
CEDAR HILLS REGIONAL LANDFILL QUARTERLY ENVIRONMENTAL MONITORING REPORT

First Quarter 2014



Department of Natural Resources and Parks
Solid Waste Division

KING COUNTY
CEDAR HILLS REGIONAL LANDFILL
QUARTERLY ENVIRONMENTAL MONITORING REPORT

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Cedar Hills Regional Landfill Summary of Quarterly Environmental Monitoring First Quarter of 2014

This summary contains a discussion of quarterly environmental monitoring results for groundwater and surface water quality and landfill gas migration monitoring for Cedar Hills Regional Landfill.

Environmental samples were collected and analyzed in accordance with the Quality Assurance Project Plan for Environmental Monitoring at King County Solid Waste Facilities (QAPP). This document contains procedures to ensure data quality, consistency and documentation.

1.0 Quarterly Results and Analysis

This Section discusses the monitoring results and how they compare to previously collected data at the site.

1.1 Groundwater

Groundwater monitoring well details and locations are presented in Table 1 and Figure 1. Monitoring activities for the second quarter are listed in Table 2.

1.11 Regional Aquifer

Regional aquifer analysis results for this quarter are consistent with past results.

For discussion and graphical presentation, monitoring wells are grouped together according to the flow path analysis for the regional aquifer, which was developed in the *Cedar Hills Regional Landfill Technical Memorandum Phase I Investigations Groundwater Monitoring Well System Enhancements*, 2007, and refined in the *Cedar Hills Regional Landfill Regional Aquifer Technical Memorandum*, 2011.

Groundwater elevations and potentiometric surfaces are within historical ranges and reflect seasonal responses to precipitation. Potentiometric Surface Map and Groundwater Flow Analysis can be found in Appendix A. Elevations measured this quarter conform to the current hydrogeologic model.

Exceedances of regulatory standards are tabulated and presented in Table 3. Groundwater samples were analyzed for both dissolved and total metal fractions per WAC 173-351-430(2)(b)(ii) as revised. Results for metals listed in WAC 173-351-990 Appendix I were compared to water quality standards. This has resulted in more exceedances for arsenic but does not indicate a change in water quality as the dissolved concentrations remained similar. These results reflect the change in analytical procedure.

Primary Ground Water Quality Criteria were exceeded for total arsenic in upgradient and crossgradient wells MW-93, MW-21 and MW-99; wells interior, vertical to facilities MW-64, MW-68, and MW-100; and downgradient wells MW-69, MW-80, MW-86, MW-87, MW-89 and MW-91. Trichloroethylene exceeded the groundwater criterion in upgradient wells MW-76 and MW-82; and vinyl chloride exceeded criteria in MW-65. Secondary standards (dissolved iron and dissolved manganese) were

exceeded in numerous regional wells. These results are consistent with past analyses.

The change to a comparison of Appendix I metals to standards using the total fraction leads to concentration increases as a result of dissolving particulates in the sample rather than filtering them out. This was an expected result of the methodology change.

Trilinear Diagrams (Figures 2 through 6) indicate water quality type (hydrochemical facie) based on dissolved ion distribution. The diagrams are useful to recognize spatial variability, potential analytical error or change in hydrochemical facie over time. All regional samples are within the calcium-magnesium-bicarbonate hydrochemical facie. Data are consistent with previous quarters. Ion balance calculations (Table 4) indicate no analytical error in regional aquifer samples as all samples are within 10% on the ion balance.

Intra-well prediction limits are calculated annually using data collected through the end of the previous calendar year (2013). Comparison to calculated prediction limits provides an indication of whether a change in concentration represents normal variability or a change in water quality. This quarter, dissolved arsenic in MW-68 and barium in MW-87 exceeded prediction limits (Table 5). Dissolved rather than total metals are used in the prediction limit evaluation because an adequate background data set for total metals cannot be developed until more samples are analyzed.

Volatile Organic Compound (VOC) detections are presented in Table 6. Present are regularly occurring detections of chlorinated VOCs and their breakdown products from the upgradient Queen City Farms (QCF) Site, which include trichloroethene (TCE) in monitoring wells MW-76, MW-78, MW-82, MW-83, and MW-94; *cis*-1,2-dichloroethene was detected in MW-24, MW-56, MW-59 and MW-76; tetrachloroethene (PCE) in MW-76 and vinyl chloride (VC) in MW-65. These upgradient well detections are consistent with past data and continuing migration from QCF.

Acetone was detected in Trip Blanks and Method Blanks as well as one groundwater sample, methylene chloride was detected in several Trip Blanks and one Method Blank, all probable laboratory artifacts. 2-butanone was detected in one Method Blank. Quality Assurance /Quality Control (QA/QC) samples (trip blanks, and method blanks) detections appear in Table 13.

1.12 Perched Zones

Analysis results for the perched zones this quarter are consistent with past results.

Groundwater elevations measured during the quarter are within historical ranges. Samples were collected from nine perched wells, four in the north and west areas of the landfill (MW-27A, MW-28, MW-29, and MW-55), four in the east perched zone (MW-30A, MW-47, MW-62 and MW-EB6), and MW-101 in the South Solid Waste Area. Groundwater quality data for the regularly sampled Perched Zone samples collected during the first quarter of 2014 are consistent with previous samples.

Exceedances of regulatory standards are tabulated and presented in Table 7. All are consistent with past analyses and known impacts.

Trilinear plots for perched zones samples are all within the calcium-magnesium-bicarbonate hydrochemical facie, as in past samples (Table 8 and Figures 7-9). Cation/Anion balances indicate no potential analytical error (greater than 10% ion imbalance) in perched zones samples.

As with the regional data, perched zone prediction limits are derived from cumulative data through the end of 2013 and any exceedances of these limits by current results are tabulated (Table 9). There were no prediction limits exceedances in the perched zone.

Volatile Organic Compound detections in the perched zones are presented in Table 10. All are consistent with previous analyses.

1.2 Surface Water

Surface water sampling is attempted monthly at stations located along the drainage courses around the landfill. Samples were collected at 14 surface water stations having adequate flow during the quarter. Monitoring activities are listed in Table 11.

Cedar Hills Regional Landfill is covered by an Industrial Stormwater General Permit issued by the Washington State Department of Ecology. The permit defines discharge Benchmarks, applicable to all facilities and Effluent Limits, applicable specifically to landfills. These values are reproduced in Table 15. Stations SW-N4, SW-SL3 and SW-GS1 are the designated points for comparison to permit benchmarks and effluent limits. Samples were obtained from each designated compliance station monthly this quarter. Compliance sample exceedances are presented in Table 12. The Benchmarks for turbidity (two SW-GS1 samples) and total copper (one SW-N4 sample) were exceeded this quarter.

1.3 Landfill Gas

A network of compliance probes are monitored for landfill gas migration around the perimeter of the landfill. Probes are monitored by the landfill gas crew monthly to monitor system performance and quarterly for compliance.

Detections above the regulatory limit in landfill gas probe GP-33C in September of 2011 prompted actions including: monitoring frequency increases, operational adjustments to increase LFG recovery rates, off-site structure monitoring and preparation of a response plan.

Operational review resulted in modifications to enhance extraction from unlined areas and under liner spaces that could potentially act as gas conveyance pathways.

The plan resulted in installation of 13 borings targeting the potential zone of LFG

migration in the native sediments. Eight borings serve as LFG extraction wells and five as monitoring probes. The extraction wells and probes are currently monitored bimonthly. Methane detections in the first quarter have not exceeded 0.1% by volume in any migration monitoring probe.

Data indicate the system has been effective in controlling LFG migration to the perimeter probes with no methane detections this quarter.

Compliance Probe, On-site Buildings and supplemental Monitoring Probe results are presented in Appendix B.

2.0 Analytical Methods

Groundwater quality is evaluated by comparison of analysis results to regulatory standards, geochemical analysis and statistical evaluation. Water quality analytical results for surface water runoff discharged from the landfill site are compared to the limits set in the Industrial Stormwater General Permit. Following is a brief description of each.

2.1 Regulatory Standards

Groundwater monitoring results are compared to Washington State Groundwater Quality Criteria, WAC 173-200 (Table 14). Surface water monitoring results are compared to the *Industrial Stormwater General Permit* Benchmark Criteria or WAC 173-201A Water Quality Standards for Surface Waters of the State of Washington.

2.2 Trilinear Diagrams and Major Ion Balance

Geochemical data are presented on trilinear diagrams. Major cations and anions are plotted on individual triangles as percentages of total milliequivalents per liter (meq/L). These diagrams illustrate differences in major ion chemistry between groundwater samples and can be used to categorize water composition into identifiable groups or hydrochemical facies. These hydrochemical facies reflect distinct compositions of cation and anion concentrations. The value of the diagram lies in pointing out relationships that exist among individual samples. Trilinear Diagrams are included with ionic balance calculations in this report. Ion balance calculations are useful for determining analytical correctness and can be of value in detecting laboratory error or variation in field sampling procedures.

2.3 Prediction Limits

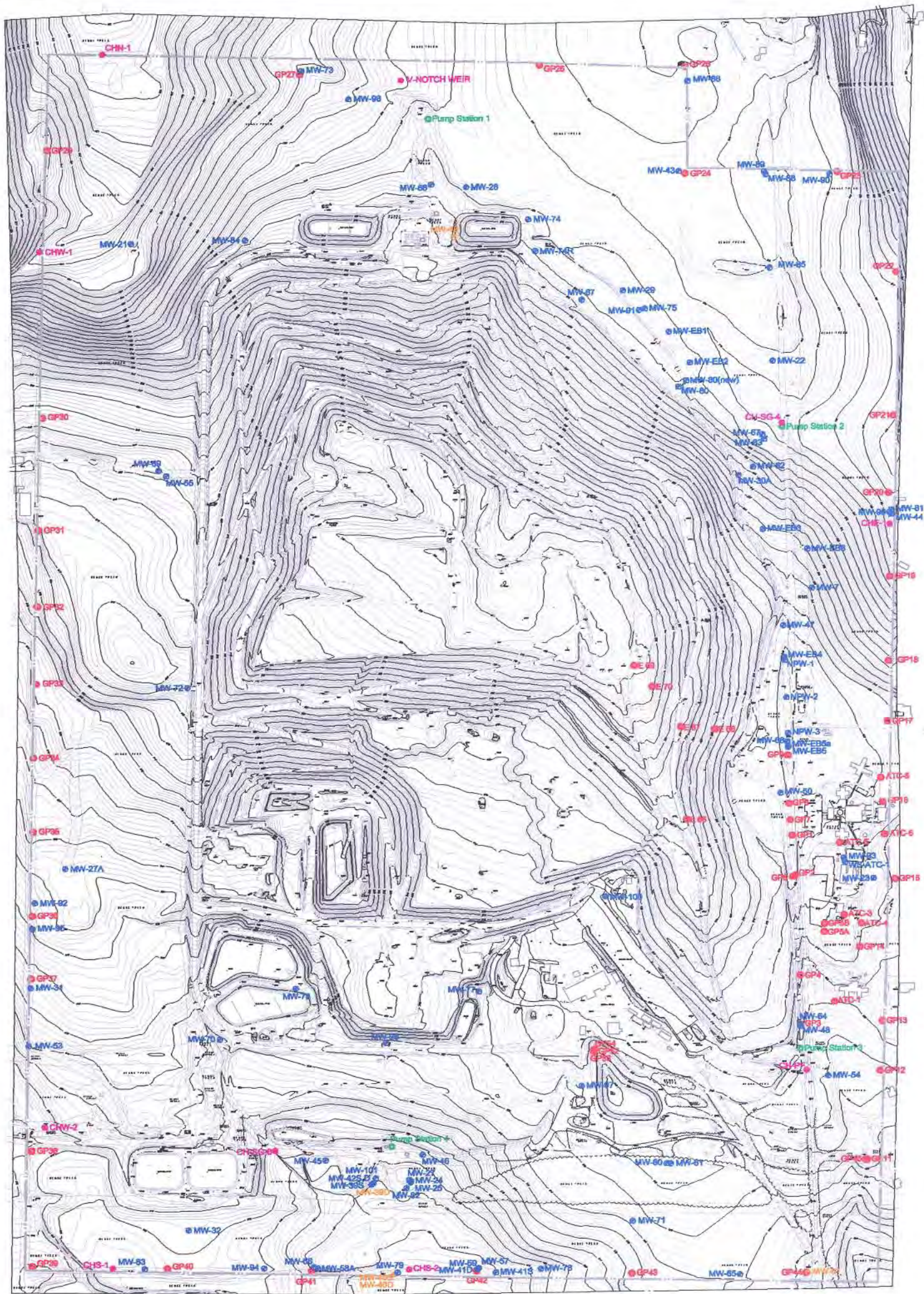
The Prediction Limit is an intra-well statistical test that compares an analytical result to a computed limit value. The limit value is derived from past analytical results from the same well, considered representative historical well data. A value outside of this limiting value is considered evidence that the result is not drawn from the same

sample population distribution. The prediction limits generated in this report are based on a 1% false positive rate (type I error) and depend on the background distribution. For each parameter tested, an appropriate background data set is chosen. This background set is updated annually to include recent data that more accurately defines background water quality. The data set is tested for normality by application of the Shapiro-Wilk Test for Normality. If the data fail the test for normality, log transformed data are tested. When normal or transformed normal data sets are determined, a parametric prediction limit is calculated and future results compared to this value. When transformations fail the test for normality, a non-parametric method is applied and future results are compared to this limit.

This test is performed on parameters listed in WAC 173-351-990 Appendix I and is used to detect a change in the population distribution of the individual well. Exceedances detected in Appendix I parameters for the quarter are presented in Table 5 (Regional Aquifer Wells) and Table 9 (Perched Zones Wells).

2.4 Laboratory Data Quality

Laboratory analytical data is reviewed to verify meeting data quality objectives (DQOs) as defined in the Quality Assurance Project Plan for Environmental Monitoring at King County Solid Waste Facilities (QAPP). Occasionally, results identified during this process are deemed to be unsuitable for evaluation purposes. A summary of suspect results can be found in Table 16.



LEGEND

- MW-9  Monitoring Well
- GP-19  Gas Probe
- MW-8  Decommissioned Monitoring Well
- GP-13  Decommissioned Gas Probe
-  Pump Station NO. _____
- MW-9  Surface Water Stations



 King County Solid Waste Division	DATE:	OCT. 2007	SITE MAP Cedar Hills Landfill Maple Valley, Washington	Aero-Metric Aerial Photo taken August 24, 2007	PROJECT NO.
	DESIGNED BY:				FIGURE NO. 1

TABLE 1
SUMMARY OF CEDAR HILLS REGIONAL LANDFILL GROUNDWATER WELLS

Well Number	Date Constructed	Aquifer	Zone ¹	Purpose ²	Ground	Top of	Total Well	Screened Interval		Screened Interval		Coordinates	
					Surface Elevation	Well Casing Elevation	Depth	Depth	Depth	Elevation	Elevation	Northing	Easting
MW-24	6/1/1983	Regional	US	WL/WQ	473.8	475.99	193.0	187	192	286.8	281.8	167767.76	1702441.65
MW-54	9/26/1986	Regional	US	WL	579.3	580.43	360.0	329	351	250.3	228.3	168435.53	1702154.28
MW-56	10/12/1988	Regional	US	WL/WQ	479.2	480.33	170.5	156	166	323.2	313.2	167214.82	1698980.77
MW-57	8/22/1988	Regional	US	WL/WQ	455.7	456.64	145.5	129	144	326.7	311.7	167201.99	1699993.32
MW-58A	9/26/1988	Regional	US	WL/WQ	478.6	479.27	220.5	208.5	218.5	270.1	260.1	167207.16	1699006.59
MW-59	8/16/1988	Regional	US	WL/WQ	455.6	457.13	185.5	170.5	180.5	285.1	275.1	167193.44	1699983.91
MW-60	9/13/1991	Regional	US	WL/WQ	564.8	567.15	266.4	230	239	334.8	325.8	167873.2	1701154.47
MW-65	3/29/1993	Regional	US	WL/WQ	543.2	545.83	236.9	225.5	234.3	317.7	308.9	167146.55	1701602.10
MW-76	10/25/1999	Regional	US	WL/WQ	489.8	491.71	155.9	138.7	148.2	351.1	341.6	167193.13	1700376.23
MW-82	11/2/2000	Regional	US	WL/WQ	472.8	474.85	139.5	123.9	133.4	348.9	339.4	167725.31	1699553.72
MW-83	10/27/2000	Regional	US	WL/WQ	494.5	496.81	160.0	144.3	153.8	350.2	340.7	167212.27	1697939.89
MW-94	7/2/2002	Regional	US	WL/WQ	493.2	495.51	168.0	136	144.7	357.2	348.5	167210.22	1698674.21
MW-21	5/17/1983	Regional	UNW	WL/WQ	418.2	420.66	180.0	155	163	263.2	255.2	173876.38	1697901.86
MW-73	7/3/1999	Regional	UNW	WL/WQ	484.3	485.70	218.0	196.2	205.5	288.1	278.8	174995.59	1698954.95
MW-84	10/20/2000	Regional	UNW	WL/WQ	528.7	530.80	250.5	236.2	245.7	292.5	283.0	173894.54	1698602.89
MW-81	10/3/2002	Regional	UNE	WL/WQ	492.2	493.66	199.0	183	192	309.2	300.2	172113.99	1702568.87
MW-99	8/30/2002	Regional	UNE	WL/WQ	491.8	493.64	287.0	270	279	221.8	212.8	172098.73	1702556.06
MW-93	6/24/2002	Regional	CG	WL/WQ	630.2	632.15	350.0	310.3	320.1	319.9	310.1	169851.24	1702259.35
MW-95	7/22/2002	Regional	CG	WL/WQ	568.6	571.54	311.0	254	262.7	314.6	305.9	169426.92	1697265.32
MW-106	2/19/2009	Regional	CG	WL	473.0	475.47	270.0	193	203	280.0	270.0	173461.69	1702536.99
MW-70	5/11/1993	Regional	I	WL/WQ	527.9	530.57	221.5	205.1	218.8	322.8	309.1	168699.89	1698412.97
MW-77	10/12/1999	Regional	I	WL/WQ	550.5	552.67	251.5	230	239.5	320.5	311.0	168999.71	1700007.63
MW-78	10/8/1999	Regional	I	WL/WQ	535.3	537.35	229.5	213	225.5	322.3	309.8	169027.58	1698881.94
MW-100	8/26/2002	Regional	I	WL/WQ	618.4	620.32	124.7	299.3	309.3	319.1	309.1	169610.46	1700791.72
MW-22	5/25/1983	Regional	V	WL	515.0	517.09	284.0	279	283.8	236.0	231.2	173088.17	1701844.34
MW-64	3/22/1993	Regional	V	WL/WQ	594.3	596.55	276.3	260.3	274.1	334.0	320.2	168772.19	1701980.27
MW-66	4/5/1993	Regional	V	WL/WQ	528.6	531.28	250.7	234.2	248	294.4	280.6	174250.32	1699750.19
MW-67	4/28/1993	Regional	V	WL/WQ	514.1	516.43	232.4	216.3	230.1	297.8	284.0	172610.65	1701776.69
MW-68	4/15/1993	Regional	V	WL/WQ	644.8	647.07	354.6	333.5	352.5	311.3	292.3	170609.35	1701917.32
MW-69	4/23/1993	Regional	DW	WL/WQ	651.0	653.69	368.8	357.4	371	293.6	280.0	172400.20	1698061.86
MW-72	8/7/1998	Regional	DW	WL/WQ	669.8	671.87	389.0	366.2	375.8	303.6	294.0	170987.71	1698229.92
MW-74	11/1/2000	Regional	DG	WL/WQ	529.2	531.26	270.0	239.3	248.8	289.9	280.4	173813.79	1700386.85
MW-75	9/24/1999	Regional	DG	WL/WQ	529.8	532.40	287.0	258.7	268.8	271.1	261.0	173432.42	1701059.70
MW-80	2/27/2001	Regional	DG	WL/WQ	528.5	530.41	270.0	249.3	258.8	279.2	269.7	172964.99	1701309.78
MW-85	12/1/2000	Regional	DG	WL/WQ	529.8	531.76	270.0	247.2	256.7	282.6	273.1	173694.52	1701828.95
MW-86	12/12/2000	Regional	DG	WL/WQ	533.9	536.04	282.0	250.5	259.3	283.4	274.6	174917.90	1701331.25
MW-87	11/21/2000	Regional	DG	WL/WQ	535.2	537.31	272.5	251.5	260.8	283.7	274.4	173493.76	1700670.27
MW-88	9/13/2001	Regional	DG	WL/WQ	511.2	513.68	248.5	229.7	239	281.5	272.2	174303.06	1701807.87
MW-89	11/12/2001	Regional	DG	WL/WQ	510.7	512.82	328.0	281.5	290.8	229.2	219.9	174319.44	1701799.57
MW-90	8/14/2002	Regional	DG	WL/WQ	500.2	502.22	300.0	265	274	235.2	226.2	174300.67	1702203.13
MW-91	10/26/2001	Regional	DG	WL/WQ	529.7	532.02	331.0	268.9	289	260.8	240.7	173423.94	1701023.09
MW-43	4/30/1985	Regional	DNF	WL/WQ	544.6	547.06	325.0	299	309	245.6	235.6	174327.14	1701274.23
WS-ATC-1	2/7/1972	Regional	--	WL	624.9	625.51	535.0	325	340	299.9	284.9	169823.34	1702268.95
WS-NPW-1	8/22/1990	Regional	--	WL	644.6	646.33	382.0	365.7	375.7	278.9	268.9	171138.99	1701906.96
WS-NPW-3	6/5/1990	Regional	--	WL	644.3	645.81	376.0	359.4	367.4	284.9	276.9	170663.28	1701922.88

TABLE 1
SUMMARY OF CEDAR HILLS REGIONAL LANDFILL GROUNDWATER WELLS

Well Number	Date Constructed	Aquifer	Zone ¹	Purpose ²	Ground	Top of	Total Well					Coordinates	
					Surface Elevation	Well Casing Elevation	Depth	Screened Interval Depth	Screened Interval Elevation	Screened Interval Depth	Screened Interval Elevation	Northing	Easting
MW-30A	9/6/1989	Perched	EPZ	WL/WQ	567.7	568.43	40.0	25	35	542.7	532.7	172345.48	1701628.59
MW-47	6/31/1985	Perched	EPZ	WL/WQ	633.6	634.60	50.0	23.5	43.5	610.1	590.1	171365.53	1701898.69
MW-48	5/24/1985	Perched	EPZ	WL	593.6	594.49	63.0	37	47	556.6	546.6	168758.73	1701985.17
MW-50	6/3/1985	Perched	EPZ	WL	636.2	637.02	39.5	27.5	37.5	608.7	598.7	170276.14	1701873.92
MW-62	2/1/1990	Perched	EPZ	WL/WQ	555.3	556.21	65.5	44	54	511.3	501.3	172397.77	1701719.18
MW-63	2/12/1990	Perched	EPZ	WL	513.8	515.88	22.0	12	17	501.8	496.8	172580.25	1701786.72
MW-102	1/27/2009	Perched	EPZ	WL	549.7	552.48	50	35	50	515.2	500.2	172313.75	1701858.76
MW-103	1/28/2009	Perched	EPZ	WL	636.8	639.08	40.00	25	35	611.8	601.8	170473.99	1702210.55
MW-104	1/29/2009	Perched	EPZ	WL	626.9	629.68	35.00	22	32	604.9	594.9	171153.34	1702169.14
MW-EB6	11/28/1990	Perched	EPZ	WL/WQ	587.9	589.61	50.0	20	30	567.9	557.9	171862.72	1702049.75
MW-27A	10/3/1985	Perched	NW	WL/WQ	583.2	584.23	80.0	59	69	524.2	514.2	169817.29	1697470.72
MW-28	6/21/1983	Perched	NW	WL/WQ	526.2	527.75	39.0	27	37	499.2	489.2	174231.84	1699966.20
MW-29	6/23/1983	Perched	NW	WL/WQ	531.7	532.92	60.0	17	27	514.7	504.7	173552.23	1700926.39
MW-55	10/2/1986	Perched	NW	WL/WQ	651.1	652.29	67.0	37.5	47.5	613.6	603.6	172364.53	1698110.11
MW-98	3/9/2001	Perched	NW	WL	501.6	503.73	22.5	10.7	20	490.9	481.6	174810.64	1699245.65
MW-25	6/3/1983	Perched	SSWA	WL	473.2	474.41	43.0	18	38	455.2	435.2	167760.97	1699580.14
MW-41S	7/12/1983	Perched	SSWA	WL	460.7	462.44	51.0	8	18	452.7	442.7	167171.51	1700100.82
MW-41D	7/12/1983	Perched	SSWA	WL	460.7	462.32	51.0	30	50	430.7	410.7	167171.51	1700100.82
MW-45	5/17/1985	Perched	SSWA	WL	487.7	488.40	64.0	31	41	447.6	457.6	167907.28	1699058.03
MW-79	11/5/1999	Perched	SSWA	WL	456.9	459.17	56.0	40.5	50	416.4	406.9	167175.91	1699495.56
MW-96	12/18/2001	Perched	SSWA	WL	545.4	547.74	102.9	88.8	97.5	456.6	447.9	168667.73	1699434.47
MW-97	9/5/2001	Perched	SSWA	WL	562.5	564.54	124.7	101	110	461.5	452.5	168380.87	1700636.96
MW-101	6/2/2006	Perched	SSWA	WL/WQ	472.1	474.72	57.50	44	54	428.1	418.1	167791.40	1699364
MW-105	1/30/2009	Perched	SSWA	WL	518.7	521.23	30.00	18	28	500.7	490.7	167697.49	1698320.49

Notes ¹Position of the well screen in the regional aquifer flow path analysis relative to waste placement and site utilities. .

Zone Designations

US = Upgradient South Site Wells

UNW = Upgradient Northwest

UNE = Upgradient Northeast

CG = Cross Gradient

DW = Westside Downgradient

V = Vertical Key Facilities

I = Interior

DNF = Downgradient of North End Facilities outside Refuse Cells

DG = Downgradient Groundwater Flow

²WL = Water Level WQ = Water Quality

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 1st QUARTER 2014

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-21	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-21	Regional	1/3/14	Groundwater Sampling	W21-140103-	
MW-22	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-24	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-24	Regional	1/21/14	Groundwater Sampling	W24-140121-	
MW-25	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-27A	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-27A	Perched	1/7/14	Groundwater Sampling	W27A140107-	
MW-28	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-28	Perched	1/15/14	Groundwater Sampling	W28-140115-	
MW-29	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-29	Perched	1/31/14	Groundwater Sampling	W29-140131-	
MW-30A	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-30A	Perched	1/28/14	Groundwater Sampling	W30A140128-	
MW-41D	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-41S	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-43	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-43	Regional	1/10/14	Groundwater Sampling	W43-140110-	
MW-45	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-47	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-47	Perched	1/6/14	Groundwater Sampling	W47-140106-	
MW-48	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-50	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-54	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-55	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-55	Perched	1/15/14	Groundwater Sampling	W55-140115-	
MW-56	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-56	Regional	1/3/14	Groundwater Sampling	W56-140103-	
MW-57	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-57	Regional	1/13/14	Groundwater Sampling	W57-140113-	
MW-58A	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-58A	Regional	NA	Groundwater Sampling	NA	
MW-59	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-59	Regional	1/10/14	Groundwater Sampling	W59-140110-	
MW-60	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-60	Regional	1/9/14	Groundwater Sampling	W60-140109-	
MW-62	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-62	Perched	1/28/14	Groundwater Sampling	W62-140128-	
MW-63	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-64	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-64	Regional	1/14/14	Groundwater Sampling	W64-140114-	
MW-65	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-65	Regional	1/3/14	Groundwater Sampling	W65-140103-	
MW-66	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-66	Regional	1/16/14	Groundwater Sampling	W66-140116-	
MW-67	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-67	Regional	1/6/14	Groundwater Sampling	W67-140106-	
MW-68	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-68	Regional	1/14/14	Groundwater Sampling	W68-140114-	
MW-69	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-69	Regional	1/15/14	Groundwater Sampling	W69-140115-	
MW-70	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-70	Regional	1/14/14	Groundwater Sampling	W70-140114-	
MW-72	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-72	Regional	1/21/14	Groundwater Sampling	W72-140121-	
MW-73	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-73	Regional	1/15/14	Groundwater Sampling	W73-140115-	
MW-74	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-74	Regional	1/17/14	Groundwater Sampling	W74R140117-	
MW-74	Regional	2/21/14	Groundwater Sampling	W74R140221-	
MW-74	Regional	3/25/14	Groundwater Sampling	W74R140325-	
MW-75	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-75	Regional	1/17/14	Groundwater Sampling	W75-140117-	
MW-75	Regional	2/21/14	Groundwater Sampling	W75-140221-	
MW-75	Regional	3/25/14	Groundwater Sampling	W75-140325-	
MW-76	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-76	Regional	1/10/14	Groundwater Sampling	W76-140110-	
MW-77	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-77	Regional	1/28/14	Groundwater Sampling	W77-140128-	
MW-78	Regional	1/2/14	Groundwater Elevation Measurement	NA	

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 1st QUARTER 2014

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-78	Regional	1/27/14	Groundwater Sampling	W78-140127-	
MW-79	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-80	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-80	Regional	1/27/14	Groundwater Sampling	W80-140127-	
MW-81	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-81	Regional	1/13/14	Groundwater Sampling	W81-140113-	
MW-82	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-82	Regional	3/31/14	Groundwater Sampling	W82-140331-	
MW-83	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-83	Regional	1/16/14	Groundwater Sampling	W83-140116-	
MW-84	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-84	Regional	1/21/14	Groundwater Sampling	W84-140121-	
MW-85	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-85	Regional	1/6/14	Groundwater Sampling	W85-140106-	
MW-86	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-86	Regional	1/27/14	Groundwater Sampling	W86-140127-	
MW-87	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-87	Regional	1/17/14	Groundwater Sampling	W87-140117-	
MW-87	Regional	2/21/14	Groundwater Sampling	W87-140221-	
MW-87	Regional	3/20/14	Groundwater Sampling	W87-140320-	
MW-88	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-88	Regional	1/13/14	Groundwater Sampling	W88-140113-	
MW-89	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-89	Regional	1/13/14	Groundwater Sampling	W89-140113-	
MW-90	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-90	Regional	1/10/14	Groundwater Sampling	W90-140110-	
MW-91	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-91	Regional	1/7/14	Groundwater Sampling	W91-140107-	
MW-93	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-93	Regional	1/23/14	Groundwater Sampling	W93-140123-	
MW-94	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-94	Regional	1/13/14	Groundwater Sampling	W94-140113-	
MW-95	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-95	Regional	1/7/14	Groundwater Sampling	W95-140107-	
MW-96	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-97	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-98	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-99	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-99	Regional	1/17/14	Groundwater Sampling	W99-140117-	
MW-99	Regional	2/21/14	Groundwater Sampling	W99-140221-	
MW-99	Regional	3/20/14	Groundwater Sampling	W99-140320-	
MW-100	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-100	Regional	1/23/14	Groundwater Sampling	W100140123-	
MW-101	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-101	Perched	1/16/14	Groundwater Sampling	W101140116-	
MW-102	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-103	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-104	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-105	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-106	Regional	1/2/14	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	1/2/14	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	1/24/14	Groundwater Sampling	WB6-140124-	
WS-NPW-1	Regional	1/2/14	Groundwater Elevation Measurement	NA	
WS-NPW-3	Regional	1/2/14	Groundwater Elevation Measurement	NA	
Equipment Blank	NA	1/21/14	QA/QC Sample	WU1H140121E	
Equipment Blank	NA	1/21/14	QA/QC Sample	WU1S140121E	
Field Blank	NA	1/16/14	QA/QC Sample	W66-140116F	
Field Blank	NA	1/21/14	QA/QC Sample	W72-140121F	
MW-43	Regional	1/10/14	QA/QC Sample	W43-140110D	Field Duplicate
MW-78	Regional	1/27/14	QA/QC Sample	W78-140127D	Field Duplicate
MW-91	Regional	1/7/14	QA/QC Sample	W91-140107D	Field Duplicate

NA = No sample ID assigned, No sample collected.

TABLE 3
SUMMARY OF EXCEEDANCES OF WAC 173-200-040
WATER QUALITY STANDARDS FOR GROUND WATERS OF THE STATE OF WASHINGTON
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
(Data Collected from January 1, 2014 to March 31, 2014)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
South, Northeast and Northwest Upgradient and Crossgradient Wells					
pH (field)	(pH units)	MW-73	1/15/2014	W73-140115-	5.99
		MW-76	1/10/2014	W76-140110-	6.25
Arsenic (Total)	(mg/L)	MW-21	1/3/2014	W21-140103-	0.00105
		MW-93	1/23/2014	W93-140123-	0.00136 D
		MW-99	1/17/2014	W99-140117-	0.00211 D
Iron (Dissolved)	(mg/L)	MW-21	1/3/2014	W21-140103-	2.07
		MW-24	1/21/2014	W24-140121-	3.25
		MW-57	1/13/2014	W57-140113-	8.39
		MW-59	1/10/2014	W59-140110-	4.32
		MW-65	1/3/2014	W65-140103-	4.74
Manganese (Dissolved)	(mg/L)	MW-21	1/3/2014	W21-140103-	0.0731
		MW-24	1/21/2014	W24-140121-	0.114 D
		MW-56	1/3/2014	W56-140103-	0.105
		MW-57	1/13/2014	W57-140113-	0.272
		MW-59	1/10/2014	W59-140110-	0.115
		MW-65	1/3/2014	W65-140103-	0.214
		MW-93	1/23/2014	W93-140123-	0.272 D
		MW-95	1/7/2014	W95-140107-	0.146
		MW-99	1/17/2014	W99-140117-	0.0827
Trichloroethene	(ug/L)	MW-76	1/10/2014	W76-140110-	7.89
		MW-82	3/31/2014	W82-140331-	4.76
Vinyl Chloride	(ug/L)	MW-65	1/3/2014	W65-140103-	0.0511
Interior and Vertical to Facilities Wells					
Arsenic (Total)	(mg/L)	MW-64	1/14/2014	W64-140114-	0.00276
		MW-68	1/14/2014	W68-140114-	0.0285
		MW-100	1/23/2014	W100140123-	0.00275 D
Iron (Dissolved)	(mg/L)	MW-68	1/14/2014	W68-140114-	0.781
		MW-100	1/23/2014	W100140123-	1.24
Manganese (Dissolved)	(mg/L)	MW-64	1/14/2014	W64-140114-	0.0741
		MW-67	1/6/2014	W67-140106-	0.0779
		MW-68	1/14/2014	W68-140114-	0.277
		MW-100	1/23/2014	W100140123-	0.257 D

TABLE 3
SUMMARY OF EXCEEDANCES OF WAC 173-200-040
WATER QUALITY STANDARDS FOR GROUND WATERS OF THE STATE OF WASHINGTON
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
(Data Collected from January 1, 2014 to March 31, 2014)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Wells Downgradient to Waste Cells and North end Facilities					
Arsenic (Total)	(mg/L)	MW-69	1/15/2014	W69-140115-	0.00359
		MW-80	1/27/2014	W80-140127-	0.00469
		MW-86	1/27/2014	W86-140127-	0.00187
		MW-87	1/17/2014	W87-140117-	0.00356 D
		MW-89	1/13/2014	W89-140113-	0.00249
		MW-91	1/7/2014	W91-140107-	0.0116
Iron (Dissolved)	(mg/L)	MW-43	1/10/2014	W43-140110-	0.932
		MW-69	1/15/2014	W69-140115-	1.07
		MW-72	1/21/2014	W72-140121-	2.2
		MW-75	1/17/2014	W75-140117-	1.51
		MW-80	1/27/2014	W80-140127-	1.61
		MW-86	1/27/2014	W86-140127-	0.387
		MW-87	1/17/2014	W87-140117-	3.48
		MW-89	1/13/2014	W89-140113-	0.795
		MW-90	1/10/2014	W90-140110-	1.03
		MW-91	1/7/2014	W91-140107-	2.27
Manganese (Dissolved)	(mg/L)	MW-43	1/10/2014	W43-140110-	0.233
		MW-69	1/15/2014	W69-140115-	0.24
		MW-72	1/21/2014	W72-140121-	0.321
		MW-75	1/17/2014	W75-140117-	0.127 D
		MW-80	1/27/2014	W80-140127-	0.277 D
		MW-87	1/17/2014	W87-140117-	0.415
		MW-89	1/13/2014	W89-140113-	0.267
		MW-90	1/10/2014	W90-140110-	0.27
		MW-91	1/7/2014	W91-140107-	0.298

Table 4
Ion Balance Calculations
Cedar Hills Landfill Regional Aquifer Groundwater Monitoring Wells

Data Collected from January 1 1, 2014 to March 31, 2014

Site ID		Upgradient South																	
		MW-24 1/21/14			MW-56 1/3/14			MW-57 1/13/14			MW-82 3/31/14			MW-59 1/10/14			MW-60 1/9/14		
Cations	MW n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1 2	15.1	0.75349	37.9	14.6	0.72854	47.4	15.5	0.77345	36.3	25.0	1.2475	44.8	14.0	0.6986	37.8	16.6	0.82834	47.0
Magnesium	24.3 2	10.0	0.82288	41.4	6.9	0.56532	36.8	9.0	0.74388	34.9	14.3	1.17671	42.3	8.8	0.72002	39.0	8.0	0.65995	37.4
Potassium	39.1 1	0.9	0.02317	1.2	1.0	0.0266	1.7	0.9	0.02256	1.1	1.8	0.04501	1.6	1.1	0.02711	1.5	1.2	0.03018	1.7
Sodium	23.0 1	6.1	0.26447	13.3	4.9	0.21227	13.8	6.4	0.27664	13.0	7.2	0.31405	11.3	5.6	0.24315	13.2	5.4	0.23402	13.3
Iron	55.8 2	3.25	0.11639	5.9	0.03	0.00107	0.1	8.39	0.30046	14.1	0.01	0.00018	0.0	4.32	0.15471	8.4	0.08	0.0029	0.2
Manganese	54.9 2	0.11	0.00415	0.2	0.11	0.00382	0.2	0.27	0.0099	0.5	0.00	6E-05	0.0	0.12	0.00419	0.2	0.00	9.9E-05	0.0
Ammonia-N	14.0 1	0.04	0.00259	0.1	0.01	0.00036	0.0	0.03	0.0018	0.1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.11	0.008	0.5
Total Cations (meq/L)			2.0			1.5			2.1			2.8			1.8			1.8	
Anions																			
Alkalinity, Total		63			54			73			114			65			77		
Carbonate	60.0 2	0.066	0.0022	0.1	0.0174	0.00058	0.0	0.0149	0.0005	0.0	0.0751	0.0025	0.1	0.0163	0.00054	0.0	0.0305	0.00102	0.1
Bicarbonate	61.0 1	77.09	1.26361	72.5	65.72	1.07726	70.4	89.27	1.46328	71.6	138.93	2.27715	79.3	79.14	1.29726	71.5	93.51	1.53275	82.7
Chloride	35.5 1	3.9	0.11029	6.3	3.5	0.09872	6.4	6.7	0.18926	9.3	6.1	0.1729	6.0	4.4	0.12298	6.8	3.1	0.08772	4.7
Nitrate-N	14.0 1	0.01	0.00036	0.0	1.35	0.09638	6.3	0.01	0.00036	0.0	0.67	0.04762	1.7	0.01	0.00036	0.0	1.20	0.08567	4.6
Sulfate	96.1 2	17.6	0.36645	21.0	12.4	0.25818	16.9	18.8	0.39143	19.1	17.8	0.37061	12.9	18.9	0.39351	21.7	7.0	0.14575	7.9
Total Anions (meq/L)			1.7			1.5			2.0			2.9	100.0		1.8			1.9	
Total Ions (meq/L)			3.7			3.1			4.2			5.7			3.7			3.6	
Cation/Anion Ratio			1.14			1.00			1.04			0.97			1.02			0.95	
Percent Difference			6.5			0.2			2.0			-1.5			0.9			-2.5	
Trilinear Diagram Data																			
sum (Ca, Mg, Na+K)			1.86			1.53			1.82			2.78			1.69			1.75	
Calcium				40.42			47.53			42.58			44.82			41.36			47.27
Magnesium				44.15			36.88			40.95			42.28			42.63			37.66
Sodium + Potassium				15.43			15.58			16.47			12.90			16.00			15.08
													100.0						
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.74			1.43			2.04			2.82			1.81			1.77	
Sulfate				21.029			17.995			19.146			13.127			21.690			8.247
Chloride				6.329			6.881			9.257			6.124			6.778			4.964
Bicarbonate + Carbonate				72.641			75.124			71.597			80.748			71.532			86.789

Table 4
Ion Balance Calculations
Cedar Hills Landfill Regional Aquifer Groundwater Monitoring Wells

Data Collected from January 1 1, 2014 to March 31, 2014

Site ID			Upgradient South														
			MW-65 1/3/14			MW-76 1/10/14			MW-58A No Sample			MW-83 1/16/14			MW-94 1/13/14		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	12.4	0.61876	36.9	19.4	0.96806	47.4				42.4	2.11577	52.7	25.3	1.26248	48.8
Magnesium	24.3	2	7.6	0.62209	37.1	8.6	0.70685	34.6				17.6	1.44826	36.0	11.8	0.97099	37.5
Potassium	39.1	1	1.0	0.02555	1.5	1.3	0.03351	1.6				2.8	0.07161	1.8	2.1	0.05346	2.1
Sodium	23.0	1	5.3	0.23141	13.8	7.7	0.33319	16.3				8.8	0.38147	9.5	6.9	0.301	11.6
Iron	55.8	2	4.74	0.16975	10.1	0.01	0.00018	0.0				0.01	0.00018	0.0	0.01	0.00018	0.0
Manganese	54.9	2	0.21	0.00779	0.5	0.00	1.8E-05	0.0				0.00	1.8E-05	0.0	0.00	1.8E-05	0.0
Ammonia-N	14.0	1	0.01	0.00036	0.0	0.01	0.00036	0.0				0.01	0.00036	0.0	0.01	0.00036	0.0
Total Cations (meq/L)				1.7			2.0						4.0			2.6	
Anions																	
Alkalinity, Total			54			68						148			100		
Carbonate	60.0	2	0.0246	0.00082	0.1	0.0072	0.00024	0.0				0.0849	0.00283	0.1	0.0338	0.00113	0.0
Bicarbonate	61.0	1	65.83	1.07902	69.6	82.34	1.34956	61.7				180.39	2.95672	70.2	121.93	1.99857	73.6
Chloride	35.5	1	4.1	0.11565	7.5	15.3	0.43156	19.7				36.3	1.02389	24.3	18.1	0.51054	18.8
Nitrate-N	14.0	1	0.01	0.00036	0.0	2.11	0.15064	6.9				0.76	0.05419	1.3	0.96	0.06854	2.5
Sulfate	96.1	2	17.0	0.35395	22.8	12.3	0.2561	11.7				8.4	0.17406	4.1	6.6	0.13742	5.1
Total Anions (meq/L)				1.5			2.2						4.2			2.7	
Total Ions (meq/L)				3.2			4.2						8.2			5.3	
Cation/Anion Ratio				1.08			0.93						0.95			0.95	
Percent Difference				3.9			-3.4						-2.4			-2.4	
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)				1.50			2.04						4.02			2.59	
Calcium					41.31			47.42						52.67			48.78
Magnesium					41.53			34.62						36.05			37.52
Sodium + Potassium					17.16			17.96						11.28			13.70
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				1.55			2.04						4.16			2.65	
Sulfate					22.844			12.569						4.187			5.190
Chloride					7.464			21.181						24.628			19.283
Bicarbonate + Carbonate					69.692			66.249						71.186			75.527

Table 4
Ion Balance Calculations
Cedar Hills Landfill Regional Aquifer Groundwater Monitoring Wells

Data Collected from January 1 1, 2014 to March 31, 2014

Site ID			Upgradient Northwest									Upgradient Northeast					
			MW-21 1/3/14			MW-73 1/15/14			MW-84 1/21/14			MW-81 1/13/14			MW-99 1/17/14		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	10.3	0.51397	38.5	12.0	0.5988	59.5	12.0	0.5988	35.9	9.5	0.47305	40.7	10.5	0.52395	37.2
Magnesium	24.3	2	5.9	0.48632	36.5	3.4	0.28142	28.0	9.3	0.76774	46.0	5.5	0.45094	38.8	4.9	0.40156	28.5
Potassium	39.1	1	1.1	0.02788	2.1	0.8	0.02059	2.0	1.0	0.02522	1.5	0.6	0.01647	1.4	0.9	0.02205	1.6
Sodium	23.0	1	5.3	0.22836	17.1	2.4	0.10439	10.4	6.3	0.2749	16.5	5.1	0.2214	19.0	10.4	0.45238	32.1
Iron	55.8	2	2.07	0.07413	5.6	0.01	0.00018	0.0	0.01	0.00018	0.0	0.01	0.00018	0.0	0.03	0.00122	0.1
Manganese	54.9	2	0.07	0.00266	0.2	0.00	1.8E-05	0.0	0.00	9.2E-05	0.0	0.00	1.8E-05	0.0	0.08	0.00301	0.2
Ammonia-N	14.0	1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.07	0.0051	0.4
Total Cations (meq/L)				1.3			1.0			1.7			1.2			1.4	
Anions																	
Alkalinity, Total			53			39			60			49			57		
Carbonate	60.0	2	0.0751	0.0025	0.2	0.0023	7.5E-05	0.0	0.0454	0.00151	0.1	0.0624	0.00208	0.2	0.2199	0.00733	0.5
Bicarbonate	61.0	1	65.00	1.06534	83.1	46.97	0.76981	73.9	73.23	1.2003	74.2	59.17	0.96978	71.7	69.09	1.1325	80.2
Chloride	35.5	1	2.7	0.077	6.0	1.1	0.0299	2.9	3.7	0.10324	6.4	3.9	0.10888	8.1	3.2	0.09082	6.4
Nitrate-N	14.0	1	0.01	0.00036	0.0	0.73	0.05219	5.0	0.53	0.03748	2.3	1.56	0.11137	8.2	0.11	0.00771	0.5
Sulfate	96.1	2	6.6	0.13721	10.7	9.1	0.18905	18.2	13.2	0.27484	17.0	7.7	0.1597	11.8	8.4	0.17406	12.3
Total Anions (meq/L)				1.3			1.0			1.6			1.4			1.4	
Total Ions (meq/L)				2.6			2.0			3.3			2.5			2.8	
Cation/Anion Ratio				1.04			0.97			1.03			0.86			1.00	
Percent Difference				2.0			-1.7			1.5			-7.5			-0.1	
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)				1.26			1.01			1.67			1.16			1.40	
Calcium					40.90			59.57			35.93			40.72			37.43
Magnesium					38.70			28.00			46.06			38.81			28.68
Sodium + Potassium					20.39			12.43			18.01			20.47			33.89
					100.0			100.0			100.0						
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				1.28			0.99			1.58			1.24			1.40	
Sulfate					10.702			19.119			17.396			12.874			12.391
Chloride					6.006			3.024			6.534			8.777			6.466
Bicarbonate + Carbonate					83.291			77.858			76.070			78.348			81.143

Table 4
Ion Balance Calculations
Cedar Hills Landfill Regional Aquifer Groundwater Monitoring Wells

Data Collected from January 1 1, 2014 to March 31, 2014

Site ID			Cross Gradient						Interior											
			MW-93 1/23/14			MW-95 1/7/14			MW-70 1/14/14			MW-77 1/28/14			MW-78 1/27/14			MW-100 1/23/14		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	39.6	1.97605	47.6	19.9	0.99301	45.7	17.7	0.88323	43.9	22.6	1.12774	45.1	17.1	0.85329	44.8	30.3	1.51198	43.5
Magnesium	24.3	2	20.4	1.67867	40.4	10.8	0.88871	40.9	10.1	0.8311	41.3	12.1	0.99568	39.8	8.5	0.69698	36.6	17.3	1.42358	40.9
Potassium	39.1	1	1.6	0.04118	1.0	1.2	0.03146	1.4	1.4	0.03504	1.7	1.3	0.03427	1.4	2.2	0.05601	2.9	2.0	0.05064	1.5
Sodium	23.0	1	10.2	0.44368	10.7	5.9	0.25446	11.7	6.1	0.26316	13.1	7.9	0.34276	13.7	6.9	0.29883	15.7	10.1	0.43933	12.6
Iron	55.8	2	0.01	0.00018	0.0	0.01	0.00018	0.0	0.01	0.00018	0.0	0.01	0.00018	0.0	0.01	0.00018	0.0	1.24	0.04441	1.3
Manganese	54.9	2	0.27	0.0099	0.2	0.15	0.00532	0.2	0.00	1.8E-05	0.0	0.00	0.00016	0.0	0.00	1.8E-05	0.0	0.26	0.00936	0.3
Ammonia-N	14.0	1	0.05	0.00358	0.1	0.02	0.00156	0.1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0
Total Cations (meq/L)				4.2			2.2			2.0			2.5			1.9			3.5	
Anions																				
Alkalinity, Total			119			87			84			102			67			137		
Carbonate	60.0	2	0.1082	0.00361	0.1	0.1112	0.00371	0.2	0.0796	0.00265	0.1	0.0826	0.00275	0.1	0.0175	0.00058	0.0	0.0625	0.00208	0.1
Bicarbonate	61.0	1	144.96	2.37604	58.8	105.55	1.73003	74.7	101.83	1.6691	76.6	124.27	2.03694	84.8	81.46	1.33521	75.8	167.01	2.73751	86.0
Chloride	35.5	1	2.9	0.08123	2.0	8.0	0.2265	9.8	6.9	0.19462	8.9	4.4	0.12354	5.1	7.4	0.20788	11.8	2.7	0.07616	2.4
Nitrate-N	14.0	1	0.02	0.00114	0.0	0.02	0.00107	0.0	0.03	0.00228	0.1	0.70	0.05026	2.1	0.73	0.05212	3.0	0.01	0.00036	0.0
Sulfate	96.1	2	75.7	1.57614	39.0	17.0	0.35395	15.3	14.9	0.31023	14.2	9.0	0.1876	7.8	8.0	0.16615	9.4	17.7	0.36853	11.6
Total Anions (meq/L)				4.0			2.3			2.2			2.4			1.8			3.2	
Total Ions (meq/L)				8.2			4.5			4.2			4.9			3.7			6.7	
Cation/Anion Ratio				1.03			0.94			0.92			1.04			1.08			1.09	
Percent Difference				1.4			-3.1			-4.0			2.0			3.9			4.4	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				4.14			2.17			2.01			2.50			1.91			3.43	
Calcium					47.74			45.81			43.89			45.10			44.79			44.14
Magnesium					40.55			41.00			41.30			39.82			36.58			41.56
Sodium + Potassium					11.71			13.19			14.82			15.08			18.63			14.30
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				4.04			2.31			2.18			2.35			1.71			3.18	
Sulfate					39.042			15.295			14.253			7.980			9.717			11.573
Chloride					2.012			9.787			8.942			5.255			12.158			2.392
Bicarbonate + Carbonate					58.946			74.918			76.805			86.765			78.125			86.035

Table 4
Ion Balance Calculations
Cedar Hills Landfill Regional Aquifer Groundwater Monitoring Wells

Data Collected from January 1 1, 2014 to March 31, 2014

Site ID			Vertical to Facilites												Downgradient Northwest					
			MW-64 1/14/14			MW-66 1/16/14			MW-67 1/6/14			MW-68 1/14/14			MW-69 1/15/14			MW-72 1/21/14		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	19.6	0.97804	36.2	20.6	1.02794	36.7	29.7	1.48204	43.9	25.9	1.29242	43.5	28.2	1.40719	46.6	29.4	1.46707	43.0
Magnesium	24.3	2	16.3	1.34129	49.6	16.8	1.38243	49.4	17.9	1.47295	43.6	15.0	1.23431	41.6	14.2	1.16848	38.7	17.8	1.46472	42.9
Potassium	39.1	1	1.7	0.04425	1.6	1.3	0.03223	1.2	1.7	0.04322	1.3	1.6	0.04195	1.4	1.7	0.04322	1.4	1.8	0.04501	1.3
Sodium	23.0	1	7.7	0.33319	12.3	8.2	0.35668	12.7	8.6	0.3719	11.0	8.3	0.36234	12.2	8.1	0.35016	11.6	7.9	0.3432	10.1
Iron	55.8	2	0.09	0.00307	0.1	0.01	0.00018	0.0	0.14	0.00512	0.2	0.78	0.02797	0.9	1.07	0.03832	1.3	2.20	0.07879	2.3
Manganese	54.9	2	0.07	0.0027	0.1	0.00	1.8E-05	0.0	0.08	0.00284	0.1	0.28	0.01008	0.3	0.24	0.00874	0.3	0.32	0.01169	0.3
Ammonia-N	14.0	1	0.03	0.00214	0.1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.02	0.00107	0.0	0.01	0.00079	0.0	0.02	0.00112	0.0
Total Cations (meq/L)				2.7	99.9		2.8			3.4			3.0			3.0			3.4	
Anions																				
Alkalinity, Total			104			118			129			131			134			116		
Carbonate	60.0	2	0.0385	0.00128	0.0	0.1149	0.00383	0.1	0.1021	0.0034	0.1	0.0991	0.0033	0.1	0.1719	0.00573	0.2	0.0567	0.00189	0.1
Bicarbonate	61.0	1	126.80	2.0784	72.4	143.73	2.35581	80.7	157.17	2.57621	72.7	159.62	2.6163	85.9	163.13	2.67387	85.1	141.40	2.31776	70.9
Chloride	35.5	1	4.1	0.11508	4.0	7.2	0.20196	6.9	4.9	0.13793	3.9	2.8	0.07926	2.6	5.9	0.16642	5.3	4.6	0.12947	4.0
Nitrate-N	14.0	1	0.01	0.00036	0.0	0.74	0.05269	1.8	0.40	0.02856	0.8	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0
Sulfate	96.1	2	32.5	0.67668	23.6	14.6	0.30398	10.4	38.2	0.79536	22.5	16.7	0.34771	11.4	14.2	0.29566	9.4	39.4	0.82034	25.1
Total Anions (meq/L)				2.9	100.0		2.9			3.5			3.0			3.1			3.3	
Total Ions (meq/L)				5.6			5.7			6.9			6.0			6.2			6.7	
Cation/Anion Ratio				0.94			0.96			0.95			0.97			0.96			1.04	
Percent Difference				-3.0			-2.1			-2.4			-1.3			-2.0			2.1	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				2.70			2.80			3.37			2.93			2.97			3.32	
Calcium					36.27			36.72			43.98			44.09			47.40			44.19
Magnesium					49.74			49.39			43.71			42.11			39.36			44.12
Sodium + Potassium					14.00			13.89			12.32			13.79			13.25			11.69
					100.0															
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				2.87			2.87			3.51			3.05			3.14			3.27	
Sulfate					23.566			10.608			22.641			11.413			9.411			25.091
Chloride					4.008			7.048			3.926			2.602			5.297			3.960
Bicarbonate + Carbonate					72.426			82.344			73.433			85.985			85.292			70.949
					100.0															

Table 4
Ion Balance Calculations
Cedar Hills Landfill Regional Aquifer Groundwater Monitoring Wells

