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)	ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)		
Residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Ground Water Surface Water Interface Criteria (GSI) (III)	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6		
GSI Final Acute Value (FAV)	ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220		
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)		
Groundwater Concentration for Vapor Intrusion (GW _{VII,avg}) (a)	ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA		
Water Solubility (VII)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206		
Flammability & Explosivity Screening Level (VIII)	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID		
ID	SAMPLE ID	SAMPLE DATE																			
MW-1	W-R2330009-043013-MJF-002	4/30/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	1.0 J	<5.0	1.7 J	<1.0
MW-1 ^A	W-R2330009-080713-ZTR-007	8/7/2013																			
MW-1	W-R2330009-080713-ZTR-007	8/7/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-1 ^A	W-R2330009-111413-ACN-013	11/14/2013																			
MW-1	W-R2330009-111413-ACN-013	11/14/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-1 ^A	W-R2330012-032814-ACN-009	3/28/2014																			
MW-1	W-R2330012-032814-ACN-009	3/28/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	2.3 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-1 ^A	W-R2330012-12214-JCH-026	12/2/2014																			
MW-1	W-R2330012-12214-JCH-026	12/2/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	2.3 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-1 ^A (DUP)	W-R2330012-12214-JCH-027	12/2/2014																			
MW-1 (DUP)	W-R2330012-12214-JCH-027	12/2/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	2.5 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-1 ^A	W-R2330017-031915-ACN-021	3/19/2015																			
MW-1	W-R2330017-031915-ACN-021	3/19/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-1 ^A	W-R2330017-111915-AEP-021	11/19/2015																			
MW-1	W-R2330017-111915-AEP-021	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-1 ^A	W-R2330021-042116-AFB-022	4/21/2016																			
MW-1	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-1 ^A	W-R2330021-110216-JPM-018	11/2/2016																			
MW-1	W-R2330021-110216-JPM-018	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-1 ^A	W-R2330022-042617-DMS-019	4/26/2017																			
MW-1	W-R2330022-042617-DMS-019	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-1 ^A	W-R2330022-102717-AFB-032	10/27/2017																			
MW-1	W-R2330022-102717-AFB-032	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-1 ^A	W-R2330024-042418-JPM-017	4/24/2018																			
MW-1	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-3	W-R2330004-090512-MJF-01	9/5/2012	<10	<10	<5.0	<10	<10	<5.0	4.2 J	<5.0	<5.0	<5.0	<10	<5.0	<10	0.85 J	<4.0	<5.0	<5.0	<5.0	<1.0
MW-3	W-R2330009-050213-MJF-009	5/2/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	1.4 J	<1.0
MW-3 ^A	W-R2330009-080713-ZTR-004	8/7/2013																			
MW-3	W-R2330009-080713-ZTR-004	8/7/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-3 ^A	W-R2330009-111213-ACN-002	11/12/2013																			
MW-3	W-R2330009-111213-ACN-002	11/12/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-3 ^A	W-R2330012-032714-ACN-007	3/27/2014																			
MW-3	W-R2330012-032714-ACN-007	3/27/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-3 ^A	W-R2330012-091514-ACN-001	9/15/2014																			
MW-3	W-R2330012-091514-ACN-001	9/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	
MW-3 ^A	W-R2330012-121114-JCH-019	12/1/2014																			
MW-3	W-R2330012-121114-JCH-019	12/1/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-3 ^A	W-R2330017-031915-JCH-015	3/19/2015																			
MW-3	W-R2330017-031915-JCH-015	3/19/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-3 ^A	W-R2330017-111915-JPM-018	11/19/2015																			
MW-3	W-R2330017-111915-JPM-018	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-3 ^A	W-R2330021-042216-AFB-030	4/22/2016																			
MW-3	W-R2330021-042216-AFB-030	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-3 ^A	W-R2330021-110416-JPM-029	11/4/2016																			
MW-3	W-R2330021-110416-JPM-029	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-3 ^A	W-R2330022-042817-AFB-029	4/28/2017																			
MW-3	W-R2330022-042817-AFB-029	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS</				

Table 3
Summary Of Ground Water Sample Results

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Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI,200}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-1	W-R2330009-043013-MJF-002	4/30/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.1 J	0.43 J	15	1,500	<1.0	<1.0	1.1 J	2.8 J	1.3 J	<0.005	17,000	<3.0	<50	130
MW-1 ^A	W-R2330009-080713-ZTR-007	8/7/2013						67	0.21 J	23	1,700	<1.0	0.17 J	1.5 J	3.4 J	3.3 J		25,000	0.25 J	<50	120
MW-1	W-R2330009-080713-ZTR-007	8/7/2013	<5.0	<5.0	<2.0	<5.0	<5.0	5.3 J	0.27 J	23	1,900	<1.0	0.10 J	1.3 J	3.7 J	1.2 J	<0.005	25,000	0.076 J	<50	120
MW-1 ^A	W-R2330009-111413-ACN-013	11/14/2013						33 J	0.19 J	28	2,200	<1.0	<1.0	2.0 J	3.1 J	0.62 J		21,000	0.17 J	<50	86
MW-1	W-R2330009-111413-ACN-013	11/14/2013	<5.0	<5.0	<2.0	<5.0	<5.0	4.8 J	0.21 J	27	2,200	<1.0	0.12 J	2.5 J	3.7 J	<4.0	0.0044 J	21,000	<3.0	<50	90
MW-1 ^A	W-R2330012-032814-ACN-009	3/28/2014						14 J	0.18 J	16 J	1,300	0.15 J	<1.0	0.78 J	2.6 J	2.4 J		17,000	0.13 J	<50	69
MW-1	W-R2330012-032814-ACN-009	3/28/2014	<5.0	<5.0	<2.0	<5.0	<5.0	<100	0.19 J	16	1,600	0.19 J	0.18 J	2.7 J	3.0 J	2.0 J	6.7 J	18,000	<3.0	<50	65
MW-1 ^A	W-R2330012-12214-JCH-026	12/2/2014						120	0.23 J	26	1,700	<1.0	0.062 J	1.6 J	1.9 J	0.55 J		18,000	<3.0	<50	83
MW-1	W-R2330012-12214-JCH-026	12/2/2014	<5.0	<5.0	<2.0	<5.0	<5.0	4.0 J	0.24 J	25	1,700	<1.0	<1.0	1.2 J	2.0 J	<4.0	3.9 J	17,000	<3.0	<50	80
MW-1 ^A (DUP)	W-R2330012-12214-JCH-027	12/2/2014						74	0.19 J	25	1,800	<1.0	<1.0	1.4 J	2.0 J	0.17 J		18,000	<3.0	<50	81
MW-1 (DUP)	W-R2330012-12214-JCH-027	12/2/2014	<5.0	<5.0	<2.0	<5.0	<5.0	3.3 J	0.18 J	25	1,700	<1.0	<1.0	1.4 J	1.8 J	<4.0	4.6 J	17,000	<3.0	<50	78
MW-1 ^A	W-R2330017-031915-ACN-021	3/19/2015						30 J	0.26 J	27	1,900	<1.0	<1.0	1.3 J	2.3 J	1.1 J		21,000	<3.0	<50	81
MW-1	W-R2330017-031915-ACN-021	3/19/2015	<5.0	<5.0	<2.0	<5.0	<5.0	18 J	0.31 J	27	2,000	<1.0	<1.0	1.3 J	2.2 J	0.50 J	<5.0	21,000	<3.0	<50	81
MW-1 ^A	W-R2330017-111915-AEP-021	11/19/2015						210	NS	NS	NS	NS	NS	NS	NS	NS		23,000	NS	160,000	NS
MW-1	W-R2330017-111915-AEP-021	11/19/2015	NS	NS	NS	NS	NS	5.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	23,000	NS	160,000	NS
MW-1 ^A	W-R2330021-042116-AFB-022	4/21/2016						140	NS	NS	NS	NS	NS	NS	NS	NS		15,000	NS	NS	59
MW-1	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	NS	NS	NS	29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	18,000	NS	NS	57
MW-1 ^A	W-R2330021-110216-JPM-018	11/2/2016						420	NS	NS	NS	NS	NS	NS	NS	NS	NS	21,000	NS	NS	57
MW-1	W-R2330021-110216-JPM-018	11/2/2016	NS	NS	NS	NS	NS	8.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000	NS	NS	42 J
MW-1 ^A	W-R2330022-042617-DMS-019	4/26/2017						29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000	NS	NS	42 J
MW-1	W-R2330022-042617-DMS-019	4/26/2017	NS	NS	NS	NS	NS	9.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000	NS	NS	41 J
MW-1 ^A	W-R2330022-102717-AFB-032	10/27/2017						280	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000	NS	NS	73
MW-1	W-R2330022-102717-AFB-032	10/27/2017	NS	NS	NS	NS	NS	5.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000	NS	NS	60
MW-1 ^A	W-R2330024-042418-JPM-017	4/24/2018						16	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000	NS	NS	48
MW-1	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	NS	NS	NS	3.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000	NS	NS	48
MW-3	W-R2330004-090512-MJF-01	9/5/2012	<5.0	<5.0	<2.0	<5.0	<5.0	6.0 J	0.29 J	14	900	<1.0	<1.0	1.1 J	4.2 J	0.39 J		9,300	0.12 J	<50	86
MW-3	W-R2330009-050213-MJF-009	5/2/2013	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.51 J	1.5 J	220	<1.0	0.047 J	0.86 J	1.5 J	3.2 J	<0.005	2,000	0.11 J	<50	67
MW-3 ^A	W-R2330009-080713-ZTR-004	8/7/2013						120	0.28 J	3.9 J	300	<1.0	0.11 J	0.84 J	0.95 J	5.4		4,000	0.24 J	<50	44 J
MW-3	W-R2330009-080713-ZTR-004	8/7/2013	<5.0	<5.0	<2.0	<5.0	<5.0	5.2 J	0.40 J	3.8 J	320	<1.0	0.063 J	4.5 J	1.9 J	3.5 J	<0.005	4,000	<3.0	<50	46 J
MW-3 ^A	W-R2330009-111213-ACN-002	11/12/2013						190	0.33 J	3.3 J	260	<1.0	<1.0	1.1 J	1.0 J	2.1 J		3,800	0.30 J	<50	38 J
MW-3	W-R2330009-111213-ACN-002	11/12/2013	<5.0	<5.0	<2.0	<5.0	<5.0	4.1 J	0.31 J	3.7 J	300	<1.0	<1.0	0.46 J	1.3 J	1.3 J	<0.005	3,900	<3.0	<50	36 J
MW-3 ^A	W-R2330012-032714-ACN-007	3/27/2014						450	0.22 J	0.76 J	130	<1.0	<1.0	0.48 J	0.84 J	2.6 J		2,000	0.79 J	<50	33 J
MW-3	W-R2330012-032714-ACN-007	3/27/2014	<5.0	<5.0	<2.0	<5.0	<5.0	89 J	0.24 J	0.62 J	150 J	<1.0	<1.0	<10	1.5 J	2.1 J	<0.005	1,400	0.079 J		

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{V,reg}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE	ID	ID	ID	ID	ID	ID	ID
MW-1	W-R2330009-043013-MJF-002	4/30/2013	<0.2	5.3 J	<5.0	<0.20	<2.0	1.4 J	9.1 J
MW-1 ^A	W-R2330009-080713-ZTR-007	8/7/2013	<0.2	8.0 J	<5.0	<0.20	<2.0	2.0 J	6.0 J
MW-1	W-R2330009-080713-ZTR-007	8/7/2013	<0.2	7.4 J	<5.0	<0.20	<2.0	1.7 J	5.6 J
MW-1 ^A	W-R2330009-111413-ACN-013	11/14/2013	<0.2	7.7 J	<5.0	<0.20	<2.0	1.7 J	3.4 J
MW-1	W-R2330009-111413-ACN-013	11/14/2013	<0.2	8.2 J	<5.0	<0.20	<2.0	1.8 J	3.4 J
MW-1 ^A	W-R2330012-032814-ACN-009	3/28/2014	<0.2	7.5 J	0.71 J	<0.2	<2.0	1.8 J	2.0 J
MW-1	W-R2330012-032814-ACN-009	3/28/2014	<0.2	7.5 J	<5.0	<0.2	<2.0	1.6 J	1.4 J
MW-1 ^A	W-R2330012-12214-JCH-026	12/2/2014	<0.2	4.0 J	<5.0	<0.20	<2.0	2.1 J	3.6 J
MW-1	W-R2330012-12214-JCH-026	12/2/2014	<0.2	3.8 J	<5.0	<0.20	<2.0	1.5 J	<50
MW-1 ^A (DUP)	W-R2330012-12214-JCH-027	12/2/2014	<0.2	3.5 J	<5.0	<0.20	<2.0	2.1 J	3.2 J
MW-1 (DUP)	W-R2330012-12214-JCH-027	12/2/2014	<0.2	3.6 J	<5.0	<0.20	<2.0	1.8 J	<50
MW-1 ^A	W-R2330017-031915-ACN-021	3/19/2015	<0.2	5.1 J	<5.0	<0.20	<2.0	2.1 J	3.3 J
MW-1	W-R2330017-031915-ACN-021	3/19/2015	<0.2	5.0 J	<5.0	<0.20	<2.0	1.6 J	3.5 J
MW-1 ^A	W-R2330017-111915-AEP-021	11/19/2015	NS	NS	NS	NS	NS	NS	NS
MW-1	W-R2330017-111915-AEP-021	11/19/2015	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	NS	NS	NS	NS	NS
MW-1	W-R2330021-042116-AFB-022	4/21/2016	NS	NS	NS	NS	NS	NS	NS
MW-1 ^A	W-R2330021-110216-JPM-018	11/2/2016							
MW-1	W-R2330021-110216-JPM-018	11/2/2016							
MW-1 ^A	W-R2330022-042617-DMS-019	4/26/2017	<0.2	15 J	0.91 J	<0.20	<2.0	0.60 J	3.7 J
MW-1	W-R2330022-042617-DMS-019	4/26/2017	<0.2	4.9 J	0.98 J	<0.20	0.49 J	0.53 J	2.3 J
MW-1 ^A	W-R2330022-102717-AFB-032	10/27/2017							
MW-1	W-R2330022-102717-AFB-032	10/27/2017							
MW-1 ^A	W-R2330024-042418-JPM-017	4/24/2018							
MW-1	W-R2330024-042418-JPM-017	4/24/2018							
MW-3	W-R2330004-090512-MJF-01	9/5/2012	<0.2	5.6 J	3.6 J	<0.20	<2.0	0.75 J	4.4 J
MW-3	W-R2330009-050213-MJF-009	5/2/2013	<0.2	7.2 J	3.6 J	<0.20	<2.0	0.60 J	2.4 J
MW-3 ^A	W-R2330009-080713-ZTR-004	8/7/2013	<0.2	6.4 J	5.6	<0.20	<2.0	0.88 J	4.3 J
MW-3	W-R2330009-080713-ZTR-004	8/7/2013	<0.2	6.6 J	5.0 J	<0.20	<2.0	0.32 J	2.6 J
MW-3 ^A	W-R2330009-111213-ACN-002	11/12/2013	<0.2	4.8 J	1.2 J	<0.20	<2.0	1.1 J	5.9 J
MW-3	W-R2330009-111213-ACN-002	11/12/2013	<0.2	4.8 J	1.3 J	<0.20	<2.0	0.41 J	1.9 J
MW-3 ^A	W-R2330012-032714-ACN-007	3/27/2014	0.057 J	8.9 J	0.76 J	<0.20	0.22 J	1.6 J	8.0 J
MW-3	W-R2330012-032714-ACN-007	3/27/2014	0.058 J	8.0 J	1.4 J	<0.20	<2.0	0.56 J	3.8 J
MW-3 ^A	W-R2330012-091514-ACN-001	9/15/2014	<0.2	7.8 J	1.5 J	<0.20	<2.0	2.1 J	9.1 J
MW-3	W-R2330012-091514-ACN-001	9/15/2014	<0.2	7.0 J	1.6 J	<0.20	<2.0	0.56 J	4.2 J
MW-3 ^A	W-R2330012-12114-JCH-019	12/1/2014	<0.2	4.7 J	1.3 J	0.055 J	<2.0	0.65 J	4.5 J
MW-3	W-R2330012-12114-JCH-019	12/1/2014	<0.2	5.9 J	2.2 J	0.081 J	<2.0	<4.0	<50
MW-3 ^A	W-R2330017-031915-JCH-015	3/19/2015	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330017-031915-JCH-015	3/19/2015	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330017-111915-JPM-018	11/19/2015	NS	NS	NS	NS	NS	NS	NS
MW-3	W-R2330017-111915-JPM-018	11/19/2015	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330021-042216-AFB-030	4/22/2016							
MW-3	W-R2330021-042216-AFB-030	4/22/2016							
MW-3 ^A	W-R2330021-110416-JPM-029	11/4/2016	<0.2	2.4 J	0.46 J	<0.20	<2.0	0.75 J	1.9 J
MW-3	W-R2330021-110416-JPM-029	11/4/2016	<0.2	2.4 J	<5.0	<0.025	<2.0	0.73 J	2.4 J
MW-3 ^A	W-R2330022-042817-AFB-029	4/28/2017	<0.2	2.8 J	<5.0	<0.20	<2.0	0.85 J	1.1 J
MW-3	W-R2330022-042817-AFB-029	4/28/2017	<0.2	4.0 J	<5.0	<0.20	<2.0	1.0 J	2.4 J
MW-3 ^A (DUP)	W-R2330022-042817-AFB-030	4/28/2017	<0.2	4.0 J	1.0 J	<0.20	<2.0	1.4 J	3.5 J

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-3 (DUP)	W-R2330022-042817-AFB-030	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-102417-DMS-008	10/23/2017																			
MW-3	W-R2330022-102417-DMS-008	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330024-042518-DMS-022	4/25/2018																			
MW-3	W-R2330024-042518-DMS-022	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330004-090512-MJF-02	9/5/2012	<25	<1.0	<1.0	<50	12 J	0.39 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-4 (DUP)	W-R2330004-090512-MJF-03	9/5/2012	<25	<1.0	<1.0	<50	8.5 J	0.43 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-4	W-R2330009-050213-MJF-010	5/2/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-4 ^A	W-R2330009-080713-ZTR-005	8/7/2013																			
MW-4	W-R2330009-080713-ZTR-005	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-4 ^A	W-R2330009-111213-ACN-003	11/12/2013																			
MW-4	W-R2330009-111213-ACN-003	11/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-4 ^A	W-R2330012-032714-ACN-006	3/27/2014																			
MW-4	W-R2330012-032714-ACN-006	3/27/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-4 ^A	W-R2330012-121114-JCH-020	12/1/2014																			
MW-4	W-R2330012-121114-JCH-020	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-4 ^A	W-R2330017-031715-ACN-010	3/17/2015																			
MW-4	W-R2330017-031715-ACN-010	3/17/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-4 ^A	W-R2330017-112015-JPM-033	11/20/2015																			
MW-4	W-R2330017-112015-JPM-033	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-042116-AFB-028	4/21/2016																			
MW-4	W-R2330021-042116-AFB-028	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-110416-JPM-036	11/4/2016																			
MW-4	W-R2330021-110416-JPM-036	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-042817-AFB-034	4/28/2017																			
MW-4	W-R2330022-042817-AFB-034	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-102417-DMS-012	10/24/2017																			
MW-4	W-R2330022-102417-DMS-012	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330024-042518-DMS-026	4/25/2018																			
MW-4	W-R2330024-042518-DMS-026	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330009-050113-MJF-004	5/1/2013	<25	<1.0	<1.0	<50	6.9 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-5 (DUP)	W-R2330009-050113-MJF-005	5/1/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-5 ^A	W-R2330009-080813-ZTR-009	8/8/2013																			
MW-5	W-R2330009-080813-ZTR-009	8/8/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-5 ^A	W-R2330009-111213-ACN-004	11/12/2013																			
MW-5	W-R2330009-111213-ACN-004	11/12/2013	<25	<1.0	<1.0	<50	15 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-5 ^A	W-R2330012-032814-ACN-008	3/28/2014																			
MW-5	W-R2330012-032814-ACN-008	3/28/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-5 ^A	W-R2330012-122114-JCH-025	12/2/2014																			
MW-5	W-R2330012-122114-JCH-025	12/2/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-5 ^A	W-R2330017-031915-JCH-018	3/19/2015																			
MW-5	W-R2330012-031915-JCH-018</																				

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI-MS}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2,30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-3 (DUP)	W-R2330022-042817-AFB-030	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330022-102417-DMS-008	10/23/2017																			
MW-3	W-R2330022-102417-DMS-008	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3 ^A	W-R2330024-042518-DMS-022	4/25/2018																			
MW-3	W-R2330024-042518-DMS-022	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330004-090512-MJF-02	9/5/2012	<10	<10	<5.0	<10	<10	<5.0	<1.1	<5.0	<5.0	<5.0	<10	<5.0	<10	<0.84	<4.0	<5.0	<5.0	<5.0	<1.0
MW-4 (DUP)	W-R2330004-090512-MJF-03	9/5/2012	<10	<10	<5.0	<10	<10	<5.0	<1.1	<5.0	<5.0	<5.0	<10	<5.0	<10	<0.84	<4.0	<5.0	<5.0	<5.0	<1.0
MW-4	W-R2330009-050213-MJF-010	5/2/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-4 ^A	W-R2330009-080713-ZTR-005	8/7/2013																			
MW-4	W-R2330009-080713-ZTR-005	8/7/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-4 ^A	W-R2330009-111213-ACN-003	11/12/2013																			
MW-4	W-R2330009-111213-ACN-003	11/12/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-4 ^A	W-R2330012-032714-ACN-006	3/27/2014																			
MW-4	W-R2330012-032714-ACN-006	3/27/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-4 ^A	W-R2330012-12114-JCH-020	12/1/2014																			
MW-4	W-R2330012-12114-JCH-020	12/1/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-4 ^A	W-R2330017-031715-ACN-010	3/17/2015																			
MW-4	W-R2330017-031715-ACN-010	3/17/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-4 ^A	W-R2330017-112015-JPM-033	11/20/2015																			
MW-4	W-R2330017-112015-JPM-033	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-042116-AFB-028	4/21/2016																			
MW-4	W-R2330021-042116-AFB-028	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330021-110416-JPM-036	11/4/2016																			
MW-4	W-R2330021-110416-JPM-036	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-042817-AFB-034	4/28/2017																			
MW-4	W-R2330022-042817-AFB-034	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330022-102417-DMS-012	10/24/2017																			
MW-4	W-R2330022-102417-DMS-012	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330024-042518-DMS-026	4/25/2018																			
MW-4	W-R2330024-042518-DMS-026	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330009-050113-MJF-004	5/1/2013	<10	<10	<5.0	<10	<10	<5.0	<10	1.3 J	<5.0	<5.0	<10	<5.0	<10	1.2 J	<4.0	0.99 J	<5.0	<5.0	<1.0
MW-5 (DUP)	W-R2330009-050113-MJF-005	5/1/2013	<10	<10	<5.0	<10	<10	<5.0	<10	1.3 J	<5.0	<5.0	<10	<5.0	<10	1.2 J	<4.0	0.93 J	<5.0	<5.0	<1.0
MW-5 ^A	W-R2330009-080813-ZTR-009	8/8/2013																			
MW-5	W-R2330009-080813-ZTR-009	8/8/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-5 ^A	W-R2330009-111213-ACN-004	11/12/2013																			
MW-5	W-R2330009-111213-ACN-004	11/12/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-5 ^A	W-R2330012-032814-ACN-008	3/28/2014																			
MW-5	W-R2330012-032814-ACN-008	3/28/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-5 ^A	W-R2330012-12214-JCH-025	12/2/2014																			
MW-5	W-R2330012-12214-JCH-025	12/2/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-5 ^A	W-R2330017-031915-JCH-018	3/19/2015																			
MW-5	W-R2330012-031915-JCH-018	3/19/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	0.79 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-5 ^A	W-R2330017-112015-JPM-031	11/20/2015																			
MW-5	W-R2330017-112015-JPM-031	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS							

Table 3
Summary Of Ground Water Sample Results

Table 3
Summary of Ground Water
Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-MS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-3 (DUP)	W-R2330022-042817-AFB-030	4/28/2017	NS	NS	NS	NS	NS	7.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,300	NS	NS	230
MW-3 ^A	W-R2330022-102417-DMS-008	10/23/2017						78	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000	NS	NS	93
MW-3	W-R2330022-102417-DMS-008	10/23/2017	NS	NS	NS	NS	NS	4.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000	NS	NS	88
MW-3 ^A	W-R2330024-042518-DMS-022	4/25/2018						470	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,100	NS	NS	240
MW-3	W-R2330024-042518-DMS-022	4/25/2018	NS	NS	NS	NS	NS	28	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,100	NS	NS	230
MW-4	W-R2330004-090512-MJF-02	9/5/2012	<5.0	<5.0	<2.0	<5.0	<5.0	7.6 J	0.097 J	1.4 J	470	<1.0	<1.0	1.1 J	1.2 J	<4.0	<0.005	14,000	<3.0	<50	56
MW-4 (DUP)	W-R2330004-090512-MJF-03	9/5/2012	<5.0	<5.0	<2.0	<5.0	<5.0	11 J	0.14 J	1.2 J	480	<1.0	<1.0	0.85 J	1.3 J	0.26 J	<0.005	15,000	0.034 J	<50	55
MW-4	W-R2330009-050213-MJF-010	5/2/2013	<5.0	<5.0	<2.0	<5.0	<5.0	13 J	0.21 J	<5.0	410	<1.0	<1.0	0.84 J	2.7 J	<4.0	<0.005	11,000	<3.0	<50	490
MW-4 ^A	W-R2330009-080713-ZTR-005	8/7/2013						4.5 J	0.22 J	<5.0	480	<1.0	0.29 J	0.80 J	2.4 J	2.7 J		16,000	<3.0	<50	77
MW-4	W-R2330009-080713-ZTR-005	8/7/2013	<5.0	<5.0	<2.0	<5.0	<5.0	170	0.12 J	<5.0	490	<1.0	0.29 J	1.4 J	1.5 J	2.6 J	<0.005	16,000	0.30 J	<50	80
MW-4 ^A	W-R2330009-111213-ACN-003	11/12/2013						490	0.23 J	1.7 J	460	<1.0	<1.0	2.9 J	2.2 J	1.4 J		16,000	1.2 J	<50	96
MW-4	W-R2330009-111213-ACN-003	11/12/2013	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.19 J	1.1 J	460	<1.0	0.34 J	0.78 J	2.0 J	0.65 J	<0.005	15,000	<3.0	<50	70
MW-4 ^A	W-R2330012-032714-ACN-006	3/27/2014						2,800	0.40 J	5.1	480	0.095 J	<1.0	4.5 J	5.7 J	9.6 J		20,000	7.5	<50	700
MW-4	W-R2330012-032714-ACN-006	3/27/2014	<5.0	<5.0	<2.0	<5.0	<5.0	6.0 J	0.23 J	2.9 J	450	<1.0	<1.0	0.37 J	2.4 J	2.0 J	3.4 J	15,000	<3.0	<50	410
MW-4 ^A	W-R2330012-121114-JCH-020	12/1/2014						500	0.35 J	2.8 J	430	<1.0	<1.0	1.3 J	2.0 J	1.9 J		14,000	0.71 J	<50	110
MW-4	W-R2330012-121114-JCH-020	12/1/2014	<5.0	<5.0	<2.0	<5.0	<5.0	4.5 J	0.37 J	2.5 J	410	<1.0	<1.0	0.54 J	1.8 J	0.95 J	<5.0	12,000	<3.0	<50	100
MW-4 ^A	W-R2330017-031715-ACN-010	3/17/2015						3,100	0.33 J	2.3 J	500	<1.0	<1.0	4.7 J	3.4 J	7.8		20,000	4.4	<50	140
MW-4	W-R2330017-031715-ACN-010	3/17/2015	<5.0	<5.0	<2.0	<5.0	<5.0	7.1 J	0.23 J	0.97 J	450	<1.0	<1.0	0.55 J	1.7 J	1.1 J	<5.0	16,000	<3.0	<50	69
MW-4 ^A	W-R2330017-112015-JPM-033	11/20/2015						84	NS	NS	NS	NS	NS	NS	NS	NS		12,000	NS	140,000	NS
MW-4	W-R2330017-112015-JPM-033	11/20/2015	NS	NS	NS	NS	NS	2.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	130,000	NS
MW-4 ^A	W-R2330021-042116-AFB-028	4/21/2016						81	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000	NS	NS	490
MW-4	W-R2330021-042116-AFB-028	4/21/2016	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	17,000	NS	NS	560
MW-4 ^A	W-R2330021-110416-JPM-036	11/4/2016						210	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000	NS	NS	72
MW-4	W-R2330021-110416-JPM-036	11/4/2016	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000	NS	NS	60
MW-4 ^A	W-R2330022-042817-AFB-034	4/28/2017						21 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	10,000	NS	NS	760
MW-4	W-R2330022-042817-AFB-034	4/28/2017	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,600	NS	NS	730
MW-4 ^A	W-R2330022-102417-DMS-012	10/24/2017						28	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000	NS	NS	62
MW-4	W-R2330022-102417-DMS-012	10/24/2017	NS	NS	NS	NS	NS	6.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,000	NS	NS	60
MW-4 ^A	W-R2330024-042518-DMS-026	4/25/2018						33	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,100	NS	NS	680
MW-4	W-R2330024-042518-DMS-026	4/25/2018	NS	NS	NS	NS	NS	8	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,800	NS	NS	690
MW-5	W-R2330009-050113-MJF-004	5/1/2013	<5.0	<5.0	<2.0	<5.0	<5.0	15 J	0.17 J	31	1,300	<1.0	<1.0	1.5 J	2.3 J	<4.0	<0.005	5,300	0.3 J	<50	56
MW-5 (DUP)	W-R2330009-050113-MJF-005	5/1/2013	<5.0	<5.0	<2.0	<5.0	<5.0	12 J	0.27 J	31	1,300	<1.0	<1.0	1.9 J	2.3 J	<4.0	<0.005	5,400	0.061 J	<50	58
MW-5 ^A	W-R2330009-080813-ZTR-009	8/8/2013						330	2.2 J	34	1,500	<1.0	0.84 J	2.1 J	2.3 J	3.5 J		5,300	2.1 J	<50	56
MW-5	W-R2330009-080813-ZTR-009	8/8/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.7 J	0.27 J	31	1,400										

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-3 (DUP)	W-R2330022-042817-AFB-030	4/28/2017	<0.2	8.4 J	<5.0	<0.20	<2.0	2.1 J	7.5 J
MW-3 ^A	W-R2330022-102417-DMS-008	10/23/2017	<0.2	4.7 J	<5.0	<0.20	<2.0	0.94 J	2.8 J
MW-3	W-R2330022-102417-DMS-008	10/23/2017	<0.2	16 J	1.4 J	<0.20	0.12 J	8.5	35 J
MW-3 ^A	W-R2330024-042518-DMS-022	4/25/2018							
MW-3	W-R2330024-042518-DMS-022	4/25/2018							
MW-4	W-R2330004-090512-MJF-02	9/5/2012	<0.2	8.4 J	<5.0	<0.20	<2.0	0.74 J	20 J
MW-4 (DUP)	W-R2330004-090512-MJF-03	9/5/2012	<0.2	6.2 J	<5.0	<0.20	<2.0	2.2 J	6.5 J
MW-4	W-R2330009-050213-MJF-010	5/2/2013	<0.2	5.4 J	<5.0	<0.20	<2.0	1.0 J	3.1 J
MW-4 ^A	W-R2330009-080713-ZTR-005	8/7/2013	<0.2	11 J	<5.0	0.029 J	<2.0	6.6	23 J
MW-4	W-R2330009-080713-ZTR-005	8/7/2013	<0.2	4.4 J	<5.0	<0.20	<2.0	0.71 J	<50
MW-4 ^A	W-R2330009-111213-ACN-003	11/12/2013	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330009-111213-ACN-003	11/12/2013	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330012-032714-ACN-006	3/27/2014	NS	NS	NS	NS	NS	NS	NS
MW-4	W-R2330012-032714-ACN-006	3/27/2014	NS	NS	NS	NS	NS	NS	NS
MW-4 ^A	W-R2330012-12114-JCH-020	12/1/2014							
MW-4	W-R2330012-12114-JCH-020	12/1/2014							
MW-4 ^A	W-R2330017-031715-ACN-010	3/17/2015	<0.2	3.5 J	0.69 J	<0.20	<2.0	1.3 J	1.1 J
MW-4	W-R2330017-031715-ACN-010	3/17/2015	<0.2	3.9 J	0.67 J	<0.20	0.069 J	1.2 J	1.1 J
MW-4 ^A	W-R2330017-112015-JPM-033	11/20/2015	<0.2	4.9 J	0.75 J	<0.20	<2.0	2.2 J	10 J
MW-4	W-R2330017-112015-JPM-033	11/20/2015	<0.2	4.3 J	<5.0	<0.20	<2.0	1.4 J	3.1 J
MW-4 ^A	W-R2330021-042116-AFB-028	4/21/2016	<0.2	6.3 J	<5.0	<0.20	<2.0	2.5 J	11 J
MW-4	W-R2330021-042116-AFB-028	4/21/2016	<0.2	5.9 J	<5.0	<0.20	<2.0	1.3 J	2.4 J
MW-4 ^A	W-R2330021-110416-JPM-036	11/4/2016	<0.2	9.2 J	<5.0	0.051 J	<2.0	4.2	26 J
MW-4	W-R2330021-110416-JPM-036	11/4/2016	<0.2	6.5 J	0.70 J	<0.20	<2.0	1.3 J	0.65 J
MW-4 ^A	W-R2330022-042817-AFB-034	4/28/2017	<0.2	3.4 J	<5.0	0.029 J	<2.0	2.1 J	6.0 J
MW-4	W-R2330022-042817-AFB-034	4/28/2017	<0.2	3.4 J	<5.0	<0.20	<2.0	1.5 J	<50
MW-4 ^A	W-R2330022-102417-DMS-012	10/24/2017							
MW-4	W-R2330022-102417-DMS-012	10/24/2017							
MW-4 ^A	W-R2330024-042518-DMS-026	4/25/2018							
MW-4	W-R2330024-042518-DMS-026	4/25/2018							
MW-5	W-R2330009-050113-MJF-004	5/1/2013	<0.2	5.5 J	<5.0	<0.20	<2.0	2.2 J	9.3 J
MW-5 (DUP)	W-R2330009-050113-MJF-005	5/1/2013	<0.2	4.8 J	<5.0	<0.20	<2.0	1.5 J	<50
MW-5 ^A	W-R2330009-080813-ZTR-009	8/8/2013	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330009-080813-ZTR-009	8/8/2013	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330009-111213-ACN-004	11/12/2013	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330009-111213-ACN-004	11/12/2013	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330012-032814-ACN-008	3/28/2014							
MW-5	W-R2330012-032814-ACN-008	3/28/2014							
MW-5 ^A	W-R2330012-12214-JCH-025	12/2/2014							
MW-5	W-R2330012-12214-JCH-025	12/2/2014							
MW-5 ^A	W-R2330017-031915-JCH-018	3/19/2015	<0.2	3.8 J	0.051 J	<0.025	<2.0	1.2 J	1.5 J
MW-5	W-R2330012-031915-JCH-018	3/19/2015	<0.2	5.0 J	<5.0	<0.20	<2.0	0.99 J	2.1 J
MW-5 ^A	W-R2330017-112015-JPM-031	11/20/2015	<0.2	7.5 J	<5.0	<0.20	<2.0	1.3 J	3.8 J
MW-5	W-R2330017-112015-JPM-031	11/20/2015	<0.2	7.6 J	<5.0	<0.20	<2.0	1.3 J	3.2 J
MW-5 ^A	W-R2330021-042116-JPM-024	4/21/2016	<0.2	8.5 J	<5.0	<0.20	<2.0	1.6 J	3.7 J
MW-5	W-R2330021-042116-JPM-024	4/21/2016	<0.2	8.5 J	<5.0	<0.20	<2.0	1.6 J	3.3 J
MW-5 ^A	W-R2330021-110216-AEM-013	11/2/2016	<0.2	11 J	<5.0	<0.20	0.084 J	1.2 J	5.0 J
MW-5	W-R2330021-110216-AEM-013	11/2/2016	<0.2	12 J	<5.0	<0.20	<2.0	0.99 J	3.0 J

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-5 ^A (DUP)	W-R2330021-110216-AEM-014	11/2/2016																			
MW-5 (DUP)	W-R2330021-110216-AEM-014	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-042617-AFB-016	4/26/2017																			
MW-5	W-R2330022-042617-AFB-016	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-102717-AFB-029	10/27/2017																			
MW-5	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330004-090512-MJF-04	9/5/2012	<25	<1.0	<1.0	<50	11 J	4.9	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-6	W-R2330009-050213-MJF-012	5/2/2013	<25	<1.0	<1.0	<50	<50	2.8	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-6 ^A	W-R2330009-080713-ZTR-002	8/7/2013																			
MW-6	W-R2330009-080713-ZTR-002	8/7/2013	<25	<1.0	<1.0	<50	<50	4.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-6 ^A	W-R2330009-111313-ACN-011	11/13/2013																			
MW-6	W-R2330009-111313-ACN-011	11/13/2013	<25	<1.0	<1.0	<50	<50	4.6	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-6 ^A	W-R2330012-032714-ACN-004	3/27/2014																			
MW-6	W-R2330012-032714-ACN-004	3/27/2014	<25	<1.0	<1.0	<50	<50	2.7	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-6 ^A	W-R2330012-12214-JCH-023	12/2/2014																			
MW-6	W-R2330012-12214-JCH-023	12/2/2014	<25	<1.0	<1.0	<50	<50	3.2	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	1.3 J	<1.0	<5.0	<1.0	<1.0	<3.0
MW-6 ^A	W-R2330017-031715-ACN-012	3/17/2015																			
MW-6	W-R2330017-031715-ACN-012	3/17/2015	<25	<1.0	<1.0	<50	<50	2.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	0.58 J	<1.0	<5.0	<1.0	<1.0	<3.0
MW-6 ^A	W-R2330017-111915-JPM-023	11/19/2015																			
MW-6	W-R2330017-111915-JPM-023	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-042116-JPM-026	4/21/2016																			
MW-6	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-110416-JPM-037	11/4/2016																			
MW-6	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-042817-AFB-033	4/28/2017																			
MW-6	W-R2330022-042817-AFB-033	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-102817-AFB-035	10/28/2017																			
MW-6	W-R2330022-102817-AFB-035	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A DUP	W-R2330022-102817-AFB-036	10/28/2017																			
MW-6 DUP	W-R2330022-102817-AFB-036	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330024-042518-DMS-028	4/25/2018																			
MW-6	W-R2330024-042518-DMS-028	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330009-050213-MJF-008	5/2/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-7 ^A	W-R2330009-080613-ZTR-001	8/6/2013																			
MW-7	W-R2330009-080613-ZTR-001	8/6/2013	<25	<1.0	<1.0	<50	5.5 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-7 ^A	W-R2330009-111313-ACN-006	11/13/2013																			
MW-7	W-R2330009-111313-ACN-006	11/13/2013	<25	<1.0	<1.0	<50	12 J	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-7 ^A	W-R2330012-032614-ACN-001	3/26/2014																			
MW-7	W-R2330012-032614-ACN-001	3/26/2014	<25	<1.0	<1.0	<50	<50.0	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-7 ^A	W-R2330012-112614-JCH-015	11/26/2014																			
MW-7	W-R2330012-112614-JCH-015	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-7 ^A	W-R2330017-031715-JCH-013	3/17/2015																			
MW-7	W-R2330017-031715-JCH-013	3/17/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-7 ^A	W-R2330017-111615-AEP-005	11/16/2015																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzy phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2,30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-5 ^A (DUP)	W-R2330021-110216-AEM-014	11/2/2016																			
MW-5 (DUP)	W-R2330021-110216-AEM-014	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-042617-AFB-016	4/26/2017																			
MW-5	W-R2330022-042617-AFB-016	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5 ^A	W-R2330022-102717-AFB-029	10/27/2017																			
MW-5	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330004-090512-MJF-04	9/5/2012	<10	<10	<5.0	<10	<10	<5.0	<1.1	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-6	W-R2330009-050213-MJF-012	5/2/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330009--080713-ZTR-002	8/7/2013																			
MW-6	W-R2330009--080713-ZTR-002	8/7/2013	<10	<10	<5.0	<10	<10	<5.0	<1.1	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330009-111313-ACN-011	11/13/2013																			
MW-6	W-R2330009-111313-ACN-011	11/13/2013	<10	<10	<5.0	<10	<10	<5.0	<10	0.47 J	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330012-032714-ACN-004	3/27/2014																			
MW-6	W-R2330012-032714-ACN-004	3/27/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330012-12214-JCH-023	12/2/2014																			
MW-6	W-R2330012-12214-JCH-023	12/2/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330017-031715-ACN-012	3/17/2015																			
MW-6	W-R2330017-031715-ACN-012	3/17/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-6 ^A	W-R2330017-111915-JPM-023	11/19/2015																			
MW-6	W-R2330017-111915-JPM-023	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-042116-JPM-026	4/21/2016																			
MW-6	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-110416-JPM-037	11/4/2016																			
MW-6	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-042817-AFB-033	4/28/2017																			
MW-6	W-R2330022-042817-AFB-033	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-102817-AFB-035	10/28/2017																			
MW-6	W-R2330022-102817-AFB-035	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A DUP	W-R2330022-102817-AFB-036	10/28/2017																			
MW-6 DUP	W-R2330022-102817-AFB-036	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330024-042518-DMS-028	4/25/2018																			
MW-6	W-R2330024-042518-DMS-028	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330009-050213-MJF-008	5/2/2013	<10	<10	<5.0	<10	<10	<5.0	<10	1.1 J	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	0.95 J	<5.0	<5.0
MW-7 ^A	W-R2330009-080613-ZTR-001	8/6/2013																			
MW-7	W-R2330009-080613-ZTR-001	8/6/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330009-111313-ACN-006	11/13/2013																			
MW-7	W-R2330009-111313-ACN-006	11/13/2013	<10	<10	<5.0	<10	<10	<5.0	<10	0.18 J	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330012-032614-ACN-001	3/26/2014																			
MW-7	W-R2330012-032614-ACN-001	3/26/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330012-112614-JCH-015	11/26/2014																			
MW-7	W-R2330012-112614-JCH-015	11/26/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330017-031715-JCH-013	3/17/2015																			
MW-7	W-R2330017-031715-JCH-013	3/17/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<10	<4.0	<5.0	<5.0	<5.0
MW-7 ^A	W-R2330017-111615-AEP-005	11/16/2015																			
MW-7	W-R2330017-111615-AEP-005	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330021-041916-JPM-007	4/19/2016																			
MW-7	W-R2330021-041916-JPM-007	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330021-110116-AEM-007	11/1/2016																			

Table 3
Summary Of Ground Water Sample Results

Table 3
Summary of Ground Water
Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-MS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-5 ^A (DUP)	W-R2330021-110216-AEM-014	11/2/2016						400	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,100	NS	NS	72
MW-5 (DUP)	W-R2330021-110216-AEM-014	11/2/2016	NS	NS	NS	NS	NS	12 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400	NS	NS	50
MW-5 ^A	W-R2330022-042617-AFB-016	4/26/2017						30 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,500	NS	NS	56
MW-5	W-R2330022-042617-AFB-016	4/26/2017	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,300	NS	NS	50
MW-5 ^A	W-R2330022-102717-AFB-029	10/27/2017						890	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,600	NS	NS	76
MW-5	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	NS	NS	NS	4.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,100	NS	NS	62
MW-6	W-R2330004-090512-MJF-04	9/5/2012	<5.0	<5.0	<2.0	<5.0	<5.0	17 J	0.16 J	9.4	580	<1.0	<1.0	1.0 J	2.4 J	0.31 J	<0.005	26,000	0.057 J	<50	500
MW-6	W-R2330009-050213-MJF-012	5/2/2013	<5.0	<5.0	<2.0	<5.0	<5.0	7.5 J	0.15 J	3.7 J	480	<1.0	<1.0	1.6 J	1.5 J	<4.0	<0.005	18,000	0.31 J	<50	640
MW-6 ^A	W-R2330009-080713-ZTR-002	8/7/2013						47 J	0.11 J	6.0	540	<1.0	0.19 J	0.94 J	1.9 J	4.40		22,000	0.29 J	<50	790
MW-6	W-R2330009-080713-ZTR-002	8/7/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.8 J	0.15 J	5.5	550	<1.0	0.25 J	0.75 J	2.4 J	3.5 J	<0.005	21,000	0.063 J	<50	750
MW-6 ^A	W-R2330009-111313-ACN-011	11/13/2013						200 J	0.16 J	5.4 J	520	<1.0	0.25 J	1.8 J	1.7 J	1.4 J		18,000	0.55 J	<50	430
MW-6	W-R2330009-111313-ACN-011	11/13/2013	<5.0	<5.0	<2.0	<5.0	<5.0	160	0.14 J	5.5 J	520	<1.0	0.43 J	2.2 J	1.7 J	1.3 J	<0.005	18,000	0.41 J	<50	430
MW-6 ^A	W-R2330012-032714-ACN-004	3/27/2014						76	0.15 J	3.0 J	460	<1.0	<1.0	0.56 J	2.0 J	2.0 J		11,000	0.31 J	<50	410
MW-6	W-R2330012-032714-ACN-004	3/27/2014	<5.0	<5.0	<2.0	<5.0	<5.0	8.6 J	0.17 J	3.4 J	460	<1.0	<1.0	0.37 J	1.4 J	1.9 J	1.3 J	10,000	<3.0	<50	410
MW-6 ^A	W-R2330012-12214-JCH-023	12/2/2014						320	0.17 J	4.5 J	570	<1.0	0.068 J	1.7 J	1.1 J	0.85 J		18,000	<3.0	<50	420
MW-6	W-R2330012-12214-JCH-023	12/2/2014	<5.0	<5.0	<2.0	<5.0	<5.0	5.6 J	0.17 J	4.8 J	540	<1.0	<1.0	0.53 J	1.0 J	<4.0	<5.0	17,000	<3.0	<50	410
MW-6 ^A	W-R2330017-031715-ACN-012	3/17/2015						300	0.35 J	3.1 J	430	<1.0	0.098 J	1.5 J	1.7 J	4.1		12,000	1.1 J	<50	500
MW-6	W-R2330017-031715-ACN-012	3/17/2015	<5.0	<5.0	<2.0	<5.0	<5.0	3.3 J	0.41 J	1.9 J	360	<1.0	<1.0	0.42 J	1.5 J	2.0 J	<5.0	11,000	<3.0	<50	470
MW-6 ^A	W-R2330017-111915-JPM-023	11/19/2015						30 J	NS	NS	NS	NS	NS	NS	NS	NS		22,000	NS	130,000	NS
MW-6	W-R2330017-111915-JPM-023	11/19/2015	NS	NS	NS	NS	NS	7.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	22,000	NS	130,000	NS
MW-6 ^A	W-R2330021-042116-JPM-026	4/21/2016						100	NS	NS	NS	NS	NS	NS	NS	NS		5,800	NS	NS	320
MW-6	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	NS	NS	NS	7.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,300	NS	NS	360
MW-6 ^A	W-R2330021-110416-JPM-037	11/4/2016						76	NS	NS	NS	NS	NS	NS	NS	NS	NS	25,000	NS	NS	500
MW-6	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	NS	NS	NS	7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	25,000	NS	NS	490
MW-6 ^A	W-R2330022-042817-AFB-033	4/28/2017						83										3,600	NS	NS	960
MW-6	W-R2330022-042817-AFB-033	4/28/2017	NS	NS	NS	NS	NS	5.1 J										3,300	NS	NS	910
MW-6 ^A	W-R2330022-102817-AFB-035	10/28/2017						550	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	NS	410
MW-6	W-R2330022-102817-AFB-035	10/28/2017	NS	NS	NS	NS	NS	6.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,100	NS	NS	360
MW-6 ^A DUP	W-R2330022-102817-AFB-036	10/28/2017						140	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,600	NS	NS	370
MW-6 DUP	W-R2330022-102817-AFB-036	10/28/2017	NS	NS	NS	NS	NS	4.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,900	NS	NS	370
MW-6 ^A	W-R2330024-042518-DMS-028	4/25/2018						32	NS	NS	NS	NS	NS	NS	NS	NS	NS	560	NS	NS	260
MW-6	W-R2330024-042518-DMS-028	4/25/2018	NS	NS	NS	NS	NS	4.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	250	NS	NS	250
MW-7	W-R2330009-050213-MJF-008	5/2/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.4 J	0.84 J	0.87 J	450	<1.0	<1.0	1.4 J	3.4 J	2.1 J	<0.005	3,400	0.074 J	<50	530
MW-7 ^A	W-R2330009-080613-ZTR-001	8/6/2013						39 J	0.39 J	18	520	<1.0	0.43 J	1.4 J	3.8 J	2.2 J		8,100	0.47 J	<50	910
MW-7	W-R2330009-080613-ZTR-001	8/6/2013	<5.0	<5.0	<2.0	<5.0	<5.0	5.3 J	0.48 J	17	520	<1.0	0.21 J	1.2 J	4.3 J	3.1 J	<0.005	7,700	0.096 J	<50	880
MW-7 ^A	W-R2330009-111313-ACN-006	11/13/2013																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-5 ^A (DUP)	W-R2330021-110216-AEM-014	11/2/2016	<0.2	4.9 J	<5.0	0.027 J	<2.0	2.2 J	14 J
MW-5 (DUP)	W-R2330021-110216-AEM-014	11/2/2016	<0.2	4.2 J	<5.0	0.020 J	<2.0	1.8 J	<50
MW-5 ^A	W-R2330022-042617-AFB-016	4/26/2017	<0.2	15 J	<5.0	<0.20	<2.0	1.9 J	42 J
MW-5	W-R2330022-042617-AFB-016	4/26/2017	<0.2	14 J	<5.0	<0.20	<2.0	0.84 J	33 J
MW-5 ^A	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-5	W-R2330022-102717-AFB-029	10/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330004-090512-MJF-04	9/5/2012	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330009-050213-MJF-012	5/2/2013	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330009--080713-ZTR-002	8/7/2013	<0.2	11 J	<5.0	<0.20	<2.0	1.2 J	40 J
MW-6	W-R2330009--080713-ZTR-002	8/7/2013							
MW-6 ^A	W-R2330009-111313-ACN-011	11/13/2013							
MW-6	W-R2330009-111313-ACN-011	11/13/2013	<0.2	14 J	<5.0	<0.20	<2.0	1.4 J	44 J
MW-6 ^A	W-R2330012-032714-ACN-004	3/27/2014	<0.2	14 J	<5.0	<0.20	<2.0	1.2 J	39 J
MW-6	W-R2330012-032714-ACN-004	3/27/2014	<0.2	14 J	<5.0	<0.20	<2.0	2.2 J	22 J
MW-6 ^A	W-R2330012-12214-JCH-023	12/2/2014	<0.2	14 J	<5.0	<0.20	<2.0	2.3 J	6.6 J
MW-6	W-R2330012-12214-JCH-023	12/2/2014	<0.2	18 J	0.84J	<0.20	0.22 J	1.2 J	15 J
MW-6 ^A	W-R2330017-031715-ACN-012	3/17/2015	<0.2	16 J	<5.0	<0.20	<2.0	1.0 J	8.2 J
MW-6	W-R2330017-031715-ACN-012	3/17/2015	<0.2	8.4 J	<5.0	0.022 J	<2.0	2.1 J	6.3 J
MW-6 ^A	W-R2330017-111915-JPM-023	11/19/2015	<0.2	7.6 J	<5.0	<0.20	<2.0	1.6 J	<50
MW-6	W-R2330017-111915-JPM-023	11/19/2015	<0.2	12 J	<5.0	<0.20	<2.0	1.4 J	19 J
MW-6 ^A	W-R2330021-042116-JPM-026	4/21/2016	<0.2	12 J	<5.0	<0.20	<2.0	1.2 J	4.4 J
MW-6	W-R2330021-042116-JPM-026	4/21/2016	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330021-110416-JPM-037	11/4/2016	NS	NS	NS	NS	NS	NS	NS
MW-6 ^A	W-R2330022-042817-AFB-033	4/28/2017	NS	NS	NS	NS	NS	NS	NS
MW-6	W-R2330022-042817-AFB-033	4/28/2017	<0.2	4.4 J	<5.0	<0.20	<2.0	0.89 J	2.0 J
MW-6 ^A	W-R2330022-102817-AFB-035	10/28/2017							
MW-6	W-R2330022-102817-AFB-035	10/28/2017							
MW-6 ^A DUP	W-R2330022-102817-AFB-036	10/28/2017	<0.2	6.8 J	<5.0	<0.20	<2.0	1.3 J	4.0 J
MW-6 DUP	W-R2330022-102817-AFB-036	10/28/2017	<0.2	6.6 J	<5.0	<0.20	<2.0	0.91 J	3.0 J
MW-6 ^A	W-R2330024-042518-DMS-028	4/25/2018							
MW-6	W-R2330024-042518-DMS-028	4/25/2018							
MW-7	W-R2330009-050213-MJF-008	5/2/2013	<0.2	7.6 J	<5.0	<0.20	<2.0	1.5 J	3.2 J
MW-7 ^A	W-R2330009-080613-ZTR-001	8/6/2013	<0.2	7.9 J	<5.0	<0.20	<2.0	0.89 J	2.4 J
MW-7	W-R2330009-080613-ZTR-001	8/6/2013	<0.2	19 J	<5.0	<0.20	<2.0	5.2	18 J
MW-7 ^A	W-R2330009-111313-ACN-006	11/13/2013	<0.2	10 J	<5.0	<0.20	<2.0	0.85 J	5.8 J
MW-7	W-R2330009-111313-ACN-006	11/13/2013	<0.2	6.7 J	<5.0	<0.20	<2.0	2.0 J	11 J
MW-7 ^A	W-R2330012-032614-ACN-001	3/26/2014	<0.2	5.6 J	<5.0	<0.20	<2.0	0.74 J	<50
MW-7	W-R2330012-032614-ACN-001	3/26/2014	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330012-112614-JCH-015	11/26/2014	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330012-112614-JCH-015	11/26/2014	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330017-031715-JCH-013	3/17/2015	NS	NS	NS	NS	NS	NS	NS
MW-7	W-R2330017-031715-JCH-013	3/17/2015	<0.2	6.3 J	<5.0	<0.20	<2.0	1.2 J	7.5 J
MW-7 ^A	W-R2330017-111615-AEP-005	11/16/2015							
MW-7	W-R2330017-111615-AEP-005	11/16/2015							
MW-7 ^A	W-R2330021-041916-JPM-007	4/19/2016	<0.2	5.2 J	<5.0	<0.20	<2.0	1.5 J	4.6 J
MW-7	W-R2330021-041916-JPM-007	4/19/2016	<0.2	5.2 J	<5.0	<0.20	<2.0	1.4 J	2.9 J
MW-7 ^A	W-R2330021-110116-AEM-007	11/1/2016	<0.2	6.9 J	<5.0	<0.20	0.14 J	1.5 J	3.7 J

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Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-7	W-R2330021-110116-AEM-007	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-042517-DMS-013	4/25/2017																			
MW-7	W-R2330022-042517-DMS-013	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-102717-DMS-028	10/27/2017																			
MW-7	W-R2330022-102717-DMS-028	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330024-042318-DMS-006	4/23/2018																			
MW-7	W-R2330024-042318-DMS-006	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330009-050313-MJF-013	5/3/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-8 ^A	W-R2330009-080713-ZTR-008	8/7/2013																			
MW-8	W-R2330009-080713-ZTR-008	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-8 ^A	W-R2330009-111213-ACN-005	11/12/2013																			
MW-8	W-R2330009-111213-ACN-005	11/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-8 ^A	W-R2330012-112614-JCH-014	11/26/2014																			
MW-8	W-R2330012-112614-JCH-014	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-8 ^A	W-R2330017-032015-JCH-029	3/20/2015																			
MW-8	W-R2330017-032015-JCH-029	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-8 ^A	W-R2330017-111615-AEP-004	11/16/2015																			
MW-8	W-R2330017-111615-AEP-004	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-041916-JPM-008	4/19/2016																			
MW-8	W-R2330021-041916-JPM-008	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-110116-AEM-008	11/1/2016																			
MW-8	W-R2330021-110116-AEM-008	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330022-102617-AFB-024	10/26/2017																			
MW-8	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330009-050113-MJF-007	5/1/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-9 ^A	W-R2330009-080813-ZTR-013	8/8/2013																			
MW-9	W-R2330009-080813-ZTR-013	8/8/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-9 ^A	W-R2330009-111413-ACN-012	11/14/2013																			
MW-9	W-R2330009-111413-ACN-012	11/14/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-9 ^A	W-R2330012-032614-ACN-003	3/26/2014																			
MW-9	W-R2330012-032614-ACN-003	3/26/2014	<25	<1.0	<1.0	<50	<50	0.36 J	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-9 ^A	W-R2330012-12214-JCH-024	12/2/2014																			
MW-9	W-R2330012-12214-JCH-024	12/2/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-9 ^A	W-R2330017-031915-JCH-017	3/19/2015																			
MW-9	W-R2330012-031915-JCH-017	3/19/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-9 ^A	W-R2330017-112015-AFB-030	11/20/2015																			
MW-9	W-R2330017-112015-AFB-030	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-042116-AFB-025	4/21/2016																			
MW-9	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-110116-AEM-012	11/2/2016																			
MW-9	W-R2330021-110116-AEM-012	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-042617-DMS-015	4/26/2017																			
MW-9	W-R2330022-042617-DMS-015	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-102717-DMS-030	10/27/2017																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-7	W-R2330021-110116-AEM-007	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-042517-DMS-013	4/25/2017																			
MW-7	W-R2330022-042517-DMS-013	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330022-102717-DMS-028	10/27/2017																			
MW-7	W-R2330022-102717-DMS-028	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7 ^A	W-R2330024-042318-DMS-006	4/23/2018																			
MW-7	W-R2330024-042318-DMS-006	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330009-050313-MJF-013	5/3/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	1.4 J	<1.0
MW-8 ^A	W-R2330009-080713-ZTR-008	8/7/2013																			
MW-8	W-R2330009-080713-ZTR-008	8/7/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-8 ^A	W-R2330009-111213-ACN-005	11/12/2013																			
MW-8	W-R2330009-111213-ACN-005	11/12/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-8 ^A	W-R2330012-112614-JCH-014	11/26/2014																			
MW-8	W-R2330012-112614-JCH-014	11/26/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-8 ^A	W-R2330017-032015-JCH-029	3/20/2015																			
MW-8	W-R2330017-032015-JCH-029	3/20/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-8 ^A	W-R2330017-111615-AEP-004	11/16/2015																			
MW-8	W-R2330017-111615-AEP-004	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-041916-JPM-008	4/19/2016																			
MW-8	W-R2330021-041916-JPM-008	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330021-110116-AEM-008	11/1/2016																			
MW-8	W-R2330021-110116-AEM-008	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330022-102617-AFB-024	10/26/2017																			
MW-8	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330009-050113-MJF-007	5/1/2013	<10	<10	<5.0	<10	<10	<5.0	<10	1.1 J	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	0.91 J	0.92 J	1.7 J	<1.0
MW-9 ^A	W-R2330009-080813-ZTR-013	8/8/2013																			
MW-9	W-R2330009-080813-ZTR-013	8/8/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-9 ^A	W-R2330009-111413-ACN-012	11/14/2013																			
MW-9	W-R2330009-111413-ACN-012	11/14/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-9 ^A	W-R2330012-032614-ACN-003	3/26/2014																			
MW-9	W-R2330012-032614-ACN-003	3/26/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-9 ^A	W-R2330012-12214-JCH-024	12/2/2014																			
MW-9	W-R2330012-12214-JCH-024	12/2/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-9 ^A	W-R2330017-031915-JCH-017	3/19/2015																			
MW-9	W-R2330012-031915-JCH-017	3/19/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-9 ^A	W-R2330017-112015-AFB-030	11/20/2015																			
MW-9	W-R2330017-112015-AFB-030	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-042116-AFB-025	4/21/2016																			
MW-9	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-110116-AEM-012	11/2/2016																			
MW-9	W-R2330021-110116-AEM-012	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-042617-DMS-015	4/26/2017																			
MW-9	W-R2330022-042617-DMS-015	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330022-102717-DMS-030	10/27/2017																			
MW-9	W-R2330022-102717-DMS-030	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330024-042618-DMS-033	4/26/2018																			
MW-9	W-R2330024-042618-DMS-033	4/26/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330009-050113-MJF-003	5/1/2013	<10	<10	<5.0	<10</															

Table 3
Summary Of Ground Water Sample Results

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Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-MS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-7	W-R2330021-110116-AEM-007	11/1/2016	NS	NS	NS	NS	NS	7.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,600	NS	NS	320
MW-7 ^A	W-R2330022-042517-DMS-013	4/25/2017						66	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,300	NS	NS	490
MW-7	W-R2330022-042517-DMS-013	4/25/2017	NS	NS	NS	NS	NS	4.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,900	NS	NS	470
MW-7 ^A	W-R2330022-102717-DMS-028	10/27/2017						17	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,000	NS	NS	760
MW-7	W-R2330022-102717-DMS-028	10/27/2017	NS	NS	NS	NS	NS	4.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,800	NS	NS	740
MW-7 ^A	W-R2330024-042318-DMS-006	4/23/2018						30	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,200	NS	NS	610
MW-7	W-R2330024-042318-DMS-006	4/23/2018	NS	NS	NS	NS	NS	4.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,000	NS	NS	600
MW-8	W-R2330009-050313-MJF-013	5/3/2013	<5.0	<5.0	<2.0	<5.0	<5.0	11 J	0.21 J	1.2 J	380	<1.0	<1.0	0.56 J	1.5 J	<4.0	<0.005	6,200	<3.0	<50	180
MW-8 ^A	W-R2330009-080713-ZTR-008	8/7/2013						51	0.16 J	4.1 J	470	<1.0	0.12 J	1.2 J	1.5 J	3.8 J		8,200	0.80 J	<50	200
MW-8	W-R2330009-080713-ZTR-008	8/7/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.3 J	0.20 J	3.9 J	460	<1.0	0.098 J	0.94 J	2.3 J	1.6 J	<0.005	8,100	0.074 J	<50	200
MW-8 ^A	W-R2330009-111213-ACN-005	11/12/2013						98 J	0.12 J	3.7 J	420	<1.0	0.50 J	1.3 J	1.6 J	1.6 J		7,700	0.34 J	<50	200
MW-8	W-R2330009-111213-ACN-005	11/12/2013	<5.0	<5.0	<2.0	<5.0	<5.0	8.4 J	0.13 J	3.6 J	440	<1.0	0.49 J	2.0 J	1.8 J	1.5 J	0.0015 J	7,500	<3.0	<50	210
MW-8 ^A	W-R2330012-112614-JCH-014	11/26/2014						1,200	0.11 J	4.7 J	370	<1.0	2.1	2.7 J	2.4 J	4.7		8,000	4.7	<50	400
MW-8	W-R2330012-112614-JCH-014	11/26/2014	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	<2.0	3.3 J	350	<1.0	<1.0	0.34 J	1.3 J	0.50 J	<5.0	4,900	<3.0	<50	330
MW-8 ^A	W-R2330017-032015-JCH-029	3/20/2015						440	<2.0	2.0 J	330	<1.0	0.73 J	3.2 J	1.2 J	2.7 J		7,100	1.9 J	<50	210
MW-8	W-R2330017-032015-JCH-029	3/20/2015	<5.0	<5.0	<2.0	<5.0	<5.0	13 J	0.18 J	1.3 J	330	<1.0	<1.0	0.47 J	1.3 J	1.5 J	<5.0	5,900	<3.0	<50	200
MW-8 ^A	W-R2330017-111615-AEP-004	11/16/2015						540	NS	NS	NS	NS	NS	NS	NS	NS		3,300	NS	92,000	NS
MW-8	W-R2330017-111615-AEP-004	11/16/2015	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,300	NS	91,000	NS
MW-8 ^A	W-R2330021-041916-JPM-008	4/19/2016						140	NS	NS	NS	NS	NS	NS	NS	NS		6,500	NS	NS	200
MW-8	W-R2330021-041916-JPM-008	4/19/2016	NS	NS	NS	NS	NS	3.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,900	NS	NS	200
MW-8 ^A	W-R2330021-110116-AEM-008	11/1/2016						50 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,200	NS	NS	2,800
MW-8	W-R2330021-110116-AEM-008	11/1/2016	NS	NS	NS	NS	NS	8.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,900	NS	NS	290
MW-8 ^A	W-R2330022-102617-AFB-024	10/26/2017						23	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,000	NS	NS	310
MW-8	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,600	NS	NS	320
MW-9	W-R2330009-050113-MJF-007	5/1/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.6 J	0.2 J	44	1,700	<1.0	<1.0	1.9 J	2.4 J	0.71 J	<0.005	28,000	0.053 J	<50	760
MW-9 ^A	W-R2330009-080813-ZTR-013	8/8/2013						13 J	0.13 J	52	1,300	<1.0	0.22 J	1.0 J	1.4 J	2.1 J		31,000	0.17 J	<50	440
MW-9	W-R2330009-080813-ZTR-013	8/8/2013	<5.0	<5.0	<2.0	<5.0	<5.0	4.7 J	0.21 J	52	1,300	<1.0	0.24 J	0.91 J	2.2 J	1.7 J	<0.005	30,000	0.068 J	<50	430
MW-9 ^A	W-R2330009-111413-ACN-012	11/14/2013						43 J	0.16 J	59	2,100	<1.0	<1.0	2.0 J	1.7 J	<4.0		30,000	0.30 J	<50	400
MW-9	W-R2330009-111413-ACN-012	11/14/2013	<5.0	<5.0	<2.0	<5.0	<5.0	4.7 J	0.17 J	60	2,200	<1.0	<1.0	1.0 J	1.7 J	<4.0	<0.005	29,000	0.083 J	<50	340
MW-9 ^A	W-R2330012-032614-ACN-003	3/26/2014						190	0.19 J	51	1,700	<1.0	<1.0	1.0 J	2.2 J	2.6 J		34,000	0.99 J	<50	600
MW-9	W-R2330012-032614-ACN-003	3/26/2014	<5.0	<5.0	<2.0	<5.0	<5.0	7.8 J	0.15 J	47	1,900	<1.0	<1.0	0.70 J	2.2 J	1.4 J	2.1 J	34,000	0.21 J	<50	570
MW-9 ^A	W-R2330012-12214-JCH-024	12/2/2014						42 J	0.18 J	59	1,800	<1.0	0.050 J	1.0 J	1.2 J	<4.0		31,000	<3.0	<50	330
MW-9	W-R2330012-12214-JCH-024	12/2/2014	<5.0	<5.0	<2.0	<5.0	<5.0	5.9 J	0.25 J	62	1,900	<1.0	<1.0	1.0 J	1.4 J	<4.0	<5.0	30,000	<3.0	<50	300
MW-9 ^A	W-R2330017-031915-JCH-017	3/19/2015						260	0.19 J	49	1,700	<1.0	0.094 J	1.4 J	2.0 J	3.9 J		34,000	1.1 J	<50	390
MW-9	W-R2330012-031915-JCH-017	3/19/2015	<5.0	<5.0																	

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-7	W-R2330021-110116-AEM-007	11/1/2016	<0.2	6.3 J	<5.0	<0.20	<2.0	1.5 J	2.5 J
MW-7 ^A	W-R2330022-042517-DMS-013	4/25/2017	<0.2	8.0 J	<5.0	<0.20	<2.0	1.9 J	5.3 J
MW-7	W-R2330022-042517-DMS-013	4/25/2017	<0.2	7.9 J	<5.0	<0.20	<2.0	1.3 J	2.1 J
MW-7 ^A	W-R2330022-102717-DMS-028	10/27/2017	<0.2	3.2 J	<5.0	0.024 J	<2.0	1.9 J	3.7 J
MW-7	W-R2330022-102717-DMS-028	10/27/2017	<0.2	3.5 J	<5.0	<0.20	<2.0	1.6 J	<50
MW-7 ^A	W-R2330024-042318-DMS-006	4/23/2018							
MW-7	W-R2330024-042318-DMS-006	4/23/2018							
MW-8	W-R2330009-050313-MJF-013	5/3/2013	<0.2	7.0 J	<5.0	<0.20	<2.0	2.1 J	11 J
MW-8 ^A	W-R2330009-080713-ZTR-008	8/7/2013	<0.2	6.3 J	<5.0	<0.20	<2.0	1.2 J	3.9 J
MW-8	W-R2330009-080713-ZTR-008	8/7/2013	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330009-111213-ACN-005	11/12/2013	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330009-111213-ACN-005	11/12/2013	NS	NS	NS	NS	NS	NS	NS
MW-8 ^A	W-R2330012-112614-JCH-014	11/26/2014	NS	NS	NS	NS	NS	NS	NS
MW-8	W-R2330012-112614-JCH-014	11/26/2014							
MW-8 ^A	W-R2330017-032015-JCH-029	3/20/2015							
MW-8	W-R2330017-032015-JCH-029	3/20/2015							
MW-8 ^A	W-R2330017-111615-AEP-004	11/16/2015	<0.2	4.9 J	0.66 J	<0.20	<2.0	2.3 J	2.4 J
MW-8	W-R2330017-111615-AEP-004	11/16/2015	<0.2	7.5 J	<5.0	<0.20	<2.0	2.4 J	9.6 J
MW-8	W-R2330017-111615-AEP-004	11/16/2015	<0.2	7.6 J	<5.0	<0.20	<2.0	2.3 J	5.2 J
MW-8 ^A	W-R2330021-041916-JPM-008	4/19/2016	<0.2	7.4 J	0.75 J	<0.20	<2.0	2.2 J	8.5 J
MW-8	W-R2330021-041916-JPM-008	4/19/2016	<0.2	7.4 J	0.79 J	<0.20	<2.0	2.2 J	4.9 J
MW-8 ^A	W-R2330021-110116-AEM-008	11/1/2016	<0.2	8.1 J	<5.0	<0.20	<2.0	3.0 J	7.0 J
MW-8	W-R2330021-110116-AEM-008	11/1/2016	<0.2	8.1 J	<5.0	<0.20	<2.0	2.1 J	3.4 J
MW-8 ^A	W-R2330022-102617-AFB-024	10/26/2017							
MW-8	W-R2330022-102617-AFB-024	10/26/2017							
MW-9	W-R2330009-050113-MJF-007	5/1/2013	<0.2	8.0 J	<5.0	<0.20	<2.0	3.0 J	3.8 J
MW-9 ^A	W-R2330009-080813-ZTR-013	8/8/2013	<0.2	8.2 J	<5.0	<0.20	<2.0	2.3 J	5.0 J
MW-9	W-R2330009-080813-ZTR-013	8/8/2013	<0.2	8.1 J	<5.0	<0.20	<2.0	2.1 J	2.1 J
MW-9 ^A	W-R2330009-111413-ACN-012	11/14/2013	<0.2	9.8 J	<5.0	<0.20	0.24 J	1.8 J	3.0 J
MW-9	W-R2330009-111413-ACN-012	11/14/2013	<0.2	7.9 J	0.84 J	<0.20	<2.0	2.3 J	2.1 J
MW-9 ^A	W-R2330012-032614-ACN-003	3/26/2014	<0.2	8.0 J	0.83 J	<0.20	<2.0	1.9 J	<50
MW-9	W-R2330012-032614-ACN-003	3/26/2014	<0.2	2.8 J	<5.0	<0.20	<2.0	3.2 J	3.7 J
MW-9 ^A	W-R2330012-12214-JCH-024	12/2/2014	<0.2	2.8 J	<5.0	<0.20	<2.0	3.2 J	<50
MW-9	W-R2330012-12214-JCH-024	12/2/2014	<0.2	3.9 J	<5.0	<0.20	<2.0	2.8 J	3.4 J
MW-9 ^A	W-R2330017-031915-JCH-017	3/19/2015	<0.2	3.7 J	<5.0	<0.20	<2.0	2.3 J	<50
MW-9	W-R2330012-031915-JCH-017	3/19/2015	<0.2	3.8 J	<5.0	<0.20	<2.0	2.1 J	3.8 J
MW-9 ^A	W-R2330017-112015-AFB-030	11/20/2015	<0.2	3.7 J	<5.0	0.021 J	<2.0	2.7 J	3.3 J
MW-9	W-R2330017-112015-AFB-030	11/20/2015	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330021-042116-AFB-025	4/21/2016	NS	NS	NS	NS	NS	NS	NS
MW-9 ^A	W-R2330021-110116-AEM-012	11/2/2016	NS	NS	NS	NS	NS	NS	NS
MW-9	W-R2330021-110116-AEM-012	11/2/2016							
MW-9 ^A	W-R2330022-042617-DMS-015	4/26/2017							
MW-9	W-R2330022-042617-DMS-015	4/26/2017							
MW-9 ^A	W-R2330022-102717-DMS-030	10/27/2017	<0.2	1.2 J	1.7 J	<0.20	<2.0	<4.0	2.0 J
MW-9 ^A	W-R2330022-102717-DMS-030	10/27/2017	<0.2	2.2 J	0.74 J	<0.20	<2.0	0.24 J	2.5 J
MW-9	W-R2330022-102717-DMS-030	10/27/2017	<0.2	2.2 J	1.1 J	<0.20	<2.0	0.23 J	2.2 J
MW-9 ^A	W-R2330024-042618-DMS-033	4/26/2018							
MW-9	W-R2330024-042618-DMS-033	4/26/2018							
MW-10	W-R2330009-050113-MJF-003	5/1/2013	<0.2	4.8 J	1.1 J	<0.20	0.24 J	2.1 J	8.6 J

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI-res}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-10 ^A	W-R2330009-080813-ZTR-010	8/8/2013																			
MW-10	W-R2330009-080813-ZTR-010	8/8/2013	<25	<1.0	<1.0	<50	<50	8.5	<1.0	<5.0	24	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A (DUP)	W-R2330009-080813-ZTR-011	8/8/2013																			
MW-10 (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	<25	<1.0	<1.0	<50	<50	8.2	<1.0	<5.0	23	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330009-111313-ACN-008	11/13/2013																			
MW-10	W-R2330009-111313-ACN-008	11/13/2013	<25	<1.0	<1.0	<50	16 J	13	<1.0	<5.0	36	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A (DUP)	W-R2330009-111313-ACN-009	11/13/2013																			
MW-10 (DUP)	W-R2330009-111313-ACN-009	11/13/2013	<25	<1.0	<1.0	<50	16 J	12	<1.0	<5.0	35	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330012-032814-ACN-010	3/28/2014																			
MW-10	W-R2330012-032814-ACN-010	3/28/2014	<25	<1.0	<1.0	<50	<50	8.2	<1.0	<5.0	24	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A (DUP)	W-R2330012-032814-ACN-011	3/28/2014																			
MW-10 (DUP)	W-R2330012-032814-ACN-011	3/28/2014	<25	<1.0	<1.0	<50	<50	8.2	<1.0	<5.0	25	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330012-12214-JCH-028	12/2/2014																			
MW-10	W-R2330012-12214-JCH-028	12/2/2014	<25	<1.0	<1.0	<50	<50	7.8	<1.0	<5.0	38	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330017-031915-ACN-019	3/19/2015																			
MW-10	W-R2330017-031915-ACN-019	3/19/2015	<25	<1.0	<1.0	<50	<50	10	<1.0	<5.0	28	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A (DUP)	W-R2330017-031915-ACN-020	3/19/2015																			
MW-10 (DUP)	W-R2330012-031915-ACN-020	3/19/2015	<25	<1.0	<1.0	<50	<50	10	<1.0	<5.0	27	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330017-111915-AEP-022	11/19/2015																			
MW-10	W-R2330017-111915-AEP-022	11/19/2015	<25	<1.0	0.48 J	<50	<50	12	<1.0	<5.0	44	<5.0	<1.0	<10	<5.0	<5.0	<1.0	0.29 J	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330021-042116-JPM-023	4/21/2016																			
MW-10	W-R2330021-042116-JPM-023	4/21/2016	<25	<1.0	<1.0	<50	5.5 J	7.4	<1.0	<5.0	24	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330021-110216-JPM-019	11/2/2016																			
MW-10	W-R2330021-110216-JPM-019	11/2/2016	<25	<1.0	.41 J	<50	1.8 J	11.0	<1.0	<5.0	41	<5.0	<1.0	.49 J	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330022-042617-DMS-017	4/26/2017																			
MW-10	W-R2330022-042617-DMS-017	4/26/2017	<25	<1.0	<1.0	<50	7.4 J	7.2	<1.0	<5.0	32	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330022-102717-DMS-031	10/27/2017																			
MW-10	W-R2330022-102717-DMS-031	10/27/2017	<25	<1.0	<1.0	<50	3.5 J	9.8	<1.0	<5.0	34	<5.0	<1.0	<10	<5.0	<5.0	<1.0	0.22 J	<1.0	<1.0	<3.0
MW-10 ^A	W-R2330024-042418-JPM-017	4/24/2018																			
MW-10	W-R2330024-042418-JPM-017	4/24/2018	<25	<1.0	<1.0	<50	3.5 J	6.4	<1.0	<5.0	30	<5.0	<1.0	<10	<5.0	<5.0	<1.0	0.22 J	<1.0	<1.0	<3.0
MW-11	W-R2330009-043013-MJF-001	4/30/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-11 ^A	W-R2330009-080713-ZTR-006	8/7/2013																			
MW-11	W-R2330009-080713-ZTR-006	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-11 ^A	W-R2330009-111213-ACN-001	11/12/2013																			
MW-11	W-R2330009-111213-ACN-001	11/12/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-11 ^A	W-R2330012-032614-ACN-002	3/26/2014																			
MW-11	W-R2330012-032614-ACN-002	3/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-11 ^A	W-R2330012-091514-ACN-003	9/15/2014																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2,3-Methylnaphthalene	2,4-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)	ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)		
Residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Ground Water Surface Water Interface Criteria (GSI) (III)	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6		
GSI Final Acute Value (FAV)	ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	2.0E+03	NA	75	220			
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)		
Groundwater Concentration for Vapor Intrusion (GW _{VI-res}) (a)	ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA		
Water Solubility (VII)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206		
Flammability & Explosivity Screening Level (VIII)	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	NA	ID	ID	NA	NA	ID	
ID	SAMPLE ID	SAMPLE DATE																			
MW-10 ^A	W-R2330009-080813-ZTR-010	8/8/2013																			
MW-10	W-R2330009-080813-ZTR-010	8/8/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A (DUP)	W-R2330009-080813-ZTR-011	8/8/2013																			
MW-10 (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A	W-R2330009-111313-ACN-008	11/13/2013																			
MW-10	W-R2330009-111313-ACN-008	11/13/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	0.28 J	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A (DUP)	W-R2330009-111313-ACN-009	11/13/2013																			
MW-10 (DUP)	W-R2330009-111313-ACN-009	11/13/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A	W-R2330012-032814-ACN-010	3/28/2014																			
MW-10	W-R2330012-032814-ACN-010	3/28/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A (DUP)	W-R2330012-032814-ACN-011	3/28/2014																			
MW-10 (DUP)	W-R2330012-032814-ACN-011	3/28/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A	W-R2330012-12214-JCH-028	12/2/2014																			
MW-10	W-R2330012-12214-JCH-028	12/2/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	2.1 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A	W-R2330017-031915-ACN-019	3/19/2015																			
MW-10	W-R2330017-031915-ACN-019	3/19/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A (DUP)	W-R2330017-031915-ACN-020	3/19/2015																			
MW-10 (DUP)	W-R2330012-031915-ACN-020	3/19/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.8 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-10 ^A	W-R2330017-111915-AEP-022	11/19/2015																			
MW-10	W-R2330017-111915-AEP-022	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330021-042116-JPM-023	4/21/2016																			
MW-10	W-R2330021-042116-JPM-023	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330021-110216-JPM-019	11/2/2016																			
MW-10	W-R2330021-110216-JPM-019	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330022-042617-DMS-017	4/26/2017																			
MW-10	W-R2330022-042617-DMS-017	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330022-102717-DMS-031	10/27/2017																			
MW-10	W-R2330022-102717-DMS-031	10/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330024-042418-JPM-017	4/24/2018																			
MW-10	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330009-043013-MJF-001	4/30/2013	0.56 J	<10	<5.0	<10	<10	<5.0	<10	1.1 J	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	0.92 J	<5.0	1.7 J	<1.0
MW-11 ^A	W-R2330009-080713-ZTR-006	8/7/2013																			
MW-11	W-R2330009-080713-ZTR-006	8/7/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-11 ^A	W-R2330009-111213-ACN-001	11/12/2013																			
MW-11	W-R2330009-111213-ACN-001	11/12/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-11 ^A	W-R2330012-032614-ACN-002	3/26/2014																			
MW-11	W-R2330012-032614-ACN-002	3/26/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-11 ^A	W-R2330012-091514-ACN-003	9/15/2014																			
MW-11	W-R2330012-091514-ACN-003	9/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330012-12114-JCH-017	12/1/2014																			
MW-11	W-R2330012-12114-JCH-017	12/1/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-11 ^A	W-R2330017-031715-ACN-009	3/17/2015																			
MW-11	W-R2330017-031715-ACN-009	3/17/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-11 ^A	W-R2330017-111915-AEP-019	11/19/2015																			
MW-11	W-R2330017-111915-AEP-019	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330021-042116-JPM-021	4/21/2016																			
MW-11	W-R2330021-042																				

Table 3
Summary Of Ground Water Sample Results

Table 3
Summary of Ground Water
Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-res}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-10 ^A	W-R2330009-080813-ZTR-010	8/8/2013						26 J	0.27 J	6.5	1,700	<1.0	0.29 J	2.2 J	3.1 J	3.4 J		17,000	7.3	<50	600
MW-10	W-R2330009-080813-ZTR-010	8/8/2013	<5.0	<5.0	<2.0	<5.0	<5.0	8.1 J	0.31 J	6.7	1,800	<1.0	0.22 J	2.0 J	3.5 J	2.7 J	<0.005	17,000	2.4 J	<50	600
MW-10 ^A (DUP)	W-R2330009-080813-ZTR-011	8/8/2013						25 J	0.26 J	6.7	1,700	<1.0	0.40 J	2.0 J	3.1 J	3.4 J		17,000	7.2	<50	580
MW-10 (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	<5.0	<5.0	<2.0	<5.0	<5.0	7.4 J	0.25 J	6.4	1,700	<1.0	0.27 J	2.0 J	3.1 J	2.4 J	<0.005	17,000	2.7 J	<50	600
MW-10 ^A	W-R2330009-111313-ACN-008	11/13/2013						26 J	0.24 J	10	1,900	<1.0	1.7 J	3.7 J	3.3 J	1.8 J		2,300	2.8 J	<50	460
MW-10	W-R2330009-111313-ACN-008	11/13/2013	<5.0	<5.0	<2.0	<5.0	<5.0	12 J	0.23 J	9.7 J	1,900	<1.0	1.4 J	2.7 J	3.8 J	1.1 J	0.0019 J	2,100	0.16 J	<50	480
MW-10 ^A (DUP)	W-R2330009-111313-ACN-009	11/13/2013						26 J	0.23 J	10	1,900	<1.0	1.7 J	2.9 J	3.4 J	1.4 J		2,300	2.8 J	<50	450
MW-10 (DUP)	W-R2330009-111313-ACN-009	11/13/2013	<5.0	<5.0	<2.0	<5.0	<5.0	8.8 J	0.20 J	9.2 J	1,900	<1.0	1.7 J	2.6 J	3.4 J	1.1 J	0.0023 J	2,100	0.18 J	<50	470
MW-10 ^A	W-R2330012-032814-ACN-010	3/28/2014						32 J	0.20 J	6.6 J	1,700	<1.0	<1.0	1.6 J	3.0 J	1.9 J		24,000	1.6 J	<50	550
MW-10	W-R2330012-032814-ACN-010	3/28/2014	<5.0	<5.0	<2.0	<5.0	<5.0	2.0 J	0.22 J	6.5 J	1,700	<1.0	<1.0	0.79 J	2.5 J	3.3 J	2.4 J	24,000	0.14 J	<50	540
MW-10 ^A (DUP)	W-R2330012-032814-ACN-011	3/28/2014						45 J	0.23 J	7.1 J	1,800	<1.0	<1.0	1.6 J	2.9 J	1.5 J		25,000	1.7 J	<50	550
MW-10 (DUP)	W-R2330012-032814-ACN-011	3/28/2014	<5.0	<5.0	<2.0	<5.0	<5.0	4.7 J	0.21 J	6.8 J	1,700	<1.0	<1.0	<10	3.0 J	1.1 J	4.1 J	23,000	0.14 J	<50	530
MW-10 ^A	W-R2330012-12214-JCH-028	12/2/2014						21 J	0.23 J	7.1	2,100	<1.0	0.034 J	2.3 J	2.2 J	<4.0		22,000	2.2 J	<50	420
MW-10	W-R2330012-12214-JCH-028	12/2/2014	<5.0	<5.0	<2.0	<5.0	<5.0	8.2 J	0.22 J	8.4	2,100	<1.0	<1.0	2.3 J	2.4 J	<4.0	<5.0	23,000	<3.0	<50	430
MW-10 ^A	W-R2330017-031915-ACN-019	3/19/2015						24 J	0.29 J	7.3	2,500	<1.0	0.028 J	2.5 J	2.3 J	0.51 J		23,000	2.5 J	<50	450
MW-10	W-R2330017-031915-ACN-019	3/19/2015	<5.0	<5.0	<2.0	<5.0	<5.0	7.8 J	0.26 J	7.0	2,300	<1.0	<1.0	2.2 J	2.3 J	0.40 J	<5.0	22,000	<3.0	<50	420
MW-10 ^A (DUP)	W-R2330017-031915-ACN-020	3/19/2015						26 J	0.21 J	6.6	2,300	<1.0	<1.0	2.2 J	2.3 J	0.65 J		21,000	2.1 J	<50	420
MW-10 (DUP)	W-R2330012-031915-ACN-020	3/19/2015	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.24 J	7.2	2,400	<1.0	<1.0	2.6 J	2.7 J	0.27 J	<5.0	23,000	0.36 J	<50	430
MW-10 ^A	W-R2330017-111915-AEP-022	11/19/2015						31 J	NS	NS	NS	NS	NS	NS	NS	NS		22,000	NS	160,000	NS
MW-10	W-R2330017-111915-AEP-022	11/19/2015	NS	NS	NS	NS	NS	7.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	22,000	NS	160,000	NS
MW-10 ^A	W-R2330021-042116-JPM-023	4/21/2016						190	NS	NS	NS	NS	NS	NS	NS	NS		22,000	NS	NS	420
MW-10	W-R2330021-042116-JPM-023	4/21/2016	NS	NS	NS	NS	NS	19 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	27,000	NS	NS	470
MW-10 ^A	W-R2330021-110216-JPM-019	11/2/2016						32 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	22,000	NS	NS	420
MW-10	W-R2330021-110216-JPM-019	11/2/2016	NS	NS	NS	NS	NS	6.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	22,000	NS	NS	430
MW-10 ^A	W-R2330022-042617-DMS-017	4/26/2017						110	NS	NS	NS	NS	NS	NS	NS	NS	NS	21,000	NS	NS	430
MW-10	W-R2330022-042617-DMS-017	4/26/2017	NS	NS	NS	NS	NS	4.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000	NS	NS	410
MW-10 ^A	W-R2330022-102717-DMS-031	10/27/2017						37	NS	NS	NS	NS	NS	NS	NS	NS	NS	18,000	NS	NS	470
MW-10	W-R2330022-102717-DMS-031	10/27/2017	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	17,000	NS	NS	470
MW-10 ^A	W-R2330024-042418-JPM-017	4/24/2018						75	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000	NS	NS	450
MW-10	W-R2330024-042418-JPM-017	4/24/2018	NS	NS	NS	NS	NS	7.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	20,000	NS	NS	450
MW-11	W-R2330009-043013-MJF-001	4/30/2013	<5.0	<5.0	<2.0	<5.0	<5.0	4.6 J	0.13 J	<5.0	26	<1.0	<1.0	0.69 J	0.41 J	0.76 J	<0.005	13 J	0.0079 J	<50	7.4 J
MW-11 ^A	W-R2330009-080713-ZTR-006	8/7/2013						22 J	0.079 J	<5.0	57 J	<1.0	<1.0	0.49 J	0.51 J	2					