Data Collected from January 1 1, 2014 to March 31, 2014

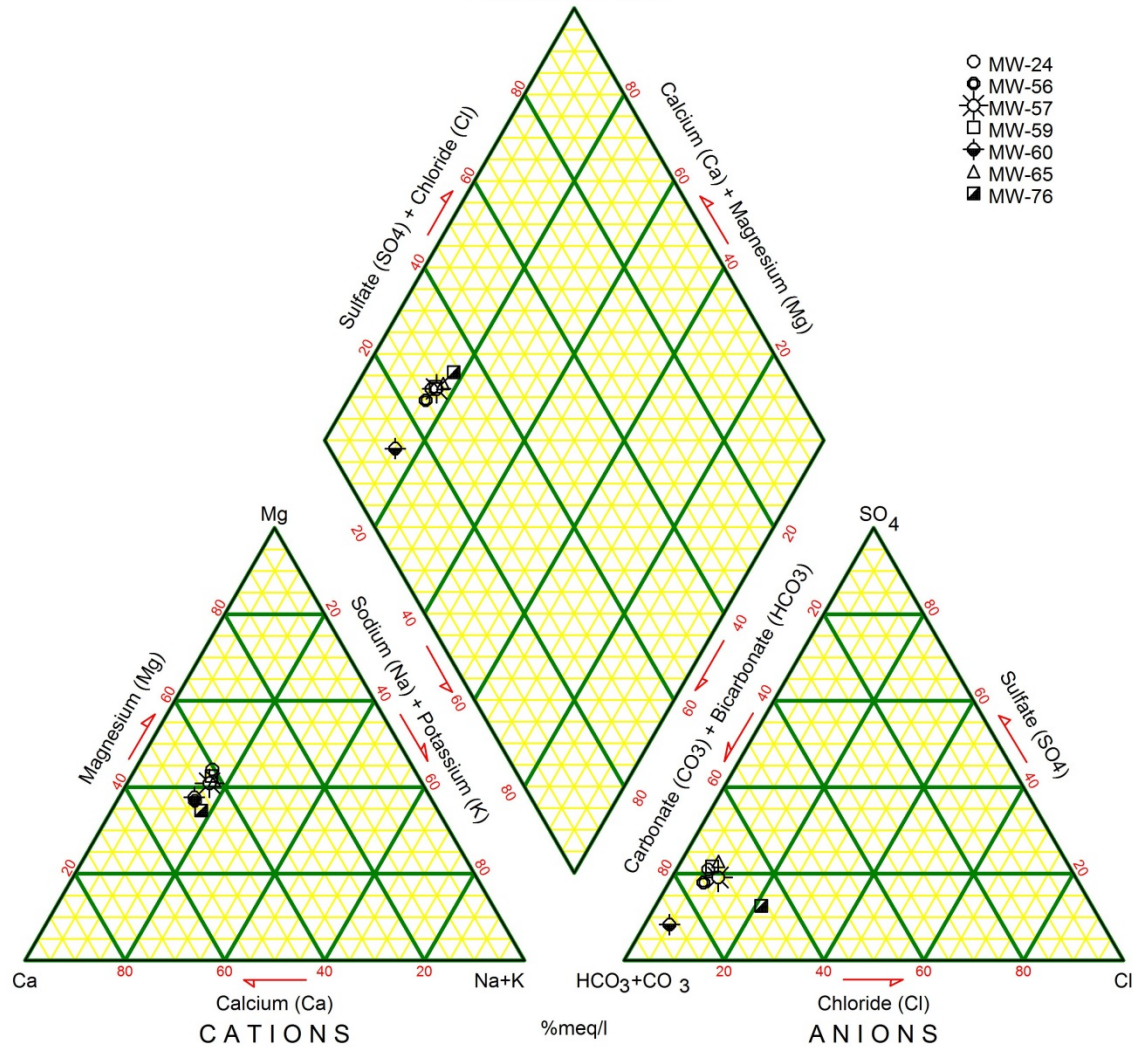
Site ID			Downgradient																	
			MW-74 1/17/14			MW-75 1/17/14			MW-80 1/27/14			MW-85 1/6/14			MW-86 1/27/14			MW-87 1/17/14		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	45.1	2.2505	39.8	25.6	1.27745	38.5	29.4	1.46707	46.2	25.1	1.2525	42.8	14.8	0.73852	38.2	41.4	2.06587	41.0
Magnesium	24.3	2	34.2	2.81424	49.7	19.0	1.56346	47.1	15.3	1.259	39.6	15.6	1.28369	43.8	10.3	0.84756	43.8	28.3	2.32874	46.2
Potassium	39.1	1	2.1	0.05294	0.9	1.7	0.0445	1.3	1.6	0.04041	1.3	1.6	0.0399	1.4	1.2	0.03018	1.6	2.2	0.05678	1.1
Sodium	23.0	1	12.4	0.53937	9.5	8.7	0.37669	11.3	7.9	0.34276	10.8	8.1	0.35146	12.0	7.0	0.30274	15.7	10.2	0.44368	8.8
Iron	55.8	2	0.01	0.00018	0.0	1.51	0.05408	1.6	1.61	0.05766	1.8	0.01	0.00018	0.0	0.39	0.01386	0.7	3.48	0.12463	2.5
Manganese	54.9	2	0.00	1.8E-05	0.0	0.13	0.00462	0.1	0.28	0.01008	0.3	0.00	1.8E-05	0.0	0.01	0.00035	0.0	0.42	0.01511	0.3
Ammonia-N	14.0	1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00096	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00093	0.0
Total Cations (meq/L)				5.7			3.3			3.2			2.9			1.9			5.0	
Anions																				
Alkalinity, Total			215			99			96			100			64			88		
Carbonate	60.0	2	0.1353	0.00451	0.1	0.0472	0.00157	0.0	0.0646	0.00215	0.1	0.0722	0.00241	0.1	0.018	0.0006	0.0	0.0496	0.00165	0.0
Bicarbonate	61.0	1	262.02	4.29484	77.9	120.44	1.97413	59.6	116.87	1.91556	63.9	121.85	1.99729	65.5	77.92	1.27721	69.9	107.75	1.76608	35.8
Chloride	35.5	1	23.7	0.66849	12.1	12.0	0.33848	10.2	5.4	0.15231	5.1	10.4	0.29335	9.6	5.4	0.15288	8.4	6.7	0.18814	3.8
Nitrate-N	14.0	1	0.44	0.03134	0.6	0.01	0.00036	0.0	0.02	0.00129	0.0	0.14	0.00964	0.3	0.14	0.01014	0.6	0.01	0.00036	0.0
Sulfate	96.1	2	24.8	0.51636	9.4	47.8	0.99524	30.1	44.6	0.92861	31.0	35.8	0.74539	24.5	18.6	0.38727	21.2	143.0	2.97738	60.3
Total Anions (meq/L)				5.5			3.3			3.0			3.0			1.8			4.9	
Total Ions (meq/L)				11.2			6.6			6.2			6.0			3.8			10.0	
Cation/Anion Ratio				1.03			1.00			1.06			0.96			1.06			1.02	
Percent Difference				1.3			0.2			2.9			-2.0			2.8			1.0	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				5.66			3.26			3.11			2.93			1.92			4.90	
Calcium					39.78			39.16			47.18			42.78			38.48			42.20
Magnesium					49.75			47.93			40.49			43.85			44.17			47.57
Sodium + Potassium					10.47			12.91			12.32			13.37			17.35			10.22
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				5.48			3.31			3.00			3.04			1.82			4.93	
Sulfate					9.415			30.073			30.968			24.532			21.302			60.353
Chloride					12.189			10.228			5.079			9.655			8.409			3.814
Bicarbonate + Carbonate					78.395			59.699			63.953			65.814			70.288			35.833

Table 4
Ion Balance Calculations
Cedar Hills Landfill Regional Aquifer Groundwater Monitoring Wells

Data Collected from January 1 1, 2014 to March 31, 2014

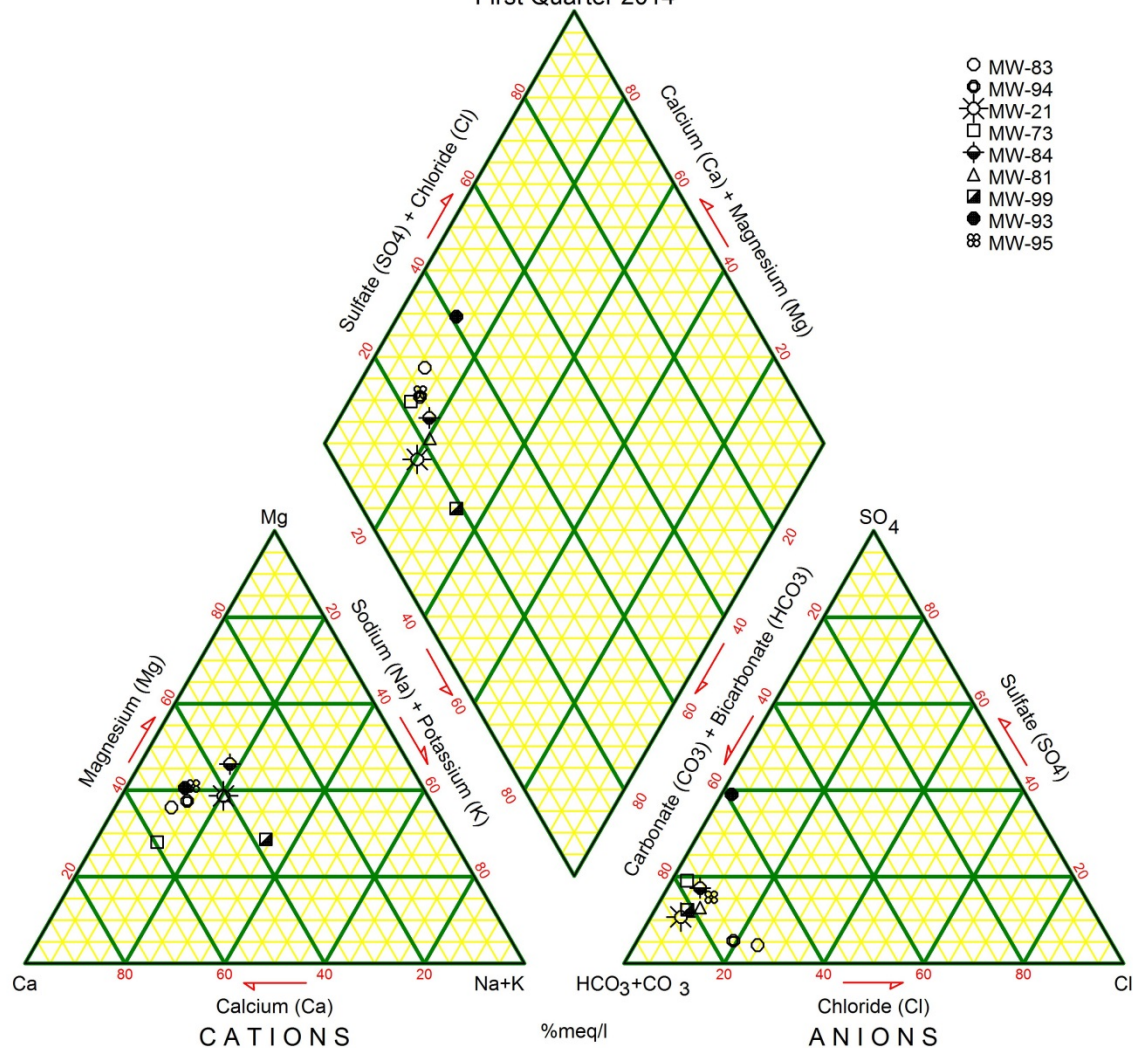
Site ID		Downgradient of North End Facilities														
		MW-88 1/13/14			MW-89 1/13/14			MW-90 1/10/14			MW-91 1/7/14			MW-43 1/10/14		
Cations	MW n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1 2	8.3	0.41517	34.6	13.1	0.65369	34.8	16.2	0.80838	41.7	22.5	1.12275	40.0	12.8	0.63872	36.4
Magnesium	24.3 2	6.5	0.53322	44.4	9.8	0.80889	43.0	9.5	0.7842	40.5	14.9	1.22609	43.6	9.3	0.76527	43.6
Potassium	39.1 1	0.8	0.02008	1.7	1.4	0.03683	2.0	1.3	0.03402	1.8	1.8	0.04604	1.6	1.3	0.03427	2.0
Sodium	23.0 1	5.3	0.23228	19.3	7.8	0.34102	18.1	6.0	0.26273	13.6	7.4	0.32101	11.4	6.3	0.27316	15.6
Iron	55.8 2	0.01	0.00018	0.0	0.80	0.02847	1.5	1.03	0.03689	1.9	2.27	0.08129	2.9	0.93	0.03338	1.9
Manganese	54.9 2	0.00	1.8E-05	0.0	0.27	0.00972	0.5	0.27	0.00983	0.5	0.30	0.01085	0.4	0.23	0.00848	0.5
Ammonia-N	14.0 1	0.01	0.00036	0.0	0.02	0.00116	0.1	0.02	0.00117	0.1	0.02	0.00114	0.0	0.02	0.00169	0.1
Total Cations (meq/L)			1.2			1.9			1.9			2.8			1.8	
Anions																
Alkalinity, Total		53			73			69			87			70		
Carbonate	60.0 2	0.05321	0.00177	0.1	0.06817	0.00227	0.1	0.03601	0.0012	0.1	0.06755	0.00225	0.1	0.04745	0.00158	0.1
Bicarbonate	61.0 1	65.04	1.06607	80.8	89.29	1.46351	75.6	83.86	1.37459	66.8	106.37	1.74349	61.0	85.79	1.40621	76.8
Chloride	35.5 1	2.3	0.06346	4.8	4.3	0.11988	6.2	4.1	0.11565	5.6	8.6	0.24286	8.5	5.0	0.14019	7.7
Nitrate-N	14.0 1	0.55	0.03955	3.0	0.01	0.00036	0.0	0.01	0.00079	0.0	0.03	0.00178	0.1	0.01	0.00036	0.0
Sulfate	96.1 2	7.2	0.14908	11.3	16.8	0.34979	18.1	27.2	0.56633	27.5	41.6	0.86615	30.3	13.6	0.28316	15.5
Total Anions (meq/L)			1.3			1.9			2.1			2.9			1.8	
Total Ions (meq/L)			2.5			3.8			4.0			5.7			3.6	
Cation/Anion Ratio			0.91			0.97			0.94			0.98			0.96	
Percent Difference			-4.7			-1.5			-3.0			-0.8			-2.1	
Trilinear Diagram Data																
sum (Ca, Mg, Na+K)			1.20			1.84			1.89			2.72			1.71	
Calcium				34.58			35.52			42.79			41.34			37.32
Magnesium				44.41			43.95			41.51			45.14			44.72
Sodium + Potassium				21.02			20.53			15.71			13.51			17.96
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.28			1.94			2.06			2.85			1.83	
Sulfate				11.643			18.073			27.521			30.341			15.464
Chloride				4.957			6.194			5.620			8.507			7.656
Bicarbonate + Carbonate				83.400			75.733			66.859			61.152			76.881

Cedar Hills Regional Landfill
 Figure 2. Regional Aquifer South Upgradient Wells
 First Quarter 2014

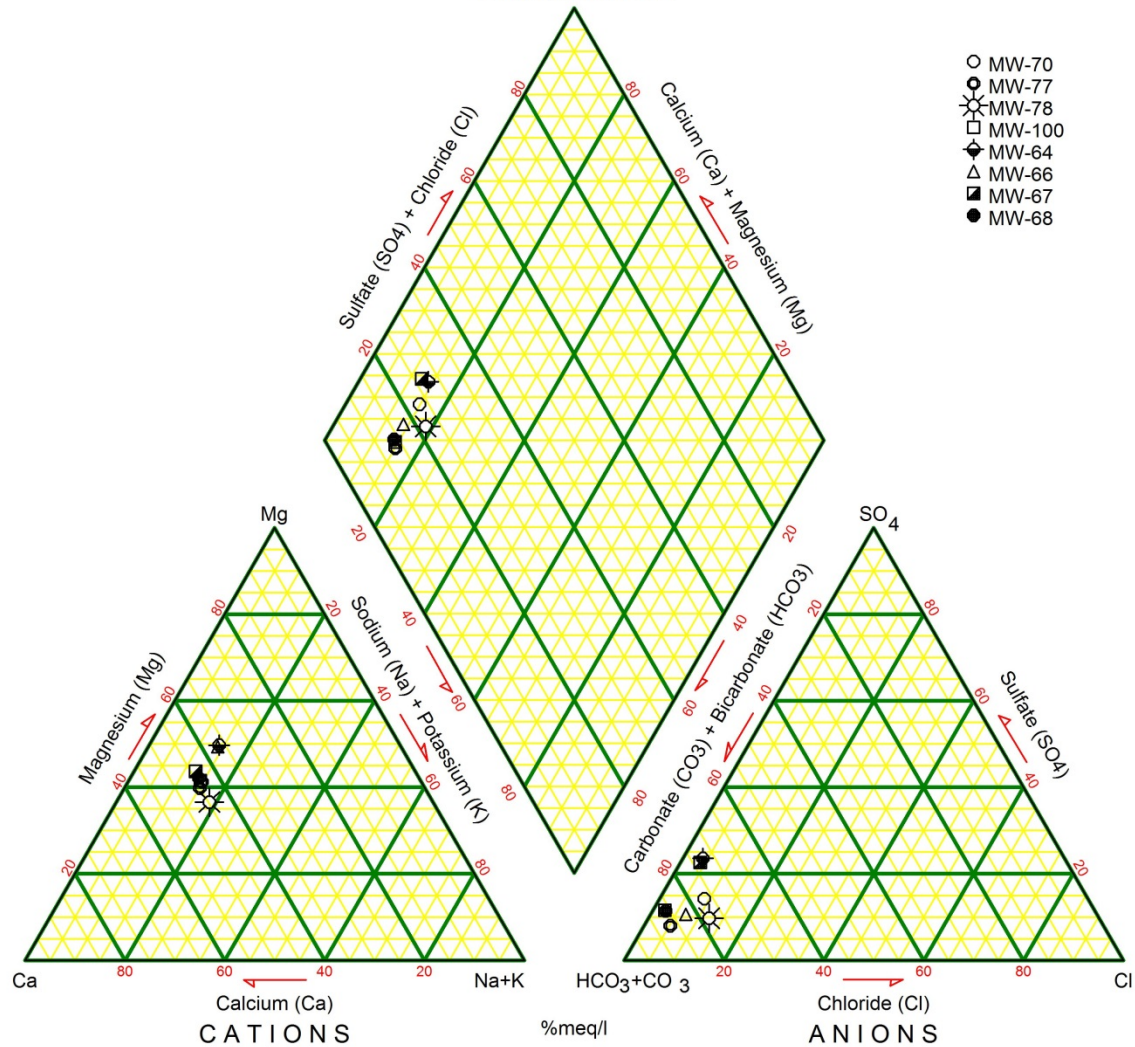


Cedar Hills Regional Landfill

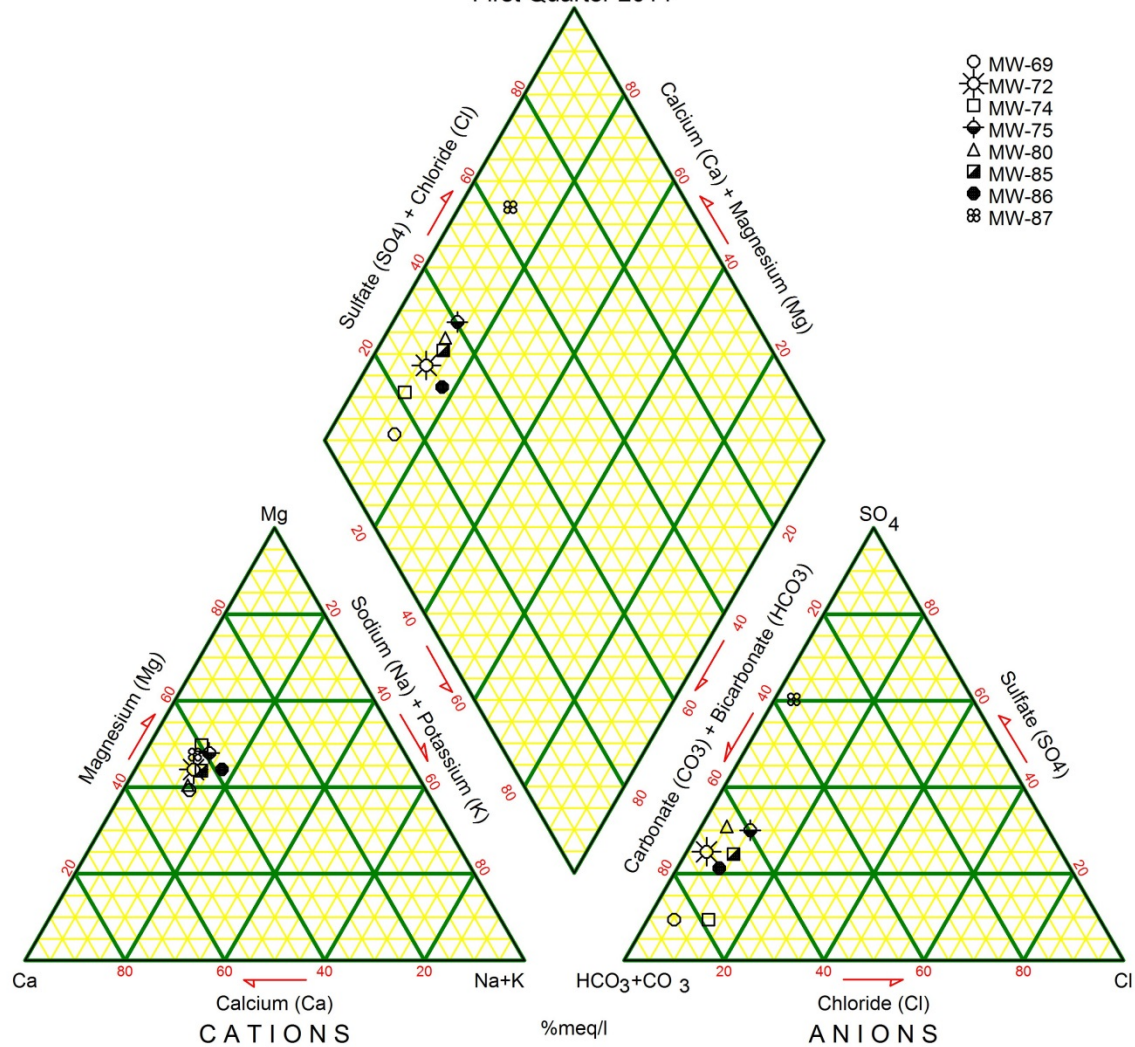
Figure 3. Regional Aquifer S Upgradient NE and NW Crossgradient Wells
First Quarter 2014



Cedar Hills Regional Landfill
Figure 4. Regional Aquifer Wells Interior and Vertical to Facilities
First Quarter 2014



Cedar Hills Regional Landfill
Figure 5. Regional Aquifer Downgradient Wells
First Quarter 2014



Cedar Hills Regional Landfill

Figure 6. Regional Aquifer Wells Downgradient of Northend Facilities
First Quarter 2014

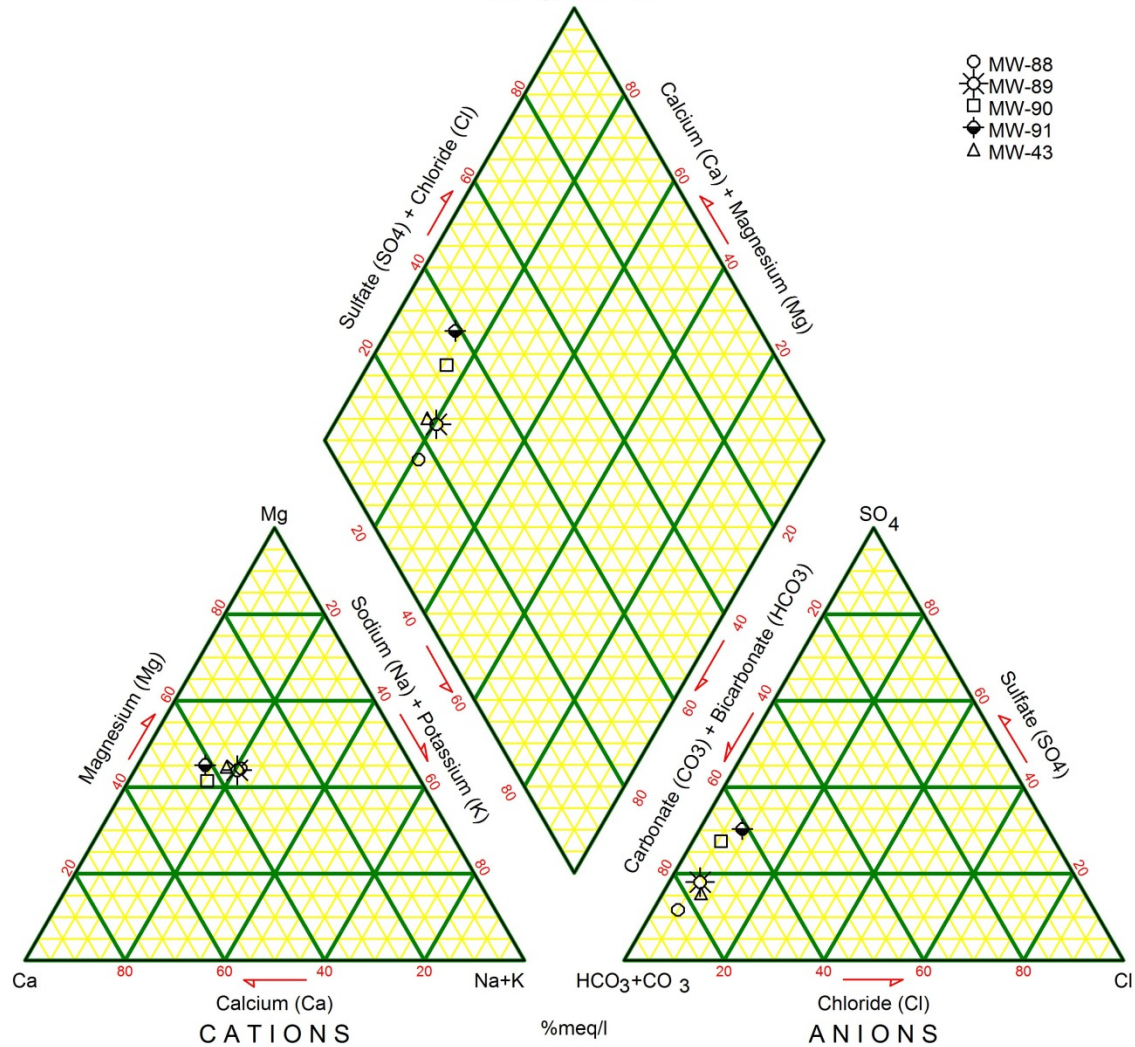


TABLE 5
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT EXCEEDANCES
(Data Collected from January 1, 2014 to March 31, 2014)

Parameter	Units	Well ID	Sample Date	Sample Value	Intrawell Limit Value
South, Northeast and Northwest Upgradient and Crossgradient Wells					
NO PREDICTION LIMIT EXCEEDANCES THIS QUARTER					
Interior and Vertical to Facilities Wells					
Arsenic Dissolved	mg/L	MW-68	01/14/14	0.00729	0.005
Wells Downgradient to Waste Cells and North end Facilities					
Barium Dissolved	mg/L	MW-87	01/17/14	0.0224	0.0216

TABLE 6
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN REGIONAL AQUIFER WELLS
(Data Collected from January 1, 2014 to March 31, 2014)

Analyte	Site ID	Date	Sample ID	ug/L
South, Northeast and Northwest Upgradient and Crossgradient Wells				
Acetone	MW-21	1/3/2014	W21-140103-	4.09
cis-1,2-Dichloroethene	MW-24	1/21/2014	W24-140121-	0.24 T
	MW-56	1/3/2014	W56-140103-	1.22
	MW-59	1/10/2014	W59-140110-	0.74
	MW-76	1/10/2014	W76-140110-	0.509
Tetrachloroethene	MW-76	1/10/2014	W76-140110-	0.445
Trichloroethene	MW-76	1/10/2014	W76-140110-	7.89
	MW-78	1/27/2014	W78-140127-	0.649
	MW-82	3/31/2014	W82-140331-	4.76
	MW-83	1/16/2014	W83-140116-	1.66
	MW-94	1/13/2014	W94-140113-	2.64
Vinyl Chloride	MW-65	1/3/2014	W65-140103-	0.0511
Interior and Vertical to Facilities Wells				
No Detections this Quarter				
Downgradient Wells				
No Detections this Quarter				

TABLE 7
SUMMARY OF EXCEEDANCES OF WAC 173-200-040
WATER QUALITY STANDARDS FOR GROUND WATERS OF THE STATE OF WASHINGTON

CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES
(Data Collected from January 1, 2014 to March 31, 2014)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
North and West Perched Wells					
pH (field)	(pH units)	MW-28	1/15/14	W28-140115-	5.9
		MW-29	1/31/14	W29-140131-	6.38
Arsenic (Total)	(mg/L)	MW-27A	1/7/2014	W27A140107-	0.0158
Manganese (Dissolved)	(mg/L)	MW-27A	1/7/2014	W27A140107-	0.0679
		MW-55	1/15/2014	W55-140115-	0.168
East Perched Zone Wells					
pH (field)	(pH units)	MW-30A	1/28/14	W30A140128-	6.35
		MW-EB6	1/24/14	WB6-140124-	5.76
Arsenic (Total)	(mg/L)	MW-EB6	1/24/14	WB6-140124-	0.0059
Iron (Dissolved)	(mg/)	MW-EB6	1/24/14	WB6-140124-	6.34
Manganese (Dissolved)	(mg/L)	MW-47	1/6/14	W47-140106-	1.77
		MW-EB6	1/24/14	WB6-140124-	0.315 D
1,1-Dichloroethane	(ug/L)	MW-30A	1/28/14	W30A140128-	1.86
		MW-62	1/28/14	W62-140128-	1.43
Total Dissolved Solids	(mg/L)	MW-47	1/6/14	W47-140106-	688
Vinyl Chloride	(ug/L)	MW-47	1/6/14	W47-140106-	4.63
South Solid Waste Area Perched Wells					
Arsenic (Total)	(mg/L)	MW-101	1/16/2014	W101140116-	0.00406 D
Manganese (Dissolved)	(mg/L)	MW-101	1/16/2014	W101140116-	1.38 D
Vinyl Chloride	(ug/L)	MW-101	1/16/2014	W101140116-	0.353

See Data Qualifier List for Qualifier Information.

Table 8
Ion Balance Calculations
Cedar Hills Landfill Perched Zones GW Monitoring Wells

Data Collected from January 1, 2014 to March 31, 2014

Site ID Date			North and West Perched Wells											
			MW-27A 1/7/14			MW-28 1/15/14			MW-29 1/31/14			MW-55 1/15/14		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	19.3	0.96307	52.8	8.5	0.42365	47.7	7.2	0.36078	49.8	12.1	0.60379	40.4
Magnesium	24.3	2	5.6	0.46163	25.3	2.3	0.19008	21.4	1.7	0.14153	19.6	6.9	0.57025	38.2
Potassium	39.1	1	3.6	0.09131	5.0	0.9	0.02379	2.7	0.6	0.01593	2.2	1.7	0.04322	2.9
Sodium	23.0	1	6.6	0.28621	15.7	5.7	0.24924	28.1	4.7	0.20487	28.3	5.9	0.25794	17.3
Iron	55.8	2	0.0	0.00018	0.0	0.0	0.00018	0.0	0.0	0.00047	0.1	0.3	0.0096	0.6
Manganese	54.9	2	0.1	0.00247	0.1	0.0	1.8E-05	0.0	0.0	1.8E-05	0.0	0.2	0.00612	0.4
Ammonia-N	14.0	1	0.3	0.01828	1.0	0.0	0.00036	0.0	0.0	0.00036	0.0	0.1	0.00376	0.3
Total Cations (meq/L)			1.8			0.9			0.7			1.5		
Anions														
Alkalinity, Total			82			25.1			25.1			60.7		
Carbonate	60.0	2	0.35469	0.01182	0.6	0.0012	4E-05	0.0	0.00362	0.00012	0.0	0.11508	0.00384	0.3
Bicarbonate	61.0	1	99.32	1.62793	81.5	30.62	0.50188	54.4	30.61	0.5018	68.3	73.82	1.20998	79.1
Chloride	35.5	1	5.7	0.15937	8.0	3.3	0.09252	10.0	2.8	0.07757	10.6	2.1	0.05782	3.8
Nitrate-N	14.0	1	0.0	0.00236	0.1	0.4	0.02799	3.0	1.6	0.11708	15.9	0.0	0.00036	0.0
Sulfate	96.1	2	9.5	0.19676	9.8	14.4	0.29982	32.5	1.8	0.03831	5.2	12.4	0.25818	16.9
Total Anions (meq/L)			2.0			0.9			0.7			1.5		
Total Ions (meq/L)			3.8			1.8			1.5			3.0		
Cation/Anion Ratio			0.91			0.96			0.99			0.98		
Percent Difference			-4.6			-1.9			-0.7			-1.2		
TRILINEAR DIAGRAM DATA														
sum (Ca, Mg, Na+K)			1.80			0.89			0.72			1.48		
Calcium			53.4			47.8			49.9			40.9		
Magnesium			25.6			21.4			19.6			38.7		
Sodium + Potassium			20.9			30.8			30.5			20.4		
						100.0			100.0					
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			2.00			0.89			0.62			1.53		
Sulfate			9.9			33.5			6.2			16.9		
Chloride			8.0			10.3			12.6			3.8		
Bicarbonate + Carbonate			82.2			56.1			81.2			79.3		

Table 8
Ion Balance Calculations
Cedar Hills Landfill Perched Zones GW Monitoring Wells

Data Collected from January 1, 2014 to March 31, 2014

Site ID	Date	MW	n	East Perched Zone												SSWA		
				MW-30A			MW-47			MW-62			MW-EB6			MW-101		
				1/28/14			1/6/14			1/28/14			1/24/14			1/16/14		
Cations				mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2		25.1	1.2525	38.6	123.0	6.13772	51.1	21.0	1.0479	44.3	7.0	0.34731	22.4	58.2	2.90419	42.0
Magnesium	24.3	2		14.5	1.19317	36.8	59.6	4.90434	40.8	7.3	0.60235	25.5	3.7	0.30035	19.3	38.5	3.16807	45.8
Potassium	39.1	1		1.6	0.04041	1.2	5.0	0.12737	1.1	1.0	0.0266	1.1	1.2	0.02941	1.9	3.0	0.0775	1.1
Sodium	23.0	1		17.4	0.75686	23.3	17.4	0.75686	6.3	15.8	0.68726	29.1	12.1	0.52632	33.9	16.5	0.71771	10.4
Iron	55.8	2		0.0	0.00018	0.0	0.3	0.01053	0.1	0.0	0.00018	0.0	6.3	0.22705	14.6	0.1	0.00292	0.0
Manganese	54.9	2		0.0	1.8E-05	0.0	1.8	0.06444	0.5	0.0	1.8E-05	0.0	0.3	0.01147	0.7	1.4	0.05024	0.7
Ammonia-N	14.0	1		0.0	0.00036	0.0	0.1	0.00585	0.0	0.0	0.00036	0.0	1.6	0.11066	7.1	0.0	0.00086	0.0
Total Cations (meq/L)					3.2			12.0			2.4	100.0		1.6	92.9		6.9	
Anions																		
Alkalinity, Total				133			650			78.1			62.9			362		
Carbonate	60.0	2		0.0179	0.0006	0.0	0.31028	0.01034	0.1	0.02408	0.0008	0.0	0.00218	7.3E-05	0.0	0.24401	0.00813	0.1
Bicarbonate	61.0	1		162.22	2.659	86.9	792.37	12.9877	97.5	95.23	1.56096	65.2	76.73	1.25774	93.2	441.14	7.23078	97.1
Chloride	35.5	1		1.1	0.03216	1.1	6.9	0.19462	1.5	5.6	0.15852	6.6	0.8	0.02132	1.6	3.6	0.10098	1.4
Nitrate-N	14.0	1		2.7	0.19062	6.2	0.0	0.00036	0.0	3.0	0.21703	9.1	0.0	0.00257	0.2	0.0	0.00036	0.0
Sulfate	96.1	2		8.6	0.17823	5.8	6.1	0.1268	1.0	21.9	0.45598	19.1	3.3	0.06788	5.0	5.2	0.10868	1.5
Total Anions (meq/L)					3.1			13.3			2.4	100.0		1.3	100.0		7.4	
Total Ions (meq/L)					6.3			25.3			4.8			2.9			14.4	
Cation/Anion Ratio					1.06			0.90			0.99			1.15			0.93	
Percent Difference					2.9			-5.2			-0.6			7.0			-4	
TRILINEAR DIAGRAM DATA																		
sum (Ca, Mg, Na+K)					3.24			11.93			2.36			1.20			6.87	
Calcium						38.6			51.5			44.33			28.86			42.29
Magnesium						36.8			41.1			25.48			24.96			46.13
Sodium + Potassium						24.6			7.4			30.20			46.18			11.58
												100.0			100.0			
sum (SO ₄ , Cl, HCO ₃ +CO ₃)					2.87			13.32			2.18			1.35			7.45	
Sulfate						6.2			1.0			21.0			5.0			1.5
Chloride						1.1			1.5			7.3			1.6			1.4
Bicarbonate + Carbonate						92.7			97.6			71.8			93.4			97.2
												100.0			100.0			

Cedar Hills Regional Landfill
 Figure 7. Perched Zone Wells North and West
 First Quarter 2014

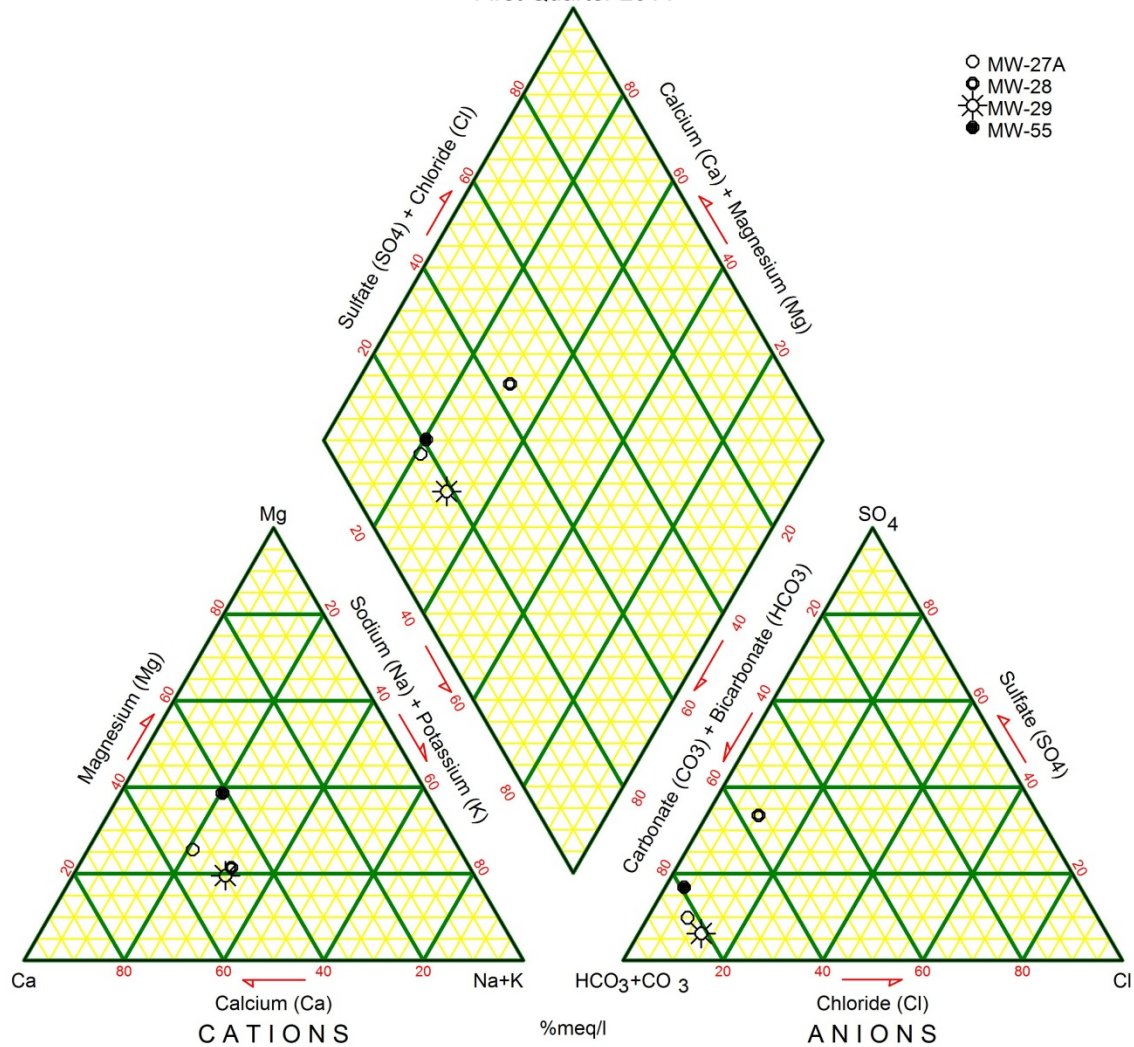
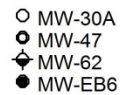


Figure 8. East Perched Zone Wells



Cedar Hills Regional Landfill
 Figure 9. SSWA Perched Zone Wells
 First Quarter 2014

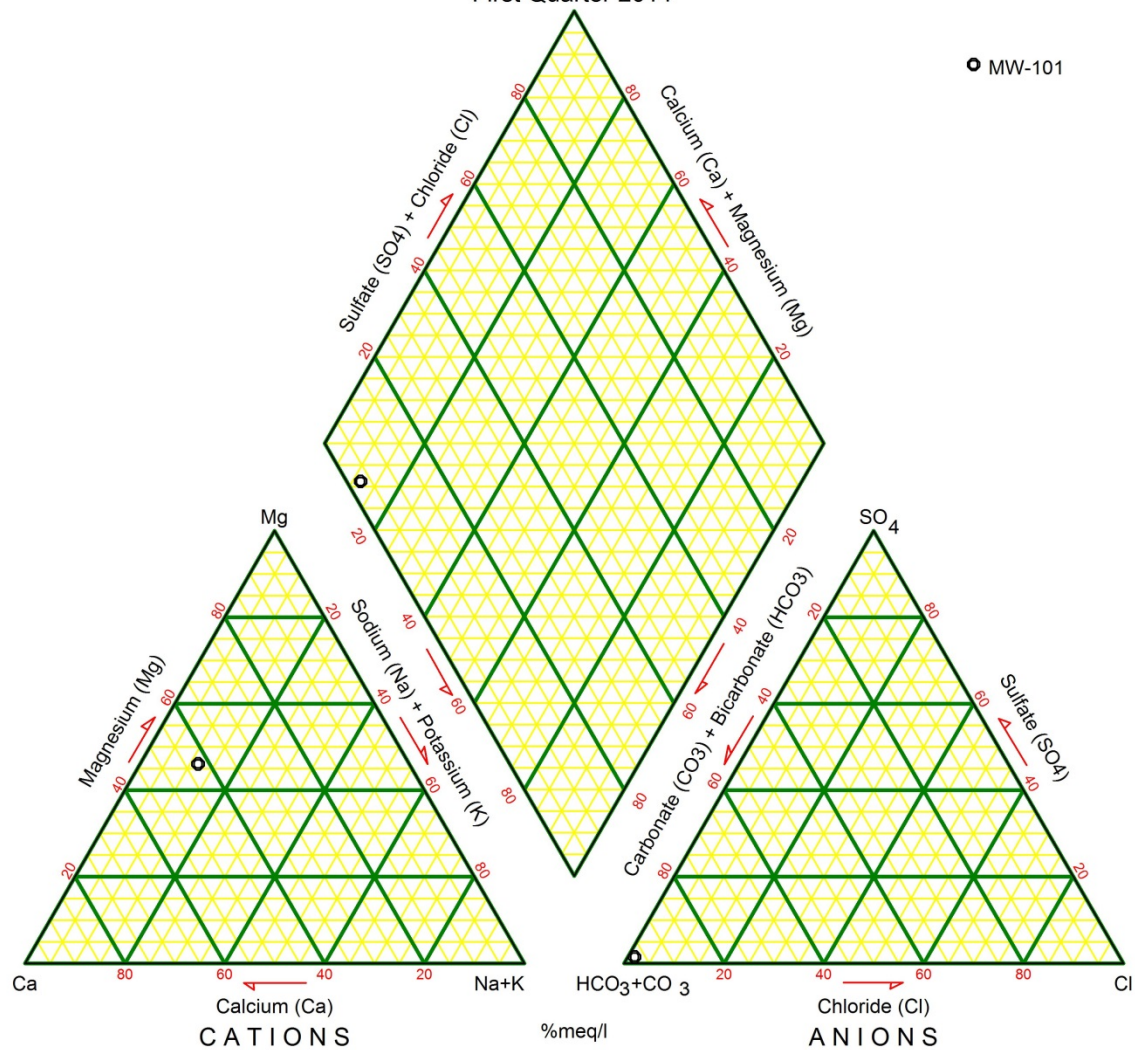


TABLE 9
CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT EXCEEDANCES
(Data Collected from January 1, 2014 to March 31, 2014)

Parameter	Units	Well ID	Sample Date	Sample Value	Limit Value
NO PERCHED ZONE PREDICTION LIMIT EXCEEDANCES THIS QUARTER					

Table 11
Surface Water Monitoring Activities 1st Quarter 2014

Station ID	Date	Planned Activity	Sample ID	Comment
SW-E1	1/22/14	Quarterly Characterization Sample	SE1-140122Q	
SW-E1	2/26/14	Monthly Characterization Sample	SE1-140226M	
SW-E1	3/19/14	Monthly Characterization Sample	SE1-140319M	
SW-GS1	1/2/14	NPDES Permit Sample	SGS1140102P	
SW-GS1	1/22/14	Quarterly Characterization Sample	SGS1140122Q	
SW-GS1	2/27/14	Monthly Characterization Sample	SGS1140227M	
SW-GS1	3/19/14	Monthly Characterization Sample	SGS1140319M	
SW-GS1	3/25/14	NPDES Permit Sample	SGS1140325P	
SW-LP1	1/23/14	South Lagoon Inlet Characterization	SLP1140123P	
SW-LP1	2/27/14	South Lagoon Inlet Characterization	SLP1140227P	
SW-LP2	1/23/14	South Lagoon Inlet Characterization	SLP2140123P	
SW-LP2	2/27/14	South Lagoon Inlet Characterization	SLP2140227P	
SW-LP3	1/23/14	South Lagoon Inlet Characterization	NA ¹	
SW-LP3	2/27/14	South Lagoon Inlet Characterization	NA	
SW-MC	1/23/14	Quarterly Characterization Sample	SMC-140123Q	
SW-MC	2/27/14	Monthly Characterization Sample	SMC-140227M	
SW-MC	3/31/14	Monthly Characterization Sample	SMC-140331M	
SW-N1	1/22/14	Quarterly Characterization Sample	SN1-140122Q	
SW-N1	2/26/14	Monthly Characterization Sample	SN1-140226M	
SW-N1	3/19/14	Monthly Characterization Sample	SN1-140319M	
SW-N4	1/2/14	NPDES Permit Sample	SN4-140102P	
SW-N4	1/23/14	Quarterly Characterization Sample	SN4-140123Q	
SW-N4	1/23/14	QA/QC Sample	SN4-140123D	Field Duplicate
SW-N4	2/26/14	Monthly Characterization Sample	SN4-140226M	
SW-N4	3/19/14	Monthly Characterization Sample	SN4-140319M	
SW-N4	3/19/14	QA/QC Sample	SN4-140319D	Field Duplicate
SW-N4	3/25/14	NPDES Permit Sample	SN4-140325P	
SW-S1	1/22/14	Quarterly Characterization Sample	SS1-140122Q	
SW-S1	2/27/14	Monthly Characterization Sample	SS1-140227M	
SW-S1	3/19/14	Monthly Characterization Sample	SS1-140319M	
SW-S2	1/22/14	Quarterly Characterization Sample	SS2-140122Q	
SW-S2	2/27/14	Monthly Characterization Sample	SS2-140227M	
SW-S2	3/19/14	Monthly Characterization Sample	SS2-140319M	
SW-S3	1/22/14	Monthly Characterization Sample	NA	No Flow, No Sample
SW-S3	2/27/14	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S3	3/19/14	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-SL3	1/2/14	NPDES Permit Sample	SSL3140102P	
SW-SL3	1/22/14	Quarterly Characterization Sample	SSL3140122Q	
SW-SL3	1/23/14	Monthly Characterization Sample	SSL3140123P	
SW-SL3	2/27/14	Quarterly Characterization Sample	SSL3140227M	
SW-SL3	2/27/14	NPDES Permit Sample	SSL3140227P	
SW-SL3	3/19/14	Monthly Characterization Sample	SSL3140319M	
SW-SL3	3/25/14	Quarterly Characterization Sample	SSL3140325P	
SW-TD1	1/29/14	Area 5 Top Deck Monitoring	STD1140129-	
SW-TD2	1/29/14	Area 5 Top Deck Monitoring	STD2140129-	
SW-TD4	1/29/14	Area 5 Top Deck Monitoring	STD4140129-	
SW-TD6	1/29/14	Area 5 Top Deck Monitoring	STD6140129-	
SW-V	1/22/14	Quarterly Characterization Sample	SV--140122Q	
SW-V	2/26/14	Monthly Characterization Sample	SV--140226M	
SW-V	3/19/14	Quarterly Characterization Sample	SV--140319M	

Table 11
Surface Water Monitoring Activities 1st Quarter 2014

Station ID	Date	Planned Activity	Sample ID	Comment
SW-W	1/23/14	Monthly Characterization Sample	SW--140123Q	
SW-W	2/27/14	Monthly Characterization Sample	SW--140227M	
SW-W	3/31/14	Quarterly Characterization Sample	SW--140331M	
SW-W1	1/22/14	Monthly Characterization Sample	SW1-140122Q	
SW-W1	2/26/14	Monthly Characterization Sample	SW1-140226M	
SW-W1	3/19/14	Monthly Characterization Sample	SW1-140319M	
SW-W2	1/22/14	Quarterly Characterization Sample	SW2-140122Q	
SW-W2	2/27/14	Monthly Characterization Sample	SW2-140227M	
SW-S2	2/27/14	QA/QC Sample	SS2-140227D	Field Duplicate
SW-W2	3/19/14	Monthly Characterization Sample	SW2-140319M	
Field Blank	2/26/14	QA/QC Sample	SN1-140226F	
Field Blank	3/19/14	QA/QC Sample	SW2-140319F	
Staff Gages	1/22/14	Monthly Stream Gage Levels	NA	
Staff Gages	2/26/14	Monthly Stream Gage Levels	NA	
Staff Gages	2/27/14	Monthly Stream Gage Levels	NA	
Staff Gages	3/18/14	Monthly Stream Gage Levels	NA	
Staff Gages	3/19/14	Monthly Stream Gage Levels	NA	

¹ No sample ID assigned, No sample collected.

TABLE 12
CEDAR HILLS LANDFILL
SUMMARY OF STORMWATER PERMIT EXCEEDANCES
(Data Collected from January 1, 2014 to March 31, 2014)

Parameter		Sampling Location	Date	Value	Regulatory Limit	Regulation
Turbidity	NTU	SW-GS1	1/22/14	32.5	25	ISGP
		SW-GS1	2/27/14	83	25	ISGP
Copper, Total	ug/L	SW-N4	3/19/14	16.1	14	ISGP

ISGP - Industrial General Stormwater Permit

TABLE 13
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN BLANKS
(Data Collected from January 1, 2014 to March 31, 2014)

Analyte	Site ID	Date	Sample ID	ug/L
Acetone	VOA Trip Blank	1/6/2014	VTRP140107C	4.12 B
	VOA Trip Blank	1/16/2014	VTRP140117B	5.3
	VOA Trip Blank	1/16/2014	VTRP140117C	4.17
	VOA Trip Blank	2/20/2014	VTRP140221C	4 BT
	Method Blank	1/13/2014	WG130599-1	2.3
	Method Blank	2/20/2014	WG131192-1	4.16
	Method Blank	2/25/2014	WG131232-1	4.24
2-Butanone	Method Blank	2/25/2014	WG131232-1	2.1
Methylene Chloride	VOA Trip Blank	1/14/2014	VTRP140115B	0.35 T
	VOA Trip Blank	1/14/2014	VTRP140115C	0.545
	VOA Trip Blank	1/15/2014	VTRP140116B	0.712
	VOA Trip Blank	1/15/2014	VTRP140116C	0.551
	VOA Trip Blank	1/16/2014	VTRP140117B	0.668
	VOA Trip Blank	1/16/2014	VTRP140117C	0.37 T
	VOA Trip Blank	1/17/2014	VTRP140121B	0.778
	VOA Trip Blank	1/17/2014	VTRP140121C	0.484
	Method Blank	2/25/2014	WG131232-1	0.37

See Data Qualifier List for Qualifier Information.

Table 14
Groundwater Quality Criteria

			Ground Water
	Analyte	CAS No.	Quality Criteria
			Criterion*
I.	PRIMARY AND SECONDARY CONTAMINANTS AND RADIONUCLIDES		
	A. Primary Contaminants		
	Barium	7440-39-3	1.0
	Cadmium	7440-43-9	0.005
	Chromium	7440-47-3	0.05
	Lead	7439-92-1	0.015
	Mercury	7439-97-6	0.002
	Selenium	7782-49-2	0.01
	Silver	7440-22-4	0.05
	Fluoride	16984-48-8	4.0
	Nitrate	14797-55-8	10.0
	Endrin	72-20-8	0.2
	Methoxychlor	72-43-5	40
	1,1,1-Trichloroethane	71-55-6	200
	2,4-D	94-75-7	70
	2,4,5-TP	93-72-1	100
	Total Coliforms		1/100
	B. Secondary Standards		
	Copper	7440-50-8	1.0
	Iron	7439-89-6	0.3
	Manganese	7439-96-5	0.05
	Zinc	7440-66-6	5.0
	Chloride	16887-00-6	250
	Sulfate	14808-79-8	250
	Total Dissolved Solids		500
	Foaming Agents		0.5
	pH	12408-02-5	6.5-8.5
	Corrosivity		non-corrosive
	Color		15
	Odor-Threshold		3
	C. Radionuclides and Radioactivity		
	Gross Alpha particle activity		15
	Gross Beta particle activity		50
	Tritium	10028-17-8	20,000
	Strontium	7440-24-6	8
	Radium 226 & Radium 228		5
	Radium 226	13982-63-3	3
II.	CARCINOGENS		
	1,1-Dichloroethane	75-34-3	1
	1,2-Dichloroethane	107-06-2	0.5
	1,2-Dichloropropane	78-87-5	0.6
	1,2-Dimethylhydrazine	540-73-8	60
	1,2-Diphenylhydrazine	122-66-7	0.09
	1,3-Dichloropropene tot.	542-75-6	0.2
	1,4-Dichlorobenzene	106-46-7	4
	1,4-Dioxane	123-91-1	7
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.0000006
	2,4,6-Trichlorophenol	88-06-2	4.0
	2,4-Dinitrotoluene	121-14-2	0.1
	2,4-Toluenediamine	95-80-7	0.002
	2,6-Dinitrotoluene	606-20-2	0.1
	2-Methoxy-5-nitroaniline	99-59-2	2.0
	2-Methylaniline	95-53-4	0.2
	2-Methylaniline hydrochloride	636-21-5	0.5
	3,3'-Dichlorobenzidine	91-94-1	0.2
	3,3'-Dimethoxybenzidine	119-90-4	6.0
	3,3'-Dimethylbenzidine	119-93-7	0.007
	4,4'-Methylene bis(N,N'-dimethyl) aniline	101-61-1	2.0
	4-Chloro-2-methyl aniline	95-69-2	0.1
	4-Chloro-2-methyl aniline hydrochloride	3165-93-3	0.2
	Acrylamide	79-06-1	0.02
	Acrylonitrile	107-13-1	0.07
	Aldrin	309-00-2	0.005
	Aniline	62-53-3	14
	Aramite	140-57-8	3
	Arsenic	7440-38-2	0.00005
	Azobenzene	103-33-3	0.7
	Benzene	71-43-2	1

Table 14
Groundwater Quality Criteria

Analyte	CAS No.	Ground Water Quality Criteria Criterion*	
Benzidine	92-87-5	0.0004	ug/L
Benzo(a)pyrene	50-32-8	0.008	ug/L
Benzotrachloride	98-07-7	0.007	ug/L
Benzyl chloride	100-44-7	0.5	ug/L
Bis(2-ethylhexyl)phthalate	117-81-7	6	ug/L
Bis(chloroethyl)ether	111-44-4	0.07	ug/L
Bis(chloromethyl)ether	542-88-1	0.0004	ug/L
Bromodichloromethane	75-27-4	0.3	ug/L
Bromoform	75-25-2	5	ug/L
Carbazole	86-74-8	5	ug/L
Carbon Tetrachloride	56-23-5	0.3	ug/L
Chlordane	5103-71-9	0.06	ug/L
Chlorodibromomethane	124-48-1	0.5	ug/L
Chloroform	67-66-3	7	ug/L
Chlorthalonil	1897-45-6	30	ug/L
DDT (includes DDE and DDD)	50-29-3, 72-55-9, 72-54-8	0.3	ug/L
Diallate	2303-16-4	1	ug/L
Dichlorovos	62-73-7	0.3	ug/L
Dieldrin	60-57-1	0.005	ug/L
Direct Black 38	1937-37-7	0.009	ug/L
Direct Blue 6	2602-46-2	0.009	ug/L
Direct Brown 95	16071-86-6	0.009	ug/L
Epichlorohydrin	106-89-8	8	ug/L
Ethyl acrylate	140-88-5	2	ug/L
Ethylene dibromide	106-93-4	0.001	ug/L
Ethylene thiourea	96-45-7	2	ug/L
Folpet	133-07-3	20	ug/L
Furazolidone	67-45-8	0.02	ug/L
Furium	531-82-8	0.002	ug/L
Furmecyclox	60568-05-0	3	ug/L
Heptachlor	76-44-8	0.02	ug/L
Heptachlor epoxide	1024-57-3	0.009	ug/L
Hexachlorobenzene	118-74-1	0.05	ug/L
Hexachlorocyclohexane (alpha)	319-84-6	0.001	ug/L
Hexachlorocyclohexane (technical)	608-73-1	0.05	ug/L
Hexachlorodibenzo-p-dioxin, mix	34465-46-8	0.00001	ug/L
Hydrazine/hydrazine sulfate	302-01-2/10034-93-2	0.03	ug/L
Lindane	58-89-9	0.06	ug/L
Methylene Chloride	75-09-2	5	ug/L
Mirex	2385-85-5	0.05	ug/L
Nitrofurazone	59-87-0	0.06	ug/L
N-Nitrosodiethanolamine	1116-54-7	0.03	ug/L
N-Nitrosodiethylamine	55-18-5	0.0005	ug/L
N-Nitrosodimethylamine	62-75-9	0.002	ug/L
N-Nitroso-di-n-butylamine	924-16-3	0.02	ug/L
N-Nitroso-di-n-propylamine	621-64-7	0.01	ug/L
N-Nitrosodiphenylamine	86-30-6	17.0	ug/L
N-Nitroso-N-methylethylamine	10595-95-6	0.004	ug/L
N-Nitrosopyrrolidine	930-55-2	0.04	ug/L
o-Chloronitrobenzene	88-73-3	3	ug/L
o-Phenylenediamine	95-54-5	0.005	ug/L
o-Toluidine	95-53-4	0.2	ug/L
p,a,a,a-Tetrachlorotoluene	5216-25-1	0.004	ug/L
PAHs [Benzo(a)pyrene]		0.01	ug/L
PBBs	59536-65-1	0.01	ug/L
PCBs c	27323-18-8	0.01	ug/L
p-Chloronitrobenzene	100-00-5	5	ug/L
Propylene oxide	75-56-9]	0.01	ug/L
Tetrachloroethylene	127-18-4	0.8	ug/L
Toxaphene c	8001-35-2	0.08	ug/L
Trichloroethylene (TCE)	79-01-6	3	ug/L
Trimethyl phosphate	512-56-1	2.0	ug/L
Vinyl chloride	75-01-4	0.02	ug/L
NOTES: pCi/L=picocuries per liter mg/L=milligrams per liter ug/L=micrograms per liter *Ground Water Quality Criteria=173-200 WAC Water Quality Standards for Ground Waters of the State of Washington			

TABLE 15
CEDAR HILLS LANDFILL
INDUSTRIAL STORMWATER GENERAL PERMIT

BENCHMARKS and EFFLUENT LIMITS

Parameter	Units	Minimum Sampling Frequency	Benchmark	Effluent Limit	
				Monthly Average	Daily Maximum
pH	Std. Units	Quarterly	5.0 to 9.0	6.0 to 9.0	
Turbidity	NTU	Quarterly	25	--	--
Oil Sheen	Yes/No	Quarterly	None Visible	--	--
Copper, Total	ug/L	Quarterly	14	--	--
Zinc, Total	ug/L	Quarterly	117	110	200
BOD	mg/L	Quarterly	--	37	140
TSS	mg/L	Quarterly	--	27	88
Ammonia-N	mg/L	Quarterly	--	4.9	10
Alpha Terpineol	ug/L	Quarterly	--	16	33
Benzoic Acid	ug/L	Quarterly	--	71	120
4-Methylphenol*	ug/L	Quarterly	--	14	25
Phenol	ug/L	Quarterly	--	15	26

* Analytical result reported as the total of 3-Methylphenol (CAS RN 108-39-4) and 4-Methylphenol (CAS RN 106-44-5)

TABLE 16
CEDAR HILLS REGIONAL LANDFILL
LABORATORY DATA REVIEW - SUSPECT DATA ALL MATRICES
(Data Collected from January 1, 2014 to March 31, 2014)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value	Cause of Unuseability
Acetone	ug/L	MW-47	1/6/2014	W47-140106-	5.28 B	Blank Contamination
		MW-91	1/7/2014	W91-140107D	9.32 B	Blank Contamination
		VOA TRIP BLANK	1/6/2014	VTRP140107C	4.12 B	Blank Contamination
		VOA TRIP BLANK	2/11/2014	VTRP140212B	9.23 B	Blank Contamination
		VOA TRIP BLANK	2/20/2014	VTRP140221C	4 BT	Blank Contamination

APPENDIX A

Potentiometric Surface Maps and Aquifer Flow Calculations



King County

Water and Land Resources Division

Department of Natural Resources and Parks
King Street Center, KSC-NR-0600
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855

206-477-4800

TTY Relay: 711

Memorandum

To: Tom Theno
King County Solid Waste Division

From: Sevin Bilir
King County Water & Land Resources Division

Re: **Potentiometric Groundwater Surface Mapping & Groundwater Velocity Calculations**
First Quarter 2014 Results
Cedar Hills Landfill, King County, Washington
Project No. 1033379 – Task 02.14.137.20

Date: May 15, 2014

King County Water & Land Resources Division (KCWLRD) submits this letter report on groundwater conditions during the first quarter of 2014 for the Cedar Hills Landfill (landfill), in accordance with the *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations* (KCWLRD, 2013). King County Solid Waste Division (KCSWD) personnel measured groundwater elevations at the landfill on January 2, 2014. These measurements were received by KCWLRD on April 22, 2014 and were used to:

1. Evaluate the potentiometric groundwater surface elevation for the regional aquifer;
2. Determine the groundwater flow direction and horizontal gradient for the regional aquifer; and
3. Calculate the groundwater velocity of the regional aquifer.