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L									
			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-10 ^A	W-R2330009-080813-ZTR-010	8/8/2013	<0.2	3.2 J	0.83 J	<0.20	<2.0	<4.0	3.1 J
MW-10	W-R2330009-080813-ZTR-010	8/8/2013	<0.2	3.4 J	1.3 J	<0.20	<2.0	0.34 J	0.91 J
MW-10 ^A (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	<0.2	3.3 J	0.83 J	<0.20	0.098 J	0.28 J	<50.0
MW-10 (DUP)	W-R2330009-080813-ZTR-011	8/8/2013	0.062 J	2.5 J	<5.0	<0.20	<2.0	0.28 J	2.8 J
MW-10 ^A	W-R2330009-111313-ACN-008	11/13/2013	0.064 J	2.6 J	<5.0	<0.20	<2.0	0.20 J	3.2 J
MW-10	W-R2330009-111313-ACN-008	11/13/2013	<0.2	3.3 J	<5.0	<0.20	<2.0	0.48 J	7.3 J
MW-10 ^A (DUP)	W-R2330009-111313-ACN-009	11/13/2013	<0.2	2.9 J	0.93 J	<0.20	<2.0	<4.0	3.5 J
MW-10 (DUP)	W-R2330009-111313-ACN-009	11/13/2013	<0.2	3.5 J	0.92 J	<0.20	<2.0	<4.0	<50
MW-10 ^A	W-R2330012-032814-ACN-010	3/28/2014	<0.2	1.7 J	1.0 J	<0.20	<2.0	<4.0	<50
MW-10	W-R2330012-032814-ACN-010	3/28/2014	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A (DUP)	W-R2330012-032814-ACN-011	3/28/2014	NS	NS	NS	NS	NS	NS	NS
MW-10 (DUP)	W-R2330012-032814-ACN-011	3/28/2014	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330012-12214-JCH-028	12/2/2014	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330012-12214-JCH-028	12/2/2014							
MW-10 ^A	W-R2330017-031915-ACN-019	3/19/2015							
MW-10	W-R2330017-031915-ACN-019	3/19/2015	<0.2	3.3 J	<5.0	<0.20	<2.0	0.99 J	8.8 J
MW-10 ^A (DUP)	W-R2330017-031915-ACN-020	3/19/2015	<0.2	4.3 J	<5.0	<0.20	<2.0	1.7 J	4.5 J
MW-10 (DUP)	W-R2330012-031915-ACN-020	3/19/2015	<0.2	4.2 J	<5.0	<0.20	<2.0	1.2 J	2.7 J
MW-10 ^A	W-R2330017-111915-AEP-022	11/19/2015	<0.2	4.5 J	<5.0	<0.20	0.12 J	1.3 J	3.4 J
MW-10	W-R2330017-111915-AEP-022	11/19/2015	<0.2	4.7 J	<5.0	<0.20	<2.0	0.97 J	2.2 J
MW-10 ^A	W-R2330021-042116-JPM-023	4/21/2016	<0.2	7.0 J	<5.0	<0.20	<2.0	1.1 J	4.1 J
MW-10	W-R2330021-042116-JPM-023	4/21/2016	<0.2	8.4 J	<5.0	<0.20	<2.0	1.1 J	5.8 J
MW-10 ^A	W-R2330021-110216-JPM-019	11/2/2016	<0.2	3.5 J	<5.0	0.040 J	<2.0	4.5	8.1 J
MW-10	W-R2330021-110216-JPM-019	11/2/2016	<0.2	1.7 J	<5.0	0.064 J	<2.0	1.0 J	<50
MW-10 ^A	W-R2330022-042617-DMS-017	4/26/2017	<0.2	6.5 J	<5.0	<0.20	<2.0	2.9 J	13 J
MW-10	W-R2330022-042617-DMS-017	4/26/2017	<0.2	4.4 J	<5.0	<0.20	<2.0	0.93 J	4.5 J
MW-10 ^A	W-R2330022-102717-DMS-031	10/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-10	W-R2330022-102717-DMS-031	10/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-10 ^A	W-R2330024-042418-JPM-017	4/24/2018							
MW-10	W-R2330024-042418-JPM-017	4/24/2018							
MW-11	W-R2330009-043013-MJF-001	4/30/2013	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330009-080713-ZTR-006	8/7/2013	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330009-080713-ZTR-006	8/7/2013	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330009-111213-ACN-001	11/12/2013	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330009-111213-ACN-001	11/12/2013							
MW-11 ^A	W-R2330012-032614-ACN-002	3/26/2014							
MW-11	W-R2330012-032614-ACN-002	3/26/2014	<0.2	3.6 J	<5.0	<0.20	<2.0	4.3	7.9 J
MW-11 ^A	W-R2330012-091514-ACN-003	9/15/2014	<0.2	1.2 J	<5.0	<0.20	<2.0	0.65 J	1.7 J
MW-11	W-R2330012-091514-ACN-003	9/15/2014	0.064 J	4.4 J	<5.0	<0.20	<2.0	2.8 J	7.9 J
MW-11 ^A	W-R2330012-12114-JCH-017	12/1/2014	0.064 J	3.0 J	<5.0	<0.20	<2.0	0.36 J	3.1 J
MW-11	W-R2330012-12114-JCH-017	12/1/2014	0.063 J	4.7 J	<5.0	<0.20	<2.0	2.9 J	7.7 J
MW-11 ^A	W-R2330017-031715-ACN-009	3/17/2015	0.058 J	3.0 J	<5.0	<0.20	<2.0	0.32 J	2.9 J
MW-11	W-R2330017-031715-ACN-009	3/17/2015	<0.2	2.2 J	<5.0	<0.20	<2.0	2.4 J	9.6 J
MW-11 ^A	W-R2330017-111915-AEP-019	11/19/2015	<0.2	0.74 J	<5.0	<0.20	<2.0	<4.0	3.4 J
MW-11	W-R2330017-111915-AEP-019	11/19/2015	<0.2	6.4 J	<5.0	<0.20	<2.0	3.7 J	11 J
MW-11 ^A	W-R2330021-042116-JPM-021	4/21/2016	<0.2	3.5 J	<5.0	<0.20	<2.0	<4.0	3.2 J
MW-11	W-R2330021-042116-JPM-021	4/21/2016	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-r2330021-110116-JPM-010	6/26/2201	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII,ms}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-11	W-r2330021-110116-JPM-010	6/26/2201	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-042617-DMS-018	4/26/2017																			
MW-11	W-R2330022-042617-DMS-018	4/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-102717-AFB-034	10/28/2017																			
MW-11	W-R2330022-102717-AFB-034	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330024-042618-DMS-032	4/26/2018																			
MW-11	W-R2330024-042618-DMS-032	4/26/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330009-050213-MJF-011	5/2/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-12 ^A	W-R2330009-080713-ZTR-003	8/7/2013																			
MW-12	W-R2330009-080713-ZTR-003	8/7/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-12 ^A	W-R2330009-111313-ACN-007	11/13/2013																			
MW-12	W-R2330009-111313-ACN-007	11/13/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-12 ^A	W-R2330012-032714-ACN-005	3/27/2014																			
MW-12	W-R2330012-032714-ACN-005	3/27/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-12 ^A	W-R2330012-12114-JCH-021	12/1/2014																			
MW-12	W-R2330012-12114-JCH-021	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-12 ^A	W-R2330017-031715-ACN-011	3/17/2015																			
MW-12	W-R2330017-031715-ACN-011	3/17/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-12 ^A	W-R2330017-112015-AFB-032	11/20/2015																			
MW-12	W-R2330017-112015-AFB-032	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330017-112015-AFB-DUP2	11/20/2015																			
MW-12	W-R2330017-112015-AFB-DUP2	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330021-042116-AFB-027	4/21/2016																			
MW-12	W-R2330021-042116-AFB-027	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330021-110416-JPM-035	11/4/2016																			
MW-12	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-042817-AFB-032	4/28/2017																			
MW-12	W-R2330022-042817-AFB-032	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-102417-DMS-010	10/24/2017																			
MW-12	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A (DUP)	W-R2330022-102417-DMS-011	10/24/2017																			
MW-12 (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330024-042518-DMS-020	4/25/2018																			
MW-12	W-R2330024-042518-DMS-020	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330012-052014-ACN-029	5/20/2014																			
MW-17	W-R2330012-052014-ACN-029	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-17 ^A	W-R2330012-091514-ACN-004	9/15/2014																			
MW-17	W-R2330012-091514-ACN-004	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS	NS
MW-17 ^A (DUP)	W-R2330012-091514-ACN-005	9/15/2014																			
MW-17 (DUP)	W-R2330012-091514-ACN-005	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330012-112414-MCW-004	11/24/2014																			
MW-17	W-R2330012-112414-MCW-004	11/24/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-17 ^A	W-R2330017-031615-ACN-007	3/16/2015																			
MW-17	W-R2330017-031615-ACN-007	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-17 ^A	W-R2330017-111715-AFB-009	11/17/2015																			
MW-17	W-R2330017-111715-AFB-009	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A																					

Table 3
Summary of Ground Water
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Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIMS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-11	W-R2330021-110116-JPM-010	6/26/2201	NS	NS	NS	NS	NS	7.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,100	NS	NS	140
MW-11 ^A	W-R2330022-042617-DMS-018	4/26/2017						93	NS	NS	NS	NS	NS	NS	NS	NS	NS	350	NS	NS	95
MW-11	W-R2330022-042617-DMS-018	4/26/2017	NS	NS	NS	NS	NS	5.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	24 J	NS	NS	17 J
MW-11 ^A	W-R2330022-102717-AFB-034	10/28/2017						69	NS	NS	NS	NS	NS	NS	NS	NS	NS	310	NS	NS	180
MW-11	W-R2330022-102717-AFB-034	10/28/2017	NS	NS	NS	NS	NS	4.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	240	NS	NS	160
MW-11 ^A	W-R2330024-042618-DMS-032	4/26/2018						20	NS	NS	NS	NS	NS	NS	NS	NS	NS	150	NS	NS	85
MW-11	W-R2330024-042618-DMS-032	4/26/2018	NS	NS	NS	NS	NS	3.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	<300	NS	NS	12
MW-12	W-R2330009-050213-MJF-011	5/2/2013	<5.0	<5.0	<2.0	<5.0	<5.0	14 J	0.22 J	1.4 J	1,100	<1.0	<1.0	1.9 J	4.0 J	<4.0	<0.005	15,000	0.17 J	<50	1,500
MW-12 ^A	W-R2330009-080713-ZTR-003	8/7/2013						170	0.15 J	1.2 J	1,400	<1.0	0.27 J	1.2 J	1.4 J	6.1		18,000	0.36 J	<50	470
MW-12	W-R2330009-080713-ZTR-003	8/7/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.9 J	0.26 J	0.93 J	1,500	<1.0	0.30 J	0.73 J	2.4 J	3.6 J	<0.005	17,000	0.062 J	<50	420
MW-12 ^A	W-R2330009-111313-ACN-007	11/13/2013						89	0.16 J	0.79 J	1,600	0.13 J	0.33 J	1.0 J	1.5 J	1.5 J		12,000	0.26 J	<50	210
MW-12	W-R2330009-111313-ACN-007	11/13/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.9 J	0.16 J	0.85 J	1,500	<1.0	0.68 J	0.99 J	1.9 J	1.3 J	<0.005	12,000	<3.0	<50	190
MW-12 ^A	W-R2330012-032714-ACN-005	3/27/2014						61	0.18 J	0.82 J	1,200	<1.0	<1.0	0.53 J	1.9 J	3.6 J		8,800	0.24 J	<50	750
MW-12	W-R2330012-032714-ACN-005	3/27/2014	<5.0	<5.0	<2.0	<5.0	<5.0	4.9 J	0.19 J	<5.0	1,300	<1.0	<1.0	0.43 J	1.5 J	4.6	2.2 J	9,100	0.22 J	<50	660
MW-12 ^A	W-R2330012-12114-JCH-021	12/1/2014						1,200	0.31 J	2.7 J	1,600	<1.0	0.090 J	2.6 J	1.3 J	3.9 J		14,000	1.3 J	<50	310
MW-12	W-R2330012-12114-JCH-021	12/1/2014	<5.0	<5.0	<2.0	<5.0	<5.0	15 J	0.22 J	<5.0	1,600	<1.0	<1.0	0.55 J	0.86 J	<4.0	<5.0	12,000	<3.0	<50	340
MW-12 ^A	W-R2330017-031715-ACN-011	3/17/2015						1,000	0.31 J	1.4 J	1,800	<1.0	<1.0	2.2 J	1.9 J	7.6		14,000	2.2 J	<50	170
MW-12	W-R2330017-031715-ACN-011	3/17/2015	<5.0	<5.0	<2.0	<5.0	<5.0	5.1 J	0.58 J	<5.0	1,500	<1.0	<1.0	0.58 J	1.4 J	1.3 J	<5.0	12,000	<3.0	<50	140
MW-12 ^A	W-R2330017-112015-AFB-032	11/20/2015						340	NS	NS	NS	NS	NS	NS	NS	NS		12,000	NS	130,000	NS
MW-12	W-R2330017-112015-AFB-032	11/20/2015	NS	NS	NS	NS	NS	7.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	130,000	NS
MW-12 ^A	W-R2330017-112015-AFB-DUP2	11/20/2015						380	NS	NS	NS	NS	NS	NS	NS	NS		12,000	NS	140,000	NS
MW-12	W-R2330017-112015-AFB-DUP2	11/20/2015	NS	NS	NS	NS	NS	7.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	130,000	NS
MW-12 ^A	W-R2330021-042116-AFB-027	4/21/2016						60	NS	NS	NS	NS	NS	NS	NS	NS		4,900	NS	NS	140
MW-12	W-R2330021-042116-AFB-027	4/21/2016	NS	NS	NS	NS	NS	13 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,100	NS	NS	160
MW-12 ^A	W-R2330021-110416-JPM-035	11/4/2016						150	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000	NS	NS	270
MW-12	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	NS	NS	NS	27 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000	NS	NS	270
MW-12 ^A	W-R2330022-042817-AFB-032	4/28/2017						36 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,400	NS	NS	740
MW-12	W-R2330022-042817-AFB-032	4/28/2017	NS	NS	NS	NS	NS	12 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,000	NS	NS	740
MW-12 ^A	W-R2330022-102417-DMS-010	10/24/2017						530	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000	NS	NS	280
MW-12	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	NS	NS	NS	8.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000	NS	NS	250
MW-12 ^A (DUP)	W-R2330022-102417-DMS-011	10/24/2017						410	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000	NS	NS	280
MW-12 (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	NS	NS	NS	6.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000	NS	NS	260
MW-12 ^A	W-R2330024-042518-DMS-020	4/25/2018						21	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,800	NS	NS	400
MW-12	W-R2330024-042518-DMS-020	4/25/2018	NS	NS	NS	NS	NS	14	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,400	NS	NS	420
MW-17 ^A	W-R2330012-052014-ACN-029	5/20/2014						1,400	0.11 J	5.6	160	<1.0	<1.0	2.4 J	0.98 J	2.8 J		4,200	2.2 J	<50	210
MW-17	W-R2330012-052014-ACN-029	5/20/2014	<5.0	<5.0	<2.0	<5.0	<5.0	51	0.063 J	4.5 J	150	<1.0	<1.0	<							

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-11	W-R2330021-110116-JPM-010	6/26/2201	NS	NS	NS	NS	NS	NS	NS
MW-11 ^A	W-R2330022-042617-DMS-018	4/26/2017	NS	NS	NS	NS	NS	NS	NS
MW-11	W-R2330022-042617-DMS-018	4/26/2017	<0.2	15 J	1.6 J	0.047 J	0.18 J	16	27 J
MW-11 ^A	W-R2330022-102717-AFB-034	10/28/2017							
MW-11	W-R2330022-102717-AFB-034	10/28/2017							
MW-11 ^A	W-R2330024-042618-DMS-032	4/26/2018							
MW-11	W-R2330024-042618-DMS-032	4/26/2018							
MW-12	W-R2330009-050213-MJF-011	5/2/2013	<0.2	3.1 J	<5.0	<0.20	0.21 J	0.61 J	2.9 J
MW-12 ^A	W-R2330009-080713-ZTR-003	8/7/2013	0.030 J	79	8.0	0.17 J	1.3 J	90	200
MW-12	W-R2330009-080713-ZTR-003	8/7/2013	<0.2	1.9 J	<5.0	<0.20	<2.0	<4.0	3.6 J
MW-12 ^A	W-R2330009-111313-ACN-007	11/13/2013	<0.2	71	2.5 J	0.16 J	0.91 J	67	170
MW-12	W-R2330009-111313-ACN-007	11/13/2013	<0.2	5.3 J	<5.0	<0.20	<2.0	<4.0	4.6 J
MW-12 ^A	W-R2330012-032714-ACN-005	3/27/2014	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330012-032714-ACN-005	3/27/2014	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330012-12114-JCH-021	12/1/2014	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330012-12114-JCH-021	12/1/2014	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330017-031715-ACN-011	3/17/2015	<0.2	5.3 J	<5.0	<0.20	<2.0	6.3	9.2 J
MW-12	W-R2330017-031715-ACN-011	3/17/2015							
MW-12 ^A	W-R2330017-112015-AFB-032	11/20/2015							
MW-12	W-R2330017-112015-AFB-032	11/20/2015	<0.2	1.9 J	<5.0	<0.20	<2.0	1.3 J	2.5 J
MW-12 ^A	W-R2330017-112015-AFB-DUP2	11/20/2015	<0.2	21	1.7 J	0.080 J	<2.0	24	53
MW-12	W-R2330017-112015-AFB-DUP2	11/20/2015	<0.2	1.8 J	<5.0	<0.20	<2.0	0.48 J	3.9 J
MW-12 ^A	W-R2330021-042116-AFB-027	4/21/2016	<0.2	9.4 J	0.82 J	<0.20	<2.0	4.2	11 J
MW-12	W-R2330021-042116-AFB-027	4/21/2016	<0.2	5.6 J	<5.0	<0.20	<2.0	0.53 J	3.7 J
MW-12 ^A	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330021-110416-JPM-035	11/4/2016	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-042817-AFB-032	4/28/2017	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330022-042817-AFB-032	4/28/2017	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330022-102417-DMS-010	10/24/2017	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	NS	NS	NS	NS	NS
MW-12 (DUP)	W-R2330022-102417-DMS-011	10/24/2017	NS	NS	NS	NS	NS	NS	NS
MW-12 ^A	W-R2330024-042518-DMS-020	4/25/2018	NS	NS	NS	NS	NS	NS	NS
MW-12	W-R2330024-042518-DMS-020	4/25/2018	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330012-052014-ACN-029	5/20/2014	<0.2	5.5 J	<5.0	<0.20	<2.0	6.4	11 J
MW-17	W-R2330012-052014-ACN-029	5/20/2014	<0.2	1.9 J	<5.0	<0.20	<2.0	0.57 J	1.1 J
MW-17 ^A	W-R2330012-091514-ACN-004	9/15/2014	<0.2	1.9 J	<5.0	<0.20	<2.0	1.9 J	5.3 J
MW-17	W-R2330012-091514-ACN-004	9/15/2014	<0.2	1.4 J	<5.0	<0.20	<2.0	0.68 J	4.5 J
MW-17 ^A (DUP)	W-R2330012-091514-ACN-005	9/15/2014	<0.2	6.7 J	<5.0	<0.20	<2.0	4.0 J	12 J
MW-17 (DUP)	W-R2330012-091514-ACN-005	9/15/2014	<0.2	3.7 J	<5.0	<0.20	<2.0	0.52 J	<50
MW-17 ^A	W-R2330012-112414-MCW-004	11/24/2014	<0.2	6.7 J	<5.0	<0.20	<2.0	3.9 J	12 J
MW-17	W-R2330012-112414-MCW-004	11/24/2014	<0.2	3.7 J	<5.0	<0.20	<2.0	0.55 J	<50
MW-17 ^A	W-R2330017-031615-ACN-007	3/16/2015	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330017-031615-ACN-007	3/16/2015	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330017-111715-AFB-009	11/17/2015	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330017-111715-AFB-009	11/17/2015	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330021-041916-AEP-012	4/19/2016							
MW-17	W-R2330021-041916-AEP-012	4/19/2016							

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-17 ^A	W-R2330021-110116-AEM-009	11/1/2016																			
MW-17	W-R2330021-110116-AEM-009	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330022-042517-AFB-011	4/25/2017																			
MW-17	W-R2330022-042517-AFB-011	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330022-102617-AFB-023	10/26/2017																			
MW-17	W-R2330022-102617-AFB-023	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17 ^A	W-R2330024-042418-DMS-018	4/24/2018																			
MW-17	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330012-052014-ACN-026	5/20/2014																			
MW-18	W-R2330012-052014-ACN-026	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-18 ^A	W-R2330012-112414-ACN-001	11/24/2014																			
MW-18	W-R2330012-112414-ACN-001	11/24/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-18 ^A	W-R2330017-031615-JCH-003	3/16/2015																			
MW-18	W-R2330017-031615-JCH-003	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.47 J	<3.0
MW-18 ^A	W-R2330017-111715-JPM-007	11/17/2015																			
MW-18	W-R2330017-111715-JPM-007	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330021-041916-AEP-009	4/19/2016																			
MW-18	W-R2330021-041916-AEP-009	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330021-110316-AEM-025	11/3/2016																			
MW-18	W-R2330021-110316-AEM-025	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330022-042517-DMS-008	4/25/2017																			
MW-18	W-R2330022-042517-DMS-008	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330022-102517-AFB-018	10/25/2017																			
MW-18	W-R2330022-102517-AFB-018	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330024-042518-JPM-027	4/25/2018																			
MW-18	W-R2330024-042518-JPM-027	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330012-052014-ACN-027	5/20/2014																			
MW-19	W-R2330012-052014-ACN-027	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-19 ^A	W-R2330012-112414-ACN-002	11/24/2014																			
MW-19	W-R2330012-112414-ACN-002	11/24/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-19 ^A	W-R2330017-031615-JCH-004	3/16/2015																			
MW-19	W-R2330017-031615-JCH-004	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-19 ^A	W-R2330017-111715-AFB-008	11/17/2015																			
MW-19	W-R2330017-111715-AFB-008	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-041916-JPM-010	4/19/2016																			
MW-19	W-R2330021-041916-JPM-010	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	DUP 1	4/19/2016																			
MW-19	DUP 1	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-110316-AEM-027	11/3/2016																			
MW-19	W-R2330021-110316-AEM-027	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-042517-AFB-009	4/25/2017																			
MW-19	W-R2330022-042517-AFB-009	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-102517-DMS-019	10/25/2017																			
MW-19	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330024-042518-JPM-029	4/25/2018																			
MW-19	W-R2330024-042518-JPM-029	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330012-052014-ACN-028	5/20/2014																			
MW-20	W-R2330012-052014-ACN-028	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI-max}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2,30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-17 ^A	W-R2330021-110116-AEM-009	11/1/2016																			
MW-17	W-R2330021-110116-AEM-009	11/1/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-17 ^A	W-R2330022-042517-AFB-011	4/25/2017																			
MW-17	W-R2330022-042517-AFB-011	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-17 ^A	W-R2330022-102617-AFB-023	10/26/2017																			
MW-17	W-R2330022-102617-AFB-023	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-17 ^A	W-R2330024-042418-DMS-018	4/24/2018																			
MW-17	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-18 ^A	W-R2330012-052014-ACN-026	5/20/2014																			
MW-18	W-R2330012-052014-ACN-026	5/20/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-18 ^A	W-R2330012-112414-ACN-001	11/24/2014																			
MW-18	W-R2330012-112414-ACN-001	11/24/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-18 ^A	W-R2330017-031615-JCH-003	3/16/2015																			
MW-18	W-R2330017-031615-JCH-003	3/16/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-18 ^A	W-R2330017-111715-JPM-007	11/17/2015																			
MW-18	W-R2330017-111715-JPM-007	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-18 ^A	W-R2330021-041916-AEP-009	4/19/2016																			
MW-18	W-R2330021-041916-AEP-009	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-18 ^A	W-R2330021-110316-AEM-025	11/3/2016																			
MW-18	W-R2330021-110316-AEM-025	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-18 ^A	W-R2330022-042517-DMS-008	4/25/2017																			
MW-18	W-R2330022-042517-DMS-008	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-18 ^A	W-R2330022-102517-AFB-018	10/25/2017																			
MW-18	W-R2330022-102517-AFB-018	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-18 ^A	W-R2330024-042518-JPM-027	4/25/2018																			
MW-18	W-R2330024-042518-JPM-027	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-19 ^A	W-R2330012-052014-ACN-027	5/20/2014																			
MW-19	W-R2330012-052014-ACN-027	5/20/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-19 ^A	W-R2330012-112414-ACN-002	11/24/2014																			
MW-19	W-R2330012-112414-ACN-002	11/24/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-19 ^A	W-R2330017-031615-JCH-004	3/16/2015																			
MW-19	W-R2330017-031615-JCH-004	3/16/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	0.78 J	<1.0
MW-19 ^A	W-R2330017-111715-AFB-008	11/17/2015																			
MW-19	W-R2330017-111715-AFB-008	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-041916-JPM-010	4/19/2016																			
MW-19	W-R2330021-041916-JPM-010	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	DUP 1	4/19/2016																			
MW-19	DUP 1	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330021-110316-AEM-027	11/3/2016																			
MW-19	W-R2330021-110316-AEM-027	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-042517-AFB-009	4/25/2017																			
MW-19	W-R2330022-042517-AFB-009	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-102517-DMS-019	10/25/2017																			
MW-19	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330024-042518-JPM-029	4/25/2018																			
MW-19	W-R2330024-042518-JPM-029	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330012-052014-ACN-028	5/20/2014																			
MW-20	W-R2330012-052014-ACN-028	5/20/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0

Table 3
Summary Of Ground Water Sample Results

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Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-MS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-17 ^A	W-R2330021-110116-AEM-009	11/1/2016						140	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,700	NS	NS	3,900
MW-17	W-R2330021-110116-AEM-009	11/1/2016	NS	NS	NS	NS	NS	7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400	NS	NS	410
MW-17 ^A	W-R2330022-042517-AFB-011	4/25/2017						1,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,500	NS	NS	420
MW-17	W-R2330022-042517-AFB-011	4/25/2017	NS	NS	NS	NS	NS	17 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,300	NS	NS	430
MW-17 ^A	W-R2330022-102617-AFB-023	10/26/2017						860	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,200	NS	NS	440
MW-17	W-R2330022-102617-AFB-023	10/26/2017	NS	NS	NS	NS	NS	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,200	NS	NS	440
MW-17 ^A	W-R2330024-042418-DMS-018	4/24/2018						400	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500	NS	NS	510
MW-17	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400	NS	NS	500
MW-18 ^A	W-R2330012-052014-ACN-026	5/20/2014						5,400	0.35 J	10	400	0.23 J	0.28 J	8.8 J	5.6 J	11		13,000	6.9	<50	600
MW-18	W-R2330012-052014-ACN-026	5/20/2014	<5.0	<5.0	<2.0	<5.0	<5.0	56	0.24 J	5.1	370	0.097 J	0.16 J	0.30 J	1.3 J	<4.0	<0.005	2,000	0.20 J	<50	250
MW-18 ^A	W-R2330012-112414-ACN-001	11/24/2014						25,000	1.0 J	46	730	1.2	1.4	48	34	74		72,000	52	<50	3,800
MW-18	W-R2330012-112414-ACN-001	11/24/2014	<5.0	<5.0	<2.0	<5.0	<5.0	45 J	0.18 J	11	550	<1.0	0.088 J	<10	0.59 J	0.21 J	<5.0	3,600	<3.0	<50	210
MW-18 ^A	W-R2330017-031615-JCH-003	3/16/2015						28,000	1.3 J	51	740	0.77 J	1.4	35	25	60		60,000	45	<50	2700
MW-18	W-R2330017-031615-JCH-003	3/16/2015	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.16 J	6.7	450	<1.0	0.041 J	0.15 J	0.97 J	1.5 J	<5.0	2,800	<3.0	<50	180
MW-18 ^A	W-R2330017-111715-JPM-007	11/17/2015						2,200	NS	NS	NS	NS	NS	NS	NS	NS		7,200	NS	30,000	NS
MW-18	W-R2330017-111715-JPM-007	11/17/2015	NS	NS	NS	NS	NS	22 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,900	NS	25,000	NS
MW-18 ^A	W-R2330021-041916-AEP-009	4/19/2016						2,100	NS	NS	NS	NS	NS	NS	NS	NS		4,400	NS	NS	220
MW-18	W-R2330021-041916-AEP-009	4/19/2016	NS	NS	NS	NS	NS	29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,300	NS	NS	140
MW-18 ^A	W-R2330021-110316-AEM-025	11/3/2016						96	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,100	NS	NS	180
MW-18	W-R2330021-110316-AEM-025	11/3/2016	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,800	NS	NS	180
MW-18 ^A	W-R2330022-042517-DMS-008	4/25/2017						2,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,900	NS	NS	420
MW-18	W-R2330022-042517-DMS-008	4/25/2017	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,300	NS	NS	150
MW-18 ^A	W-R2330022-102517-AFB-018	10/25/2017						5,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	17,000	NS	NS	880
MW-18	W-R2330022-102517-AFB-018	10/25/2017	NS	NS	NS	NS	NS	23	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,600	NS	NS	160
MW-18 ^A	W-R2330024-042518-JPM-027	4/25/2018						7,500	NS	NS	NS	NS	NS	NS	NS	NS	NS	26,000	NS	NS	1700
MW-18	W-R2330024-042518-JPM-027	4/25/2018	NS	NS	NS	NS	NS	64	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,100	NS	NS	130
MW-19 ^A	W-R2330012-052014-ACN-027	5/20/2014						1,900	0.089 J	6.2	350	<1.0	0.062 J	3.5 J	1.5 J	3.4 J		5,300	1.6 J	<50	350
MW-19	W-R2330012-052014-ACN-027	5/20/2014	<5.0	<5.0	<2.0	<5.0	<5.0	120	0.12 J	4.5 J	320	<1.0	<1.0	0.53 J	1.1 J	0.87 J	1.2 J	2,400	0.088 J	<50	300
MW-19 ^A	W-R2330012-112414-ACN-002	11/24/2014						7,900	0.49 J	14	380	0.34 J	0.27 J	16	6.7 J	17		16,000	9.7	<50	560
MW-19	W-R2330012-112414-ACN-002	11/24/2014	<5.0	<5.0	<2.0	<5.0	<5.0	74	0.15 J	6.3	330	<1.0	0.054 J	0.30 J	0.93 J	0.18 J	<5.0	2,000	<3.0	<50	350
MW-19 ^A	W-R2330017-031615-JCH-004	3/16/2015						1,600	0.12 J	11	510	<1.0	<1.0	2.8 J	1.9 J	4.1		6,600	1.7 J	<50	520
MW-19	W-R2330017-031615-JCH-004	3/16/2015	<5.0	<5.0	<2.0	<5.0	<5.0	18 J	0.14 J	5 J	540	<1.0	<1.0	0.3 J	0.91 J	1.8 J	<5.0	3,500	<3.0	<50	460
MW-19 ^A	W-R2330017-111715-AFB-008	11/17/2015						4,100	NS	NS	NS	NS	NS	NS	NS	NS		11,000	NS	38,000	NS
MW-19	W-R2330017-111715-AFB-008	11/17/2015	NS	NS	NS	NS	NS	370	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400	NS	34,000	NS
MW-19 ^A	W-R2330021-041916-JPM-010	4/19/2016						1,300	NS	NS	NS	NS	NS	NS	NS	NS		5,100	NS	NS	450
MW-19	W-R2330021-041916-JPM-010	4/19/2016	NS	NS	NS	NS	NS	25 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,100	NS	NS	420
MW-19 ^A	DUP 1	4/19/2016						1,300	NS	NS	NS	NS	NS	NS	NS	NS		5,100	NS	NS	450
MW-19	DUP 1	4/19/2016	NS	NS	NS	NS	NS	13 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,000	NS	NS	420
MW-19 ^A	W-R2330021-110316-AEM-027	11/3/2016						190	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,000	NS		

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L									
			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIRIS}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-17 ^A	W-R2330021-110116-AEM-009	11/1/2016	<0.2	5.5 J	0.68 J	<0.20	<2.0	3.8 J	9.9 J
MW-17	W-R2330021-110116-AEM-009	11/1/2016	<0.2	1.9 J	<5.0	<0.20	<2.0	0.32 J	1.9 J
MW-17 ^A	W-R2330022-042517-AFB-011	4/25/2017	<0.2	3.0 J	<5.0	<0.20	<2.0	1.8 J	8.2 J
MW-17	W-R2330022-042517-AFB-011	4/25/2017	<0.2	2.0 J	<5.0	<0.20	<2.0	<4.0	4.5 J
MW-17 ^A	W-R2330022-102617-AFB-023	10/26/2017	<0.2	7.7 J	<5.0	0.038 J	<2.0	8.5	18 J
MW-17	W-R2330022-102617-AFB-023	10/26/2017	<0.2	2.0 J	<5.0	<0.20	<2.0	<4.0	<50
MW-17 ^A	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	NS	NS	NS	NS	NS
MW-17	W-R2330024-042418-DMS-018	4/24/2018	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330012-052014-ACN-026	5/20/2014	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330012-052014-ACN-026	5/20/2014	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330012-112414-ACN-001	11/24/2014	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330012-112414-ACN-001	11/24/2014	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330017-031615-JCH-003	3/16/2015	NS	NS	NS	NS	NS	NS	NS
MW-18	W-R2330017-031615-JCH-003	3/16/2015	NS	NS	NS	NS	NS	NS	NS
MW-18 ^A	W-R2330017-111715-JPM-007	11/17/2015	<0.2	23	2.7 J	<0.20	<2.0	24	81
MW-18	W-R2330017-111715-JPM-007	11/17/2015							
MW-18 ^A	W-R2330021-041916-AEP-009	4/19/2016							
MW-18	W-R2330021-041916-AEP-009	4/19/2016	<0.2	3.2 J	<5.0	<0.20	<2.0	0.64 J	2.2 J
MW-18 ^A	W-R2330021-110316-AEM-025	11/3/2016	<0.2	4.4 J	<5.0	<0.20	<2.0	1.1 J	6.8 J
MW-18	W-R2330021-110316-AEM-025	11/3/2016	<0.2	3.7 J	<5.0	<0.20	<2.0	<4.0	23 J
MW-18 ^A	W-R2330022-042517-DMS-008	4/25/2017	<0.2	4.4 J	<5.0	<0.20	<2.0	0.75 J	5.6 J
MW-18	W-R2330022-042517-DMS-008	4/25/2017	<0.2	3.8 J	<5.0	<0.20	<2.0	<4.0	4.6 J
MW-18 ^A	W-R2330022-102517-AFB-018	10/25/2017	<0.2	6.5 J	<5.0	<0.20	<2.0	1.5 J	8.6 J
MW-18	W-R2330022-102517-AFB-018	10/25/2017	<0.2	5.9 J	<5.0	<0.20	<2.0	0.71 J	5.9 J
MW-18 ^A	W-R2330024-042518-JPM-027	4/25/2018							
MW-18	W-R2330024-042518-JPM-027	4/25/2018							
MW-19 ^A	W-R2330012-052014-ACN-027	5/20/2014	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330012-052014-ACN-027	5/20/2014	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330012-112414-ACN-002	11/24/2014	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330012-112414-ACN-002	11/24/2014	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330017-031615-JCH-004	3/16/2015	<0.2	4.4 J	0.92 J	<0.20	<2.0	2.5 J	7.2 J
MW-19	W-R2330017-031615-JCH-004	3/16/2015							
MW-19 ^A	W-R2330017-111715-AFB-008	11/17/2015							
MW-19	W-R2330017-111715-AFB-008	11/17/2015	<0.2	3.3 J	<5.0	<0.20	<2.0	1.1 J	2.2 J
MW-19 ^A	W-R2330021-041916-JPM-010	4/19/2016	<0.2	4.4 J	0.72 J	<0.20	<2.0	2.6 J	7.3 J
MW-19	W-R2330021-041916-JPM-010	4/19/2016	<0.2	3.1 J	<5.0	<0.20	<2.0	0.84 J	1.9 J
MW-19 ^A	DUP 1	4/19/2016	<0.2	25	2.8 J	0.059 J	<2.0	29	100
MW-19	DUP 1	4/19/2016	<0.2	3.8 J	<5.0	<0.20	<2.0	1.5 J	4.5 J
MW-19 ^A	W-R2330021-110316-AEM-027	11/3/2016	<0.2	7.4 J	0.76 J	0.023 J	<2.0	3.3 J	9.2 J
MW-19	W-R2330021-110316-AEM-027	11/3/2016	<0.2	6.3 J	<5.0	0.020 J	<2.0	1.2 J	4.1 J
MW-19 ^A	W-R2330022-042517-AFB-009	4/25/2017	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330022-042517-AFB-009	4/25/2017	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	NS	NS	NS	NS	NS
MW-19	W-R2330022-102517-DMS-019	10/25/2017	NS	NS	NS	NS	NS	NS	NS
MW-19 ^A	W-R2330024-042518-JPM-029	4/25/2018							
MW-19	W-R2330024-042518-JPM-029	4/25/2018							
MW-20 ^A	W-R2330012-052014-ACN-028	5/20/2014							
MW-20	W-R2330012-052014-ACN-028	5/20/2014							

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-20 ^A	W-R2330012-112414-ACN-003	11/24/2014																			
MW-20	W-R2330012-112414-ACN-003	11/24/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-20 ^A	W-R2330017-031615-ACN-005	3/16/2015																			
MW-20	W-R2330017-031615-ACN-005	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-20 ^A (DUP)	W-R2330017-031615-ACN-006	3/16/2015																			
MW-20 (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-20 ^A	W-R2330017-111715-JPM-010	11/17/2015																			
MW-20	W-R2330017-111715-JPM-010	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-041916-JPM-011	4/19/2016																			
MW-20	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-110316-JPM-026	11/3/2016																			
MW-20	W-R2330021-110316-JPM-026	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-042517-DMS-010	4/25/2017																			
MW-20	W-R2330022-042517-DMS-010	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A (DUP)	W-R2330022-042517-DMS-012	4/25/2017																			
MW-20 (DUP)	W-R2330022-042517-DMS-012	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-102617-AFB-022	10/26/2017																			
MW-20	W-R2330022-102617-AFB-022	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330024-042518-JPM-030	4/25/2018																			
MW-20	W-R2330024-042518-JPM-030	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330012-051914-ACN-021	5/19/2014																			
MW-21	W-R2330012-051914-ACN-021	5/19/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-21 ^A	W-R2330012-112514-ACN-006	11/25/2014																			
MW-21	W-R2330012-112514-ACN-006	11/25/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-21 ^A	W-R2330017-032015-JCH-023	3/20/2015																			
MW-21	W-R2330017-032015-JCH-023	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-21 ^A	W-R2330012-111815-JPM-013	11/18/2015																			
MW-21	W-R2330012-111815-JPM-013	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A (DUP)	DUP 1	11/18/2015																			
MW-21 (DUP)	DUP 1	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330021-042016-JPM-015	4/20/2016																			
MW-21	W-R2330012-042016-JPM-015	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330021-110316-AEM-021	11/3/2016																			
MW-21	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-042717-DMS-021	4/27/2017																			
MW-21	W-R2330022-042717-DMS-021	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-102517-DMS-015	10/25/2017																			
MW-21	W-R2330022-102517-DMS-015	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330024-042418-JPM-013	4/24/2018																			
MW-21	W-R2330024-042418-JPM-013	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330012-051914-ACN-022	5/19/2014																			
MW-22	W-R2330012-051914-ACN-022	5/19/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-22 ^A	W-R2330012-112514-ACN-007	11/25/2014																			
MW-22	W-R2330012-112514-ACN-007	11/25/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-22 ^A (DUP)	W-R2330012-112514-ACN-008	11/25/2014																			
MW-22 (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-22 ^A	W-R2330017-032015-JCH-027	3/20/2015																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-20 ^A	W-R2330012-112414-ACN-003	11/24/2014																			
MW-20	W-R2330012-112414-ACN-003	11/24/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-20 ^A	W-R2330017-031615-ACN-005	3/16/2015																			
MW-20	W-R2330017-031615-ACN-005	3/16/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-20 ^A (DUP)	W-R2330017-031615-ACN-006	3/16/2015																			
MW-20 (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-20 ^A	W-R2330017-111715-JPM-010	11/17/2015																			
MW-20	W-R2330017-111715-JPM-010	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-041916-JPM-011	4/19/2016																			
MW-20	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-110316-JPM-026	11/3/2016																			
MW-20	W-R2330021-110316-JPM-026	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-042517-DMS-010	4/25/2017																			
MW-20	W-R2330022-042517-DMS-010	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A (DUP)	W-R2330022-042517-DMS-012	4/25/2017																			
MW-20 (DUP)	W-R2330022-042517-DMS-012	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330022-102617-AFB-022	10/26/2017																			
MW-20	W-R2330022-102617-AFB-022	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330024-042518-JPM-030	4/25/2018																			
MW-20	W-R2330024-042518-JPM-030	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330012-051914-ACN-021	5/19/2014																			
MW-21	W-R2330012-051914-ACN-021	5/19/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	0.87 J	<1.0
MW-21 ^A	W-R2330012-112514-ACN-006	11/25/2014																			
MW-21	W-R2330012-112514-ACN-006	11/25/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-21 ^A	W-R2330017-032015-JCH-023	3/20/2015																			
MW-21	W-R2330017-032015-JCH-023	3/20/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-21 ^A	W-R2330012-111815-JPM-013	11/18/2015																			
MW-21	W-R2330012-111815-JPM-013	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A (DUP)	DUP 1	11/18/2015																			
MW-21 (DUP)	DUP 1	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330021-042016-JPM-015	4/20/2016																			
MW-21	W-R2330012-042016-JPM-015	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330021-110316-AEM-021	11/3/2016																			
MW-21	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-042717-DMS-021	4/27/2017																			
MW-21	W-R2330022-042717-DMS-021	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-102517-DMS-015	10/25/2017																			
MW-21	W-R2330022-102517-DMS-015	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330024-042418-JPM-013	4/24/2018																			
MW-21	W-R2330024-042418-JPM-013	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330012-051914-ACN-022	5/19/2014																			
MW-22	W-R2330012-051914-ACN-022	5/19/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	1.5 J	<10	<10	<4.0	<5.0	<5.0	0.88 J	<1.0
MW-22 ^A	W-R2330012-112514-ACN-007	11/25/2014																			
MW-22	W-R2330012-112514-ACN-007	11/25/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.7 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-22 ^A (DUP)	W-R2330012-112514-ACN-008	11/25/2014																			
MW-22 (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.7 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-22 ^A	W-R2330017-032015-JCH-027	3/20/2015																			
MW-22	W-R2330017-032015-JCH-027	3/20/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.0 J	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-20 ^A	W-R2330012-112414-ACN-003	11/24/2014						330	<2.0	8.8	290	<1.0	<1.0	0.90 J	0.49 J	1.2 J		4,200	0.69 J	<50	160
MW-20	W-R2330012-112414-ACN-003	11/24/2014	<5.0	<5.0	<2.0	<5.0	<5.0	100	<2.0	7.7	300	<1.0	<1.0	0.39 J	0.66 J	0.32 J	<5.0	3,600	<3.0	<50	150
MW-20 ^A	W-R2330017-031615-ACN-005	3/16/2015						1,600	0.14 J	7.5	250	<1.0	<1.0	2.8 J	1.5 J	4.9		7,000	2.8 J	<50	210
MW-20	W-R2330017-031615-ACN-005	3/16/2015	<5.0	<5.0	<2.0	<5.0	<5.0	64	0.13 J	5.8	260	<1.0	<1.0	0.36 J	0.73 J	0.98 J	<5.0	4,200	<3.0	<50	170
MW-20 ^A (DUP)	W-R2330017-031615-ACN-006	3/16/2015						1,600	0.13 J	7.6	250	<1.0	<1.0	2.8 J	1.5 J	4.7		7,100	2.8 J	<50	210
MW-20 (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<5.0	<5.0	<2.0	<5.0	<5.0	43 J	<2.0	6.1	250	<1.0	<1.0	0.28 J	0.61 J	0.93 J	<5.0	4,900	<3.0	<50	170
MW-20 ^A	W-R2330017-111715-JPM-010	11/17/2015						2,600	NS	NS	NS	NS	NS	NS	NS	NS		10,000	NS	56,000	NS
MW-20	W-R2330017-111715-JPM-010	11/17/2015	NS	NS	NS	NS	NS	93	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,200	NS	55,000	NS
MW-20 ^A	W-R2330021-041916-JPM-011	4/19/2016						46 J	NS	NS	NS	NS	NS	NS	NS	NS		3,500	NS	NS	140
MW-20	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	NS	NS	NS	4.0 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,600	NS	NS	150
MW-20 ^A	W-R2330021-110316-JPM-026	11/3/2016						120	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,700	NS	NS	170
MW-20	W-R2330021-110316-JPM-026	11/3/2016	NS	NS	NS	NS	NS	9.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400	NS	NS	160
MW-20 ^A	W-R2330022-042517-DMS-010	4/25/2017						200	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500	NS	NS	180
MW-20	W-R2330022-042517-DMS-010	4/25/2017	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,300	NS	NS	180
MW-20 ^A (DUP)	W-R2330022-042517-DMS-012	4/25/2017						200	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500	NS	NS	180
MW-20 (DUP)	W-R2330022-042517-DMS-012	4/25/2017	NS	NS	NS	NS	NS	8.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400	NS	NS	190
MW-20 ^A	W-R2330022-102617-AFB-022	10/26/2017						960	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,300	NS	NS	160
MW-20	W-R2330022-102617-AFB-022	10/26/2017	NS	NS	NS	NS	NS	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,900	NS	NS	140
MW-20 ^A	W-R2330024-042518-JPM-030	4/25/2018						680	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,900	NS	NS	180
MW-20	W-R2330024-042518-JPM-030	4/25/2018	NS	NS	NS	NS	NS	45	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,900	NS	NS	160
MW-21 ^A	W-R2330012-051914-ACN-021	5/19/2014						1,400	0.16 J	1.9 J	38 J	<1.0	<1.0	2.4 J	1.7 J	4.1		2,400	1.4 J	<50	60
MW-21	W-R2330012-051914-ACN-021	5/19/2014	<5.0	<5.0	<2.0	<5.0	<5.0	48 J	0.16 J	<5.0	31 J	<1.0	<1.0	<10	0.91 J	1.2 J	<0.005	56 J	<3.0	<50	9.1 J
MW-21 ^A	W-R2330012-112514-ACN-006	11/25/2014						480	0.15 J	1.1 J	81 J	<1.0	0.076 J	1.1 J	0.89 J	2.0 J		850	0.72 J	<50	52
MW-21	W-R2330012-112514-ACN-006	11/25/2014	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.24 J	0.70 J	72 J	<1.0	0.061 J	0.22 J	0.70 J	0.98 J	<5.0	42 J	<3.0	<50	37 J
MW-21 ^A	W-R2330017-032015-JCH-023	3/20/2015						3,000	0.23 J	2.2 J	73 J	<1.0	0.21 J	5.1 J	2.5 J	6.2		4,100	2.9 J	<50	100
MW-21	W-R2330017-032015-JCH-023	3/20/2015	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.19 J	<5.0	62 J	<1.0	0.078 J	0.14 J	0.89 J	0.41 J	<5.0	20 J	<3.0	<50	25 J
MW-21 ^A	W-R2330012-111815-JPM-013	11/18/2015						34 J	NS	NS	NS	NS	NS	NS	NS	NS		59 J	NS	21,000	NS
MW-21	W-R2330012-111815-JPM-013	11/18/2015	NS	NS	NS	NS	NS	3.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11 J	NS	21,000	NS
MW-21 ^A (DUP)	DUP 1	11/18/2015						27 J	NS	NS	NS	NS	NS	NS	NS	NS		47 J	NS	20,000	NS
MW-21 (DUP)	DUP 1	11/18/2015	NS	NS	NS	NS	NS	3.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 J	NS	21,000	NS
MW-21 ^A	W-R2330021-042016-JPM-015	4/20/2016						190	NS	NS	NS	NS	NS	NS	NS	NS		320	NS	NS	4.6 J
MW-21	W-R2330012-042016-JPM-015	4/20/2016	NS	NS	NS	NS	NS	20 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	50 J	NS	NS	3.8 J
MW-21 ^A	W-R2330021-110316-AEM-021	11/3/2016						16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	36 J	NS	NS	35 J
MW-21	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	NS	NS	NS	5.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14 J	NS	NS	36 J
MW-21 ^A	W-R2330022-042717-DMS-021	4/27/2017						120	NS	NS	NS	NS	NS	NS	NS	NS	NS	220	NS	NS	33 J
MW-21	W-R2330022-042717-DMS-021	4/27/2017	NS	NS	NS	NS	NS	6.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	36 J	NS	NS	24 J
MW-21 ^A	W-R2330022-102517-DMS-015	10/25/2017						140	NS	NS	NS	NS	NS	NS	NS	NS	NS	200	NS	NS	46
M																					

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-20 ^A	W-R2330012-112414-ACN-003	11/24/2014	<0.2	3.8 J	0.69 J	<0.20	<2.0	0.69 J	4.9 J
MW-20	W-R2330012-112414-ACN-003	11/24/2014	<0.2	2.9 J	<5.0	<0.20	<2.0	<4.0	1.7 J
MW-20 ^A	W-R2330017-031615-ACN-005	3/16/2015	<0.2	1.7 J	<5.0	<0.20	<2.0	<4.0	4.7 J
MW-20	W-R2330017-031615-ACN-005	3/16/2015	<0.2	0.93 J	<5.0	<0.20	<2.0	<4.0	5.4 J
MW-20 ^A (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<0.2	3.1 J	<5.0	<0.20	<2.0	<4.0	4.6 J
MW-20 (DUP)	W-R2330017-031615-ACN-006	3/16/2015	<0.2	2.8 J	<5.0	<0.20	<2.0	<4.0	<50
MW-20 ^A	W-R2330017-111715-JPM-010	11/17/2015	NS	NS	NS	NS	NS	NS	NS
MW-20	W-R2330017-111715-JPM-010	11/17/2015	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	NS	NS	NS	NS	NS
MW-20	W-R2330021-041916-JPM-011	4/19/2016	NS	NS	NS	NS	NS	NS	NS
MW-20 ^A	W-R2330021-110316-JPM-026	11/3/2016							
MW-20	W-R2330021-110316-JPM-026	11/3/2016							
MW-20 ^A	W-R2330022-042517-DMS-010	4/25/2017							
MW-20	W-R2330022-042517-DMS-010	4/25/2017	<0.2	6.3 J	2.4 J	<0.20	<2.0	6.8	12 J
MW-20	W-R2330022-042517-DMS-012	4/25/2017	<0.2	2.3 J	1.7 J	<0.20	<2.0	0.35 J	2.2 J
MW-20 ^A (DUP)	W-R2330022-042517-DMS-012	4/25/2017	<0.2	6.5 J	1.1 J	<0.20	<2.0	1.4 J	6.1 J
MW-20 (DUP)	W-R2330022-042517-DMS-012	4/25/2017	<0.2	4.4 J	<5.0	<0.20	<2.0	<4.0	4.4 J
MW-20 ^A	W-R2330022-102617-AFB-022	10/26/2017	<0.2	4.9 J	1.2 J	<0.20	<2.0	1.5 J	6.3 J
MW-20	W-R2330022-102617-AFB-022	10/26/2017	<0.2	4.8 J	1.1 J	<0.20	<2.0	<4.0	8.4 J
MW-20 ^A	W-R2330024-042518-JPM-030	4/25/2018							
MW-20	W-R2330024-042518-JPM-030	4/25/2018							
MW-21 ^A	W-R2330012-051914-ACN-021	5/19/2014	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330012-051914-ACN-021	5/19/2014	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330012-112514-ACN-006	11/25/2014	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330012-112514-ACN-006	11/25/2014	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330017-032015-JCH-023	3/20/2015							
MW-21	W-R2330017-032015-JCH-023	3/20/2015							
MW-21 ^A	W-R2330012-111815-JPM-013	11/18/2015							
MW-21	W-R2330012-111815-JPM-013	11/18/2015	<0.2	4.3 J	0.9 J	<0.20	<2.0	3.1 J	7.3 J
MW-21	W-R2330012-111815-JPM-013	11/18/2015	<0.2	0.23 J	<5.0	<0.20	<2.0	0.41 J	1.6 J
MW-21 ^A (DUP)	DUP 1	11/18/2015	<0.2	2.7 J	0.86 J	<0.20	<2.0	0.98 J	4.5 J
MW-21 (DUP)	DUP 1	11/18/2015	<0.2	2.4 J	<5.0	<0.20	<2.0	<4.0	3.0 J
MW-21 ^A	W-R2330021-042016-JPM-015	4/20/2016	<0.2	7.5 J	<5.0	<0.20	<2.0	7.0	16 J
MW-21	W-R2330012-042016-JPM-015	4/20/2016	<0.2	2.9 J	<5.0	<0.20	<2.0	<4.0	<50
MW-21 ^A	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330021-110316-AEM-021	11/3/2016	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-042717-DMS-021	4/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-21	W-R2330022-042717-DMS-021	4/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-21 ^A	W-R2330022-102517-DMS-015	10/25/2017							
MW-21	W-R2330022-102517-DMS-015	10/25/2017							
MW-21 ^A	W-R2330024-042418-JPM-013	4/24/2018							
MW-21	W-R2330024-042418-JPM-013	4/24/2018							
MW-22 ^A	W-R2330012-051914-ACN-022	5/19/2014	0.064 J	9.1 J	<5.0	<0.20	<2.0	1.1 J	7.0 J
MW-22	W-R2330012-051914-ACN-022	5/19/2014							
MW-22 ^A	W-R2330012-112514-ACN-007	11/25/2014							
MW-22	W-R2330012-112514-ACN-007	11/25/2014	0.062 J	8.8 J	<5.0	<0.20	<2.0	0.55 J	5.0 J
MW-22 ^A (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<0.2	9.3 J	1.1 J	<0.20	<2.0	1.9 J	11 J
MW-22 (DUP)	W-R2330012-112514-ACN-008	11/25/2014	<0.2	7.5 J	0.79 J	<0.20	<2.0	0.66 J	4.2 J
MW-22 ^A	W-R2330017-032015-JCH-027	3/20/2015	<0.2	5.7 J	<5.0	<0.20	<2.0	1.5 J	4.0 J
MW-22	W-R2330017-032015-JCH-027	3/20/2015	<0.2	6.8 J	0.97 J	0.095 J	<2.0	<4.0	3.1 J

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-22 ^A	W-R2330017-111815-JPM-014	11/18/2015																			
MW-22	W-R2330017-111815-JPM-014	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-042016-JPM-019	4/20/2016																			
MW-22	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-110216-JPM-017	11/2/2016																			
MW-22	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-042717-DMS-023	4/27/2017																			
MW-22	W-R2330022-042717-DMS-023	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-102517-AFB-014	10/25/2017																			
MW-22	W-R2330022-102517-AFB-014	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330024-042418-JPM-015	4/24/2018																			
MW-22	W-R2330024-042418-JPM-015	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330012-051914-ACN-023	5/19/2014																			
MW-23	W-R2330012-051914-ACN-023	5/19/2014	<25	<1.0	<1.0	<50	<50	3.7	<1.0	<5.0	40	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A (DUP)	W-R2330012-051914-ACN-024	5/19/2014																			
MW-23 (DUP)	W-R2330012-051914-ACN-024	5/19/2014	<25	<1.0	<1.0	<50	<50	4.2	<1.0	<5.0	45	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A	W-R2330012-112514-ACN-009	11/25/2014																			
MW-23	W-R2330012-112514-ACN-009	11/25/2014	<25	<1.0	<1.0	<50	<50	5.4	<1.0	<5.0	89	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A	W-R2330017-032015-ACN-028	3/20/2015																			
MW-23	W-R2330017-032015-ACN-028	3/20/2015	<25	<1.0	<1.0	<50	<50	2.7	<1.0	<5.0	45	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A	W-R2330017-111815-JPM-016	11/18/2015																			
MW-23	W-R2330017-111815-JPM-016	11/18/2015	<25	<1.0	<1.0	<50	<50	4.1	<1.0	<5.0	72	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A	W-R2330021-042016-JPM-020	4/20/2016																			
MW-23	W-R2330021-042016-JPM-020	4/20/2016	<25	<1.0	<1.0	<50	<50	2.5	<1.0	<5.0	36	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A	W-R2330021-110216-JPM-016	11/2/2016																			
MW-23	W-R2330021-110216-JPM-016	11/2/2016	<25	<1.0	<1.0	<50	3.2 J	1.2	<1.0	<5.0	18	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A	W-R2330022-042717-DMS-024	4/27/2017																			
MW-23	W-R2330022-042717-DMS-024	4/27/2017	<25	<1.0	<1.0	<50	2.2 J	2.7	<1.0	<5.0	43	<5.0	<1.0	0.60 J	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A	W-R2330022-102517-DMS-016	10/25/2017																			
MW-23	W-R2330022-102517-DMS-016	10/25/2017	<25	<1.0	<1.0	<50	<50	4.0	<1.0	<5.0	65	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-23 ^A	W-R2330024-042418-DMS-014	4/24/2018																			
MW-23	W-R2330024-042418-DMS-014	4/24/2018	<25	<1.0	<1.0	<50	<50	2.1	<1.0	<5.0	42	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-24 ^A	W-R2330012-052014-ACN-030	5/20/2014																			
MW-24	W-R2330012-052014-ACN-030	5/20/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-24 ^A	W-R2330012-112614-JCH-013	11/26/2014																			
MW-24	W-R2330012-112614-JCH-013	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-24 ^A	W-R2330017-032015-ACN-026	3/20/2015																			
MW-24	W-R2330017-032015-ACN-026	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-24 ^A	W-R2330017-111815-AFB-015	11/18/2015																			
MW-24	W-R2330017-111815-AFB-015	11/18/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-24 ^A	W-R2330021-042116-AFB-018	4/21/2016																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI-max}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-22 ^A	W-R2330017-111815-JPM-014	11/18/2015																			
MW-22	W-R2330017-111815-JPM-014	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-042016-JPM-019	4/20/2016																			
MW-22	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-110216-JPM-017	11/2/2016																			
MW-22	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-042717-DMS-023	4/27/2017																			
MW-22	W-R2330022-042717-DMS-023	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-102517-AFB-014	10/25/2017																			
MW-22	W-R2330022-102517-AFB-014	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330024-042418-JPM-015	4/24/2018																			
MW-22	W-R2330024-042418-JPM-015	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330012-051914-ACN-023	5/19/2014																			
MW-23	W-R2330012-051914-ACN-023	5/19/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	0.85 J	<1.0
MW-23 ^A (DUP)	W-R2330012-051914-ACN-024	5/19/2014																			
MW-23 (DUP)	W-R2330012-051914-ACN-024	5/19/2014	<10	<10	<5.0	<10	<10	<5.0	<10	1.1 J	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	0.91 J	<1.0
MW-23 ^A	W-R2330012-112514-ACN-009	11/25/2014																			
MW-23	W-R2330012-112514-ACN-009	11/25/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-23 ^A	W-R2330017-032015-ACN-028	3/20/2015																			
MW-23	W-R2330017-032015-ACN-028	3/20/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	1.0	<5.0	1.6 J	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-23 ^A	W-R2330017-111815-JPM-016	11/18/2015																			
MW-23	W-R2330017-111815-JPM-016	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330021-042016-JPM-020	4/20/2016																			
MW-23	W-R2330021-042016-JPM-020	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330021-110216-JPM-016	11/2/2016																			
MW-23	W-R2330021-110216-JPM-016	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330022-042717-DMS-024	4/27/2017																			
MW-23	W-R2330022-042717-DMS-024	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330022-102517-DMS-016	10/25/2017																			
MW-23	W-R2330022-102517-DMS-016	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330024-042418-DMS-014	4/24/2018																			
MW-23	W-R2330024-042418-DMS-014	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330012-052014-ACN-030	5/20/2014																			
MW-24	W-R2330012-052014-ACN-030	5/20/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-24 ^A	W-R2330012-112614-JCH-013	11/26/2014																			
MW-24	W-R2330012-112614-JCH-013	11/26/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-24 ^A	W-R2330017-032015-ACN-026	3/20/2015																			
MW-24	W-R2330017-032015-ACN-026	3/20/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-24 ^A	W-R2330017-111815-AFB-015	11/18/2015																			
MW-24	W-R2330017-111815-AFB-015	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330021-042116-AFB-018	4/21/2016																			
MW-24	W-R2330021-042116-AFB-018	4/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330021-110316-JPM-022	11/3/2016																			
MW-24	W-R2330021-110316-JPM-022	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330022-042717-DMS-027	4/27/2017																			
MW-24	W-R2330022-042717-DMS-027	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330022-102517-AFB-017	10/25/2017																			
MW-24	W-R2330022-102517-AFB-017	10/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-MS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-22 ^A	W-R2330017-111815-JPM-014	11/18/2015						95	NS	NS	NS	NS	NS	NS	NS		7,000	NS	120,000	NS	
MW-22	W-R2330017-111815-JPM-014	11/18/2015	NS	NS	NS	NS	NS	2.0 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,400	NS	120,000	NS
MW-22 ^A	W-R2330021-042016-JPM-019	4/20/2016						37 J	NS	NS	NS	NS	NS	NS	NS		6,500	NS	NS	88	
MW-22	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	NS	NS	NS	41 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	NS	82
MW-22 ^A	W-R2330021-110216-JPM-017	11/2/2016						58	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	NS	91
MW-22	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	NS	91
MW-22 ^A	W-R2330022-042717-DMS-023	4/27/2017						17 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,500	NS	NS	140
MW-22	W-R2330022-042717-DMS-023	4/27/2017	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,500	NS	NS	130
MW-22 ^A	W-R2330022-102517-AFB-014	10/25/2017						41	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000	NS	NS	72
MW-22	W-R2330022-102517-AFB-014	10/25/2017	NS	NS	NS	NS	NS	8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	NS	67
MW-22 ^A	W-R2330024-042418-JPM-015	4/24/2018						18	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,400	NS	NS	110
MW-22	W-R2330024-042418-JPM-015	4/24/2018	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,000	NS	NS	110
MW-23 ^A	W-R2330012-051914-ACN-023	5/19/2014						560	0.15 J	13	610	<1.0	<1.0	1.7 J	2.2 J	2.1 J		13,000	1.2 J	<50	180
MW-23	W-R2330012-051914-ACN-023	5/19/2014	<5.0	<5.0	<2.0	<5.0	<5.0	7.7 J	0.089 J	12	560	<1.0	<1.0	0.76 J	1.9 J	<4.0	<0.005	12,000	0.067 J	<50	160
MW-23 ^A (DUP)	W-R2330012-051914-ACN-024	5/19/2014						590	0.11 J	12	580	<1.0	<1.0	1.7 J	2.1 J	2.2 J		13,000	1.3 J	<50	180
MW-23 (DUP)	W-R2330012-051914-ACN-024	5/19/2014	<5.0	<5.0	<2.0	<5.0	<5.0	8.5 J	0.076 J	12	550	<1.0	<1.0	0.70 J	1.8 J	<4.0	<0.005	11,000	<3.0	<50	150
MW-23 ^A	W-R2330012-112514-ACN-009	11/25/2014						6,700	1.1 J	46	1,300	0.31 J	0.68 J	18	9.3 J	37		35,000	30	<50	310
MW-23	W-R2330012-112514-ACN-009	11/25/2014	<5.0	<5.0	<2.0	<5.0	<5.0	21 J	0.20 J	26	1,100	<1.0	0.037 J	1.3 J	2.4 J	0.18 J	<5.0	18,000	<3.0	<50	78
MW-23 ^A	W-R2330017-032015-ACN-028	3/20/2015						650	0.20 J	17	940	<1.0	<1.0	2.2 J	3.1 J	3.7 J		17,000	2.6 J	<50	120
MW-23	W-R2330017-032015-ACN-028	3/20/2015	<5.0	<5.0	<2.0	<5.0	<5.0	6.7 J	0.21 J	16	860	<1.0	<1.0	0.96 J	2.8 J	2.3 J	<5.0	16,000	0.82 J	<50	99
MW-23 ^A	W-R2330017-111815-JPM-016	11/18/2015						180	NS	NS	NS	NS	NS	NS	NS	NS		14,000	NS	130,000	NS
MW-23	W-R2330017-111815-JPM-016	11/18/2015	NS	NS	NS	NS	NS	5.0 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000	NS	130,000	NS
MW-23 ^A	W-R2330021-042016-JPM-020	4/20/2016						190	NS	NS	NS	NS	NS	NS	NS	NS		15,000	NS	NS	89
MW-23	W-R2330021-042016-JPM-020	4/20/2016	NS	NS	NS	NS	NS	9.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000	NS	NS	99
MW-23 ^A	W-R2330021-110216-JPM-016	11/2/2016						570	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000	NS	NS	100
MW-23	W-R2330021-110216-JPM-016	11/2/2016	NS	NS	NS	NS	NS	11 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,000	NS	NS	92
MW-23 ^A	W-R2330022-042717-DMS-024	4/27/2017						110	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000	NS	NS	85
MW-23	W-R2330022-042717-DMS-024	4/27/2017	NS	NS	NS	NS	NS	4.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000	NS	NS	80
MW-23 ^A	W-R2330022-102517-DMS-016	10/25/2017						65	NS	NS	NS	NS	NS	NS	NS	NS	NS	13,000	NS	NS	90
MW-23	W-R2330022-102517-DMS-016	10/25/2017	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	14,000	NS	NS	91
MW-23 ^A	W-R2330024-042418-DMS-014	4/24/2018						190	NS	NS	NS	NS	NS	NS	NS	NS	NS	12,000	NS	NS	7.9
MW-23	W-R2330024-042418-DMS-014	4/24/2018	NS	NS	NS	NS	NS	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	11,000	NS	NS	7.3
MW-24 ^A	W-R2330012-052014-ACN-030	5/20/2014						310	<2.0	5.7	170	<1.0	<1.0	0.57 J	0.50 J	1.6 J		5,300	0.38 J	<50	640
MW-24	W-R2330012-052014-ACN-030	5/20/2014	<5.0	<5.0	<2.0	<5.0	<5.0	4.8 J	0.074 J	5.2	160	<1.0	<1.0	<1.0	0.76 J	0.75 J	<0.005	4,700	<3.0	<50	620
MW-24 ^A	W-R2330012-112614-JCH-013	11/26/2014						12 J	<2.0	4.6 J	130	<1.0	0.051 J	0.13 J	0.25 J	<4.0		2,500	<3.0	<50	690
MW-24	W-R2330012-112614-JCH-013	11/26/2014	<5.0	<5.0	<2.0	<5.0	<5.0	<50	<2.0	4.9 J	130	<1.0	<1.0	<1.0	0.19 J	<4.0	<5.0	2,100	<3.0	<50	670
MW-24 ^A	W-R2330017-032015-ACN-026	3/20/2015						84	<2.0	7.4	140	<1.0	0.24 J	0.68 J	0.56 J	1.8 J		5,900	0.47 J	<50	740
MW-24	W-R2330017-032015-ACN-026	3/20/2015	<5.0	<5.0	<2.0	<5.0	<5.0	3.8 J	0.19 J	3.2 J	130	<1.0	0.066.								

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-22 ^A	W-R2330017-111815-JPM-014	11/18/2015	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330017-111815-JPM-014	11/18/2015	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330021-042016-JPM-019	4/20/2016	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330021-110216-JPM-017	11/2/2016	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-042717-DMS-023	4/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330022-042717-DMS-023	4/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-22 ^A	W-R2330022-102517-AFB-014	10/25/2017	<0.2	4.4 J	<5.0	<0.20	<2.0	1.2 J	6.8 J
MW-22	W-R2330022-102517-AFB-014	10/25/2017	<0.2	3.3 J	<5.0	<0.20	<2.0	<4.0	3.6 J
MW-22 ^A	W-R2330024-042418-JPM-015	4/24/2018	NS	NS	NS	NS	NS	NS	NS
MW-22	W-R2330024-042418-JPM-015	4/24/2018	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330012-051914-ACN-023	5/19/2014	<0.2	4.3 J	<5.0	<0.20	<2.0	0.99 J	6.4 J
MW-23	W-R2330012-051914-ACN-023	5/19/2014	<0.2	3.5 J	<5.0	<0.20	<2.0	<4.0	3.4 J
MW-23 ^A (DUP)	W-R2330012-051914-ACN-024	5/19/2014	<0.2	8.0 J	<5.0	<0.20	<2.0	3.4 J	17 J
MW-23 (DUP)	W-R2330012-051914-ACN-024	5/19/2014	<0.2	3.9 J	<5.0	<0.20	<2.0	<4.0	5.4 J
MW-23 ^A	W-R2330012-112514-ACN-009	11/25/2014	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330012-112514-ACN-009	11/25/2014	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330017-032015-ACN-028	3/20/2015	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330017-032015-ACN-028	3/20/2015	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330017-111815-JPM-016	11/18/2015	<0.2	3.0 J	<5.0	<0.20	<2.0	1.6 J	8.0 J
MW-23	W-R2330017-111815-JPM-016	11/18/2015							
MW-23 ^A	W-R2330021-042016-JPM-020	4/20/2016							
MW-23	W-R2330021-042016-JPM-020	4/20/2016	<0.2	1.6 J	<5.0	<0.20	<2.0	0.68 J	3.8 J
MW-23 ^A	W-R2330021-110216-JPM-016	11/2/2016	<0.2	2.0 J	<5.0	<0.20	<2.0	0.96 J	4.6 J
MW-23	W-R2330021-110216-JPM-016	11/2/2016	<0.2	1.7 J	<5.0	<0.20	<2.0	0.91 J	5.3 J
MW-23 ^A	W-R2330022-042717-DMS-024	4/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330022-042717-DMS-024	4/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330022-102517-DMS-016	10/25/2017	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330022-102517-DMS-016	10/25/2017	NS	NS	NS	NS	NS	NS	NS
MW-23 ^A	W-R2330024-042418-DMS-014	4/24/2018	NS	NS	NS	NS	NS	NS	NS
MW-23	W-R2330024-042418-DMS-014	4/24/2018	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330012-052014-ACN-030	5/20/2014	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330012-052014-ACN-030	5/20/2014	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330012-112614-JCH-013	11/26/2014	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330012-112614-JCH-013	11/26/2014							
MW-24 ^A	W-R2330017-032015-ACN-026	3/20/2015							
MW-24	W-R2330017-032015-ACN-026	3/20/2015	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330017-111815-AFB-015	11/18/2015	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330017-111815-AFB-015	11/18/2015	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330021-042116-AFB-018	4/21/2016	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330021-042116-AFB-018	4/21/2016	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330021-110316-JPM-022	11/3/2016	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330021-110316-JPM-022	11/3/2016							
MW-24 ^A	W-R2330022-042717-DMS-027	4/27/2017							
MW-24	W-R2330022-042717-DMS-027	4/27/2017	NS	NS	NS	NS	NS	NS	NS
MW-24 ^A	W-R2330022-102517-AFB-017	10/25/2017	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330022-102517-AFB-017	10/25/2017	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-24 ^A	W-R2330024-042418-DMS-009	4/24/2018																			
MW-24	W-R2330024-042418-DMS-009	4/24/2018	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-25 ^A	W-R2330012-051914-ACN-025	5/19/2014																			
MW-25	W-R2330012-051914-ACN-025	5/19/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-25 ^A	W-R2330012-112614-JCH-012	11/26/2014																			
MW-25	W-R2330012-112614-JCH-012	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-25 ^A	W-R2330017-032015-JCH-025	3/20/2015																			
MW-25	W-R2330017-032015-JCH-025	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-25 ^A	W-R2330017-111815-AFB-011	11/18/2015																			
MW-25	W-R2330017-111815-AFB-011	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-042016-AEP-017	4/20/2016																			
MW-25	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-110316-AEM-023	11/3/2016																			
MW-25	W-R2330021-110316-AEM-023	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-042717-DMS-026	4/27/2017																			
MW-25	W-R2330022-042717-DMS-026	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-102817-AFB-037	10/28/2017																			
MW-25	W-R2330022-102817-AFB-037	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330024-042418-DMS-010	4/24/2018																			
MW-25	W-R2330024-042418-DMS-010	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330012-051914-ACN-020	5/19/2014																			
MW-26	W-R2330012-051914-ACN-020	5/19/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-26 ^A	W-R2330012-112614-JCH-011	11/26/2014																			
MW-26	W-R2330012-112614-JCH-011	11/26/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-26 ^A	W-R2330017-032015-ACN-024	3/20/2015																			
MW-26	W-R2330017-032015-ACN-024	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-26 ^A	W-R2330017-111815-AFB-012	11/18/2015																			
MW-26	W-R2330017-111815-AFB-012	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-042016-AEP-016	4/20/2016																			
MW-26	W-R2330021-042016-AEP-016	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-110316-JPM-024	11/3/2016																			
MW-26	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-042717-DMS-025	4/27/2017																			
MW-26	W-R2330022-042717-DMS-025	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-102817-AFB-038	10/28/2017																			
MW-26	W-R2330022-102817-AFB-038	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330024-042418-DMS-012	4/24/2018																			
MW-26	W-R2330024-042418-DMS-012	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330012-091514-ACN-002	9/15/2014																			
MW-27	W-R2330012-091514-ACN-002	9/15/2014	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS	NS	NS	<5.0	<5.0	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330012-121114-JCH-018	12/1/2014																			
MW-27	W-R2330012-121114-JCH-018	12/1/2014	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-27 ^A	W-R2330017-031915-JCH-016	3/19/2015																			
MW-27	W-R2330017-031915-JCH-016	3/19/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-27 ^A	W-R2330017-111915-JPM-020	11/19/2015																			
MW-27	W-R2330017-111915-JPM-020	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330021-042216-AFB-031	4/22/2016																			
MW-27	W-R2330021-042216-AFB-031	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI-max}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-24 ^A	W-R2330024-042418-DMS-009	4/24/2018																			
MW-24	W-R2330024-042418-DMS-009	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330012-051914-ACN-025	5/19/2014																			
MW-25	W-R2330012-051914-ACN-025	5/19/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	0.80 J	<1.0
MW-25 ^A	W-R2330012-112614-JCH-012	11/26/2014																			
MW-25	W-R2330012-112614-JCH-012	11/26/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-25 ^A	W-R2330017-032015-JCH-025	3/20/2015																			
MW-25	W-R2330017-032015-JCH-025	3/20/2015	<10	<10	0.40 J	<10	<10	<5.0	<10	<5.0	0.30 J	<5.0	<10	<5.0	<10	<10	0.38 J	<5.0	<5.0	<5.0	<1.0
MW-25 ^A	W-R2330017-111815-AFB-011	11/18/2015																			
MW-25	W-R2330017-111815-AFB-011	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-042016-AEP-017	4/20/2016																			
MW-25	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-110316-AEM-023	11/3/2016																			
MW-25	W-R2330021-110316-AEM-023	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-042717-DMS-026	4/27/2017																			
MW-25	W-R2330022-042717-DMS-026	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330022-102817-AFB-037	10/28/2017																			
MW-25	W-R2330022-102817-AFB-037	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330024-042418-DMS-010	4/24/2018																			
MW-25	W-R2330024-042418-DMS-010	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330012-051914-ACN-020	5/19/2014																			
MW-26	W-R2330012-051914-ACN-020	5/19/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-26 ^A	W-R2330012-112614-JCH-011	11/26/2014																			
MW-26	W-R2330012-112614-JCH-011	11/26/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-26 ^A	W-R2330017-032015-ACN-024	3/20/2015																			
MW-26	W-R2330017-032015-ACN-024	3/20/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-26 ^A	W-R2330017-111815-AFB-012	11/18/2015																			
MW-26	W-R2330017-111815-AFB-012	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-042016-AEP-016	4/20/2016																			
MW-26	W-R2330021-042016-AEP-016	4/20/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330021-110316-JPM-024	11/3/2016																			
MW-26	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-042717-DMS-025	4/27/2017																			
MW-26	W-R2330022-042717-DMS-025	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330022-102817-AFB-038	10/28/2017																			
MW-26	W-R2330022-102817-AFB-038	10/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330024-042418-DMS-012	4/24/2018																			
MW-26	W-R2330024-042418-DMS-012	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330012-091514-ACN-002	9/15/2014																			
MW-27	W-R2330012-091514-ACN-002	9/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330012-121114-JCH-018	12/1/2014																			
MW-27	W-R2330012-121114-JCH-018	12/1/2014	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-27 ^A	W-R2330017-031915-JCH-016	3/19/2015																			
MW-27	W-R2330017-031915-JCH-016	3/19/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-27 ^A	W-R2330017-111915-JPM-020	11/19/2015																			
MW-27	W-R2330017-111915-JPM-020	11/19/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330021-042216-AFB-031	4/22/2016																			
MW-27	W-R2330021-042216-AFB-031	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary Of Ground Water Sample Results

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Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VII-MS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-24 ^A	W-R2330024-042418-DMS-009	4/24/2018						13	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400	NS	NS	1000
MW-24	W-R2330024-042418-DMS-009	4/24/2018	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,600	NS	NS	960
MW-25 ^A	W-R2330012-051914-ACN-025	5/19/2014						2,600	0.24 J	1.9 J	83 J	<1.0	<1.0	3.8 J	1.5 J	7.4		3,800	2.5 J	<50	190
MW-25	W-R2330012-051914-ACN-025	5/19/2014	<5.0	<5.0	<2.0	<5.0	<5.0	51	0.21 J	0.63 J	68 J	<1.0	<1.0	<10	0.59 J	3.7 J	<0.005	110 J	0.25 J	<50	150
MW-25 ^A	W-R2330012-112614-JCH-012	11/26/2014						400	0.18 J	0.85 J	72 J	<1.0	0.11 J	1.3 J	0.53 J	3.2 J		570	0.59 J	<50	340
MW-25	W-R2330012-112614-JCH-012	11/26/2014	<5.0	<5.0	<2.0	<5.0	<5.0	5.9 J	0.15 J	<5.0	66 J	<1.0	0.071 J	<10	0.33 J	2.9 J	<5.0	16 J	<3.0	<50	250
MW-25 ^A	W-R2330017-032015-JCH-025	3/20/2015						450	0.22 J	0.88 J	72 J	<1.0	0.060 J	0.84 J	0.77 J	4.2		620	0.57 J	<50	310
MW-25	W-R2330017-032015-JCH-025	3/20/2015	0.13 J	0.71 J	<2.0	<5.0	<5.0	12 J	0.28 J	<5.0	67 J	<1.0	0.061 J	<10	0.63 J	6.2	<5.0	28 J	0.37 J	<50	110
MW-25 ^A	W-R2330017-111815-AFB-011	11/18/2015						6,000	NS	NS	NS	NS	NS	NS	NS	NS		14,000	NS	30,000	NS
MW-25	W-R2330017-111815-AFB-011	11/18/2015	NS	NS	NS	NS	NS	46 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	63 J	NS	16,000	NS
MW-25 ^A	W-R2330021-042016-AEP-017	4/20/2016						1,400	NS	NS	NS	NS	NS	NS	NS	NS		2,400	NS	NS	990
MW-25	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	NS	NS	NS	24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	180 J	NS	NS	68
MW-25 ^A	W-R2330021-110316-AEM-023	11/3/2016						250	NS	NS	NS	NS	NS	NS	NS	NS	NS	490	NS	NS	370
MW-25	W-R2330021-110316-AEM-023	11/3/2016	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	13 J	NS	NS	230
MW-25 ^A	W-R2330022-042717-DMS-026	4/27/2017						720	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,500	NS	NS	580
MW-25	W-R2330022-042717-DMS-026	4/27/2017	NS	NS	NS	NS	NS	18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	26 J	NS	NS	95
MW-25 ^A	W-R2330022-102817-AFB-037	10/28/2017						190	NS	NS	NS	NS	NS	NS	NS	NS	NS	350	NS	NS	570
MW-25	W-R2330022-102817-AFB-037	10/28/2017	NS	NS	NS	NS	NS	7.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	11 J	NS	NS	320
MW-25 ^A	W-R2330024-042418-DMS-010	4/24/2018						1,200	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,700	NS	NS	1,100
MW-25	W-R2330024-042418-DMS-010	4/24/2018	NS	NS	NS	NS	NS	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	26 J	NS	NS	45
MW-26 ^A	W-R2330012-051914-ACN-020	5/19/2014						900	0.37 J	2.7 J	37 J	<1.0	<1.0	1.8 J	1.2 J	4.6		1,900	1.1 J	<50	110
MW-26	W-R2330012-051914-ACN-020	5/19/2014	<5.0	<5.0	<2.0	<5.0	<5.0	36 J	0.39 J	1.5 J	34 J	<1.0	<1.0	<10	1.1 J	1.0 J	<0.005	55 J	<3.0	<50	86
MW-26 ^A	W-R2330012-112614-JCH-011	11/26/2014						210	0.22 J	<5.0	25 J	<1.0	0.13 J	0.52 J	0.65 J	2.0 J		360	<3.0	<50	69
MW-26	W-R2330012-112614-JCH-011	11/26/2014	<5.0	<5.0	<2.0	<5.0	<5.0	8.4 J	0.16 J	<5.0	24 J	<1.0	0.079 J	<10	0.54 J	1.0 J	<5.0	<200	<3.0	<50	65
MW-26 ^A	W-R2330017-032015-ACN-024	3/20/2015						2,200	0.33 J	3.5 J	34 J	<1.0	0.16 J	4.5 J	2.1 J	7.8		4,300	3.4	<50	100
MW-26	W-R2330017-032015-ACN-024	3/20/2015	<5.0	<5.0	<2.0	<5.0	<5.0	82	0.27 J	<5.0	21 J	<1.0	0.070 J	0.29 J	0.80 J	2.2 J	<5.0	130 J	<3.0	<50	25 J
MW-26 ^A	W-R2330017-111815-AFB-012	11/18/2015						910	NS	NS	NS	NS	NS	NS	NS	NS		2,300	NS	21,000	NS
MW-26	W-R2330017-111815-AFB-012	11/18/2015	NS	NS	NS	NS	NS	9.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	19 J	NS	20,000	NS
MW-26 ^A	W-R2330021-042016-AEP-016	4/20/2016						1,200	NS	NS	NS	NS	NS	NS	NS	NS		2,100	NS	NS	58
MW-26	W-R2330021-042016-AEP-016	4/20/2016	NS	NS	NS	NS	NS	59	NS	NS	NS	NS	NS	NS	NS	NS	NS	160 J	NS	NS	11 J
MW-26 ^A	W-R2330021-110316-JPM-024	11/3/2016						500	NS	NS	NS	NS	NS	NS	NS	NS	NS	910	NS	NS	45 J
MW-26	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	NS	NS	NS	150	NS	NS	NS	NS	NS	NS	NS	NS	NS	310	NS	NS	250
MW-26 ^A	W-R2330022-042717-DMS-025	4/27/2017						290	NS	NS	NS	NS	NS	NS	NS	NS	NS	790	NS	NS	19 J
MW-26	W-R2330022-042717-DMS-025	4/27/2017	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	23 J	NS	NS	5.8 J
MW-26 ^A	W-R2330022-102817-AFB-038	10/28/2017						250	NS	NS	NS	NS	NS	NS	NS	NS	NS	480	NS	NS	71
MW-26	W-R2330022-102817-AFB-038	10/28/2017	NS	NS	NS	NS	NS	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	21 J	NS	NS	62
MW-26 ^A	W-R2330024-042418-DMS-012	4/24/2018						290	NS	NS	NS	NS	NS	NS	NS	NS	NS	470	NS	NS	17
MW-26	W-R2330024-042418-DMS-012	4/24/2018	NS	NS	NS	NS	NS	14	NS	NS	NS	NS	NS	NS	NS	NS	NS	<300			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-24 ^A	W-R2330024-042418-DMS-009	4/24/2018	NS	NS	NS	NS	NS	NS	NS
MW-24	W-R2330024-042418-DMS-009	4/24/2018	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330012-051914-ACN-025	5/19/2014	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330012-051914-ACN-025	5/19/2014	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330012-112614-JCH-012	11/26/2014							
MW-25	W-R2330012-112614-JCH-012	11/26/2014							
MW-25 ^A	W-R2330017-032015-JCH-025	3/20/2015	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330017-032015-JCH-025	3/20/2015	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330017-111815-AFB-011	11/18/2015	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330017-111815-AFB-011	11/18/2015	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	NS	NS	NS	NS	NS
MW-25	W-R2330021-042016-AEP-017	4/20/2016	NS	NS	NS	NS	NS	NS	NS
MW-25 ^A	W-R2330021-110316-AEM-023	11/3/2016							
MW-25	W-R2330021-110316-AEM-023	11/3/2016							
MW-25 ^A	W-R2330022-042717-DMS-026	4/27/2017	<0.2	7.4 J	<5.0	<0.20	<2.0	3.3 J	13 J
MW-25	W-R2330022-042717-DMS-026	4/27/2017	<0.2	3.6 J	<5.0	<0.20	<2.0	<4.0	<50
MW-25 ^A	W-R2330022-102817-AFB-037	10/28/2017							NS
MW-25	W-R2330022-102817-AFB-037	10/28/2017							NS
MW-25 ^A	W-R2330024-042418-DMS-010	4/24/2018							
MW-25	W-R2330024-042418-DMS-010	4/24/2018							
MW-26 ^A	W-R2330012-051914-ACN-020	5/19/2014	NS	NS	NS	NS	NS	NS	NS
MW-26	W-R2330012-051914-ACN-020	5/19/2014	NS	NS	NS	NS	NS	NS	NS
MW-26 ^A	W-R2330012-112614-JCH-011	11/26/2014	NS	NS	NS	NS	NS	NS	
MW-26	W-R2330012-112614-JCH-011	11/26/2014	NS	NS	NS	NS	NS	NS	
MW-26 ^A	W-R2330017-032015-ACN-024	3/20/2015							NS
MW-26	W-R2330017-032015-ACN-024	3/20/2015							NS
MW-26 ^A	W-R2330017-111815-AFB-012	11/18/2015	NS	NS	NS	NS	NS	NS	
MW-26	W-R2330017-111815-AFB-012	11/18/2015	NS	NS	NS	NS	NS	NS	
MW-26 ^A	W-R2330021-042016-AEP-016	4/20/2016							NS
MW-26	W-R2330021-042016-AEP-016	4/20/2016							NS
MW-26 ^A	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	NS	NS	NS	NS	
MW-26	W-R2330021-110316-JPM-024	11/3/2016	NS	NS	NS	NS	NS	NS	
MW-26 ^A	W-R2330022-042717-DMS-025	4/27/2017							7.8 J
MW-26	W-R2330022-042717-DMS-025	4/27/2017							<50
MW-26 ^A	W-R2330022-102817-AFB-038	10/28/2017	<0.2	3.7 J	<5.0	<0.20	<2.0	0.76 J	NS
MW-26	W-R2330022-102817-AFB-038	10/28/2017	<0.2	2.4 J	<5.0	<0.20	<2.0	<4.0	NS
MW-26 ^A	W-R2330024-042418-DMS-012	4/24/2018							
MW-26	W-R2330024-042418-DMS-012	4/24/2018							
MW-27 ^A	W-R2330012-091514-ACN-002	9/15/2014	NS	NS	NS	NS	NS	NS	NS
MW-27	W-R2330012-091514-ACN-002	9/15/2014	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330012-121114-JCH-018	12/1/2014	NS	NS	NS	NS	NS	NS	
MW-27	W-R2330012-121114-JCH-018	12/1/2014	NS	NS	NS	NS	NS	NS	
MW-27 ^A	W-R2330017-031915-JCH-016	3/19/2015							1,500
MW-27	W-R2330017-031915-JCH-016	3/19/2015							4.0 J
MW-27 ^A	W-R2330017-111915-JPM-020	11/19/2015	0.98	410	13 J	0.78 J	7.6 J	380	22 J
MW-27	W-R2330017-111915-JPM-020	11/19/2015	<0.2	14 J	<5.0	<0.20	<2.0	0.20 J	4.8 J
MW-27 ^A	W-R2330021-042216-AFB-031	4/22/2016	<0.2	22	0.68 J	<0.20	0.35 J	7.3	8.1 J
MW-27	W-R2330021-042216-AFB-031	4/22/2016	<0.2	12 J	0.68 J	<0.20	<2.0	0.19 J	3.0 J