There have been no significant changes in the interpreted groundwater conditions since the report submitted for the fourth quarter of the 2013 monitoring event.

Groundwater Elevation Data

KCSWD attempted groundwater level measurements at 44 monitoring wells during the first quarter of 2014. These wells were completed in the regional aquifer as referred to in *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill* (Aspect, 2010).

Table 1 lists the well identifications, locations, well details, measured groundwater levels and calculated groundwater elevations for the regional aquifer. Wells with screened intervals within ten feet of the water table were used for potentiometric surface mapping purposes. A total of 26 wells with water levels within ten feet of the top of screen were selected.

Figure 1 shows well locations, groundwater elevations at the 26 selected wells, groundwater potentiometric surface contours, and interpreted groundwater flow direction in the regional aquifer for the January 2, 2014 measurement event.

Direction of Groundwater Flow

Figure 1 shows interpreted groundwater potentiometric surface contours and groundwater flow directions in the regional aquifer, based on the January 2, 2014 measurements. Groundwater elevations indicate that groundwater in the regional aquifer generally flowed north beneath the southern and central portions of the landfill with minor components of flow to the northwest and northeast. At the northern end of the landfill, groundwater generally flowed to the north and northeast.

Groundwater Parameters

Horizontal groundwater velocity was calculated using the following formula:

$$\text{where: } v = \frac{1}{n_{eff}} K \frac{\Delta H}{\Delta L}$$

$$\begin{aligned} v &= \text{Groundwater velocity [L/t]} \\ n_{eff} &= \text{Effective porosity [dimensionless]} \\ K &= \text{Hydraulic conductivity [L/t]} \\ \frac{\Delta H}{\Delta L} &= \text{Hydraulic gradient [L/L]} \end{aligned}$$

Horizontal groundwater velocity was calculated for the regional aquifer below the landfill. Horizontal groundwater velocity was calculated for the southern, central, and northern portions of the regional aquifer, based on spatial differences in aquifer parameters and hydraulic gradients. The hydraulic conductivity and effective porosity values were based on the range referred to in the *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill* (Aspect, 2010).

Table 2 presents a summary of the groundwater parameters used to calculate a groundwater velocity from the first quarter 2014 data. The hydraulic gradient was greatest under the southern portion of the landfill and smallest under the northern portion. On January 2, 2014, average horizontal groundwater velocity within the regional aquifer ranged from 0.018 feet per day (ft/d) under the southern portion of the landfill to 3.9 ft/d under the central portion of the landfill.

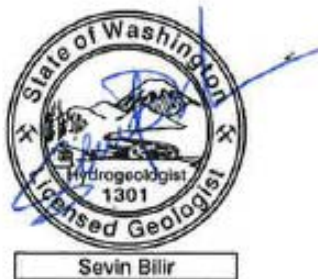
References

Aspect Consulting (Aspect). 2010. *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill*. Unpublished work. April 30.

King County Water & Land Resources Division (KCWLRD). 2013. *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations*. Unpublished.

Thank you for the opportunity to provide hydrogeologic services to the KCSWD. Please contact me if you have any questions.

Sincerely,



Sevin Bilir, WA LHG
Environmental Scientist III
King County Water & Land Resources Division

Attachments

Table 1: Groundwater Elevations - First Quarter 2014
Table 2: Groundwater Parameters - First Quarter 2014
Figure 1: Groundwater Potentiometric Surface Map - First Quarter 2014 – Regional Aquifer

Table 1: Groundwater Elevations – First Quarter 2014

Cedar Hills Landfill
King County, Washington

							January 2, 2014	
Regional Aquifer Unit	Well Identification	X (ft)	Y (ft)	Top of Casing Elevation (ft MSL)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Measured Depth to Water (ft)	Groundwater Elevations (ft MSL)
Wells with water levels within 10 feet of the top of screen	MW-60	1701154.47	167873.20	567.15	334.81	325.81	227.9	339.25
	MW-64	1701980.27	168772.19	596.55	334.03	320.23	265.83	330.72
	MW-66	1699750.19	174250.32	531.28	294.39	280.59	238.3	292.98
	MW-67	1701776.69	172610.65	516.43	297.80	284.00	220.77	295.66
	MW-68	1701917.32	170609.35	647.07	311.29	292.29	332.46	314.61
	MW-69	1698061.86	172400.20	653.69	293.57	279.97	356.6	297.09
	MW-70	1698412.97	168699.89	530.57	322.75	309.05	205.22	325.35
	MW-72	1698229.92	170987.71	671.87	303.63	294.03	361.66	310.21
	MW-73	1698954.95	174995.59	485.70	288.11	278.81	190.93	294.77
	MW-74R	1700386.85	173813.79	531.26	289.90	280.40	240.05	291.21
	MW-76	1700376.23	167193.13	491.71	351.06	341.56	135.87	355.84
	MW-77	1700007.63	168999.71	552.67	320.47	310.97	226.82	325.85
	MW-78	1698881.94	169027.58	537.35	322.34	309.84	212.57	324.78
	MW-81	1702568.87	172113.99	493.66	309.19	300.19	184.08	309.58
	MW-82	1699553.72	167725.31	474.85	348.88	339.38	124.01	350.84
	MW-83	1697939.89	167212.27	496.81	350.19	340.69	143.93	352.88
	MW-84	1698602.89	173894.54	530.80	292.46	282.96	236.27	294.53
	MW-85	1701828.95	173694.52	531.76	282.56	273.06	246.28	285.48
	MW-86	1701331.25	174917.90	536.04	283.43	274.63	248.27	287.77
	MW-87	1700670.27	173493.76	537.31	283.68	274.38	248.34	288.97
Wells with water levels greater than 10 feet above the top of screen	MW-88	1701807.87	174303.06	513.68	281.52	272.22	227.25	286.43
	MW-93	1702259.35	169851.24	632.15	319.87	310.07	308.78	323.37
	MW-94	1698674.21	167210.22	495.51	357.22	348.52	142.61	352.9
	MW-95	1697265.32	169426.92	571.54	314.60	305.90	251.33	320.21
	MW-100	1700791.72	169610.46	620.32	319.06	309.06	298.12	322.2
	MW-106	1702536.99	173461.69	475.47	280.04	270.04	190.92	284.55
	MW-21	1697901.86	173876.38	420.66	263.22	255.22	125.07	295.59
	MW-22P	1701844.34	173088.17	517.09	236.02	231.22	232.55	284.54
	MW-24	1699582.39	167767.76	475.99	286.76	281.76	145.37	330.62
	MW-43	1701274.23	174327.14	547.06	245.63	235.63	263.45	283.61
	MW-54	1702154.28	168435.53	580.43	250.25	228.25	278.66	301.77
	MW-56	1698980.77	167214.82	480.33	323.15	313.15	127.22	353.11
	MW-57	1699993.32	167201.99	456.64	326.65	311.65	102.22	354.42
	MW-58A	1699006.59	167207.16	479.27	270.05	260.05	149.08	330.19
	MW-59	1699983.91	167193.44	457.13	285.08	275.08	123.9	333.23
	MW-65	1701602.10	167146.55	545.83	317.71	308.91	209.24	336.59
	MW-75	1701059.70	173432.42	532.40	271.10	261.00	245.77	286.63
	MW-80	1701309.78	172964.99	530.41	279.17	269.67	239.2	291.21
	MW-89	1701799.57	174319.44	512.82	229.20	219.90	232.11	280.71
	MW-90	1702203.13	174300.67	502.22	235.16	226.16	221.86	280.36
	MW-91	1701023.09	173423.94	532.02	260.81	240.71	247.08	284.94
	MW-99	1702556.06	172098.73	493.64	221.77	212.77	200.69	292.95
	NPW-1	1701906.96	171138.99	646.33	299.87	284.87	334.04	312.29
	NPW-3	1701922.88	170663.28	645.81	284.87	276.87	331.34	314.47

Notes

1. Water level measurements made by KCSWD personnel.
2. Reference datum for XY coordinates is the North American Datum of 1927 (NAD27)
3. Elevations reported in feet above Mean Sea Level based on the National Geodetic Vertical Datum, 1929.

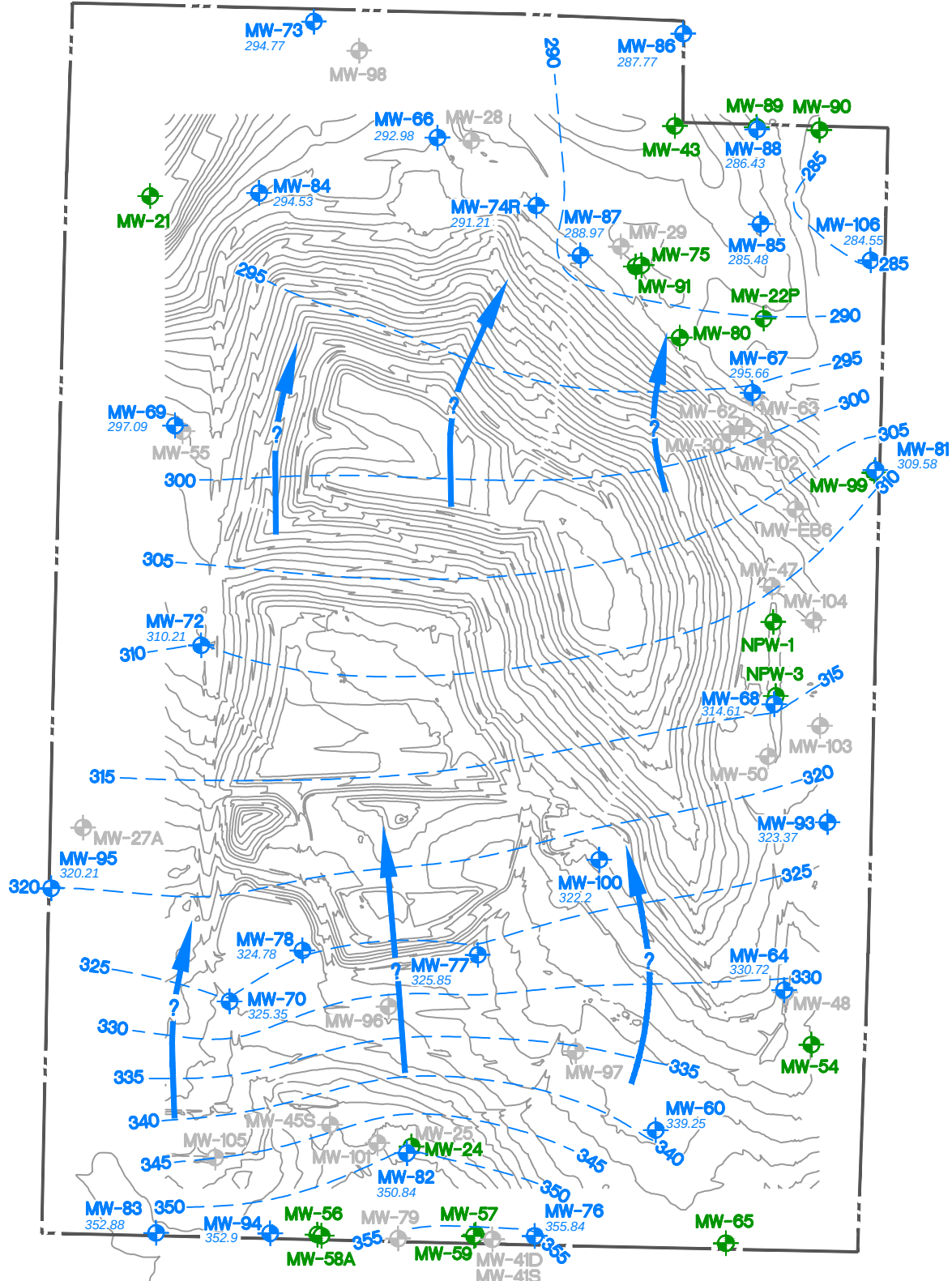
Table 2: Groundwater Parameters – First Quarter 2014

Cedar Hills Landfill
King County, Washington

Regional Aquifer Zone Beneath the Landfill	Horizontal Hydraulic Conductivity (K)			Horizontal Hydraulic Gradient	Effective Porosity (n _{eff})	Horizontal Groundwater Velocity (v)	General Groundwater Flow Direction
	Range	(cm/s)	(ft/d)	(ft/ft)		(ft/d)	
Northern	Minimum	2.10E-03	6	0.005	24%	0.122	N, NW, NE
	Maximum	4.20E-02	120	0.005	24%	2.44	
	Mean	2.10E-02	60	0.005	24%	1.22	
Central	Minimum	2.10E-03	6	0.008	24%	0.19	N, NNW
	Maximum	4.20E-02	120	0.008	24%	3.9	
	Mean	2.10E-02	60	0.008	24%	1.9	
Southern	Minimum	6.40E-06	0.018	0.018	26%	0.0013	N, NNE, NNW
	Maximum	6.40E-04	1.8	0.018	26%	0.13	
	Mean	6.40E-05	0.18	0.018	26%	0.013	

Notes

1. Horizontal hydraulic conductivity values and effective porosity values from *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill (Aspect, 2010)*.
2. Hydraulic gradients measured from the potentiometric surface map shown on Figure 1.
3. Mean hydraulic conductivity values are the geometric mean of the high and low values.
4. NNE, north-northeast; NNW, north-northwest; NE, northeast; N, north



Groundwater Potentiometric Surface Map
First Quarter 2014- Regional Aquifer
Cedar Hills Landfill
 King County, Washington

DATE:	May 2014	PROJECT NO.	1033379
DESIGNED BY:	SB	FIGURE NO.	1
DRAWN BY:	LT		
REVISED BY:	SB		

APPENDIX B

Field and Analytical Test Results

Groundwater Analytical Data

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater Elevation Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground- Water Elevation (msl)	Comment
MW-21	1/2/2014	420.66	125.07	295.59	
MW-21	1/3/2014	420.66	125.25	295.41	
MW-22	1/2/2014	517.09	232.55	284.54	
MW-24	1/2/2014	475.99	145.37	330.62	
MW-24	1/21/2014	475.99	145.31	330.68	
MW-25	1/2/2014	474.41	5.58	468.83	
MW-27A	1/2/2014	584.23	54.22	530.01	
MW-27A	1/7/2014	584.23	54.12	530.11	
MW-28	1/2/2014	527.75	22.3	505.45	
MW-28	1/15/2014	527.75	20.42	507.33	
MW-29	1/2/2014	532.92	10.15	522.77	
MW-29	1/31/2014	532.92	10.4	522.52	
MW-30A	1/2/2014	568.43	29.6	538.83	
MW-30A	1/28/2014	568.43	29.43	539.00	
MW-41S	1/2/2014	462.44	4.38	458.06	
MW-41D	1/2/2014	462.32	25.15	437.17	
MW-43	1/2/2014	547.06	263.45	283.61	
MW-43	1/10/2014	547.06	263.4	283.66	
MW-45	1/2/2014	488.4	NA	NA	No Access
MW-47	1/2/2014	634.6	15.32	619.28	
MW-47	1/6/2014	634.6	15.07	619.53	
MW-48	1/2/2014	594.49	44.15	550.34	
MW-50	1/2/2014	637.02	29.57	607.45	
MW-54	1/2/2014	580.43	278.66	301.77	
MW-55	1/2/2014	652.29	27.45	624.84	
MW-55	1/15/2014	652.29	27.35	624.94	
MW-56	1/2/2014	480.33	127.22	353.11	
MW-56	1/3/2014	480.33	127.35	352.98	
MW-57	1/2/2014	456.64	102.22	354.42	
MW-57	1/13/2014	456.64	101.95	354.69	
MW-58A	1/2/2014	479.27	149.08	330.19	
MW-59	1/2/2014	457.13	123.9	333.23	
MW-59	1/10/2014	457.13	123.86	333.27	
MW-60	1/2/2014	567.15	227.9	339.25	
MW-60	1/9/2014	567.15	227.89	339.26	
MW-62	1/2/2014	556.21	49.85	506.36	
MW-62	1/28/2014	556.21	50.31	505.90	
MW-63	1/2/2014	515.88	12.4	503.48	
MW-64	1/2/2014	596.55	265.83	330.72	
MW-64	1/14/2014	596.55	266.31	330.24	
MW-65	1/2/2014	545.83	209.24	336.59	
MW-65	1/3/2014	545.83	209.36	336.47	
MW-66	1/2/2014	531.28	238.3	292.98	
MW-66	1/16/2014	531.28	238.85	292.43	
MW-67	1/2/2014	516.43	220.77	295.66	

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater Elevation Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Reference Elevation	Depth to Water	Ground- Water Elevation	Comment
		(msl)	(feet)	(msl)	
MW-67	1/6/2014	516.43	221.06	295.37	
MW-68	1/2/2014	647.07	332.46	314.61	
MW-68	1/14/2014	647.07	333.26	313.81	
MW-69	1/2/2014	653.69	356.6	297.09	
MW-69	1/15/2014	653.69	356.37	297.32	
MW-70	1/2/2014	530.57	205.22	325.35	
MW-70	1/14/2014	530.57	205.77	324.80	
MW-72	1/2/2014	671.87	361.66	310.21	
MW-72	1/21/2014	671.87	361.78	310.09	
MW-73	1/2/2014	485.7	190.93	294.77	
MW-73	1/15/2014	485.7	191.47	294.23	
MW-74	1/2/2014	531.26	240.05	291.21	
MW-74	1/17/2014	531.26	240.01	291.25	
MW-74	2/21/2014	531.26	240.35	290.91	
MW-74	3/25/2014	531.26	239.41	291.85	
MW-75	1/2/2014	532.4	245.77	286.63	
MW-75	1/17/2014	532.4	245.63	286.77	
MW-75	2/21/2014	532.4	246.91	285.49	
MW-75	3/17/2014	532.4	244.53	287.87	
MW-76	1/2/2014	491.71	135.87	355.84	
MW-76	1/10/2014	491.71	135.57	356.14	
MW-77	1/2/2014	552.67	226.82	325.85	
MW-77	1/28/2014	552.67	226.95	325.72	
MW-78	1/2/2014	537.35	212.57	324.78	
MW-78	1/27/2014	537.35	212.57	324.78	
MW-79	1/2/2014	459.17	37.31	421.86	
MW-80	1/2/2014	530.41	239.2	291.21	
MW-80	1/27/2014	530.41	239.22	291.19	
MW-81	1/2/2014	493.66	184.08	309.58	
MW-81	1/13/2014	493.66	184.87	308.79	
MW-82	1/2/2014	474.85	124.01	350.84	
MW-82	3/31/2014	474.85	118.95	355.90	
MW-83	1/2/2014	496.81	143.93	352.88	
MW-83	1/16/2014	496.81	145.12	351.69	
MW-84	1/2/2014	530.8	238.94	291.86	
MW-84	1/21/2014	530.8	236.27	294.53	
MW-85	1/2/2014	531.76	246.28	285.48	
MW-85	1/6/2014	531.76	246.34	285.42	
MW-86	1/2/2014	536.04	248.27	287.77	
MW-86	1/27/2014	536.04	249.25	286.79	
MW-87	1/2/2014	537.31	248.34	288.97	
MW-87	1/17/2014	537.31	248.64	288.67	
MW-87	2/21/2014	537.31	248.75	288.56	
MW-88	1/2/2014	513.68	227.25	286.43	
MW-88	1/13/2014	513.68	227.86	285.82	

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater Elevation Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Reference Elevation	Depth to Water	Ground- Water Elevation	Comment
		(msl)	(feet)	(msl)	
MW-89	1/2/2014	512.82	232.11	280.71	
MW-89	1/13/2014	512.82	232.48	280.34	
MW-90	1/2/2014	502.22	221.86	280.36	
MW-90	1/10/2014	502.22	221.81	280.41	
MW-91	1/2/2014	532.02	247.08	284.94	
MW-91	1/7/2014	532.02	247.13	284.89	
MW-93	1/2/2014	632.15	308.78	323.37	
MW-93	1/23/2014	632.15	308	324.15	
MW-94	1/2/2014	495.51	142.61	352.90	
MW-94	1/13/2014	495.51	142.78	352.73	
MW-95	1/2/2014	571.54	251.33	320.21	
MW-95	1/7/2014	571.54	251.1	320.44	
MW-96	1/2/2014	547.74	99.19	448.55	
MW-97	1/2/2014	564.54	112.9	451.64	
MW-98	1/2/2014	503.73	15.3	488.43	
MW-99	1/2/2014	493.64	200.69	292.95	
MW-99	1/17/2014	493.64	200.85	292.79	
MW-99	2/21/2014	493.64	200.82	292.82	
MW-99	3/20/2014	493.64	200.31	293.33	
MW-100	1/2/2014	620.32	298.12	322.20	
MW-100	1/23/2014	620.32	298.34	321.98	
MW-101	1/2/2014	474.72	33.06	441.66	
MW-101	1/16/2014	474.72	33.17	441.55	
MW-102	1/2/2014	552.48	45.08	507.40	
MW-103	1/2/2014	639.08	10.76	628.32	
MW-104	1/2/2014	629.68	22.48	607.20	
MW-105	1/2/2014	521.23	20.75	500.48	
MW-106	1/2/2014	475.47	190.92	284.55	
MW-EB6	1/2/2014	589.61	26.08	563.53	
MW-EB6	1/24/2014	589.61	25.65	563.96	Dry
WS-NPW-1	1/2/2014	646.33	334.04	312.29	
WS-NPW-3	1/2/2014	645.81	331.34	314.47	

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater Field Parameters

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Purge Volume
			(std. Units)	(umho/cm)	(°C)	(gal)
MW-21	1/3/2014	W21-140103-	7.37	120	9.2	8.8
MW-24	1/21/2014	W24-140121-	7.24	170	9.2	14.3
MW-27A	1/7/2014	W27A140107-	7.86	160	9.1	7
MW-28	1/15/2014	W28-140115-	5.9	100	10.7	18.5
MW-29	1/31/2014	W29-140131-	6.38	75	10.8	26.5
MW-30A	1/28/2014	W30A140128-	6.35	210	11.9	3.6
MW-43	1/10/2014	W43-140110-	7.05	140	8.9	16
MW-47	1/6/2014	W47-140106-	6.9	690	10.7	28
MW-55	1/15/2014	W55-140115-	7.5	120	9.4	10.5
MW-56	1/3/2014	W56-140103-	6.73	120	8.9	25
MW-57	1/13/2014	W57-140113-	6.53	170	9.6	27.5
MW-59	1/10/2014	W59-140110-	6.62	170	9.5	8.9
MW-60	1/9/2014	W60-140109-	6.82	150	9	14
MW-62	1/28/2014	W62-140128-	6.71	180	9.6	1.8
MW-64	1/14/2014	W64-140114-	6.79	220	11	8
MW-65	1/3/2014	W65-140103-	6.88	150	9.3	7.1
MW-66	1/16/2014	W66-140116-	7.21	240	9.8	9.3
MW-67	1/6/2014	W67-140106-	7.12	290	8.9	16
MW-68	1/14/2014	W68-140114-	7.1	260	10.1	
MW-69	1/15/2014	W69-140115-	7.33	230	9	9.8
MW-70	1/14/2014	W70-140114-	7.2	170	9.7	12
MW-72	1/21/2014	W72-140121-	6.91	230	9.3	12.6
MW-73	1/15/2014	W73-140115-	5.99	105	10.1	11.8
MW-74	1/17/2014	W74R140117-	7.02	360	9.4	7
MW-74	2/21/2014	W74R140221-	7.09	360	9.5	7
MW-74	3/25/2014	W74R140325-	6.87	340	9.6	7
MW-75	1/17/2014	W75-140117-	6.9	240	9	15.5
MW-75	2/21/2014	W75-140221-	6.9	230	8.9	14
MW-75	3/25/2014	W75-140325-	6.79	225	9.1	11.2
MW-76	1/10/2014	W76-140110-	6.25	200	9.6	7.5
MW-77	1/28/2014	W77-140128-	7.13	200	10.7	10.3
MW-78	1/27/2014	W78-140127-	6.64	160	10.2	10
MW-80	1/27/2014	W80-140127-	7.05	220	9.1	9
MW-81	1/13/2014	W81-140113-	7.33	120	9.6	8
MW-82	3/31/2014	W82-140331-	7.04	235	9.5	8
MW-83	1/16/2014	W83-140116-	6.98	350	10.7	5.6
MW-84	1/21/2014	W84-140121-	7.1	150	9	7.4
MW-85	1/6/2014	W85-140106-	7.08	230	8.8	9
MW-86	1/27/2014	W86-140127-	6.67	140	8.4	7.5
MW-87	1/17/2014	W87-140117-	6.97	340	9.9	7.5
MW-87	2/21/2014	W87-140221-	7.02	400	10.1	9.3
MW-87	3/20/2014	W87-140320-	6.94	400	10.1	8
MW-88	1/13/2014	W88-140113-	7.22	110	9.4	10
MW-89	1/13/2014	W89-140113-	7.19	170	9.4	10.3
MW-90	1/10/2014	W90-140110-	6.94	160	8.9	9.5

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater Field Parameters

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Purge Volume
			(std. Units)	(umho/cm)	(°C)	(gal)
MW-91	1/7/2014	W91-140107-	7.11	245	9.5	12.3
MW-93	1/23/2014	W93-140123-	7.18	330	10.5	9.2
MW-94	1/13/2014	W94-140113-	6.75	210	9	4.8
MW-95	1/7/2014	W95-140107-	7.33	170	8.9	7.2
MW-99	1/17/2014	W99-140117-	7.81	120	9.4	11.5
MW-99	2/21/2014	W99-140221-	7.96	125	10.1	11.7
MW-99	3/20/2014	W99-140320-	7.8	120	9.6	4.6
MW-100	1/23/2014	W100140123-	6.88	270	10	10.8
MW-101	1/16/2014	W101140116-	7.05	450		9.3
MW-EB6	1/24/2014	WB6-140124-	5.76	130	9.6	1
WS-NPW	1/9/2014	WNPW140109-	7.27	240	5.1	
EQUIPMENT BLANK	1/21/2014	WU1S140121E	7.97	3.4	15.8	
EQUIPMENT BLANK	1/21/2014	WU1H140121E	7.64	3.1	15.9	
FIELD BLANK	1/16/2014	W66-140116F	7.74	4	15.8	
FIELD BLANK	1/21/2014	W72-140121F	7.41	17	7.5	

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater Conventional Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Alkalinity, Total (CaCO ₃)	Ammonia, (NH ₃)	Chloride	Nitrate- Nitrogen, (NO ₃ as N)	Specific Conductanc	Sulfate (SO ₄)	Total Dissolved Solids	Total Organic Carbon	Total Solids	Suspended Solids
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(umho/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-21	1/3/2014	W21-140103-	53.4	< 0.01 U	2.73	< 0.01 U	127	6.59	81.2	< 1 U	86.3	2.9
MW-24	1/21/2014	W24-140121-	63.3	0.0363	3.91	< 0.01 U	177	17.6	108	< 1 U	118	2.6
MW-27A	1/7/2014	W27A140107-	82	0.256	5.65	0.033 T	196	9.45	134	< 1 U	135	< 1 U
MW-28	1/15/2014	W28-140115-	25.1	< 0.01 U	3.28	0.392	105	14.4	85.8	< 1 U	89.5	< 1 U
MW-29	1/31/2014	W29-140131-	25.1	< 0.01 U	2.75	1.64	79.4	1.84	75.8	< 1 U	79.9	1.73
MW-30A	1/28/2014	W30A140128-	133	< 0.01 U	1.14	2.67	302	8.56	190	1.01	198	1.51
MW-43	1/10/2014	W43-140110-	70.4	0.0237	4.97	< 0.01 U	178	13.6	126	< 1 U	128	1.68
MW-43 DUP	1/10/2014	W43-140110D	70.1	0.0235	5.01	< 0.01 U	181	13.6	127	< 1 U	130	1.9
MW-47	1/6/2014	W47-140106-	650	0.082	6.9	< 0.01 U	1120	6.09	688	3.61	706	< 1 U
MW-55	1/15/2014	W55-140115-	60.7	0.0526	2.05	< 0.01 U	154	12.4	121	< 1 U	131	2.8
MW-56	1/3/2014	W56-140103-	53.9	< 0.01 U	3.5	1.35	157	12.4	99	< 1 U	102	< 1 U
MW-57	1/13/2014	W57-140113-	73.2	0.0252	6.71	< 0.01 U	203	18.8	152	< 1 U	156	3
MW-59	1/10/2014	W59-140110-	64.9	< 0.01 U	4.36	< 0.01 U	184	18.9	124	< 1 U	124	2.9
MW-60	1/9/2014	W60-140109-	76.7	0.112	3.11	1.2	184	7	127	< 1 U	131	2.2
MW-62	1/28/2014	W62-140128-	78.1	< 0.01 U	5.62	3.04	243	21.9	154	< 1 U	154	< 1 U
MW-64	1/14/2014	W64-140114-	104	0.03 T	4.08	< 0.01 U	275	32.5	169	< 1 U	171	3
MW-65	1/3/2014	W65-140103-	54	< 0.01 U	4.1	< 0.01 U	156	17	97.6	< 1 U	110	5.4
MW-66	1/16/2014	W66-140116-	118	< 0.01 U	7.16	0.738	288	14.6	173	< 1 U	175	< 1 U
MW-67	1/6/2014	W67-140106-	129	< 0.01 U	4.89	0.4	340	38.2	208	< 1 U	216	1.6
MW-68	1/14/2014	W68-140114-	131	0.015 T	2.81	< 0.01 U	295	16.7	180	< 1 U	194	12
MW-69	1/15/2014	W69-140115-	134	0.011 T	5.9	< 0.01 U	299	14.2	179	< 1 U	190	11.9
MW-70	1/14/2014	W70-140114-	83.6	< 0.01 U	6.9	0.032 T	218	14.9	141	< 1 U	139	< 1 U
MW-72	1/21/2014	W72-140121-	116	0.0157	4.59	< 0.01 U	319	39.4	191	< 1 U	199	5.2
MW-73	1/15/2014	W73-140115-	38.5	< 0.01 U	1.06	0.731	112	9.08	86.7	2.86	85	1
MW-74	1/17/2014	W74R140117-	215	< 0.01 U	23.7	0.439	523	24.8	283	< 1 U	296	< 1 U
MW-75	1/17/2014	W75-140117-	98.8	< 0.01 U	12	< 0.01 U	321	47.8	192	< 1 U	204	3.4
MW-76	1/10/2014	W76-140110-	67.5	< 0.01 U	15.3	2.11	231	12.3	153	1.37	155	< 1 U
MW-77	1/28/2014	W77-140128-	102	< 0.01 U	4.38	0.704	237	9.01	139	< 1 U	143	< 1 U
MW-78	1/27/2014	W78-140127-	66.8	< 0.01 U	7.37	0.73	183	7.98	113	< 1 U	116	< 1 U
MW-78 DUP	1/27/2014	W78-140127D	66.7	< 0.01 U	7.44	0.751	183	8.05	114	< 1 U	119	1
MW-80	1/27/2014	W80-140127-	95.9	0.0135	5.4	0.018 T	297	44.6	179	< 1 U	187	2.44
MW-81	1/13/2014	W81-140113-	48.6	< 0.01 U	3.86	1.56	140	7.67	99.7	< 1 U	103	< 1 U
MW-82	3/31/2014	W82-140331-	114	< 0.01 U	6.13	0.667	283	17.8	174	< 1 U	181	1.12
MW-83	1/16/2014	W83-140116-	148	< 0.01 U	36.3	0.759	430	8.36	248	2.28	260	< 1 U
MW-84	1/21/2014	W84-140121-	60.1	< 0.01 U	3.66	0.525	163	13.2	96.1	< 1 U	103	< 1 U
MW-85	1/6/2014	W85-140106-	100	< 0.01 U	10.4	0.135	296	35.8	181	< 1 U	187	< 1 U
MW-86	1/27/2014	W86-140127-	63.9	< 0.01 U	5.42	0.142	184	18.6	112	< 1 U	114	3.2
MW-87	1/17/2014	W87-140117-	88.4	0.013	6.67	< 0.01 U	480	143	317	< 1 U	343	12.8
MW-88	1/13/2014	W88-140113-	53.4	< 0.01 U	2.25	0.554	133	7.16	94.1	< 1 U	94.6	< 1 U
MW-89	1/13/2014	W89-140113-	73.3	0.0162	4.25	< 0.01 U	194	16.8	132	< 1 U	135	2.1
MW-90	1/10/2014	W90-140110-	68.8	0.0164	4.1	0.011 T	207	27.2	140	< 1 U	147	3.9
MW-91	1/7/2014	W91-140107-	87.3	0.016	8.61	0.025 T	287	41.6	181	< 1 U	207	19.4
MW-91 DUP	1/7/2014	W91-140107D	87.2	0.0154	8.64	0.025 T	288	41.7	178	< 1 U	207	23.2
MW-93	1/23/2014	W93-140123-	119	0.0502	2.88	0.016 T	397	75.7	244	< 1 U	257	< 1 U
MW-94	1/13/2014	W94-140113-	100	< 0.01 U	18.1	0.96	279	6.6	182	1.63	175	< 1 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater Conventional Analytical Data

Contact Person: ~~Sandy Jimenez~~ (206) 477-5224

Site	Date	Sample ID	Alkalinity, Total (CaCO ₃) (mg/L)	Ammonia, (NH ₃) (mg/L)	Chloride (mg/L)	Nitrate- Nitrogen, (NO ₃ as N) (mg/L)	Specific Conductanc (umho/cm)	Sulfate (SO ₄) (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)
MW-95	1/7/2014	W95-140107-	86.7	0.0219	8.03	0.015 T	223	17	135	< 1 U	138	< 1 U
MW-99	1/17/2014	W99-140117-	57	0.0715	3.22	0.108	139	8.36	89.8	< 1 U	122	< 1 U
MW-100	1/23/2014	W100140123-	137	< 0.01 U	2.7	< 0.01 U	308	17.7	168	< 1 U	188	8.8
MW-101	1/16/2014	W101140116-	362	0.012	3.58	< 0.01 U	665	5.22	385	4.24	396	1.5
MW-EB6	1/24/2014	WB6-140124-	62.9	1.55	0.756	0.036 T	139	3.26	97.4	3.46	129	5.2
WS-NPW	1/9/2014	WNPW140109-	143	< 0.01 U	3.25	< 0.01 U	319	18.2	197	< 1 U	199	3.2
EQUIPMENT BLANK	1/21/2014	WU1S140121E		< 0.01 U								
EQUIPMENT BLANK	1/21/2014	WU1H140121E		< 0.01 U								
FIELD BLANK	1/16/2014	W66-140116F	1.8 T	< 0.01 U	< 0.1 U	0.036 T	3.9 T	< 0.1 U	< 5 U	< 1 U	< 5 U	< 1 U
FIELD BLANK	1/21/2014	W72-140121F	1.7 T	< 0.01 U	< 0.1 U	0.035 T	3.7 T	< 0.1 U	< 5 U	< 1 U	< 5 U	< 1 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Antimony, dissolved (mg/L)	Antimony, total (mg/L)	Arsenic, dissolved (mg/L)	Arsenic, total (mg/L)	Barium, dissolved (mg/L)	Barium, total (mg/L)	Beryllium, dissolved (mg/L)	Beryllium, total (mg/L)	Cadmium, dissolved (mg/L)	Cadmium, total (mg/L)	Calcium, dissolved (mg/L)	Calcium, total (mg/L)
MW-21	1/3/2014	W21-140103-	< 0.001 U	< 0.001 U	< 0.001 U	0.00105	0.00346	0.0035	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	10.3	10.2
MW-24	1/21/2014	W24-140121-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	0.00203	0.00187 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	15.1	14.1
MW-27A	1/7/2014	W27A140107-	< 0.001 U	< 0.001 U	0.0167	0.0158	0.0049	0.00492	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	19.3	20.1
MW-28	1/15/2014	W28-140115-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00547	0.00561	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	8.49	9.32
MW-29	1/31/2014	W29-140131-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0015	0.00204	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	7.23	6.32
MW-30A	1/28/2014	W30A140128-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00488	0.005	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	25.1	23
MW-43	1/10/2014	W43-140110-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00613	0.00645	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	12.8	14.1
MW-43 Duplicate	1/10/2014	W43-140110D	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00646	0.00662	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	13.2	13.3
MW-47	1/6/2014	W47-140106-	< 0.001 U	< 0.001 U	0.00107	< 0.001 U	0.0365	0.037	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	123	130
MW-55	1/15/2014	W55-140115-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00408	0.00604	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	12.1	13.4
MW-56	1/3/2014	W56-140103-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00398	0.00424	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	14.6	14.7
MW-57	1/13/2014	W57-140113-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0015	0.00152	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	15.5	16.8
MW-59	1/10/2014	W59-140110-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00329	0.00343	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	14	14.8
MW-60	1/9/2014	W60-140109-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.003	0.00353	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	16.6	16.7
MW-62	1/28/2014	W62-140128-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00203	0.00213	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	21	20.3
MW-64	1/14/2014	W64-140114-	< 0.001 U	< 0.001 U	< 0.001 U	0.00276	0.0095	0.0108	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	19.6	21.2
MW-65	1/3/2014	W65-140103-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00732	0.00726	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	12.4	12.2
MW-66	1/16/2014	W66-140116-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00637	0.00589	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	20.6	20.5
MW-67	1/6/2014	W67-140106-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00922	0.00965	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	29.7	30
MW-68	1/14/2014	W68-140114-	< 0.001 U	< 0.001 U	0.00729	0.0285	0.0108	0.0125	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	25.9	27.4
MW-69	1/15/2014	W69-140115-	< 0.001 U	< 0.001 U	0.00242	0.00359	0.0111	0.0127	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	28.2	30.4
MW-70	1/14/2014	W70-140114-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00182	0.0019	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	17.7	19
MW-72	1/21/2014	W72-140121-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	0.011	0.0106 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	29.4	28.5
MW-73	1/15/2014	W73-140115-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00285	0.00305	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	12	12.8
MW-74	1/17/2014	W74R140117-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	0.0118	0.0109 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	45.1	43.1
MW-75	1/17/2014	W75-140117-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	0.0103	0.0105 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	25.6	24.5
MW-76	1/10/2014	W76-140110-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00336	0.00346	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	19.4	20.1
MW-77	1/28/2014	W77-140128-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00277	0.00288	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	22.6	21
MW-78	1/27/2014	W78-140127-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00237	0.00227	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	17.1	15.7
MW-78 Duplicate	1/27/2014	W78-140127D	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00232	0.00223	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	16.4	15.6
MW-80	1/27/2014	W80-140127-	< 0.001 U	< 0.001 U	0.00437	0.00469	0.0135	0.0132	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	29.4	27.5
MW-81	1/13/2014	W81-140113-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00228	0.00257	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	9.48	11.4
MW-82	3/31/2014	W82-140331-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00103 D	0.00111	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	25	24.3
MW-83	1/16/2014	W83-140116-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00677	0.00671	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	42.4	45.4
MW-84	1/21/2014	W84-140121-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	0.00365	0.00345 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	12	11.5
MW-85	1/6/2014	W85-140106-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00534	0.00529	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	25.1	25
MW-86	1/27/2014	W86-140127-	< 0.001 U	< 0.001 U	< 0.001 U	0.00187	0.00492	0.00492	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	14.8	13.5
MW-87	1/17/2014	W87-140117-	< 0.001 U	< 0.001 U	< 0.001 U	0.00356 D	0.0224	0.0233 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	41.4	40.2
MW-88	1/13/2014	W88-140113-	< 0.001 U	< 0.001 U	0.00106	< 0.001 U	0.0022	0.00225	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	8.32	9.44
MW-89	1/13/2014	W89-140113-	< 0.001 U	< 0.001 U	< 0.001 U	0.00249	0.00579	0.00647	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	13.1	14.3
MW-90	1/10/2014	W90-140110-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00523	0.00602	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	16.2	17.4
MW-91	1/7/2014	W91-140107-	< 0.001 U	< 0.001 U	0.0021	0.0116	0.00961	0.0122	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	22.5	22.7
MW-91 Duplicate	1/7/2014	W91-140107D	< 0.001 U	< 0.001 U	0.00203	0.01	0.00942	0.0118	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	22.1	23
MW-93	1/23/2014	W93-140123-	< 0.001 U	< 0.001 U	0.0014	0.00136 D	0.00908	0.00904 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	39.6	38.6
MW-94	1/13/2014	W94-140113-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00191	0.00189	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	25.3	27.8

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: ~~Sandy Jimenez~~ (206) 477-5224

Site	Date	Sample ID	Antimony, dissolved (mg/L)	Antimony, total (mg/L)	Arsenic, dissolved (mg/L)	Arsenic, total (mg/L)	Barium, dissolved (mg/L)	Barium, total (mg/L)	Beryllium, dissolved (mg/L)	Beryllium, total (mg/L)	Cadmium, dissolved (mg/L)	Cadmium, total (mg/L)	Calcium, dissolved (mg/L)	Calcium, total (mg/L)
MW-95	1/7/2014	W95-140107-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00362	0.00402	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	19.9	19.8
MW-99	1/17/2014	W99-140117-	< 0.001 U	< 0.001 U	0.00218	0.00211 D	0.00308	0.00311 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	10.5	9.9
MW-100	1/23/2014	W100140123-	< 0.001 U	< 0.001 U	< 0.001 U	0.00275 D	0.00744	0.00792 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	30.3	28.7
MW-101	1/16/2014	W101140116-	< 0.001 U	< 0.001 U	0.00458	0.00406 D	0.0295	0.0311 D	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	58.2	68.2 D
MW-EB6	1/24/2014	WB6-140124-	< 0.001 U	< 0.001 U	0.00838	0.0059	0.00905	0.0112	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	6.96	7.33
WS-NPW	1/9/2014	WNPW140109-		< 0.001 U		< 0.001 U		0.00879		< 0.001 U		< 0.002 U		30.6
EQUIPMENT BLANK	1/21/2014	WU1S140121E	< 0.001 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.002 U		< 0.01 U	
EQUIPMENT BLANK	1/21/2014	WU1H140121E	< 0.001 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.002 U		< 0.01 U	
FIELD BLANK	1/16/2014	W66-140116F	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U
FIELD BLANK	1/21/2014	W72-140121F	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Chromium, dissolved (mg/L)	Chromium, total (mg/L)	Cobalt, dissolved (mg/L)	Cobalt, total (mg/L)	Copper, dissolved (mg/L)	Copper, total (mg/L)	Iron, dissolved (mg/L)	Iron, total (mg/L)	Lead, dissolved (mg/L)	Lead, total (mg/L)	Magnesium, dissolved (mg/L)	Magnesium, total (mg/L)
MW-21	1/3/2014	W21-140103-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	2.07	2.81	< 0.001 U	< 0.001 U	5.91	5.71
MW-24	1/21/2014	W24-140121-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	3.25	3.14 D	< 0.001 U	< 0.001 U	10	9.5
MW-27A	1/7/2014	W27A140107-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.01 T	< 0.001 U	< 0.001 U	5.61	5.66
MW-28	1/15/2014	W28-140115-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.012 T	< 0.001 U	< 0.001 U	2.31	2.35
MW-29	1/31/2014	W29-140131-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.013 T	0.0803	< 0.001 U	< 0.001 U	1.72	1.49
MW-30A	1/28/2014	W30A140128-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.212	< 0.001 U	< 0.001 U	14.5	11.8
MW-43	1/10/2014	W43-140110-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.932	1.5	< 0.001 U	< 0.001 U	9.3	9.78
MW-43 Duplicate	1/10/2014	W43-140110D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.973	1.53	< 0.001 U	< 0.001 U	9.32	9.24
MW-47	1/6/2014	W47-140106-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.294	0.325	< 0.001 U	< 0.001 U	59.6	61
MW-55	1/15/2014	W55-140115-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.268	0.622	< 0.001 U	< 0.001 U	6.93	6.95
MW-56	1/3/2014	W56-140103-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.03 T	0.162	< 0.001 U	< 0.001 U	6.87	6.67
MW-57	1/13/2014	W57-140113-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	8.39	7.95	< 0.001 U	< 0.001 U	9.04	9.32
MW-59	1/10/2014	W59-140110-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	4.32	4.39	< 0.001 U	< 0.001 U	8.75	9.01
MW-60	1/9/2014	W60-140109-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.0811	0.228	< 0.001 U	< 0.001 U	8.02	7.99
MW-62	1/28/2014	W62-140128-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.041 T	< 0.001 U	< 0.001 U	7.32	6.61
MW-64	1/14/2014	W64-140114-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.0857	0.993	< 0.001 U	< 0.001 U	16.3	17
MW-65	1/3/2014	W65-140103-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	4.74	4.55	< 0.001 U	< 0.001 U	7.56	7.22
MW-66	1/16/2014	W66-140116-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	16.8	16.3
MW-67	1/6/2014	W67-140106-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.143	0.305	< 0.001 U	< 0.001 U	17.9	17.9
MW-68	1/14/2014	W68-140114-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.781	3.23	< 0.001 U	< 0.001 U	15	15.1
MW-69	1/15/2014	W69-140115-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	1.07	1.87	< 0.001 U	< 0.001 U	14.2	14.4
MW-70	1/14/2014	W70-140114-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	10.1	10.5
MW-72	1/21/2014	W72-140121-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	2.2	2.32 D	< 0.001 U	< 0.001 U	17.8	17.5
MW-73	1/15/2014	W73-140115-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00284	0.00299	< 0.01 U	0.049 T	< 0.001 U	< 0.001 U	3.42	3.41
MW-74	1/17/2014	W74R140117-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	< 0.01 U	0.04 DT	< 0.001 U	< 0.001 U	34.2	33.4
MW-75	1/17/2014	W75-140117-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	1.51	1.65 D	< 0.001 U	< 0.001 U	19	18.7
MW-76	1/10/2014	W76-140110-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	8.59	9.17
MW-77	1/28/2014	W77-140128-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.0594	< 0.001 U	< 0.001 U	12.1	10.6
MW-78	1/27/2014	W78-140127-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.012 T	< 0.001 U	< 0.001 U	8.47	7
MW-78 Duplicate	1/27/2014	W78-140127D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.011 T	< 0.001 U	< 0.001 U	7.93	6.88
MW-80	1/27/2014	W80-140127-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	1.61	2.06	< 0.001 U	< 0.001 U	15.3	13.1
MW-81	1/13/2014	W81-140113-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.024 T	< 0.001 U	< 0.001 U	5.48	6.13
MW-82	3/31/2014	W82-140331-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.03 T	< 0.001 U	< 0.001 U	14.3	13.4
MW-83	1/16/2014	W83-140116-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	17.6	18.3
MW-84	1/21/2014	W84-140121-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 DU	< 0.001 U	< 0.001 U	9.33	9.02
MW-85	1/6/2014	W85-140106-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.02 T	< 0.001 U	< 0.001 U	15.6	15.5
MW-86	1/27/2014	W86-140127-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.387	1.68	< 0.001 U	< 0.001 U	10.3	8.73
MW-87	1/17/2014	W87-140117-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	0.00347	3.48	6.35 D	< 0.001 U	< 0.001 U	28.3	28.4
MW-88	1/13/2014	W88-140113-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	6.48	7.14
MW-89	1/13/2014	W89-140113-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.795	1.78	< 0.001 U	< 0.001 U	9.83	10.2
MW-90	1/10/2014	W90-140110-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	1.03	2.21	< 0.001 U	< 0.001 U	9.53	9.97
MW-91	1/7/2014	W91-140107-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	2.27	9.76	< 0.001 U	< 0.001 U	14.9	14.9
MW-91 Duplicate	1/7/2014	W91-140107D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	2.28	8.38	< 0.001 U	< 0.001 U	14.6	15
MW-93	1/23/2014	W93-140123-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	< 0.01 U	0.013 DT	< 0.001 U	< 0.001 U	20.4	20.2
MW-94	1/13/2014	W94-140113-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	11.8	12.4

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: ~~Sandy Jimenez~~ (206) 477-5224

Site	Date	Sample ID	Chromium, dissolved (mg/L)	Chromium, total (mg/L)	Cobalt, dissolved (mg/L)	Cobalt, total (mg/L)	Copper, dissolved (mg/L)	Copper, total (mg/L)	Iron, dissolved (mg/L)	Iron, total (mg/L)	Lead, dissolved (mg/L)	Lead, total (mg/L)	Magnesium, dissolved (mg/L)	Magnesium, total (mg/L)
MW-95	1/7/2014	W95-140107-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.013 T	< 0.001 U	< 0.001 U	10.8	10.6
MW-99	1/17/2014	W99-140117-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	0.034 T	0.135 D	< 0.001 U	< 0.001 U	4.88	4.83
MW-100	1/23/2014	W100140123-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	1.24	4.36 D	< 0.001 U	< 0.001 U	17.3	16.9
MW-101	1/16/2014	W101140116-	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	0.0814	0.0857 D	< 0.001 U	< 0.001 U	38.5	40.3
MW-EB6	1/24/2014	WB6-140124-	< 0.005 U	< 0.005 U	< 0.003 U	0.00325	0.00224	0.00601	6.34	6.67	< 0.001 U	0.00217	3.65	3.76
WS-NPW	1/9/2014	WNPW140109-		< 0.005 U		< 0.003 U		< 0.002 U		0.66		< 0.001 U		16.4
EQUIPMENT BLANK	1/21/2014	WU1S140121E	< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U		< 0.015 U	
EQUIPMENT BLANK	1/21/2014	WU1H140121E	< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U		< 0.015 U	
FIELD BLANK	1/16/2014	W66-140116F	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 DU	< 0.001 U	< 0.001 U	< 0.015 U	< 0.015 U
FIELD BLANK	1/21/2014	W72-140121F	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 DU	< 0.001 U	< 0.001 U	< 0.015 U	< 0.015 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Manganese, dissolved	Manganese, total	Mercury, dissolved	Mercury, total	Nickel, dissolved	Nickel, total	Potassium, dissolved	Potassium, total	Selenium, dissolved	Selenium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-21	1/3/2014	W21-140103-	0.0731	0.0741	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.09	1.03	< 0.001 U	< 0.001 U
MW-24	1/21/2014	W24-140121-	0.114 D	0.107 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	0.906	0.907	< 0.001 U	< 0.001 U
MW-27A	1/7/2014	W27A140107-	0.0679	0.0677	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	3.57	3.65	< 0.001 U	< 0.001 U
MW-28	1/15/2014	W28-140115-	< 0.001 U	0.00194	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.93	0.893	< 0.001 U	< 0.001 U
MW-29	1/31/2014	W29-140131-	< 0.001 U	0.00138	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.623	0.47 T	< 0.001 U	< 0.001 U
MW-30A	1/28/2014	W30A140128-	< 0.001 DU	0.00208	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.58	1.76	< 0.001 U	< 0.001 U
MW-43	1/10/2014	W43-140110-	0.233	0.241	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.34	1.28	< 0.001 U	< 0.001 U
MW-43 Duplicate	1/10/2014	W43-140110D	0.227	0.229	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.42	1.36	< 0.001 U	< 0.001 U
MW-47	1/6/2014	W47-140106-	1.77	1.85	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	4.98	5.16	< 0.001 U	< 0.001 U
MW-55	1/15/2014	W55-140115-	0.168	0.179	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.69	1.69	< 0.001 U	< 0.001 U
MW-56	1/3/2014	W56-140103-	0.105	0.0949	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.04	0.996	< 0.001 U	< 0.001 U
MW-57	1/13/2014	W57-140113-	0.272	0.27	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.882	0.822	< 0.001 U	< 0.001 U
MW-59	1/10/2014	W59-140110-	0.115	0.108	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.06	1.09	< 0.001 U	< 0.001 U
MW-60	1/9/2014	W60-140109-	0.00271	0.00353	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.18	1.13	< 0.001 U	< 0.001 U
MW-62	1/28/2014	W62-140128-	< 0.001 DU	0.0013	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.04	1.17	< 0.001 U	< 0.001 U
MW-64	1/14/2014	W64-140114-	0.0741	0.261	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.73	1.68	< 0.001 U	< 0.001 U
MW-65	1/3/2014	W65-140103-	0.214	0.211	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.999	0.934	< 0.001 U	< 0.001 U
MW-66	1/16/2014	W66-140116-	< 0.001 DU	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.26	1.08	0.00103	< 0.001 U
MW-67	1/6/2014	W67-140106-	0.0779	0.0828	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.69	1.61	< 0.001 U	< 0.001 U
MW-68	1/14/2014	W68-140114-	0.277	0.275	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.64	1.55	< 0.001 U	< 0.001 U
MW-69	1/15/2014	W69-140115-	0.24	0.247	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.69	1.65	< 0.001 U	< 0.001 U
MW-70	1/14/2014	W70-140114-	< 0.001 U	0.00435	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.37	1.35	< 0.001 U	< 0.001 U
MW-72	1/21/2014	W72-140121-	0.321	0.305 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	1.76	1.89	< 0.001 U	< 0.001 U
MW-73	1/15/2014	W73-140115-	< 0.001 U	0.00154	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.805	0.758	< 0.001 U	< 0.001 U
MW-74	1/17/2014	W74R140117-	< 0.001 DU	< 0.001 DU	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	2.07	2.15	< 0.001 U	< 0.001 U
MW-75	1/17/2014	W75-140117-	0.127 D	0.124 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	1.74	1.81	< 0.001 U	< 0.001 U
MW-76	1/10/2014	W76-140110-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.31	1.33	< 0.001 U	< 0.001 U
MW-77	1/28/2014	W77-140128-	0.0044 D	0.0234	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.34	1.42	0.00113	< 0.001 U
MW-78	1/27/2014	W78-140127-	< 0.001 DU	0.00351	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.19	2.14	< 0.001 U	< 0.001 U
MW-78 Duplicate	1/27/2014	W78-140127D	< 0.001 DU	0.00319	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.07	2.1	< 0.001 U	< 0.001 U
MW-80	1/27/2014	W80-140127-	0.277 D	0.279	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.58	1.63	< 0.001 U	< 0.001 U
MW-81	1/13/2014	W81-140113-	< 0.001 U	0.0011	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.644	0.702	0.00107	< 0.001 U
MW-82	3/31/2014	W82-140331-	0.00164	0.00173	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.76	1.7	< 0.001 U	< 0.001 U
MW-83	1/16/2014	W83-140116-	< 0.001 DU	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.8	2.77	< 0.001 U	< 0.001 U
MW-84	1/21/2014	W84-140121-	0.00252	0.00324 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	0.986	1.02	< 0.001 U	< 0.001 U
MW-85	1/6/2014	W85-140106-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.56	1.48	0.0013	0.00113
MW-86	1/27/2014	W86-140127-	0.00958 D	0.0132	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.18	1.2	< 0.001 U	< 0.001 U
MW-87	1/17/2014	W87-140117-	0.415	0.392 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	2.22	2.34	< 0.001 U	< 0.001 U
MW-88	1/13/2014	W88-140113-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.785	0.785	< 0.001 U	< 0.001 U
MW-89	1/13/2014	W89-140113-	0.267	0.269	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.44	1.38	< 0.001 U	< 0.001 U
MW-90	1/10/2014	W90-140110-	0.27	0.312	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.33	1.23	< 0.001 U	< 0.001 U
MW-91	1/7/2014	W91-140107-	0.298	0.348	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.8	1.7	< 0.001 U	< 0.001 U
MW-91 Duplicate	1/7/2014	W91-140107D	0.292	0.339	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.78	1.72	< 0.001 U	< 0.001 U
MW-93	1/23/2014	W93-140123-	0.272 D	0.279 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	1.61	1.71	< 0.001 U	< 0.001 U
MW-94	1/13/2014	W94-140113-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.09	2.02	< 0.001 U	< 0.001 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Manganese, dissolved (mg/L)	Manganese, total (mg/L)	Mercury, dissolved (mg/L)	Mercury, total (mg/L)	Nickel, dissolved (mg/L)	Nickel, total (mg/L)	Potassium, dissolved (mg/L)	Potassium, total (mg/L)	Selenium, dissolved (mg/L)	Selenium, total (mg/L)
MW-95	1/7/2014	W95-140107-	0.146	0.242	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.23	1.19	< 0.001 U	< 0.001 U
MW-99	1/17/2014	W99-140117-	0.0827	0.0816 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	0.862	0.881	< 0.001 U	< 0.001 U
MW-100	1/23/2014	W100140123-	0.257 D	0.247 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	1.98	2.04	< 0.001 U	< 0.001 U
MW-101	1/16/2014	W101140116-	1.38 D	1.44 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	3.03	3.22	< 0.001 U	< 0.001 U
MW-EB6	1/24/2014	WB6-140124-	0.315 D	0.288	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.15	1.28	< 0.001 U	< 0.001 U
WS-NPW	1/9/2014	WNPW140109-		0.0434		< 0.0001 U		< 0.01 U		1.74		< 0.001 U
EQUIPMENT BLANK	1/21/2014	WU1S140121E	0.0016		< 0.0001 U		< 0.01 U		< 0.3 U		< 0.001 U	
EQUIPMENT BLANK	1/21/2014	WU1H140121E	< 0.001 U		< 0.0001 U		< 0.01 U		< 0.3 U		< 0.001 U	
FIELD BLANK	1/16/2014	W66-140116F	< 0.001 DU	< 0.001 DU	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	< 0.3 U	< 0.3 U	< 0.001 U	< 0.001 U
FIELD BLANK	1/21/2014	W72-140121F	< 0.001 DU	< 0.001 DU	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 DU	< 0.3 U	< 0.3 U	< 0.001 U	< 0.001 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Silver, dissolved (mg/L)	Silver, total (mg/L)	Sodium, dissolved (mg/L)	Sodium, total (mg/L)	Thallium, dissolved (mg/L)	Thallium, total (mg/L)	Vanadium, dissolved (mg/L)	Vanadium, total (mg/L)	Zinc, dissolved (mg/L)	Zinc, total (mg/L)
MW-21	1/3/2014	W21-140103-	< 0.003 U	< 0.003 U	5.25	5.32	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-24	1/21/2014	W24-140121-	< 0.003 U	< 0.003 U	6.08	5.85	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U
MW-27A	1/7/2014	W27A140107-	< 0.003 U	< 0.003 U	6.58	6.93	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-28	1/15/2014	W28-140115-	< 0.003 U	< 0.003 U	5.73	6.06	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-29	1/31/2014	W29-140131-	< 0.003 U	< 0.003 U	4.71	4.44	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-30A	1/28/2014	W30A140128-	< 0.003 U	< 0.003 U	17.4	15	< 0.001 U	< 0.001 U	0.00202	0.00233	< 0.004 DU	< 0.004 U
MW-43	1/10/2014	W43-140110-	< 0.003 U	< 0.003 U	6.28	6.57	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-43 Duplicate	1/10/2014	W43-140110D	< 0.003 U	< 0.003 U	6.13	6.26	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-47	1/6/2014	W47-140106-	< 0.003 U	< 0.003 U	17.4	18	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-55	1/15/2014	W55-140115-	< 0.003 U	< 0.003 U	5.93	5.8	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-56	1/3/2014	W56-140103-	< 0.003 U	< 0.003 U	4.88	4.96	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-57	1/13/2014	W57-140113-	< 0.003 U	< 0.003 U	6.36	6.58	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-59	1/10/2014	W59-140110-	< 0.003 U	< 0.003 U	5.59	5.74	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-60	1/9/2014	W60-140109-	< 0.003 U	< 0.003 U	5.38	5.44	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-62	1/28/2014	W62-140128-	< 0.003 U	< 0.003 U	15.8	14.6	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 DU	< 0.004 U
MW-64	1/14/2014	W64-140114-	< 0.003 U	< 0.003 U	7.66	7.94	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-65	1/3/2014	W65-140103-	< 0.003 U	< 0.003 U	5.32	5.26	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-66	1/16/2014	W66-140116-	< 0.003 U	< 0.003 U	8.2	7.91	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-67	1/6/2014	W67-140106-	< 0.003 U	< 0.003 U	8.55	8.72	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-68	1/14/2014	W68-140114-	< 0.003 U	< 0.003 U	8.33	8.34	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-69	1/15/2014	W69-140115-	< 0.003 U	< 0.003 U	8.05	8.1	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	0.00575
MW-70	1/14/2014	W70-140114-	< 0.003 U	< 0.003 U	6.05	6.28	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-72	1/21/2014	W72-140121-	< 0.003 U	< 0.003 U	7.89	7.79	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U
MW-73	1/15/2014	W73-140115-	< 0.003 U	< 0.003 U	2.4	2.47	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-74	1/17/2014	W74R140117-	< 0.003 U	< 0.003 U	12.4	12.3	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U
MW-75	1/17/2014	W75-140117-	< 0.003 U	< 0.003 U	8.66	8.64	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U
MW-76	1/10/2014	W76-140110-	< 0.003 U	< 0.003 U	7.66	8.3	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-77	1/28/2014	W77-140128-	< 0.003 U	< 0.003 U	7.88	7.04	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 DU	< 0.004 U
MW-78	1/27/2014	W78-140127-	< 0.003 U	< 0.003 U	6.87	5.9	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 DU	< 0.004 U
MW-78 Duplicate	1/27/2014	W78-140127D	< 0.003 U	< 0.003 U	6.46	5.8	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 DU	< 0.004 U
MW-80	1/27/2014	W80-140127-	< 0.003 U	< 0.003 U	7.88	6.95	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 DU	< 0.004 U
MW-81	1/13/2014	W81-140113-	< 0.003 U	< 0.003 U	5.09	5.82	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-82	3/31/2014	W82-140331-	< 0.003 U	< 0.003 U	7.22	6.96	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-83	1/16/2014	W83-140116-	< 0.003 U	< 0.003 U	8.77	9.11	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-84	1/21/2014	W84-140121-	< 0.003 U	< 0.003 U	6.32	6.19	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U
MW-85	1/6/2014	W85-140106-	< 0.003 U	< 0.003 U	8.08	8.12	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-86	1/27/2014	W86-140127-	< 0.003 U	< 0.003 U	6.96	6.08	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 DU	< 0.004 U
MW-87	1/17/2014	W87-140117-	< 0.003 U	< 0.003 U	10.2	10.4	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U
MW-88	1/13/2014	W88-140113-	< 0.003 U	< 0.003 U	5.34	5.86	< 0.001 U	< 0.001 U	0.00241	0.00252	< 0.004 U	< 0.004 U
MW-89	1/13/2014	W89-140113-	< 0.003 U	< 0.003 U	7.84	8.35	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-90	1/10/2014	W90-140110-	< 0.003 U	< 0.003 U	6.04	6.28	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-91	1/7/2014	W91-140107-	< 0.003 U	< 0.003 U	7.38	7.53	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-91 Duplicate	1/7/2014	W91-140107D	< 0.003 U	< 0.003 U	7.3	7.54	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-93	1/23/2014	W93-140123-	< 0.003 U	< 0.003 U	10.2	10.2	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	0.00722 D	0.00981
MW-94	1/13/2014	W94-140113-	< 0.003 U	< 0.003 U	6.92	7.34	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: ~~Sandy Jimenez~~ (206) 477-5224

Site	Date	Sample ID	Silver, dissolved (mg/L)	Silver, total (mg/L)	Sodium, dissolved (mg/L)	Sodium, total (mg/L)	Thallium, dissolved (mg/L)	Thallium, total (mg/L)	Vanadium, dissolved (mg/L)	Vanadium, total (mg/L)	Zinc, dissolved (mg/L)	Zinc, total (mg/L)
MW-95	1/7/2014	W95-140107-	< 0.003 U	< 0.003 U	5.85	5.89	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-99	1/17/2014	W99-140117-	< 0.003 U	< 0.003 U	10.4	10	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U
MW-100	1/23/2014	W100140123-	< 0.003 U	< 0.003 U	10.1	9.9	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U
MW-101	1/16/2014	W101140116-	< 0.003 U	< 0.003 U	16.5	17.3	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 U	< 0.004 U
MW-EB6	1/24/2014	WB6-140124-	< 0.003 U	< 0.003 U	12.1	10.8	< 0.001 U	< 0.001 U	0.00262	0.00332	< 0.004 DU	< 0.004 U
WS-NPW	1/9/2014	WNPW140109-		< 0.003 U		8.46		< 0.001 U		< 0.002 U		0.00501
EQUIPMENT BLANK	1/21/2014	WU1S140121E	< 0.003 U		0.528		< 0.001 U		< 0.002 U		< 0.004 DU	
EQUIPMENT BLANK	1/21/2014	WU1H140121E	< 0.003 U		0.492		< 0.001 U		< 0.002 U		< 0.004 DU	
FIELD BLANK	1/16/2014	W66-140116F	< 0.003 U	< 0.003 U	0.501	0.524	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 U	< 0.004 U
FIELD BLANK	1/21/2014	W72-140121F	< 0.003 U	< 0.003 U	0.501	0.516	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 DU	< 0.004 DU	< 0.004 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	1,1,1,2-Tetrachloro-ethane 630-20-6 (ug/L)	1,1,1-Trichloro-ethane 71-55-6 (ug/L)	1,1,2,2-Tetrachloro-ethane 79-34-5 (ug/L)	1,1,2-Trichloro-ethane 79-00-5 (ug/L)	1,1-Dichloro-ethane 75-34-3 (ug/L)	1,1-Dichloro-ethene 75-35-4 (ug/L)	1,2,3-Trichloro-propane 96-18-4 (ug/L)	1,2-Dibromo-3-Chloropropane 96-12-8 (ug/L)	1,2-Dibromo-ethane 106-93-4 (ug/L)	1,2-Dichloro-benzene 95-50-1 (ug/L)	1,2-Dichloro-ethane 107-06-2 (ug/L)	1,2-Dichloro-propane 78-87-5 (ug/L)
MW-21	1/3/2014	W21-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-24	1/21/2014	W24-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	1/7/2014	W27A140107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-28	1/15/2014	W28-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-29	1/31/2014	W29-140131-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	1/28/2014	W30A140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.86	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	1/10/2014	W43-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43 Duplicate	1/10/2014	W43-140110D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	1/6/2014	W47-140106-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.562	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-55	1/15/2014	W55-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-56	1/3/2014	W56-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	1/13/2014	W57-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-59	1/10/2014	W59-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	1/9/2014	W60-140109-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-62	1/28/2014	W62-140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.43	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64	1/14/2014	W64-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-65	1/3/2014	W65-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-66	1/16/2014	W66-140116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-67	1/6/2014	W67-140106-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-68	1/14/2014	W68-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-69	1/15/2014	W69-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	1/14/2014	W70-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-72	1/21/2014	W72-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-73	1/15/2014	W73-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	1/17/2014	W74R140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	2/21/2014	W74R140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	3/25/2014	W74R140325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	1/17/2014	W75-140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	2/21/2014	W75-140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	3/25/2014	W75-140325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-76	1/10/2014	W76-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	1/28/2014	W77-140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78	1/27/2014	W78-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78 Duplicate	1/27/2014	W78-140127D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	1/27/2014	W80-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-81	1/13/2014	W81-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-82	3/31/2014	W82-140331-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	1/16/2014	W83-140116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-84	1/21/2014	W84-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-85	1/6/2014	W85-140106-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-86	1/27/2014	W86-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	1/17/2014	W87-140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	2/21/2014	W87-140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	3/20/2014	W87-140320-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-88	1/13/2014	W88-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Cedar Hills Regional Landfill
Environmental Monitoring Report 1st Quarter 2014

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: ~~Sandy Jimenez~~ (206) 477-5224

Site	Date	Sample ID	1,1,1,2-Tetrachloro-ethane 630-20-6 (ug/L)	1,1,1-Trichloro-ethane 71-55-6 (ug/L)	1,1,2,2-Tetrachloro-ethane 79-34-5 (ug/L)	1,1,2-Trichloro-ethane 79-00-5 (ug/L)	1,1-Dichloro-ethane 75-34-3 (ug/L)	1,1-Dichloro-ethene 75-35-4 (ug/L)	1,2,3-Trichloro-propane 96-18-4 (ug/L)	1,2-Dibromo-3-Chloropropane 96-12-8 (ug/L)	1,2-Dibromo-ethane 106-93-4 (ug/L)	1,2-Dichloro-benzene 95-50-1 (ug/L)	1,2-Dichloro-ethane 107-06-2 (ug/L)	1,2-Dichloro-propane 78-87-5 (ug/L)
VOA TRIP BLANK	3/19/2014	VTRP140320C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/24/2014	VTRP140325B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/26/2014	VTRP140331C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	1,4-Dichloro- benzene	2-Butanone	2-Hexanone	4-Methyl-2- Pentanone	Acetone	Arylonitrile	Benzene	Bromochloro- methane	Bromodichloro- methane	Bromoform	Bromo- methane	Carbon Disulfide
			106-46-7 (ug/L)	78-93-3 (ug/L)	591-78-6 (ug/L)	108-10-1 (ug/L)	67-64-1 (ug/L)	107-13-1 (ug/L)	71-43-2 (ug/L)	74-97-5 (ug/L)	75-27-4 (ug/L)	75-25-2 (ug/L)	74-83-9 (ug/L)	75-15-0 (ug/L)
MW-21	1/3/2014	W21-140103-	< 0.2 U	< 4 U	< 4 U	< 4 U	4.09	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-24	1/21/2014	W24-140121-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	1/7/2014	W27A140107-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-28	1/15/2014	W28-140115-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-29	1/31/2014	W29-140131-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	1/28/2014	W30A140128-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	1/10/2014	W43-140110-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43 Duplicate	1/10/2014	W43-140110D	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	1/6/2014	W47-140106-	< 0.2 U	< 4 U	< 4 U	< 4 U	5.28 B	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-55	1/15/2014	W55-140115-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-56	1/3/2014	W56-140103-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	1/13/2014	W57-140113-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-59	1/10/2014	W59-140110-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	1/9/2014	W60-140109-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-62	1/28/2014	W62-140128-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64	1/14/2014	W64-140114-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-65	1/3/2014	W65-140103-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-66	1/16/2014	W66-140116-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-67	1/6/2014	W67-140106-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-68	1/14/2014	W68-140114-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-69	1/15/2014	W69-140115-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	1/14/2014	W70-140114-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-72	1/21/2014	W72-140121-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-73	1/15/2014	W73-140115-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	1/17/2014	W74R140117-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	2/21/2014	W74R140221-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	3/25/2014	W74R140325-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	1/17/2014	W75-140117-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	2/21/2014	W75-140221-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	3/25/2014	W75-140325-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-76	1/10/2014	W76-140110-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	1/28/2014	W77-140128-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78	1/27/2014	W78-140127-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78 Duplicate	1/27/2014	W78-140127D	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	1/27/2014	W80-140127-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-81	1/13/2014	W81-140113-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-82	3/31/2014	W82-140331-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	1/16/2014	W83-140116-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-84	1/21/2014	W84-140121-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-85	1/6/2014	W85-140106-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-86	1/27/2014	W86-140127-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	1/17/2014	W87-140117-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	2/21/2014	W87-140221-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	3/20/2014	W87-140320-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-88	1/13/2014	W88-140113-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	1,4-Dichloro- benzene	2-Butanone	2-Hexanone	4-Methyl-2- Pentanone	Acetone	Arylonitrile	Benzene	Bromochloro- methane	Bromodichloro- methane	Bromoform	Bromo- methane	Carbon Disulfide
			106-46-7 (ug/L)	78-93-3 (ug/L)	591-78-6 (ug/L)	108-10-1 (ug/L)	67-64-1 (ug/L)	107-13-1 (ug/L)	71-43-2 (ug/L)	74-97-5 (ug/L)	75-27-4 (ug/L)	75-25-2 (ug/L)	74-83-9 (ug/L)	75-15-0 (ug/L)
MW-89	1/13/2014	W89-140113-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-90	1/10/2014	W90-140110-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-91	1/7/2014	W91-140107-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-91 Duplicate	1/7/2014	W91-140107D	< 0.2 U	< 4 U	< 4 U	< 4 U	9.32 B	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-93	1/23/2014	W93-140123-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-94	1/13/2014	W94-140113-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-95	1/7/2014	W95-140107-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-99	1/17/2014	W99-140117-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-99	2/21/2014	W99-140221-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-99	3/20/2014	W99-140320-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-100	1/23/2014	W100140123-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-101	1/16/2014	W101140116-	< 0.2 U	< 4 U	< 4 U	< 4 U	4.64	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-EB6	1/24/2014	WB6-140124-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
WS-NPW	1/9/2014	WNPW140109-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	1/16/2014	W66-140116F	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	1/21/2014	W72-140121F	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/6/2014	VTRP104107B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/3/2014	VTRP140106B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/3/2014	VTRP140106C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/6/2014	VTRP140107C	< 0.2 U	< 4 U	< 4 U	< 4 U	4.12 B	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/8/2014	VTRP140109B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/8/2014	VTRP140109L	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/9/2014	VTRP140110B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/10/2014	VTRP140110C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/10/2014	VTRP140113B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/10/2014	VTRP140113C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA Trip Blank	1/13/2014	VTRP140114B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA Trip Blank	1/13/2014	VTRP140114C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/14/2014	VTRP140115B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/14/2014	VTRP140115C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/15/2014	VTRP140116B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/15/2014	VTRP140116C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/16/2014	VTRP140117B	< 0.2 U	< 4 U	< 4 U	< 4 U	5.3	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/16/2014	VTRP140117C	< 0.2 U	< 4 U	< 4 U	< 4 U	4.17	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/17/2014	VTRP140121B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/17/2014	VTRP140121C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/22/2014	VTRP140123C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/23/2014	VTRP140124C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/23/2014	VTRP140127B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/24/2014	VTRP140127C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/27/2014	VTRP140128B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/27/2014	VTRP140128C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/30/2014	VTRP140131C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/20/2014	VTRP140221B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/20/2014	VTRP140221C	< 0.2 U	< 4 U	< 4 U	< 4 U	4 BT	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: ~~Sandy Jimenez~~ (206) 477-5224

Site	Date	Sample ID	1,4-Dichloro- benzene	2-Butanone	2-Hexanone	4-Methyl-2- Pentanone	Acetone	Arylonitrile	Benzene	Bromochloro- methane	Bromodichloro- methane	Bromoform	Bromo- methane	Carbon Disulfide
			106-46-7 (ug/L)	78-93-3 (ug/L)	591-78-6 (ug/L)	108-10-1 (ug/L)	67-64-1 (ug/L)	107-13-1 (ug/L)	71-43-2 (ug/L)	74-97-5 (ug/L)	75-27-4 (ug/L)	75-25-2 (ug/L)	74-83-9 (ug/L)	75-15-0 (ug/L)
VOA TRIP BLANK	3/19/2014	VTRP140320C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/24/2014	VTRP140325B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/26/2014	VTRP140331C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Carbon	Chloro-	Chloro-	Chloro-	Chloroform	Chloro-	cis-1,2-	cis-1,3-	Dibromo-	Dichloro-	Ethyl -	m, p-Xylene
			Tetrachloride	benzene	dibromo-	ethane		methane	Dichloro-	Dichloro-	methane	difluoro-	benzene	
			56-23-5 (ug/L)	108-90-7 (ug/L)	124-48-1 (ug/L)	75-00-3 (ug/L)	67-66-3 (ug/L)	74-87-3 (ug/L)	156-59-2 (ug/L)	10061-01-5 (ug/L)	74-95-3 (ug/L)	75-71-8 (ug/L)	100-41-4 (ug/L)	
MW-21	1/3/2014	W21-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-24	1/21/2014	W24-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.24 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	1/7/2014	W27A140107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-28	1/15/2014	W28-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-29	1/31/2014	W29-140131-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	1/28/2014	W30A140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.03	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	1/10/2014	W43-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43 Duplicate	1/10/2014	W43-140110D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	1/6/2014	W47-140106-	< 0.2 U	< 0.2 U	< 0.2 U	0.21 T	< 0.2 U	< 0.2 U	1.91	< 0.2 U	< 0.2 U	2.93	< 0.2 U	< 0.2 U
MW-55	1/15/2014	W55-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-56	1/3/2014	W56-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.22	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	1/13/2014	W57-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-59	1/10/2014	W59-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.74	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	1/9/2014	W60-140109-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-62	1/28/2014	W62-140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	3.78	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64	1/14/2014	W64-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-65	1/3/2014	W65-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-66	1/16/2014	W66-140116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-67	1/6/2014	W67-140106-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-68	1/14/2014	W68-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-69	1/15/2014	W69-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	1/14/2014	W70-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-72	1/21/2014	W72-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-73	1/15/2014	W73-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	1/17/2014	W74R140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	2/21/2014	W74R140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	3/25/2014	W74R140325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	1/17/2014	W75-140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	2/21/2014	W75-140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	3/25/2014	W75-140325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-76	1/10/2014	W76-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.509	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	1/28/2014	W77-140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78	1/27/2014	W78-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78 Duplicate	1/27/2014	W78-140127D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	1/27/2014	W80-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-81	1/13/2014	W81-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-82	3/31/2014	W82-140331-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	1/16/2014	W83-140116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-84	1/21/2014	W84-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-85	1/6/2014	W85-140106-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-86	1/27/2014	W86-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	1/17/2014	W87-140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	2/21/2014	W87-140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	3/20/2014	W87-140320-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-88	1/13/2014	W88-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill --- Groundwater VOA Analytical Data

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Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Carbon Tetrachloride 56-23-5 (ug/L)	Chloro- benzene 108-90-7 (ug/L)	Chloro- dibromo- methane 124-48-1 (ug/L)	Chloro- ethane 75-00-3 (ug/L)	Chloroform 67-66-3 (ug/L)	Chloro- methane 74-87-3 (ug/L)	cis-1,2- Dichloro- ethene 156-59-2 (ug/L)	cis-1,3- Dichloro- propene 10061-01-5 (ug/L)	Dibromo- methane 74-95-3 (ug/L)	Dichloro- difluoro- methane 75-71-8 (ug/L)	Ethyl - benzene 100-41-4 (ug/L)	m, p-Xylene (ug/L)
VOA TRIP BLANK	3/19/2014	VTRP140320C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/24/2014	VTRP140325B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/26/2014	VTRP140331C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
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Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Methyl Iodide 74-88-4 (ug/L)	Methylene Chloride 75-09-2 (ug/L)	o-Xylene 95-47-6 (ug/L)	Styrene 100-42-5 (ug/L)	Tetrachloro- ethene 127-18-4 (ug/L)	Toluene 108-88-3 (ug/L)	trans-1,2- Dichloro- ethene 156-60-5 (ug/L)	trans-1,3- Dichloro- propene 10061-02-6 (ug/L)	trans-1,4- Dichloro-2- butene 110-57-6 (ug/L)	Trichloro- ethene 79-01-6 (ug/L)	Trichloro- fluoro- methane 75-69-4 (ug/L)	Vinyl Acetate 108-05-4 (ug/L)	Vinyl Chloride 75-01-4 (ug/L)
MW-21	1/3/2014	W21-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-24	1/21/2014	W24-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-27A	1/7/2014	W27A140107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-28	1/15/2014	W28-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-29	1/31/2014	W29-140131-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-30A	1/28/2014	W30A140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	0.982	< 0.2 U	< 0.2 U	< 0.02 U
MW-43	1/10/2014	W43-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-43 Duplicate	1/10/2014	W43-140110D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-47	1/6/2014	W47-140106-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	4.63
MW-55	1/15/2014	W55-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-56	1/3/2014	W56-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-57	1/13/2014	W57-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-59	1/10/2014	W59-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-60	1/9/2014	W60-140109-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-62	1/28/2014	W62-140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-64	1/14/2014	W64-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-65	1/3/2014	W65-140103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.0511
MW-66	1/16/2014	W66-140116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-67	1/6/2014	W67-140106-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-68	1/14/2014	W68-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-69	1/15/2014	W69-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-70	1/14/2014	W70-140114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-72	1/21/2014	W72-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-73	1/15/2014	W73-140115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-74	1/17/2014	W74R140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-74	2/21/2014	W74R140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-74	3/25/2014	W74R140325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-75	1/17/2014	W75-140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-75	2/21/2014	W75-140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-75	3/25/2014	W75-140325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-76	1/10/2014	W76-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.445	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	7.89	< 0.2 U	< 0.2 U	< 0.02 U
MW-77	1/28/2014	W77-140128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-78	1/27/2014	W78-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	0.649	< 0.2 U	< 0.2 U	< 0.02 U
MW-78 Duplicate	1/27/2014	W78-140127D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	0.632	< 0.2 U	< 0.2 U	< 0.02 U
MW-80	1/27/2014	W80-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-81	1/13/2014	W81-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-82	3/31/2014	W82-140331-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	4.76	< 0.2 U	< 0.2 U	< 0.02 U
MW-83	1/16/2014	W83-140116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	1.66	< 0.2 U	< 0.2 U	< 0.02 U
MW-84	1/21/2014	W84-140121-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-85	1/6/2014	W85-140106-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-86	1/27/2014	W86-140127-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-87	1/17/2014	W87-140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-87	2/21/2014	W87-140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-87	3/20/2014	W87-140320-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-88	1/13/2014	W88-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U

Data Collected from January 1, 2014 to March 31, 2014
Cedar Hills Landfill --- Groundwater VOA Analytical Data

Site	Date	Sample ID	Methyl Iodide	Methylene Chloride	o-Xylene	Styrene	Tetrachloro-ethene	Toluene	trans-1,2-Dichloro-ethene	trans-1,3-Dichloro-propene	trans-1,4-Dichloro-2-butene	Trichloro-ethene	Trichloro-fluoro-methane	Vinyl Acetate	Vinyl Chloride
			74-88-4 (ug/L)	75-09-2 (ug/L)	95-47-6 (ug/L)	100-42-5 (ug/L)	127-18-4 (ug/L)	108-88-3 (ug/L)	156-60-5 (ug/L)	10061-02-6 (ug/L)	110-57-6 (ug/L)	79-01-6 (ug/L)	75-69-4 (ug/L)	108-05-4 (ug/L)	75-01-4 (ug/L)
MW-89	1/13/2014	W89-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-90	1/10/2014	W90-140110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-91	1/7/2014	W91-140107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-91 Duplicate	1/7/2014	W91-140107D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-93	1/23/2014	W93-140123-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-94	1/13/2014	W94-140113-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	2.64	< 0.2 U	< 0.2 U	< 0.02 U
MW-95	1/7/2014	W95-140107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-99	1/17/2014	W99-140117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-99	2/21/2014	W99-140221-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-99	3/20/2014	W99-140320-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-100	1/23/2014	W100140123-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-101	1/16/2014	W101140116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.353
MW-EB6	1/24/2014	WB6-140124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
WS-NPW	1/9/2014	WNPW140109-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
FIELD BLANK	1/16/2014	W66-140116F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
FIELD BLANK	1/21/2014	W72-140121F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/6/2014	VTRP104107B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/3/2014	VTRP140106B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/3/2014	VTRP140106C	< 0.2 U	< 0.2 U	< 0.2 U										

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: ~~Sandy Jimenez~~ (206) 477-5224

Site	Date	Sample ID	Methyl Iodide	Methylene Chloride	o-Xylene	Styrene	Tetrachloro- ethene	Toluene	trans-1,2- Dichloro- ethene	trans-1,3- Dichloro- propene	trans-1,4- Dichloro-2- butene	Trichloro- ethene	Trichloro- fluoro- methane	Vinyl Acetate	Vinyl Chloride
			74-88-4 (ug/L)	75-09-2 (ug/L)	95-47-6 (ug/L)	100-42-5 (ug/L)	127-18-4 (ug/L)	108-88-3 (ug/L)	156-60-5 (ug/L)	10061-02-6 (ug/L)	110-57-6 (ug/L)	79-01-6 (ug/L)	75-69-4 (ug/L)	108-05-4 (ug/L)	75-01-4 (ug/L)
VOA TRIP BLANK	3/19/2014	VTRP140320C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/24/2014	VTRP140325B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/26/2014	VTRP140331C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U

Surface Water Analytical Data

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill ---Surface Water Elevation Data-Staff Gage Measurements

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Staff Gage	Location	Date	Reference Elevation Staff Gage 0' (msl)	Reference Elevation Top of Peizo (msl)	Depth to Water (Peizometer) (feet)	Staff Gage Reading (feet)	Surface Water Elevation (msl)	Comment
SW-G1	SW-W1	1/22/2014	415.38	418.84		0.7	418.14	
SW-G1	SW-W1	2/26/2014	415.38	418.84		0.98	417.86	
SW-G1	SW-W1	3/19/2014	415.38	418.84		1.03	417.81	
SW-G2	SW-N1	1/22/2014	355.68	358.21		0.54	357.67	
SW-G2	SW-N1	2/26/2014	355.68	358.21		0.87	357.34	
SW-G2	SW-N1	3/19/2014	355.68	358.21		0.95	357.26	
SW-G3	SW -V	1/22/2014	466.46	469.88		0.12	469.76	
SW-G3	SW -V	2/26/2014	466.46	469.88		0.29	469.59	
SW-G3	SW -V	3/19/2014	466.46	469.88		0.26	469.62	
SW-G4	Upstream of SW-E1	1/22/2014	502.41	505.85		0.28	505.57	
SW-G4	Upstream of SW-E1	2/26/2014	502.41	505.85		0.44	505.41	
SW-G4	Upstream of SW-E1	3/19/2014	502.41	505.85		0.50	505.35	
SW-G5	SW-E1	1/22/2014	486.92	490.34		0.65	489.69	
SW-G5	SW-E1	2/26/2014	486.92	490.34		0.73	489.61	
SW-G5	SW-E1	3/19/2014	486.92	490.34		0.82	489.52	
SW-G6	Upstream of SW-GS1	1/22/2014	490.72	494.12		0.55	493.57	
SW-G6	Upstream of SW-GS1	2/27/2014	490.72	494.12		0.58	493.54	
SW-G6	Upstream of SW-GS1	3/18/2014	490.72	494.12		0.67	493.45	
SW-G7	SW-S2	1/22/2014	453.03	456.41		0.55	455.86	
SW-G7	SW-S2	2/27/2014	453.03	456.41		0.60	455.81	
SW-G7	SW-S2	3/18/2014	453.03	456.41		0.64	455.77	
SW-G8	Upstream of SW-S1	1/22/2014	510.61	515.56		0.62	514.94	
SW-G8	Upstream of SW-S1	2/27/2014	510.61	515.56		0.78	514.78	
SW-G8	Upstream of SW-S1	3/18/2014	510.61	515.56		1.00	514.56	
SW-G9	SW-S1	1/22/2014	490.93	494.35		0.82	493.53	
SW-G9	SW-S1	2/27/2014	490.93	494.35		1.35	493.00	
SW-G9	SW-S1	3/18/2014	490.93	494.35		1.52	492.83	

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Field Parameters

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Turbidity	Oxygen, Dissolved
			(std. Units)	(umho/cm)	(°C)	(NTU)	(mg/L)
SW-E1	1/22/2014	SE1-140122Q	6.92	46	5.4	2.32	10.33
SW-E1	2/26/2014	SE1-140226M	6.68	41	5.1	1.93	10.87
SW-E1	3/19/2014	SE1-140319M	7.31	44	7.9	1.79	14.29
SW-GS1	1/2/2014	SGS1140102P	7.45	87	6.6	6.43	9.81
SW-GS1	1/22/2014	SGS1140122Q	7.36	85	6.2	32.5	9.85
SW-GS1	2/27/2014	SGS1140227M	7.29	77	7	83	9.35
SW-GS1	3/19/2014	SGS1140319M	7.26	82	9.4	20.3	9.04
SW-GS1	3/25/2014	SGS1140325P	7.2	88	10.1	7.76	8.77
SW-SLP1	1/23/2014	SLP1140123P	7	230	6.5	7.32	10.79
SW-SLP1	2/27/2014	SLP1140227P	6.66	220	8.3	3.51	10.31
SW-SLP2	1/23/2014	SLP2140123P	6.76	120	4.8	3.73	12.73
SW-SLP2	2/27/2014	SLP2140227P	6.4	94	5.7	6.5	12.38
SW-MC	1/23/2014	SMC-140123Q	6.87	89	5	1.68	12.9
SW-MC	2/27/2014	SMC-140227M	6.66	84	6.6	2.45	12.23
SW-MC	3/31/2014	SMC-140331M	7.56	83	7.2	2.42	9.51
SW-N1	1/22/2014	SN1-140122Q	6.94	94	6.3	1.76	11.66
SW-N1	2/26/2014	SN1-140226M	6.32	79	6.8	2.47	12.02
SW-N1	3/19/2014	SN1-140319M	7.11	70	8.6	3.39	13.35
SW-N4	1/2/2014	SN4-140102P	6.09	100	6.2	1.82	14.09
SW-N4	1/23/2014	SN4-140123Q	6.82	95	6.2	3.1	12.05
SW-N4	2/26/2014	SN4-140226M	6.39	74	7.4	3.91	11.98
SW-N4 Duplicate	3/19/2014	SN4-140319D	7.09	62	9.3	6.18	13.17
SW-N4	3/19/2014	SN4-140319M	7.09	62	9.3	6.18	13.17
SW-N4	3/25/2014	SN4-140325P	7.64	76	11.6	3.34	9.02
SW-S1	1/22/2014	SS1-140122Q	8.21	55	6.8	0.21	6.56
SW-S1	2/27/2014	SS1-140227M	7.63	53	6.9	0.41	8.88
SW-S1	3/19/2014	SS1-140319M	7.44	47	9	3.82	8.21
SW-S2	1/22/2014	SS2-140122Q	8.21	90	6.6	18.6	7.09
SW-S2 Duplicate	2/27/2014	SS2-140227D	8.01	79	7.1	64.4	8.58
SW-S2	2/27/2014	SS2-140227M	8.01	79	7.1	64.4	8.58
SW-S2	3/19/2014	SS2-140319M	8.13	82	8.9	11.9	7.94
SW-SL3	1/2/2014	SSL3140102P	6.52	135	6.4	1.03	10.54
SW-SL3	1/22/2014	SSL3140122Q	7.43	105	6.7	1.21	8.46
SW-SL3	1/23/2014	SSL3140123P	6.8	105	4.1	2.42	10.79
SW-SL3	2/27/2014	SSL3140227M	6.83	93	6.9	3.7	9.13
SW-SL3	2/27/2014	SSL3140227P	6.51	90	6.7	4.4	11.26
SW-SL3	3/19/2014	SSL3140319M	6.71	85	9.2	4.82	8.84
SW-SL3	3/25/2014	SSL3140325P	7.26	105	10.7	1.09	6.46
SW-TD1	1/29/2014	STD1140129-	7.34	41	6.7	5.87	9.47
SW-TD1	3/3/2014	STD1140303-	7.1	36	7.1	2.51	9.84
SW-TD2	1/29/2014	STD2140129-	8.09	32	6.2	4.98	9.61
SW-TD2	3/3/2014	STD2140303-	7.36	25	7.7	2.33	10.02
SW-TD4	1/29/2014	STD4140129-	7.45	43	7.5	3.77	8.37
SW-TD4	3/3/2014	STD4140303-	7.61	32	7.1	1.79	10.1
SW-TD6	1/29/2014	STD6140129-	8.05	47	11.8	6.94	10.22

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Field Parameters

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Turbidity	Oxygen, Dissolved
			(std. Units)	(umho/cm)	(°C)	(NTU)	(mg/L)
SW-TD6	3/3/2014	STD6140303-	8.22	45	8.3	4.04	10.32
SW-V	1/22/2014	SV--140122Q	6.78	84	10	1.3	10.71
SW-V	2/26/2014	SV--140226M	6.34	76	9.4	0.78	10.57
SW-V	3/19/2014	SV--140319M	6.6	68	9.6	1.96	13.06
SW-W	1/23/2014	SW--140123Q	6.6	82	5.9	2.33	9.72
SW-W	2/27/2014	SW--140227M	6.46	82	7	3.15	9.91
SW-W	3/31/2014	SW--140331M	7.39	85	7.8	3.61	8.38
SW-W1	1/22/2014	SW1-140122Q	7.05	100	6.5	1.43	12.47
SW-W1	2/26/2014	SW1-140226M	6.42	89	6.8	1.57	12.55
SW-W1	3/19/2014	SW1-140319M	7.14	77	8.1	1.86	12.91
SW-W2	1/22/2014	SW2-140122Q	7.71	58	6.5	0.54	8.79
SW-W2	2/27/2014	SW2-140227M	7.11	56	6.2	0.32	9.23
SW-W2	3/19/2014	SW2-140319M	7.01	49	8.3	2.89	8.59
FIELD BLANK	2/26/2014	SN1-140226F	6.84	4.7	12.6	0.49	11.19
FIELD BLANK	3/19/2014	SW2-140319F	7.47	3.5	10.9		

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Conventional Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Alkalinity, Total (CaCO3) (mg/L)	Ammonia, (NH3) (mg/L)	Biological Oxygen Demand (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Coliforms, Fecal (CFU/100mL)	Coliforms, Total (CFU/100mL)	Cyanide (mg/L)	Fluoride (mg/L)	Hardness (mg/L)	Nitrate- Nitrogen, (NO3 as N) (mg/L)
SW-E1	1/22/2014	SE1-140122Q	13.8	< 0.01 U	< 2 U	< 5 U	1.71	4	14	< 0.02 U	< 0.1 U	13	0.584
SW-E1	2/26/2014	SE1-140226M	11.9	< 0.01 U		< 5 U	1.65	5	86			13.8	1.09
SW-E1	3/19/2014	SE1-140319M	12.7	< 0.01 U		< 5 U	1.52	3	10			15.6	0.865
SW-GS1	1/2/2014	SGS1140102P		0.01 T	< 2 U								
SW-GS1	1/22/2014	SGS1140122Q	31.5	< 0.01 U	< 2 U	6.6 T	1.69	10	30	< 0.02 U	< 0.1 U	36.9	1.01
SW-GS1	2/27/2014	SGS1140227M	29.7	< 0.01 U		< 5 U	1.6	22	200			37.9	0.745
SW-GS1	3/19/2014	SGS1140319M	26.5	0.208		< 5 U	3.41	16	130			33.2	1.06
SW-GS1	3/25/2014	SGS1140325P		< 0.01 U	< 2 U								
SW-SLP1	1/23/2014	SLP1140123P		0.809	2.35			8	290				
SW-SLP1	2/27/2014	SLP1140227P		0.023 T	3.6			2000	6300				
SW-SLP2	1/23/2014	SLP2140123P		< 0.01 U	< 2 U			9	340				
SW-SLP2	2/27/2014	SLP2140227P		< 0.01 U	< 2 U			310	900				
SW-MC	1/23/2014	SMC-140123Q	34	< 0.01 U	< 2 U	< 5 U	3.18	7	10	< 0.02 U	< 0.1 U	34.3	1.46
SW-MC	2/27/2014	SMC-140227M	27.8	< 0.01 U		5.2 T	2.76	1	23			31.7	1.51
SW-MC	3/31/2014	SMC-140331M	29.9	< 0.01 U		< 5 U	1.99	28	27			33.2	0.847
SW-N1	1/22/2014	SN1-140122Q	33.5	< 0.01 U	< 2 U	5.9 T	3.09	5	6	< 0.02 U	< 0.1 U	38.5	1.46
SW-N1	2/26/2014	SN1-140226M	26.1	< 0.01 U		6 T	2.54	5	52			30.4	1.41
SW-N1	3/19/2014	SN1-140319M	23.8	< 0.01 U		< 5 U	1.87	2	23			28.3	1.14
SW-N4	1/2/2014	SN4-140102P		0.035 T	< 2 U								
SW-N4	1/23/2014	SN4-140123Q	33	0.0423	< 2 U	11 T	1.78	15	23	< 0.02 U	< 0.1 U	36.3	0.948
SW-N4	2/26/2014	SN4-140226M	26.2	0.0801		11 T	1.6	15	370			31	0.678
SW-N4	3/19/2014	SN4-140319M	25.6	0.0484		9 T	0.817	11	39			28.7	0.472
SW-N4	3/25/2014	SN4-140325P		0.0492	< 2 U								
SW-S1	1/22/2014	SS1-140122Q	12.5	< 0.01 U	< 2 U	< 5 U	2.59	5	14	< 0.02 U	< 0.1 U	17.5	1.82
SW-S1	2/27/2014	SS1-140227M	11.1	0.0605		< 5 U	2.41	5	51			17.1	2.17
SW-S1	3/19/2014	SS1-140319M	10.5	< 0.01 U		< 5 U	1.95	3	23			15.5	1.73
SW-S2	1/22/2014	SS2-140122Q	32.2	< 0.01 U	< 2 U	5.1 T	1.75	9	30	< 0.02 U	< 0.1 U	37.9	1.04
SW-S2	2/27/2014	SS2-140227M	27.6	< 0.01 U		10 T	1.87	21	170			64.4	1.24
SW-S2	3/19/2014	SS2-140319M	26	0.0164		< 5 U	3.23	10	80			32.4	1.6
SW-SL3	1/2/2014	SSL3140102P		< 0.01 U	< 2 U								
SW-SL3	1/22/2014	SSL3140122Q	44.5	< 0.01 U	< 2 U	5.2 T	3.33	1	5	< 0.02 U	< 0.1 U	47.4	0.388
SW-SL3	1/23/2014	SSL3140123P		< 0.01 U	< 2 U			< 1 U	42				
SW-SL3	2/27/2014	SSL3140227M	38.5	< 0.01 U		10 T	2.09	< 1 U	61			38.8	0.356
SW-SL3	2/27/2014	SSL3140227P		< 0.01 U	2.82			< 1 U	39				
SW-SL3	3/19/2014	SSL3140319M	38.7	< 0.01 U		6.8 T	1.1	11	140			36.9	0.149
SW-SL3	3/25/2014	SSL3140325P		< 0.01 U	< 2 U								
SW-TD1	1/29/2014	STD1140129-	14.7			21.1	1.37						
SW-TD2	1/29/2014	STD2140129-	8.81			34.5	1.48						
SW-TD4	1/29/2014	STD4140129-	12.3			27.6	2.32						
SW-TD6	1/29/2014	STD6140129-	15.3			24	1.64						
SW-V	1/22/2014	SV--140122Q	24.6	< 0.01 U	< 2 U	< 5 U	2.61	< 1 U	1	< 0.02 U	< 0.1 U	33.4	1.31
SW-V	2/26/2014	SV--140226M	24.8	< 0.01 U		< 5 U	2.6	< 1 U	180			25.5	1.32
SW-V	3/19/2014	SV--140319M	20.7	< 0.01 U		< 5 U	2.83	1	1			25	1.29
SW-W1	1/22/2014	SW1-140122Q	37.1	< 0.01 U	< 2 U	< 5 U	4.3	8	20	< 0.02 U	< 0.1 U	35	1.71
SW-W1	2/26/2014	SW1-140226M	28.6	< 0.01 U		< 5 U	3.94	14	170			32.7	1.8

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Conventional Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Alkalinity, Total (CaCO3) (mg/L)	Ammonia, (NH3) (mg/L)	Biological Oxygen Demand (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Coliforms, Fecal (CFU/100mL)	Coliforms, Total (CFU/100mL)	Cyanide (mg/L)	Fluoride (mg/L)	Hardness (mg/L)	Nitrate- Nitrogen, (NO3 as N) (mg/L)
SW-W1	3/19/2014	SW1-140319M	24.7	< 0.01 U		< 5 U	3.28	23	170			29.9	1.57
SW-W	1/23/2014	SW--140123Q	32.8	0.0151	< 2 U	< 5 U	4.23	3	23	< 0.02 U	< 0.1 U	31.7	1.57
SW-W	2/27/2014	SW--140227M	26.7	0.0111		< 5 U	3.84	17	46			30.1	1.51
SW-W	3/31/2014	SW--140331M	29.7	0.014 T		8.2 T	3.23	9	8			31.9	0.782
SW-W2	1/22/2014	SW2-140122Q	13.9	< 0.01 U	< 2 U	< 5 U	2.72	1	2	< 0.02 U	< 0.1 U	18.2	1.78
SW-W2	2/27/2014	SW2-140227M	12.1	< 0.01 U		< 5 U	2.51	1	59			16.7	2.16
SW-W2	3/19/2014	SW2-140319M	10.5	< 0.01 U		< 5 U	2	4	80			15.6	1.74
FIELD BLANK	2/26/2014	SN1-140226F	1.7 T	< 0.01 U		< 5 U	< 0.1 U	< 1 U	< 1 U			< 1 U	0.036 T
FIELD BLANK	3/19/2014	SW2-140319F	1.7 T	< 0.01 U		< 5 U	< 0.1 U	< 1 U	< 1 U			< 1 U	0.0423
SW-N4 DUP	1/23/2014	SN4-140123D	33.1	0.0429	< 2 U	10 T	1.79	11	21	< 0.02 U	< 0.1 U	36.4	0.936
SW-N4 DUP	3/19/2014	SN4-140319D	25.7	0.0489		11 T	0.808	8	190			29.6	0.458
SW-S2 DUP	2/27/2014	SS2-140227D	27	< 0.01 U		< 5 U	1.87	25	33			36.5	1.25

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Conventional Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Nitrate+Nitrite (NO3+NO2 as N) (mg/L)	Soluble Reactive Phosphorus (mg/L)	Specific Conductance (umho/cm)	Sulfate (SO4) (mg/L)	Total Dissolved Solids (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
SW-E1	1/22/2014	SE1-140122Q	0.584	< 0.01 U	45.9	1.79	42	0.13 T	2.43	45.4	2.1	1.89
SW-E1	2/26/2014	SE1-140226M	1.09	< 0.01 U	45.2	1.7	34.5	< 0.1 U	2.44	40.6	< 1 U	1.21
SW-E1	3/19/2014	SE1-140319M	0.865	< 0.01 U	43.9	1.99	32.5	0.16 T	2.39	44.8	22	1.99
SW-GS1	1/2/2014	SGS1140102P									1.2	7.62
SW-GS1	1/22/2014	SGS1140122Q	1.01	< 0.01 U	90.5	5.31	83.7	0.19 T	2.69	89.2	7	33
SW-GS1	2/27/2014	SGS1140227M	0.745	< 0.01 U	83.9	5.01	108	0.16 T	3.73	142	20.4	83.2
SW-GS1	3/19/2014	SGS1140319M	1.08	< 0.01 U	84.8	3.38	64.4	0.46	3.47	83.7	29	34.1
SW-GS1	3/25/2014	SGS1140325P									1.67	8.29
SW-SLP1	1/23/2014	SLP1140123P									2.3	6.97
SW-SLP1	2/27/2014	SLP1140227P									2.5	2.63
SW-SLP2	1/23/2014	SLP2140123P									1.1	3.47
SW-SLP2	2/27/2014	SLP2140227P									1.1	5.66
SW-MC	1/23/2014	SMC-140123Q	1.46	< 0.01 U	107	6.41	79.9	0.237	3.11	82	< 1 U	1.6
SW-MC	2/27/2014	SMC-140227M	1.51	0.0102	92.8	5.42	66.6	0.16 T	3.41	70.5	1.6	4.32
SW-MC	3/31/2014	SMC-140331M	0.847	< 0.01 U	86.7	4.34	66.8	0.2 T	3.39	69.7	1.8	2.21
SW-N1	1/22/2014	SN1-140122Q	1.46	< 0.01 U	106	6.47	76.2	0.211	3.07	80.8	< 1 U	2.44
SW-N1	2/26/2014	SN1-140226M	1.41	0.0153	87.5	5.3	61.8	0.282	3.92	66.8	1.5	1.79
SW-N1	3/19/2014	SN1-140319M	1.14	0.0162	76.5	4.4	59.2	0.209	3.83	62.7	1.9	2.65
SW-N4	1/2/2014	SN4-140102P									1.2	2.22
SW-N4	1/23/2014	SN4-140123Q	0.948	< 0.01 U	105	9.44	78.7	0.402	5.35	89.2	1	2.7
SW-N4	2/26/2014	SN4-140226M	0.678	0.024	81.5	5.74	60.2	0.348	5.53	67.8	< 1 U	3.47
SW-N4	3/19/2014	SN4-140319M	0.472	0.0366	70.5	3.94	57	0.322	5.85	60.9	1.6	5.65
SW-N4	3/25/2014	SN4-140325P									1.8 T	3.7
SW-S1	1/22/2014	SS1-140122Q	1.82	< 0.01 U	59	2.27	52.6	0.15 T	2.81	52.6	< 1 U	0.641
SW-S1	2/27/2014	SS1-140227M	2.17	< 0.01 U	58	2.19	43.5	0.18 T	2.46	51.1	< 1 U	0.34 T
SW-S1	3/19/2014	SS1-140319M	1.73	< 0.01 U	50.8	2.26	37.6	< 0.1 U	2.3	40.3	< 1 U	0.43 T
SW-S2	1/22/2014	SS2-140122Q	1.04	< 0.01 U	94.1	5.81	80.4	0.208	3.01	83.7	2.2	21.3
SW-S2	2/27/2014	SS2-140227M	1.24	< 0.01 U	84	4.71	92	0.466	3.94	130	21.8	67.7
SW-S2	3/19/2014	SS2-140319M	1.61	< 0.01 U	86.9	3.3	60.7	0.24	2.94	66.2	1.2	13.1
SW-SL3	1/2/2014	SSL3140102P									< 1 U	1.96
SW-SL3	1/22/2014	SSL3140122Q	0.388	< 0.01 U	125	8.64	83.8	0.22	3.97	88.7	< 1 U	2.21
SW-SL3	1/23/2014	SSL3140123P									1.47	2.42
SW-SL3	2/27/2014	SSL3140227M	0.356	< 0.01 U	97	4.79	60.7	0.19 T	4.67	72.3	1.9	3.36
SW-SL3	2/27/2014	SSL3140227P									2.1	3.51
SW-SL3	3/19/2014	SSL3140319M	0.149	0.0191	89.2	2.84	59.9	0.363	5	65.8	2.2	4.83
SW-SL3	3/25/2014	SSL3140325P									1.3	1.21
SW-TD1	1/29/2014	STD1140129-				2.25			5.92			
SW-TD2	1/29/2014	STD2140129-				1.99			10.8			
SW-TD4	1/29/2014	STD4140129-				3.48			7.56			
SW-TD6	1/29/2014	STD6140129-				3.35			7			
SW-V	1/22/2014	SV--140122Q	1.31	< 0.01 U	92.4	8.11	70	0.16 T	1.59	108	26.8	2.33
SW-V	2/26/2014	SV--140226M	1.32	< 0.01 U	86.4	6.78	57.4	< 0.1 U	1.17	62.7	3.9	0.32 T
SW-V	3/19/2014	SV--140319M	1.29	< 0.01 U	78.6	6.38	54.4	0.215	1.16	65.1	7.2	2.62
SW-W1	1/22/2014	SW1-140122Q	1.71	< 0.01 U	118	5.92	80.1	0.12 T	2.12	84.4	1.8	1.99
SW-W1	2/26/2014	SW1-140226M	1.8	< 0.01 U	101	5.71	65.6	0.1 T	2.64	77.2	7.27	1.15

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Conventional Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Nitrate+Nitrite (NO3+NO2 as N) (mg/L)	Soluble Reactive Phosphorus (mg/L)	Specific Conductance (umho/cm)	Sulfate (SO4) (mg/L)	Total Dissolved Solids (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
SW-W1	3/19/2014	SW1-140319M	1.57	< 0.01 U	89.4	6.24	60.7	0.14 T	2.71	63.4	1.9	1.67
SW-W	1/23/2014	SW--140123Q	1.57	< 0.01 U	107	5.1	77.6	0.248	3.01	82.6	1.1	2.1
SW-W	2/27/2014	SW--140227M	1.51	< 0.01 U	92.7	5.01	64.6	0.14 T	3.07	74.8	2.1	2.37
SW-W	3/31/2014	SW--140331M	0.782	< 0.01 U	89.6	4.12	69.6	0.299	5.05	76.3	3.4	4.28
SW-W2	1/22/2014	SW2-140122Q	1.78	< 0.01 U	61.9	2.49	51.5	0.12 T	2.35	55.7	< 1 U	0.509
SW-W2	2/27/2014	SW2-140227M	2.16	< 0.01 U	58.6	2.38	38.3	< 0.1 U	2.39	45.6	< 1 U	0.527
SW-W2	3/19/2014	SW2-140319M	1.74	< 0.01 U	51.2	2.54	38.4	0.17 T	2.51	50.1	8.7	2.41
FIELD BLANK	2/26/2014	SN1-140226F	0.036 T	< 0.01 U	3.4 T	< 0.1 U	< 5 U	< 0.1 U	< 1 U	< 5 U	< 1 U	< 0.2 U
FIELD BLANK	3/19/2014	SW2-140319F	0.0423	< 0.01 U	3.5 T	< 0.1 U	< 5 U	< 0.1 U	< 1 U	< 5 U	< 1 U	0.3 T
SW-N4 DUP	1/23/2014	SN4-140123D	0.936	< 0.01 U	105	9.48	78.8	0.434	5.34	83.7	1.5	3.8
SW-N4 DUP	3/19/2014	SN4-140319D	0.458	0.0372	70.3	3.94	59.1	0.405	5.72	63.6	2	5.49
SW-S2 DUP	2/27/2014	SS2-140227D	1.25	< 0.01 U	83.2	4.64	95.1	0.13 T	3.5	116	1.2 T	64.7

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Aluminum, dissolved	Aluminum, total	Antimony, dissolved	Antimony, total	Arsenic, dissolved	Arsenic, total	Barium, dissolved	Barium, total	Beryllium, dissolved	Beryllium, total	Cadmium, dissolved	Cadmium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-E1	1/22/2014	SE1-140122Q	0.0547	0.111	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00266	0.00302	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-E1	2/26/2014	SE1-140226M	0.0584	0.0989	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00244	0.00264	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-E1	3/19/2014	SE1-140319M	0.0516	0.423	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00266	0.00616	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-GS1	1/2/2014	SGS1140102P												
SW-GS1	1/22/2014	SGS1140122Q	< 0.02 U	1.65	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00313	0.0125	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	2/27/2014	SGS1140227M	< 0.02 U	5.65	< 0.001 U	< 0.001 U	< 0.001 U	0.00183	0.00266	0.0342	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	3/19/2014	SGS1140319M	0.0274	1.75	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0043	0.0149	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-GS1	3/25/2014	SGS1140325P												
SW-MC	1/23/2014	SMC-140123O	< 0.02 U	0.0606	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00399	0.00433	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-MC	2/27/2014	SMC-140227M	0.0298	0.138	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00393	0.0043	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-MC	3/31/2014	SMC-140331M	0.0296	0.162	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00362	0.00467	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	1/22/2014	SN1-140122Q	< 0.02 U	0.0756	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00412	0.00472	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	2/26/2014	SN1-140226M	0.0319	0.131	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00343	0.00411	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	3/19/2014	SN1-140319M	0.0527	0.189	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00347	0.00483	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-N4	1/2/2014	SN4-140102P												
SW-N4 Duplicate	1/23/2014	SN4-140123D	0.0338	0.127	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00376	0.00441	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4	1/23/2014	SN4-140123O	0.0391	0.126	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0038	0.00445	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4	2/26/2014	SN4-140226M	0.0499	0.217	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00306	0.00408	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4 Duplicate	3/19/2014	SN4-140319D	0.0757	0.319	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00307	0.00501	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-N4	3/19/2014	SN4-140319M	0.072	0.357	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00301	0.00495	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-N4	3/25/2014	SN4-140325P												
SW-S1	1/22/2014	SS1-140122Q	0.0322	0.0378	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00635	0.00655	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S1	2/27/2014	SS1-140227M	0.0319	0.0406	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00657	0.00637	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S1	3/19/2014	SS1-140319M	0.0397	0.0478	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00619	0.00661	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-S2	1/22/2014	SS2-140122Q	0.032	1.07	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00493	0.0115	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2 Duplicate	2/27/2014	SS2-140227D	0.0283	4.17	< 0.001 U	< 0.001 U	< 0.001 U	0.00139	0.00358	0.0265	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	2/27/2014	SS2-140227M	0.0208	13.6	< 0.001 U	< 0.001 U	< 0.001 U	0.0051	0.00335	0.13	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	3/19/2014	SS2-140319M	0.0308	0.644	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00451	0.00865	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-SL3	1/2/2014	SSL3140102P												
SW-SL3	1/22/2014	SSL3140122Q	< 0.02 U	0.0555	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00823	0.00849	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	1/23/2014	SSL3140123P												
SW-SL3	2/27/2014	SSL3140227M	0.0349	0.208	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00708	0.00797	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	2/27/2014	SSL3140227P												
SW-SL3	3/19/2014	SSL3140319M	0.0457	0.26	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00579	0.00804	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-SL3	3/25/2014	SSL3140325P												
SW-SLP1	1/23/2014	SLP1140123P												
SW-SLP1	2/27/2014	SLP1140227P												
SW-SLP2	1/23/2014	SLP2140123P												
SW-SLP2	2/27/2014	SLP2140227P												
SW-TD1	1/29/2014	STD1140129-												
SW-TD2	1/29/2014	STD2140129-												
SW-TD4	1/29/2014	STD4140129-												
SW-TD6	1/29/2014	STD6140129-												
SW-V	1/22/2014	SV--140122Q	< 0.02 U	2.06	< 0.001 U	< 0.001 U	< 0.001 U	0.00123	0.00296	0.0236	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-V	2/26/2014	SV--140226M	< 0.02 U	0.0365	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00268	0.0028	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U

Environmental Monitoring Data

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Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Aluminum, dissolved	Aluminum, total	Antimony, dissolved	Antimony, total	Arsenic, dissolved	Arsenic, total	Barium, dissolved	Barium, total	Beryllium, dissolved	Beryllium, total	Cadmium, dissolved	Cadmium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-V	3/19/2014	SV--140319M	< 0.02 U	0.216	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0026	0.0044	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-W	1/23/2014	SW--140123Q	0.0371	0.057	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00431	0.00452	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W	2/27/2014	SW--140227M	0.0595	0.185	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00439	0.00494	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W	3/31/2014	SW--140331M	0.0949	0.309	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00515	0.0065	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W1	1/22/2014	SW1-140122Q	< 0.02 U	0.0497	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00528	0.00578	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W1	2/26/2014	SW1-140226M	0.0278	0.172	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00528	0.00672	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W1	3/19/2014	SW1-140319M	0.0334	0.0998	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00552	0.00683	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
SW-W2	1/22/2014	SW2-140122Q	0.0332	0.0368	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00685	0.00707	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W2	2/27/2014	SW2-140227M	0.0325	0.0408	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00716	0.00656	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W2	3/19/2014	SW2-140319M	0.0429	0.142	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00653	0.00764	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U
FIELD BLANK	2/26/2014	SN1-140226F	< 0.02 U	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
FIELD BLANK	3/19/2014	SW2-140319F	< 0.02 U	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Calcium, dissolved	Calcium, total	Chromium, dissolved	Chromium, total	Cobalt, dissolved	Cobalt, total	Copper, dissolved	Copper, total	Iron, dissolved	Iron, total	Lead, dissolved	Lead, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-E1	1/22/2014	SE1-140122Q	4.29	3.79	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.029 T	0.0559	< 0.001 U	< 0.001 U
SW-E1	2/26/2014	SE1-140226M	3.81	3.91	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.033 T	0.048 T	< 0.001 U	< 0.001 U
SW-E1	3/19/2014	SE1-140319M	4.08	4.66	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.023 T	0.266	< 0.001 U	< 0.001 U
SW-GS1	1/2/2014	SGS1140102P								0.00236				
SW-GS1	1/22/2014	SGS1140122Q	9.32	9.33	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00496	0.021 T	1.92	< 0.001 U	0.00126
SW-GS1	2/27/2014	SGS1140227M	8.39	8.06	< 0.005 U	0.00707	< 0.003 U	< 0.003 U	0.00204	0.0117	0.011 T	5.66	< 0.001 U	0.00274
SW-GS1	3/19/2014	SGS1140319M	7.59	8.54	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00566	0.021 T	2.05	< 0.001 U	0.00118
SW-GS1	3/25/2014	SGS1140325P								0.00212				
SW-MC	1/23/2014	SMC-140123O	10.1	8.41	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00283	0.00249	0.038 T	0.0786	< 0.001 U	< 0.001 U
SW-MC	2/27/2014	SMC-140227M	7.94	8.01	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00369	0.00404	0.037 T	0.134	< 0.001 U	< 0.001 U
SW-MC	3/31/2014	SMC-140331M	8.31	8.74	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00436	0.0048	0.044 T	0.186	< 0.001 U	< 0.001 U
SW-N1	1/22/2014	SN1-140122Q	9.83	9.96	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0032	0.00301	0.042 T	0.102	< 0.001 U	< 0.001 U
SW-N1	2/26/2014	SN1-140226M	7.58	7.69	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00492	0.00492	0.043 T	0.138	< 0.001 U	< 0.001 U
SW-N1	3/19/2014	SN1-140319M	7.05	7.46	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00594	0.00642	0.044 T	0.178	< 0.001 U	< 0.001 U
SW-N4	1/2/2014	SN4-140102P								0.00978				
SW-N4 Duplicate	1/23/2014	SN4-140123D	10.6	8.79	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0109	0.00937	0.0775	0.175	< 0.001 U	< 0.001 U
SW-N4	1/23/2014	SN4-140123O	10.7	8.73	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.011	0.0092	0.0863	0.175	< 0.001 U	< 0.001 U
SW-N4	2/26/2014	SN4-140226M	7.66	7.72	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0108	0.0115	0.0633	0.223	< 0.001 U	< 0.001 U
SW-N4 Duplicate	3/19/2014	SN4-140319D	7.12	7.68	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0141	0.0162	0.0687	0.297	< 0.001 U	< 0.001 U
SW-N4	3/19/2014	SN4-140319M	7.14	7.46	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0138	0.0161	0.0652	0.341	< 0.001 U	< 0.001 U
SW-N4	3/25/2014	SN4-140325P								0.0126				
SW-S1	1/22/2014	SS1-140122Q	4.98	5.01	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.013 T	< 0.001 U	< 0.001 U
SW-S1	2/27/2014	SS1-140227M	4.89	4.8	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.013 T	< 0.001 U	< 0.001 U
SW-S1	3/19/2014	SS1-140319M	4.39	4.56	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.014 T	0.018 T	< 0.001 U	< 0.001 U
SW-S2	1/22/2014	SS2-140122Q	9.8	9.68	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00329	0.028 T	1.15	< 0.001 U	< 0.001 U
SW-S2 Duplicate	2/27/2014	SS2-140227D	8.03	8.17	< 0.005 U	0.00534	< 0.003 U	< 0.003 U	< 0.002 U	0.00833	0.024 T	3.96	< 0.001 U	0.00189
SW-S2	2/27/2014	SS2-140227M	7.88	12.3	< 0.005 U	0.0189	< 0.003 U	0.0114	< 0.002 U	0.0416	0.018 T	17	< 0.001 U	0.019
SW-S2	3/19/2014	SS2-140319M	8.12	8.61	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00308	0.026 T	0.699	< 0.001 U	< 0.001 U
SW-SL3	1/2/2014	SSL3140102P								0.00291				
SW-SL3	1/22/2014	SSL3140122Q	12.5	12.2	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00314	0.00287	0.102	0.178	< 0.001 U	< 0.001 U
SW-SL3	1/23/2014	SSL3140123P								0.00279				
SW-SL3	2/27/2014	SSL3140227M	10.5	9.95	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00447	0.00508	0.101	0.28	< 0.001 U	< 0.001 U
SW-SL3	2/27/2014	SSL3140227P								0.00541				
SW-SL3	3/19/2014	SSL3140319M	9.11	10	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00564	0.00676	0.0825	0.302	< 0.001 U	< 0.001 U
SW-SL3	3/25/2014	SSL3140325P								0.00405				
SW-SLP1	1/23/2014	SLP1140123P								0.0031				
SW-SLP1	2/27/2014	SLP1140227P								0.0027				
SW-SLP2	1/23/2014	SLP2140123P								0.00808				
SW-SLP2	2/27/2014	SLP2140227P								0.0108				
SW-TD1	1/29/2014	STD1140129-									0.048 T	0.277		
SW-TD2	1/29/2014	STD2140129-									0.0679	0.209		
SW-TD4	1/29/2014	STD4140129-									0.039 T	0.137		
SW-TD6	1/29/2014	STD6140129-									0.042 T	0.278		
SW-V	1/22/2014	SV--140122Q	8.35	9.33	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00644	< 0.01 U	2.77	< 0.001 U	0.00165
SW-V	2/26/2014	SV--140226M	6.96	7.18	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.029 T	< 0.001 U	< 0.001 U

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Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Calcium, dissolved	Calcium, total	Chromium, dissolved	Chromium, total	Cobalt, dissolved	Cobalt, total	Copper, dissolved	Copper, total	Iron, dissolved	Iron, total	Lead, dissolved	Lead, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-V	3/19/2014	SV--140319M	6.75	7.26	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.239	< 0.001 U	< 0.001 U
SW-W	1/23/2014	SW--140123Q	9.63	8.26	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.112	0.155	< 0.001 U	< 0.001 U
SW-W	2/27/2014	SW--140227M	8	8.24	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.085	0.174	< 0.001 U	< 0.001 U
SW-W	3/31/2014	SW--140331M	7.98	8.59	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00338	0.0027	0.188	0.372	< 0.001 U	< 0.001 U
SW-W1	1/22/2014	SW1-140122Q	10.8	8.74	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.037 T	0.0909	< 0.001 U	< 0.001 U
SW-W1	2/26/2014	SW1-140226M	8.31	8.56	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.041 T	0.203	< 0.001 U	< 0.001 U
SW-W1	3/19/2014	SW1-140319M	7.74	8.13	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.035 T	0.112	< 0.001 U	< 0.001 U
SW-W2	1/22/2014	SW2-140122Q	5.32	5.2	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.012 T	< 0.001 U	< 0.001 U
SW-W2	2/27/2014	SW2-140227M	5.1	4.69	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.014 T	< 0.001 U	< 0.001 U
SW-W2	3/19/2014	SW2-140319M	4.37	4.58	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.014 T	0.0943	< 0.001 U	< 0.001 U
FIELD BLANK	2/26/2014	SN1-140226F	< 0.01 U	< 0.01 U	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U
FIELD BLANK	3/19/2014	SW2-140319F	< 0.01 U	< 0.01 U	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U

Environmental Monitoring Data

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Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Magnesium, dissolved	Magnesium, total	Manganese, dissolved	Manganese, total	Mercurv. total	Nickel, dissolved	Nickel, total	Potassium, dissolved	Potassium, total	Selenium, dissolved	Selenium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-E1	1/22/2014	SE1-140122Q	0.991	0.856	0.00576	0.00627	< 0.0001 U	< 0.01 U	< 0.01 U	0.529 D	0.33 T	< 0.001 U	< 0.001 U
SW-E1	2/26/2014	SE1-140226M	0.928	0.967	0.00322	0.00546	< 0.0001 U	< 0.01 U	< 0.01 U	0.39 T	0.38 T	< 0.001 U	< 0.001 U
SW-E1	3/19/2014	SE1-140319M	0.918	0.969	0.00394	0.0803 D	< 0.0001 U	< 0.01 U	< 0.01 U	0.4 T	0.508	< 0.001 U	< 0.001 U
SW-GS1	1/2/2014	SGS1140102P											
SW-GS1	1/22/2014	SGS1140122Q	2.97	3.3	0.00691	0.0365	< 0.0001 U	< 0.01 U	< 0.01 U	0.805 D	0.894	< 0.001 U	< 0.001 U
SW-GS1	2/27/2014	SGS1140227M	2.6	4.32	0.00633	0.116	< 0.0001 U	< 0.01 U	< 0.01 U	0.763	1.4	< 0.001 U	< 0.001 U
SW-GS1	3/19/2014	SGS1140319M	2.28	2.88	0.00384	0.116 D	< 0.0001 U	< 0.01 U	< 0.01 U	0.921	1.11	< 0.001 U	< 0.001 U
SW-GS1	3/25/2014	SGS1140325P											
SW-MC	1/23/2014	SMC-140123O	3.52	3.24	0.00244	0.00438	< 0.0001 U	< 0.01 U	< 0.01 U	1.12 D	0.975	< 0.001 U	< 0.001 U
SW-MC	2/27/2014	SMC-140227M	2.65	2.84	0.0023	0.00685	< 0.0001 U	< 0.01 U	< 0.01 U	0.921	0.953	< 0.001 U	< 0.001 U
SW-MC	3/31/2014	SMC-140331M	2.69	2.76	0.00377	0.00823	< 0.0001 U	< 0.01 U	< 0.01 U	0.965	1	< 0.001 U	< 0.001 U
SW-N1	1/22/2014	SN1-140122Q	3.33	3.31	0.00482	0.00892	< 0.0001 U	< 0.01 U	< 0.01 U	1.15	1.04	< 0.001 U	< 0.001 U
SW-N1	2/26/2014	SN1-140226M	2.6	2.72	0.00298	0.00816	< 0.0001 U	< 0.01 U	< 0.01 U	0.997	0.961	< 0.001 U	< 0.001 U
SW-N1	3/19/2014	SN1-140319M	2.26	2.35	0.003	0.0102 D	< 0.0001 U	< 0.01 U	< 0.01 U	0.941	0.97	< 0.001 U	< 0.001 U
SW-N4	1/2/2014	SN4-140102P											
SW-N4 Duplicate	1/23/2014	SN4-140123D	3.8	3.52	0.0191	0.0235	< 0.0001 U	< 0.01 U	< 0.01 U	1.67 D	1.49	< 0.001 U	< 0.001 U
SW-N4	1/23/2014	SN4-140123O	3.83	3.53	0.0195	0.0251	< 0.0001 U	< 0.01 U	< 0.01 U	1.67 D	1.46	< 0.001 U	< 0.001 U
SW-N4	2/26/2014	SN4-140226M	2.69	2.84	0.0145	0.0202	< 0.0001 U	< 0.01 U	< 0.01 U	1.28	1.23	< 0.001 U	< 0.001 U
SW-N4 Duplicate	3/19/2014	SN4-140319D	2.34	2.53	0.0097	0.0182 D	< 0.0001 U	< 0.01 U	< 0.01 U	1.16	1.22	< 0.001 U	< 0.001 U
SW-N4	3/19/2014	SN4-140319M	2.34	2.44	0.00957	0.0183 D	< 0.0001 U	< 0.01 U	< 0.01 U	1.16	1.24	< 0.001 U	< 0.001 U
SW-N4	3/25/2014	SN4-140325P											
SW-S1	1/22/2014	SS1-140122Q	1.22	1.22	0.0012	0.0011	< 0.0001 U	< 0.01 U	< 0.01 U	0.575 D	0.579	< 0.001 U	< 0.001 U
SW-S1	2/27/2014	SS1-140227M	1.18	1.25	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.529	0.558	< 0.001 U	< 0.001 U
SW-S1	3/19/2014	SS1-140319M	1.02	0.989	< 0.001 U	< 0.001 DU	< 0.0001 U	< 0.01 U	< 0.01 U	0.558	0.511	< 0.001 U	< 0.001 U
SW-S2	1/22/2014	SS2-140122Q	3.27	3.33	0.00567	0.0201	< 0.0001 U	< 0.01 U	< 0.01 U	0.923 D	0.961	< 0.001 U	< 0.001 U
SW-S2 Duplicate	2/27/2014	SS2-140227D	2.51	3.91	0.00217	0.0624	< 0.0001 U	< 0.01 U	< 0.01 U	0.728	1.22	< 0.001 U	< 0.001 U
SW-S2	2/27/2014	SS2-140227M	2.63	8.2	0.00296	2.74	< 0.0001 U	< 0.01 U	0.0287	0.83	1.72	< 0.001 U	< 0.001 U
SW-S2	3/19/2014	SS2-140319M	2.48	2.64	0.00265	0.0152 D	< 0.0001 U	< 0.01 U	< 0.01 U	0.925	1.03	< 0.001 U	< 0.001 U
SW-SL3	1/2/2014	SSL3140102P											
SW-SL3	1/22/2014	SSL3140122Q	4.3	4.12	0.0037	0.00599	< 0.0001 U	< 0.01 U	< 0.01 U	1.84 D	1.66	< 0.001 U	< 0.001 U
SW-SL3	1/23/2014	SSL3140123P											
SW-SL3	2/27/2014	SSL3140227M	3.05	3.38	0.00318	0.00958	< 0.0001 U	< 0.01 U	< 0.01 U	1.6	1.7	< 0.001 U	< 0.001 U
SW-SL3	2/27/2014	SSL3140227P											
SW-SL3	3/19/2014	SSL3140319M	2.74	2.89	0.00513	0.0142 D	< 0.0001 U	< 0.01 U	< 0.01 U	1.88	2.08	< 0.001 U	< 0.001 U
SW-SL3	3/25/2014	SSL3140325P											
SW-SLP1	1/23/2014	SLP1140123P											
SW-SLP1	2/27/2014	SLP1140227P											
SW-SLP2	1/23/2014	SLP2140123P											
SW-SLP2	2/27/2014	SLP2140227P											
SW-TD1	1/29/2014	STD1140129-											
SW-TD2	1/29/2014	STD2140129-											
SW-TD4	1/29/2014	STD4140129-											
SW-TD6	1/29/2014	STD6140129-											
SW-V	1/22/2014	SV--140122O	1.92	2.44	< 0.001 U	0.65	< 0.0001 U	< 0.01 U	< 0.01 U	1.14 D	1.15	< 0.001 U	< 0.001 U
SW-V	2/26/2014	SV--140226M	1.74	1.85	< 0.001 U	0.00587	< 0.0001 U	< 0.01 U	< 0.01 U	0.901	0.888	< 0.001 U	< 0.001 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Magnesium, dissolved	Magnesium, total	Manganese, dissolved	Manganese, total	Mercurv. total	Nickel, dissolved	Nickel, total	Potassium, dissolved	Potassium, total	Selenium, dissolved	Selenium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-V	3/19/2014	SV--140319M	1.59	1.66	< 0.001 U	0.0568 D	< 0.0001 U	< 0.01 U	< 0.01 U	0.827	0.847	< 0.001 U	< 0.001 U
SW-W	1/23/2014	SW--140123Q	2.76	2.69	0.00928	0.00829	< 0.0001 U	< 0.01 U	< 0.01 U	1.22 D	1.12	< 0.001 U	< 0.001 U
SW-W	2/27/2014	SW--140227M	2.31	2.31	0.00974	0.0109	< 0.0001 U	< 0.01 U	< 0.01 U	0.877	0.965	< 0.001 U	< 0.001 U
SW-W	3/31/2014	SW--140331M	2.45	2.54	0.0194	0.0244	< 0.0001 U	< 0.01 U	< 0.01 U	1.02	1.1	< 0.001 U	< 0.001 U
SW-W1	1/22/2014	SW1-140122Q	3.47	3.2	0.00203	0.00984	< 0.0001 U	< 0.01 U	< 0.01 U	1.1 D	0.875	< 0.001 U	< 0.001 U
SW-W1	2/26/2014	SW1-140226M	2.57	2.75	0.00528	0.0278	< 0.0001 U	< 0.01 U	< 0.01 U	0.871	0.872	< 0.001 U	< 0.001 U
SW-W1	3/19/2014	SW1-140319M	2.21	2.32	0.00485	0.0133 D	< 0.0001 U	< 0.01 U	< 0.01 U	0.876	0.921	< 0.001 U	< 0.001 U
SW-W2	1/22/2014	SW2-140122Q	1.27	1.25	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.569 D	0.554	< 0.001 U	< 0.001 U
SW-W2	2/27/2014	SW2-140227M	1.21	1.22	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.5 T	0.532	< 0.001 U	< 0.001 U
SW-W2	3/19/2014	SW2-140319M	0.994	1	0.00159	0.00372 D	< 0.0001 U	< 0.01 U	< 0.01 U	0.547	0.54	< 0.001 U	< 0.001 U
FIELD BLANK	2/26/2014	SN1-140226F	< 0.015 U	< 0.015 U	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.3 U	< 0.001 U	< 0.001 U
FIELD BLANK	3/19/2014	SW2-140319F	< 0.015 U	< 0.015 U	< 0.001 U	< 0.001 DU	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.3 U	< 0.001 U	< 0.001 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Silver, dissolved	Silver, total	Sodium, dissolved	Sodium, total	Thallium, dissolved	Thallium, total	Tin, dissolved	Tin, total	Vanadium, dissolved	Vanadium, total	Zinc, dissolved	Zinc, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-E1	1/22/2014	SE1-140122Q	< 0.003 U	< 0.003 U	2.62	2.45	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-E1	2/26/2014	SE1-140226M	< 0.003 U	< 0.003 U	2.33	2.35	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-E1	3/19/2014	SE1-140319M	< 0.003 U	< 0.003 U	2.29	2.36	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 DU
SW-GS1	1/2/2014	SGS1140102P												< 0.004 U
SW-GS1	1/22/2014	SGS1140122Q	< 0.003 U	< 0.003 U	2.99	2.67	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.00398	< 0.004 U	0.00587
SW-GS1	2/27/2014	SGS1140227M	< 0.003 U	< 0.003 U	2.32	2.57	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.0122	< 0.004 U	0.0147
SW-GS1	3/19/2014	SGS1140319M	< 0.003 U	< 0.003 U	3.39	3.64	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.00437	< 0.004 U	0.00721 D
SW-GS1	3/25/2014	SGS1140325P												< 0.004 U
SW-MC	1/23/2014	SMC-140123Q	< 0.003 U	< 0.003 U	4.88	4.47	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0067	0.00718
SW-MC	2/27/2014	SMC-140227M	< 0.003 U	< 0.003 U	3.61	3.64	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00754	0.00892
SW-MC	3/31/2014	SMC-140331M	< 0.003 U	< 0.003 U	3.24	3.42	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00802	0.0109
SW-N1	1/22/2014	SN1-140122Q	< 0.003 U	< 0.003 U	4.55	4.2	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00788	0.00844
SW-N1	2/26/2014	SN1-140226M	< 0.003 U	< 0.003 U	3.17	3.32	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0115	0.0119
SW-N1	3/19/2014	SN1-140319M	< 0.003 U	< 0.003 U	2.95	3.1	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0131	0.0134 D
SW-N4	1/2/2014	SN4-140102P												0.0284
SW-N4 Duplicate	1/23/2014	SN4-140123D	< 0.003 U	< 0.003 U	2.8	2.59	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0231	0.0239
SW-N4	1/23/2014	SN4-140123Q	< 0.003 U	< 0.003 U	2.83	2.59	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0235	0.0293
SW-N4	2/26/2014	SN4-140226M	< 0.003 U	< 0.003 U	1.98	1.94	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0252	0.0269
SW-N4 Duplicate	3/19/2014	SN4-140319D	< 0.003 U	< 0.003 U	1.74	1.82	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0297	0.0336 D
SW-N4	3/19/2014	SN4-140319M	< 0.003 U	< 0.003 U	1.75	1.76	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.029	0.0324 D
SW-N4	3/25/2014	SN4-140325P												0.0232
SW-S1	1/22/2014	SS1-140122Q	< 0.003 U	< 0.003 U	3.5	3.17	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S1	2/27/2014	SS1-140227M	< 0.003 U	< 0.003 U	2.87	3.08	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S1	3/19/2014	SS1-140319M	< 0.003 U	< 0.003 U	2.54	2.54	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 DU
SW-S2	1/22/2014	SS2-140122Q	< 0.003 U	< 0.003 U	3.03	2.65	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.0025	< 0.004 U	0.00555
SW-S2 Duplicate	2/27/2014	SS2-140227D	< 0.003 U	< 0.003 U	2.39	2.6	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.0085	< 0.004 U	0.0105
SW-S2	2/27/2014	SS2-140227M	< 0.003 U	< 0.003 U	2.5	3.39	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.0343	< 0.004 U	0.114
SW-S2	3/19/2014	SS2-140319M	< 0.003 U	< 0.003 U	3.32	3.4	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 DU
SW-SL3	1/2/2014	SSL3140102P												0.00525
SW-SL3	1/22/2014	SSL3140122Q	< 0.003 U	< 0.003 U	4.43	3.97	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00598	0.00544
SW-SL3	1/23/2014	SSL3140123P												0.00509
SW-SL3	2/27/2014	SSL3140227M	< 0.003 U	< 0.003 U	2.76	2.92	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00617	0.00849
SW-SL3	2/27/2014	SSL3140227P												0.00757
SW-SL3	3/19/2014	SSL3140319M	< 0.003 U	< 0.003 U	2.14	2.23	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00734	0.00909 D
SW-SL3	3/25/2014	SSL3140325P												0.0121
SW-SLP1	1/23/2014	SLP1140123P												0.0137
SW-SLP1	2/27/2014	SLP1140227P												0.0228
SW-SLP2	1/23/2014	SLP2140123P												0.0294
SW-SLP2	2/27/2014	SLP2140227P												0.0207
SW-TD1	1/29/2014	STD1140129-												
SW-TD2	1/29/2014	STD2140129-												
SW-TD4	1/29/2014	STD4140129-												
SW-TD6	1/29/2014	STD6140129-												
SW-V	1/22/2014	SV--140122Q	< 0.003 U	< 0.003 U	5.16	4.62	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.005	< 0.004 U	0.0233
SW-V	2/26/2014	SV--140226M	< 0.003 U	< 0.003 U	4.25	4.36	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Silver, dissolved	Silver, total	Sodium, dissolved	Sodium, total	Thallium, dissolved	Thallium, total	Tin, dissolved	Tin, total	Vanadium, dissolved	Vanadium, total	Zinc, dissolved	Zinc, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-V	3/19/2014	SV--140319M	< 0.003 U	< 0.003 U	3.98	4.13	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	0.0048 D
SW-W	1/23/2014	SW--140123Q	< 0.003 U	< 0.003 U	5.91	5.64	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W	2/27/2014	SW--140227M	< 0.003 U	< 0.003 U	4.76	4.98	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W	3/31/2014	SW--140331M	< 0.003 U	< 0.003 U	4.34	4.68	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W1	1/22/2014	SW1-140122Q	< 0.003 U	< 0.003 U	6.23	5.76	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W1	2/26/2014	SW1-140226M	< 0.003 U	< 0.003 U	4.96	5.09	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W1	3/19/2014	SW1-140319M	< 0.003 U	< 0.003 U	4.57	4.88	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 DU
SW-W2	1/22/2014	SW2-140122Q	< 0.003 U	< 0.003 U	3.77	3.34	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W2	2/27/2014	SW2-140227M	< 0.003 U	< 0.003 U	3.07	3.12	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W2	3/19/2014	SW2-140319M	< 0.003 U	< 0.003 U	2.67	2.72	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 DU
FIELD BLANK	2/26/2014	SN1-140226F	< 0.003 U	< 0.003 U	0.506	0.475	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
FIELD BLANK	3/19/2014	SW2-140319F	< 0.003 U	< 0.003 U	0.487	0.494	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 DU

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Pesticide/Herbicide Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	2,4,5-T	2,4,5-TP	2,4-D	Dinoseb	Endrin	Lindane	Methoxy-chlor	Toxaphene	4-Methyl-phenol	alpha Terpineol	Benzoic Acid	Phenol
			93-76-5 (ug/L)	93-72-1 (ug/L)	94-75-7 (ug/L)	88-85-7 (ug/L)	72-20-8 (ug/L)	58-89-9 (ug/L)	72-43-5 (ug/L)	8001-35-2 (ug/L)	106-44-5 (ug/L)	98-55-5 (ug/L)	65-85-0 (ug/L)	108-95-2 (ug/L)
SW-E1	1/22/2014	SE1-140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-E1	2/26/2014	SE1-140226M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-E1	3/19/2014	SE1-140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	1/2/2014	SGS1140102P									< 10 U	< 5 U	< 50 U	< 4 U
SW-GS1	1/22/2014	SGS1140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	2/27/2014	SGS1140227M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	3/19/2014	SGS1140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	3/25/2014	SGS1140325P									< 10 U	< 5 U	< 50 U	< 4 U
SW-MC	1/23/2014	SMC-140123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-MC	2/27/2014	SMC-140227M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-MC	3/31/2014	SMC-140331M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	1/22/2014	SN1-140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	2/26/2014	SN1-140226M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	3/19/2014	SN1-140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	1/2/2014	SN4-140102P									< 10 U	< 5 U	< 50 U	< 4 U
SW-N4 Duplicate	1/23/2014	SN4-140123D	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	1/23/2014	SN4-140123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	2/26/2014	SN4-140226M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4 Duplicate	3/19/2014	SN4-140319D	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	3/19/2014	SN4-140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	3/25/2014	SN4-140325P									< 10 U	< 5 U	< 50 U	< 4 U
SW-S1	1/22/2014	SS1-140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S1	2/27/2014	SS1-140227M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S1	3/19/2014	SS1-140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	1/22/2014	SS2-140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2 Duplicate	2/27/2014	SS2-140227D	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	2/27/2014	SS2-140227M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	3/19/2014	SS2-140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	1/2/2014	SSL3140102P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SL3	1/22/2014	SSL3140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	1/23/2014	SSL3140123P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SL3	2/27/2014	SSL3140227M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	2/27/2014	SSL3140227P									< 10 U	< 5 GU	< 50 U	< 4 U
SW-SL3	3/19/2014	SSL3140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	3/25/2014	SSL3140325P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP1	1/23/2014	SLP1140123P									< 10 GU	< 5 U	< 50 U	< 4 U
SW-SLP1	2/27/2014	SLP1140227P									< 10 U	< 5 GU	< 50 U	< 4 U
SW-SLP2	1/23/2014	SLP2140123P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP2	2/27/2014	SLP2140227P									< 10 U	< 5 GU	< 50 U	< 4 U
SW-V	1/22/2014	SV--140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-V	2/26/2014	SV--140226M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-V	3/19/2014	SV--140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W	1/23/2014	SW--140123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W	2/27/2014	SW--140227M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W	3/31/2014	SW--140331M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Surface Water Pesticide/Herbicide Analytical Data

Contact Person: Seady Jimenez (206) 477-5224

Site	Date	Sample ID	2,4,5-T 93-76-5 (ug/L)	2,4,5-TP 93-72-1 (ug/L)	2,4-D 94-75-7 (ug/L)	Dinoseb 88-85-7 (ug/L)	Endrin 72-20-8 (ug/L)	Lindane 58-89-9 (ug/L)	Methoxy- chlor 72-43-5 (ug/L)	Toxaphene 8001-35-2 (ug/L)	4-Methyl- phenol 106-44-5 (ug/L)	alpha Terpineol 98-55-5 (ug/L)	Benzoic Acid 65-85-0 (ug/L)	Phenol 108-95-2 (ug/L)
SW-W1	1/22/2014	SW1-140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W1	2/26/2014	SW1-140226M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W1	3/19/2014	SW1-140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	1/22/2014	SW2-140122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	2/27/2014	SW2-140227M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	3/19/2014	SW2-140319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
FIELD BLANK	2/26/2014	SN1-140226F	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
FIELD BLANK	3/19/2014	SW2-140319F	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				

Leachate Analytical Data

Leachate Monitoring Activities 1st Quarter 2014

Station ID	Date	Activity	Sample ID	Comment
API	1/8/14	Monthly Characterization Sample	LAPI140108M	
API	2/12/14	Monthly Characterization Sample	LAPI140212M	
API	3/12/14	Monthly Characterization Sample	LAPI140312M	
LEPS	1/8/14	Monthly Characterization Sample	LEPS140108M	
LEPS	1/8/14	Permit Sample	LEPS140108P	
LEPS	2/12/14	Monthly Characterization Sample	LEPS140212M	
LEPS	2/12/14	Permit Sample	LEPS140212P	
LEPS	3/12/14	Monthly Characterization Sample	LEPS140312M	
LEPS	3/12/14	Permit Sample	LEPS140312P	
MH46N	1/8/14	Monthly Characterization Sample	L46N140108M	
MH46N	2/12/14	Monthly Characterization Sample	L46N140212M	
MH46N	3/12/14	Monthly Characterization Sample	L46N140312M	
PS2A	1/8/14	Monthly Characterization Sample	LP2A140108M	
PS2A	2/12/14	Monthly Characterization Sample	LP2A140212M	
PS2A	3/12/14	Monthly Characterization Sample	LP2A140312M	

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Leachate Field Parameters

Contact Person --- Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature
			(std. Units)	(umho/cm)	(o C)
LS-API	1/8/2014	LAPI140108M	7.5	2700	7.8
LS-API	2/12/2014	LAPI140212M	7.39	2300	6
LS-API	3/12/2014	LAPI140312M	7.36	1080	4.5
LS-LEPS	1/8/2014	LEPS140108M	8.18	3550	8
LS-LEPS	1/8/2014	LEPS140108P	8.18	3550	8
LS-LEPS	2/12/2014	LEPS140212M	8.21	4100	8.4
LS-LEPS	2/12/2014	LEPS140212P	8.22	4100	9.1
LS-LEPS	3/11/2014	LEPS140312P	7.92	1950	11.3
LS-LEPS	3/12/2014	LEPS140312M	7.89	1950	10.3
LS-MH46N	1/8/2014	L46N140108M	7.4	7500	24.4
LS-MH46N	2/12/2014	L46N140212M	7.13	7500	22.6
LS-MH46N	3/12/2014	L46N140312M	7.23	5300	25
LS-PS2A	1/8/2014	LP2A140108M	6.31	200	9
LS-PS2A	2/12/2014	LP2A140212M	6.82	225	9.5
LS-PS2A	3/12/2014	LP2A140312M	6.93	880	8.2

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
 Cedar Hills Landfill --- Leachate Conventional Analytical Data
 Contact Person --- Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Alkalinity, Total (CaCO3)	Ammonia, (NH3 as N)	Biological Oxygen Demand	Chemical Oxygen Demand	Chloride	Coliforms, Fecal	Coliforms, Total	Cyanide	Fluoride	Nitrate+Nitrite (NO3+NO2 as N)	Phosphorus, Total (as P)	Specific Conductance
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(CFU/100mL)	(CFU/100mL)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(umho/cm)
LS-API	1/8/2014	LAPI140108M	1780	311	1520	2670	407	12000	160000	< 0.02 SU	< 0.1 U	0.291	0.353	4700
LS-API	2/12/2014	LAPI140212M	1540	222	846	1590	318	9900	340000	< 0.02 SU	< 0.1 U	0.325	0.857	3920
LS-API	3/12/2014	LAPI140312M	361	108	799	1310	177	16000	62000	< 0.02 U	< 0.1 U	0.06 T	0.23 T	2340
LS-LEPS	1/8/2014	LEPS140108M	1620	265	177	856	385	23000	66000	< 0.02 SU	< 0.1 U	0.013 T	0.0916	4010
LS-LEPS	2/12/2014	LEPS140212M	1760	283	346	1100	442	14000	320000	< 0.02 SU	< 0.1 U	0.016 T	0.127	4980
LS-LEPS	3/12/2014	LEPS140312M	1350	109	578	1020	177	19000	180000	< 0.02 U	< 0.1 U	< 0.01 U	0.016 T	2300
LS-MH46N	1/8/2014	L46N140108M	2950	631	85	1600	1610	< 1 U	< 1 U	< 0.02 SU	< 0.1 U	0.461	2.82	8810
LS-MH46N	2/12/2014	L46N140212M	2640	447	134	1390	1370	< 1 U	< 1 U	< 0.02 SU	< 0.1 U	0.606	2.82	9180
LS-MH46N	3/12/2014	L46N140312M	2380	453	280	1250	1240	< 1 U	< 1 U	< 0.02 SU	< 0.1 U	0.32	2.61	8440
LS-PS2A	1/8/2014	LP2A140108M	62.3	6.33	10.8	37.7	9.8	< 1 U	340	< 0.02 U	< 0.1 U	1.76	< 0.01 U	232
LS-PS2A	2/12/2014	LP2A140212M	68.9	5.84	14	42.1	12.4	< 1 U	48	< 0.02 U	< 0.1 U	2	< 0.01 U	231
LS-PS2A	3/12/2014	LP2A140312M	375	63.8	71.9	321	191	2	28	< 0.02 U	< 0.1 U	6.26	0.265	1610

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
 Cedar Hills Landfill --- Leachate Conventional Analytical Data
 Contact Person --- Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Sulfate (SO4)	Sulfide Total	Total Fats, Oils and Grease	Total Kjeldahl Nitrogen (TKN as N)	Total Organic Carbon	Total Suspended Solids	Total Volatile Solids	Volatile Suspended Solids
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LS-API	1/8/2014	LAPI140108M	71	0.11 T	2.6 T	343	814	64	1250	30
LS-API	2/12/2014	LAPI140212M	42.4	0.19 T	6.3 B	293	472	52	771	20
LS-API	3/12/2014	LAPI140312M	57.1	0.09 T	2 T	104	397	62	634	24
LS-LEPS	1/8/2014	LEPS140108M	37.5	< 0.01 U	3.6 T	300	144	340	716	292
LS-LEPS	2/12/2014	LEPS140212M	35.7	0.09 T	3.7 BT	318	207	274	726	248
LS-LEPS	3/12/2014	LEPS140312M	43.5	0.17 T	2 T	125	268	168	601	116
LS-MH46N	1/8/2014	L46N140108M	4.42	0.477	3.6 T	625	472	9.2	987	8
LS-MH46N	2/12/2014	L46N140212M	5.46	0.429	4.8 BT	548	448	3.89	871	3
LS-MH46N	3/12/2014	L46N140312M	12.6	0.448	2.4 T	431	345	42.9	841	32
LS-PS2A	1/8/2014	LP2A140108M	14	0.015 T	< 2 U	7.37	30.7	36	65.8	12
LS-PS2A	2/12/2014	LP2A140212M	10.1	0.02 T	2.3 BT	7.3	15.6	3	50.6	2.14
LS-PS2A	3/12/2014	LP2A140312M	16	< 0.01 U	< 2 GU	54.6	85.2	11.8	252	5.5

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
 Cedar Hills Landfill --- Leachate Metal Analytical Data
 Contact Person --- Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Aluminum, total (mg/L)	Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Cadmium, total (mg/L)	Calcium, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Copper, total (mg/L)	Iron, total (mg/L)	Lead, total (mg/L)
LS-API	1/8/2014	LAPI140108M	3.41	< 0.001 U	0.055 T	0.146	< 0.001 U	< 0.002 U	163	0.0503	0.0201	0.013 T	19	< 0.001 U
LS-API	2/12/2014	LAPI140212M	2.78	< 0.001 U	0.049 T	0.0954	< 0.001 U	< 0.002 U	101	0.0397	0.013 T	0.013 T	12.9	< 0.001 U
LS-API	3/12/2014	LAPI140312M	3.14	< 0.001 U	0.025 T	0.0699	< 0.001 U	< 0.002 U	98.8	0.0279	0.011 T	0.013 T	9.07	< 0.001 U
LS-LEPS	1/8/2014	LEPS140108M	3.27	< 0.001 U	0.052 T	0.0982	< 0.001 U	< 0.002 U	81.1	0.0473	0.014 T	0.014 T	9.79	< 0.001 U
LS-LEPS	2/12/2014	LEPS140212P						< 0.002 U		0.0485		0.0087 T		< 0.001 U
LS-LEPS	2/12/2014	LEPS140212M	1.17	< 0.001 U	0.063 T	0.0873	< 0.001 U	< 0.002 U	84.9	0.0485	0.014 T	0.0077 T	8.41	< 0.001 U
LS-LEPS	3/12/2014	LEPS140312M	3.06	< 0.001 U	0.028 T	0.07	< 0.001 U	< 0.002 U	89.8	0.0272	0.01 T	0.013 T	10.4	< 0.001 U
LS-LEPS	3/12/2014	LEPS140312P						< 0.002 U		0.0266		0.012 T		< 0.001 U
LS-MH46N	1/8/2014	L46N140108M	< 0.02 U	< 0.001 U	0.081 T	0.36	< 0.001 U	< 0.002 U	89	0.0882	0.0299	< 0.002 U	2.26	< 0.001 U
LS-MH46N	2/12/2014	L46N140212M	< 0.02 U	< 0.001 U	0.074 T	0.303	< 0.001 U	< 0.002 U	80.6	0.0736	0.0255	< 0.002 U	2.21	< 0.001 U
LS-MH46N	3/12/2014	L46N140312M	0.17 T	< 0.001 U	0.067 T	0.257	< 0.001 U	< 0.002 U	70.8	0.0697	0.0241	< 0.002 U	2.6	< 0.001 U
LS-PS2A	1/8/2014	LP2A140108M	< 0.02 U	< 0.001 U	< 0.001 U	0.0117	< 0.001 U	< 0.002 U	15.6	< 0.005 U	< 0.003 U	0.0208	5.62	< 0.001 U
LS-PS2A	2/12/2014	LP2A140212M	0.12 T	< 0.001 U	< 0.001 U	0.0107	< 0.001 U	< 0.002 U	14	< 0.005 U	< 0.003 U	0.02 T	1.17	< 0.001 U
LS-PS2A	3/12/2014	LP2A140312M	0.17 T	< 0.001 U	< 0.001 U	0.0238	< 0.001 U	< 0.002 U	13.9	0.012 T	0.0058 T	0.037	4.86	< 0.001 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
 Cedar Hills Landfill --- Leachate Metal Analytical Data
 Contact Person --- Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Magnesium, total (mg/L)	Manganese, total (mg/L)	Mercury, total (mg/L)	Nickel, total (mg/L)	Potassium, total (mg/L)	Selenium, total (mg/L)	Silver, total (mg/L)	Sodium, total (mg/L)	Thallium, total (mg/L)	Tin, total (mg/L)	Vanadium, total (mg/L)	Zinc, total (mg/L)
LS-API	1/8/2014	LAPI140108M	46.1	2.1	< 0.0001 U	0.0863	155	< 0.001 U	< 0.003 U	416	< 0.001 U	< 0.01 U	0.021 T	0.578
LS-API	2/12/2014	LAPI140212M	35.5	1.31	< 0.0001 U	0.0573	130	< 0.001 U	< 0.003 U	344	< 0.001 U	< 0.01 U	0.023 T	0.226
LS-API	3/12/2014	LAPI140312M	22	1.21	< 0.0001 U	0.0437	68.9	< 0.001 U	< 0.003 U	167	< 0.001 U	< 0.01 U	0.013 T	0.469
LS-LEPS	1/8/2014	LEPS140108M	32.5	0.965	< 0.0001 U	0.0665	132	< 0.001 U	< 0.003 U	363	< 0.001 U	< 0.01 U	0.024 T	0.212
LS-LEPS	2/12/2014	LEPS140212P				0.0706								0.159
LS-LEPS	2/12/2014	LEPS140212M	36.5	0.899	< 0.0001 U	0.0715	169	< 0.001 U	< 0.003 U	465	< 0.001 U	0.021 T	0.024 T	0.161
LS-LEPS	3/12/2014	LEPS140312M	21.7	1.09	< 0.0001 U	0.0409	70.7	< 0.001 U	< 0.003 U	171	< 0.001 U	< 0.01 U	0.013 T	0.391
LS-LEPS	3/12/2014	LEPS140312P				0.0405								0.38
LS-MH46N	1/8/2014	L46N140108M	54.6	0.499	< 0.0001 U	0.134	327	< 0.001 U	< 0.003 U	1100	< 0.001 U	< 0.01 U	0.114	0.017 T
LS-MH46N	2/12/2014	L46N140212M	48.2	0.489	< 0.0001 U	0.116	301	< 0.001 U	< 0.003 U	1000	< 0.001 U	< 0.01 U	0.0947	0.022 T
LS-MH46N	3/12/2014	L46N140312M	41.3	0.461	< 0.0001 U	0.108	272	< 0.001 U	< 0.003 U	846	< 0.001 U	< 0.01 U	0.0794	0.0392
LS-PS2A	1/8/2014	LP2A140108M	5.42	0.288	< 0.0001 U	< 0.01 U	3.76	< 0.001 U	< 0.003 U	9.01	< 0.001 U	< 0.01 U	< 0.002 U	0.0522
LS-PS2A	2/12/2014	LP2A140212M	4.79	0.1	< 0.0001 U	< 0.01 U	3.78	< 0.001 U	< 0.003 U	10.4	< 0.001 U	< 0.01 U	< 0.002 U	0.017 T
LS-PS2A	3/12/2014	LP2A140312M	5.68	0.197	< 0.0001 U	0.023 T	52.2	< 0.001 U	< 0.003 U	155	< 0.001 U	0.024 T	< 0.002 U	0.0503

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014
 Cedar Hills Landfill --- Leachate VOA Analytical Data
 Contact Person --- Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	1,1,1,2- Tetrachloro- ethane 630-20-6 (ug/L)	1,1,1- Trichloro- ethane 71-55-6 (ug/L)	1,1,2,2- Tetrachloro- ethane 79-34-5 (ug/L)	1,1,2- Trichloro- ethane 79-00-5 (ug/L)	1,1-Dichloro- ethane 75-34-3 (ug/L)	1,1-Dichloro- ethene 75-35-4 (ug/L)	1,1-Dichloro- propene 563-58-6 (ug/L)	1,2,3- Trichloro- propane 96-18-4 (ug/L)	1,2-Dibromo- 3- Chloropropan 96-12-8 (ug/L)	1,2- Dibromo- ethane 106-93-4 (ug/L)	1,2-Dichloro- benzene 95-50-1 (ug/L)	1,2-Dichloro- ethane 107-06-2 (ug/L)
LS-API	1/8/2014	LAPI140108M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	4.36
LS-API	2/12/2014	LAPI140212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	3.6 T
LS-API	3/12/2014	LAPI140312M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	1/8/2014	LEPS140108M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	2/12/2014	LEPS140212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	3/12/2014	LEPS140312M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	2/12/2014	L46N140212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	2.6 T	< 0.2 U
LS-MH46N	1/8/2014	L46N140108M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	3/12/2014	L46N140312M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	3.2 T	< 0.2 U
LS-PS2A	2/12/2014	LP2A140212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	1/8/2014	LP2A140108M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	3/12/2014	LP2A140312M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/7/2014	VTRP140108C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/11/2014	VTRP140212C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/7/2014	VTRP140108B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/11/2014	VTRP140212B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/11/2014	VTRP140312C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/11/2014	VTRP140312B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U

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 Contact Person --- Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	1,2-Dichloro- propane	1,3 Dichloro- benzene	1,3-Dichloro- propane	1,4-Dichloro- benzene	2,2-Dichloro- propane	2-Butanone	2-Hexanone	2-Methyl-1- propanol	3-Chloro- propene	4-Methyl-2- Pentanone	Acetone	Acetonitrile
			78-87-5 (ug/L)	541-73-1 (ug/L)	142-28-9 (ug/L)	106-46-7 (ug/L)	594-20-7 (ug/L)	78-93-3 (ug/L)	591-78-6 (ug/L)	78-83-1 (ug/L)	107-05-1 (ug/L)	108-10-1 (ug/L)	67-64-1 (ug/L)	75-05-8 (ug/L)
LS-API	1/8/2014	LAPI140108M	< 0.2 U	< 0.2 U	< 0.2 U	2.2 T	< 0.2 U	4470 D	< 4 U	< 100 U	< 10 U	33 T	3450 D	< 100 U
LS-API	2/12/2014	LAPI140212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	3760 D	< 4 U	< 100 U	< 10 U	33 T	2940 D	< 100 GU
LS-API	3/12/2014	LAPI140312M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2920 D	< 4 U	< 100 GU	< 10 U	< 4 U	692	< 100 GU
LS-LEPS	1/8/2014	LEPS140108M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	43.7	< 100 U
LS-LEPS	2/12/2014	LEPS140212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	551	< 4 U	< 100 U	< 10 U	< 4 U	545	< 100 GU
LS-LEPS	3/12/2014	LEPS140312M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	3290 DL	< 4 U	< 100 GU	< 10 U	24 T	826	< 100 GU
LS-MH46N	2/12/2014	L46N140212M	< 0.2 U	< 0.2 U	< 0.2 U	10.6	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 GU
LS-MH46N	1/8/2014	L46N140108M	< 0.2 U	< 0.2 U	< 0.2 U	7.05	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-MH46N	3/12/2014	L46N140312M	< 0.2 U	< 0.2 U	< 0.2 U	13.2	< 0.2 U	< 4 U	< 4 U	< 100 GU	< 10 U	< 4 U	< 4 U	< 100 GU
LS-PS2A	2/12/2014	LP2A140212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	67.9	< 4 U	< 100 U	< 10 U	< 4 U	112	< 100 GU
LS-PS2A	1/8/2014	LP2A140108M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	53.6	< 4 U	< 100 U	< 10 U	< 4 U	81.7	< 100 U
LS-PS2A	3/12/2014	LP2A140312M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	61.9	< 4 U	< 100 GU	< 10 U	< 4 U	70.5	< 100 GU
VOA TRIP BLANK	1/7/2014	VTRP140108C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	2/11/2014	VTRP140212C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 GU
VOA TRIP BLANK	1/7/2014	VTRP140108B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	2/11/2014	VTRP140212B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	9.23 B	< 100 GU
VOA TRIP BLANK	3/11/2014	VTRP140312C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	3/11/2014	VTRP140312B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U

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Site	Date	Sample ID	Acrolein	Acrylonitrile	Benzene	Bromochloro- methane	Bromodichlor o-methane	Bromoform	Bromo- methane	Carbon Disulfide	Carbon Tetrachloride	Chloro- benzene	Chloro- dibromo- methane	Chloroethane
			107-02-8 (ug/L)	107-13-1 (ug/L)	71-43-2 (ug/L)	74-97-5 (ug/L)	75-27-4 (ug/L)	75-25-2 (ug/L)	74-83-9 (ug/L)	75-15-0 (ug/L)	56-23-5 (ug/L)	108-90-7 (ug/L)	124-48-1 (ug/L)	75-00-3 (ug/L)
LS-API	1/8/2014	LAPI140108M	< 10 U	< 0.07 U	2.2 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-API	2/12/2014	LAPI140212M	< 10 U	< 0.07 U	2.3 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-API	3/12/2014	LAPI140312M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	1/8/2014	LEPS140108M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	2/12/2014	LEPS140212M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	3/12/2014	LEPS140312M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	2/12/2014	L46N140212M	< 10 U	< 0.07 U	3.3 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.4 T	< 0.2 U	< 0.2 U
LS-MH46N	1/8/2014	L46N140108M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	3/12/2014	L46N140312M	< 10 U	< 0.07 U	3.3 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.8 T	< 0.2 U	< 0.2 U
LS-PS2A	2/12/2014	LP2A140212M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	1/8/2014	LP2A140108M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	3/12/2014	LP2A140312M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/7/2014	VTRP140108C	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/11/2014	VTRP140212C	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/7/2014	VTRP140108B	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/11/2014	VTRP140212B	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/11/2014	VTRP140312C	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/11/2014	VTRP140312B	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

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Site	Date	Sample ID	Chloroform	Chloro- methane	Chloroprene	cis-1,2- Dichloro- ethene	cis-1,3- Dichloro- propene	Dibromo- methane	Dichloro- difluoro- methane	Ethylbenzene	m & p Xylenes	Methyl Iodide	Methyl Methacrylate	Methylacrylo- nitrile
			67-66-3 (ug/L)	74-87-3 (ug/L)	126-99-8 (ug/L)	156-59-2 (ug/L)	10061-01-5 (ug/L)	74-95-3 (ug/L)	75-71-8 (ug/L)	100-41-4 (ug/L)	mpx (ug/L)	74-88-4 (ug/L)	80-62-6 (ug/L)	126-98-7 (ug/L)
LS-API	1/8/2014	LAPI140108M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	8.89	20.6	< 0.2 U	< 2 U	< 5 U
LS-API	2/12/2014	LAPI140212M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	9.06	21.2	< 0.2 U	< 2 U	< 5 U
LS-API	3/12/2014	LAPI140312M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.4 T	5.46	< 0.2 U	< 2 U	< 5 U
LS-LEPS	1/8/2014	LEPS140108M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-LEPS	2/12/2014	LEPS140212M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-LEPS	3/12/2014	LEPS140312M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-MH46N	2/12/2014	L46N140212M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	49.2	58.5	< 0.2 U	< 2 U	< 5 U
LS-MH46N	1/8/2014	L46N140108M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	30.4	36.1	< 0.2 U	< 2 U	< 5 U
LS-MH46N	3/12/2014	L46N140312M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	59.7	69.5	< 0.2 U	< 2 U	< 5 U
LS-PS2A	2/12/2014	LP2A140212M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-PS2A	1/8/2014	LP2A140108M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-PS2A	3/12/2014	LP2A140312M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.6 T	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	1/7/2014	VTRP140108C	< 0.2 U	0.2 T	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	2/11/2014	VTRP140212C	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	1/7/2014	VTRP140108B	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	2/11/2014	VTRP140212B	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	3/11/2014	VTRP140312C	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	3/11/2014	VTRP140312B	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U

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Site	Date	Sample ID	Methylene Chloride	o-Xylene	Propionitrile	Styrene	Tetrachloro- ethene	Toluene	trans-1,2- Dichloro- ethene	trans-1,3- Dichloro- propene	trans-1,4- Dichloro-2- butene	Trichloro- ethene	Trichloro- fluoro- methane	Vinyl Acetate	Vinyl Chloride
			75-09-2 (ug/L)	95-47-6 (ug/L)	107-12-0 (ug/L)	100-42-5 (ug/L)	127-18-4 (ug/L)	108-88-3 (ug/L)	156-60-5 (ug/L)	10061-02-6 (ug/L)	110-57-6 (ug/L)	79-01-6 (ug/L)	75-69-4 (ug/L)	108-05-4 (ug/L)	75-01-4 (ug/L)
LS-API	1/8/2014	LAPI140108M	13.2	8.77	< 60 U	< 0.2 U	< 0.2 U	43.7	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.635
LS-API	2/12/2014	LAPI140212M	7.57	8.54	< 60 U	< 0.2 U	< 0.2 U	41.4	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.817
LS-API	3/12/2014	LAPI140312M	3.2 T	2.4 T	< 60 GU	< 0.2 U	< 0.2 U	11.2	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.18 T
LS-LEPS	1/8/2014	LEPS140108M	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-LEPS	2/12/2014	LEPS140212M	2.4 T	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-LEPS	3/12/2014	LEPS140312M	< 0.2 U	< 0.2 U	< 60 GU	< 0.2 U	< 0.2 U	3 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-MH46N	2/12/2014	L46N140212M	2 T	4.23	< 60 U	< 0.2 U	< 0.2 U	3.8 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	5.23
LS-MH46N	1/8/2014	L46N140108M	< 0.2 U	3.2 T	< 60 U	< 0.2 U	< 0.2 U	3 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	2.1
LS-MH46N	3/12/2014	L46N140312M	< 0.2 U	5.22	< 60 GU	< 0.2 U	< 0.2 U	4.27	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	5.6
LS-PS2A	2/12/2014	LP2A140212M	2.1 T	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-PS2A	1/8/2014	LP2A140108M	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-PS2A	3/12/2014	LP2A140312M	< 0.2 U	< 0.2 U	< 60 GU	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/7/2014	VTRP140108C	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	2/11/2014	VTRP140212C	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/7/2014	VTRP140108B	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	2/11/2014	VTRP140212B	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/11/2014	VTRP140312C	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/11/2014	VTRP140312B	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Leachate Pesticide/Herbicide Analytical Data