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			Butanone (MEK)	1,2-Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VII,ms}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-27 ^A	W-R2330021-110416-JPM-033	11/4/2016																			
MW-27	W-R2330021-110416-JPM-033	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A (DUP)	W-R2330021-110416-JPM-034	11/4/2016																			
MW-27 (DUP)	W-R2330021-110416-JPM-034	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-042817-AFB-031	4/28/2017																			
MW-27	W-R2330022-042817-AFB-031	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-102417-DMS-009	10/24/2017																			
MW-27	W-R2330022-102417-DMS-009	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330024-042518-DMS-024	4/25/2018																			
MW-27	W-R2330024-042518-DMS-024	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330012-020515-ACN-001	2/5/2015																			
MW-29	W-R2330012-020515-ACN-001	2/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-29 ^A (DUP)	W-R2330012-020515-ACN-002	2/5/2015																			
MW-29 (DUP)	W-R2330012-020515-ACN-002	2/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-29 ^A	W-R2330017-031615-JCH-001	3/16/2015																			
MW-29	W-R2330017-031615-JCH-001	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-29 ^A	W-R2330017-112015-AFB-028	11/20/2015																			
MW-29	W-R2330017-112015-AFB-028	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-042216-AFB-033	4/22/2016																			
MW-29	W-R2330021-042216-AFB-033	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-110416-AEM-031	11/4/2016																			
MW-29	W-R2330021-110416-AEM-031	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330022-042517-JPM-006	4/25/2017																			
MW-29	W-R2330022-042517-JPM-006	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330022-102617-AFB-024	10/26/2017																			
MW-29	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330024-042518-JPM-023	4/25/2018																			
MW-29	W-R2330024-042518-JPM-023	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330012-020515-ACN-003	2/5/2015																			
MW-30	W-R2330012-020515-ACN-003	2/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-30 ^A	W-R2330017-031615-ACN-002	3/16/2015																			
MW-30	W-R2330017-031615-ACN-002	3/16/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-30 ^A	W-R2330017-112015-JPM-029	11/20/2015																			
MW-30	W-R2330017-112015-JPM-029	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-042216-JPM-034	4/22/2016																			
MW-30	W-R2330021-042216-JPM-034	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	DUP 2	4/22/2016																			
MW-30	DUP 2	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-110416-AEM-032	11/4/2016																			
MW-30	W-R2330021-110416-AEM-032	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330022-042517-DMS-007	4/25/2017																			
MW-30	W-R2330022-042517-DMS-007	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330022-102617-AFB-025	10/26/2017																			
MW-30	W-R2330022-102617-AFB-025	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330024-042518-JPM-025	4/25/2018																			
MW-30	W-R2330024-042518-JPM-025	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330017-060515-ACN-001	6/5/2015																			
MW-31	W-R2330017-060515-ACN-001	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI,max}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-27 ^A	W-R2330021-110416-JPM-033	11/4/2016																			
MW-27	W-R2330021-110416-JPM-033	11/4/2016	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A (DUP)	W-R2330021-110416-JPM-034	11/4/2016																			
MW-27 (DUP)	W-R2330021-110416-JPM-034	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-042817-AFB-031	4/28/2017																			
MW-27	W-R2330022-042817-AFB-031	4/28/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330022-102417-DMS-009	10/24/2017																			
MW-27	W-R2330022-102417-DMS-009	10/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-27 ^A	W-R2330024-042518-DMS-024	4/25/2018																			
MW-27	W-R2330024-042518-DMS-024	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330012-020515-ACN-001	2/5/2015																			
MW-29	W-R2330012-020515-ACN-001	2/5/2015	<11	<11	<5.3	<11	<10	<5.3	<11	<5.3	<5.3	<5.3	<11	<5.3	<10	<11	<4.2	<5.3	<5.3	<5.3	<1.1
MW-29 ^A (DUP)	W-R2330012-020515-ACN-002	2/5/2015																			
MW-29 (DUP)	W-R2330012-020515-ACN-002	2/5/2015	<11	<11	<5.3	<11	<10	<5.3	<11	<5.3	<5.3	<5.3	<11	<5.3	<10	<11	<4.2	<5.3	<5.3	<5.3	<1.1
MW-29 ^A	W-R2330017-031615-JCH-001	3/16/2015																			
MW-29	W-R2330017-031615-JCH-001	3/16/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-29 ^A	W-R2330017-112015-AFB-028	11/20/2015																			
MW-29	W-R2330017-112015-AFB-028	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-042216-AFB-033	4/22/2016																			
MW-29	W-R2330021-042216-AFB-033	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330021-110416-AEM-031	11/4/2016																			
MW-29	W-R2330021-110416-AEM-031	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330022-042517-JPM-006	4/25/2017																			
MW-29	W-R2330022-042517-JPM-006	4/25/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330022-102617-AFB-024	10/26/2017																			
MW-29	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-29 ^A	W-R2330024-042518-JPM-023	4/25/2018																			
MW-29	W-R2330024-042518-JPM-023	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330012-020515-ACN-003	2/5/2015																			
MW-30	W-R2330012-020515-ACN-003	2/5/2015	<11	<11	<5.3	<11	<10	<5.3	<11	<5.3	<5.3	<5.3	<11	<5.3	<10	<11	<4.2	<5.3	<5.3	<5.3	<1.1
MW-30 ^A	W-R2330017-031615-ACN-002	3/16/2015																			
MW-30	W-R2330017-031615-ACN-002	3/16/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
MW-30 ^A	W-R2330017-112015-JPM-029	11/20/2015																			
MW-30	W-R2330017-112015-JPM-029	11/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-30 ^A	W-R2330021-042216-JPM-034	4/22/2016																	</		

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-MS}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-27 ^A	W-R2330021-110416-JPM-033	11/4/2016						120	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,300	NS	NS	110
MW-27	W-R2330021-110416-JPM-033	11/4/2016	NS	NS	NS	NS	NS	5.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,000	NS	NS	100
MW-27 ^A (DUP)	W-R2330021-110416-JPM-034	11/4/2016						110	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,200	NS	NS	110
MW-27 (DUP)	W-R2330021-110416-JPM-034	11/4/2016	NS	NS	NS	NS	NS	5.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,000	NS	NS	110
MW-27 ^A	W-R2330022-042817-AFB-031	4/28/2017						71	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,600	NS	NS	100
MW-27	W-R2330022-042817-AFB-031	4/28/2017	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,000	NS	NS	90
MW-27 ^A	W-R2330022-102417-DMS-009	10/24/2017						35	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,800	NS	NS	92
MW-27	W-R2330022-102417-DMS-009	10/24/2017	NS	NS	NS	NS	NS	8.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500	NS	NS	91
MW-27 ^A	W-R2330024-042518-DMS-024	4/25/2018						170	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,200	NS	NS	110
MW-27	W-R2330024-042518-DMS-024	4/25/2018	NS	NS	NS	NS	NS	4	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,900	NS	NS	100
MW-29 ^A	W-R2330012-020515-ACN-001	2/5/2015						530	<2.0	2.5 J	200	<1.0	0.046 J	1.3 J	1.4 J	1.6 J		3,200	2.0 J	<50	410
MW-29	W-R2330012-020515-ACN-001	2/5/2015	<5.3	<5.3	<2.1	<5.3	<5.3	8.8 J	<2.0	2.3 J	200	<1.0	<1.0	<10	1.1	0.35 J	<5.0	2,400	<3.0	<50	380
MW-29 ^A (DUP)	W-R2330012-020515-ACN-002	2/5/2015						370	<2.0	2.1 J	200	<1.0	0.065 J	1.3 J	1.3 J	0.88 J		2,900	0.60 J	<50	400
MW-29 (DUP)	W-R2330012-020515-ACN-002	2/5/2015	<5.3	<5.3	<2.1	<5.3	<5.3	11 J	<2.0	2.4	200	<1.0	<1.0	<10	1.3 J	<4.0	<5.0	2,500	<3.0	<50	400
MW-29 ^A	W-R2330017-031615-JCH-001	3/16/2015						1,400	0.11 J	6.2	220	<1.0	0.11 J	3.3 J	2.0 J	5.6		5,400	2.8 J	<50	400
MW-29	W-R2330017-031615-JCH-001	3/16/2015	<5.0	<5.0	<2.0	<5.0	<5.0	<50	<2.0	3.1 J	220	<1.0	0.048 J	<10	1.0 J	1.3 J	<5.0	2,800	<3.0	<50	400
MW-29 ^A	W-R2330017-112015-AFB-028	11/20/2015						420	NS	NS	NS	NS	NS	NS	NS	NS		4,100	NS	21,000	NS
MW-29	W-R2330017-112015-AFB-028	11/20/2015	NS	NS	NS	NS	NS	5.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,300	NS	20,000	NS
MW-29 ^A	W-R2330021-042216-AFB-033	4/22/2016						110	NS	NS	NS	NS	NS	NS	NS	NS		5,400	NS	NS	260
MW-29	W-R2330021-042216-AFB-033	4/22/2016	NS	NS	NS	NS	NS	2.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,700	NS	NS	250
MW-29 ^A	W-R2330021-110416-AEM-031	11/4/2016						54	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,000	NS	NS	300
MW-29	W-R2330021-110416-AEM-031	11/4/2016	NS	NS	NS	NS	NS	5.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,000	NS	NS	290
MW-29 ^A	W-R2330022-042517-JPM-006	4/25/2017						18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,400	NS	NS	240
MW-29	W-R2330022-042517-JPM-006	4/25/2017	NS	NS	NS	NS	NS	20 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,700	NS	NS	250
MW-29 ^A	W-R2330022-102617-AFB-024	10/26/2017						12	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,900	NS	NS	210
MW-29	W-R2330022-102617-AFB-024	10/26/2017	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,400	NS	NS	210
MW-29 ^A	W-R2330024-042518-JPM-023	4/25/2018						42	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,100	NS	NS	250
MW-29	W-R2330024-042518-JPM-023	4/25/2018	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,400	NS	NS	250
MW-30 ^A	W-R2330012-020515-ACN-003	2/5/2015						580	0.30 J	4.3 J	120	<1.0	0.53 J	1.7 J	0.30 J	3.9 J		500	1.3 J	<50	72
MW-30	W-R2330012-020515-ACN-003	2/5/2015	<5.3	<5.3	<2.1	<5.3	<5.3	11 J	0.39 J	3.2 J	110	<1.0	0.45 J	<10	0.28 J	1.1 J	5.0	18 J	<3.0	<50	67
MW-30 ^A	W-R2330017-031615-ACN-002	3/16/2015						110	0.28 J	1.6 J	95 J	<1.0	0.54 J	0.34 J	0.19 J	2.2 J		100 J	<3.0	<50	47 J
MW-30	W-R2330017-031615-ACN-002	3/16/2015	<5.0	<5.0	<2.0	<5.0	<5.0	5.8 J	0.44 J	2.3 J	110	<1.0	0.22 J	<10	0.62 J	1.6 J	<5.0	180 J	<3.0	<50	110
MW-30 ^A	W-R2330017-112015-JPM-029	11/20/2015						54	NS	NS	NS	NS	NS	NS	NS	NS		310	NS	14,000	NS
MW-30	W-R2330017-112015-JPM-029	11/20/2015	NS	NS	NS	NS	NS	10 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	740	NS	13,000	NS
MW-30 ^A	W-R2330021-042216-JPM-034	4/22/2016						21 J	NS	NS	NS	NS	NS	NS	NS	NS		710	NS	NS	110
MW-30	W-R2330021-042216-JPM-034	4/22/2016	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	530	NS	NS	130
MW-30 ^A	DUP 2	4/22/2016						18 J	NS	NS	NS	NS	NS	NS	NS	NS		650	NS	NS	120
MW-30	DUP 2	4/22/2016	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	530	NS	NS	120
MW-30 ^A	W-R2330021-110416-AEM-032	11/4/2016						28 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,000	NS	NS	94
MW-30	W-R2330021-110416-AEM-032	11/4/2016	NS	NS	NS	NS	NS	7.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	990	NS	NS	100
MW-30 ^A	W-R2330022-042517-DMS-007	4/25/2017						35 J	NS	NS	NS	NS									

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-27 ^A	W-R2330021-110416-JPM-033	11/4/2016	<0.2	10 J	0.77 J	<0.20	<2.0	2.4 J	2,200
MW-27	W-R2330021-110416-JPM-033	11/4/2016	<0.2	8.5 J	0.84 J	<0.20	<2.0	0.17 J	26 J
MW-27 ^A (DUP)	W-R2330021-110416-JPM-034	11/4/2016	0.39	86 J	<5.0	2.7	<2.0	86	210 J
MW-27 (DUP)	W-R2330021-110416-JPM-034	11/4/2016	<0.2	10 J	<5.0	<0.20	1.1 J	1.3 J	24 J
MW-27 ^A	W-R2330022-042817-AFB-031	4/28/2017	<0.2	20 J	<5.0	<0.20	<2.0	4.0 J	420 J
MW-27	W-R2330022-042817-AFB-031	4/28/2017	<0.2	16 J	<5.0	<0.20	0.081 J	0.77 J	5.6 J
MW-27 ^A	W-R2330022-102417-DMS-009	10/24/2017	0.12 J	130 J	12 J	<0.20	0.96 J	9.3	580
MW-27	W-R2330022-102417-DMS-009	10/24/2017	<0.2	9.1 J	0.76 J	<0.20	<2.0	1.7 J	4.8 J
MW-27 ^A	W-R2330024-042518-DMS-024	4/25/2018							
MW-27	W-R2330024-042518-DMS-024	4/25/2018							
MW-29 ^A	W-R2330012-020515-ACN-001	2/5/2015	0.30	210	9.8 J	0.53 J	2.4 J	86	1,700
MW-29	W-R2330012-020515-ACN-001	2/5/2015	<0.2	14 J	0.73 J	<0.20	<2.0	0.38 J	4.5 J
MW-29 ^A (DUP)	W-R2330012-020515-ACN-002	2/5/2015	0.95	1,100	27 J	1.7 J	6.3 J	590	2,900
MW-29 (DUP)	W-R2330012-020515-ACN-002	2/5/2015	<0.2	5.0 J	<5.0	<0.20	0.26 J	3.2 J	14 J
MW-29 ^A	W-R2330017-031615-JCH-001	3/16/2015	0.51	1,100	47 J	2.5	13 J	660	680
MW-29	W-R2330017-031615-JCH-001	3/16/2015	<0.2	14 J	0.75 J	<0.20	<2.0	0.67 J	19 J
MW-29 ^A	W-R2330017-112015-AFB-028	11/20/2015	<0.2	210	9.4 J	<0.20	2.3 J	180	140 J
MW-29	W-R2330017-112015-AFB-028	11/20/2015	<0.2	25	<5.0	<0.20	<2.0	0.46 J	18 J
MW-29 ^A	W-R2330021-042216-AFB-033	4/22/2016	<0.2	53 J	<5.0	<0.20	<2.0	46	800
MW-29	W-R2330021-042216-AFB-033	4/22/2016	<0.2	24	<5.0	<0.20	<2.0	<4.0	4.2 J
MW-29 ^A	W-R2330021-110416-AEM-031	11/4/2016	0.23	310	13 J	0.75 J	3.3 J	320	470 J
MW-29	W-R2330021-110416-AEM-031	11/4/2016	<0.2	15 J	<5.0	<0.20	<2.0	0.49 J	18 J
MW-29 ^A	W-R2330022-042517-JPM-006	4/25/2017	0.13	51 J	<5.0	<0.20	<2.0	24 J	950
MW-29	W-R2330022-042517-JPM-006	4/25/2017	<0.2	12 J	<5.0	<0.20	<2.0	1.7 J	<500
MW-29 ^A	W-R2330022-102617-AFB-024	10/26/2017							44
MW-29	W-R2330022-102617-AFB-024	10/26/2017							<27
MW-29 ^A	W-R2330024-042518-JPM-023	4/25/2018							
MW-29	W-R2330024-042518-JPM-023	4/25/2018							
MW-30 ^A	W-R2330012-020515-ACN-003	2/5/2015	0.15	22 J	<5.0	<0.20	<2.0	19 J	210 J
MW-30	W-R2330012-020515-ACN-003	2/5/2015	<0.2	8.2 J	<5.0	<0.20	<2.0	<4.0	16 J
MW-30 ^A	W-R2330017-031615-ACN-002	3/16/2015	0.1	9.7 J	<5.0	<2.0	<2.0	6.6	9,900
MW-30	W-R2330017-031615-ACN-002	3/16/2015	<0.2	19 J	<5.0	<2.0	<2.0	<4.0	61 J
MW-30 ^A	W-R2330017-112015-JPM-029	11/20/2015	<0.2	31 J	<5.0	<0.20	<2.0	2.4 J	44 J
MW-30	W-R2330017-112015-JPM-029	11/20/2015	<0.2	19 J	<5.0	<0.20	<2.0	2.4 J	27 J
MW-30 ^A	W-R2330021-042216-JPM-034	4/22/2016	2.2	320	<5.0	16	<2.0	90	140
MW-30	W-R2330021-042216-JPM-034	4/22/2016	<0.2	16 J	<5.0	<0.20	<2.0	2.3 J	34 J
MW-30 ^A	DUP 2	4/22/2016	0.11	9.7 J	<5.0	<2.0	<2.0	6.6	360
MW-30	DUP 2	4/22/2016	<0.2	19 J	<5.0	<2.0	<2.0	<4.0	19 J
MW-30 ^A	W-R2330021-110416-AEM-032	11/4/2016	0.43	40	2.6 J	0.18 J	0.37 J	30	140
MW-30	W-R2330021-110416-AEM-032	11/4/2016	<0.2	26 J	<5.0	<2.0	<2.0	1.7 J	62
MW-30 ^A	W-R2330022-042517-DMS-007	4/25/2017	<0.2	31	0.98 J	<0.2	<2.0	0.86 J	2.8 J
MW-30	W-R2330022-042517-DMS-007	4/25/2017	<0.2	7.5 J	1.7 J	<0.2	<2.0	0.69 J	16 J
MW-30 ^A	W-R2330022-102617-AFB-025	10/26/2017	<0.2	11 J	<5.0	<0.2	<2.0	1.4 J	2.9 J
MW-30	W-R2330022-102617-AFB-025	10/26/2017	<0.2	18 J	0.84 J	<0.20	<2.0	0.46 J	2.5 J
MW-30 ^A	W-R2330024-042518-JPM-025	4/25/2018							
MW-30	W-R2330024-042518-JPM-025	4/25/2018							
MW-31 ^A	W-R2330017-060515-ACN-001	6/5/2015	<0.2	2.6 J	0.73 J	<0.20	<2.0	1.3 J	340
MW-31	W-R2330017-060515-ACN-001	6/5/2015	<0.2	10 J	<5.0	<0.20	<2.0	2.2 J	21 J

Table 3
Summary Of Ground Water Sample Results

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Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI,RES}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-31 ^A	W-R2330017-111615-AEP-001	11/16/2015																			
MW-31	W-R2330017-111615-AEP-001	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-041816-JPM-003	4/18/2016																			
MW-31	W-R2330021-041816-JPM-003	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-103116-AEM-003	10/31/2016																			
MW-31	W-R2330021-103116-AEM-003	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-042417-DMS-002	4/24/2017																			
MW-31	W-R2330022-042417-DMS-002	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-102317-DMS-003	10/23/2017																			
MW-31	W-R2330022-102617-DMS-003	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330024-042318-DMS-003	4/23/2018																			
MW-31	W-R2330024-042318-DMS-003	4/24/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-060515-ACN-002	6/5/2015																			
MW-32	W-R2330017-060515-ACN-002	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-111615-AEP-002	11/16/2015																			
MW-32	W-R2330017-111615-AEP-002	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-041816-AEP-004	4/18/2016																			
MW-32	W-R2330021-041816-AEP-004	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-103116-JPM-004	10/31/2016																			
MW-32	W-R2330021-103116-JPM-004	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330022-042417-AFB-001	4/24/2017																			
MW-32 ^A	W-R2330022-102317-DMS-004	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330022-102317-DMS-004	10/23/2017																			
MW-32	W-R2330022-042417-AFB-001	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330024-042318-JPM-004	4/23/2018																			
MW-32	W-R2330024-042318-JPM-004	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-060515-ACN-003	6/5/2015																			
MW-33	W-R2330017-060515-ACN-003	6/5/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-111615-AEP-003	11/16/2015																			
MW-33	W-R2330017-111615-AEP-003	11/16/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330021-041816-JPM-005	4/18/2016																			
MW-33	W-R2330021-041816-JPM-005	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330021-103116-JPM-005	10/31/2016																			
MW-33	W-R2330021-103116-JPM-005	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330022-042417-DMS-003	4/24/2017																			
MW-33	W-R2330022-042417-DMS-003	4/24/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330022-102617-DMS-005	10/23/2017																			
MW-33	W-R2330022-102617-DMS-005	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330024-042318-DMS-005	4/23/2018																			
MW-33	W-R2330024-042318-DMS-005	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330017-060515-ACN-004	6/5/2015																			
MW-34	W-R2330017-060515-ACN-004	6/5/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
MW-34 ^A	W-R2330017-111815-JPM-017	11/18/2015																			
MW-34	W-R2330017-111815-JPM-017	11/18/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330021-041916-JPM-013	4/19/2016																			
MW-34	W-R2330021-041916-JPM-013	4/19/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330021-110416-AEM-030	11/4/2016																			
MW-34	W-R2330021-110416-AEM-030	11/4/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330022-042417-DMS-004	4/24/2017																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L	Semivolatile Organic Compounds (SVOCs)																		
	1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	D-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)	ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)	ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)	ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)	ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VI,RES}) (a)	ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA
Water Solubility (VII)	ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)	ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID		SAMPLE DATE																
MW-31 ^A	W-R2330017-111615-AEP-001		11/16/2015																
MW-31	W-R2330017-111615-AEP-001		11/16/2015		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-041816-JPM-003		4/18/2016																
MW-31	W-R2330021-041816-JPM-003		4/18/2016		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330021-103116-AEM-003		10/31/2016																
MW-31	W-R2330021-103116-AEM-003		10/31/2016		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-042417-DMS-002		4/24/2017																
MW-31	W-R2330022-042417-DMS-002		4/24/2017		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330022-102317-DMS-003		10/23/2017																
MW-31	W-R2330022-102617-DMS-003		10/23/2017		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-31 ^A	W-R2330024-042318-DMS-003		4/23/2018																
MW-31	W-R2330024-042318-DMS-003		4/24/2018		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-060515-ACN-002		6/5/2015																
MW-32	W-R2330017-060515-ACN-002		6/5/2015		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330017-111615-AEP-002		11/16/2015																
MW-32	W-R2330017-111615-AEP-002		11/16/2015		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-041816-AEP-004		4/18/2016																
MW-32	W-R2330021-041816-AEP-004		4/18/2016		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330021-103116-JPM-004		10/31/2016																
MW-32	W-R2330021-103116-JPM-004		10/31/2016		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330022-042417-AFB-001		4/24/2017																
MW-32 ^A	W-R2330022-102317-DMS-004		10/23/2017		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330022-102317-DMS-004		10/23/2017																
MW-32	W-R2330022-042417-AFB-001		4/24/2017		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32 ^A	W-R2330024-042318-JPM-004		4/23/2018																
MW-32	W-R2330024-042318-JPM-004		4/23/2018		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-060515-ACN-003		6/5/2015																
MW-33	W-R2330017-060515-ACN-003		6/5/2015		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-111615-AEP-003		11/16/2015																
MW-33	W-R2330017-111615-AEP-003		11/16/2015		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330021-041816-JPM-005		4/18/2016																
MW-33	W-R2330021-041816-JPM-005		4/18/2016		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330021-103116-JPM-005		10/31/2016																
MW-33	W-R2330021-103116-JPM-005		10/31/2016		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330022-042417-DMS-003		4/24/2017																
MW-33	W-R2330022-042417-DMS-003		4/24/2017		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330022-102617-DMS-005		10/23/2017																
MW-33	W-R2330022-102617-DMS-005		10/23/2017		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330024-042318-DMS-005		4/23/2018																
MW-33	W-R2330024-042318-DMS-005		4/23/2018		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330017-060515-ACN-004		6/5/2015																
MW-34	W-R2330017-060515-ACN-004		6/5/2015		<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<5.0	<1.0
MW-34 ^A	W-R2330017-111815-JPM-017		11/18/2015																
MW-34	W-R2330017-111815-JPM-017		11/18/2015		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330021-041916-JPM-013		4/19/2016																
MW-34	W-R2330021-041916-JPM-013		4/19/2016		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330021-110416-AEM-030		11/4/2016																
MW-34	W-R2330021-110416-AEM-030		11/4/2016		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330022-042417-DMS-004		4/24/2017																
MW-34	W-R2330022-042417-DMS-004		4/24/2017		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330022-102617-DMS-006		10/23/2017																
MW-34	W-R2330022-102617-DMS-006		10/23/2017		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-34 ^A	W-R2330024-042318-DMS-007		4/23/2018																
MW-34	W-R2330024-042318-DMS-007		4/23/2018		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330021-041816-AEP-001		4/18/2016																

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P, R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI,RES}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-31 ^A	W-R2330017-111615-AEP-001	11/16/2015						3,400	NS	NS	NS	NS	NS	NS	NS		5,900	NS	27,000	NS	
MW-31	W-R2330017-111615-AEP-001	11/16/2015	NS	NS	NS	NS	NS	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	130	NS	17,000	NS
MW-31 ^A	W-R2330021-041816-JPM-003	4/18/2016						12	NS	NS	NS	NS	NS	NS	NS		130	NS	NS	NS	360
MW-31	W-R2330021-041816-JPM-003	4/18/2016	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	110	NS	NS	390
MW-31 ^A	W-R2330021-103116-AEM-003	10/31/2016						14 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	160 J	NS	NS	400
MW-31	W-R2330021-103116-AEM-003	10/31/2016	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	110 J	NS	NS	370
MW-31 ^A	W-R2330022-042417-DMS-002	4/24/2017						350	NS	NS	NS	NS	NS	NS	NS	NS	NS	870	NS	NS	410
MW-31	W-R2330022-042417-DMS-002	4/24/2017	NS	NS	NS	NS	NS	13 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	150 J	NS	NS	420
MW-31 ^A	W-R2330022-102317-DMS-003	10/23/2017						16	NS	NS	NS	NS	NS	NS	NS	NS	NS	110	NS	NS	440
MW-31	W-R2330022-102617-DMS-003	10/23/2017	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	65 J	NS	NS	430
MW-31 ^A	W-R2330024-042318-DMS-003	4/23/2018						480	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,800	NS	NS	630
MW-31	W-R2330024-042318-DMS-003	4/24/2018	NS	NS	NS	NS	NS	31	NS	NS	NS	NS	NS	NS	NS	NS	NS	65 J	NS	NS	400
MW-32 ^A	W-R2330017-060515-ACN-002	6/5/2015						1,400	NS	NS	NS	NS	NS	NS	NS	NS		4,700	NS	<50	95
MW-32	W-R2330017-060515-ACN-002	6/5/2015	NS	NS	NS	NS	NS	6.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,000	NS	<50	62
MW-32 ^A	W-R2330017-111615-AEP-002	11/16/2015						920	NS	NS	NS	NS	NS	NS	NS	NS		6,300	NS	66,000	NS
MW-32	W-R2330017-111615-AEP-002	11/16/2015	NS	NS	NS	NS	NS	120	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,700	NS	66,000	NS
MW-32 ^A	W-R2330021-041816-AEP-004	4/18/2016						160	NS	NS	NS	NS	NS	NS	NS	NS		670	NS	NS	81
MW-32	W-R2330021-041816-AEP-004	4/18/2016	NS	NS	NS	NS	NS	4.0 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	410	NS	NS	87
MW-32 ^A	W-R2330021-103116-JPM-004	10/31/2016						780	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,700	NS	NS	100
MW-32	W-R2330021-103116-JPM-004	10/31/2016	NS	NS	NS	NS	NS	170	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,000	NS	NS	82
MW-32 ^A	W-R2330022-042417-AFB-001	4/24/2017						1,600	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,100	NS	NS	46 J
MW-32 ^A	W-R2330022-102317-DMS-004	10/23/2017	NS	NS	NS	NS	NS	7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,200	NS	NS	90
MW-32	W-R2330022-102317-DMS-004	10/23/2017						<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,100	NS	NS	80
MW-32	W-R2330022-042417-AFB-001	4/24/2017	NS	NS	NS	NS	NS	19 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	810	NS	NS	29 J
MW-32 ^A	W-R2330024-042318-JPM-004	4/23/2018						2,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,800	NS	NS	42
MW-32	W-R2330024-042318-JPM-004	4/23/2018	NS	NS	NS	NS	NS	180	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,100	NS	NS	33
MW-33 ^A	W-R2330017-060515-ACN-003	6/5/2015						1,000	NS	NS	NS	NS	NS	NS	NS	NS		4,500	NS	<50	120
MW-33	W-R2330017-060515-ACN-003	6/5/2015	NS	NS	NS	NS	NS	18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,200	NS	<50	80
MW-33 ^A	W-R2330017-111615-AEP-003	11/16/2015						860	NS	NS	NS	NS	NS	NS	NS	NS		3,400	NS	84,000	NS
MW-33	W-R2330017-111615-AEP-003	11/16/2015	NS	NS	NS	NS	NS	15 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,700	NS	85,000	NS
MW-33 ^A	W-R2330021-041816-JPM-005	4/18/2016						67	NS	NS	NS	NS	NS	NS	NS	NS		2,700	NS	NS	81
MW-33	W-R2330021-041816-JPM-005	4/18/2016	NS	NS	NS	NS	NS	3.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,700	NS	NS	84
MW-33 ^A	W-R2330021-103116-JPM-005	10/31/2016						400	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,100	NS	NS	78
MW-33	W-R2330021-103116-JPM-005	10/31/2016	NS	NS	NS	NS	NS	16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,300	NS	NS	64
MW-33 ^A	W-R2330022-042417-DMS-003	4/24/2017						820	NS	NS	NS	NS	NS	NS	NS	NS	NS	5,300	NS	NS	100
MW-33	W-R2330022-042417-DMS-003	4/24/2017	NS	NS	NS	NS	NS	16 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,200	NS	NS	89
MW-33 ^A	W-R2330022-102617-DMS-005	10/23/2017						430	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,700	NS	NS	72
MW-33	W-R2330022-102617-DMS-005	10/23/2017	NS	NS	NS	NS	NS	39	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,300	NS	NS	68
MW-33 ^A	W-R2330024-042318-DMS-005	4/23/2018																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L									
			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI,RES}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE							
MW-31 ^A	W-R2330017-111615-AEP-001	11/16/2015	<0.2	9.7 J	<5.0	<0.20	<2.0	3.3 J	6.9 J
MW-31	W-R2330017-111615-AEP-001	11/16/2015	<0.2	9.6 J	<5.0	<0.20	<2.0	3.3 J	7.8 J
MW-31 ^A	W-R2330021-041816-JPM-003	4/18/2016	<0.2	31 J	<5.0	<0.20	<2.0	1.1 J	9.0 J
MW-31	W-R2330021-041816-JPM-003	4/18/2016	<0.2	15 J	<5.0	<0.20	<2.0	<4.0	21J
MW-31 ^A	W-R2330021-103116-AEM-003	10/31/2016	<0.2	11 J	1.1 J	<0.20	1.5 J	1.1 J	1.3 J
MW-31	W-R2330021-103116-AEM-003	10/31/2016	<0.2	9.6 J	<5.0	<0.20	<2.0	<4.0	8.0 J
MW-31 ^A	W-R2330022-042417-DMS-002	4/24/2017	<0.2	17 J	7.2	<0.2	<2.0	0.59 J	1.9 J
MW-31	W-R2330022-042417-DMS-002	4/24/2017	<0.2	20 J	5.4 J	<0.20	<2.0	2.4 J	38 J
MW-31 ^A	W-R2330022-102317-DMS-003	10/23/2017	<0.2	1.4 J	<5.0	<0.20	<2.0	<4.0	10 J
MW-31	W-R2330022-102617-DMS-003	10/23/2017	<0.2	4.3 J	<5.0	<0.20	<2.0	<4.0	80 J
MW-31 ^A	W-R2330024-042318-DMS-003	4/23/2018							
MW-31	W-R2330024-042318-DMS-003	4/24/2018							
MW-32 ^A	W-R2330017-060515-ACN-002	6/5/2015	<0.2	6.4 J	<5.0	<0.20	<2.0	<4.0	51
MW-32	W-R2330017-060515-ACN-002	6/5/2015	<0.2	4.0 J	<5.0	<0.20	<2.0	1.2 J	8.8 J
MW-32 ^A	W-R2330017-111615-AEP-002	11/16/2015	<0.2	4.8 J	<5.0	<0.20	<2.0	0.28 J	15 J
MW-32	W-R2330017-111615-AEP-002	11/16/2015	<0.2	5.2 J	<5.0	<0.20	<2.0	<4.0	1.8 J
MW-32 ^A	W-R2330021-041816-AEP-004	4/18/2016	<0.2	13 J	<50	<0.20	0.093 J	1.1 J	4.1 J
MW-32	W-R2330021-041816-AEP-004	4/18/2016	<0.2	4.2 J	<5.0	<0.20	<2.0	<4.0	3.1 J
MW-32 ^A	W-R2330021-103116-JPM-004	10/31/2016	<0.2	0.42 J	0.48 J	<0.025	<2.0	<0.30	2.2 J
MW-32	W-R2330021-103116-JPM-004	10/31/2016	<0.2	0.6 J	<5.0	<0.20	<2.0	<4.0	1.7 J
MW-32 ^A	W-R2330022-042417-AFB-001	4/24/2017	<0.2	<20	<5.0	<0.20	<2.0	<4.0	5.3 J
MW-32 ^A	W-R2330022-102317-DMS-004	10/23/2017	<0.2	0.46 J	<5.0	<0.20	<2.0	<4.0	2.1 J
MW-32	W-R2330022-102317-DMS-004	10/23/2017	<0.2	<20	<5.0	<0.20	<2.0	0.3 J	0.57 J
MW-32	W-R2330022-042417-AFB-001	4/24/2017	<0.2	<20	<5.0	<0.20	<2.0	<4.0	0.87 J
MW-32 ^A	W-R2330024-042318-JPM-004	4/23/2018	NS	NS	NS	NS	NS	NS	NS
MW-32	W-R2330024-042318-JPM-004	4/23/2018	NS	NS	NS	NS	NS	NS	NS
MW-33 ^A	W-R2330017-060515-ACN-003	6/5/2015	<0.2	1.3 J	<5.0	<0.20	<2.0	<4.0	3.7 J
MW-33	W-R2330017-060515-ACN-003	6/5/2015	<0.2	0.57 J	<5.0	<0.20	<2.0	<4.0	3.4 J
MW-33 ^A	W-R2330017-111615-AEP-003	11/16/2015	<0.2	<20	<5.0	<0.20	<2.0	<4.0	3.4 J
MW-33	W-R2330017-111615-AEP-003	11/16/2015	<0.2	<20	<5.0	<0.20	<2.0	<4.0	3.4 J
MW-33 ^A	W-R2330021-041816-JPM-005	4/18/2016	<0.2	0.63 J	<5.0	<0.20	<2.0	<4.0	<50
MW-33	W-R2330021-041816-JPM-005	4/18/2016	<0.2	0.67 J	<5.0	<0.20	<2.0	<4.0	3.5 J
MW-33 ^A	W-R2330021-103116-JPM-005	10/31/2016	<0.2	<20	<5.0	<0.20	<2.0	<4.0	14 J
MW-33	W-R2330021-103116-JPM-005	10/31/2016	<0.2	<20	<5.0	<0.20	<2.0	<4.0	14 J
MW-33 ^A	W-R2330022-042417-DMS-003	4/24/2017	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
MW-33	W-R2330022-042417-DMS-003	4/24/2017	<0.2	0.68 J	<5.0	0.026 J	<2.0	<4.0	<50
MW-33 ^A	W-R2330022-102617-DMS-005	10/23/2017							
MW-33	W-R2330022-102617-DMS-005	10/23/2017							
MW-33 ^A	W-R2330024-042318-DMS-005	4/23/2018							
MW-33	W-R2330024-042318-DMS-005	4/23/2018							
MW-34 ^A	W-R2330017-060515-ACN-004	6/5/2015	<0.2	1.1 J	<5.0	0.043 J	<2.0	<4.0	8.6 J
MW-34	W-R2330017-060515-ACN-004	6/5/2015	<0.2	1.0 J	<5.0	0.022 J	<2.0	0.54 J	<50
MW-34 ^A	W-R2330017-111815-JPM-017	11/18/2015	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
MW-34	W-R2330017-111815-JPM-017	11/18/2015	<0.2	<20	<5.0	<0.20	<2.0	<4.0	4.1 J
MW-34 ^A	W-R2330021-041916-JPM-013	4/19/2016	<0.2	1.4 J	<5.0	<0.20	<2.0	<4.0	<50
MW-34	W-R2330021-041916-JPM-013	4/19/2016	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
MW-34 ^A	W-R2330021-110416-AEM-030	11/4/2016	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
MW-34	W-R2330021-110416-AEM-030	11/4/2016	<0.2	0.47 J	<5.0	<0.20	<2.0	<4.0	<50
MW-34 ^A	W-R2330022-042417-DMS-004	4/24/2017	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
MW-34	W-R2330022-042417-DMS-004	4/24/2017	<0.2	<20	<5.0	<0.20	<2.0	<4.0	<50
MW-34 ^A	W-R2330022-102617-DMS-006	10/23/2017	<0.2	<20	<5.0	<0.20	<2.0	<4.0	NS
MW-34	W-R2330022-102617-DMS-006	10/23/2017	<0.2	<20	<5.0	<0.20	<2.0	<4.0	NS
MW-34 ^A	W-R2330024-042318-DMS-007	4/23/2018	NS	NS	NS	NS	NS	NS	NS
MW-34	W-R2330024-042318-DMS-007	4/23/2018	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330021-041816-AEP-001	4/18/2016	<0.2	<20	<5.0	<0.20	<2.0	<4.0	NS

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Volatile Organic Compounds (VOCs)																		
			2-Butanone (MEK)	1,2- Dichlorobenzene	1,4-Dichlorobenzene	4-Methyl-2-Pentanone (MIBK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chlorobenzene	Chloroethane	Chloroform	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Toluene	Xylenes
Residential Drinking Water Criteria (II)			13,000	600 (A)	75 (A)	1,800	730	5.0 (A)	80 (A,W)	800	100 (A)	430	80 (A,W)	NA	80 (A,W)	1,700	74 (E)	800	NA	790 (E)	280 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	700	NA	NA	1,000	10,000
Ground Water Surface Water Interface Criteria (GSI) (III)			2,200	13	17	ID	1,700	200	ID	ID	25	1,100	350	NA	ID	ID	18	28	NA	270	41
GSI Final Acute Value (FAV)			40,000	240	210	ID	30,000	1,900	ID	ID	450	20,000	11,000	ID	ID	ID	320	500	NA	2,600	730
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2.4E+8 (S)	1.6E+5 (S)	16,000	2.0E+07 (S)	1.0E+09 (D,S)	5,600	4,800	2.5E+05	2.1E+05	5.7E+06 (S)	28,000	NA	14,000	2.2E+05	1.1E+05	56,000 (S)	NA	5.3E+5 (S)	1.9E+05 (S)
Groundwater Concentration for Vapor Intrusion (GW _{V.I.B.S.}) (a)			4.3E+06	7,600	76	1,100	8.2E+06	27	NA	2,400	1,100	44,000	140	1,900	NA	NA	700 (d)	10	NA	36,000	10,000 (d)
Water Solubility (VII)			2.40E+08	1.56E+05	73,800	2.00E+07	1.0E+09	1.75E+06	6.74E+06	1.19E+06	4.72E+05	5.74E+06	7.92E+06	NA	2.60E+06	3.00E+05	1.69E+05	56,000	NA	5.26E+05	1.86E+5 (S)
Flammability & Explosivity Screening Level (VIII)			ID	NA	NA	ID	1.5E+07	68,000	ID	13,000	1.6E+05	1.1E+05	ID	NA	ID	ID	43,000	29,000	NA	61,000	70,000
ID	SAMPLE ID	SAMPLE DATE																			
MW-35	W-R2330021-041816-AEP-001	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330021-103116-JPM-002	10/31/2016																			
MW-35	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330022-050117-AFB-036	5/1/2017																			
MW-35	W-R2330022-050117-AFB-036	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330022-102317-DMS-002	10/23/2017																			
MW-35	W-R2330022-102317-DMS-002	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330024-042318-JPM-002	4/23/2018																			
MW-35	W-R2330024-042318-JPM-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330021-041816-JPM-002	4/18/2016																			
MW-36	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330021-103116-AEM-001	10/31/2016																			
MW-36	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330022-050117-AFB-037	5/1/2017																			
MW-36	W-R2330022-050117-AFB-037	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330022-102317-DMS-001	10/23/2017																			
MW-36	W-R2330022-102317-DMS-001	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330024-102317-JPM-002	4/23/2018																			
MW-36	W-R2330024-102317-JPM-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330017-032015-ACN-030	3/20/2015																			
CRA-266M	W-R2330017-032015-ACN-030	3/20/2015	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
CRA-266M ^A	W-R2330017-111715-JPM-006	11/17/2015																			
CRA-266M	W-R2330017-111715-JPM-006	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-042216-JPM-032	4/22/2016																			
CRA-266M	W-R2330021-042216-JPM-032	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-110216-JPM-015	11/2/2016																			
CRA-266M	W-R2330021-110216-JPM-015	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330022-042717-AFB-022	4/27/2017																			
CRA-266M	W-R2330022-042717-AFB-022	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330024-042518-JPM-021	4/25/2018																			
CRA-266M	W-R2330024-042518-JPM-021	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SB-13 ^A	W-R2330009-121013-AJL-008	12/10/2013																			
SB-13	W-R2330009-121013-AJL-008	12/10/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.37 J	<3.0
SB-14 ^A	W-R2330009-121013-AJL-007	12/10/2013																			
SB-14	W-R2330009-121013-AJL-007	12/10/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
SB-15 ^A	W-R2330009-120913-AJL-006	12/9/2013																			
SB-15	W-R2330009-120913-AJL-006	12/9/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	0.31 J	<3.0
SB-21 ^A	W-R2330009-120513-RD-001	12/5/2013																			
SB-21	W-R2330009-120513-RD-001	12/5/2013	<25	<1.0	<1.0	<50	<50	6.7	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	1.4	2.5 J	<1.0	0.44 J	4.2
SB-22 ^A	W-R2330009-120513-RD-002	12/5/2013																			
SB-22	W-R2330009-120513-RD-002	12/5/2013	<25	<1.0	<1.0	<50	<50	<1.0	<1.0	<5.0	0.72 J	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
SB-23 ^A	W-R2330009-120513-RD-003	12/5/2013																			
SB-23	W-R2330009-120513-RD-003	12/5/2013	<25	<1.0	<1.0	<50	<50	2.4	<1.0	<5.0	<1.0	<5.0	<1.0	<10	<5.0	<5.0	<1.0	<5.0	<1.0	<1.0	<3.0
SB-24 ^A	W-R2330009-120613-RD-004	12/6/2013																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Semivolatile Organic Compounds (SVOCs)																		
			1,1-Biphenyl	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	4-Chloroaniline	Bis(2-ethylhexyl)phthalate	Acenaphthene	Acetophenone	Benzaldehyde	Butyl benzyl phthalate	Caprolactam	Carbazole	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Fluoranthene
Residential Drinking Water Criteria (II)			ID	45	260	370	370	370	NA	6.0 (A)	1,300	1,500	NA	1,200	5,800	85	ID	5,500	73,000	880	210 (S)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ground Water Surface Water Interface Criteria (GSI) (III)			ID	18	19	30 (M); 25	30 (M); 25	380	NA	25	38	ID	NA	67	NA	10 (M); 4.0	4	110	110	9.7	1.6
GSI Final Acute Value (FAV)			ID	NA	340	1,400	1,400	2,700	ID	285	200	NA	NA	630	ID	72	72	2.0E+03	NA	75	220
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			ID	490,000	25,000 (S)	NLV	NLV	NLV	NA	NLV	4,200 (S)	6.1E+06 (S)	NA	NLV	NLV	NLV	10,000 (S)	NLV	NLV	NLV	210 (S)
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			ID	78,000	940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NLV	2.30E+01	NA	NA	NA	NA
Water Solubility (VII)			ID	2.20E+07	24,600	2.80E+07	2.80E+07	7.87E+06	NA	340	4,240	6.1E+06 (S)	NA	2.7E+03	5.25E+09	7,480	10,000	1.08E+06	1.08E+06	1.12E+04	206
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	NA	NA	ID	NA	NA	ID	ID	NA	ID	NA	ID	ID	NA	NA	NA	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-35	W-R2330021-041816-AEP-001	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330021-103116-JPM-002	10/31/2016																			
MW-35	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330022-050117-AFB-036	5/1/2017																			
MW-35	W-R2330022-050117-AFB-036	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330022-102317-DMS-002	10/23/2017																			
MW-35	W-R2330022-102317-DMS-002	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35 ^A	W-R2330024-042318-JPM-002	4/23/2018																			
MW-35	W-R2330024-042318-JPM-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330021-041816-JPM-002	4/18/2016																			
MW-36	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330021-103116-AEM-001	10/31/2016																			
MW-36	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330022-050117-AFB-037	5/1/2017																			
MW-36	W-R2330022-050117-AFB-037	5/1/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330022-102317-DMS-001	10/23/2017																			
MW-36	W-R2330022-102317-DMS-001	10/23/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-36 ^A	W-R2330024-102317-JPM-002	4/23/2018																			
MW-36	W-R2330024-102317-JPM-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330017-032015-ACN-030	3/20/2015																			
CRA-266M	W-R2330017-032015-ACN-030	3/20/2015	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	0.13 J
CRA-266M ^A	W-R2330017-111715-JPM-006	11/17/2015																			
CRA-266M	W-R2330017-111715-JPM-006	11/17/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-042216-JPM-032	4/22/2016																			
CRA-266M	W-R2330021-042216-JPM-032	4/22/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330021-110216-JPM-015	11/2/2016																			
CRA-266M	W-R2330021-110216-JPM-015	11/2/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330022-042717-AFB-022	4/27/2017																			
CRA-266M	W-R2330022-042717-AFB-022	4/27/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CRA-266M ^A	W-R2330024-042518-JPM-021	4/25/2018																			
CRA-266M	W-R2330024-042518-JPM-021	4/25/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SB-13 ^A	W-R2330009-121013-AJL-008	12/10/2013																			
SB-13	W-R2330009-121013-AJL-008	12/10/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	0.28 J	<10	<10	<4.0	<5.0	<5.0	0.21 J	<1.0
SB-14 ^A	W-R2330009-121013-AJL-007	12/10/2013																			
SB-14	W-R2330009-121013-AJL-007	12/10/2013	<10	<10	<5.0	<10	<10	<5.0	<10	0.77 J	<5.0	<5.0	<10	0.34 J	<10	<10	<4.0	<5.0	<5.0	0.25 J	<1.0
SB-15 ^A	W-R2330009-120913-AJL-006	12/9/2013																			
SB-15	W-R2330009-120913-AJL-006	12/9/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	0.56 J	<10	<10	<4.0	<5.0	<5.0	0.23 J	<1.0
SB-21 ^A	W-R2330009-120513-RD-001	12/5/2013																			
SB-21	W-R2330009-120513-RD-001	12/5/2013	<10	<10	0.19 J	<10	0.41 J	<5.0	<10	1.6 J	0.54 J	0.22 J	0.79 J	<5.0	<10	<10	0.41 J	0.35 J	<5.0	<5.0	<1.0
SB-22 ^A	W-R2330009-120513-RD-002	12/5/2013																			
SB-22	W-R2330009-120513-RD-002	12/5/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	0.12 J	<5.0	0.51 J	<5.0	<10	<10	<4.0	<5.0	<5.0	0.14 J	<1.0
SB-23 ^A	W-R2330009-120513-RD-003	12/5/2013																			
SB-23	W-R2330009-120513-RD-003	12/5/2013	<10	<10	<5.0	<10	<10	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<4.0	<5.0	<5.0	<5.0	<1.0
SB-24 ^A	W-R2330009-120613-RD-004	12/6/2013																			

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Table 3
Summary of Ground Water
Sample Results

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Metals																		
			Fluorene	Naphthalene	Phenanthrene	Pyrene	Phenol	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper (B)	Cyanide (P,R)	Iron (B)	Lead (B)	Magnesium (B)	Manganese (B)
Residential Drinking Water Criteria (II)			880	520	52	140 (S)	4,400	50 (E)(V)	6.0 (A)	10 (A)	2,000 (A)	4.0 (A)	5.0 (A)	100 (A)	40	1,000 (E)	200 (A)	300 (E)	4.0 (L)	400,000	50 (E)
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	NA	1,400	NA	2,000	NA	NA	860
Ground Water Surface Water Interface Criteria (GSI) (III)			12	11	2.0 (M); 1.4	ID	450	NA	130	10	670 (G)	6.7 (G)	3 (G)	11	100	13 (G)	5.2	NA	29	NA	2,800 (G)
GSI Final Acute Value (FAV)			220	200	11	ID	6,800	NA	2,300	680	3,844 (G)	120	13 (G)	1,588	740	39 (G)	NA	NA	551	NA	12,112 (G)
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			2,000 (S)	31,000 (S)	1,000 (S)	140 (S)	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV
Groundwater Concentration for Vapor Intrusion (GW _{VI-reg}) (a)			7.1E+04	240	110	410	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV	NA	NLV	NLV	NLV	NLV
Water Solubility (VII)			1,980	31,000	1,000	135	8.28E+7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flammability & Explosivity Screening Level (VIII)			ID	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID
ID	SAMPLE ID	SAMPLE DATE																			
MW-35	W-R2330021-041816-AEP-001	4/18/2016	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	11 J	NS	NS	6.3 J
MW-35 ^A	W-R2330021-103116-JPM-002	10/31/2016						50 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	190 J	NS	NS	19 J
MW-35	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	NS	NS	NS	8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	13 J	NS	NS	1.7 J
MW-35 ^A	W-R2330022-050117-AFB-036	5/1/2017						220	NS	NS	NS	NS	NS	NS	NS	NS	NS	790	NS	NS	29 J
MW-35	W-R2330022-050117-AFB-036	5/1/2017	NS	NS	NS	NS	NS	7.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	21 J	NS	NS	1.8 J
MW-35 ^A	W-R2330022-102317-DMS-002	10/23/2017						33	NS	NS	NS	NS	NS	NS	NS	NS	NS	110	NS	NS	12
MW-35	W-R2330022-102317-DMS-002	10/23/2017	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4.6	NS	NS	7.6
MW-35 ^A	W-R2330024-042318-JPM-002	4/23/2018						61	NS	NS	NS	NS	NS	NS	NS	NS	NS	210	NS	NS	18
MW-35	W-R2330024-042318-JPM-002	4/23/2018	NS	NS	NS	NS	NS	4.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	87	NS	NS	3.4 J
MW-36 ^A	W-R2330021-041816-JPM-002	4/18/2016						59	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,100	NS	NS	160
MW-36	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	NS	NS	NS	4.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	930	NS	NS	150
MW-36 ^A	W-R2330021-103116-AEM-001	10/31/2016						58	NS	NS	NS	NS	NS	NS	NS	NS	NS	490	NS	NS	150
MW-36	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	NS	NS	NS	7.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	340	NS	NS	130
MW-36 ^A	W-R2330022-050117-AFB-037	5/1/2017						240	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,100	NS	NS	250
MW-36	W-R2330022-050117-AFB-037	5/1/2017	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	380	NS	NS	140
MW-36 ^A	W-R2330022-102317-DMS-001	10/23/2017						25	NS	NS	NS	NS	NS	NS	NS	NS	NS	450	NS	NS	190
MW-36	W-R2330022-102317-DMS-001	10/23/2017	NS	NS	NS	NS	NS	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	490	NS	NS	200
MW-36 ^A	W-R2330024-102317-JPM-002	4/23/2018						220.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	580	NS	NS	190
MW-36	W-R2330024-102317-JPM-002	4/23/2018	NS	NS	NS	NS	NS	6.2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	87	NS	NS	130
CRA-266M ^A	W-R2330017-032015-ACN-030	3/20/2015						150	0.15 J	9.1	24 J	<1.0	0.18 J	0.41 J	0.86 J	1.6 J		750	1.3 J	<50	210
CRA-266M	W-R2330017-032015-ACN-030	3/20/2015	<5.0	<5.0	<2.0	<5.0	<5.0	<50	0.15 J	2.8 J	21 J	<1.0	0.23 J	0.16 J	0.60 J	1.1 J	<5.0	43 J	<3.0	<50	72
CRA-266M ^A	W-R2330017-111715-JPM-006	11/17/2015						8.6 J	NS	NS	NS	NS	NS	NS	NS	NS		480	NS	12,000	NS
CRA-266M	W-R2330017-111715-JPM-006	11/17/2015	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	31	NS	12,000	NS
CRA-266M ^A	W-R2330021-042216-JPM-032	4/22/2016						22 J	NS	NS	NS	NS	NS	NS	NS	NS		440	NS	NS	110
CRA-266M	W-R2330021-042216-JPM-032	4/22/2016	NS	NS	NS	NS	NS	33 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	100
CRA-266M ^A	W-R2330021-110216-JPM-015	11/2/2016						4.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	140 J	NS	NS	72
CRA-266M	W-R2330021-110216-JPM-015	11/2/2016	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	130 J	NS	NS	68
CRA-266M ^A	W-R2330022-042717-AFB-022	4/27/2017						29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	890	NS	NS	610
CRA-266M	W-R2330022-042717-AFB-022	4/27/2017	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	180 J	NS	NS	130
CRA-266M ^A	W-R2330024-042518-JPM-021	4/25/2018						<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	96
CRA-266M	W-R2330024-042518-JPM-021	4/25/2018	NS	NS	NS	NS	NS	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	380	NS	NS	98
SB-13 ^A	W-R2330009-121013-AJL-008	12/10/2013						120,000	2.8 J	300	730 J	5.9 J	4.0 J	240	140 J	510		310,000	250	<50	5,300
SB-13	W-R2330009-121013-AJL-008	12/10/2013	<5.0	<5.0	<2.0	<5.0	<5.0	23 J	0.37 J	<2.0	59 J	<1.0	0.071 J	<10	8.0 J	2.3 J	<0.005	71 J	0.072 J	<50	610
SB-14 ^A	W-R2330009-121013-AJL-007	12/10/2013						2,100	0.54 J	2.1 J	65 J	0.12 J	0.20 J	4.6 J	9.6 J	7.4		3,500	4.0	<50	800
SB-14	W-R2330009-121013-AJL-007	12/10/2013	<5.0	<5.0	<2.0	<5.0	<5.0	14 J	0.37 J	<2.0	49 J	<1.0	0.064 J	<10	5.4 J	1.9 J	<0.005	150 J	0.11 J	<50	470
SB-15 ^A	W-R2330009-120913-AJL-006	12/9/2013						790	0.32 J	2.0 J	33 J	<1.0	0.052 J	5.2 J	1.5 J	2.9 J		1,600	0.79 J	<50	53
SB-15	W-R2330009-120913-AJL-006	12/9/2013	<5.0	<5.0	<2.0	<5.0	<5.0	6.9 J	0.43 J	0.77 J	34 J	<1.0	<1.0	<10	2.2 J	2.0 J	2.3 J	770	<3.0	<50	53
SB-21 ^A	W-R2330009-120513-RD-001	12/5/2013						38,000 J	13 J	37 J	2,900	1.7 J	11	75 J	38 J	320		73,000	1,700	<50	1,800
SB-21	W-R2330009-120513-RD-001	12/5/2013	0.94 J	<5.0	<2.0	<5.0	0.44 J	24 J	0.97 J	2.3 J	2,000	<1.0	<1.0	1.7 J	5.5 J	2.3 J	6.9	13,000	0.49 J	<50	530
SB-22 ^A	W-R2330009-120513-RD-002	12/5/2013						1,900	2.2 J	<5.0	1000	<1.0	<1.0	8.1 J	4.3 J	40 J		16,000	59	<50	550
SB-22	W-R2330009-120513-RD-002	12/5/2013	<5.0	<5.0	<2.0	<5.0	<5.0	10 J	0.99 J	2.0 J	960	<1.0	<1.0	1.1 J	3.9 J	2.8 J	3.6 J	12,000	0.21 J	<50	560
SB-23 ^A	W-R2330009-120513-RD-003	12/5/2013						3,200	2.8 J	72	880 J	1.8 J	<1.0	130	40 J	150		8,600	86	<50	1,600
SB-23	W-R2330009-120513-RD-003	12/5/2013	<5.0	<5.0	<2.0	<5.0	<5.0	17 J	0.39 J	23	690	<1.0	<1.0	2.3 J	3.0 J	1.5 J	31	12,000	0.084 J	<50	70
SB-24 ^A	W-R2330009-120613-RD-004	12/6/2013						6,700	2.6 J	130	860 J	3.5 J	2.9 J	130	77 J	220		190,000	150	<50	4,100

Table 3
Summary Of Ground Water Sample Results

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

GROUNDWATER: Part 201/213 Generic Residential Cleanup Criteria Revised December 30, 2013 and Guidance Document for the Vapor Intrusion Pathway May 2013 Units: µg/L			Mercury	Nickel	Selenium (B)	Silver	Thallium	Vanadium	Zinc	
Residential Drinking Water Criteria (II)			2.0 (A)	100 (A)	50 (A)	34	2.0 (A)	4.5	2,400	
Residential Health-Based Drinking Water Value (E)			NA	NA	NA	NA	NA	NA	NA	
Ground Water Surface Water Interface Criteria (GSI) (III)			0.0013	73 (G)	5.0	0.2 (M); 0.06	3.7	27	170 (G)	
GSI Final Acute Value (FAV)			2.8	1,320 (G)	120	1.1	94	220	330 (G)	
Groundwater Volatilization to Indoor Air Inhalation Criteria (V)			56 (S)	NLV	NLV	NLV	NLV	NLV	NLV	
Groundwater Concentration for Vapor Intrusion (GW _{VIR}) (a)			NLV	NLV	NLV	NLV	NLV	NLV	NLV	
Water Solubility (VII)			56	NA	NA	NA	NA	NA	NA	
Flammability & Explosivity Screening Level (VIII)			ID	ID	ID	ID	ID	ID	ID	
ID	SAMPLE ID	SAMPLE DATE								
MW-35	W-R2330021-041816-AEP-001	4/18/2016	<0.2	<20	<5.0	<0.20	<2.0	<4.0	NS	
MW-35 ^A	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	NS	NS	NS	NS	NS	
MW-35	W-R2330021-103116-JPM-002	10/31/2016	NS	NS	NS	NS	NS	NS	NS	
MW-35 ^A	W-R2330022-050117-AFB-036	5/1/2017	NS	NS	NS	NS	NS	NS	NS	
MW-35	W-R2330022-050117-AFB-036	5/1/2017	NS	NS	NS	NS	NS	NS	NS	
MW-35 ^A	W-R2330022-102317-DMS-002	10/23/2017	NS	NS	NS	NS	NS	NS	NS	
MW-35	W-R2330022-102317-DMS-002	10/23/2017	NS	NS	NS	NS	NS	NS	NS	
MW-35 ^A	W-R2330024-042318-JPM-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	
MW-35	W-R2330024-042318-JPM-002	4/23/2018	NS	NS	NS	NS	NS	NS	NS	
MW-36 ^A	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	NS	NS	NS	NS	NS	
MW-36	W-R2330021-041816-JPM-002	4/18/2016	NS	NS	NS	NS	NS	NS	NS	
MW-36 ^A	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	NS	NS	NS	NS		
MW-36	W-R2330021-103116-AEM-001	10/31/2016	NS	NS	NS	NS	NS	NS		
MW-36 ^A	W-R2330022-050117-AFB-037	5/1/2017	NS	NS	NS	NS	NS	NS		
MW-36	W-R2330022-050117-AFB-037	5/1/2017	NS	NS	NS	NS	NS	NS		
MW-36 ^A	W-R2330022-102317-DMS-001	10/23/2017								
MW-36	W-R2330022-102317-DMS-001	10/23/2017								
MW-36 ^A	W-R2330024-102317-JPM-002	4/23/2018								
MW-36	W-R2330024-102317-JPM-002	4/23/2018								
CRA-266M ^A	W-R2330017-032015-ACN-030	3/20/2015								
CRA-266M	W-R2330017-032015-ACN-030	3/20/2015								
CRA-266M ^A	W-R2330017-111715-JPM-006	11/17/2015								
CRA-266M	W-R2330017-111715-JPM-006	11/17/2015								
CRA-266M ^A	W-R2330021-042216-JPM-032	4/22/2016								
CRA-266M	W-R2330021-042216-JPM-032	4/22/2016								
CRA-266M ^A	W-R2330021-110216-JPM-015	11/2/2016								
CRA-266M	W-R2330021-110216-JPM-015	11/2/2016								
CRA-266M ^A	W-R2330022-042717-AFB-022	4/27/2017								
CRA-266M	W-R2330022-042717-AFB-022	4/27/2017								
CRA-266M ^A	W-R2330024-042518-JPM-021	4/25/2018								
CRA-266M	W-R2330024-042518-JPM-021	4/25/2018								
SB-13 ^A	W-R2330009-121013-AJL-008	12/10/2013								
SB-13	W-R2330009-121013-AJL-008	12/10/2013								
SB-14 ^A	W-R2330009-121013-AJL-007	12/10/2013								
SB-14	W-R2330009-121013-AJL-007	12/10/2013								
SB-15 ^A	W-R2330009-120913-AJL-006	12/9/2013								
SB-15	W-R2330009-120913-AJL-006	12/9/2013								
SB-21 ^A	W-R2330009-120513-RD-001	12/5/2013								
SB-21	W-R2330009-120513-RD-001	12/5/2013								
SB-22 ^A	W-R2330009-120513-RD-002	12/5/2013								
SB-22	W-R2330009-120513-RD-002	12/5/2013								
SB-23 ^A	W-R2330009-120513-RD-003	12/5/2013								
SB-23	W-R2330009-120513-RD-003	12/5/2013								
SB-24 ^A	W-R2330009-120613-RD-004	12/6/2013								

Table 4
Total Depth to Bottom of Wells
and Estimated Sediment Accumulation

Van Buren Landfill Site
Van Buren Township, Wayne County, Michigan

Well ID	Total Depth of Well from TOC ³ (feet)	Total Depth of Well from TOC ³ (feet) 4/26/2018	Estimated Sediment Accumulation
MW-1	21.67	21.20	0.47
MW-3	14.80	13.15	1.65
MW-4	21.60	21.83	-0.23
MW-5	30.02	29.9	0.12
MW-6	16.38	16.23	0.15
MW-7	8.81	8.89	-0.08
MW-8	7.78	ND	ND
MW-9	14.81	14.71	0.10
MW-10	23.45	23.35	0.10
MW-11	18.12	18.2	-0.08
MW-12	18.66	17.59	1.07
MW-13	25.94	24.05	1.89
MW-14	17.70	17.7	0.00
MW-15	15.72	16.41	-0.69
MW-16	16.28	16.7	-0.42
MW-17	17.84	17.8	0.04
MW-18	16.66	16	0.66
MW-19	14.63	14.63	0.00
MW-20	15.47	14.88	0.59
MW-21	15.36	14.2	1.16
MW-22	15.42	14.87	0.55
MW-23	15.74	15.09	0.65
MW-24	16.19	14.4	1.79
MW-25	16.52	16.14	0.38
MW-26	17.19	17.31	-0.12
MW-27	13.97	13.9	0.07
MW-28	21.70	22.95	-1.25
MW-29	12.22	11.7	0.52
MW-30	12.36	12.45	-0.09
MW-31	8.99	8.92	0.07
MW-32	9.5	8.18	1.32
MW-33	18.59	18.15	0.44
MW-34	18.89	13.19	5.7
MW-35	10.48	10	0.48
MW-36	10.29	10.05	0.24
CRA-265M	13.95		
CRA-266M	12.15		
CRA-833M	16.80		
CRA-834M	14.55		

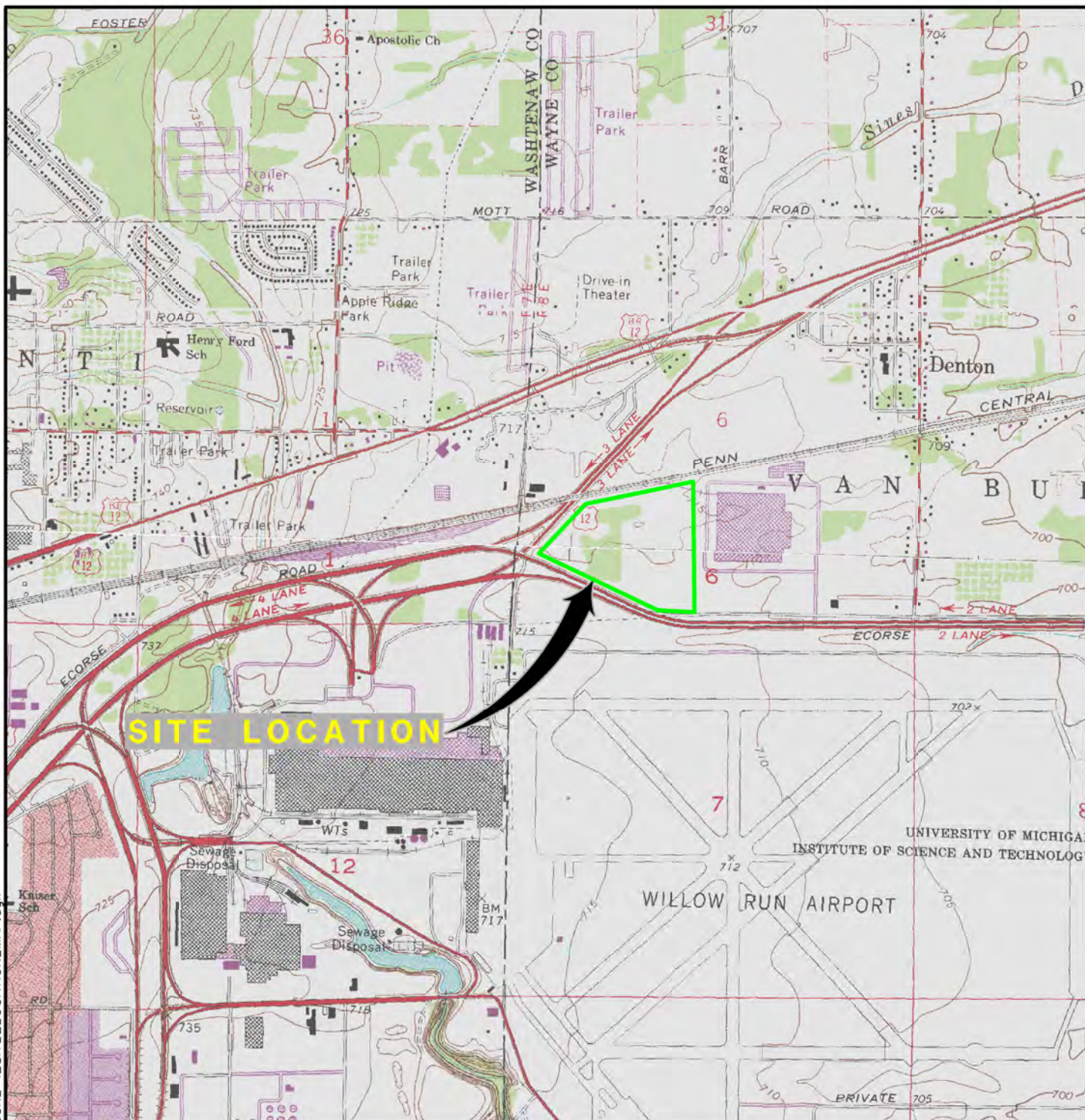
Notes:

MW-31, MW-32 and MW-33 were measured and redeveloped on April 7, 2016
MW-3, MW-12, MW-18, MW-32, MW-21, MW-23, MW-22, MW-26, MW-34 were measured and redeveloped in July of 2017

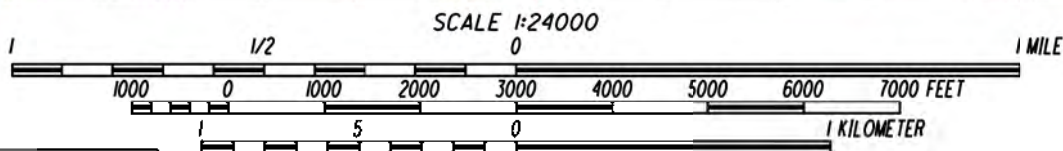
FIGURES



W:\Projects\Projects P-T\R2330012\CAD\R2330012-FIGURE 1-SITE-LOCATION-MAP.dgn



SITE LOCATION



CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



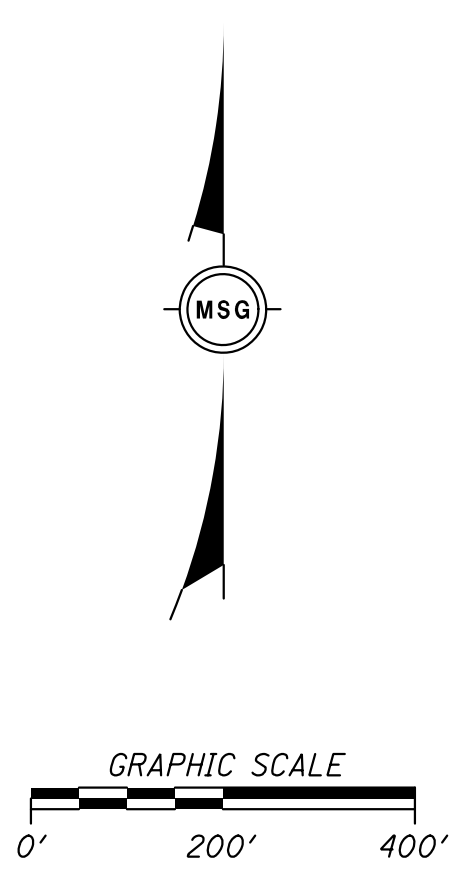
NOTE: MAP ADAPTED FROM USGS TOPOGRAPHIC QUADRANGLES, (MICHIGAN 7.5 MINUTE SERIES) DENTON, MICHIGAN (PHOTOGRAPHS TAKEN 1952 AND REVISED FROM PHOTOGRAPHS TAKEN 1966 AND FIELD CHECKED 1969, REVISED AGAIN IN 1982) AND YPSILANTI EAST, MICHIGAN (PHOTOGRAPHS TAKEN 1952, AND REVISIONS TAKEN FROM PHOTOGRAPHS TAKEN 1966, AND FIELD CHECKED 1967, REVISED AGAIN IN 1982)



**FIGURE 1
SITE LOCATION MAP**

VAN BUREN LANDFILL SITE
MICHIGAN AVE. & ECORSE RD.
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

DATE	DRAWN BY	DESIGNED BY	PROJECT NO.
3/12/14	CJB	MJF	R2330012



LEGEND

- PROPERTY LINE
- R/W LINE
- FENCE
- EXTENT OF EARTH DISTURBANCE BASED ON APRIL 26, 1970 AERIAL PHOTO
- GAS— EXISTING GAS MAIN
- FO— EXISTING FIBER OPTIC CABLE
- W— EXISTING FIRE WATER
- W— EXISTING WATER MAIN
- GROUND WATER ELEVATION CONTOUR (FEET ABOVE MSL)
- ST (3) THREE EX. PARALLEL STORM SEWERS
- SURFACE WATER SAMPLE LOCATION
- SOIL BORING LOCATION
- 712.36 MONITORING WELL LOCATION WITH GROUND WATER ELEVATION (FEET ABOVE MSL)
- TP-32 TEST PIT LOCATION

- GENERAL NOTES:
1. AERIAL PHOTO FROM SEMCOG DATED 2010.
 2. UTILITY LOCATIONS BASED ON INFORMATION FROM SAP/QAPP AND MISS DIG UTILITY MARKINGS.
 3. MW-34 WAS NOT USED IN CONTOURING.



MDEQ Part 201 Non-Residential Health Based Clean Up Criteria
Al = 4,100 ug/l
Fe = 5,600 ug/l
Mn = 2,500 ug/l

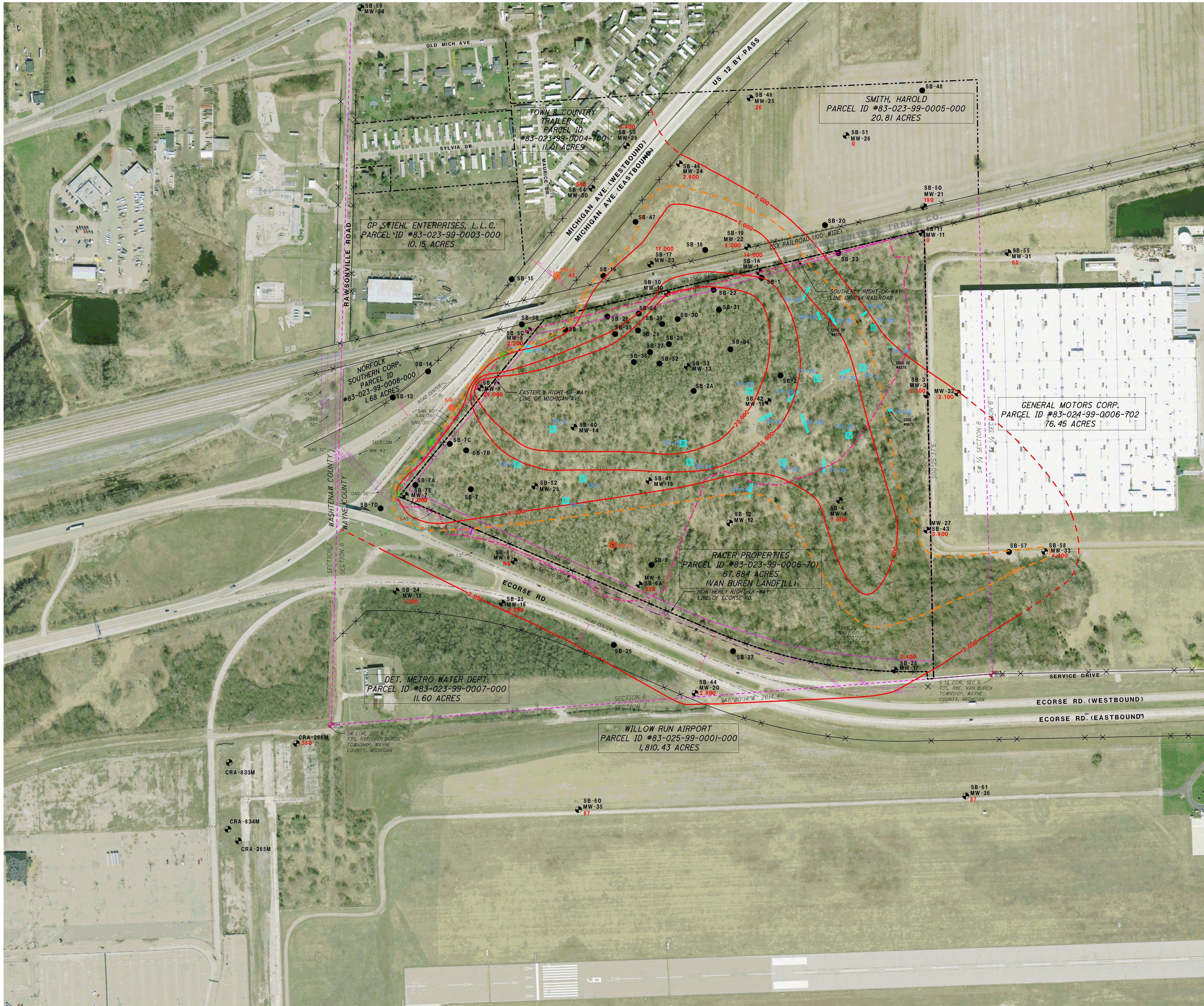
MDEQ Part 201 Residential Health Based Clean Up Criteria
Al = 300 ug/l
Fe = 2,000 ug/l
Mn = 660 ug/l

CHEMICAL ABBREVIATIONS
B = Benzene
Ba = Barium
As = Dissolved Arsenic
Fe = Dissolved Iron
Mn = Manganese
BC = Below Applicable Criteria

LEGEND

- PROPERTY LINE
- R/W LINE
- FENCE
- EXTENT OF EARTH DISTURBANCE
BASED ON APRIL 26, 1970
AERIAL PHOTO
- GAS - EXISTING GAS MAIN
- FO - EXISTING FIBER OPTIC CABLE
- EXISTING FIRE WATER
- EXISTING WATER MAIN
- EXISTING STORM
- ST (3) THREE EX. PARALLEL STORM SEWERS
- SURFACE WATER SAMPLE LOCATION
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- TEST PIT LOCATION
- TP-32

- GENERAL NOTES:
- AERIAL PHOTO FROM SEMCOG DATED 2010.
 - UTILITY LOCATIONS BASED ON INFORMATION FROM SAP/QAPP AND MISS DIG UTILITY MARKINGS.
 - OFF-SITE LOCATIONS COMPARED TO RESIDENTIAL CRITERIA. ON-SITE LOCATIONS COMPARED TO NON-RESIDENTIAL CRITERIA.
 - ALL RESULTS EXPRESSED IN MICROGRAMS PER LITER.
 - ONLY EXCEEDENCES OF NON-RESIDENTIAL HEALTH-BASED DRINKING WATER CRITERIA AND RESIDENTIAL HEALTH-BASED DRINKING WATER CRITERIA ARE SHOWN.
 - ONLY EXCEEDENCES OF DISSOLVED METALS ARE SHOWN. THERE ARE EXCEEDENCES OF TOTAL METALS NOT DISPLAYED IN THE FIGURE (REFER TO TABLE).



LEGEND

PROPERTY LINE

R/W LINE

FENCE

EXTENT OF EARTH DISTURBANCE
BASED ON APRIL 26, 1970
AERIAL PHOTO

GAS- EXISTING GAS MAIN

FO- EXISTING FIBER OPTIC CABLE

EXISTING FIRE WATER

EXISTING WATER MAIN

EXISTING STORM

ST (3)
THREE EX. PARALLEL STORM SEWERS

SURFACE WATER SAMPLE LOCATION

SOIL BORING LOCATION

MONITORING WELL LOCATION

TEST PIT LOCATION

TP-32

DISSOLVED IRON CONCENTRATION
AT WELL LOCATION

NS

DISSOLVED IRON ISOCONTOUR (ug/L)

PROPOSED NON-RESIDENTIAL HEALTH BASED
DRINKING WATER CRITERIAL (4,200 ug/L)

4.400

NS

15.000

4.200

PROPERTY LINE

R/W LINE

FENCE

EXTENT OF EARTH DISTURBANCE
BASED ON APRIL 26, 1970
AERIAL PHOTO

GAS- EXISTING GAS MAIN

FO- EXISTING FIBER OPTIC CABLE

EXISTING FIRE WATER

EXISTING WATER MAIN

EXISTING STORM

ST (3)
THREE EX. PARALLEL STORM SEWERS

SURFACE WATER SAMPLE LOCATION

SOIL BORING LOCATION

MONITORING WELL LOCATION

TEST PIT LOCATION

TP-32

DISSOLVED IRON CONCENTRATION
AT WELL LOCATION

NS

DISSOLVED IRON ISOCONTOUR (ug/L)

PROPOSED NON-RESIDENTIAL HEALTH BASED
DRINKING WATER CRITERIAL (4,200 ug/L)

4.400

NS

15.000

4.200

GENERAL NOTES:

1. WELLS WERE ANALYZED FOR Fe, Al AND Mn (TOTALS AND DISSOLVED).
2. AERIAL PHOTO FROM SEMCOG DATED 2010.
3. UTILITY LOCATIONS BASED ON INFORMATION FROM SAP/OAPP AND MISS DIG UTILITY MARKINGS.
4. ALL RESULTS EXPRESSED IN MICROGRAMS PER LITER.
5. MW-8 AND MW-34 WAS NOT SAMPLED DUE TO FLOODING.
6. ISOCONTOURS NOT GENERATED USING MW-3, CRA-380 AND SW-3.
6. RESIDENTIAL HEALTH BASED DRINKING WATER CRITERIA FOR IRON IS 2,000 ug/L. PROPOSED RESIDENTIAL HEALTH BASED DRINKING WATER CRITERIA FOR IRON IS 4,200 ug/L.
7. IRON CONTOURS ALONG WEST BOUNDARY INCORPORATED SW-1 DATA COLLECTED IN 2014.

DESCRIPTION
PHASE III SITE INVESTIGATION
SAMPLING LOCATIONS

BY
CJB

DATE
7/19/14

NO.
1

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Preparing An Environmental
Environmental Response Trust

RACER

VAN BUREN LANDFILL SITE (11070)
MICHIGAN AVE. & ECORSE RD.
VAN BUREN TWP., WAYNE CO. MICHIGAN

FIGURE 4
DISSOLVED IRON
ISOCONCENTRATION MAP

ATTACHMENT 1

LOW FLOW GROUND WATER FIELD SAMPLING FORMS



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**TECHNICAL SKILL.
CREATIVE SPIRIT.**

DATE: 4/24/18

PERSONNEL: SPM/DMB

OBSERVERS: _____

SITE CONDITIONS: cloudy, sprinkle 55°F

DEPTH OF WELL: _____

DEPTH TO WATER LEVEL: 9.6

SCREEN LENGTH: _____

WELL DIAMETER:

TUBING TYPE: Teflon Line PE

CASING TYPE:

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: W-12330024-041218-2PM-D17

SAMPLE DATE: 4/24/18

SAMPLE TIME: 1353

Notes: started paging @ 1824

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

**TECHNICAL SKILL.
CREATIVE SPIRIT.**

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DATE: 4-25-18

PERSONNEL: DMS

OBSERVERS: _____

SITE CONDITIONS: Cloudy 55°

DEPTH OF WELL: 13.15

DEPTH TO WATER LEVEL: 4.18

SCREEN LENGTH: 51

WELL DIAMETER: 24

TUBING TYPE: Teflon Line PE

CASING TYPE: PLC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: W082830024-042518-DMJ-022
 SAMPLE DATE: 04-25-18
 SAMPLE TIME: 1115

Notes: purdy @ 1044 * Horizon broken

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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SAMPLE LOCATION:

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS: cloudy, 50°

DEPTH TO WATER LEVEL: 10.45

WELL DIAMETER: 2"

CASING TYPE: PVC

C:\Scans\R2330021\ADMINISTRATION\Ground Water Monitoring\October 2016\Low-Flow Sampling Field Form.xlsx

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**TECHNICAL SKILL.
CREATIVE SPIRIT.**

DATE: 4/26/18

PERSONNEL: JPM

OBSERVERS: _____

SITE CONDITIONS: Sunny 45° F

DEPTH OF WELL: _____

DEPTH TO WATER LEVEL: 8.89

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: Teflon Line PE

CASING TYPE: _____

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: W-R2330024-042618-IPM-024

SAMPLE DATE: 4/26/18

SAMPLE TIME: 1030

Notes: Start pricing @ 955

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

DATE: 4-25-18

PERSONNEL: DMS

OBSERVERS: _____

SITE CONDITIONS: 80 Cloudy 55°

DEPTH OF WELL: 16.23

DEPTH TO WATER LEVEL: 4.50

SCREEN LENGTH: 51

WELL DIAMETER: 20

TUBING TYPE: Teflon Line PE

CASING TYPE: PVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: WR2830024-042518-DMS-028

SAMPLE DATE: 4-25-18

SAMPLE TIME: 1420

Notes:

Start purge @ 1347

*Horiba Turbidity
Broken -

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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**TECHNICAL SKILL.
CREATIVE SPIRIT.**

SAMPLE LOCATION: NW-7

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

PERSONNEL: DMS

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

OBSERVERS: _____

SITE CONDITIONS: Summer - 605

DEPTH OF WELL: 8.89

DEPTH TO WATER LEVEL: 3.29

SCREEN LENGTH: 51

WELL DIAMETER: 2"

TUBING TYPE: Teflon Line PE

CASING TYPE: PVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: R2330024-042318-DMS-006

SAMPLE DATE: 24.23.12

SAMPLE TIME: ~~10:55~~ 1346

Notes: Start Bridge @ 1325

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS:

DATE: 4-26-18

PERSONNEL:

OBSERVERS:

DEPTH OF WELL: 14.71

SCREEN LENGTH: 51

TUBING TYPE: Teflon Line PE

DEPTH TO WATER LEVEL: 6.90

WELL DIAMETER: 211

CASING TYPE: 2N1

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

[illegible]

SAMPLE ID: WR2320022-042618-DMS-033

SAMPLE DATE: 05-20-18

SAMPLE TIME: 1040

Notes:

Start purge @ 1000

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

DATE: 04-24-03

PERSONNEL: DNS

OBSERVERS: _____

DEPTH OF WELL: 23.58

DEPTH TO WATER LEVEL: 13.4

SCREEN LENGTH: 51

WELL DIAMETER: 2"

TUBING TYPE: Teflon Line PE

CASING TYPE: DVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: WR2330024-042418-DMS-016

SAMPLE DATE: 04-24-18

SAMPLE TIME: 1335

Notes:

Start page @ 1306

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL
CREATIVE SPIRIT

DATE: 4-26-14

PERSONNEL: DMS

OBSERVERS: _____

SITE CONDITIONS: 30m x 50'

DEPTH OF WELL: 18.20

DEPTH TO WATER LEVEL: 7.07

SCREEN LENGTH: 51

WELL DIAMETER: 21

TUBING TYPE: Teflon Line PE

CASING TYPE: PVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: WR2330024-0426HB-DMS-032

SAMPLE DATE: 4-26-18

SAMPLE TIME: 910

Notes:

Start purge @ 841

* Horiba Broken and Turbidity

¹ – 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

Then started working

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TECHNICAL SKILL.
CREATIVE SPIRIT.