Contact Person --- Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	2,4,5-T	2,4,5-TP	2,4-D	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Alpha BHC	Alpha Chlordane	Aroclor 1016	Aroclor 1221	Aroclor 1232
			93-76-5 (ug/L)	93-72-1 (ug/L)	94-75-7 (ug/L)	72-54-8 (ug/L)	72-55-9 (ug/L)	50-29-3 (ug/L)	309-00-2 (ug/L)	319-84-6 (ug/L)	57-74-9 (ug/L)	12674-11-2 (ug/L)	11104-28-2 (ug/L)	11141-16-5 (ug/L)
LS-API	1/8/2014	LAPI140108M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-API	2/12/2014	LAPI140212M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 U	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-API	3/12/2014	LAPI140312M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-LEPS	1/8/2014	LEPS140108M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-LEPS	2/12/2014	LEPS140212M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 U	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-LEPS	3/12/2014	LEPS140312M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-MH46N	1/8/2014	L46N140108M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-MH46N	2/12/2014	L46N140212M	< 2 U	< 1 U	< 5 U	< 0.1 U	< 0.1 GU	< 0.1 GU	< 0.025 U	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-MH46N	3/12/2014	L46N140312M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-PS2A	1/8/2014	LP2A140108M	< 2 U	< 1 U	< 5 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.025 U	< 0.025 U	< 0.025 U	< 0.01 U	< 0.01 U	< 0.01 U
LS-PS2A	2/12/2014	LP2A140212M	< 2 U	< 1 U	< 5 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.025 U	< 0.025 U	< 0.025 U	< 0.01 U	< 0.01 U	< 0.01 U
LS-PS2A	3/12/2014	LP2A140312M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U

Environmental Monitoring Data

Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Leachate Pesticide/Herbicide Analytical Data

Contact Person --- Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Beta BHC	Delta BHC	Dieldrin	Dinoseb	Endo- sulfan I	Endo- sulfan II	Endo- sulfan Sulfate	Endrin
			53469-21-9 (ug/L)	12672-29-6 (ug/L)	11097-69-1 (ug/L)	11096-82-5 (ug/L)	319-85-7 (ug/L)	319-86-8 (ug/L)	60-57-1 (ug/L)	88-85-7 (ug/L)	959-98-8 (ug/L)	33213-65-9 (ug/L)	1031-07-8 (ug/L)	72-20-8 (ug/L)
LS-API	1/8/2014	LAPI140108M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 GU	< 0.1 U	< 0.5 U	< 0.1 GU
LS-API	2/12/2014	LAPI140212M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-API	3/12/2014	LAPI140312M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-LEPS	1/8/2014	LEPS140108M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 GU	< 0.1 U	< 0.5 U	< 0.1 GU
LS-LEPS	2/12/2014	LEPS140212M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-LEPS	3/12/2014	LEPS140312M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-MH46N	1/8/2014	L46N140108M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 GU	< 0.1 U	< 0.5 U	< 0.1 GU
LS-MH46N	2/12/2014	L46N140212M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-MH46N	3/12/2014	L46N140312M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	0.21 T	< 0.1 GU	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-PS2A	1/8/2014	LP2A140108M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-PS2A	2/12/2014	LP2A140212M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-PS2A	3/12/2014	LP2A140312M	0.14 T	< 0.01 U	< 0.01 U	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U

Environmental Monitoring Data

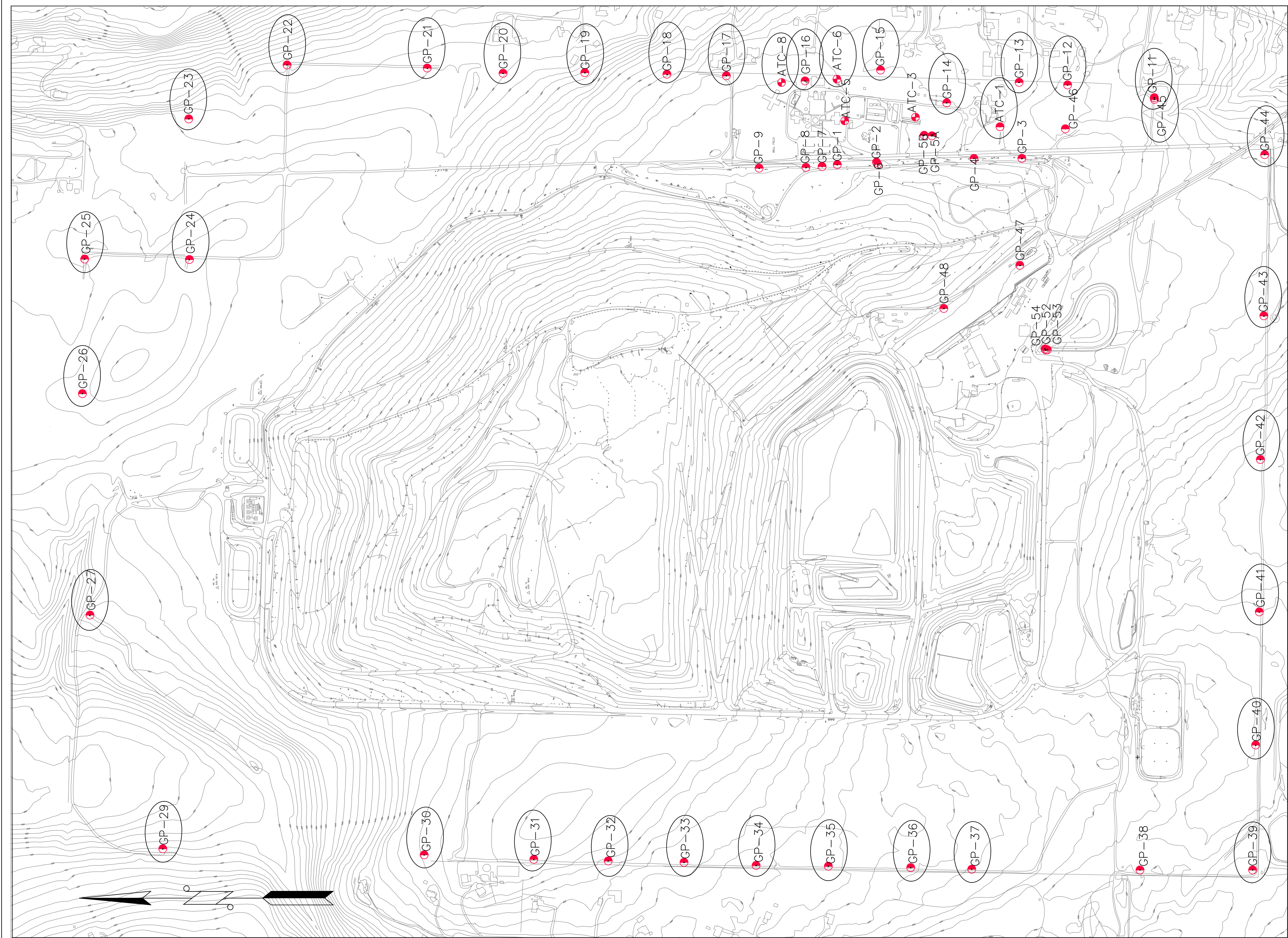
Data Collected from January 1, 2014 to March 31, 2014

Cedar Hills Landfill --- Leachate Pesticide/Herbicide Analytical Data

Contact Person --- Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Endrin Aldehyde	Heptachlor	Heptachlor Epoxide	Isodrin	Lindane	Methoxy- chlor	Toxaphene
			7421-93-4 (ug/L)	76-44-8 (ug/L)	1024-57-3 (ug/L)	465-73-6 (ug/L)	58-89-9 (ug/L)	72-43-5 (ug/L)	8001-35-2 (ug/L)
LS-API	1/8/2014	LAPI140108M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	< 2.5 U
LS-API	2/12/2014	LAPI140212M	< 0.2 GU	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-API	3/12/2014	LAPI140312M	< 0.2 U	< 0.025 GU	< 0.025 GU	< 10 GU	< 0.025 U	< 2 U	< 2.5 U
LS-LEPS	1/8/2014	LEPS140108M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	< 2.5 U
LS-LEPS	2/12/2014	LEPS140212M	< 0.2 GU	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-LEPS	3/12/2014	LEPS140312M	< 0.2 U	< 0.025 GU	< 0.025 GU	< 10 GU	< 0.025 U	< 2 U	< 2.5 U
LS-MH46N	1/8/2014	L46N140108M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	< 2.5 U
LS-MH46N	2/12/2014	L46N140212M	< 0.2 GU	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-MH46N	3/12/2014	L46N140312M	< 0.2 U	< 0.025 GU	< 0.025 GU	< 10 GU	< 0.025 U	< 2 U	< 2.5 U
LS-PS2A	1/8/2014	LP2A140108M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-PS2A	2/12/2014	LP2A140212M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-PS2A	3/12/2014	LP2A140312M	< 0.2 U	< 0.025 GU	< 0.025 GU	< 10 GU	< 0.025 U	< 2 GU	< 2.5 U

Landfill Gas Monitoring Data



Northing	Easting	Elev	Description	Inst. Date
170,000.33	1,701,942.93	640.02	GP-1 CASE EL	1985/86
169,740.00	1,701,960.00	622.00	GP-2 CASE EL	1985/86
168,758.11	1,701,985.28	594.21	GP-3 CASE EL	1985/86
169,058.18	1,701,972.94	606.19	GP-4 CASE EL	1985/86
169,370.19	1,702,134.95	616.23	GP-5A GRND EL	1988
169,422.02	1,702,138.87	619.63	GP-5B CASE EL	1988
169,731.73	1,701,946.48	635.59	GP-6 CASE EL	1988
170,101.22	1,701,930.58	640.66	GP-7 CASE EL	1988
170,208.37	1,701,925.10	642.67	GP8 CASE EL	1988
170,519.95	1,701,919.34	645.27	GP-9 CASE EL	1988
			GP-10 NOT INSTALLED	1988
167,890.09	1,702,389.27	567.15	GP-11 CASE EL	1988
168,466.64	1,702,473.27	568.08	GP-12 CASE EL	1988
168,790.03	1,702,490.84	588.15	GP-13 CASE EL	1988
169,271.56	1,702,354.75	613.32	GP-14 CASE EL	1988
169,724.93	1,702,446.19	618.75	GP-15 CASE EL	1988
170,214.28	1,702,500.56	630.19	GP-16 CASE EL	1988
170,738.83	1,702,535.09	625.18	GP-17 CASE EL	1988
171,132.85	1,702,543.29	600.83	GP-18 CASE EL	1988
171,634.52	1,702,554.91	544.15	GP-19 CASE EL	1988
172,224.83	1,702,550.70	496.61	GP-20 CASE EL	1988
172,729.15	1,702,584.65	489.79	GP-21 CASE EL	1988
173,662.40	1,702,607.81	374.84	GP-22 CASE EL	1988
174,317.16	1,702,248.74	501.77	GP-23 CASE EL	1988
174,313.44	1,701,311.74	544.72	GP-24 CASE EL	1988
175,011.63	1,701,324.89	533.86	GP-25 CASE EL	1988
175,043.82	1,700,364.55	541.69	GP-26 CASE EL	1988
174,983.78	1,698,935.68	484.75	GP-27 CASE EL	1988
			GP-28 NOT INSTALLED	1988
174,455.39	1,697,385.67	431.05	GP-29 CASE EL	1988
172,787.40	1,697,339.61	644.62	GP-30 CASE EL	1988
172,013.96	1,697,321.72	673.37	GP-31 CASE EL	1988
171,524.28	1,697,308.08	647.57	GP-32 CASE EL	1988
171,017.18	1,697,293.36	625.03	GP-33 CASE EL	1988
170,537.12	1,697,287.04	604.93	GP-34 CASE EL	1988
170,083.32	1,697,286.32	596.28	GP-35 CASE EL	1988
169,510.89	1,697,265.94	574.92	GP-36 CASE EL	1988
169,049.03	1,697,252.08	557.38	GP-37 CASE EL	1988
167,909.72	1,697,243.54	523.57	GP-38 CASE EL	1988
167,239.45	1,697,232.41	541.03	GP-39 CASE EL	1988
167,205.68	1,698,100.32	502.77	GP-40 CASE EL	1988
167,191.96	1,698,965.50	482.97	GP-41 CASE EL	1988
167,183.37	1,699,979.90	457.95	GP-42 CASE EL	1988
167,160.00	1,700,961.11	536.86	GP-43 CASE EL	1988
167,135.28	1,702,007.20	529.11	GP-44 CASE EL	1994
167,888.74	1,702,378.77	567.47	GP-45 CASE EL	1994
168,482.15	1,702,182.52	589.79	GP-46 CASE EL	1994
168,783.75	1,701,272.71	600.07	GP-47 CASE EL	1994
169,289.65	1,700,985.98	616.56	GP-48 CASE EL	1994
168,612.91	1,700,710.62	561.13	GP-52 GRND EL	2001
168,601.99	1,700,711.34	561.02	GP-53 GRND EL	2001
168,617.89	1,700,717.53	561.20	GP-54 GRND EL	2001
168,916.92	1,702,195.87	591.29	GP-ATC-1 GRND EL	1985/86
169,479.79	1,702,259.97	616.25	GP-ATC-3 GRND EL	1985/86
			GP-ATC-4 ABANDONED/REMOVED	
169,950.42	1,702,235.30	625.65	GP-ATC-5 GRND EL	1985/86
170,002.70	1,702,512.99	620.16	GP-ATC-6 GRND EL	1985/86
170,371.26	1,702,490.56	629.94	GP-ATC-8 GRND EL	1985/86



KING COUNTY DEPARTMENT OF
NATURAL RESOURCES AND PARKS
SOLID WASTE DIVISION

CEDAR HILLS REGIONAL LANDFILL
LANDFILL GAS MIGRATION MONITORING PLAN

APPROVED VICTOR O. OKEREKE DATE 03-19-07
RECOMMENDED TOM THENO DATE 09-28-07
DESIGNED N/A DRAWN PHAM / McEWEN
PROJECT NO. SURVEY NO. SHEET 1 OF 1
\\c:\data\cepm\m\gas-prob-loc\alt-ifg-loc\006-geom\probonly.dwg

LEGEND

INTERIOR LFG MONITORING PROBES

LFG MIGRATION MONITORING PROBES

DATE	REVISION	BY

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

January 2014 Monitoring

Beginning Barometer: 30.36
 Ending Barometer: 30.32
 Ambient Temp: 40 F
 Tech: RB/KS

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	1/23/2014 8:29	0.0	0.1	21.0	0	-1.44	
ATC-01S	1/23/2014 8:31	0.0	0.1	21.0	0	0	
ATC-06D	1/23/2014 9:29	0.0	0.1	21.0	0	-5.78	
ATC-06S	1/23/2014 9:31	0.0	1.0	3.3	0	0.1	
ATC-08D	1/23/2014 9:42	0.0	1.7	16.2	0	0.05	
ATC-08S	1/23/2014 9:43	0.0	0.2	20.7	0	-0.01	
GP-11A	1/23/2014 8:04	0.0	0.1	20.8	0	-0.22	
GP-11B	1/23/2014 8:06	0.0	0.1	20.9	0	-0.71	
GP-11C	1/23/2014 8:08	0.0	0.1	20.8	0	-0.54	
GP-11D	1/23/2014 8:11	0.0	0.1	20.8	0	0	
GP-12A	1/23/2014 8:46	0.0	0.1	21.0	0	-1.41	
GP-12B	1/23/2014 8:48	0.0	0.1	21.0	0	-1.72	
GP-12C	1/23/2014 8:51	0.0	0.2	19.0	0	-17.4	
GP-12D	1/23/2014 8:52	0.0	0.7	3.9	0	-2.44	
GP-13A	1/23/2014 8:37	0.0	0.1	21.0	0	0.6	
GP-13B	1/23/2014 8:38	0.0	0.1	21.0	0	0	
GP-13C	1/23/2014 8:40	0.0	0.1	21.0	0	0	
GP-13D	1/23/2014 8:42	0.0	0.1	21.0	0	-2.23	
GP-14A	1/23/2014 8:59	0.0	0.1	21.0	0	-2.26	
GP-14B	1/23/2014 9:01	0.0	0.1	21.0	0	-2.37	
GP-15A	1/23/2014 9:15	0.0	0.1	21.0	0	-0.24	
GP-15C	1/23/2014 9:21	0.0	2.2	8.5	0	-3.84	
GP-15D	1/23/2014 9:21	0.0	0.2	21.0	0	0.06	
GP-16A	1/23/2014 9:34	0.0	0.2	21.0	0	0.04	
GP-16B	1/23/2014 9:37	0.0	0.1	21.0	0	-2.23	
GP-16C	1/23/2014 9:38	0.0	0.1	21.0	0	-2.07	
GP-17A	1/23/2014 12:39						No Reading -Water
GP-17B	1/23/2014 12:41	0.0	0.4	19.3	0	0	
GP-17C	1/23/2014 12:43	0.0	0.1	20.9	0	-1.27	
GP-18A	1/23/2014 12:47						No Reading -Water
GP-18B	1/23/2014 12:50	0.0	0.4	12.2	0	0	
GP-18C	1/23/2014 12:51	0.0	0.1	20.5	0	-0.67	
GP-19A	1/23/2014 12:56	0.0	0.1	21.0	0	-1.57	
GP-19B	1/23/2014 12:57	0.0	0.7	15.6	0	0.06	
GP-19C	1/23/2014 13:01	0.0	0.1	21.0	0	-0.02	
GP-20A	1/23/2014 13:05	0.0	0.1	21.0	0	-0.6	
GP-20B	1/23/2014 13:07	0.0	0.3	19.9	0	0.01	
GP-20C	1/23/2014 13:10	0.0	0.2	5.6	0	0.03	
GP-21A	1/23/2014 13:13	0.0	0.1	21.0	0	-0.01	
GP-21B	1/23/2014 13:15	0.0	0.1	8.7	0	0.06	
GP-21C	1/23/2014 13:17	0.0	0.1	21.0	0	-0.01	
GP-22A	1/23/2014 13:22	0.0	0.6	20.5	0	-10.54	
GP-22C	1/23/2014 13:24	0.0	0.8	12.2	0	-0.83	
GP-23A	1/23/2014 13:30	0.0	0.1	21.0	0	-2.19	
GP-23B	1/23/2014 13:32	0.0	0.1	21.0	0	0.05	
GP-23C	1/23/2014 13:34	0.0	0.1	21.0	0	-1.36	
GP-24A	1/23/2014 13:38	0.0	4.2	11.2	0	0.07	
GP-24B	1/23/2014 13:40	0.0	1.0	18.9	0	0.06	
GP-25	1/23/2014 13:43	0.0	3.5	13.7	0	0	
GP-26	1/23/2014 13:46	0.0	1.1	19.8	0	0.09	
GP-27	1/23/2014 13:51	0.0	8.9	7.9	0	0.04	
GP-29A	1/23/2014 13:57	0.0	0.7	20.4	0	0.02	
GP-29B	1/23/2014 14:00	0.0	0.7	21.0	0	-1.94	
GP-30A	1/23/2014 14:10	0.0	2.3	18.7	0	0.45	
GP-30B	1/23/2014 14:14	0.0	0.8	20.4	0	-0.03	
GP-31A	1/23/2014 14:17	0.0	1.3	20.1	0	13.54	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

January 2014 Monitoring

Beginning Barometer: 30.36
Ending Barometer: 30.32
Ambient Temp: 40 F
Tech: RB/KS

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-31B	1/23/2014 14:20	0.0	0.3	14.6	0	-0.03	
GP-31C	1/23/2014 14:22	0.0	2.3	9.5	0	-0.67	
GP-32A	1/23/2014 14:25	0.0	0.5	20.9	0	0.03	
GP-32B	1/23/2014 14:27	0.0	0.2	21.0	0	0.01	
GP-32C	1/23/2014 14:29	0.0	0.3	20.8	0	-0.01	
GP-33A	1/23/2014 14:32	0.0	0.1	21.0	0	0.11	
GP-33B	1/23/2014 14:33	0.0	0.1	21.0	0	0	
GP-33C	1/23/2014 14:35	0.0	0.1	21.0	0	-0.8	
GP-34A	1/23/2014 14:38	0.0	0.1	21.0	0	-3.46	
GP-34B	1/23/2014 14:40	0.0	0.1	21.0	0	0.14	
GP-34C	1/23/2014 14:42	0.0	0.1	21.0	0	-0.91	
GP-35A	1/23/2014 14:45	0.0	0.1	21.0	0	0.02	
GP-35B	1/23/2014 14:46	0.0	0.1	21.0	0	0	
GP-35C	1/23/2014 14:48	0.0	0.1	21.0	0	-0.01	
GP-36A	1/23/2014 14:51	0.0	0.3	6.8	0	0.4	
GP-36B	1/23/2014 14:52	0.0	0.3	13.3	0	0.25	
GP-36C	1/23/2014 14:54	0.0	0.4	8.5	0	-0.66	
GP-37A	1/23/2014 14:56	0.0	0.6	10.7	0	-1.4	
GP-37B	1/23/2014 14:58	0.0	0.2	20.7	0	0.04	
GP-37C	1/23/2014 15:00	0.0	0.6	1.9	0	-0.59	
GP-39	1/23/2014 15:08	0.0	1.5	18.1	0	0	
GP-40	1/23/2014 15:12	0.0	0.1	19.1	0	-0.37	
GP-41A	1/23/2014 15:15	0.0	0.1	21.0	0	0.07	
GP-41B	1/23/2014 15:17	0.0	0.1	21.0	0	0.18	
GP-41C	1/23/2014 15:18	0.0	0.1	21.0	0	0.1	
GP-42A	1/23/2014 15:22						No Reading -Water
GP-42B	1/23/2014 15:25	0.0	0.1	20.9	0	0.03	
GP-43A	1/23/2014 15:29	0.0	0.1	21.0	0	0	
GP-43B	1/23/2014 15:31	0.0	0.1	21.0	0	0.01	
GP-43C	1/23/2014 15:32	0.0	0.1	21.0	0	0.05	
GP-44A	1/23/2014 15:37	0.0	0.1	21.0	0	0.13	
GP-44B	1/23/2014 15:38	0.0	1.0	8.5	0	-2.46	
GP-44C	1/23/2014 15:40	0.0	0.1	21.0	0	0.1	
GP-45S	1/23/2014 8:14	0.0	0.1	21.0	0	0.07	
GP-45I	1/23/2014 8:17	0.0	0.1	21.0	0	0.07	
GP-45D	1/23/2014 8:20	0.0	0.1	21.0	0	-0.57	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

February 2014 Monitoring

Beginning Barometer: 29.96

Ending Barometer: 30.05

Ambient Temp: 47 F

Tech: KS

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01S	2/13/2014 7:47	0.0	0.4	20.6	0	-0.21	No Reading -Water
ATC-01D	2/13/2014 7:49	0.0	0.0	20.8	0	0.02	
ATC-06S	2/13/2014 8:54	0.0	0.1	20.9	0	1.5	
ATC-06D	2/13/2014 8:56	0.0	0.9	1.9	0	0.21	
ATC-08S	2/13/2014 9:07	0.0	0.1	20.8	0	0.11	
ATC-08D	2/13/2014 9:09	0.0	0.2	19.0	0	1.37	
GP-11A	2/13/2014 7:35	0.0	0.1	20.4	0	0.59	
GP-11B	2/13/2014 7:37	0.0	0.3	16.5	0	-1.36	
GP-11C	2/13/2014 7:39	0.0	0.1	18.5	0	-0.04	
GP-11D	2/13/2014 7:40	0.0	0.1	20.6	0	0.1	
GP-12A	2/13/2014 7:54	0.0	0.0	20.9	0	0.2	
GP-12B	2/13/2014 7:56	0.0	0.0	20.9	0	0.31	
GP-12C	2/13/2014 7:57	0.0	0.2	18.9	0	0.77	
GP-12D	2/13/2014 7:59	0.0	0.9	2.8	0	-0.04	
GP-13A	2/13/2014 8:03	0.0	0.1	20.9	0	0.17	
GP-13B	2/13/2014 8:04	0.0	0.1	20.9	0	0.19	
GP-13C	2/13/2014 8:06	0.0	0.0	21.0	0	0.15	
GP-13D	2/13/2014 8:07	0.0	0.0	21.0	0	-1.2	
GP-14A	2/13/2014 8:13	0.0	0.6	15.0	0	-0.84	
GP-14B	2/13/2014 8:14	0.0	0.1	21.0	0	-0.98	
GP-15A	2/13/2014 8:42	0.0	0.3	20.7	0	8.38	No Reading -Water
GP-15C	2/13/2014 8:44	0.0	3.0	3.6	0	0.06	
GP-15D	2/13/2014 8:46	0.0	0.2	20.7	0	-3.5	
GP-16A	2/13/2014 9:00	0.0	0.1	20.6	0	0.06	
GP-16B	2/13/2014 9:02	0.0	0.2	20.0	0	-1.24	
GP-16C	2/13/2014 9:04	0.0	1.2	12.7	0	-1.21	
GP-17A	2/13/2014 11:46	0.0	0.3	13.4	0	0.45	No Reading -Water
GP-17B	2/13/2014 11:48	0.0	1.0	16.5	0	0.04	
GP-17C	2/13/2014 11:50	0.0	0.1	20.6	0	-0.76	
GP-18A	2/13/2014 11:52	0.0	0.1	20.6	0	1.83	No Reading -Water
GP-18B	2/13/2014 11:54	0.0	0.4	11.8	0	0.16	
GP-18C	2/13/2014 11:55	0.0	0.5	14.5	0	-1.9	
GP-19A	2/13/2014 11:59	0.0	0.1	20.4	0	0.98	
GP-19B	2/13/2014 12:00	0.0	0.7	14.9	0	0.31	
GP-19C	2/13/2014 12:02	0.0	0.1	20.5	0	-0.06	
GP-20A	2/13/2014 12:06	0.0	0.1	20.4	0	1.03	
GP-20B	2/13/2014 12:07	0.0	0.3	10.7	0	0.26	
GP-20C	2/13/2014 12:09	0.0	0.1	19.3	0	0.44	
GP-21A	2/13/2014 12:12	0.0	0.1	20.4	0	0.05	
GP-21B	2/13/2014 12:13	0.0	0.1	8.4	0	0.17	
GP-21C	2/13/2014 12:14	0.0	0.1	12.9	0	1.9	No Reading -Water
GP-22A	2/13/2014 12:19	0.0	0.4	20.1	0	9.35	
GP-22C	2/13/2014 12:20	0.0	0.8	11.4	0	-1.78	
GP-23A	2/13/2014 13:06	0.0	0.1	20.0	0	0.01	
GP-23B	2/13/2014 13:07	0.0	0.1	20.0	0	0.29	
GP-23C	2/13/2014 13:09	0.0	0.0	20.1	0	0	
GP-24A	2/13/2014 13:12	0.0	3.9	9.9	0	0.15	
GP-24B	2/13/2014 13:14	0.0	0.9	18.1	0	0.17	
GP-25	2/13/2014 13:17	0.0	2.8	14.1	0	0.05	
GP-26	2/13/2014 13:20	0.0	1.2	17.1	0	0.1	
GP-27	2/13/2014 13:23	0.0	8.2	8.1	0	0.17	
GP-29A	2/13/2014 13:27	0.0	0.6	19.8	0	0.16	
GP-29B	2/13/2014 13:29	0.0	0.7	20.0	0	-1.08	
GP-30A	2/13/2014 13:36	0.0	2.2	17.9	0	0.77	
GP-30B	2/13/2014 13:38	0.0	1.1	19.4	0	-1.84	
GP-31A	2/13/2014 13:40	0.0	1.1	19.4	0	7.12	
GP-31B	2/13/2014 13:41	0.0	0.3	14.4	0	-0.24	
GP-31C	2/13/2014 13:43	0.0	2.1	10.5	0	1.51	
GP-32A	2/13/2014 13:45	0.0	0.6	19.8	0	0.17	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

February 2014 Monitoring

Beginning Barometer: 29.96

Ending Barometer: 30.05

Ambient Temp: 47 F

Tech: KS

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-32B	2/13/2014 13:47	0.0	0.2	20.4	0	0.19	
GP-32C	2/13/2014 13:48	0.0	0.3	20.4	0	0.19	
GP-33A	2/13/2014 13:51	0.0	0.1	20.6	0	0.06	
GP-33B	2/13/2014 13:52	0.0	0.0	20.6	0	0.1	
GP-33C	2/13/2014 13:54	0.0	0.0	20.7	0	-1.64	
GP-34A	2/13/2014 13:56	0.0	0.3	19.8	0	9.6	No Reading -Water
GP-34B	2/13/2014 13:58	0.0	0.1	20.6	0	0	
GP-34C	2/13/2014 14:00	0.0	0.0	20.7	0	-1.79	
GP-35A	2/13/2014 14:02	0.0	0.0	20.7	0	0.12	
GP-35B	2/13/2014 14:04	0.0	0.0	20.7	0	0.15	
GP-35C	2/13/2014 14:05	0.0	0.0	20.7	0	0	
GP-36A	2/13/2014 14:08	0.0	0.0	20.8	0	1.03	
GP-36B	2/13/2014 14:09	0.0	0.1	20.8	0	0.54	
GP-36C	2/13/2014 14:11	0.0	0.7	3.3	0	-1.59	
GP-37A	2/13/2014 14:13	0.0	0.1	6.0	0	-0.02	No Reading -Water
GP-37B	2/13/2014 14:14	0.0	3.7	16.2	0	0.17	
GP-37C	2/13/2014 14:15	0.0	0.7	2.6	0	-0.45	
GP-39	2/13/2014 14:21	0.0	1.4	17.7	0	0.82	
GP-40	2/13/2014 14:29	0.0	0.1	17.6	0	0.13	
GP-41A	2/13/2014 14:38	0.0	0.0	20.6	0	0.18	
GP-41B	2/13/2014 14:39	0.0	0.0	20.7	0	0.22	
GP-41C	2/13/2014 14:41	0.0	0.0	20.6	0	0.09	
GP-42A	2/13/2014 14:48	0.1	0.1	20.6	2	0.83	No Reading -Water
GP-42B	2/13/2014 14:49	0.1	0.1	20.6	2	-0.29	
GP-43A	2/13/2014 14:52	0.1	0.1	20.6	2	0.48	
GP-43B	2/13/2014 14:54	0.1	0.0	20.6	2	0.19	
GP-43C	2/13/2014 14:55	0.1	0.1	19.4	2	0.19	
GP-44A	2/13/2014 15:00	0.1	0.0	20.6	2	0.25	
GP-44B	2/13/2014 15:01	0.1	0.6	13.1	2	-0.13	
GP-44C	2/13/2014 15:03	0.1	0.0	20.6	2	0.31	
GP-45S	2/13/2014 7:30	0.0	0.1	20.4	0	0.1	
GP-45I	2/13/2014 7:33	0.0	0.1	20.4	0	-1.04	
GP-45D	2/13/2014 7:31	0.0	0.1	20.5	0	-0.01	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
March 2014 Monitoring

Beginning Barometer: 30.46
Ending Barometer: 30.42
Ambient Temp: 44 F
Tech: DB

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01S	3/11/2014 9:05	0.0	0.0	0.0	0	-2.59	No Reading -Water
ATC-01D	3/11/2014 9:07	0.0	0.1	21.0	0	-0.16	
ATC-06S	3/11/2014 9:56	0.0	0.1	21.0	0	0.27	
ATC-06D	3/11/2014 9:58	0.0	0.9	1.3	0	-3.22	
ATC-08S	3/11/2014 10:07	0.0	0.0	21.0	0	-4.97	
ATC-08D	3/11/2014 10:09	0.0	0.3	16.9	0	-4.65	
GP-11A	3/11/2014 8:03	0.0	0.0	0.0	0	0.01	No Reading -Water
GP-11B	3/11/2014 8:06	0.0	0.0	21.0	0	-2.99	
GP-11C	3/11/2014 8:07	0.0	0.0	21.0	0	-2.49	
GP-11D	3/11/2014 8:09	0.0	0.1	21.0	0	0.02	
GP-12A	3/11/2014 8:48	0.0	0.0	21.0	0	0.11	
GP-12B	3/11/2014 8:49	0.0	0.0	21.0	0	0.68	
GP-12C	3/11/2014 8:51	0.0	0.1	19.3	0	-4.89	
GP-12D	3/11/2014 8:53	0.0	0.8	1.9	0	-8.9	
GP-13A	3/11/2014 8:56	0.0	0.0	21.0	0	0.25	
GP-13B	3/11/2014 8:58	0.0	0.0	21.0	0	0.17	
GP-13C	3/11/2014 9:00	0.0	0.0	21.0	0	-0.01	
GP-13D	3/11/2014 9:01	0.0	0.0	21.0	0	-5.64	
GP-14A	3/11/2014 9:12	0.0	0.0	21.0	0	-0.44	
GP-14B	3/11/2014 9:14	0.0	0.0	21.0	0	-7.14	
GP-15A	3/11/2014 9:42	0.0	0.0	0.0	0	0.14	No Reading -Water
GP-15C	3/11/2014 9:44	0.0	1.8	10.9	0	-5.25	
GP-15D	3/11/2014 9:46	0.0	0.2	20.7	0	-22	
GP-16A	3/11/2014 10:01	0.0	0.0	0.0	0	-0.86	No Reading -Water
GP-16B	3/11/2014 10:02	0.0	0.1	21.0	0	-8.12	
GP-16C	3/11/2014 10:04	0.0	0.0	21.0	0	-8.31	
GP-17A	3/11/2014 13:19	0.0	0.0	0.0	0	-14.93	No Reading -Water
GP-17B	3/11/2014 13:20	0.0	0.7	17.1	0	0.08	
GP-17C	3/11/2014 13:22	0.0	0.0	20.1	0	-7.39	
GP-18A	3/11/2014 13:31	0.0	0.0	0.0	0	0.55	No Reading -Water
GP-18B	3/11/2014 13:33	0.0	0.3	12.1	0	0.16	
GP-18C	3/11/2014 13:34	0.0	0.0	20.2	0	-7.31	
GP-19A	3/11/2014 13:37	0.0	0.0	20.4	0	0.14	
GP-19B	3/11/2014 13:39	0.0	0.5	15.1	0	0.29	
GP-19C	3/11/2014 13:40	0.0	0.0	20.4	0	-0.64	
GP-20A	3/11/2014 13:44	0.0	0.0	20.5	0	0.89	
GP-20B	3/11/2014 13:45	0.0	0.1	19.6	0	-0.03	
GP-20C	3/11/2014 13:47	0.0	0.2	5.8	0	0.19	
GP-21A	3/11/2014 13:51	0.0	0.0	0.0	0	-0.11	No Reading -Water
GP-21B	3/11/2014 13:53	0.0	0.1	9.2	0	0.11	
GP-21C	3/11/2014 13:54	0.0	0.2	9.9	0	0.72	
GP-22A	3/11/2014 13:58	0.0	0.2	20.3	0	0.94	
GP-22C	3/11/2014 14:00	0.0	0.7	10.8	0	-6.62	
GP-23A	3/11/2014 14:04	0.0	0.0	20.5	0	0	
GP-23B	3/11/2014 14:06	0.0	0.0	20.6	0	-1.14	
GP-23C	3/11/2014 14:07	0.0	0.0	20.6	0	0	
GP-24A	3/11/2014 14:15	0.0	3.2	11.7	0	0.12	
GP-24B	3/11/2014 14:17	0.0	2.1	14.0	0	0	
GP-25	3/11/2014 14:24	0.0	0.1	20.3	0	3.58	
GP-26	3/11/2014 14:32	0.0	1.1	17.3	0	-0.01	
GP-27	3/11/2014 14:35	0.0	7.3	8.1	0	0.12	
GP-29A	3/11/2014 14:40	0.0	0.5	19.9	0	-0.01	
GP-29B	3/11/2014 14:42	0.0	0.1	20.5	0	3.12	
GP-30A	3/11/2014 15:12	0.0	0.7	17.4	0	0.17	
GP-30B	3/11/2014 15:13	0.0	0.5	19.6	0	-1.47	
GP-31A	3/11/2014 15:16	0.0	0.0	0.0	0	1.18	No Reading -Water
GP-31B	3/11/2014 15:18	0.0	0.2	14.3	0	0.69	
GP-31C	3/11/2014 15:19	0.0	0.0	20.0	0	-1.07	
GP-32A	3/11/2014 15:22	0.0	0.5	18.5	0	0.1	
GP-32B	3/11/2014 15:24	0.0	0.1	20.0	0	0.17	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
March 2014 Monitoring

Beginning Barometer: 30.46
Ending Barometer: 30.42
Ambient Temp: 44 F
Tech: DB

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-32C	3/11/2014 15:25	0.0	0.2	20.1	0	0.17	
GP-33A	3/11/2014 15:28	0.0	0.0	20.2	0	0.14	
GP-33B	3/11/2014 15:30	0.0	0.0	20.2	0	0	
GP-33C	3/11/2014 15:32	0.0	0.0	20.3	0	-3.06	
GP-34A	3/11/2014 15:35	0.0	0.0	0.0	0	-0.06	No Reading -Water
GP-34B	3/11/2014 15:37	0.0	0.0	20.3	0	0.07	
GP-34C	3/11/2014 15:38	0.0	0.0	19.8	0	-5.76	
GP-35A	3/11/2014 15:42	0.0	0.0	20.4	0	0	
GP-35B	3/11/2014 15:43	0.0	0.0	20.4	0	0.08	
GP-35C	3/11/2014 15:44	0.0	0.0	20.4	0	-0.12	
GP-36A	3/11/2014 15:48	0.0	0.1	10.6	0	0.48	
GP-36B	3/11/2014 15:49	0.0	0.0	0.0	0	0.41	No Reading -Water
GP-36C	3/11/2014 15:50	0.0	0.3	8.5	0	-6.12	
GP-37A	3/11/2014 15:53	0.0	0.0	0.0	0	0.8	No Reading -Water
GP-37B	3/11/2014 15:53	0.0	0.1	19.2	0	0.73	Blocked
GP-37C	3/11/2014 15:55	0.0	0.4	4.4	0	-5.06	
GP-39	3/11/2014 16:05	0.0	1.0	18.2	0	0.18	
GP-40	3/11/2014 16:10	0.0	0.0	18.5	0	-0.01	
GP-41A	3/11/2014 16:14	0.0	0.0	20.4	0	0.14	
GP-41B	3/11/2014 16:16	0.0	0.0	20.4	0	0.07	
GP-41C	3/11/2014 16:17	0.0	0.0	20.4	0	0	
GP-42A	3/11/2014 16:21	0.0	0.0	0.0	0	-3.32	No Reading -Water
GP-42B	3/11/2014 16:22	0.0	0.0	20.5	0	-2.14	
GP-43A	3/11/2014 16:26	0.0	0.0	20.4	0	0.04	
GP-43B	3/11/2014 16:28	0.0	0.0	20.5	0	0	
GP-43C	3/11/2014 16:29	0.0	0.0	20.6	0	-0.06	
GP-44A	3/11/2014 16:33	0.0	0.0	20.5	0	0.14	
GP-44B	3/11/2014 16:35	0.0	0.7	9.2	0	-5.78	
GP-44C	3/11/2014 16:36	0.0	0.0	20.6	0	0	
GP-45S	3/11/2014 7:56	0.0	0.0	20.9	0	0	
GP-45I	3/11/2014 7:58	0.0	0.0	20.8	0	0.08	
GP-45D	3/11/2014 7:59	0.0	0.0	20.9	0	-2.26	



CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
First Quarter 2014 Monitoring

Probe ID	Date	Time	Barometric		CO2 %vol	O2 %vol	Static Pressure in INWC
			Pressure in Hg	CH4 %vol			
MGPW 1700	1/7/2014	2:44pm	30.05	0.1	0.1	20.6	0
MGPW 1700	1/31/2014	3:17PM	30.07	0	0.1	21	-2.56
MGPW 1700	2/5/2014	12:50pm	30.35	0	0	20.7	-1.93
MGPW 1700	2/28/2014	2:35pm	29.71	0	0	21	0.36
MGPW 1700	3/7/2014	12:21pm	30.23	0.1	0.1	21	-4.98
MGPW 1700	3/27/2014	3:08pm	29.8	0.1	0.1	21	-2.49
MGPW 1708	1/7/2014	2:32pm	30.05	0.1	0.1	21	-0.52
MGPW 1708	1/31/2014	3:05PM	30.07	0	0.3	21	-2.96
MGPW 1708	2/5/2014	12:35pm	30.35	0	0.4	20.9	-2.58
MGPW 1708	2/28/2014	2:25pm	29.71	0	0.1	20.9	0.26
MGPW 1708	3/7/2014	12:13pm	30.23	0.1	0.1	21	-5.74
MGPW 1708	3/27/2014	2:54pm	29.8	0.1	0.2	20.9	-2.8
MGPW 1710S	1/7/2014	2:28pm	30.05	0.1	0.1	21	-0.47
MGPW 1710S	1/31/2014	3:09PM	30.07	0	0.2	21	-2.79
MGPW 1710S	2/5/2014	1240pm	30.35	0	0	21	-1.88
MGPW 1710S	2/28/2014	2:28pm	29.71	0	0	21	0.21
MGPW 1710S	3/7/2014	12:16pm	30.23	0.1	0.1	21	-4.59
MGPW 1710S	3/27/2014	2:57pm	29.80	0.1	0.1	20.9	-2.29
MGPW 1710D	1/7/2014	2:26pm	30.05	0.0	0.1	21.0	-0.48
MGPW 1710D	1/31/2014	3:13PM	30.07	0.0	0.2	21.0	-2.36
MGPW 1710D	2/5/2014	12:45pm	30.35	0.0	0.0	20.8	-2.27
MGPW 1710D	2/28/2014	2:32pm	29.71	0.0	0.0	21.0	0.27
MGPW 1710D	3/7/2014	12:18pm	30.23	0.1	0.1	21.0	-5.35
MGPW 1710D	3/27/2014	3:03pm	29.80	0.1	0.1	21.0	-2.69
MGPW 1714	1/7/2014	2:23pm	30.05	0.1	0.1	20.6	0
MGPW 1714	1/31/2014	3:17PM	30.07	0.0	0.1	21.0	-2.56
MGPW 1714	2/5/2014	12:50pm	30.35	0.0	0.0	20.7	-1.93
MGPW 1714	2/28/2014	2:35pm	29.71	0.0	0.0	21.0	0.36
MGPW 1714	3/7/2014	12:21pm	30.23	0.1	0.1	21.0	-4.98
MGPW 1714	3/27/2014	3:08pm	29.80	0.1	0.1	21.0	-2.49
MGPW 1714	12/17/2013	11:20am	30.18	0.0	0.1	20.9	-0.77

KING COUNTY SOLID WASTE DIVISION
QUALIFIER INFORMATION
(Effective 4/1/2009)

QUAL	QUALIFIER DESCRIPTION
U	Undetected Analyte concentration <MDL – Less than Method detection limit
T	Estimated, Less than Reporting Detection Limit but greater than Method detection limit
J	Reported value is an estimate
B	Contamination present in Blank
C	Confluent Growth
E	Estimated, outside expected accuracy
H	Exceeds holding time
R	Data Rejected
S	Sample handling errors
X	Too numerous to count
D	Dilution
P	PASS – Qualitative result acceptable
F	FAIL – Qualitative result is not acceptable
G	Greater than
L	Less than

APPENDIX C

Meteorological Data

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY , 2014

IN MILES PER HOUR

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	1.6	2.2	3.0	3.3	3.9	3.0	2.0	3.3	1.8	2.2	1.2	1.5	1.1	2.0	2.3	3.8	1.5	2.3	2.3	3.1	4.0	3.1	2.4	4.1	2.5
2	3.7	2.8	3.6	6.5	4.1	4.5	2.7	4.1	4.6	6.8	6.4	5.3	4.8	5.7	5.9	5.6	5.2	4.9	11.6	11.3	4.5	4.1	4.3	4.7	5.3
3	5.0	3.6	5.6	5.3	6.8	5.0	4.7	6.8	6.1	4.6	4.1	4.2	5.3	3.2	2.7	2.2	4.3	4.4	3.0	1.2	3.5	1.5	0.2	1.6	4.0
4	1.8	1.7	1.5	3.0	2.3	2.4	1.7	4.6	4.7	3.1	4.6	4.2	2.3	5.5	6.6	5.2	4.8	5.6	7.4	5.2	6.2	6.1	4.5	3.8	4.1
5	3.5	3.2	4.9	3.7	4.6	4.1	5.3	4.5	4.8	2.1	2.2	1.2	2.4	2.9	2.5	3.0	4.4	5.2	4.2	4.5	5.1	5.2	5.9	3.9	3.9
6	5.4	6.3	6.7	5.8	2.1	1.4	3.8	3.4	2.5	4.0	1.8	3.5	3.2	2.4	5.2	4.9	6.7	5.6	6.4	4.4	3.5	5.9	5.6	5.6	4.6
7	4.4	2.7	4.3	3.3	2.2	3.8	2.8	3.7	4.1	3.0	3.7	5.4	4.6	2.9	1.7	5.2	4.3	3.5	2.6	2.4	3.7	4.3	5.1	5.0	3.7
8	5.8	5.8	4.8	5.6	3.1	5.8	5.9	5.9	4.0	4.4	4.6	4.6	6.0	7.8	8.9	9.3	11.6	12.7	16.5	14.5	15.7	14.7	13.0	13.4	8.5
9	13.1	12.5	10.1	8.5	9.4	7.9	9.4	7.9	9.2	9.6	6.4	6.8	8.8	6.7	8.5	6.1	7.2	9.7	14.8	19.6	20.0	20.8	18.1	18.8	11.2
10	22.2	22.3	24.1	20.3	19.0	17.8	19.4	19.5	18.0	14.6	12.5	13.2	10.5	9.7	9.1	9.0	7.7	8.0	6.5	9.8	12.0	13.0	13.8	18.6	14.6
11	22.6	29.4	23.1	22.3	24.0	23.2	17.3	14.1	18.0	17.3	17.1	18.5	25.0	17.8	22.7	19.7	18.7	18.0	13.9	16.6	12.8	10.7	7.0	8.5	18.3
12	8.6	7.4	7.2	8.1	9.8	13.1	14.3	13.3	8.8	7.9	8.9	12.2	12.9	13.1	14.1	15.4	20.5	18.1	16.0	18.3	18.3	17.0	16.9	19.4	13.3
13	17.4	15.2	15.7	18.4	16.8	15.2	17.5	17.0	17.7	15.7	15.1	12.4	9.2	6.6	5.2	4.5	7.2	6.5	5.6	6.7	6.4	8.0	6.5	6.0	12.9
14	7.2	6.2	5.1	4.5	3.1	2.4	1.3	2.3	0.9	1.8	1.2	3.0	1.3	2.1	2.2	2.0	3.1	2.4	3.3	1.2	0.6	2.6	1.3	0.5	2.6
15	0.2	1.7	0.9	2.8	3.7	2.8	3.9	3.1	3.6	7.4	2.6	2.5	1.8	1.4	3.8	6.2	10.0	8.5	6.9	7.5	6.0	4.9	7.9	5.9	4.4
16	4.5	6.2	6.1	2.6	4.4	1.4	3.0	1.8	2.4	1.5	1.1	1.6	1.6	1.2	1.2	2.1	1.5	1.8	3.2	1.1	2.0	1.3	1.7	1.0	2.4
17	2.4	2.1	0.9	1.1	2.2	2.3	5.6	0.8	1.2	1.2	1.7	1.7	1.9	1.2	2.1	3.5	3.1	1.6	1.9	1.8	2.7	2.8	3.8	3.0	2.2
18	3.0	3.0	3.8	3.8	3.7	0.9	5.1	6.5	4.9	5.1	4.5	4.0	4.9	4.6	3.7	5.6	2.8	5.0	5.2	5.3	5.6	4.1	1.5	3.3	4.2
19	4.0	3.9	2.6	4.1	2.9	7.7	4.5	3.6	3.1	2.1	1.5	2.0	2.5	6.0	4.4	6.7	4.8	2.6	5.3	7.7	6.4	2.1	4.1	6.6	4.2
20	1.7	4.2	1.5	0.8	1.7	1.8	5.6	5.5	2.9	1.0	0.8	1.5	3.2	2.6	3.1	2.9	1.6	3.2	1.4	1.4	1.9	2.0	2.7	2.2	2.4
21	1.2	2.4	4.6	2.4	5.6	2.6	1.3	2.9	3.2	3.8	4.1	2.0	2.6	2.4	5.0	4.4	5.2	12.6	9.0	3.5	6.6	4.0	3.2	4.8	4.1
22	5.1	4.6	2.8	3.4	3.9	1.9	2.0	0.5	0.9	1.8	3.7	4.0	6.6	2.8	4.2	5.0	7.1	7.7	9.2	11.4	12.4	9.8	6.4	5.7	5.1
23	6.7	5.0	8.5	10.4	13.3	12.9	15.1	15.0	10.6	6.1	4.0	2.7	3.3	5.2	9.9	14.2	9.1	5.0	2.8	4.1	5.6	4.5	6.6	5.9	7.8
24	6.1	5.0	3.7	6.7	6.1	5.4	2.6	3.7	4.8	3.5	3.5	3.2	2.2	3.6	2.7	2.9	2.8	3.5	2.6	5.1	2.5	5.9	7.2	2.3	4.1
25	3.4	6.6	1.8	6.7	7.2	6.2	7.9	6.4	4.2	4.2	2.1	2.0	1.2	1.2	1.1	3.1	2.7	4.3	3.6	2.5	1.4	0.5	1.9	2.0	3.5
26	1.7	2.9	1.3	1.3	2.3	3.0	1.5	1.8	1.6	2.3	2.2	1.9	3.8	2.9	2.5	0.4	2.6	3.9	1.5	1.6	2.5	3.8	4.7	3.1	2.4
27	2.8	3.0	2.2	2.2	3.0	4.2	2.7	2.0	2.2	2.1	3.8	3.1	2.2	2.7	1.9	2.2	5.6	7.5	6.5	7.8	8.5	8.4	8.7	7.9	4.3
28	7.3	6.7	7.1	5.9	4.3	4.4	10.1	9.2	7.0	4.8	2.7	2.2	2.9	1.8	3.3	3.7	1.5	1.7	3.2	3.0	1.8	2.9	3.3	4.2	4.4
29	7.5	8.4	6.5	8.7	6.1	3.1	6.2	7.7	6.6	6.7	6.7	5.7	8.9	3.1	4.4	8.6	8.9	7.8	3.0	3.8	4.9	4.7	6.2	10.5	6.4
30	13.6	12.8	15.0	14.2	15.1	12.8	11.4	12.2	14.1	13.6	13.3	13.1	13.7	13.8	14.4	12.8	11.1	11.7	11.2	10.5	8.4	7.2	5.7	6.3	12.0
31	6.3	4.1	4.0	4.6	4.2	2.7	4.4	6.1	4.9	5.2	6.2	3.6	3.8	4.2	3.2	3.2	1.4	3.1	4.7	2.2	2.6	2.2	2.5	3.1	3.9

MONTHLY AVERAGE = 6.99

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY , 2014

IN DEGREES

(MEASURED CLOCKWISE FROM NORTH)
HOUR ENDING

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	36.	29.	106.	54.	31.	65.	44.	257.	102.	110.	289.	192.	69.	346.	12.	334.	128.	81.	103.	20.	35.	339.	190.	174.	131.
2	197.	146.	206.	164.	340.	106.	107.	188.	198.	201.	193.	192.	192.	182.	156.	154.	162.	158.	183.	178.	156.	25.	93.	304.	174.
3	24.	110.	169.	124.	131.	151.	134.	140.	137.	160.	144.	146.	135.	120.	138.	236.	10.	103.	274.	20.	310.	104.	164.	142.	139.
4	45.	39.	54.	37.	31.	79.	39.	78.	34.	38.	47.	41.	238.	33.	28.	28.	25.	31.	39.	28.	46.	37.	19.	42.	48.
5	35.	40.	21.	38.	28.	27.	30.	20.	29.	15.	12.	64.	11.	21.	48.	36.	29.	31.	45.	16.	25.	24.	22.	4.	28.
6	28.	20.	26.	18.	113.	106.	165.	169.	258.	263.	231.	239.	265.	351.	353.	269.	141.	147.	129.	178.	149.	151.	153.	160.	181.
7	179.	135.	131.	140.	70.	38.	297.	279.	169.	171.	132.	109.	262.	274.	228.	219.	144.	116.	124.	164.	176.	135.	127.	136.	165.
8	122.	146.	142.	161.	134.	142.	158.	154.	152.	134.	149.	137.	152.	139.	134.	152.	162.	167.	185.	170.	176.	176.	198.	193.	156.
9	183.	180.	167.	168.	181.	176.	177.	151.	159.	165.	150.	163.	170.	148.	138.	144.	117.	143.	188.	191.	205.	208.	211.	200.	170.
10	201.	198.	199.	195.	194.	195.	186.	186.	192.	187.	196.	196.	184.	187.	195.	181.	136.	135.	128.	136.	134.	137.	144.	183.	175.
11	188.	189.	189.	202.	211.	225.	195.	179.	223.	176.	166.	176.	192.	178.	195.	196.	195.	197.	199.	210.	211.	225.	208.	200.	197.
12	220.	175.	174.	186.	212.	207.	200.	184.	142.	118.	146.	175.	179.	186.	183.	185.	196.	203.	212.	216.	205.	196.	191.	193.	187.
13	185.	192.	183.	182.	183.	188.	194.	196.	194.	198.	200.	206.	204.	204.	199.	212.	208.	208.	185.	186.	179.	184.	161.	146.	192.
14	166.	160.	134.	140.	143.	173.	163.	170.	87.	245.	165.	220.	186.	352.	314.	355.	312.	343.	58.	82.	97.	132.	177.	120.	187.
15	49.	157.	126.	344.	142.	205.	192.	63.	7.	4.	121.	58.	51.	35.	33.	18.	19.	42.	26.	37.	33.	28.	34.	34.	77.
16	34.	39.	30.	26.	51.	339.	60.	12.	44.	276.	32.	71.	64.	60.	55.	27.	12.	0.	7.	336.	58.	31.	20.	31.	71.
17	42.	358.	333.	53.	347.	58.	28.	23.	39.	60.	35.	51.	86.	144.	45.	30.	26.	53.	332.	266.	181.	158.	114.	192.	127.
18	190.	222.	201.	167.	306.	115.	251.	292.	254.	155.	125.	132.	236.	262.	264.	24.	260.	31.	6.	24.	79.	151.	240.	3.	166.
19	40.	30.	25.	30.	26.	39.	36.	48.	5.	54.	92.	272.	343.	35.	23.	52.	143.	260.	23.	29.	33.	338.	32.	8.	84.
20	288.	35.	262.	172.	47.	34.	43.	42.	328.	47.	57.	349.	334.	355.	25.	34.	34.	27.	343.	50.	261.	25.	25.	334.	148.
21	289.	302.	24.	235.	251.	192.	146.	302.	2.	134.	187.	191.	161.	81.	204.	181.	149.	238.	147.	118.	313.	259.	165.	129.	183.
22	133.	202.	112.	107.	146.	196.	251.	162.	272.	287.	318.	8.	25.	332.	6.	20.	10.	22.	19.	18.	17.	14.	6.	32.	113.
23	28.	15.	22.	25.	32.	29.	31.	35.	32.	35.	21.	354.	26.	33.	30.	29.	24.	41.	52.	31.	11.	27.	24.	13.	42.
24	26.	9.	357.	18.	26.	55.	58.	8.	18.	313.	313.	348.	322.	268.	303.	323.	294.	312.	23.	22.	335.	188.	149.	22.	171.
25	184.	169.	146.	185.	173.	147.	128.	175.	140.	297.	285.	357.	95.	168.	4.	340.	330.	32.	55.	32.	104.	40.	14.	110.	155.
26	256.	237.	336.	43.	26.	315.	47.	47.	49.	35.	267.	18.	4.	295.	281.	343.	297.	306.	289.	9.	69.	23.	32.	343.	165.
27	344.	15.	1.	344.	221.	180.	92.	59.	151.	14.	275.	296.	16.	82.	295.	122.	179.	183.	165.	175.	160.	136.	134.	120.	157.
28	117.	124.	133.	148.	191.	63.	137.	158.	151.	139.	144.	32.	6.	45.	128.	104.	16.	64.	37.	42.	12.	75.	52.	114.	93.
29	154.	147.	162.	126.	155.	131.	153.	161.	147.	135.	172.	130.	189.	181.	190.	302.	314.	300.	287.	345.	332.	204.	191.	209.	201.
30	210.	184.	183.	183.	189.	178.	180.	188.	198.	194.	192.	187.	187.	200.	196.	184.	184.	186.	176.	177.	172.	163.	172.	177.	185.
31	177.	131.	141.	123.	151.	159.	158.	180.	202.	264.	297.	326.	38.	35.	340.	38.	25.	24.	34.	48.	337.	17.	37.	33.	138.