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS:

DATE: 4-25-18

PERSONNEL:

OBSERVERS:

DEPTH OF WELL:

SCREEN LENGTH:

TUBING TYPE: Teflon Line PE

DEPTH TO WATER LEVEL:

WELL DIAMETER:

CASING TYPE:

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

[illegible]

SAMPLE ID: M-R2330024-042518-DMS-020

SAMPLE DATE: 4-25-18

SAMPLE TIME: 945

Notes:

purge @ start purge @ 910

Note: Fished tubes out of wells +
Horiba Toramity is
off $\Rightarrow$ letting everything
else stabilize

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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DATE: 4/25/18

PROJECT #: R2330024

PERSONNEL: JPM

OBSERVERS: _____

SITE CONDITIONS: Sunny, clouds, 32 F

DEPTH OF WELL: _____

DEPTH TO WATER LEVEL: 1.91

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: Teflon Line PE

CASING TYPE: _____

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: W-17230024-042518-JPM-027
 SAMPLE DATE: 4/25/18
 SAMPLE TIME: 1338

Notes: Started flying @ 1300

[†] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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SAMPLE LOCATION: MW-19

DATE: 4/25/12

PROJECT #: R2330024

PERSONNEL: 3 pm

SITE NAME: RACER - Van Buren Landfill

OBSERVERS: _____

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS: mostly sunny 55°F

DEPTH OF WELL: _____

DEPTH TO WATER LEVEL: 2.23

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: Teflon Line PE

CASING TYPE: _____

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: W-2330024-042518-J8m-029

SAMPLE DATE: 4/25/18

SAMPLE TIME: 1440

Notes: Started porging @ 1356

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

LOW FLOW GROUND WATER SAMPLING FORM



DATE: 4-25-18

PERSONNEL: JPM

OBSERVERS: _____

DEPTH OF WELL: 14.88

SCREEN LENGTH: 5'

TUBING TYPE: Teflon Line PE

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE LOCATION: MU-20

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS: cloudy 55°

DEPTH TO WATER LEVEL: 5.08

WELL DIAMETER: 2"

CASING TYPE: PVC

TIME	WATER LEVEL (<0.3 feet once stabilized)	TEMP. ($^{\circ}$ F/ $^{\circ}$ C)	COND. (μ S/cm)	DO (mg/L) ¹	Ph	ORP (mV)	TURB. (NTU) ²	VOLUME PURGED (Gallons)	PUMP RATE (ml/min)	NOTES
		$\pm$ 3%	$\pm$ 3%	$\pm$ 10%	$\pm$ 0.1	$\pm$ 10 mV	$\pm$ 10%			
1500	5.11	52.2	3.06	2.42	7.24	101	840	1		
1505	5.09	51.6	3.10	1.93	7.21	44	736	2		
1510	5.10	51.2	3.11	1.66	7.21	2	708	3		
1515	5.10	51.6	3.11	1.53	7.21	-24	621	4		
1520	5.10	51.8	3.11	1.5	7.20	-38	396	5		
1525	5.10	51.9	3.10	1.48	7.26	-49	234	6		
1530	5.1	52.5	3.05	1.30	7.20	-58	176	7		
1535	5.1	52.8	3.04	1.23	7.26	-62	181	8		
1540	5.1	52.8	3.04	1.18	7.2	-66	171	9		

SAMPLE ID: WR2330024-042518-JPM-030

SAMPLE DATE: 4-25-18

SAMPLE TIME: 1540

Notes: porge @ 1452

¹ - 10% for values greater than 0.5 mg/L; if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

DATE: 4/24/18

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

PERSONNEL: JPM / PMS

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

OBSERVERS: _____

SITE CONDITIONS: cloudy, wind, 52°F

DEPTH OF WELL: 14.2

DEPTH TO WATER LEVEL: 5.6

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: Teflon Line PE

CASING TYPE: _____

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: W-R2330024-042418-JPM-013

SAMPLE DATE: 4/24/18

SAMPLE TIME: 1230

Notes: Started paying @ 1200

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

DATE: 4/24/19

PERSONNEL: JPM/DMS

OBSERVERS:

SITE CONDITIONS: cloudy, sprinkly 55°F

DEPTH OF WELL: metal bailore in

DEPTH TO WATER LEVEL: 4.41

SCREEN LENGTH:

WELL DIAMETER: _____

TUBING TYPE: Teflon Line PE

CASING TYPE: _____

MONITORING EQUIPMENT: ~~Bladder pump, Horiba meter, water level meter~~

Deri Pump, Horibal, Wam

SAMPLE ID: W-22330024 - 04/24/18 - JPM - 015

SAMPLE DATE: 4/24/18

SAMPLE TIME: 1315

Notes: Begin Purge @ 1245. Due to metal bailer stuck in well, a per pump was used in place of bladder pump

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

DATE: 4-24-18

SAMPLE LOCATION: MD-23

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

PERSONNEL: DMS

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

OBSERVERS: _____

SITE CONDITIONS: Cloudy, 50°

DEPTH OF WELL: 15.09

DEPTH TO WATER LEVEL: 6.83

SCREEN LENGTH: 5'

WELL DIAMETER: 2"

TUBING TYPE: Teflon Line PE

CASING TYPE: PVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

[illegible]

SAMPLE ID: W-R1330024-042418-DMS-014

SAMPLE DATE: 4-24-18

SAMPLE TIME: 1235

Notes: Start purge @ 1200 VOCs sampled here

[†] - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL

DATE: 9-24-10

SAMPLE LOCATION: NW-24

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

PERSONNEL: DMJ

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

OBSERVERS: _____

SITE CONDITIONS: Cloudy, 50°

DEPTH OF WELL: 14.40

DEPTH TO WATER LEVEL: 0.05

SCREEN LENGTH: 51

WELL DIAMETER: 21

TUBING TYPE: Teflon Line PE

CASING TYPE: PVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: M.R. 2330024-042418-DMS-009
 SAMPLE DATE: 2-24-18
 SAMPLE TIME: 950

Notes:

Start purge @ 90T

Vocs are this well

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

DATE: 4-24-18

SAMPLE LOCATION: MW-25

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

PERSONNEL: DMS

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

OBSERVERS: _____

SITE CONDITIONS: _____

DEPTH OF WELL: 110.14

DEPTH TO WATER LEVEL: 10.56

SCREEN LENGTH: 51

WELL DIAMETER: 20

TUBING TYPE: Teflon Line PE

CASING TYPE: PVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

[illegible]

SAMPLE ID: M-R2330024-042418-DMS-D10

SAMPLE DATE: 2-24-18

SAMPLE TIME: 1050

Notes:

Poray @ 1016

DVP-1 collected here

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

SAMPLE LOCATION: M117-210

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS: Cloudy, 50°

DEPTH TO WATER LEVEL: 0.52

WELL DIAMETER: 21"

CASING TYPE: PVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: 02-R2330024 042418-DMS-012
 SAMPLE DATE: 4-24-18
 SAMPLE TIME: 1145

Notes: Start prayer @ 11:00

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS:

DATE: 12/5

PERSONNEL: DMS

OBSERVERS: _____

DEPTH OF WELL: 13.90

SCREEN LENGTH: 5'

TUBING TYPE: Teflon Line PE

DEPTH TO WATER LEVEL:

WELL DIAMETER:

CASING TYPE:

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

[illegible]

SAMPLE ID: WR2330024-042518-DMS-024

SAMPLE DATE: 4-25-18

SAMPLE TIME: 1215

Notes:

Sam
parag(a) 1142

* Honor Turbidity Not working

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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DATE: 4/25/18

SITE CONDITIONS: cloudy 46°F

CASING TYPE: _____

C:\Scans\R2330021\ADMINISTRATION\Ground Water Monitoring\October 2016\Low-Flow Sampling Field Form.xlsx

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TECHNICAL SKILL.
CREATIVE SPIRIT.

DATE: 4/25/14

PROJECT #: R2330024

PERSONNEL: JPM

SITE NAME: RACER - Van Buren Landfill

OBSERVERS: _____

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS: _____

DEPTH OF WELL: _____

DEPTH TO WATER LEVEL: 3.89

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: Teflon Line PE

CASING TYPE: _____

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: W-22330024-042518-JEM-025

SAMPLE DATE: 4/25/18

SAMPLE TIME: 1148

Notes: Started purging @ 1120

* WH is below bladder

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

SAMPLE LOCATION: MW-34

PROJECT #: R2330024

SITE NAME: RACER - Van Buren Landfill

PERSONNEL: DMS

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

OBSERVERS: _____

SITE CONDITIONS: SWAMP 55°

DEPTH OF WELL: 13.19

DEPTH TO WATER LEVEL: 3.74

SCREEN LENGTH: 51

WELL DIAMETER: 21

TUBING TYPE: Teflon Line PE

CASING TYPE: ALC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: R1330020-042318-DMS-007

SAMPLE DATE: 2-23-18

SAMPLE TIME: 1500

Notes:

start purge @ 1425

- ¹ - 10% for values greater than 0.5 mg/L; if three DO values are less than 0.5 mg/L, consider the values as stabilized



OBSERVERS: _____

SITE CONDITIONS: Sunny, 50°

DEPTH OF WELL: 117.56

SCREEN LENGTH: 51

TUBING TYPE: Teflon Line PE

DEPTH TO WATER LEVEL: 3.05

WELL DIAMETER: 2"

CASING TYPE: PVC

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

[illegible]

Notes: Start Purge @ 910

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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TECHNICAL SKILL.
CREATIVE SPIRIT.

DATE: 4/23/18

PROJECT #: R2330024

PERSONNEL: JPM/dms

SITE NAME: RACER - Van Buren Landfill

OBSERVERS: _____

SITE ADDRESS: MI Ave and Ecorse Rd, Van Buren Twp, MI

SITE CONDITIONS: Sunny, slight wind, 50°F

DEPTH OF WELL: _____

DEPTH TO WATER LEVEL: 1.91

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: Teflon Line PE

CASING TYPE: _____

MONITORING EQUIPMENT: Bladder pump, Horiba meter, water level meter

SAMPLE ID: W-22330024-042318-JPM-002

SAMPLE DATE: 4/23/18

SAMPLE TIME: 950

Notes: Started purging @ 926

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

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**TECHNICAL SKILL.
CREATIVE SPIRIT.**

DATE: 4 26 19

PERSONNEL: JPM

OBSERVERS: _____

SITE CONDITIONS: Cloudy 45°F

DEPTH OF WELL: _____

DEPTH TO WATER LEVEL: 3.58

SCREEN LENGTH: _____

WELL DIAMETER: _____

TUBING TYPE: Teflon Line PE

CASING TYPE: _____

MONITORING EQUIPMENT: ~~Bladder pump, Horiba meter, water level meter~~

Perip. pump. Horiba WLM

SAMPLE ID: W- R2330024 - 042618 - JPM-021

SAMPLE DATE: 4/25/18

SAMPLE TIME: 945

Notes: Started puging @ 913

¹ - 10% for values greater than 0.5 mg/L, if three DO values are less than 0.5 mg/L, consider the values as stabilized

² - 10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized

ATTACHMENT 2

LABORATORY ANALYTICAL DATA REPORTS



Work Order: 1805002

Project Name:

RACER - Van Buren Landfill

The Mannik & Smith Group, Inc.

Frank Biehl

2365 Haggerty Road South

Suite 100

Canton, MI 48188

(734) 397-3100

11-May-2018



Certificate No: MN 998501



11-May-2018

Frank Biehl
The Mannik & Smith Group, Inc.
2365 Haggerty Road South
Suite 100
Canton, MI 48188

Re: **RACER - Van Buren Landfill**

Work Order: **1805002**

Dear Frank,

ALS Environmental received 36 samples on 01-May-2018 08:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 62.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Carey".

Electronically approved by: Bill Carey

Bill Carey
Project Manager

Report of Laboratory Analysis

Certificate No: MN 998501

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Work Order: 1805002

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1805002-01	W-R2330024-042318-DMS-001	Water		4/23/2018 10:00	5/1/2018 08:00	☐
1805002-02	W-R2330024-042318-JPM-002	Water		4/23/2018 09:50	5/1/2018 08:00	☐
1805002-03	W-R2330024-042318-DMS-003	Water		4/23/2018 12:10	5/1/2018 08:00	☐
1805002-04	W-R2330024-042318-JPM-004	Water		4/23/2018 11:38	5/1/2018 08:00	☐
1805002-05	W-R2330024-042318-DMS-005	Water		4/23/2018 12:55	5/1/2018 08:00	☐
1805002-06	W-R2330024-042318-DMS-006	Water		4/23/2018 13:46	5/1/2018 08:00	☐
1805002-07	W-R2330024-042318-DMS-007	Water		4/23/2018 15:00	5/1/2018 08:00	☐
1805002-08	W-R2330024-042318-DMS-008	Water		4/23/2018 16:00	5/1/2018 08:00	☐
1805002-09	W-R2330024-042418-DMS-009	Water		4/24/2018 09:50	5/1/2018 08:00	☐
1805002-10	W-R2330024-042418-DMS-010	Water		4/24/2018 10:50	5/1/2018 08:00	☐
1805002-11	W-R2330024-042418-JPM-011	Water		4/24/2018 10:15	5/1/2018 08:00	☐
1805002-12	W-R2330024-042418-DMS-012	Water		4/24/2018 11:45	5/1/2018 08:00	☐
1805002-13	W-R2330024-042418-JPM-013	Water		4/24/2018 12:30	5/1/2018 08:00	☐
1805002-14	W-R2330024-042418-DMS-014	Water		4/24/2018 12:35	5/1/2018 08:00	☐
1805002-15	W-R2330024-042418-JPM-015	Water		4/24/2018 13:15	5/1/2018 08:00	☐
1805002-16	W-R2330024-042418-DMS-016	Water		4/24/2018 13:35	5/1/2018 08:00	☐
1805002-17	W-R2330024-042418-JPM-017	Water		4/24/2018 13:53	5/1/2018 08:00	☐
1805002-18	W-R2330024-042418-DMS-018	Water		4/24/2018 14:55	5/1/2018 08:00	☐
1805002-19	W-R2330024-042418-JPM-019	Water		4/24/2018 15:05	5/1/2018 08:00	☐
1805002-20	W-R2330024-042518-DMS-020	Water		4/25/2018 09:45	5/1/2018 08:00	☐
1805002-21	W-R2330024-042518-JPM-021	Water		4/25/2018 09:45	5/1/2018 08:00	☐
1805002-22	W-R2330024-042518-DMS-022	Water		4/25/2018 11:15	5/1/2018 08:00	☐
1805002-23	W-R2330024-042518-JPM-023	Water		4/25/2018 11:05	5/1/2018 08:00	☐
1805002-24	W-R2330024-042518-DMS-024	Water		4/25/2018 12:15	5/1/2018 08:00	☐
1805002-25	W-R2330024-042518-JPM-025	Water		4/25/2018 11:48	5/1/2018 08:00	☐
1805002-26	W-R2330024-042518-DMS-026	Water		4/25/2018 13:20	5/1/2018 08:00	☐
1805002-27	W-R2330024-042518-JPM-027	Water		4/25/2018 13:38	5/1/2018 08:00	☐
1805002-28	W-R2330024-042518-DMS-028	Water		4/25/2018 14:20	5/1/2018 08:00	☐
1805002-29	W-R2330024-042518-JPM-029	Water		4/25/2018 14:40	5/1/2018 08:00	☐
1805002-30	W-R2330024-042518-JPM-030	Water		4/25/2018 15:40	5/1/2018 08:00	☐
1805002-31	W-R2330024-042518-DMS-031	Water		4/25/2018 16:00	5/1/2018 08:00	☐
1805002-32	W-R2330024-042618-DMS-032	Water		4/26/2018 09:10	5/1/2018 08:00	☐
1805002-33	W-R2330024-042618-DMS-033	Water		4/26/2018 10:40	5/1/2018 08:00	☐
1805002-34	W-R2330024-042618-JPM-034	Water		4/26/2018 10:30	5/1/2018 08:00	☐
1805002-35	W-R2330024-042618-DMS-035	Water		4/26/2018 11:00	5/1/2018 08:00	☐
1805002-36	Dup-1	Water		4/24/2018	5/1/2018 08:00	☐

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
WorkOrder: 1805002

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Work Order: 1805002

Case Narrative

Samples for the above noted Work Order were received on 5/1/2018. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:

No other deviations or anomalies were noted.

Metals:

No other deviations or anomalies were noted.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042318-DMS-001
Collection Date: 4/23/2018 10:00 AM

Work Order: 1805002
Lab ID: 1805002-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/3/18	Analyst: JF
BatchID: <u>117797</u>							
Aluminum	0.061		0.0026	0.010	mg/L	1	5/4/2018 13:01
Iron	0.21		0.015	0.080	mg/L	1	5/3/2018 14:32
Manganese	0.018		0.00026	0.0050	mg/L	1	5/3/2018 14:32
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/3/18	Analyst: JF
BatchID: <u>117797</u>							
Aluminum	0.0047	J	0.0026	0.010	mg/L	1	5/3/2018 14:33
Iron	0.087		0.015	0.080	mg/L	1	5/3/2018 14:33
Manganese	0.0034	J	0.00026	0.0050	mg/L	1	5/3/2018 14:33

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042318-JPM-002
Collection Date: 4/23/2018 09:50 AM

Work Order: 1805002
Lab ID: 1805002-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/3/18	Analyst: JF
BatchID: <u>117797</u>							
Aluminum	0.22		0.0026	0.010	mg/L	1	5/4/2018 13:03
Iron	0.58		0.015	0.080	mg/L	1	5/3/2018 14:35
Manganese	0.19		0.00026	0.0050	mg/L	1	5/3/2018 14:35
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/3/18	Analyst: JF
BatchID: <u>117797</u>							
Aluminum	0.0062	J	0.0026	0.010	mg/L	1	5/3/2018 14:36
Iron	0.087		0.015	0.080	mg/L	1	5/3/2018 14:36
Manganese	0.13		0.00026	0.0050	mg/L	1	5/3/2018 14:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042318-DMS-006
Collection Date: 4/23/2018 01:46 PM

Work Order: 1805002
Lab ID: 1805002-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.030		0.0026	0.010	mg/L	1	5/7/2018 15:14
Iron	7.2		0.015	0.080	mg/L	1	5/7/2018 15:14
Manganese	0.61		0.00026	0.0050	mg/L	1	5/7/2018 15:14
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.0046	J	0.0026	0.010	mg/L	1	5/7/2018 15:15
Iron	7.0		0.015	0.080	mg/L	1	5/7/2018 15:15
Manganese	0.60		0.00026	0.0050	mg/L	1	5/7/2018 15:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042318-DMS-007
Collection Date: 4/23/2018 03:00 PM

Work Order: 1805002
Lab ID: 1805002-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID:</u> 117914							
Aluminum	0.042		0.0026	0.010	mg/L	1	5/7/2018 15:17
Iron	1.8		0.015	0.080	mg/L	1	5/7/2018 15:17
Manganese	0.28		0.00026	0.0050	mg/L	1	5/7/2018 15:17
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID:</u> 117914							
Aluminum	U		0.0026	0.010	mg/L	1	5/7/2018 15:19
Iron	1.6		0.015	0.080	mg/L	1	5/7/2018 15:19
Manganese	0.28		0.00026	0.0050	mg/L	1	5/7/2018 15:19

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042318-DMS-008
Collection Date: 4/23/2018 04:00 PM

Work Order: 1805002
Lab ID: 1805002-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.0055	J	0.0026	0.010	mg/L	1	5/7/2018 15:26
Iron	0.030	J	0.015	0.080	mg/L	1	5/7/2018 15:26
Manganese	0.0015	J	0.00026	0.0050	mg/L	1	5/7/2018 15:26
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.018		0.0026	0.010	mg/L	1	5/7/2018 15:28
Iron	0.042	J	0.015	0.080	mg/L	1	5/7/2018 15:28
Manganese	0.0017	J	0.00026	0.0050	mg/L	1	5/7/2018 15:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-009
Collection Date: 4/24/2018 09:50 AM

Work Order: 1805002
Lab ID: 1805002-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.013		0.0026	0.010	mg/L	1	5/7/2018 15:30
Iron	3.4		0.015	0.080	mg/L	1	5/7/2018 15:30
Manganese	1.0		0.00026	0.0050	mg/L	1	5/7/2018 15:30
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	U		0.0026	0.010	mg/L	1	5/7/2018 15:31
Iron	2.6		0.015	0.080	mg/L	1	5/7/2018 15:31
Manganese	0.96		0.00026	0.0050	mg/L	1	5/7/2018 15:31
VOLATILE ORGANIC COMPOUNDS			SW8260B				Analyst: LSY
BatchID: <u>R235331</u>							
1,1,1-Trichloroethane	U		0.33	1.0	µg/L	1	5/5/2018 03:58
1,1,2,2-Tetrachloroethane	U		0.17	1.0	µg/L	1	5/5/2018 03:58
1,1,2-Trichloroethane	U		0.22	1.0	µg/L	1	5/5/2018 03:58
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	5/5/2018 03:58
1,1-Dichloroethane	U		0.48	1.0	µg/L	1	5/5/2018 03:58
1,1-Dichloroethene	U		0.36	1.0	µg/L	1	5/5/2018 03:58
1,2,4-Trichlorobenzene	U		0.25	5.0	µg/L	1	5/5/2018 03:58
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	5/5/2018 03:58
1,2-Dibromoethane	U		0.17	1.0	µg/L	1	5/5/2018 03:58
1,2-Dichlorobenzene	U		0.12	1.0	µg/L	1	5/5/2018 03:58
1,2-Dichloroethane	U		0.11	1.0	µg/L	1	5/5/2018 03:58
1,2-Dichloropropane	U		0.34	1.0	µg/L	1	5/5/2018 03:58
1,3-Dichlorobenzene	U		0.13	1.0	µg/L	1	5/5/2018 03:58
1,4-Dichlorobenzene	U		0.13	1.0	µg/L	1	5/5/2018 03:58
2-Butanone	U		0.47	25	µg/L	1	5/5/2018 03:58
2-Hexanone	U		0.50	50	µg/L	1	5/5/2018 03:58
4-Methyl-2-pentanone	U		0.52	50	µg/L	1	5/5/2018 03:58
Acetone	U		0.47	50	µg/L	1	5/5/2018 03:58
Benzene	U		0.42	1.0	µg/L	1	5/5/2018 03:58
Bromodichloromethane	U		0.22	1.0	µg/L	1	5/5/2018 03:58
Bromoform	U		0.56	1.0	µg/L	1	5/5/2018 03:58
Bromomethane	U		0.29	5.0	µg/L	1	5/5/2018 03:58
Carbon disulfide	U		0.39	5.0	µg/L	1	5/5/2018 03:58
Carbon tetrachloride	U		0.32	1.0	µg/L	1	5/5/2018 03:58
Chlorobenzene	U		0.21	1.0	µg/L	1	5/5/2018 03:58
Chloroethane	U		0.68	5.0	µg/L	1	5/5/2018 03:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-009
Collection Date: 4/24/2018 09:50 AM

Work Order: 1805002
Lab ID: 1805002-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	5/5/2018 03:58
Chloromethane	U		0.68	5.0	µg/L	1	5/5/2018 03:58
cis-1,2-Dichloroethene	U		0.38	1.0	µg/L	1	5/5/2018 03:58
cis-1,3-Dichloropropene	U		0.13	1.0	µg/L	1	5/5/2018 03:58
Cyclohexane	U		0.18	1.0	µg/L	1	5/5/2018 03:58
Dibromochloromethane	U		0.20	5.0	µg/L	1	5/5/2018 03:58
Dichlorodifluoromethane	U		0.30	5.0	µg/L	1	5/5/2018 03:58
Ethylbenzene	U		0.29	1.0	µg/L	1	5/5/2018 03:58
Isopropylbenzene	U		0.17	5.0	µg/L	1	5/5/2018 03:58
Methyl acetate	U		0.26	10	µg/L	1	5/5/2018 03:58
Methyl tert-butyl ether	U		0.21	5.0	µg/L	1	5/5/2018 03:58
Methylcyclohexane	U		0.090	1.0	µg/L	1	5/5/2018 03:58
Methylene chloride	U		0.16	5.0	µg/L	1	5/5/2018 03:58
Styrene	U		0.19	1.0	µg/L	1	5/5/2018 03:58
Tetrachloroethene	U		0.28	1.0	µg/L	1	5/5/2018 03:58
Toluene	U		0.32	1.0	µg/L	1	5/5/2018 03:58
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	5/5/2018 03:58
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	5/5/2018 03:58
Trichloroethene	U		0.33	1.0	µg/L	1	5/5/2018 03:58
Trichlorofluoromethane	U		0.24	1.0	µg/L	1	5/5/2018 03:58
Vinyl chloride	U		0.53	1.0	µg/L	1	5/5/2018 03:58
Xylenes, Total	U		0.74	3.0	µg/L	1	5/5/2018 03:58
Surr: 1,2-Dichloroethane-d4	98.2			75-120	%REC	1	5/5/2018 03:58
Surr: 4-Bromofluorobenzene	86.0			80-110	%REC	1	5/5/2018 03:58
Surr: Dibromofluoromethane	99.3			85-115	%REC	1	5/5/2018 03:58
Surr: Toluene-d8	99.6			85-110	%REC	1	5/5/2018 03:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-010
Collection Date: 4/24/2018 10:50 AM

Work Order: 1805002
Lab ID: 1805002-10
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	1.2		0.0026	0.010	mg/L	1	5/7/2018 15:33
Iron	1.7		0.015	0.080	mg/L	1	5/7/2018 15:33
Manganese	1.1		0.00026	0.0050	mg/L	1	5/7/2018 15:33
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.016		0.0026	0.010	mg/L	1	5/7/2018 15:35
Iron	0.026	J	0.015	0.080	mg/L	1	5/7/2018 15:35
Manganese	0.045		0.00026	0.0050	mg/L	1	5/7/2018 15:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-JPM-011
Collection Date: 4/24/2018 10:15 AM

Work Order: 1805002
Lab ID: 1805002-11
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	1.5		0.0026	0.010	mg/L	1	5/7/2018 15:36
Iron	5.9		0.015	0.080	mg/L	1	5/7/2018 15:36
Manganese	0.18		0.00026	0.0050	mg/L	1	5/7/2018 15:36
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.011		0.0026	0.010	mg/L	1	5/7/2018 15:38
Iron	0.045	J	0.015	0.080	mg/L	1	5/7/2018 15:38
Manganese	0.038		0.00026	0.0050	mg/L	1	5/7/2018 15:38

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-012
Collection Date: 4/24/2018 11:45 AM

Work Order: 1805002
Lab ID: 1805002-12
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.29		0.0026	0.010	mg/L	1	5/7/2018 15:39
Iron	0.47		0.015	0.080	mg/L	1	5/7/2018 15:39
Manganese	0.017		0.00026	0.0050	mg/L	1	5/7/2018 15:39
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.014		0.0026	0.010	mg/L	1	5/7/2018 15:46
Iron	U		0.015	0.080	mg/L	1	5/7/2018 15:46
Manganese	0.0054		0.00026	0.0050	mg/L	1	5/7/2018 15:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-JPM-013
Collection Date: 4/24/2018 12:30 PM

Work Order: 1805002
Lab ID: 1805002-13
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117914</u>							
Aluminum	0.27		0.0026	0.010	mg/L	1	5/7/2018 15:47
Iron	0.67		0.015	0.080	mg/L	1	5/7/2018 15:47
Manganese	0.15		0.00026	0.0050	mg/L	1	5/7/2018 15:47
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.0086	J	0.0026	0.010	mg/L	1	5/7/2018 16:07
Iron	0.19		0.015	0.080	mg/L	1	5/7/2018 16:07
Manganese	0.12		0.00026	0.0050	mg/L	1	5/7/2018 16:07

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-014
Collection Date: 4/24/2018 12:35 PM

Work Order: 1805002
Lab ID: 1805002-14
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.19		0.0026	0.010	mg/L	1	5/7/2018 16:08
Iron	12		0.015	0.080	mg/L	1	5/7/2018 16:08
Manganese	0.079		0.00026	0.0050	mg/L	1	5/7/2018 16:08
METALS BY ICP-MS (DISSOLVED)							
			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.029		0.0026	0.010	mg/L	1	5/7/2018 16:10
Iron	11		0.015	0.080	mg/L	1	5/7/2018 16:10
Manganese	0.073		0.00026	0.0050	mg/L	1	5/7/2018 16:10
VOLATILE ORGANIC COMPOUNDS							
			SW8260B				Analyst: LSY
BatchID: <u>R235331</u>							
1,1,1-Trichloroethane	U		0.33	1.0	µg/L	1	5/5/2018 04:22
1,1,2,2-Tetrachloroethane	U		0.17	1.0	µg/L	1	5/5/2018 04:22
1,1,2-Trichloroethane	U		0.22	1.0	µg/L	1	5/5/2018 04:22
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	5/5/2018 04:22
1,1-Dichloroethane	U		0.48	1.0	µg/L	1	5/5/2018 04:22
1,1-Dichloroethene	U		0.36	1.0	µg/L	1	5/5/2018 04:22
1,2,4-Trichlorobenzene	U		0.25	5.0	µg/L	1	5/5/2018 04:22
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	5/5/2018 04:22
1,2-Dibromoethane	U		0.17	1.0	µg/L	1	5/5/2018 04:22
1,2-Dichlorobenzene	U		0.12	1.0	µg/L	1	5/5/2018 04:22
1,2-Dichloroethane	U		0.11	1.0	µg/L	1	5/5/2018 04:22
1,2-Dichloropropane	U		0.34	1.0	µg/L	1	5/5/2018 04:22
1,3-Dichlorobenzene	U		0.13	1.0	µg/L	1	5/5/2018 04:22
1,4-Dichlorobenzene	U		0.13	1.0	µg/L	1	5/5/2018 04:22
2-Butanone	U		0.47	25	µg/L	1	5/5/2018 04:22
2-Hexanone	U		0.50	50	µg/L	1	5/5/2018 04:22
4-Methyl-2-pentanone	U		0.52	50	µg/L	1	5/5/2018 04:22
Acetone	U		0.47	50	µg/L	1	5/5/2018 04:22
Benzene	2.1		0.42	1.0	µg/L	1	5/5/2018 04:22
Bromodichloromethane	U		0.22	1.0	µg/L	1	5/5/2018 04:22
Bromoform	U		0.56	1.0	µg/L	1	5/5/2018 04:22
Bromomethane	U		0.29	5.0	µg/L	1	5/5/2018 04:22
Carbon disulfide	U		0.39	5.0	µg/L	1	5/5/2018 04:22
Carbon tetrachloride	U		0.32	1.0	µg/L	1	5/5/2018 04:22
Chlorobenzene	42		0.21	1.0	µg/L	1	5/5/2018 04:22
Chloroethane	U		0.68	5.0	µg/L	1	5/5/2018 04:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-014
Collection Date: 4/24/2018 12:35 PM

Work Order: 1805002
Lab ID: 1805002-14
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	5/5/2018 04:22
Chloromethane	U		0.68	5.0	µg/L	1	5/5/2018 04:22
cis-1,2-Dichloroethene	U		0.38	1.0	µg/L	1	5/5/2018 04:22
cis-1,3-Dichloropropene	U		0.13	1.0	µg/L	1	5/5/2018 04:22
Cyclohexane	U		0.18	1.0	µg/L	1	5/5/2018 04:22
Dibromochloromethane	U		0.20	5.0	µg/L	1	5/5/2018 04:22
Dichlorodifluoromethane	U		0.30	5.0	µg/L	1	5/5/2018 04:22
Ethylbenzene	U		0.29	1.0	µg/L	1	5/5/2018 04:22
Isopropylbenzene	U		0.17	5.0	µg/L	1	5/5/2018 04:22
Methyl acetate	U		0.26	10	µg/L	1	5/5/2018 04:22
Methyl tert-butyl ether	U		0.21	5.0	µg/L	1	5/5/2018 04:22
Methylcyclohexane	U		0.090	1.0	µg/L	1	5/5/2018 04:22
Methylene chloride	U		0.16	5.0	µg/L	1	5/5/2018 04:22
Styrene	U		0.19	1.0	µg/L	1	5/5/2018 04:22
Tetrachloroethene	U		0.28	1.0	µg/L	1	5/5/2018 04:22
Toluene	U		0.32	1.0	µg/L	1	5/5/2018 04:22
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	5/5/2018 04:22
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	5/5/2018 04:22
Trichloroethene	U		0.33	1.0	µg/L	1	5/5/2018 04:22
Trichlorofluoromethane	U		0.24	1.0	µg/L	1	5/5/2018 04:22
Vinyl chloride	U		0.53	1.0	µg/L	1	5/5/2018 04:22
Xylenes, Total	U		0.74	3.0	µg/L	1	5/5/2018 04:22
Surr: 1,2-Dichloroethane-d4	105			75-120	%REC	1	5/5/2018 04:22
Surr: 4-Bromofluorobenzene	87.6			80-110	%REC	1	5/5/2018 04:22
Surr: Dibromofluoromethane	104			85-115	%REC	1	5/5/2018 04:22
Surr: Toluene-d8	98.3			85-110	%REC	1	5/5/2018 04:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-JPM-015
Collection Date: 4/24/2018 01:15 PM

Work Order: 1805002
Lab ID: 1805002-15
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID:</u> 117916							
Aluminum	0.018		0.0026	0.010	mg/L	1	5/7/2018 16:12
Iron	9.4		0.015	0.080	mg/L	1	5/7/2018 16:12
Manganese	0.11		0.00026	0.0050	mg/L	1	5/7/2018 16:12
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID:</u> 117916							
Aluminum	U		0.0026	0.010	mg/L	1	5/7/2018 16:13
Iron	8.0		0.015	0.080	mg/L	1	5/7/2018 16:13
Manganese	0.11		0.00026	0.0050	mg/L	1	5/7/2018 16:13

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-016
Collection Date: 4/24/2018 01:35 PM

Work Order: 1805002
Lab ID: 1805002-16
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID: 117916</u>							
Aluminum	0.075		0.0026	0.010	mg/L	1	5/7/2018 16:15
Iron	20		0.015	0.080	mg/L	1	5/7/2018 16:15
Manganese	0.45		0.00026	0.0050	mg/L	1	5/7/2018 16:15
METALS BY ICP-MS (DISSOLVED)							
			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID: 117916</u>							
Aluminum	0.0073	J	0.0026	0.010	mg/L	1	5/7/2018 16:17
Iron	20		0.015	0.080	mg/L	1	5/7/2018 16:17
Manganese	0.45		0.00026	0.0050	mg/L	1	5/7/2018 16:17
VOLATILE ORGANIC COMPOUNDS							
			SW8260B				Analyst: LSY
<u>BatchID: R235331</u>							
1,1,1-Trichloroethane	U		0.33	1.0	µg/L	1	5/5/2018 04:46
1,1,2,2-Tetrachloroethane	U		0.17	1.0	µg/L	1	5/5/2018 04:46
1,1,2-Trichloroethane	U		0.22	1.0	µg/L	1	5/5/2018 04:46
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	5/5/2018 04:46
1,1-Dichloroethane	U		0.48	1.0	µg/L	1	5/5/2018 04:46
1,1-Dichloroethene	U		0.36	1.0	µg/L	1	5/5/2018 04:46
1,2,4-Trichlorobenzene	U		0.25	5.0	µg/L	1	5/5/2018 04:46
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	5/5/2018 04:46
1,2-Dibromoethane	U		0.17	1.0	µg/L	1	5/5/2018 04:46
1,2-Dichlorobenzene	U		0.12	1.0	µg/L	1	5/5/2018 04:46
1,2-Dichloroethane	U		0.11	1.0	µg/L	1	5/5/2018 04:46
1,2-Dichloropropane	U		0.34	1.0	µg/L	1	5/5/2018 04:46
1,3-Dichlorobenzene	U		0.13	1.0	µg/L	1	5/5/2018 04:46
1,4-Dichlorobenzene	U		0.13	1.0	µg/L	1	5/5/2018 04:46
2-Butanone	U		0.47	25	µg/L	1	5/5/2018 04:46
2-Hexanone	U		0.50	50	µg/L	1	5/5/2018 04:46
4-Methyl-2-pentanone	U		0.52	50	µg/L	1	5/5/2018 04:46
Acetone	U		0.47	50	µg/L	1	5/5/2018 04:46
Benzene	6.4		0.42	1.0	µg/L	1	5/5/2018 04:46
Bromodichloromethane	U		0.22	1.0	µg/L	1	5/5/2018 04:46
Bromoform	U		0.56	1.0	µg/L	1	5/5/2018 04:46
Bromomethane	U		0.29	5.0	µg/L	1	5/5/2018 04:46
Carbon disulfide	U		0.39	5.0	µg/L	1	5/5/2018 04:46
Carbon tetrachloride	U		0.32	1.0	µg/L	1	5/5/2018 04:46
Chlorobenzene	30		0.21	1.0	µg/L	1	5/5/2018 04:46
Chloroethane	U		0.68	5.0	µg/L	1	5/5/2018 04:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-016
Collection Date: 4/24/2018 01:35 PM

Work Order: 1805002
Lab ID: 1805002-16
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		0.46	1.0	µg/L	1	5/5/2018 04:46
Chloromethane	U		0.68	5.0	µg/L	1	5/5/2018 04:46
cis-1,2-Dichloroethene	U		0.38	1.0	µg/L	1	5/5/2018 04:46
cis-1,3-Dichloropropene	U		0.13	1.0	µg/L	1	5/5/2018 04:46
Cyclohexane	U		0.18	1.0	µg/L	1	5/5/2018 04:46
Dibromochloromethane	U		0.20	5.0	µg/L	1	5/5/2018 04:46
Dichlorodifluoromethane	U		0.30	5.0	µg/L	1	5/5/2018 04:46
Ethylbenzene	U		0.29	1.0	µg/L	1	5/5/2018 04:46
Isopropylbenzene	U		0.17	5.0	µg/L	1	5/5/2018 04:46
Methyl acetate	U		0.26	10	µg/L	1	5/5/2018 04:46
Methyl tert-butyl ether	U		0.21	5.0	µg/L	1	5/5/2018 04:46
Methylcyclohexane	U		0.090	1.0	µg/L	1	5/5/2018 04:46
Methylene chloride	U		0.16	5.0	µg/L	1	5/5/2018 04:46
Styrene	U		0.19	1.0	µg/L	1	5/5/2018 04:46
Tetrachloroethene	U		0.28	1.0	µg/L	1	5/5/2018 04:46
Toluene	U		0.32	1.0	µg/L	1	5/5/2018 04:46
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	5/5/2018 04:46
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	5/5/2018 04:46
Trichloroethene	U		0.33	1.0	µg/L	1	5/5/2018 04:46
Trichlorofluoromethane	U		0.24	1.0	µg/L	1	5/5/2018 04:46
Vinyl chloride	U		0.53	1.0	µg/L	1	5/5/2018 04:46
Xylenes, Total	U		0.74	3.0	µg/L	1	5/5/2018 04:46
Surr: 1,2-Dichloroethane-d4	103			75-120	%REC	1	5/5/2018 04:46
Surr: 4-Bromofluorobenzene	88.8			80-110	%REC	1	5/5/2018 04:46
Surr: Dibromofluoromethane	90.0			85-115	%REC	1	5/5/2018 04:46
Surr: Toluene-d8	100			85-110	%REC	1	5/5/2018 04:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-JPM-017
Collection Date: 4/24/2018 01:53 PM

Work Order: 1805002
Lab ID: 1805002-17
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.016		0.0026	0.010	mg/L	1	5/7/2018 16:18
Iron	15		0.015	0.080	mg/L	1	5/7/2018 16:18
Manganese	0.048		0.00026	0.0050	mg/L	1	5/7/2018 16:18
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.0035	J	0.0026	0.010	mg/L	1	5/7/2018 16:20
Iron	14		0.015	0.080	mg/L	1	5/7/2018 16:20
Manganese	0.048		0.00026	0.0050	mg/L	1	5/7/2018 16:20

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-DMS-018
Collection Date: 4/24/2018 02:55 PM

Work Order: 1805002
Lab ID: 1805002-18
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.40		0.0026	0.010	mg/L	1	5/7/2018 16:22
Iron	4.5		0.015	0.080	mg/L	1	5/7/2018 16:22
Manganese	0.51		0.00026	0.0050	mg/L	1	5/7/2018 16:22
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.0074	J	0.0026	0.010	mg/L	1	5/7/2018 16:28
Iron	3.4		0.015	0.080	mg/L	1	5/7/2018 16:28
Manganese	0.50		0.00026	0.0050	mg/L	1	5/7/2018 16:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042418-JPM-019
Collection Date: 4/24/2018 03:05 PM

Work Order: 1805002
Lab ID: 1805002-19
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.0064	J	0.0026	0.010	mg/L	1	5/7/2018 16:30
Iron	0.019	J	0.015	0.080	mg/L	1	5/7/2018 16:30
Manganese	0.0015	J	0.00026	0.0050	mg/L	1	5/7/2018 16:30
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.010	J	0.0026	0.010	mg/L	1	5/7/2018 16:31
Iron	0.032	J	0.015	0.080	mg/L	1	5/7/2018 16:31
Manganese	0.0019	J	0.00026	0.0050	mg/L	1	5/7/2018 16:31

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-DMS-020
Collection Date: 4/25/2018 09:45 AM

Work Order: 1805002
Lab ID: 1805002-20
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.021		0.0026	0.010	mg/L	1	5/7/2018 16:33
Iron	2.8		0.015	0.080	mg/L	1	5/7/2018 16:33
Manganese	0.40		0.00026	0.0050	mg/L	1	5/7/2018 16:33
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.014		0.0026	0.010	mg/L	1	5/7/2018 16:35
Iron	2.4		0.015	0.080	mg/L	1	5/7/2018 16:35
Manganese	0.42		0.00026	0.0050	mg/L	1	5/7/2018 16:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-JPM-021
Collection Date: 4/25/2018 09:45 AM