MONTHLY AVERAGE = 148.50

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY , 2014

IN DEGREES C

DAY	HOUR ENDING																								AVG
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	4.3	4.5	4.4	3.4	2.6	2.1	2.7	2.2	2.3	3.0	4.2	4.7	5.8	5.7	5.4	4.7	4.4	4.0	4.3	4.2	4.2	4.1	4.2	4.1	4.0
2	4.1	4.1	4.3	4.8	4.6	5.5	5.0	6.1	6.5	6.8	6.6	7.4	8.5	8.5	8.5	9.1	9.2	8.9	8.4	7.9	7.2	6.8	6.4	6.6	6.8
3	5.9	4.8	4.3	3.9	3.8	3.3	2.4	2.5	2.8	3.7	3.9	4.3	5.2	5.4	5.8	5.7	4.7	3.0	2.5	2.3	2.3	1.6	1.7	1.7	3.6
4	1.3	1.5	1.6	0.5	0.9	0.8	0.8	0.8	-0.1	-0.5	0.4	2.0	4.7	4.8	4.8	4.4	3.6	2.1	0.9	0.6	-0.1	0.0	-0.5	-0.4	1.4
5	-0.6	-1.1	-1.1	-1.7	-1.9	-2.3	-2.5	-1.8	-1.3	-0.1	1.0	2.6	3.0	4.2	4.2	4.0	3.2	2.7	2.3	2.1	1.2	1.0	1.1	2.0	0.8
6	0.2	0.4	0.2	0.3	1.2	-0.4	-0.4	0.9	0.8	0.9	1.2	2.5	3.6	4.3	3.9	4.8	3.7	5.2	6.5	6.3	6.1	6.3	6.6	6.0	3.7
7	4.5	4.4	5.0	5.3	5.1	4.5	4.6	4.0	5.1	5.3	6.0	7.6	7.3	7.0	7.4	7.4	6.8	6.8	6.7	6.5	6.5	6.3	6.6	6.8	6.0
8	7.1	7.5	7.8	7.4	7.1	7.3	7.0	7.2	7.4	7.7	7.5	7.8	8.2	8.0	8.0	7.8	7.7	7.8	7.3	6.8	6.6	6.5	6.4	6.4	7.3
9	5.8	5.5	5.3	5.2	5.0	4.9	4.8	4.7	4.8	5.1	5.5	6.0	5.6	5.5	5.2	5.2	5.1	5.6	6.3	7.0	7.3	7.3	7.1	7.0	5.7
10	6.9	6.7	6.6	6.5	6.6	6.7	6.8	6.7	6.7	6.9	7.1	7.2	7.4	7.6	7.7	7.4	6.8	7.1	7.4	7.1	8.6	9.1	10.4	11.7	7.5
11	12.4	13.0	13.7	13.0	9.9	7.2	6.4	6.1	4.9	6.0	6.7	7.4	6.2	6.2	6.5	5.6	5.4	5.6	6.0	5.9	5.9	6.0	5.8	5.8	7.4
12	5.7	5.5	5.4	5.6	5.6	5.4	4.9	3.9	2.9	3.7	5.0	6.1	6.9	7.5	8.2	8.3	8.6	9.1	9.1	8.8	8.7	8.7	8.8	8.8	6.7
13	8.7	8.5	8.2	8.0	7.8	7.9	8.0	8.1	8.2	8.4	8.6	8.9	9.1	9.3	9.4	9.2	9.2	9.2	9.1	9.0	8.9	8.8	8.6	8.4	8.5
14	8.3	8.1	8.1	8.2	8.2	8.4	8.5	8.3	8.6	8.0	8.4	8.4	8.9	9.3	9.4	9.0	8.4	7.9	7.5	7.7	7.6	7.3	6.9	6.9	8.2
15	6.2	5.6	5.5	5.6	5.0	4.1	3.8	3.9	3.9	5.6	5.6	5.6	6.3	7.8	8.0	7.9	7.6	6.7	5.7	5.1	4.5	4.1	3.5	3.4	5.5
16	3.0	2.7	2.4	2.1	1.9	1.6	1.3	1.1	1.1	1.4	1.8	2.1	2.4	2.9	3.1	3.5	3.2	3.1	2.8	2.6	2.3	1.9	1.6	1.2	2.2
17	1.3	1.0	0.6	0.3	0.2	-0.1	-0.3	-0.6	-0.9	-0.5	-0.1	0.5	1.2	1.6	1.6	1.7	1.6	1.3	1.0	0.8	0.7	0.4	0.1	-0.4	0.5
18	-0.5	-1.0	-1.1	-0.9	-0.1	1.3	1.7	1.6	1.3	1.4	3.5	5.8	6.9	7.5	8.2	6.4	5.6	4.3	4.3	4.3	4.0	4.3	4.1	2.5	3.1
19	1.8	1.6	0.9	0.8	0.7	1.5	1.5	1.1	1.1	1.6	2.3	3.2	3.6	3.0	3.2	2.9	3.0	2.9	2.5	2.1	1.7	1.7	1.3	1.1	2.0
20	1.1	0.9	0.8	0.7	0.3	0.0	-0.3	-0.4	-0.4	-0.1	0.5	1.4	2.8	5.5	6.6	6.7	6.5	5.4	5.3	4.9	4.2	3.3	3.3	3.6	2.6
21	3.2	2.3	2.1	2.3	-0.5	-0.4	1.2	1.1	0.7	2.0	4.3	6.9	8.6	9.7	11.4	10.9	10.8	8.1	7.1	7.3	6.7	6.3	6.0	5.7	5.2
22	6.2	5.4	5.0	5.3	5.5	5.3	5.3	5.3	5.4	5.6	5.8	5.9	5.9	6.1	6.4	6.3	6.2	5.9	5.4	5.3	5.2	5.0	4.5	4.0	5.5
23	3.6	3.5	3.4	3.3	3.1	2.9	2.6	2.4	2.0	2.7	4.1	6.4	7.6	8.1	8.3	8.1	7.6	6.7	5.5	4.2	4.1	3.6	3.4	3.6	4.6
24	2.7	3.1	2.7	2.3	1.3	3.6	4.5	2.1	5.5	5.2	7.9	7.7	10.9	11.4	11.6	11.8	10.2	8.7	8.8	7.8	7.3	6.2	5.4	6.3	6.5
25	6.0	4.6	5.2	3.4	4.7	5.5	5.5	5.1	6.4	6.6	7.6	8.6	11.6	13.3	13.7	12.0	10.6	9.2	8.2	8.0	8.3	7.7	7.4	7.0	7.8
26	6.4	5.3	5.0	4.6	3.5	3.4	2.9	2.9	1.6	3.0	5.7	6.3	6.6	7.4	8.4	9.2	7.4	5.1	4.5	3.8	3.9	3.2	2.2	3.7	4.8
27	1.0	0.4	-0.5	-0.9	-1.4	-1.3	0.1	0.2	0.8	0.7	1.1	3.1	4.0	5.9	6.7	6.1	6.3	5.9	6.5	6.4	7.5	8.2	7.9	7.5	3.4
28	6.9	7.0	6.8	7.1	7.0	6.2	7.0	7.2	7.3	7.5	7.4	7.3	7.7	8.3	9.1	8.9	8.3	7.8	7.3	7.2	6.7	6.1	5.6	5.8	7.2
29	5.8	5.5	5.1	5.3	6.1	6.5	6.7	7.5	8.0	8.2	8.4	8.6	8.6	8.2	8.3	7.7	6.6	6.4	6.0	6.0	5.9	5.7	5.7	5.7	6.8
30	5.5	4.9	4.8	4.9	4.9	4.7	4.7	4.7	4.7	4.8	5.1	5.6	6.0	5.8	5.7	5.2	5.0	4.4	4.1	4.1	3.9	3.9	4.0	4.2	4.8
31	3.8	3.5	3.5	3.4	3.4	3.4	3.4	3.4	3.5	3.7	3.6	3.7	3.4	3.3	3.9	3.8	3.7	3.5	3.2	3.1	2.9	2.6	2.5	2.6	3.4

MONTHLY AVERAGE = 5.28

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY , 2014

IN INCHES

DAY	HOUR ENDING																								TOT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
2	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.14	0.24	0.35	0.11	0.02	0.96
3	0.20	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.04	0.06	0.05	0.02	0.01	0.00	0.00	0.01	0.02	0.05	0.02	0.01	0.00	0.00	0.00	0.01	0.03	0.05	0.05	0.05	0.05	0.00	0.01	0.00	0.02
8	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.03	0.01	0.03	0.07	0.11	0.12	0.03	0.06	0.04	0.00	0.00	0.00	0.00	0.00	1.08
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.03	0.05	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.42
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.01	0.02	0.01	0.03	0.01
11	0.00	0.00	0.00	0.04	0.29	0.09	0.02	0.04	0.34	0.01	0.02	0.05	0.13	0.11	0.07	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01
12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
22	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
23	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.09	0.11	0.11	0.34
29	0.11	0.17	0.15	0.05	0.01	0.05	0.01	0.06	0.02	0.01	0.05	0.03	0.13	0.06	0.02	0.28	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.04	1.30
30	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03
31	0.01	0.01	0.01	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18

MONTHLY TOTAL = 8.69

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY , 2014

IN MPH/DIR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	2NE	2NE	3E	3NE	4NE	3NE	2NE	3W	2E	2E	1W	1S	1E	2N	2N	4NW	1SE	2E	2E	3N	4NE	3N	2S	4S
2	4S	3SE	4SW	6S	4N	4E	3E	4S	5S	7S	6S	5S	5S	6S	6SE	6SE	5S	5S	12S	11S	4SE	4NE	4E	5NW
3	5NE	4E	6S	5SE	7SE	5SE	5SE	7SE	6SE	5S	4SE	4SE	5SE	3SE	3SE	2SW	4N	4E	3W	1N	3NW	2E	0S	2SE
4	2NE	2NE	2NE	3NE	2NE	2E	2NE	5E	5NE	3NE	5NE	4NE	2SW	5NE	7NE	5NE	5NE	6NE	7NE	5NE	6NE	6NE	5N	4NE
5	4NE	3NE	5N	4NE	5NE	4NE	5NE	5N	5NE	2N	2N	1NE	2N	3N	3NE	3NE	4NE	5NE	4NE	5N	5NE	5NE	6N	4N
6	5NE	6N	7NE	6N	2SE	1E	4S	3S	2W	4W	2SW	3SW	3W	2N	5N	5W	7SE	6SE	6SE	4S	3SE	6SE	6SE	6S
7	4S	3SE	4SE	3SE	2E	4NE	3NW	4W	4S	3S	4SE	5E	5W	3W	2SW	5SW	4SE	4SE	3SE	2S	4S	4SE	5SE	5SE
8	6SE	6SE	5SE	6S	3SE	6SE	6S	6SE	4SE	4SE	5SE	5SE	6SE	8SE	9SE	9SE	12S	13S	16S	15S	16S	15S	13S	13S
9	13S	13S	10S	8S	9S	8S	9S	8SE	9S	10S	6SE	7S	9S	7SE	8SE	6SE	7SE	10SE	15S	20S	20SW	21SW	18SW	19S
10	22S	22S	24S	20S	19S	18S	19S	19S	18S	15S	13S	13S	11S	10S	9S	9S	8SE	8SE	7SE	10SE	12SE	13SE	14SE	19S
11	23S	29S	23S	22S	24SW	23SW	17S	14S	18SW	17S	17S	18S	25S	18S	23S	20S	19S	18S	14S	17SW	13SW	11SW	7SW	9S
12	9SW	7S	7S	8S	10SW	13SW	14S	13S	9SE	8SE	9SE	12S	13S	13S	14S	15S	20S	18SW	16SW	18SW	18SW	17S	17S	19S
13	17S	15S	16S	18S	17S	15S	18S	17S	18S	16S	15S	12SW	9SW	7SW	5S	5SW	7SW	7SW	6S	7S	6S	8S	7S	6SE
14	7S	6S	5SE	4SE	3SE	2S	1S	2S	1E	2SW	1S	3SW	1S	2N	2NW	2N	3NW	2N	3NE	1E	1E	3SE	1S	0SE
15	0NE	2SE	1SE	3N	4SE	3SW	4S	3NE	4N	7N	3SE	2NE	2NE	1NE	4NE	6N	10N	9NE	7NE	7NE	6NE	5NE	8NE	6NE
16	5NE	6NE	6NE	3NE	4NE	1N	3NE	2N	2NE	1W	1NE	2E	2NE	1NE	1NE	2NE	2N	2N	3N	1NW	2NE	1NE	2N	1NE
17	2NE	2N	1NW	1NE	2N	2NE	6NE	1NE	1NE	1NE	2NE	2NE	2E	1SE	2NE	4NE	3NE	2NE	2NW	2W	3S	3S	4SE	3S
18	3S	3SW	4S	4S	4NW	1SE	5W	7W	5W	5SE	4SE	4SE	5SW	5W	4W	6NE	3W	5NE	5N	5NE	6E	4SE	1SW	3N
19	4NE	4NE	3NE	4NE	3NE	8NE	5NE	4NE	3N	2NE	1E	2W	3N	6NE	4NE	7NE	5SE	3W	5NE	8NE	6NE	2N	4NE	7N
20	2W	4NE	1W	1S	2NE	2NE	6NE	6NE	3NW	1NE	1NE	2N	3NW	3N	3NE	3NE	2NE	3NE	1N	1NE	2W	2NE	3NE	2NW
21	1W	2NW	5NE	2SW	6W	3S	1SE	3NW	3N	4SE	4S	2S	3S	2E	5SW	4S	5SE	13SW	9SE	4SE	7NW	4W	3S	5SE
22	5SE	5SW	3E	3E	4SE	2S	2W	0S	1W	2W	4NW	4N	7NE	3NW	4N	5N	7N	8N	9N	11N	12N	10N	6N	6NE
23	7NE	5N	8N	10NE	13NE	13NE	15NE	15NE	11NE	6NE	4N	3N	3NE	5NE	10NE	14NE	9NE	5NE	3NE	4NE	6N	5NE	7NE	6N
24	6NE	5N	4N	7N	6NE	5NE	3NE	4N	5N	4NW	4NW	3N	2NW	4W	3NW	3NW	3NW	3NW	3NE	5N	2NW	6S	7SE	2N
25	3S	7S	2SE	7S	7S	6SE	8SE	6S	4SE	4NW	2W	2N	1E	1S	1N	3N	3NW	4NE	4NE	3NE	1E	1NE	2N	2E
26	2W	3SW	1NW	1NE	2NE	3NW	1NE	2NE	2NE	2NE	2W	2N	4N	3NW	3W	0N	3NW	4NW	2W	2N	3E	4NE	5NE	3N
27	3N	3N	2N	2N	3SW	4S	3E	2NE	2SE	2N	4W	3NW	2N	3E	2NW	2SE	6S	7S	7S	8S	8S	8SE	9SE	8SE
28	7SE	7SE	7SE	6SE	4S	4NE	10SE	9S	7SE	5SE	3SE	2NE	3N	2NE	3SE	4E	2N	2NE	3NE	3NE	2N	3E	3NE	4SE
29	8SE	8SE	6S	9SE	6SE	3SE	6SE	8S	7SE	7SE	7S	6SE	9S	3S	4S	9NW	9NW	8NW	3W	4N	5NW	5SW	6S	10SW
30	14SW	13S	15S	14S	15S	13S	11S	12S	14S	14S	13S	13S	14S	14S	14S	13S	11S	12S	11S	10S	8S	7S	6S	6S
31	6S	4SE	4SE	5SE	4SE	3S	4S	6S	5S	5W	6NW	4NW	4NE	4NE	3N	3NE	1NE	3NE	5NE	2NE	3NW	2N	3NE	3NE

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY , 2014

IN MILES PER HOUR

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	2.6	1.7	1.4	1.4	2.2	1.5	1.8	1.8	1.6	2.9	3.1	2.5	2.2	3.9	4.0	2.0	3.5	3.5	3.1	1.8	2.8	3.9	4.4	3.1	2.6
2	3.8	4.4	5.2	4.9	3.7	3.6	2.4	1.9	1.7	1.0	1.1	2.2	1.3	2.8	3.8	6.8	5.3	7.4	4.2	3.2	5.7	4.9	4.1	3.6	3.7
3	4.9	1.4	5.7	4.3	3.4	3.9	6.7	6.4	7.2	3.9	8.0	7.9	8.7	7.4	7.5	7.1	5.8	6.1	5.6	3.5	2.0	2.1	1.4	3.0	5.2
4	4.6	3.4	1.8	2.5	2.7	4.2	5.1	6.3	3.8	4.8	3.4	4.8	11.5	9.8	8.7	8.2	7.7	2.4	3.3	5.4	5.9	9.4	10.3	12.0	5.9
5	10.3	7.0	5.6	6.7	3.6	3.3	4.2	6.9	8.3	8.3	10.1	9.0	13.4	12.9	14.5	14.1	13.5	11.9	12.9	12.1	8.1	6.8	6.9	7.8	9.1
6	10.0	10.4	11.1	10.2	9.9	10.8	12.4	13.3	15.1	15.1	15.9	15.6	14.1	14.5	9.8	9.7	10.9	7.8	13.0	14.1	10.4	8.2	10.9	10.1	11.8
7	9.6	9.3	9.0	7.9	5.5	4.8	4.8	3.7	0.8	2.2	2.3	5.6	8.9	10.3	11.2	10.5	12.2	13.5	11.0	8.3	5.5	5.0	3.7	3.0	7.0
8	3.8	4.4	4.1	2.8	4.6	4.1	7.3	5.9	4.0	2.3	2.0	2.5	5.7	7.0	7.0	5.6	7.9	12.1	4.5	3.5	3.3	5.2	11.2	6.6	5.3
9	6.5	6.0	6.3	9.4	8.6	5.3	2.7	3.7	4.0	3.9	4.7	1.4	3.7	2.7	2.5	3.3	4.9	3.6	1.8	2.4	6.0	7.0	6.8	2.7	4.6
10	5.3	7.2	5.4	6.7	5.5	5.4	4.7	3.2	8.1	9.1	8.7	11.3	12.6	14.8	12.3	13.4	11.4	14.0	18.5	14.6	11.1	8.7	7.1	11.5	9.6
11	11.6	9.2	10.7	4.3	6.5	3.9	5.6	6.3	5.5	5.7	6.2	4.8	3.2	3.7	4.5	7.6	12.1	13.5	12.4	13.4	12.6	11.6	13.1	13.5	8.4
12	11.3	10.0	18.4	22.7	26.2	27.7	22.0	22.0	20.3	19.5	16.2	11.4	16.6	15.0	10.8	12.5	10.9	10.3	6.1	3.9	4.5	7.3	8.5	10.4	14.4
13	17.8	15.9	17.4	15.9	16.1	17.1	12.7	12.4	11.8	10.0	17.6	20.6	14.0	12.3	9.4	9.4	5.9	6.2	5.7	5.5	6.5	5.9	7.0	12.0	11.9
14	15.1	9.2	16.2	16.7	15.4	15.9	14.0	12.2	12.3	17.4	17.3	14.9	15.3	18.9	15.8	16.4	14.8	10.5	10.3	7.7	5.9	4.5	3.9	2.4	12.6
15	4.1	4.1	5.5	6.7	7.3	5.4	4.1	6.9	7.6	12.1	16.0	21.1	22.1	20.7	21.8	21.4	19.0	14.6	14.0	29.2	16.9	14.6	14.8	12.4	13.4
16	13.1	14.0	12.3	14.9	11.0	10.0	8.0	12.6	11.4	12.5	12.6	16.0	17.5	16.3	18.2	18.5	18.5	21.6	21.5	23.8	18.6	11.1	13.0	18.5	15.2
17	17.0	13.1	10.7	8.8	7.7	5.4	4.9	7.2	6.5	6.9	10.6	9.8	11.5	14.7	15.5	12.3	11.0	7.7	9.9	6.2	8.2	7.3	10.6	4.4	9.5
18	3.0	5.7	6.5	7.0	8.5	9.3	10.6	13.7	11.3	9.9	8.3	12.8	15.9	15.5	15.1	21.0	18.7	23.3	17.0	15.1	15.9	11.5	9.4	14.0	12.5
19	11.3	14.5	10.7	10.2	11.4	10.8	10.9	10.2	9.6	9.4	9.9	10.6	10.2	11.2	14.3	10.7	10.2	11.8	9.0	12.1	8.4	10.1	9.2	10.1	10.7
20	10.4	9.9	13.8	17.4	17.3	15.2	14.5	12.6	12.4	12.6	11.3	8.0	8.6	14.1	14.3	13.5	12.0	15.3	9.7	11.3	11.4	9.1	9.1	9.9	12.2
21	11.3	11.4	9.1	9.3	9.4	6.9	5.2	1.4	1.4	3.9	4.0	2.4	1.6	4.4	6.2	2.8	3.5	4.7	5.3	4.1	2.1	3.0	1.2	1.5	4.8
22	0.5	1.4	1.9	3.3	4.2	4.6	4.0	3.4	4.9	6.1	7.2	6.7	4.7	6.5	6.2	6.7	6.0	5.1	6.6	6.4	6.7	6.1	7.4	6.3	5.1
23	5.2	6.2	4.9	4.3	5.0	4.7	3.3	4.5	4.2	3.3	4.2	4.5	1.9	2.1	3.5	3.9	3.7	3.5	0.2	1.0	1.1	3.0	4.4	2.9	3.6
24	3.1	3.6	3.0	3.0	3.4	4.0	3.7	4.2	4.2	2.9	2.6	5.0	3.0	1.7	1.2	2.4	1.4	0.5	1.5	1.6	1.1	0.5	0.5	2.7	2.5
25	1.9	1.5	2.0	2.5	4.8	4.1	3.1	3.2	2.7	3.8	2.7	6.1	9.3	8.4	7.4	6.8	8.2	8.9	7.4	8.2	8.4	8.8	8.5	8.0	5.7
26	7.8	8.1	7.2	8.4	8.9	7.0	5.0	5.0	3.5	7.0	16.1	12.9	12.7	12.3	9.0	11.6	12.7	9.9	8.3	7.2	7.7	6.6	3.7	1.5	8.3
27	2.1	2.8	4.2	4.5	4.6	4.0	4.6	5.5	4.7	4.1	6.2	7.8	6.1	5.7	6.6	2.9	0.5	1.6	2.5	1.1	4.0	2.7	2.2	3.6	3.9
28	1.3	3.1	6.2	3.5	4.5	3.1	5.0	6.0	7.8	3.5	5.4	9.1	9.2	7.0	12.6	12.8	13.1	12.9	11.1	12.5	10.5	9.8	8.1	8.9	7.8

MONTHLY AVERAGE = 8.12

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY , 2014

IN DEGREES

(MEASURED CLOCKWISE FROM NORTH)
HOUR ENDING

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	21.	205.	140.	93.	118.	144.	106.	152.	128.	121.	118.	151.	185.	262.	15.	24.	23.	42.	12.	309.	34.	30.	34.	46.	105.
2	34.	27.	43.	25.	38.	24.	28.	7.	52.	86.	57.	3.	40.	109.	90.	323.	338.	353.	337.	301.	320.	348.	348.	346.	153.
3	337.	264.	297.	328.	348.	352.	18.	24.	26.	360.	318.	317.	318.	332.	306.	277.	313.	329.	6.	32.	65.	155.	85.	85.	220.
4	41.	70.	49.	20.	4.	10.	19.	32.	30.	22.	50.	118.	131.	103.	111.	108.	106.	111.	116.	120.	127.	131.	119.	126.	78.
5	120.	104.	104.	115.	105.	100.	107.	114.	119.	117.	87.	98.	109.	108.	124.	124.	119.	120.	124.	125.	121.	124.	116.	111.	113.
6	113.	118.	117.	120.	122.	126.	122.	120.	116.	116.	124.	127.	125.	125.	128.	128.	126.	115.	123.	125.	128.	134.	134.	129.	123.
7	127.	143.	156.	158.	183.	158.	135.	141.	114.	356.	45.	29.	22.	25.	23.	18.	21.	27.	31.	32.	33.	29.	42.	41.	87.
8	32.	36.	36.	26.	126.	105.	113.	94.	82.	34.	14.	68.	87.	104.	95.	99.	132.	134.	109.	286.	98.	166.	119.	117.	96.
9	117.	117.	130.	160.	152.	141.	117.	124.	125.	120.	109.	37.	26.	16.	30.	37.	43.	33.	44.	57.	117.	138.	131.	95.	92.
10	138.	148.	159.	193.	212.	99.	131.	127.	154.	141.	152.	167.	183.	209.	205.	165.	168.	193.	201.	198.	184.	169.	190.	204.	170.
11	209.	176.	189.	150.	146.	109.	128.	132.	127.	143.	156.	156.	163.	109.	122.	144.	130.	132.	131.	128.	130.	136.	133.	124.	142.
12	129.	154.	194.	202.	215.	218.	225.	216.	207.	206.	215.	209.	199.	214.	224.	206.	208.	210.	211.	171.	148.	146.	145.	161.	193.
13	213.	209.	214.	206.	204.	204.	196.	202.	196.	191.	219.	220.	235.	231.	228.	216.	178.	146.	137.	137.	126.	134.	115.	119.	186.
14	122.	111.	118.	134.	175.	182.	188.	182.	188.	216.	215.	216.	209.	232.	233.	222.	224.	193.	184.	162.	145.	148.	123.	139.	177.
15	128.	123.	136.	115.	116.	124.	113.	107.	122.	125.	129.	123.	122.	124.	124.	126.	126.	145.	142.	222.	188.	183.	191.	176.	139.
16	186.	211.	161.	196.	185.	195.	170.	189.	176.	179.	177.	181.	192.	179.	188.	184.	178.	182.	184.	192.	212.	203.	197.	222.	188.
17	203.	157.	123.	124.	130.	111.	132.	149.	155.	149.	186.	186.	204.	233.	214.	215.	198.	168.	173.	173.	163.	148.	168.	133.	167.
18	128.	159.	124.	129.	141.	130.	137.	131.	139.	141.	139.	164.	183.	176.	194.	221.	210.	216.	207.	193.	200.	190.	172.	195.	168.
19	190.	208.	205.	199.	207.	209.	207.	201.	192.	189.	185.	189.	207.	223.	211.	193.	183.	178.	172.	178.	144.	152.	140.	138.	187.
20	136.	155.	186.	186.	182.	179.	186.	191.	205.	219.	236.	224.	223.	218.	213.	218.	206.	196.	198.	206.	207.	197.	191.	197.	198.
21	199.	201.	202.	219.	226.	38.	20.	190.	158.	167.	170.	126.	51.	52.	27.	36.	20.	31.	42.	45.	14.	53.	33.	152.	103.
22	68.	131.	150.	130.	132.	134.	140.	145.	144.	163.	184.	160.	142.	165.	146.	160.	144.	136.	144.	119.	134.	133.	131.	144.	141.
23	160.	143.	134.	128.	144.	155.	152.	144.	160.	160.	130.	107.	221.	314.	148.	167.	210.	267.	26.	133.	51.	320.	3.	17.	150.
24	44.	316.	33.	357.	18.	35.	32.	11.	38.	76.	98.	91.	33.	59.	63.	144.	133.	109.	337.	266.	252.	266.	207.	253.	136.
25	263.	292.	4.	355.	34.	26.	18.	10.	7.	317.	74.	127.	135.	128.	133.	141.	141.	144.	118.	127.	126.	113.	104.	108.	127.
26	109.	114.	113.	110.	111.	107.	103.	112.	87.	121.	140.	134.	144.	138.	136.	132.	126.	129.	121.	131.	128.	115.	104.	71.	118.
27	116.	31.	29.	25.	24.	18.	34.	35.	42.	184.	185.	190.	188.	204.	241.	279.	68.	156.	165.	113.	207.	138.	127.	114.	121.
28	35.	51.	33.	68.	33.	89.	33.	29.	29.	17.	27.	26.	26.	30.	26.	17.	16.	20.	27.	23.	23.	25.	29.	21.	31.

MONTHLY AVERAGE = 139.72

MAX. WIND GUST FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY , 2014

IN MILES PER HOUR

DAY	HOUR ENDING																								MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
2	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
8	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
10	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
11	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
12	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
13	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
14	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
15	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
16	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
17	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
18	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
19	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
20	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
21	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
22	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
23	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
24	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
25	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
26	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
27	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
28	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

MONTHLY MAXIMUM = 4.95

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY , 2014

IN DEGREES C

DAY	HOUR ENDING																								AVG
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	2.8	2.9	2.8	2.7	2.7	2.6	2.5	2.3	2.5	2.8	3.5	4.3	4.8	4.7	4.7	4.8	4.1	3.6	3.2	2.9	2.7	2.0	1.0	0.8	3.1
2	0.6	-0.9	-1.0	-1.2	-1.5	-1.3	-1.0	-1.0	-0.6	1.1	2.6	3.4	4.5	5.9	6.4	5.4	4.4	3.5	3.1	2.8	2.1	1.8	1.9	1.8	1.8
3	1.6	1.4	0.7	0.3	-0.3	-1.4	-1.4	-1.0	-0.6	-0.1	0.4	1.1	1.4	1.5	1.8	1.5	0.9	-0.5	-0.7	-1.0	-1.4	-1.8	-1.9	-2.2	-0.1
4	-2.5	-1.9	-2.3	-2.8	-2.8	-3.0	-3.7	-3.7	-3.0	-2.4	-1.2	-0.4	-0.9	-1.2	-1.1	-1.2	-1.6	-2.1	-2.6	-2.9	-3.4	-3.6	-3.9	-4.3	-2.4
5	-4.9	-5.5	-5.9	-6.1	-6.4	-6.6	-7.0	-7.2	-6.5	-5.6	-5.1	-4.4	-4.3	-4.2	-4.3	-4.8	-5.5	-6.7	-7.5	-7.9	-8.0	-8.1	-8.2	-8.1	-6.2
6	-7.9	-7.8	-7.7	-7.6	-7.6	-7.4	-7.3	-7.3	-7.1	-6.4	-5.4	-5.0	-4.4	-4.3	-4.1	-4.2	-4.4	-4.5	-4.7	-5.1	-5.3	-5.5	-5.9	-6.6	-6.0
7	-6.4	-6.2	-5.9	-5.8	-5.8	-5.8	-5.9	-5.9	-4.7	-3.6	-3.4	-2.3	-1.2	0.1	0.3	0.4	0.2	0.0	-0.7	-1.4	-1.6	-1.5	-1.4	-2.0	-2.9
8	-2.3	-2.1	-2.4	-2.7	-2.5	-3.2	-2.8	-2.8	-2.1	-0.4	0.9	1.7	3.0	3.2	2.8	2.3	1.5	0.1	-1.1	-1.1	-1.6	-1.8	-2.5	-1.9	-0.7
9	-1.5	-1.5	-1.4	-1.4	-1.5	-1.2	-1.3	-1.0	-0.6	-0.9	-0.3	0.5	0.4	0.5	0.9	1.2	1.1	1.2	1.3	1.3	1.6	2.0	2.5	2.2	0.2
10	3.0	3.6	3.5	2.9	1.7	2.1	2.4	2.7	2.7	3.0	4.9	6.2	7.7	8.3	7.8	7.9	7.7	7.2	7.1	6.8	6.7	7.0	7.1	7.1	5.3
11	6.8	6.5	6.4	6.3	6.2	6.2	6.4	6.0	6.5	7.4	8.4	9.2	9.9	9.9	10.0	9.4	7.8	7.3	7.1	7.1	7.0	6.8	6.2	6.5	7.4
12	7.4	8.1	10.3	11.5	11.4	10.5	9.6	8.8	8.3	8.2	8.1	9.0	10.2	10.5	10.7	10.6	10.0	9.4	8.9	8.5	7.7	6.1	5.7	6.5	9.0
13	8.2	8.0	7.9	7.5	6.9	6.8	6.6	6.5	6.5	6.9	7.9	8.7	9.3	9.7	9.8	10.2	9.5	8.7	8.0	7.0	7.0	6.9	7.0	7.8	7.9
14	8.4	6.4	5.4	6.2	7.9	8.9	8.4	8.3	8.3	8.5	9.0	8.2	9.4	9.7	9.4	9.2	8.6	7.9	7.8	6.7	6.1	5.9	6.1	5.4	7.8
15	4.9	5.0	4.9	4.5	5.1	4.8	5.0	5.4	6.2	8.0	8.6	6.6	6.5	6.7	6.9	7.0	7.6	7.8	7.3	7.7	6.3	5.6	4.7	4.5	6.2
16	4.5	1.8	1.7	2.0	2.0	2.4	2.1	2.2	2.5	3.6	4.7	5.8	5.9	6.8	7.3	7.4	7.8	7.7	7.8	7.4	6.4	5.5	5.3	5.0	4.8
17	4.1	3.1	1.1	1.3	1.8	2.0	2.9	3.3	3.4	3.6	4.2	4.8	5.1	5.0	4.3	5.7	5.5	4.3	4.0	3.8	3.9	3.6	4.2	3.5	3.7
18	3.7	3.8	3.8	4.3	4.5	4.8	5.3	6.2	6.0	6.3	5.9	6.5	6.8	6.5	6.0	6.0	6.2	5.6	4.8	4.3	4.0	3.4	3.3	3.2	5.0
19	3.2	2.8	2.0	2.3	2.5	2.4	2.3	2.1	2.2	2.7	3.2	3.7	4.3	5.3	5.5	5.1	4.7	4.4	3.9	3.2	2.6	2.7	2.9	3.1	3.3
20	3.5	4.1	4.6	4.6	4.6	5.1	5.4	5.7	5.9	6.0	6.3	6.7	7.2	7.4	7.3	7.6	6.8	6.1	5.6	5.4	4.9	4.6	4.4	4.3	5.6
21	4.4	4.4	4.6	4.6	4.3	3.0	1.2	1.2	1.7	2.1	2.8	3.4	3.6	3.1	2.1	2.5	2.8	2.4	2.1	2.1	2.0	2.1	1.5	1.6	2.7
22	1.3	1.2	1.1	1.1	1.2	1.0	1.0	0.9	0.9	1.3	1.8	1.8	2.4	2.2	2.0	2.0	2.1	1.8	1.5	1.4	1.9	2.1	2.0	2.4	1.6
23	2.8	3.0	3.0	3.3	3.4	3.6	3.4	3.4	4.0	4.1	4.2	4.7	5.3	4.8	4.6	4.5	4.4	3.9	3.6	3.5	3.5	3.4	3.3	3.4	3.8
24	3.2	2.9	2.8	2.7	2.6	2.3	2.2	2.2	2.2	2.7	3.5	4.0	4.3	4.5	4.5	4.6	4.4	4.4	4.5	4.4	4.4	4.4	4.4	4.2	3.6
25	4.0	3.9	3.9	3.8	3.5	3.0	2.9	3.0	3.7	5.0	6.7	8.2	9.0	9.6	9.8	9.7	8.8	7.6	7.0	6.6	6.2	6.1	6.1	6.2	6.0
26	6.0	6.4	6.2	6.1	6.0	5.8	6.1	6.7	7.6	9.6	10.7	12.1	12.9	12.1	12.2	12.1	10.9	9.7	8.9	8.3	7.9	8.0	7.8	6.8	8.6
27	6.9	5.8	5.2	4.8	4.5	4.5	3.7	4.0	5.3	6.6	7.6	8.7	9.3	10.4	10.5	10.2	10.1	9.9	9.8	9.5	9.0	8.5	8.5	8.4	7.6
28	8.0	7.1	5.7	5.3	4.6	4.5	3.9	3.8	4.9	7.6	10.4	12.5	13.4	14.2	13.9	13.2	11.8	9.6	7.8	7.1	6.2	5.7	5.4	4.9	8.0

MONTHLY AVERAGE = 3.37

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY , 2014

IN INCHES

DAY	HOUR ENDING																								TOT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.11
10	0.00	0.00	0.00	0.00	0.07	0.15	0.11	0.09	0.08	0.07	0.05	0.00	0.01	0.06	0.03	0.00	0.05	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.82
11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.07	0.08	0.07	0.10	0.10	0.12	0.03	0.65
12	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.10	0.05	0.27
13	0.01	0.04	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
14	0.00	0.12	0.08	0.02	0.01	0.04	0.01	0.00	0.00	0.03	0.04	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.10	0.07	0.07	0.06	0.04	0.11	0.13	0.01	0.01	0.06	0.00	0.00	0.74
16	0.02	0.07	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.16	0.19	0.17	0.27	0.97
17	0.24	0.10	0.08	0.09	0.04	0.04	0.03	0.06	0.04	0.01	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.86
18	0.04	0.00	0.02	0.00	0.00	0.01	0.01	0.00	0.01	0.04	0.04	0.07	0.10	0.10	0.19	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
19	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.02	0.02	0.09
20	0.02	0.02	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
21	0.00	0.00	0.00	0.00	0.00	0.02	0.12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.01	0.02	0.03	0.01	0.02	0.02	0.01	0.00	0.17
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.05	0.06	0.04	0.02	0.01	0.03	0.01	0.00	0.01	0.00	0.27
24	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.01	0.09	0.10	0.07	0.03	0.04	0.02	0.02	0.01	0.02	0.02	0.01	0.04	0.02	0.01	0.00	0.01	0.56
25	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

MONTHLY TOTAL = 7.05

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY , 2014

IN MPH/DIR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	3N	2SW	1SE	1E	2SE	2SE	2E	2SE	2SE	3SE	3SE	2SE	2S	4W	4N	2NE	3NE	3NE	3N	2NW	3NE	4NE	4NE	3NE
2	4NE	4NE	5NE	5NE	4NE	4NE	2NE	2N	2NE	1E	1NE	2N	1NE	3E	4E	7NW	5N	7N	4NW	3NW	6NW	5N	4N	4N
3	5NW	1W	6NW	4NW	3N	4N	7N	6NE	7NE	4N	8NW	8NW	9NW	7NW	8NW	7W	6NW	6NW	6N	3NE	2NE	2SE	1E	3E
4	5NE	3E	2NE	3N	3N	4N	5N	6NE	4NE	5N	3NE	5SE	11SE	10E	9E	8E	8E	2E	3SE	5SE	6SE	9SE	10SE	12SE
5	10SE	7E	6E	7SE	4E	3E	4E	7SE	8SE	8SE	10E	9E	13E	13E	15SE	14SE	13SE	12SE	13SE	12SE	8SE	7SE	7SE	8E
6	10SE	10SE	11SE	10SE	10SE	11SE	12SE	13SE	15SE	15SE	16SE	16SE	14SE	15SE	10SE	10SE	11SE	8SE	13SE	14SE	10SE	8SE	11SE	10SE
7	10SE	9SE	9SE	8S	5S	5S	5SE	4SE	1SE	2N	2NE	6NE	9N	10NE	11NE	11N	12N	13NE	11NE	8NE	5NE	5NE	4NE	3NE
8	4NE	4NE	4NE	3NE	5SE	4E	7SE	6E	4E	2NE	2N	3E	6E	7E	7E	6E	8SE	12SE	5E	4W	3E	5S	11SE	7SE
9	6SE	6SE	6SE	9S	9SE	5SE	3SE	4SE	4SE	4SE	5E	1NE	4NE	3N	2NE	3NE	5NE	4NE	2NE	2NE	6SE	7SE	7SE	3E
10	5SE	7SE	5S	7S	5SW	5E	5SE	3SE	8SE	9SE	9SE	11S	13S	15SW	12SW	13S	11S	14S	19S	15S	11S	9S	7S	12SW
11	12SW	9S	11S	4SE	7SE	4E	6SE	6SE	6SE	6SE	6SE	5SE	3S	4E	5SE	8SE	12SE	13SE	12SE	13SE	13SE	12SE	13SE	14SE
12	11SE	10SE	18S	23SW	26SW	28SW	22SW	22SW	20SW	19SW	16SW	11SW	17S	15SW	11SW	13SW	11SW	10SW	6SW	4S	5SE	7SE	8SE	10S
13	18SW	16SW	17SW	16SW	16SW	17SW	13S	12S	12S	10S	18SW	21SW	14SW	12SW	9SW	9SW	6S	6SE	6SE	5SE	6SE	6SE	7SE	12SE
14	15SE	9E	16SE	17SE	15S	16S	14S	12S	12S	17SW	17SW	15SW	15SW	19SW	16SW	16SW	15SW	11S	10S	8S	6SE	4SE	4SE	2SE
15	4SE	4SE	5SE	7SE	7SE	5SE	4SE	7E	8SE	12SE	16SE	21SE	22SE	21SE	22SE	21SE	19SE	15SE	14SE	29SW	17S	15S	15S	12S
16	13S	14SW	12S	15S	11S	10S	8S	13S	11S	12S	13S	16S	18S	16S	18S	18S	18S	22S	22S	24S	19SW	11SW	13S	18SW
17	17SW	13SE	11SE	9SE	8SE	5E	5SE	7SE	6SE	7SE	11S	10S	12SW	15SW	15SW	12SW	11S	8S	10S	6S	8S	7SE	11S	4SE
18	3SE	6S	6SE	7SE	8SE	9SE	11SE	14SE	11SE	10SE	8SE	13S	16S	16S	15S	21SW	19SW	23SW	17SW	15S	16S	11S	9S	14S
19	11S	14SW	11SW	10S	11SW	11SW	11SW	10S	10S	9S	10S	11S	10SW	11SW	14SW	11S	10S	12S	9S	12S	8SE	10SE	9SE	10SE
20	10SE	10SE	14S	17S	17S	15S	15S	13S	12SW	13SW	11SW	8SW	9SW	14SW	14SW	14SW	12SW	15S	10S	11SW	11SW	9S	9S	10S
21	11S	11S	9S	9SW	9SW	7NE	5N	1S	1S	4S	4S	2SE	2NE	4NE	6NE	3NE	4N	5NE	5NE	4NE	2N	3NE	1NE	1SE
22	1E	1SE	2SE	3SE	4SE	5SE	4SE	3SE	5SE	6S	7S	7S	5SE	7S	6SE	7S	6SE	5SE	7SE	6SE	7SE	6SE	7SE	6SE
23	5S	6SE	5SE	4SE	5SE	5SE	3SE	4SE	4S	3S	4SE	4E	2SW	2NW	3SE	4S	4SW	4W	0NE	1SE	1NE	3NW	4N	3N
24	3NE	4NW	3NE	3N	3N	4NE	4NE	4N	4NE	3E	3E	5E	3NE	2NE	1NE	2SE	1SE	1E	1NW	2W	1W	0W	1SW	3W
25	2W	1W	2N	2N	5NE	4NE	3N	3N	3N	4NW	3E	6SE	9SE	8SE	7SE	7SE	8SE	9SE	7SE	8SE	8SE	9SE	8E	8E
26	8E	8SE	7SE	8E	9E	7E	5E	5E	4E	7SE	16SE	13SE	13SE	12SE	9SE	12SE	13SE	10SE	8SE	7SE	8SE	7SE	4E	1E
27	2SE	3NE	4NE	5NE	5NE	4N	5NE	6NE	5NE	4S	6S	8S	6S	6SW	7SW	3W	1E	2SE	2S	1SE	4SW	3SE	2SE	4SE
28	1NE	3NE	6NE	3E	4NE	3E	5NE	6NE	8NE	4N	5NE	9NE	9NE	7NE	13NE	13N	13N	13N	11NE	13NE	11NE	10NE	8NE	9N

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH , 2014

IN MILES PER HOUR

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	8.7	7.2	4.7	3.6	4.3	5.3	4.6	4.0	12.1	15.4	15.9	18.0	16.9	16.1	14.5	14.9	16.4	14.6	18.0	18.1	19.1	18.8	18.8	15.8	12.8
2	12.7	13.2	11.3	10.4	10.4	10.9	12.1	11.3	10.5	11.3	12.7	14.7	14.2	14.2	11.9	12.4	10.0	13.8	13.3	10.7	11.6	8.8	16.8	14.1	12.2
3	11.1	10.1	8.1	8.2	7.9	5.5	7.2	8.0	7.7	6.9	10.1	7.7	9.9	12.9	14.6	15.3	13.7	12.1	10.9	15.4	11.2	11.3	13.2	7.7	10.3
4	7.6	7.7	6.6	8.3	6.1	9.1	10.9	6.9	7.8	8.2	9.1	9.5	9.5	11.7	11.3	9.8	9.6	7.4	6.8	5.1	4.1	4.3	5.9	5.6	7.9
5	5.7	5.9	4.5	5.3	8.7	9.8	9.0	9.1	7.6	8.3	13.8	10.6	3.7	3.6	3.8	6.2	8.7	10.8	7.5	10.4	10.8	10.9	12.6	20.4	8.7
6	11.4	11.0	11.7	11.8	10.8	12.5	12.9	9.1	9.0	6.4	5.3	14.9	20.9	20.4	24.0	17.6	12.8	12.9	14.4	13.5	12.9	12.9	14.0	12.8	13.2
7	15.0	13.6	11.9	11.1	10.9	10.0	10.6	10.1	10.4	8.4	8.5	7.6	9.0	7.3	7.3	4.8	4.4	3.9	1.8	2.1	4.7	5.9	6.3	5.3	8.0
8	3.1	4.2	5.6	4.4	4.7	5.0	6.9	7.5	8.4	6.1	5.4	6.9	3.8	4.0	2.3	2.4	4.2	6.5	3.4	6.0	7.0	9.6	10.0	11.0	5.8
9	17.7	14.8	9.9	9.1	8.9	7.5	8.4	7.9	7.5	7.4	9.1	6.4	7.8	7.2	6.7	7.4	6.4	4.0	5.4	4.6	5.5	5.8	4.4	4.9	7.7
10	3.9	5.6	5.1	3.5	1.8	3.2	5.4	5.7	3.7	3.7	6.4	8.8	9.1	4.8	5.2	4.8	3.9	4.1	4.0	3.9	3.0	3.8	3.3	3.6	4.6
11	0.6	1.6	1.1	2.2	1.1	2.3	1.9	3.0	4.1	2.8	2.1	2.3	3.8	4.4	3.4	3.6	6.1	5.5	5.1	7.1	5.4	2.3	2.6	4.1	3.3
12	3.2	3.7	0.6	2.1	1.7	1.0	2.1	2.1	1.3	3.1	2.5	6.5	6.5	4.6	4.1	5.5	6.6	6.1	4.8	6.2	4.2	3.2	4.7	6.0	3.9
13	1.8	1.5	2.7	4.2	2.9	1.6	2.0	2.7	2.8	3.3	4.5	4.8	5.2	5.2	7.6	8.6	6.5	2.6	1.7	3.8	5.4	3.8	5.6	7.7	4.1
14	8.0	8.7	9.2	9.3	8.5	10.1	13.1	15.0	14.9	15.9	19.4	21.5	23.0	21.1	17.8	17.6	20.7	15.5	12.6	8.7	7.3	7.1	5.7	5.2	13.2
15	4.2	3.4	2.7	5.1	6.6	6.4	4.3	2.9	6.1	4.8	3.7	5.3	6.2	10.0	7.8	6.3	6.1	12.7	13.2	5.2	5.6	10.9	12.8	7.4	6.7
16	11.0	12.6	9.0	10.8	7.3	5.6	5.8	8.4	8.0	8.1	7.1	5.6	5.1	6.6	7.4	7.7	8.1	5.7	5.0	5.5	6.2	5.3	4.2	5.3	7.1
17	3.3	3.5	2.8	4.1	5.1	4.4	5.3	4.6	4.7	4.6	4.5	4.0	6.6	3.3	9.4	3.7	3.4	3.6	4.4	3.2	4.1	4.2	6.0	5.5	4.5
18	5.1	5.0	4.7	4.8	4.8	4.6	4.6	3.8	3.5	3.1	5.7	3.3	4.9	3.1	2.6	2.0	3.6	3.0	4.3	3.9	4.1	5.2	4.9	3.1	4.1
19	3.7	5.5	6.0	6.8	7.3	7.0	7.9	9.1	10.0	11.9	10.2	12.1	16.2	19.4	20.4	14.4	8.4	9.9	4.5	7.3	3.4	5.1	8.8	8.1	9.3
20	9.4	7.8	5.2	5.8	5.4	4.8	4.9	5.0	7.8	6.2	5.1	4.0	4.4	5.1	6.7	9.5	7.1	6.3	3.5	4.3	3.8	3.0	3.2	4.2	5.5
21	3.7	4.7	3.2	3.8	4.2	2.9	1.9	2.3	2.0	2.6	10.5	11.4	9.3	8.6	9.0	9.2	10.4	9.7	5.2	2.2	2.7	4.9	5.7	2.9	5.6
22	1.6	0.4	1.9	1.5	0.6	1.2	2.2	3.3	3.5	3.0	2.9	3.6	5.7	6.1	6.8	5.7	3.0	2.5	3.8	2.8	3.2	1.7	0.8	1.4	2.9
23	4.5	3.7	6.4	7.1	7.3	9.3	8.3	6.5	9.4	5.5	4.3	5.6	4.6	3.5	6.7	6.2	5.6	5.7	5.5	6.4	9.4	9.0	7.7	6.5	6.4
24	3.2	3.2	3.9	5.3	5.7	5.3	5.9	3.8	2.8	3.0	3.0	8.9	11.5	9.5	9.3	10.1	11.1	10.4	11.1	14.1	12.9	7.2	7.2	2.8	7.1
25	4.9	4.8	3.7	3.5	4.3	5.8	5.6	7.1	7.9	7.0	5.5	4.4	9.4	8.8	8.8	16.3	17.7	21.3	21.4	19.1	14.3	11.9	4.9	6.6	9.4
26	6.1	3.6	5.2	5.1	6.4	5.2	2.1	5.4	5.9	4.3	2.1	3.3	1.8	6.1	3.0	2.9	3.4	5.0	6.6	5.1	5.1	5.2	5.7	3.5	4.5
27	4.7	3.4	1.9	1.7	1.2	2.7	3.1	3.1	3.9	2.4	6.1	4.3	5.5	3.4	8.6	10.4	8.4	5.1	7.4	6.9	7.9	5.5	5.5	5.1	4.9
28	4.8	6.8	4.7	9.9	9.6	13.2	13.1	14.2	14.8	13.2	10.8	14.4	14.1	12.1	9.5	9.6	9.4	8.2	4.9	8.3	9.6	7.4	8.1	6.2	9.9
29	6.8	7.1	8.6	8.6	9.7	9.1	10.2	12.3	13.7	11.8	11.5	11.9	11.5	11.4	14.1	12.8	12.7	5.1	7.2	8.4	10.4	11.4	9.8	9.9	10.3
30	9.5	9.0	8.3	8.5	8.3	9.3	10.2	10.0	10.6	14.7	15.2	13.5	13.0	12.0	10.5	7.5	6.8	6.7	7.8	5.2	4.1	4.4	3.5	3.2	8.8
31	2.8	3.0	1.6	2.1	2.6	1.9	3.3	3.1	4.8	5.9	11.2	12.7	11.0	9.4	8.1	10.5	8.5	8.4	6.0	6.6	7.0	7.3	7.1	5.4	6.3

MONTHLY AVERAGE = 7.37

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH , 2014

IN DEGREES

(MEASURED CLOCKWISE FROM NORTH)
HOUR ENDING

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	25.	33.	37.	25.	40.	65.	55.	96.	122.	128.	128.	130.	132.	132.	128.	129.	132.	131.	130.	131.	130.	132.	128.	138.	102.
2	150.	140.	145.	147.	150.	145.	138.	142.	141.	136.	139.	133.	132.	134.	137.	134.	134.	131.	134.	138.	147.	168.	217.	207.	147.
3	188.	176.	162.	144.	165.	110.	153.	155.	126.	130.	141.	157.	198.	229.	232.	224.	231.	223.	218.	202.	194.	192.	201.	190.	181.
4	191.	184.	167.	179.	184.	200.	217.	193.	187.	175.	152.	154.	149.	172.	188.	187.	197.	175.	149.	146.	153.	118.	109.	130.	169.
5	131.	110.	46.	99.	136.	136.	138.	152.	156.	178.	198.	247.	256.	327.	334.	108.	132.	124.	115.	124.	141.	147.	202.	198.	164.
6	185.	166.	155.	156.	145.	161.	181.	165.	165.	144.	178.	201.	200.	209.	208.	197.	189.	194.	204.	203.	209.	212.	209.	206.	185.
7	206.	196.	196.	193.	194.	190.	174.	156.	172.	181.	182.	182.	197.	178.	198.	230.	222.	228.	353.	108.	140.	140.	139.	147.	187.
8	113.	148.	143.	148.	175.	178.	141.	155.	156.	207.	169.	198.	97.	41.	129.	46.	129.	146.	182.	184.	173.	178.	181.	185.	150.
9	223.	214.	191.	175.	177.	162.	147.	148.	157.	185.	194.	205.	186.	196.	224.	234.	261.	188.	157.	156.	182.	199.	229.	210.	192.
10	204.	301.	328.	340.	327.	42.	14.	24.	305.	219.	263.	226.	214.	72.	51.	42.	204.	132.	140.	158.	136.	113.	179.	132.	174.
11	156.	65.	105.	85.	98.	350.	351.	54.	30.	41.	56.	19.	309.	7.	14.	27.	21.	352.	31.	37.	69.	256.	266.	36.	118.
12	54.	21.	346.	136.	78.	99.	335.	0.	338.	223.	192.	274.	293.	279.	228.	231.	264.	287.	330.	32.	67.	48.	13.	66.	176.
13	135.	162.	339.	32.	100.	239.	199.	121.	166.	132.	192.	203.	181.	199.	238.	239.	255.	269.	110.	156.	196.	157.	152.	167.	181.
14	143.	138.	153.	158.	161.	163.	180.	203.	199.	200.	221.	228.	230.	233.	235.	241.	241.	240.	236.	217.	186.	160.	138.	137.	193.
15	128.	110.	106.	129.	134.	135.	122.	136.	194.	172.	125.	168.	185.	202.	193.	149.	170.	226.	234.	225.	200.	224.	218.	198.	170.
16	194.	226.	213.	223.	186.	153.	159.	170.	158.	184.	178.	183.	196.	176.	195.	160.	137.	131.	119.	108.	108.	106.	132.	201.	166.
17	188.	68.	117.	133.	162.	116.	129.	113.	126.	126.	155.	158.	53.	31.	27.	97.	60.	62.	71.	67.	104.	145.	123.	132.	107.
18	131.	133.	132.	131.	127.	147.	125.	156.	157.	125.	180.	184.	142.	114.	72.	219.	21.	23.	40.	115.	173.	152.	198.	146.	131.
19	185.	156.	155.	157.	156.	154.	188.	176.	175.	183.	189.	196.	205.	211.	221.	235.	55.	48.	54.	35.	58.	134.	172.	151.	152.
20	172.	159.	147.	170.	170.	150.	177.	190.	193.	188.	212.	210.	263.	271.	39.	36.	18.	31.	12.	29.	44.	28.	32.	35.	124.
21	42.	26.	30.	30.	35.	78.	125.	78.	42.	21.	20.	29.	10.	7.	5.	353.	323.	321.	322.	338.	22.	48.	43.	144.	104.
22	174.	187.	167.	136.	79.	104.	115.	165.	160.	212.	229.	214.	219.	224.	264.	292.	11.	54.	29.	17.	266.	266.	98.	275.	165.
23	12.	33.	26.	17.	31.	19.	21.	23.	24.	26.	16.	258.	292.	350.	297.	286.	18.	348.	333.	36.	35.	39.	32.	35.	109.
24	30.	52.	11.	32.	32.	26.	24.	357.	352.	1.	32.	121.	132.	121.	126.	135.	132.	153.	142.	129.	166.	145.	200.	159.	117.
25	127.	79.	82.	65.	191.	186.	146.	116.	112.	175.	211.	114.	222.	192.	142.	174.	181.	192.	201.	196.	183.	190.	138.	157.	157.
26	177.	180.	147.	142.	131.	115.	119.	136.	171.	215.	90.	110.	188.	189.	121.	147.	149.	126.	170.	169.	150.	151.	141.	122.	148.
27	151.	123.	185.	233.	43.	41.	24.	143.	119.	160.	208.	178.	201.	194.	220.	214.	213.	147.	169.	144.	156.	143.	125.	139.	153.
28	133.	112.	132.	130.	129.	126.	119.	124.	133.	140.	130.	136.	126.	131.	136.	142.	153.	148.	200.	202.	186.	134.	130.	142.	141.
29	142.	147.	149.	157.	152.	144.	146.	184.	202.	162.	165.	155.	148.	172.	197.	195.	197.	145.	157.	154.	181.	177.	173.	168.	165.
30	178.	174.	162.	152.	164.	160.	166.	160.	175.	188.	193.	197.	208.	220.	205.	183.	186.	197.	188.	137.	141.	122.	113.	71.	168.
31	60.	108.	104.	70.	45.	288.	17.	28.	27.	42.	117.	114.	98.	85.	106.	97.	85.	80.	90.	80.	41.	28.	28.	25.	78.

MONTHLY AVERAGE = 150.78

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH , 2014

IN DEGREES C

DAY	HOUR ENDING																								AVG
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	4.4	4.4	4.3	4.0	4.0	4.4	4.3	4.7	4.4	3.6	2.8	2.0	2.0	1.5	1.9	2.5	2.4	2.7	2.7	2.4	2.5	2.0	1.4	1.7	3.0
2	1.9	1.4	1.7	1.0	0.8	1.0	1.3	1.6	1.5	1.9	2.5	2.9	3.7	4.1	4.5	4.2	4.2	4.4	5.0	5.2	5.2	5.3	7.0	7.0	3.3
3	7.0	7.0	7.1	7.4	7.6	7.4	7.6	6.8	6.5	6.7	7.4	8.6	9.8	10.9	11.2	11.0	11.0	10.6	9.9	9.3	9.0	8.6	8.1	7.9	8.5
4	8.1	8.0	8.0	7.8	7.5	7.6	7.7	7.3	7.6	7.7	7.7	8.1	9.0	9.9	9.9	10.3	10.4	10.0	9.6	9.4	9.4	9.5	9.9	10.3	8.8
5	10.1	10.1	9.4	9.1	9.1	9.3	9.6	10.2	10.8	11.5	12.8	12.7	13.7	13.3	12.8	12.4	12.3	11.6	10.8	10.4	10.4	11.3	11.0	10.6	11.1
6	9.8	9.7	9.5	9.3	9.2	9.8	10.0	9.5	10.0	10.8	11.8	12.4	10.9	9.8	9.9	9.9	9.1	9.0	9.1	9.1	9.0	9.0	8.9	8.8	9.8
7	8.8	8.4	8.4	8.1	7.8	7.4	7.3	7.4	8.3	9.3	10.2	11.0	11.7	12.3	13.0	13.5	13.7	13.2	12.1	10.4	9.6	9.3	9.0	8.7	10.0
8	8.0	8.0	8.0	8.4	8.1	7.4	9.6	10.8	11.5	11.0	11.5	10.7	9.4	8.7	9.4	9.2	9.8	11.1	11.3	11.2	11.4	11.6	11.7	11.9	10.0
9	11.6	11.1	10.7	10.3	10.0	9.7	9.5	9.5	9.9	10.4	11.2	10.8	11.7	12.6	13.0	12.7	11.2	10.6	9.8	9.4	9.2	8.9	8.5	8.4	10.4
10	8.1	7.6	7.2	7.1	7.0	6.7	6.6	6.8	7.0	7.1	7.3	7.1	7.2	7.4	6.4	7.0	6.7	6.2	6.1	5.8	5.7	5.6	5.4	5.0	6.7
11	4.6	7.3	8.7	8.9	9.0	8.8	7.9	8.3	9.5	12.1	13.4	14.8	16.6	17.6	18.5	18.5	17.2	16.0	14.1	12.1	11.5	10.8	10.0	9.1	11.9
12	8.8	7.9	8.6	7.7	7.1	6.8	6.8	7.2	9.8	11.3	15.9	17.3	17.3	18.6	19.2	19.7	19.4	17.7	15.8	13.5	12.5	11.5	10.9	10.6	12.6
13	9.9	8.8	8.2	7.5	7.2	6.4	6.0	6.6	8.2	9.9	10.6	12.1	14.6	16.1	16.7	16.1	15.4	14.5	13.8	13.1	12.4	12.1	11.5	10.8	11.2
14	10.5	10.7	11.2	11.6	11.7	11.8	11.9	12.2	12.1	12.9	13.9	14.4	14.3	14.8	14.5	14.6	14.1	13.6	12.5	11.7	10.5	9.7	9.4	10.0	12.3
15	9.9	9.4	8.3	7.8	8.6	9.9	10.0	10.0	10.4	10.8	12.5	15.0	15.9	15.9	16.4	16.6	16.7	16.9	15.7	13.6	13.2	12.7	12.2	12.2	12.5
16	12.2	11.7	11.1	10.6	9.7	9.2	9.0	8.9	8.9	8.8	8.9	8.8	8.7	8.7	8.5	8.1	6.8	6.3	5.9	5.6	4.8	3.9	3.7	4.2	8.0
17	4.4	4.0	3.9	4.2	4.8	4.4	4.4	4.7	5.9	6.6	7.4	7.5	8.7	10.5	8.7	9.1	9.0	8.6	8.0	7.6	6.9	6.1	5.5	5.6	6.5
18	5.5	5.7	5.8	5.7	5.5	4.9	5.2	5.7	6.9	8.0	8.6	9.0	9.7	10.2	10.2	11.1	10.8	10.1	9.5	9.5	9.3	9.2	8.8	8.5	8.1
19	8.5	8.5	8.4	8.1	7.8	7.7	7.7	7.8	8.1	8.5	8.6	9.0	9.4	10.6	12.2	12.5	9.2	6.8	6.6	6.2	5.6	6.0	6.0	5.6	8.1
20	5.2	4.9	5.0	5.1	5.1	4.8	4.9	5.2	5.6	6.2	7.2	9.1	9.2	10.5	10.6	9.9	9.5	9.1	8.0	7.4	7.1	6.9	6.1	5.8	7.0
21	5.0	3.4	3.1	2.7	2.2	1.9	2.5	2.7	4.5	7.5	8.9	9.5	10.6	11.2	11.7	11.7	11.2	10.1	8.4	7.6	7.0	6.2	5.7	5.4	6.7
22	4.0	3.8	3.5	3.2	2.6	2.9	3.6	4.4	6.7	9.1	10.6	11.9	12.8	13.5	13.6	13.2	12.5	12.3	11.2	10.7	10.0	9.0	8.5	8.2	8.4
23	7.6	7.6	7.5	7.8	7.3	7.0	7.2	8.4	9.4	10.8	12.2	13.2	14.1	15.3	15.7	15.9	15.7	14.7	12.9	11.8	11.3	10.4	9.6	9.1	10.9
24	9.2	9.0	8.2	7.4	6.7	6.3	6.7	8.5	12.0	14.1	15.7	19.5	20.9	21.5	21.7	21.4	20.2	18.7	17.2	16.1	15.1	14.4	13.6	12.9	14.0
25	11.3	11.3	11.5	11.3	11.3	10.0	8.4	8.8	9.6	10.4	9.7	10.4	9.9	10.5	11.6	12.1	11.9	11.5	10.5	8.6	8.0	7.7	6.9	7.3	10.0
26	7.1	7.0	6.5	6.4	6.7	6.5	5.7	6.6	7.8	7.7	8.6	9.7	10.5	10.3	8.9	8.8	7.3	7.6	7.8	7.2	7.0	6.7	6.7	6.7	7.6
27	6.6	6.6	6.8	6.5	5.8	5.8	5.7	6.2	6.4	7.0	7.6	8.3	8.9	10.1	9.8	10.3	9.1	9.2	8.0	7.2	7.3	7.0	6.9	7.5	7.5
28	7.6	7.4	7.2	7.8	7.6	6.9	6.8	7.2	8.3	8.9	8.0	8.7	8.2	9.3	9.5	10.3	11.3	11.2	10.8	9.8	8.4	7.8	8.1	8.1	8.5
29	8.1	8.1	8.4	8.0	7.9	8.1	8.0	7.6	7.0	6.7	6.8	6.8	7.7	8.9	10.2	10.3	9.6	7.8	7.4	7.0	6.9	6.9	6.7	6.5	7.8
30	6.4	6.2	5.9	5.7	5.4	5.1	5.1	5.7	6.2	7.5	8.8	9.7	9.9	9.2	9.2	9.0	8.9	8.8	8.0	7.1	6.7	5.9	5.2	4.9	7.1
31	3.9	4.0	3.9	3.6	2.7	3.2	3.0	3.9	5.1	9.2	12.5	13.6	14.6	15.0	15.3	15.4	14.9	14.2	13.4	12.7	11.4	10.2	8.9	8.4	9.3

MONTHLY AVERAGE = 8.96

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH , 2014

IN INCHES

DAY	HOUR ENDING																								TOT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
2	0.00	0.01	0.00	0.00	0.00	0.02	0.01	0.02	0.02	0.03	0.03	0.05	0.10	0.06	0.08	0.08	0.07	0.00	0.03	0.04	0.06	0.17	0.05	0.02	0.95
3	0.03	0.07	0.10	0.00	0.04	0.03	0.02	0.09	0.08	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.54
4	0.00	0.00	0.00	0.09	0.13	0.00	0.10	0.05	0.08	0.09	0.05	0.04	0.00	0.01	0.02	0.00	0.00	0.01	0.01	0.00	0.08	0.01	0.00	0.03	0.80
5	0.05	0.07	0.26	0.14	0.13	0.12	0.04	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.03	0.08	0.11	0.10	0.01	0.00	0.20	0.09	1.47
6	0.00	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.14
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.12	0.10	0.14	0.07	0.08	0.10	0.11	0.08	0.11	0.10	0.13	0.06	1.23
9	0.09	0.00	0.00	0.02	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.06	0.02	0.00	0.40
10	0.04	0.09	0.07	0.05	0.07	0.06	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.03	0.25	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.76
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.05
14	0.07	0.04	0.03	0.05	0.08	0.04	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.08	0.10	0.03	0.01	0.34
16	0.04	0.05	0.02	0.04	0.06	0.10	0.12	0.09	0.06	0.06	0.06	0.09	0.11	0.07	0.09	0.08	0.08	0.08	0.08	0.08	0.10	0.06	0.01	0.00	1.63
17	0.04	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.01	0.00	0.02	0.05	0.03	0.00	0.00	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.02	0.00	0.14	0.00	0.00	0.01	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.26
26	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.03	0.00	0.12	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.22
27	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.06	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.16
28	0.00	0.00	0.01	0.00	0.01	0.10	0.09	0.02	0.00	0.03	0.07	0.04	0.08	0.00	0.01	0.00	0.00	0.00	0.00	0.07	0.06	0.01	0.00	0.00	0.60
29	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.08	0.11	0.09	0.07	0.03	0.00	0.01	0.00	0.00	0.02	0.00	0.11	0.03	0.02	0.00	0.00	0.01	0.60
30	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

MONTHLY TOTAL = 10.89

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH , 2014

IN MPH/DIR

DAY	HOUR ENDING																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	9NE	7NE	5NE	4NE	4NE	5NE	5NE	4E	12SE	15SE	16SE	18SE	17SE	16SE	14SE	15SE	16SE	15SE	18SE	18SE	19SE	19SE	19SE	16SE
2	13SE	13SE	11SE	10SE	10SE	11SE	12SE	11SE	10SE	11SE	13SE	15SE	14SE	14SE	12SE	12SE	10SE	14SE	13SE	11SE	12SE	9S	17SW	14SW
3	11S	10S	8S	8SE	8S	6E	7SE	8SE	8SE	7SE	10SE	8SE	10S	13SW	15SW	15SW	14SW	12SW	11SW	15S	11S	11S	13S	8S
4	8S	8S	7S	8S	6S	9S	11SW	7S	8S	8S	9SE	9SE	9SE	12S	11S	10S	10S	7S	7SE	5SE	4SE	4SE	6E	6SE
5	6SE	6E	5NE	5E	9SE	10SE	9SE	9SE	8SE	8S	14S	11SW	4W	4NW	4NW	6E	9SE	11SE	7SE	10SE	11SE	11SE	13S	20S
6	11S	11S	12SE	12SE	11SE	13S	13S	9S	9S	6SE	5S	15S	21S	20SW	24SW	18S	13S	13S	14SW	13SW	13SW	13SW	14SW	13SW
7	15SW	14S	12S	11S	11S	10S	11S	10SE	10S	8S	8S	8S	9S	7S	7S	5SW	4SW	4SW	2N	2E	5SE	6SE	6SE	5SE
8	3SE	4SE	6SE	4SE	5S	5S	7SE	8SE	8SE	6SW	5S	7S	4E	4NE	2SE	2NE	4SE	6SE	3S	6S	7S	10S	10S	11S
9	18SW	15SW	10S	9S	9S	7S	8SE	8SE	7SE	7S	9S	6SW	8S	7S	7SW	7SW	6W	4S	5SE	5SE	6S	6S	4SW	5SW
10	4SW	6NW	5NW	4N	2NW	3NE	5N	6NE	4NW	4SW	6W	9SW	9SW	5E	5NE	5NE	4SW	4SE	4SE	4S	3SE	4SE	3S	4SE
11	1SE	2NE	1E	2E	1E	2N	2N	3NE	4NE	3NE	2NE	2N	4NW	4N	3N	4NE	6N	5N	5NE	7NE	5E	2W	3W	4NE
12	3NE	4N	1N	2SE	2E	1E	2NW	2N	1N	3SW	2S	7W	6NW	5W	4SW	5SW	7W	6W	5NW	6NE	4NE	3NE	5N	6NE
13	2SE	1S	3N	4NE	3E	2SW	2S	3SE	3S	3SE	5S	5SW	5S	5S	8SW	9SW	6W	3W	2E	4SE	5S	4SE	6SE	8S
14	8SE	9SE	9SE	9S	8S	10S	13S	15SW	15S	16S	19SW	21SW	23SW	21SW	18SW	18SW	21SW	15SW	13SW	9SW	7S	7S	6SE	5SE
15	4SE	3E	3E	5SE	7SE	6SE	4SE	3SE	6S	5S	4SE	5S	6S	10S	8S	6SE	6S	13SW	13SW	5SW	6S	11SW	13SW	7S
16	11S	13SW	9SW	11SW	7S	6SE	6S	8S	8S	8S	7S	6S	5S	7S	7S	8S	8SE	6SE	5SE	6E	6E	5E	4SE	5S
17	3S	3E	3SE	4SE	5S	4SE	5SE	5SE	5SE	5SE	4SE	4S	7NE	3NE	9NE	4E	3NE	4NE	4E	3NE	4E	4SE	6SE	6SE
18	5SE	5SE	5SE	5SE	5SE	5SE	5SE	4SE	3SE	3SE	6S	3S	5SE	3SE	3E	2SW	4N	3NE	4NE	4SE	4S	5SE	5S	3SE
19	4S	6SE	6SE	7SE	7SE	7SE	8S	9S	10S	12S	10S	12S	16SW	19SW	20SW	14SW	8NE	10NE	4NE	7NE	3NE	5SE	9S	8SE
20	9S	8S	5SE	6S	5S	5SE	5S	5S	8S	6S	5SW	4SW	4W	5W	7NE	10NE	7N	6NE	3N	4NE	4NE	3NE	3NE	4NE
21	4NE	5NE	3NE	4NE	4NE	3E	2SE	2E	2NE	3N	10N	11NE	9N	9N	9N	9N	10NW	10NW	5NW	2N	3N	5NE	6NE	3SE
22	2S	0S	2S	1SE	1E	1E	2SE	3S	4S	3SW	3SW	4SW	6SW	6SW	7W	6W	3N	3NE	4NE	3N	3W	2W	1E	1W
23	4N	4NE	6NE	7N	7NE	9N	8N	6NE	9NE	6NE	4N	6W	5W	4N	7NW	6W	6N	6N	6NW	6NE	9NE	9NE	8NE	6NE
24	3NE	3NE	4N	5NE	6NE	5NE	6NE	4N	3N	3N	3NE	9SE	11SE	9SE	9SE	10SE	11SE	10SE	11SE	14SE	13S	7SE	7S	3S
25	5SE	5E	4E	4NE	4S	6S	6SE	7SE	8E	7S	6SW	4SE	9SW	9S	9SE	16S	18S	21S	21S	19S	14S	12S	5SE	7SE
26	6S	4S	5SE	5SE	6SE	5SE	2SE	5SE	6S	4SW	2E	3E	2S	6S	3SE	3SE	3SE	5SE	7S	5S	5SE	5SE	6SE	4SE
27	5SE	3SE	2S	2SW	1NE	3NE	3NE	3SE	4SE	2S	6SW	4S	5S	3S	9SW	10SW	8SW	5SE	7S	7SE	8SE	6SE	6SE	5SE
28	5SE	7E	5SE	10SE	10SE	13SE	13SE	14SE	15SE	13SE	11SE	14SE	14SE	12SE	10SE	10SE	9SE	8SE	5S	8S	10S	7SE	8SE	6SE
29	7SE	7SE	9SE	9SE	10SE	9SE	10SE	12S	14S	12S	12S	12SE	11SE	11S	14S	13S	13S	5SE	7SE	8SE	10S	11S	10S	10S
30	10S	9S	8S	8SE	8S	9S	10S	10S	11S	15S	15S	13S	13SW	12SW	10SW	8S	7S	7S	8S	5SE	4SE	4SE	4SE	3E
31	3NE	3E	2E	2E	3NE	2W	3N	3NE	5NE	6NE	11SE	13SE	11E	9E	8E	11E	9E	8E	6E	7E	7NE	7NE	7NE	5NE

APPENDIX D

Area 5 Top Deck Report

CEDAR HILLS REGIONAL LANDFILL AREA 5 TOP DECK MONITORING REPORT

First Quarter 2014



Department of Natural Resources and Parks
Solid Waste Division

May 2014
Printed on recycled paper

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AREA 5 TOP DECK MONITORING QUARTERLY REPORT

FIRST QUARTER 2014

This report provides the quarterly performance analysis of the interim soil cover system over Area 5 in the Cedar Hills Regional Landfill. The intent of the report is to provide the necessary information to determine whether the top deck cover system is functioning as designed. Monitoring of leachate, stormwater and the top deck surface is conducted and reported to identify any problems so that they may be corrected in a timely manner and the environment protected from potential harmful impacts.

I. LEACHATE MONITORING

Overview of the Top Deck Monitoring Program

King County Solid Waste Division (KCSWD) is continuing to experience technical issues with its leachate volume calculation system for Area 5. We are working to resolve these issues and plan to report the logged data in the earliest Top Deck Monitoring Report.

KCSWD staff will continue to evaluate leachate volumes collected throughout the landfill that are pumped to the wastewater treatment plant. We will also continue to compare the historical volumes generated through typical landfill construction and closure with the phased closure and interim top deck cover utilized in Area 5. These comparisons provide an initial effort to assess the interim cover performance. The evaluation accounts for variations in rainfall by normalizing the leachate flows in terms of gallons discharged per inch of rainfall. The flow is also normalized relative to pounds of waste in-place. These normalized flows for the entire site are presented in Table 1.

TABLE 1
SITEWIDE LEACHATE PRODUCTION

Year	Leachate	Surface Area of Refuse Areas	Refuse In Place	Precipitation	Flow	Flow	Flow	Flow
	(MG/yr)	(acres)	(lb)	(in/yr)	(gal/Acre/yr)	(gal/Acre/in)	(gal/lb/yr)	(gal/lb/in)
1986	163.03	138.5	11,328,841,100	54.79	1,177,112	21,484	0.0144	0.00026
1987	139.53	138.5	12,927,926,300	39.6	1,007,422	25,440	0.0108	0.00027
1988	169.67	161.9	14,525,504,000	48.63	1,048,009	21,551	0.0117	0.00024
1989	176	161.9	16,203,204,000	44.12	1,087,110	24,640	0.0109	0.00025
1990	294.75	161.9	17,965,254,000	71.6	1,820,594	25,427	0.0164	0.00023
1991	224.27	221.4	19,778,412,000	45.85	1,012,967	22,093	0.0113	0.00025
1992	156.46	221.4	21,454,600,000	38.64	706,694	18,289	0.0073	0.00019
1993	150.83	221.4	23,051,348,000	35.01	681,264	19,459	0.0065	0.00019
1994	159.8	221.4	24,657,528,000	38.55	721,764	18,723	0.0065	0.00017
1995	201.11	221.4	26,294,654,000	48.4	908,376	18,768	0.0076	0.00016
1996	243.03	221.4	27,946,704,000	57.08	1,097,714	19,231	0.0087	0.00015
1997	239.23	221.4	29,665,380,000	57.24	1,080,511	18,877	0.0081	0.00014
1998	202.8	221.4	31,432,828,000	42.82	916,006	21,392	0.0065	0.00015
1999	219.15	283.42	33,273,828,000	45.9	773,229	16,848	0.0066	0.00014
2000	148.82	283.42	35,167,828,000	33.15	525,102	15,840	0.0042	0.00013
2001	174.08	283.42	37,041,828,000	47.28	614,194	12,991	0.0047	0.0001
2002	133.4	283.42	38,919,828,000	35.13	470,690	13,399	0.0034	0.0001
2003	181.6	283.42	40,877,828,000	46.39	640,761	13,812	0.0044	0.0001
2004	185.72	328.72	42,889,828,000	34.08	564,983	16,578	0.0043	0.00013
2005	175.31	328.72	44,867,538,000	40.75	533,313	13,087	0.0039	0.0001
2006	264.95	328.72	46,820,938,000	52.94	806,009	15,225	0.0057	0.00011
2007	161.48	328.72	47,129,756,000	38.68	491,239	16,143	0.0034	0.000112
2008	126.02	328.72	48,990,990,000	42.32	383,366	9,059	0.0026	0.00006
2009	172.16	328.72	49,414,219,997	42.42	523,741	12,347	0.0035	0.00008
2010	199.4	335.72	51,076,043,997	49.25	593,959	12,060	0.0039	0.00008
2011	180.2	353.12*	52,701,411,694	51.05	510,308	9,996	0.0034	0.00007
2012	202.3	353.12*	54,315,239,773	58.16	572,972	9,852	0.0037	0.00006
2013	156.4	353.12*	55,933,569,773	47.77	442,923	9,272	0.0028	0.00006
2014	78.83	353.12*	56,462,578,283	24.7	223,239	9,038	0.0014	0.00006
2013: Precipitation, leachate and refuse in place through 3/31/14								

* The 353.12 acre value was a plan view area calculated by ACAD, using the area inquiry feature of a closed polyline.

II. SURFACE MONITORING

King County Solid Waste Division provided a plan for surface monitoring for the top deck of Area 5. This monitoring plan is composed of three parts: landfill gas inspections, leachate seep inspections and settlement monitoring. The purpose of this monitoring is to detect any conditions affecting the cover system that may permit landfill gas emissions, leachate seeps, or excessive or differential settlement.

Landfill Gas Inspections

Serpentine walks are conducted across the Area 5 top deck and its side slopes on a quarterly basis (see Appendix B: *Plot of GPS Generated Track Lines*). This report contains the second quarter's Serpentine Surface Monitoring Data that was conducted from March 17th to March 29th.

In addition to the serpentine walks, monthly inspections of the gas system, stormwater system, and cover system of Area 5 are performed by the Solid Waste Operations staff. All internal inspection reports showed satisfactory conditions this quarter. These inspection reports are included in Appendix A: *Inspection Reports*.

Also, throughout the first quarter the Engineering Services Section (ESS) staff performed monthly Landfill Facility Site Inspections. No issues were noted pertaining to Area 5. The ESS Inspections are included in Appendix A.

Seven Health Department Inspections were performed during the first quarter, on January 10th, February 20th, February 28th, March 6th, March 14th, March 21st, and March 26th. Inspection reports on February 20th and February 28th noted a ponded/pooled area of water in an area of settlement in Area 5. A subsequent inspection conducted on March 21st noted that drainage of the ponded area in Area 5 has been improved. An inspection on March 26th noted that methane measurements exceeded 500 ppm in Area 5 and Area 6. A follow-up inspection conducted by SWD personnel on April 4 measured methane at 117 ppm and 194 ppm. All Health Department Inspection Reports and the follow-up internal inspection are provided in Appendix A.

Leachate Seep Inspections

Visual inspections for leachate seeps are conducted by KCSWD operations personnel in conjunction with the surface emissions monitoring. No indications of leachate seeps were recorded during the quarter by either SWD or Health Department personnel.

Settlement Monitoring

Settlement of Area 5 is evaluated both through visual inspections and through topographic surveys at control points on the top deck. A site map showing the settlement monitoring points is included as Figure 1. Visual inspections are completed by both operations and engineering staff. The most recent settlement levels were measured on Area 5 on February 19th, 2014. The survey data is given in Table 2, and the settlement at each point is given in Table 3, which demonstrates that the refuse settlement (feet/month) continues to slowly decrease with time, as expected. No erosion has been observed.

Future plans for Area 5 are for continued filling to the approved 788 foot elevation. This filling will occur following the filling of Area 8, which was approved by King County Council on Dec. 6, 2010.

TABLE 2 AREA 5 SURFACE SURVEY DATA					
Station	Date	Elevation	Station	Date	Elevation
A5SM-1 (Destroyed during filling of Area 7)	10/4/2005	699.18	A5SM2 (cont.)	11/6/2012	763.35
	2/1/2006	697.7		5/22/2013	762.77
	6/27/2006	696.51		8/8/2013	762.53
	2/14/2007	694.53		2/19/2014	762.06
	7/24/2007	693.34	A5SM3 NEW 2/14/2007	2/14/2007	786.4
	2/29/2008	691.77		4/20/2007	786.25
	7/29/2008	691.26		7/24/2007	785.68
	11/24/2008	690.61		2/29/2008	784.87
	4/6/2009	690.16		7/29/2008	784.31
	7/9/2009	689.77		11/24/2008	783.76
	12/22/2009	689.13		4/6/2009	783.35
	3/1/2010	688.77		7/9/2009	783.05
	8/2/2010	688.6		12/22/2009	782.44
	12/21/2010	688.1		3/1/2010	782.08
	4/6/2011	687.83		8/2/2010	781.78
	8/8/2011	687.46		12/21/2010	781.25
	1/23/2012	687.19		4/6/2011	780.94
	5/18/2012	686.78		8/8/2011	780.66
	7/12/2012	686.69		1/23/2012	780.26
	11/2/2012	686.55		5/18/2012	779.9
	5/22/2013	686.09		7/12/2012	779.69
A5SM-2	10/4/2005	785.17		11/2/2012	779.56
	2/1/2006	782.52		5/22/2013	779.09
	6/27/2006	780.48		9/5/2013	779.66
	4/20/2007	776.95		2/19/2014	777.68
	7/24/2007	775.63	PMX20074 NEW 8/16/2007 (Destroyed original during Phase 3 of Area 6)	8/16/2007	781.56
	2/29/2008	773.44		2/29/2008	780.1
	7/29/2008	772.2		7/29/2008	779.13
	11/24/2008	771.29		11/24/2008	778.21
	4/6/2009	770.35		4/6/2009	777.41
	7/9/2009	769.79		7/9/2009	776.99
	12/22/2009	768.6		12/22/2009	776.1
	3/1/2010	768.05		3/1/2010	775.81
	8/2/2010	767.28		8/2/2010	775.29
	12/21/2010	766.53		12/21/2010	774.79
	4/6/2011	765.86		4/6/2011	774.42
	8/8/2011	765.34		8/8/2011	774.19
	1/23/2012	764.53		1/23/2012	773.79
	5/18/2012	763.99		5/18/2012	773.41
	7/12/2012	763.83		7/12/2012	773.26

III. STORMWATER MONITORING

Collection of Stormwater Samples

Samples from Area 5 top deck stormwater were collected at monitoring stations SW-A5TD1, SW-A5TD2, SW-A5TD4, SW-A5TD with comparison samples collected at stormwater sample location SW-S1, and leachate sample location LAPI during the quarter. All samples were collected and analyzed in accordance with the Area 5 Top Deck Stormwater Runoff Monitoring Plan. Figure 2 shows the locations of the Area 5 sampling stations.

Stormwater Sample Evaluation

Stormwater runoff monitoring locations, field measurements, and laboratory analyses evaluated in this report are intended to assess whether the stormwater runoff from the top deck has been contaminated by the underlying waste. Stormwater was collected either during or following significant storm events from four locations on or near the top deck of Area 5. These data will be compared to stormwater sample data collected from a location known to be unaffected by the landfill waste--sampling point SW-S1--and will also be compared to the leachate sample data collected from the inflow into the aeration ponds, LAPI. Elevated concentrations of selected parameters in the top deck stormwater samples will serve as indicators that the underlying waste may be impacting the runoff.

The analytes for the top deck stormwater runoff samples were selected based on parameters that would typically have elevated concentrations in leachate in comparison to stormwater (i.e., iron, sulfate, chemical oxygen demand, total organic carbon, alkalinity, and chloride); and are less likely to be impacted by surface factors, such as wildlife contact or contact with constituents of fertilizers used during hydroseeding. The stormwater quality results are also screened against existing surface water quality criteria (WAC 173-201A) and Benchmarks for the Washington State Industrial Stormwater General Permit. Applicable criteria/benchmarks are listed in Table 4.

TABLE 4		
Water Quality Criteria/Benchmarks For Applicable Parameters		
Parameter	Numerical Criterion	Source
pH	6.5 to 8.5	WAC 173-201A-200
	5 to 9	Industrial Stormwater General Permit
Turbidity	Less than 10 NTU above background if background turbidity is 50 NTU or less, or a 10% increase in turbidity when the background is > 50 NTU.	WAC 173-201A-200
	25 NTU	Industrial Stormwater General Permit

Parameter	Numerical Criterion	Source
Temperature	20°C	WAC 173-201A-200
Iron	1.0 mg/L	EPA 440/5-86-001 Quality Criteria for Water 1986

RESULTS

Field measurements and analytical results from the stormwater sampling and analyses performed as part of this monitoring plan are summarized in Table 5. Leachate results for similar parameters are given in Table 6. All test results are provided in Appendix C: Analytic Test Results.

The following is a parameter by parameter discussion of the top deck monitoring results. For each parameter, its importance in evaluating surface water, comparison to other onsite surface water, and comparison to representative leachate is discussed.

pH - pH levels in surface water can be affected by many factors, especially photosynthetic activity and the respiration of waterborne flora. This process can potentially decrease the night-time pH level to 4.5 and during peak daytime activity can drive the pH levels above 10.

The top deck pH ranged from 7.34 to 8.09 standard pH units, which is within the benchmark range of 6.5 to 8.5. The pH at surface water station S-1 ranged from a low of 7.44 in March to a high of 8.21 in January. The pH of the three leachate aeration pond inflow (LAPI) samples averaged 7.4 standard pH units.

Specific Conductance - Specific Conductance is the ability of water to conduct electrical current. This property is related to dissolved ion concentration, charge, ion mobility, and water temperature. Specific conductance measurements can provide indications of water contamination by a non-specific measure of increased ionic solute load.

Top deck samples ranged from 32 to 47 µmhos/cm. The average conductance at station SW-S1 was 51.6 µmhos/cm, and the leachate pond inflow averaged 2,026.7 µmhos/cm. There are no benchmarks or criteria for specific conductance.

Temperature - Water temperature criteria are established for the protection of aquatic life, and vary between bodies of water based on use categories designated. The criterion of 20°C is measured by the 7-day average of the daily maximum temperatures.

Top deck sample temperatures ranged from 6.2 to 11.8°C, all readings being below the WAC-173 criterion. Station SW-S1 averaged 7.6 °C for the quarter. The leachate temperature is not comparable due to the fact that the sample is a composite, and therefore kept on ice until it is collected.

Turbidity - Turbidity is one of the indicators used to assess the environmental health of water bodies. Turbidity is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms. Turbidity criteria are established for the protection of aquatic life, and vary between bodies of water based on use categories designated.

The top deck turbidity ranged from 3.77 to 6.94 NTU during the 1st quarter. The turbidity at Station SW-S1 ranged between 0.21 NTU in January to 3.82 NTU in March. Leachate turbidity is not measured.

The Industrial Stormwater General Permit benchmark of 25 NTU was not exceeded by any of the top deck samples during the first quarter.

The water quality criteria established by WAC 173 states that turbidity must be less than 10 NTU above background, if the background turbidity is less than 50 NTU. The background samples taken at stations SW-W1 and SW-W2 in the second quarter averaged 0.99 NTU in January, 0.95 NTU in February and 2.38 NTU in March. Therefore, none of the top deck samples exceed the WAC 173 criteria limit.

In previous quarters overall turbidity was much higher (in Area 5 top deck samples as well as surface water sampling locations S1, W1 and W2). This may indicate that heightened turbidity is due to seasonal changes from snow and ice ground cover and reduced rainfall intensity, both of which can lower the likelihood of sediments becoming mobilized in the runoff stream.

Chemical Oxygen Demand - Chemical Oxygen Demand (COD) is used to indirectly measure the amount of organic compounds in water.

Top deck samples ranged from 21.1 mg/L to 34.5 mg/L. At station SW-S1 COD was less than the method detection limit of 5 mg/L for the entire 1st quarter. The average COD level for the leachate aeration pond inflow was 1,857 mg/L. There are no benchmarks or criteria for COD.

Total Organic Carbon - Total organic carbon (TOC) is the amount of carbon bound in an organic compound and is often used as a non-specific indicator of water quality. While COD is the measurement of all substances in the water that can be oxidized, TOC is the measurement of organically bound carbon.

Top deck samples ranged from 5.92 to 10.8 mg/L. Station SW-S1 TOC results averaged 2.52 mg/L and the TOC levels for the leachate aeration pond inflow averaged 561 mg/L. There are no benchmarks or criteria for TOC.

Alkalinity - Alkalinity is the measure of the capacity of water to neutralize acids, or its buffer capacity. The alkalinity of natural waters is controlled primarily by the equilibria of the carbonate system. It is produced by dissolved CO₂ acting upon alkaline materials in the soil to produce bicarbonate (HCO₃⁻) and carbonate (CO₃²⁻). Source CO₂ can be atmospheric, from respiration of water borne organisms or decay of organic matter, including a potential contribution from landfill gas (LFG).

Top deck samples ranged from 8.81 to 17.7 mg/L as CaCO₃. Station SW-S1 values averaged 11.4 mg/L as CaCO₃, and the average alkalinity level for the leachate aeration pond inflow was 1,227 mg/L as CaCO₃ for the quarter. There are no benchmarks or criteria for alkalinity.

Chloride - Chloride is a conservative anion; that is, processes of adsorption, ion exchange, or biological uptake do generally not retard transport of chloride. Chloride is the best indicator for determining impacts from leachate. Chloride is one of the major anions to be found in water and sewage. Potable water should not exceed 250 mg/L of chloride.

Top deck samples ranged from 1.37 mg/L to 2.32 mg/L. Station SW-S1 had an average chloride concentration of 2.31 mg/L. The average chloride level for LAPI was 300.7 mg/L.

Sulfate - Sulfate (SO₄²⁻) can be found in almost all natural water and is one of the major dissolved components of rain. It is formed by the oxidation of sulfite ores and is a component in industrial and domestic waste waters. There are few elements that will form insoluble salts with sulfate, thus; once in solution, it remains so unless it is anaerobically reduced to sulfide.

Top deck samples ranged in concentrations of 1.99 to 3.48 mg/L. Station SW-S1 had a sulfate concentration average of 2.24 mg/L. Sulfate concentrations at LAPI averaged 56.8 mg/L. There are no benchmarks or criteria for sulfate.

Iron - Iron is the fourth most abundant element in the earth's crust and the most abundant heavy metal. It is present in the environment mainly as Fe(II) or Fe(III). Iron is more soluble in the reduced state than it is in the oxidized state, where it often occurs as an iron oxide mineral (Fe₂O₃). At a pH above 7, iron exists mostly as insoluble salts which settle out or are adsorbed onto surfaces. The concentration of iron in well-aerated waters is seldom high. Under reducing conditions, which are most commonly caused by oxidation reactions involving organic matter, water will have higher concentrations of dissolved iron.

Top deck samples were analyzed for dissolved and total iron. Results for dissolved iron ranged from 0.039 to 0.068 mg/L. Total iron ranged from 0.137 to 0.278 mg/L.

Dissolved iron measurements at SW-S1 ranged from below the method detection limit of 0.01 mg/L to 0.014 mg/L. The average concentration of total iron at station SW-S1 was 0.015 mg/L. The total iron concentration at the leachate aeration pond inflow averaged 13.6 mg/L.

The EPA surface water criterion for total iron is 1.0 mg/L, therefore none of the top deck samples exceeded the criteria limits during the first quarter.

TABLE 5

Area 5 Top Deck Stormwater Monitoring Results

[illegible]

TABLE 6

Leachate Pond Inflow Monitoring Results

Location	Date	Sample ID	pH	Specific Conductance	Temp	Chemical Oxygen Demand	Total Organic Carbon	Alkalinity	Chloride	Sulfate	Total Iron
			Units	µmhos/cm	C	mg/L	mg/L	mg/L as CaCO3	mg/L	mg/L	mg/L
LS-API	1/8/2014	LAPI140108M	7.5	2700	7.8	2670	814	1780	407	71	19
LS-API	2/12/2014	LAPI140212M	7.39	2300	6	1590	472	1540	318	42.4	12.9
LS-API	3/12/2014	LAPI140312M	7.36	1080	4.5	1310	397	361	177	57.1	9.07
S = SAMPLING HANDLING ERRORS											
NOTE: LEACHATE IS NOT ANALYZED FOR DISSOLVED IRON.											

IV. CONCLUSION

During the first quarter of 2014 a February inspection by the Health Department found pooled/ponded water in areas of settlement around Area 5. Additionally, a March inspection performed by the Health Department in Area 5 indicated a gas exceedance of 500 ppm. A follow-up inspection, conducted 10 days later by SWD personnel found gas levels between 100-200 ppm. None of the inspections performed by SWD staff or the Health Department in Area 5 indicated any leachate seeps. Additionally, Area 5 continues to settle at a declining rate, without any indication of major differential settling.

None of the Area 5 top deck samples that were collected during the first quarter exceeded the water quality criteria or benchmarks.

From these results, it can be concluded that the Area 5 top deck interim cover system continues to function to prevent interaction of waste and surface water runoff from the Area 5 top deck.



LEGEND:
 ○ ACTIVE MONITORING STATION

Figure 1. Area 5 Settlement Monitoring Locations

DATE	REVISION	BY

KING COUNTY DEPARTMENT OF
 NATURAL RESOURCES AND PARKS
 SOLID WASTE DIVISION

CEDAR HILLS REGIONAL LANDFILL
 SETTLEMENT MONITORING LOCATIONS

APPROVED: JDO DATE: JUN 2010
 RECOMMENDED: JDO DATE: JUN 2010
 PREPARED BY: JDO SHEET: 1 OF 1

LEGEND:
 STORMWATER MONITORING STATION

AREA 5 TOP DECK STORMWATER MONITORING STATION	
STATION	STATION DESCRIPTION
SM-AS101	STATION 101: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS102	STATION 102: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS103	STATION 103: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS104	STATION 104: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS105	STATION 105: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS106	STATION 106: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS107	STATION 107: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS108	STATION 108: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS109	STATION 109: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.
SM-AS110	STATION 110: 10' x 10' x 10' concrete structure with 1' high walls and 1' deep bottom. Located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas. It is located at the top of the deck, near the entrance to the building. The structure is designed to collect and store stormwater runoff from the roof and surrounding areas.

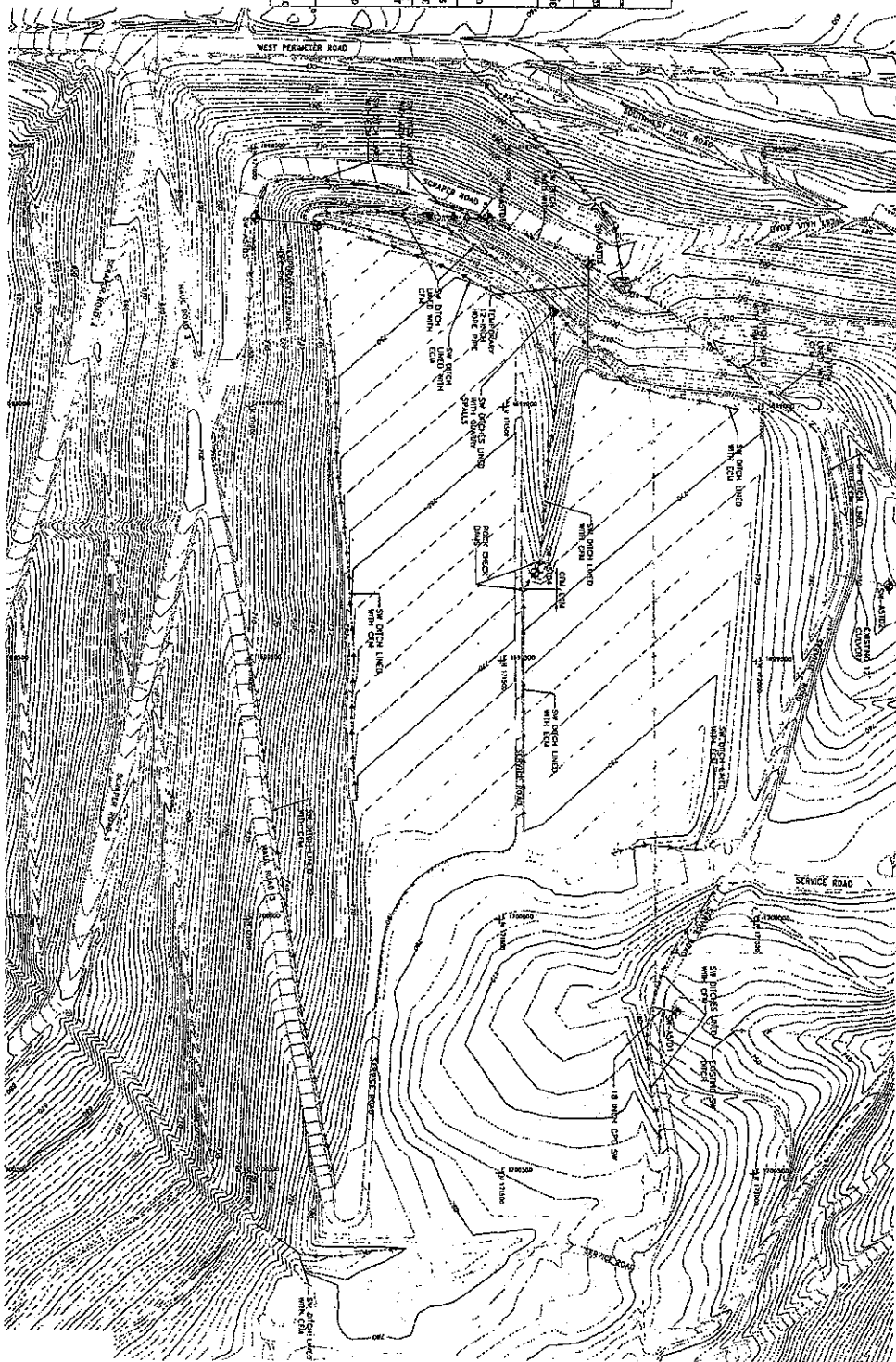
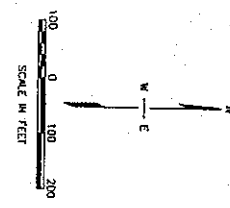


Figure 2. Top Deck Stormwater Monitoring Locations

FIGURE 2

Area 5 Top Deck
 Stormwater Monitoring Stations
 Cedar Hills Regional Landfill
 Area 5 Stage 4 Final Closure
 King County, Washington

APPENDIX A: INSPECTION REPORTS

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA5TD License: na

Location: 20

Color:

Year: 2010

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZZ6S: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012358

Date In: 12/31/2013 09:47

Date Promised: 01/01/2014 09:47

Date Out: 00:00

WO Status: A Last WO#: 0000012168

WO Priority: Last WO Date: 12/02/2013

Track DownTime: Y Operator: jd

Tire Size 1:

GVW: 0

Tire Size 2:

EAC: 24

Transmission:

Department: 7572:Waste Water, LF Gas

Fuel Type1:

Company: Gas King County Landfill Gas

Fuel Type2:

Site: 20:20- Cedar Hills

Fuel Type3:

Monitor Group:

Oil Capacity: 0.000

Comments:

Fuel Cap1: 0.000

CH Area 5

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
----------	---------	-----------	----------	--------	-----

PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	01/10/2014	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	763	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA5TD

Work Order: 0000012358

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Visually inspect Header	/				
	2	Gas- Ck for damage @ flare station inlet	/				
	3	Gas- Ck collection field pipe integrity	/				
	4	Gas- Ck collection field pipe alignment	/				
	5	Gas- Ck for damage @ possible stress pts	/				
	6	Gas- Ck for damage at vertical pipes	/				
	7	Gas- Ck for damage at well heads	/				
	8	Gas- Ck for gas leaks with TVA 1000	/				
1/24	9	Gas- Ck for settlement/ponding	/				
	10	Gas- Ck surface water conveyance system	/				
	11	Gas- Ck and open vault covers	/				
	12	Gas- Exercise field and header valves	/				
	13	Gas- Ck flex hoses and connections	/				
	14	Gas- Ck for erosion	/				
	15	Gas- Ck for vegetation	/				
	16	Gas- Ck cover system	/				
	17	Gas- Ck for refuse/litter	/				
	18	Gas- Note any deficiencies	/				

40m

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA6TD License: na

Location: 20

Color:

Year: 2010

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZG6S: Landfill Gas - not classified

TECHNICIAN COPY

**WO#: 0000012351**

Date In: 12/31/2013 08:51

Date Promised: 01/01/2014 08:51

Date Out: 00:00

WO Status: A Last WO#: 0000012212

WO Priority: Last WO Date: 12/02/2013

Track DownTime: Y Operator: jd

Tire Size 1:

GVW: 0

Tire Size 2:

EAC: 24

Transmission:

Department: 7572:Waste Water, LF Gas

Fuel Type1:

Company: Gas King County Landfill Gas

Fuel Type2:

Site: 20:20- Cedar Hills

Fuel Type3:

Monitor Group:

Oil Capacity: 0.000

Comments:

Fuel Cap1: 0.000

CH Area 6

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	01/10/2014	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	761 <i>DM</i>	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV 8S

Equipment: CHAREA6TD

Work Order: 0000012351

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Visually inspect Header	/				
	2	Gas- Ck for damage @ flare station inlet	/				
	3	Gas- Ck collection field pipe integrity	/				
	4	Gas- Ck collection field pipe alignment	/				
	5	Gas- Ck for damage @ possible stress pts	/				
	6	Gas- Ck for damage at vertical pipes	/				
	7	Gas- Ck for damage at well heads	/				
	8	Gas- Ck for gas leaks with TVA 1000	/				
	9	Gas- Ck for settlement/ponding	/				
	10	Gas- Ck surface water conveyance system	/				
	11	Gas- Ck and open vault covers	/				
	12	Gas- Exercise field and header valves	/				
	13	Gas- Ck flex hoses and connections	/				
	14	Gas- Ck for erosion	/				
	15	Gas- Ck for vegetation	/				
	16	Gas- Ck cover system	/				
	17	Gas- Ck for refuse/litter	/				
	18	Gas- Note any deficiencies	/				

1-28-14

14R

WO Company: Gas King County Landfill Gas
 WO Department: 7572 Waste Water, LF Gas
 WO Shop: Gas Landfill Gas

Equipment: CHAREA5 License: na

Location: 20 Color:
 Year: 2006 Serial: na
 Make: UD Engine:
 Model: UD
 Class: ZZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012443

Date In: 01/27/2014 15:07

Date Promised: 01/28/2014 15:07

Date Out: 00:00

WO Status: A Last WO#: 0000012310

WO Priority: Last WO Date: 12/30/2013

Track DownTime: Y Operator: jd

Tire Size 1:	GVW:	0
Tire Size 2:	EAC:	24
Transmission:	Department:	7572:Waste Water, LF Gas
Fuel Type1:	Company:	Gas King County Landfill Gas
Fuel Type2:	Site:	20:20- Cedar Hills
Fuel Type3:	Monitor Group:	
Oil Capacity: 0.000	Comments:	
Fuel Cap1: 0.000	CH Area 5	
Fuel Cap2: 0.000		

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	02/10/2014	Gas System
T	0 - MONTHS	02/10/2014	Stormwater
V	0 - MONTHS	02/10/2014	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
------	-------	--------------	-------------

REPAIRS

RTY	Description	Status	HI0	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	0	761	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	761	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	761	0.00000	Gas

NOTES

For CHAREA4, CHAREA5, CHAREA6, CHAREA7, CHAREAS23,
CHCENTRALPIT, CHEMH, CHSEPA, CHSSWA, CHSWMH (10)

PMG BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect collection system	/				
Gas Visually inspect disposal system	/				
Gas Verify daily odor log is current	/				
Gas Note any deficiencies					

PMT BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect ponds	/				
Gas Visually inspect lagoons	/				
Gas Visually inspect catch basins	/				
Gas Visually inspect control structures	/				
Gas Visually inspect conveyance pipes	/				
Gas Note any deficiencies					

PMV BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect vegetation	/				
Gas Visually inspect refuse	/				
Gas Visually inspect cover	/				
Gas Visually inspect erosion	/				
Gas Note any deficiencies					

DATE: 2-12-14

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA6 License: na

Location: 20

Color:

Year: 2006

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZG5: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012444

Date In: 01/27/2014 15:07

Date Promised: 01/28/2014 15:07

Date Out: 00:00

WO Status: A

Last WO#: 0000012403

WO Priority:

Last WO Date: 01/10/2014

Track DownTime: Y

Operator: jd

Tire Size 1:

GVW: 0

Tire Size 2:

EAC: 24

Transmission:

Department: 7572:Waste Water, LF Gas

Fuel Type1:

Company: Gas King County Landfill Gas

Fuel Type2:

Site: 20:20- Cedar Hills

Fuel Type3:

Monitor Group:

Oil Capacity: 0.000

Comments:

Fuel Cap1: 0.000

CH Area 6

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
----------	---------	-----------	----------	--------	-----

PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	02/10/2014	Gas System
S	0 - MONTHS	02/28/2014	Scheduled Inspection
T	0 - MONTHS	02/10/2014	Stormwater
V	0 - MONTHS	02/10/2014	Cover System
W	W - WEEKS	01/20/2014	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
------	-------	--------------	-------------

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	0	761	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	761	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	761	0.00000	Gas

NOTES

For CHAREA4, CHAREA5, CHAREA6, CHAREA7, CHAREAS23,
CHCENTRALPIT, CHEMH, CHSEPA, CHSSWA, CHSWMH (10)

PMG BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect collection system	☒	☒			
Gas Visually inspect disposal system	☒	☒			
Gas Verify daily odor log is current	☒	☒			
Gas Note any deficiencies					

PMT BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect ponds	☒	☒			
Gas Visually inspect lagoons	☒	☒			
Gas Visually inspect catch basins	☒	☒			
Gas Visually inspect control structures	☒	☒			
Gas Visually inspect conveyance pipes	☒	☒			
Gas Note any deficiencies					

PMV BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect vegetation	☒	☒			
Gas Visually inspect refuse	☒	☒			
Gas Visually inspect cover	☒	☒			
Gas Visually inspect erosion	☒	☒			
Gas Note any deficiencies					

DATE: 2-12-14

WO Company: Gas King County Landfill Gas
 WO Department: 7572 Waste Water, LF Gas
 WO Shop: Gas Landfill Gas

Equipment: CHAREA6TD License: na

Location: 20 Color:
 Year: 2010 Serial: na
 Make: UD Engine:
 Model: UD
 Class: ZZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012495

Date In: 01/30/2014 10:49

Date Promised: 01/31/2014 10:49

Date Out: 00:00

WO Status: A Last WO#: 0000012351

WO Priority: Last WO Date: 12/31/2013

Track DownTime: Y Operator: jd

Tire Size 1:	GVW:	0
Tire Size 2:	EAC:	24
Transmission:	Department:	7572:Waste Water, LF Gas
Fuel Type1:	Company:	Gas King County Landfill Gas
Fuel Type2:	Site:	20:20- Cedar Hills
Fuel Type3:	Monitor Group:	
Oil Capacity: D.000	Comments:	
Fuel Cap1: 0.000	CH Area 6	
Fuel Cap2: 0.000		

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	01/10/2014	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
------	-------	--------------	-------------

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	763	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000012495

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Visually inspect Header	/				
	2	Gas- Ck for damage @ flare station inlet	/				
	3	Gas- Ck collection field pipe integrity	/				
	4	Gas- Ck collection field pipe alignment	/				
	5	Gas- Ck for damage @ possible stress pts	/				
	6	Gas- Ck for damage at vertical pipes	/				
	7	Gas- Ck for damage at well heads	/				
	8	Gas- Ck for gas leaks with TVA 1000	/				
	9	Gas- Ck for settlement/ponding	/				
	10	Gas- Ck surface water conveyance system	/				
	11	Gas- Ck and open vault covers	/				
	12	Gas- Exercise field and header valves	/				
	13	Gas- Ck flex hoses and connections	/				
	14	Gas- Ck for erosion	/				
	15	Gas- Ck for vegetation	/				
	16	Gas- Ck cover system	/				
	17	Gas- Ck for refuse/litter	/				
	18	Gas- Note any deficiencies	/				

Kurt G. ...
6-25-14 30 min

WO Company: Gas King County Landfill Gas
 WO Department: 7572 Waste Water, LF Gas
 WO Shop: Gas Landfill Gas

Equipment: CHAREA5TD License: na

Location: 20 Color:
 Year: 2010 Serial: na
 Make: UD Engine:
 Model: UD
 Class: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012455

Date In: 01/28/2014 14:40

Date Promised: 01/29/2014 14:40

Date Out: 00:00

WO Status: A Last WO#: 0000012358

WO Priority: Last WO Date: 12/31/2013

Track DownTime: Y Operator: jd

Tire Size 1:	GVW:	0
Tire Size 2:	EAC:	24
Transmission:	Department:	7572:Waste Water, LF Gas
Fuel Type1:	Company:	Gas King County Landfill Gas
Fuel Type2:	Site:	20:20- Cedar Hills
Fuel Type3:	Monitor Group:	
Oil Capacity: 0.000	Comments:	
Fuel Cap1: 0.000	CH Area 5	
Fuel Cap2: 0.000		

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	01/10/2014	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
------	-------	--------------	-------------

REPAIRS

RTY	Description	Status	MIO	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	750	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA5TD

Work Order: 0000012455

Complete?	Step	Tasks	DK	Adjust	Repair	Replace	Comments
	1	Gas- Visually inspect Header	/				Ponding, minor Bubbling in one puddle Gas Ran TVA on 2/26/14 and recorded 20-40 ppm.
	2	Gas- Ck for damage @ flare station inlet	/				
	3	Gas- Ck collection field pipe integrity	/				
	4	Gas- Ck collection field pipe alignment	/				
	5	Gas- Ck for damage @ possible stress pts	/				
	6	Gas- Ck for damage at vertical pipes	/				
	7	Gas- Ck for damage at well heads	/				
	8	Gas- Ck for gas leaks with TVA 1000	/				
	9	Gas- Ck for settlement/ponding	/				
	10	Gas- Ck surface water conveyance system	/				
	11	Gas- Ck and open vault covers	/				
	12	Gas- Exercise field and header valves	/				
	13	Gas- Ck flex hoses and connections	/				
	14	Gas- Ck for erosion	/				
	15	Gas- Ck for vegetation	/				
	16	Gas- Ck cover system	/				
	17	Gas- Ck for refuse/litter	/				
	18	Gas- Note any deficiencies	/				

2-27-14

1 hr

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA5TD License: na

Location: 20

Color:

Year: 2010

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012566

Date In: 02/26/2014 10:51

Date Promised: 02/27/2014 10:51

Date Out: 00:00

WO Status: A Last WO#: 0000012455

WO Priority: Last WO Date: 01/28/2014

Track DownTime: Y Operator: jd

Tire Size 1:

GVW: 0

Tire Size 2:

EAC: 24

Transmission:

Department: 7572:Waste Water, LF Gas

Fuel Type1:

Company: Gas King County Landfill Gas

Fuel Type2:

Site: 20:20- Cedar Hills

Fuel Type3:

Monitor Group:

Oil Capacity: 0.000

Comments:

Fuel Cap1: 0.000

CH Area 5

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	02/10/2014	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	700	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREASTD

Work Order: 0000012566

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Visually inspect Header					
	2	Gas- Ck for damage @ flare station inlet					
	3	Gas- Ck collection field pipe integrity					
	4	Gas- Ck collection field pipe alignment					
	5	Gas- Ck for damage @ possible stress pts					
	6	Gas- Ck for damage at vertical pipes					
	7	Gas- Ck for damage at well heads					
	8	Gas- Ck for gas leaks with TVA 1000					
	9	Gas- Ck for settlement/ponding					
	10	Gas- Ck surface water conveyance system					
	11	Gas- Ck and open vault covers					
	12	Gas- Exercise field and header valves					
	13	Gas- Ck flex hoses and connections					
	14	Gas- Ck for erosion					
	15	Gas- Ck for vegetation					
	16	Gas- Ck cover system					
	17	Gas- Ck for refuse/litter					
	18	Gas- Note any deficiencies					

1 hr
Karl S. 3-12-14

WO Company: Gas King County Landfill Gas
 WO Department: 7572 Waste Water, LF Gas
 WO Shop: Gas Landfill Gas

Equipment: CHAREA5 License: na

Location: 20 Color:
 Year: 2006 Serial: na
 Make: UD Engine:
 Model: UD
 Class: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012650

Date In: 02/28/2014 10:21

Date Promised: 03/01/2014 10:21

Date Out: 00:00

WO Status: A Last WO#: 0000012443

WO Priority: Last WO Date: 01/27/2014

Track DownTime: Y Operator: jd

Tire Size 1:	GVW:	0
Tire Size 2:	EAC:	24
Transmission:	Department:	7572:Waste Water, LF Gas
Fuel Type1:	Company:	Gas King County Landfill Gas
Fuel Type2:	Site:	20:20- Cedar Hills
Fuel Type3:	Monitor Group:	
Oil Capacity: 0.000	Comments:	
Fuel Cap1: 0.000	CH Area 5	
Fuel Cap2: 0.000		

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	03/10/2014	Gas System
T	0 - MONTHS	03/10/2014	Stormwater
V	0 - MONTHS	03/10/2014	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
------	-------	--------------	-------