Work Order: 1805002
Lab ID: 1805002-21
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID:</u> 117916							
Aluminum	U		0.0026	0.010	mg/L	1	5/7/2018 16:36
Iron	0.36		0.015	0.080	mg/L	1	5/7/2018 16:36
Manganese	0.096		0.00026	0.0050	mg/L	1	5/7/2018 16:36
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID:</u> 117916							
Aluminum	U		0.0026	0.010	mg/L	1	5/7/2018 16:38
Iron	0.38		0.015	0.080	mg/L	1	5/7/2018 16:38
Manganese	0.098		0.00026	0.0050	mg/L	1	5/7/2018 16:38

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-DMS-022
Collection Date: 4/25/2018 11:15 AM

Work Order: 1805002
Lab ID: 1805002-22
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.47		0.0026	0.010	mg/L	1	5/7/2018 16:39
Iron	3.1		0.015	0.080	mg/L	1	5/7/2018 16:39
Manganese	0.24		0.00026	0.0050	mg/L	1	5/7/2018 16:39
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117916</u>							
Aluminum	0.028		0.0026	0.010	mg/L	1	5/7/2018 16:41
Iron	2.1		0.015	0.080	mg/L	1	5/7/2018 16:41
Manganese	0.23		0.00026	0.0050	mg/L	1	5/7/2018 16:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-JPM-023
Collection Date: 4/25/2018 11:05 AM

Work Order: 1805002
Lab ID: 1805002-23
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID:</u> 117918							
Aluminum	0.042		0.0026	0.010	mg/L	1	5/7/2018 16:51
Iron	4.1		0.015	0.080	mg/L	1	5/7/2018 16:51
Manganese	0.25		0.00026	0.0050	mg/L	1	5/7/2018 16:51
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID:</u> 117918							
Aluminum	U		0.0026	0.010	mg/L	1	5/7/2018 16:52
Iron	3.4		0.015	0.080	mg/L	1	5/7/2018 16:52
Manganese	0.25		0.00026	0.0050	mg/L	1	5/7/2018 16:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-DMS-024
Collection Date: 4/25/2018 12:15 PM

Work Order: 1805002
Lab ID: 1805002-24
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.17		0.0026	0.010	mg/L	1	5/7/2018 16:54
Iron	5.2		0.015	0.080	mg/L	1	5/7/2018 16:54
Manganese	0.11		0.00026	0.0050	mg/L	1	5/7/2018 16:54
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.0040	J	0.0026	0.010	mg/L	1	5/7/2018 16:56
Iron	3.9		0.015	0.080	mg/L	1	5/7/2018 16:56
Manganese	0.10		0.00026	0.0050	mg/L	1	5/7/2018 16:56

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-JPM-025
Collection Date: 4/25/2018 11:48 AM

Work Order: 1805002
Lab ID: 1805002-25
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID: 117918</u>							
Aluminum	0.070		0.0026	0.010	mg/L	1	5/7/2018 16:57
Iron	0.62		0.015	0.080	mg/L	1	5/7/2018 16:57
Manganese	0.11		0.00026	0.0050	mg/L	1	5/7/2018 16:57
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID: 117918</u>							
Aluminum	0.0067	J	0.0026	0.010	mg/L	1	5/7/2018 16:59
Iron	0.34		0.015	0.080	mg/L	1	5/7/2018 16:59
Manganese	0.092		0.00026	0.0050	mg/L	1	5/7/2018 16:59

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-DMS-026
Collection Date: 4/25/2018 01:20 PM

Work Order: 1805002
Lab ID: 1805002-26
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID: 117918</u>							
Aluminum	0.033		0.0026	0.010	mg/L	1	5/7/2018 17:01
Iron	8.1		0.015	0.080	mg/L	1	5/7/2018 17:01
Manganese	0.68		0.00026	0.0050	mg/L	1	5/7/2018 17:01
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
<u>BatchID: 117918</u>							
Aluminum	0.0080	J	0.0026	0.010	mg/L	1	5/7/2018 17:02
Iron	7.8		0.015	0.080	mg/L	1	5/7/2018 17:02
Manganese	0.69		0.00026	0.0050	mg/L	1	5/7/2018 17:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-JPM-027
Collection Date: 4/25/2018 01:38 PM

Work Order: 1805002
Lab ID: 1805002-27
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	7.5		0.0026	0.010	mg/L	1	5/7/2018 17:04
Iron	26		0.015	0.080	mg/L	1	5/7/2018 17:04
Manganese	1.7		0.00026	0.0050	mg/L	1	5/7/2018 17:04
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.064		0.0026	0.010	mg/L	1	5/7/2018 17:11
Iron	1.1		0.015	0.080	mg/L	1	5/7/2018 17:11
Manganese	0.13		0.00026	0.0050	mg/L	1	5/7/2018 17:11

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-DMS-028
Collection Date: 4/25/2018 02:20 PM

Work Order: 1805002
Lab ID: 1805002-28
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.032		0.0026	0.010	mg/L	1	5/7/2018 17:12
Iron	0.56		0.015	0.080	mg/L	1	5/7/2018 17:12
Manganese	0.26		0.00026	0.0050	mg/L	1	5/7/2018 17:12
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.0043	J	0.0026	0.010	mg/L	1	5/7/2018 17:14
Iron	0.25		0.015	0.080	mg/L	1	5/7/2018 17:14
Manganese	0.25		0.00026	0.0050	mg/L	1	5/7/2018 17:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-JPM-029
Collection Date: 4/25/2018 02:40 PM

Work Order: 1805002
Lab ID: 1805002-29
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.74		0.0026	0.010	mg/L	1	5/7/2018 17:16
Iron	3.2		0.015	0.080	mg/L	1	5/7/2018 17:16
Manganese	0.39		0.00026	0.0050	mg/L	1	5/7/2018 17:16
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.061		0.0026	0.010	mg/L	1	5/7/2018 17:17
Iron	2.2		0.015	0.080	mg/L	1	5/7/2018 17:17
Manganese	0.38		0.00026	0.0050	mg/L	1	5/7/2018 17:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-JPM-030
Collection Date: 4/25/2018 03:40 PM

Work Order: 1805002
Lab ID: 1805002-30
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.68		0.0026	0.010	mg/L	1	5/7/2018 17:19
Iron	3.9		0.015	0.080	mg/L	1	5/7/2018 17:19
Manganese	0.18		0.00026	0.0050	mg/L	1	5/7/2018 17:19
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.045		0.0026	0.010	mg/L	1	5/7/2018 17:21
Iron	2.9		0.015	0.080	mg/L	1	5/7/2018 17:21
Manganese	0.16		0.00026	0.0050	mg/L	1	5/7/2018 17:21

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042518-DMS-031
Collection Date: 4/25/2018 04:00 PM

Work Order: 1805002
Lab ID: 1805002-31
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 5/7/18		Analyst: JF
<u>BatchID: 117918</u>							
Aluminum	0.0031	J	0.0026	0.010	mg/L	1	5/7/2018 17:22
Iron	U		0.015	0.080	mg/L	1	5/7/2018 17:22
Manganese	U		0.00026	0.0050	mg/L	1	5/7/2018 17:22
METALS BY ICP-MS (DISSOLVED)			SW6020A		Prep: SW3005A / 5/7/18		Analyst: JF
<u>BatchID: 117918</u>							
Aluminum	U		0.0026	0.010	mg/L	1	5/7/2018 17:24
Iron	U		0.015	0.080	mg/L	1	5/7/2018 17:24
Manganese	U		0.00026	0.0050	mg/L	1	5/7/2018 17:24

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042618-DMS-032
Collection Date: 4/26/2018 09:10 AM

Work Order: 1805002
Lab ID: 1805002-32
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117918</u>							
Aluminum	0.020		0.0026	0.010	mg/L	1	5/7/2018 17:26
Iron	0.15		0.015	0.080	mg/L	1	5/7/2018 17:26
Manganese	0.085		0.00026	0.0050	mg/L	1	5/7/2018 17:26
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	0.0037	J	0.0026	0.010	mg/L	1	5/7/2018 17:40
Iron		U	0.015	0.080	mg/L	1	5/7/2018 17:40
Manganese	0.012		0.00026	0.0050	mg/L	1	5/7/2018 17:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042618-DMS-033
Collection Date: 4/26/2018 10:40 AM

Work Order: 1805002
Lab ID: 1805002-33
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	0.012		0.0026	0.010	mg/L	1	5/7/2018 17:42
Iron	30		0.015	0.080	mg/L	1	5/7/2018 17:42
Manganese	0.23		0.00026	0.0050	mg/L	1	5/7/2018 17:42
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	0.0059	J	0.0026	0.010	mg/L	1	5/7/2018 17:44
Iron	29		0.015	0.080	mg/L	1	5/7/2018 17:44
Manganese	0.23		0.00026	0.0050	mg/L	1	5/7/2018 17:44

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042618-JPM-034
Collection Date: 4/26/2018 10:30 AM

Work Order: 1805002
Lab ID: 1805002-34
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	0.32		0.0026	0.010	mg/L	1	5/7/2018 17:45
Iron	5.0		0.015	0.080	mg/L	1	5/7/2018 17:45
Manganese	0.074		0.00026	0.0050	mg/L	1	5/7/2018 17:45
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	0.020		0.0026	0.010	mg/L	1	5/7/2018 17:47
Iron	4.2		0.015	0.080	mg/L	1	5/7/2018 17:47
Manganese	0.064		0.00026	0.0050	mg/L	1	5/7/2018 17:47

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18

Client: The Mannik & Smith Group, Inc.
Project: RACER - Van Buren Landfill
Sample ID: W-R2330024-042618-DMS-035
Collection Date: 4/26/2018 11:00 AM

Work Order: 1805002
Lab ID: 1805002-35
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	0.0043	J	0.0026	0.010	mg/L	1	5/7/2018 17:53
Iron	U		0.015	0.080	mg/L	1	5/7/2018 17:53
Manganese	U		0.00026	0.0050	mg/L	1	5/7/2018 17:53
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	0.0072	J	0.0026	0.010	mg/L	1	5/7/2018 17:55
Iron	0.015	J	0.015	0.080	mg/L	1	5/7/2018 17:55
Manganese	U		0.00026	0.0050	mg/L	1	5/7/2018 17:55

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 11-May-18**Client:** The Mannik & Smith Group, Inc.**Project:** RACER - Van Buren Landfill**Sample ID:** Dup-1**Collection Date:** 4/24/2018**Work Order:** 1805002**Lab ID:** 1805002-36**Matrix:** WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	1.0		0.0026	0.010	mg/L	1	5/7/2018 17:57
Iron	1.6		0.015	0.080	mg/L	1	5/7/2018 17:57
Manganese	1.1		0.00026	0.0050	mg/L	1	5/7/2018 17:57
METALS BY ICP-MS (DISSOLVED)			SW6020A			Prep: SW3005A / 5/7/18	Analyst: JF
BatchID: <u>117924</u>							
Aluminum	0.016		0.0026	0.010	mg/L	1	5/7/2018 17:58
Iron	0.020	J	0.015	0.080	mg/L	1	5/7/2018 17:58
Manganese	0.038		0.00026	0.0050	mg/L	1	5/7/2018 17:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **117797** Instrument ID **ICPMS3** Method: **SW6020A**

MBLK		Sample ID: MBLK-117797-117797				Units: mg/L		Analysis Date: 5/3/2018 02:15 PM		
Client ID:		Run ID: ICPMS3_180503A				SeqNo: 5016207		Prep Date: 5/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Aluminum	U	0.010								
Iron	U	0.080								
Manganese	0.000774	0.0050								J

LCS		Sample ID: LCS-117797-117797				Units: mg/L		Analysis Date: 5/3/2018 02:17 PM		
Client ID:		Run ID: ICPMS3_180503A				SeqNo: 5016208		Prep Date: 5/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Iron	10.29	0.080	10	0	103	80-120	0			
Manganese	0.1005	0.0050	0.1	0	101	80-120	0			

LCS		Sample ID: LCS-117797-117797				Units: mg/L		Analysis Date: 5/4/2018 01:00 PM		
Client ID:		Run ID: ICPMS3_180504A				SeqNo: 5018416		Prep Date: 5/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Aluminum	0.1004	0.010	0.1	0	100	80-120	0			
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MS		Sample ID: 1805066-02DMS				Units: mg/L		Analysis Date: 5/3/2018 03:00 PM		
Client ID:		Run ID: ICPMS3_180503A				SeqNo: 5017516		Prep Date: 5/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Aluminum	0.1624	0.010	0.1	0.06968	92.7	75-125	0			
Iron	16.74	0.080	10	6.922	98.2	75-125	0			
Manganese	1.499	0.0050	0.1	1.42	79.5	75-125	0			O

MSD		Sample ID: 1805066-02DMSD				Units: mg/L		Analysis Date: 5/3/2018 03:01 PM		
Client ID:		Run ID: ICPMS3_180503A				SeqNo: 5017517		Prep Date: 5/3/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Aluminum	0.1609	0.010	0.1	0.06968	91.2	75-125	0.1624	0.93	20	
Iron	16.34	0.080	10	6.922	94.2	75-125	16.74	2.4	20	
Manganese	1.424	0.0050	0.1	1.42	3.88	75-125	1.499	5.17	20	SO

The following samples were analyzed in this batch:

1805002-01A	1805002-01B	1805002-02A
1805002-02B	1805002-03A	1805002-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **117914** Instrument ID **ICPMS3** Method: **SW6020A**

MBLK		Sample ID: MBLK-117914-117914				Units: mg/L		Analysis Date: 5/7/2018 03:04 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022209		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	U	0.010								
Iron	U	0.080								
Manganese	U	0.0050								

LCS		Sample ID: LCS-117914-117914				Units: mg/L		Analysis Date: 5/7/2018 03:25 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022222		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.09937	0.010	0.1	0	99.4	80-120	0			
Iron	9.941	0.080	10	0	99.4	80-120	0			
Manganese	0.0995	0.0050	0.1	0	99.5	80-120	0			

MS		Sample ID: 1805308-01AMS				Units: mg/L		Analysis Date: 5/7/2018 03:51 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022238		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.005	0.10	1	0.04003	96.5	75-125	0			
Iron	96.23	0.80	100	-0.04335	96.3	75-125	0			
Manganese	2.105	0.050	1	1.273	83.2	75-125	0			

MSD		Sample ID: 1805308-01AMSD				Units: mg/L		Analysis Date: 5/7/2018 03:52 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022239		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.014	0.10	1	0.04003	97.4	75-125	1.005	0.837	20	
Iron	97.88	0.80	100	-0.04335	97.9	75-125	96.23	1.7	20	
Manganese	2.142	0.050	1	1.273	86.9	75-125	2.105	1.74	20	

The following samples were analyzed in this batch:

1805002-04A	1805002-04B	1805002-05A
1805002-05B	1805002-06A	1805002-06B
1805002-07A	1805002-07B	1805002-08A
1805002-08B	1805002-09A	1805002-09B
1805002-10A	1805002-10B	1805002-11A
1805002-11B	1805002-12A	1805002-12B
1805002-13A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **117916** Instrument ID **ICPMS3** Method: **SW6020A**

MBLK		Sample ID: MBLK-117916-117916				Units: mg/L		Analysis Date: 5/7/2018 03:54 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022240		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	U	0.010								
Iron	U	0.080								
Manganese	U	0.0050								

LCS		Sample ID: LCS-117916-117916				Units: mg/L		Analysis Date: 5/7/2018 03:55 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022241		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1019	0.010	0.1	0	102	80-120	0			
Iron	9.782	0.080	10	0	97.8	80-120	0			
Manganese	0.1007	0.0050	0.1	0	101	80-120	0			

MS		Sample ID: 18041512-01BMS				Units: mg/L		Analysis Date: 5/7/2018 03:59 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022243		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	6.248	0.010	0.1	5.023	1230	75-125	0			SO
Iron	15.13	0.080	10	4.868	103	75-125	0			
Manganese	0.1429	0.0050	0.1	0.04528	97.7	75-125	0			

MSD		Sample ID: 18041512-01BMSD				Units: mg/L		Analysis Date: 5/7/2018 04:00 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022244		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	6.263	0.010	0.1	5.023	1240	75-125	6.248	0.229	20	SO
Iron	15.05	0.080	10	4.868	102	75-125	15.13	0.541	20	
Manganese	0.1408	0.0050	0.1	0.04528	95.5	75-125	0.1429	1.51	20	

The following samples were analyzed in this batch:

1805002-13B	1805002-14A	1805002-14B
1805002-15A	1805002-15B	1805002-16A
1805002-16B	1805002-17A	1805002-17B
1805002-18A	1805002-18B	1805002-19A
1805002-19B	1805002-20A	1805002-20B
1805002-21A	1805002-21B	1805002-22A
1805002-22B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **117918** Instrument ID **ICPMS3** Method: **SW6020A**

MBLK		Sample ID: MBLK-117918-117918				Units: mg/L		Analysis Date: 5/7/2018 04:43 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022270		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	U	0.010								
Iron	U	0.080								
Manganese	U	0.0050								

LCS		Sample ID: LCS-117918-117918				Units: mg/L		Analysis Date: 5/7/2018 04:49 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022274		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1066	0.010	0.1	0	107	80-120	0			
Iron	9.929	0.080	10	0	99.3	80-120	0			
Manganese	0.104	0.0050	0.1	0	104	80-120	0			

MS		Sample ID: 1805283-02AMS				Units: mg/L		Analysis Date: 5/7/2018 05:34 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022301		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.149	0.10	1	0.08672	106	75-125	0			
Iron	97.38	0.80	100	1.612	95.8	75-125	0			
Manganese	7.159	0.050	1	6.107	105	75-125	0			O

MSD		Sample ID: 1805283-02AMSD				Units: mg/L		Analysis Date: 5/7/2018 05:35 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022302		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.127	0.10	1	0.08672	104	75-125	1.149	1.94	20	
Iron	96.86	0.80	100	1.612	95.3	75-125	97.38	0.529	20	
Manganese	7.224	0.050	1	6.107	112	75-125	7.159	0.9	20	O

The following samples were analyzed in this batch:

1805002-23A	1805002-23B	1805002-24A
1805002-24B	1805002-25A	1805002-25B
1805002-26A	1805002-26B	1805002-27A
1805002-27B	1805002-28A	1805002-28B
1805002-29A	1805002-29B	1805002-30A
1805002-30B	1805002-31A	1805002-31B
1805002-32A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **117924** Instrument ID **ICPMS3** Method: **SW6020A**

MBLK		Sample ID: MBLK-117924-117924				Units: mg/L		Analysis Date: 5/7/2018 05:37 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022303		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	U	0.010								
Iron	U	0.080								
Manganese	U	0.0050								

LCS		Sample ID: LCS-117924-117924				Units: mg/L		Analysis Date: 5/7/2018 05:39 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022304		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1051	0.010	0.1	0	105	80-120	0			
Iron	10	0.080	10	0	100	80-120	0			
Manganese	0.1011	0.0050	0.1	0	101	80-120	0			

MS		Sample ID: 1805309-01AMS				Units: mg/L		Analysis Date: 5/7/2018 06:06 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022321		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.048	0.10	1	0.02129	103	75-125	0			
Iron	95.76	0.80	100	0.1773	95.6	75-125	0			
Manganese	1.019	0.050	1	0.04171	97.7	75-125	0			

MSD		Sample ID: 1805309-01AMSD				Units: mg/L		Analysis Date: 5/7/2018 06:08 PM		
Client ID:		Run ID: ICPMS3_180507A				SeqNo: 5022322		Prep Date: 5/7/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.071	0.10	1	0.02129	105	75-125	1.048	2.22	20	
Iron	97.66	0.80	100	0.1773	97.5	75-125	95.76	1.96	20	
Manganese	1.041	0.050	1	0.04171	99.9	75-125	1.019	2.09	20	

The following samples were analyzed in this batch:

1805002-32B	1805002-33A	1805002-33B
1805002-34A	1805002-34B	1805002-35A
1805002-35B	1805002-36A	1805002-36B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **R235331A** Instrument ID **VMS9** Method: **SW8260B**

MBLK		Sample ID: VLKW2-180504-R235331A				Units: µg/L		Analysis Date: 5/5/2018 02:21 AM		
Client ID:		Run ID: VMS9_180504B				SeqNo: 5019593		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	1.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	0.48	5.0								J
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: R235331A	Instrument ID VMS9	Method: SW8260B						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.27</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>17.65</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>88.2</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>19.64</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.2</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>20.34</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-110</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **R235331A** Instrument ID **VMS9** Method: **SW8260B**

LCS		Sample ID: VLCSW2-180504-R235331A				Units: µg/L		Analysis Date: 5/5/2018 01:32 AM		
Client ID:		Run ID: VMS9_180504B				SeqNo: 5019608		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.33	1.0	20	0	102	75-130	0			
1,1,2,2-Tetrachloroethane	23.15	1.0	20	0	116	75-130	0			
1,1,2-Trichloroethane	21.94	1.0	20	0	110	75-125	0			
1,1-Dichloroethane	22.08	1.0	20	0	110	68-142	0			
1,1-Dichloroethene	20.48	1.0	20	0	102	70-145	0			
1,2,4-Trichlorobenzene	18.57	1.0	20	0	92.8	70-135	0			
1,2-Dibromo-3-chloropropane	25.05	1.0	20	0	125	60-130	0			
1,2-Dibromoethane	22.36	1.0	20	0	112	67-155	0			
1,2-Dichlorobenzene	20.15	1.0	20	0	101	70-130	0			
1,2-Dichloroethane	21.46	1.0	20	0	107	78-125	0			
1,2-Dichloropropane	23.64	1.0	20	0	118	75-125	0			
1,3-Dichlorobenzene	19.93	1.0	20	0	99.6	75-130	0			
1,4-Dichlorobenzene	20.05	1.0	20	0	100	75-130	0			
2-Butanone	23.91	5.0	20	0	120	55-150	0			
2-Hexanone	20.96	5.0	20	0	105	60-135	0			
4-Methyl-2-pentanone	27.01	1.0	20	0	135	77-178	0			
Acetone	21.63	10	20	0	108	60-160	0			
Benzene	22.91	1.0	20	0	115	85-125	0			
Bromodichloromethane	21.52	1.0	20	0	108	75-125	0			
Bromoform	18.86	1.0	20	0	94.3	60-125	0			
Bromomethane	15.12	1.0	20	0	75.6	30-185	0			
Carbon disulfide	19.53	1.0	20	0	97.6	60-165	0			
Carbon tetrachloride	18.27	1.0	20	0	91.4	65-140	0			
Chlorobenzene	20.69	1.0	20	0	103	80-120	0			
Chloroethane	21.38	1.0	20	0	107	50-140	0			
Chloroform	21.33	1.0	20	0	107	80-130	0			
Chloromethane	15.26	1.0	20	0	76.3	46-148	0			
cis-1,2-Dichloroethene	22.45	1.0	20	0	112	75-134	0			
cis-1,3-Dichloropropene	22.36	1.0	20	0	112	70-130	0			
Dibromochloromethane	18.91	1.0	20	0	94.6	60-115	0			
Dichlorodifluoromethane	10.69	1.0	20	0	53.4	20-120	0			
Ethylbenzene	21.15	1.0	20	0	106	76-123	0			
Isopropylbenzene	21.97	1.0	20	0	110	80-127	0			
Methyl tert-butyl ether	19.89	1.0	20	0	99.4	68-129	0			
Methylene chloride	21.66	5.0	20	0	108	75-140	0			
Styrene	24.05	1.0	20	0	120	83-137	0			
Tetrachloroethene	20.73	1.0	20	0	104	68-166	0			
Toluene	20.64	1.0	20	0	103	76-125	0			
trans-1,2-Dichloroethene	21.46	1.0	20	0	107	80-140	0			
trans-1,3-Dichloropropene	21.13	1.0	20	0	106	56-132	0			
Trichloroethene	22.54	1.0	20	0	113	84-130	0			
Trichlorofluoromethane	15.65	1.0	20	0	78.2	60-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: R235331A	Instrument ID VMS9			Method: SW8260B			
Vinyl chloride	16.82	1.0	20	0	84.1	50-136	0
Xylenes, Total	67.15	3.0	60	0	112	76-127	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.5</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.98</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>105</i>	<i>80-110</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.92</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>105</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.71</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-110</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **R235331A** Instrument ID **VMS9** Method: **SW8260B**

MS				Sample ID: 1805184-01A MS			Units: µg/L		Analysis Date: 5/5/2018 08:00 AM	
Client ID:				Run ID: VMS9_180504B			SeqNo: 5019603		Prep Date:	
									DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	958	50	1000	0	95.8	75-130	0			
1,1,2,2-Tetrachloroethane	904.5	50	1000	0	90.4	75-130	0			
1,1,2-Trichloroethane	950.5	50	1000	0	95	75-125	0			
1,1-Dichloroethane	968.5	50	1000	0	96.8	68-142	0			
1,1-Dichloroethene	1044	50	1000	0	104	70-145	0			
1,2,4-Trichlorobenzene	758	50	1000	0	75.8	70-135	0			
1,2-Dibromo-3-chloropropane	976	50	1000	0	97.6	60-130	0			
1,2-Dibromoethane	963.5	50	1000	0	96.4	67-155	0			
1,2-Dichlorobenzene	911	50	1000	0	91.1	70-130	0			
1,2-Dichloroethane	968	50	1000	0	96.8	78-125	0			
1,2-Dichloropropane	1060	50	1000	0	106	75-125	0			
1,3-Dichlorobenzene	913	50	1000	0	91.3	75-130	0			
1,4-Dichlorobenzene	918.5	50	1000	0	91.8	75-130	0			
2-Butanone	967.5	250	1000	0	96.8	55-150	0			
2-Hexanone	833.5	250	1000	0	83.4	60-135	0			
4-Methyl-2-pentanone	1088	50	1000	0	109	77-178	0			
Acetone	947.5	500	1000	0	94.8	60-160	0			
Benzene	1097	50	1000	0	110	85-125	0			
Bromodichloromethane	931.5	50	1000	0	93.2	75-125	0			
Bromoform	752.5	50	1000	0	75.2	60-125	0			
Bromomethane	3466	50	1000	0	347	30-185	0			S
Carbon disulfide	1028	50	1000	0	103	60-165	0			
Carbon tetrachloride	914.5	50	1000	0	91.4	65-140	0			
Chlorobenzene	961	50	1000	0	96.1	80-120	0			
Chloroethane	1006	50	1000	0	101	50-140	0			
Chloroform	922.5	50	1000	0	92.2	80-130	0			
Chloromethane	870	50	1000	0	87	46-148	0			
cis-1,2-Dichloroethene	968.5	50	1000	0	96.8	75-134	0			
cis-1,3-Dichloropropene	883.5	50	1000	0	88.4	70-130	0			
Dibromochloromethane	804.5	50	1000	0	80.4	60-115	0			
Dichlorodifluoromethane	856.5	50	1000	0	85.6	20-120	0			
Ethylbenzene	1010	50	1000	0	101	76-123	0			
Isopropylbenzene	1007	50	1000	0	101	80-127	0			
Methyl tert-butyl ether	770	50	1000	0	77	68-129	0			
Methylene chloride	1083	250	1000	0	108	75-140	0			
Styrene	1084	50	1000	0	108	83-137	0			
Tetrachloroethene	1175	50	1000	0	118	68-166	0			
Toluene	1013	50	1000	0	101	76-125	0			
trans-1,2-Dichloroethene	971.5	50	1000	0	97.2	80-140	0			
trans-1,3-Dichloropropene	828	50	1000	0	82.8	56-132	0			
Trichloroethene	1020	50	1000	0	102	84-130	0			
Trichlorofluoromethane	873.5	50	1000	0	87.4	60-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: R235331A	Instrument ID VMS9		Method: SW8260B				
Vinyl chloride	1032	50	1000	0	103	50-136	0
Xylenes, Total	3113	150	3000	0	104	76-127	0
<i>Surr: 1,2-Dichloroethane-d4</i>	978.5	0	1000	0	97.8	75-120	0
<i>Surr: 4-Bromofluorobenzene</i>	990.5	0	1000	0	99	80-110	0
<i>Surr: Dibromofluoromethane</i>	1016	0	1000	0	102	85-115	0
<i>Surr: Toluene-d8</i>	996	0	1000	0	99.6	85-110	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: **R235331A** Instrument ID **VMS9** Method: **SW8260B**

MSD				Sample ID: 1805184-01A MSD			Units: µg/L		Analysis Date: 5/5/2018 08:24 AM	
Client ID:				Run ID: VMS9_180504B			SeqNo: 5019604		Prep Date:	
									DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	971.5	50	1000	0	97.2	75-130	958	1.4	30	
1,1,2,2-Tetrachloroethane	944.5	50	1000	0	94.4	75-130	904.5	4.33	30	
1,1,2-Trichloroethane	968.5	50	1000	0	96.8	75-125	950.5	1.88	30	
1,1-Dichloroethane	982.5	50	1000	0	98.2	68-142	968.5	1.44	30	
1,1-Dichloroethene	1068	50	1000	0	107	70-145	1044	2.23	30	
1,2,4-Trichlorobenzene	780.5	50	1000	0	78	70-135	758	2.92	30	
1,2-Dibromo-3-chloropropane	1002	50	1000	0	100	60-130	976	2.58	30	
1,2-Dibromoethane	996	50	1000	0	99.6	67-155	963.5	3.32	30	
1,2-Dichlorobenzene	948.5	50	1000	0	94.8	70-130	911	4.03	30	
1,2-Dichloroethane	957.5	50	1000	0	95.8	78-125	968	1.09	30	
1,2-Dichloropropane	1048	50	1000	0	105	75-125	1060	1.19	30	
1,3-Dichlorobenzene	968	50	1000	0	96.8	75-130	913	5.85	30	
1,4-Dichlorobenzene	952.5	50	1000	0	95.2	75-130	918.5	3.63	30	
2-Butanone	991	250	1000	0	99.1	55-150	967.5	2.4	30	
2-Hexanone	833.5	250	1000	0	83.4	60-135	833.5	0	30	
4-Methyl-2-pentanone	1212	50	1000	0	121	77-178	1088	10.8	30	
Acetone	974.5	500	1000	0	97.4	60-160	947.5	2.81	30	
Benzene	1111	50	1000	0	111	85-125	1097	1.27	30	
Bromodichloromethane	957	50	1000	0	95.7	75-125	931.5	2.7	30	
Bromoform	792.5	50	1000	0	79.2	60-125	752.5	5.18	30	
Bromomethane	3656	50	1000	0	366	30-185	3466	5.35	30	S
Carbon disulfide	1092	50	1000	0	109	60-165	1028	6.04	30	
Carbon tetrachloride	922.5	50	1000	0	92.2	65-140	914.5	0.871	30	
Chlorobenzene	1019	50	1000	0	102	80-120	961	5.86	30	
Chloroethane	1009	50	1000	0	101	50-140	1006	0.298	30	
Chloroform	954.5	50	1000	0	95.4	80-130	922.5	3.41	30	
Chloromethane	909.5	50	1000	0	91	46-148	870	4.44	30	
cis-1,2-Dichloroethene	1003	50	1000	0	100	75-134	968.5	3.5	30	
cis-1,3-Dichloropropene	921	50	1000	0	92.1	70-130	883.5	4.16	30	
Dibromochloromethane	850.5	50	1000	0	85	60-115	804.5	5.56	30	
Dichlorodifluoromethane	848	50	1000	0	84.8	20-120	856.5	0.997	30	
Ethylbenzene	1054	50	1000	0	105	76-123	1010	4.31	30	
Isopropylbenzene	1079	50	1000	0	108	80-127	1007	6.9	30	
Methyl tert-butyl ether	795.5	50	1000	0	79.6	68-129	770	3.26	30	
Methylene chloride	1092	250	1000	0	109	75-140	1083	0.873	30	
Styrene	1146	50	1000	0	115	83-137	1084	5.6	30	
Tetrachloroethene	1220	50	1000	0	122	68-166	1175	3.8	30	
Toluene	1070	50	1000	0	107	76-125	1013	5.43	30	
trans-1,2-Dichloroethene	1014	50	1000	0	101	80-140	971.5	4.28	30	
trans-1,3-Dichloropropene	878.5	50	1000	0	87.8	56-132	828	5.92	30	
Trichloroethene	1055	50	1000	0	106	84-130	1020	3.32	30	
Trichlorofluoromethane	891	50	1000	0	89.1	60-140	873.5	1.98	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Mannik & Smith Group, Inc.
Work Order: 1805002
Project: RACER - Van Buren Landfill

QC BATCH REPORT

Batch ID: R235331A		Instrument ID VMS9			Method: SW8260B				
Vinyl chloride	1062	50	1000	0	106	50-136	1032	2.86	30
Xylenes, Total	3314	150	3000	0	110	76-127	3113	6.27	30
Surr: 1,2-Dichloroethane-d4	950	0	1000	0	95	75-120	978.5	2.96	30
Surr: 4-Bromofluorobenzene	1028	0	1000	0	103	80-110	990.5	3.67	30
Surr: Dibromofluoromethane	981	0	1000	0	98.1	85-115	1016	3.46	30
Surr: Toluene-d8	1014	0	1000	0	101	85-110	996	1.79	30

The following samples were analyzed in this batch: | 1805002-09C | 1805002-14C | 1805002-16C |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Cincinnati, OH
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Chain of Custody Form

Page 1 of 4

COC ID: 47820

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Salt Lake City, UT
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South Charleston, WV
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ALS Project Manager:

ALS Work Order #: 1805002

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order		Project Name		A	Al, Fe, Mn											
Work Order		Project Number		B	Vocs											
Company Name	The Mannik & Smith Group, Inc.	Bill To Company	RACER Trust	C												
Send Report To		Invoice Attn	Accounts Payable	D												
Address	2365 Haggerty Road South	Address	2930 Ecorse Rd	E												
	Suite 100			F												
City/State/Zip	Canton, MI 48188	City/State/Zip	Ypsilanti, MI 48198	G												
Phone	(734) 397-3100	Phone		H												
Fax	(734) 397-3131	Fax		I												
e-Mail Address		e-Mail Address		J												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	W-R2330024-042318-DMS-001	4-23-18	1000	Water	2	2	X										
2	W-R2330024-042318-JPM-002	4-23-18	950	Water	2	2	X										
3	W-R2330024-042318-DMS-003	4-23-18	1210	Water	2	2	X										
4	W-R2330024-042318-JPM-004	4-23-18	1138	Water	2	2	X										
5	W-R2330024-042318-DMS-005	4-23-18	1255	Water	2	2	X										
6	W-R2330024-042318-DMS-006	4-23-18	1346	Water	2	2	X										
7	W-R2330024-042318-DMS-007	4-23-18	1500	Water	2	2	X										
8	W-R2330024-042318-DMS-008	4-23-18	1600	Water	2	2	X										
9	W-R2330024-042418-DMS-009	4-24-18	950	Water	2,1	5	X	X									
10	W-R2330024-042418-DMS-010	4-24-18	1050	Water	2	2	X										

Sampler(s) Please Print & Sign <i>Diane Shumshock</i>		Shipment Method		Turnaround Time in Business Days (BD) ☒ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD				Results Due Date:	
Relinquished by: <i>Diane Shumshock</i>	Date: 4-30-18	Time: 12:00	Received by:	Received by (Laboratory): <i>5/1/18 0800</i>		Notes:			
Relinquished by:	Date: 4-30-18	Time: 17:00	Received by (Laboratory):	Cooler ID: <i>SP2</i>	Cooler Temp: <i>3.4°C</i>	QC Package: (Check One Box Below)			
Logged by (Laboratory): <i>DFS</i>	Date: 5/1/18	Time: 0900	Checked by (Laboratory): <i>CA</i>	☐ Level II Std QC ☐ TRRP Checklist ☐ Level III Std QC/Raw Data ☐ TRRP Level IV ☐ Level IV SW846/CLP ☐ Other					
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035									

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South Charleston, WV
+1 304 356 3168

York, PA
+1 717 505 5280

ALS Project Manager:

ALS Work Order #:

1805002

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order		Project Name		A	Al, Fe, Mn											
Work Order		Project Number		B	Vocs											
Company Name	The Mannik & Smith Group, Inc.	Bill To Company	RACER Trust	C												
Send Report To		Invoice Attn	Accounts Payable	D												
Address	2385 Haggerty Road South	Address	2930 Ecorse Rd	E												
	Suite 100			F												
City/State/Zip	Canton, MI 48188	City/State/Zip	Ypsilanti, MI 48198	G												
Phone	(734) 397-3100	Phone		H												
Fax	(734) 397-3131	Fax		I												
e-Mail Address		e-Mail Address		J												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Field
11	W-R2330024-042418-JPM-011	4-24-18	1015	Water	2	2	X										
12	W-R2330024-042418-DMS-012	4-24-18	1145	Water	2	2	X										
13	W-R2330024-042418-JPM-013	4-24-18	1230	Water	2	2	X										
14	W-R2330024-042418-DMS-014	4-24-18	1235	Water	2,1	5	X	X									
15	W-R2330024-042418-JPM-015	4-24-18	1315	Water	2	2	X										
16	W-R2330024-042418-DMS-016	4-24-18	1335	Water	2,1	5	X	X									
17	W-R2330024-042418-JPM-017	4-24-18	1353	Water	2	2	X										
18	W-R2330024-042418-DMS-018	4-24-18	1455	Water	2	2	X										
19	W-R2330024-042418-JPM-019	4-24-18	1505	Water	2	2	X										
20	W-R2330024-042518-DMS-020	4-25-18	0945	Water	2	2	X										

Sampler(s) Please Print & Sign		Diane Shimsnack		Shipment Method		Turnaround Time in Business Days (BD)				☒ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD		Results Due Date:	
Relinquished by:		Date: 4-30-18		Time: 12:00		Received by:		Date: 4-30-18		Time: 17:00		Notes:	
Relinquished by:		Date: 4-30-18		Time: 17:00		Received by (Laboratory):		Date: 5/1/18		Time: 0800		QC Package: (Check One Box Below)	
Logged by (Laboratory):		Date: 5/1/18		Time: 0900		Checked by (Laboratory):		Date: 5/1/18		Time: 0900		☐ Level II Std QC ☐ TRRP Checklist ☐ Level III Std QC/Raw Data ☐ TRRP Level IV ☐ Level IV SW846/CLP ☐ Other	
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035													

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+1 304 356 3168

York, PA
+1 717 505 5280

ALS Project Manager:

ALS Work Order #: 1805002

Customer Information		Project Information		Parameter/Method Request for Analysis																
Purchase Order		Project Name		A	Al, Fe, Mn															
Work Order		Project Number		B	Vocs															
Company Name	The Mannik & Smith Group, Inc.	Bill To Company	RACER Trust	C																
Send Report To		Invoice Attn	Accounts Payable	D																
Address	2385 Haggerty Road South	Address	2930 Ecorse Rd	E																
	Suite 100			F																
City/State/Zip	Canton, MI 48188	City/State/Zip	Ypsilanti, MI 48198	G																
Phone	(734) 397-3100	Phone		H																
Fax	(734) 397-3131	Fax		I																
e-Mail Address		e-Mail Address		J																

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
21	W-R2330024-042518-JPM-021	4-25-18	945	Water	2	2	X										
22	W-R2330024-042518-DM5-022	4-25-18	1115	Water	2	2	X										
23	W-R2330024-042518-JPM-023	4-25-18	1105	Water	2	2	X										
24	W-R2330024-042518-DM5-024	4-25-18	1215	Water	2	2	X										
25	W-R2330024-042518-JPM-025	4-25-18	1148	Water	2	2	X										
26	W-R2330024-042518-DM5-026	4-25-18	1320	Water	2	2	X										
27	W-R2330024-042518-JPM-027	4-25-18	1338	Water	2	2	X										
28	W-R2330024-042518-DM5-028	4-25-18	1420	Water	2	2	X										
29	W-R2330024-042518-JPM-029	4-25-18	1440	Water	2	2	X										
30	W-R2330024-042518-JPM-030	4-25-18	1540	Water	2	2	X										

Sampler(s) Please Print & Sign <u>Diane Shmshock</u>		Shipment Method		Turnaround Time in Business Days (BD) ☒ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD				Results Due Date:	
Relinquished by: <u>[Signature]</u>	Date: <u>4-30-18</u>	Time: <u>12:00</u>	Received by: <u>[Signature]</u>	Notes:					
Relinquished by: <u>[Signature]</u>	Date: <u>4-30-18</u>	Time: <u>17:00</u>	Received by (Laboratory): <u>[Signature]</u>	Cooler ID: <u>SRZ</u>	Cooler Temp: <u>3.4°C</u>	QC Package: (Check One Box Below)			
Logged by (Laboratory): <u>DFS</u>	Date: <u>5/1/18</u>	Time: <u>09:00</u>	Checked by (Laboratory): <u>[Signature]</u>			☐ Level II Std QC ☐ TRRP Checklist ☐ Level III Std QC/Raw Data ☐ TRRP Level IV ☐ Level IV SW846/CLP ☐ Other			
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035									

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Spring City, PA
+1 610 948 4903

Salt Lake City, UT
+1 801 266 7700

South Charleston, WV
+1 304 356 3168

York, PA
+1 717 505 5280

ALS Project Manager:

ALS Work Order #: 1805002

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name		A	Al, Fe, Mn
Work Order		Project Number		B	Vocs,
Company Name	The Mannik & Smith Group, Inc.	Bill To Company	RACER Trust	C	
Send Report To		Invoice Attn	Accounts Payable	D	
Address	2365 Haggerty Road South Suite 100	Address	2930 Ecorse Rd	E	
City/State/Zip	Canton, MI 48188	City/State/Zip	Ypsilanti, MI 48198	F	
Phone	(734) 397-3100	Phone		G	
Fax	(734) 397-3131	Fax		H	
e-Mail Address		e-Mail Address		I	
				J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
31	W-R2330024-042518-DMS-031	4-25-18	1600	Water	2	2	X										
32	W-R2330024-042618-DMS-032	4-26-18	910	Water	2	2	X										
33	W-R2330024-042618-DMS-033	4-26-18	1040	Water	2	2	X										
34	W-R2330024-042618-JPM-034	4-26-18	1030	Water	2	2	X										
35	W-R2330024-042618-DMS-035	4-26-18	1100	Water	2	2	X										
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign <u>Diane Shimschack</u>		Shipment Method		Turnaround Time in Business Days (BD) ☒ 10 BD ☐ 15 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD				Results Due Date:	
Relinquished by: <u>Diane Shimschack</u>	Date: <u>4-30-18</u>	Time: <u>12:00</u>	Received by: <u>[Signature]</u>	Notes:					
Relinquished by: <u>[Signature]</u>	Date: <u>4-30-18</u>	Time: <u>17:00</u>	Received by (Laboratory): <u>[Signature]</u>	Cooler ID: <u>502</u>	Cooler Temp: <u>3.4°C</u>	QC Package: (Check One Box Below)			
Logged by (Laboratory): <u>DRS</u>	Date: <u>5/1/18</u>	Time: <u>0900</u>	Checked by (Laboratory): <u>[Signature]</u>			☐ Level II Std QC ☐ TRRP Checklist ☐ Level III Std QC/Raw Data ☐ TRRP Level IV ☐ Level IV SW846/CLP ☐ Other			
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₃ 7-Other 8-4°C 9-5035									

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Sample Receipt Checklist

Client Name: **MANNIK&SMITH**

Date/Time Received: **01-May-18 08:00**

Work Order: **1805002**

Received by: **DS**

Checklist completed by <u>Diane Shaw</u>	01-May-18	Reviewed by: <u>Bill Carey</u>	01-May-18
eSignature	Date	eSignature	Date

Matrices: **Water**

Carrier name: **Courier**

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Sample(s) received on ice?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>3.4/3.4 c</u> <u>SR2</u>		
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>5/1/2018 9:36:28 AM</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: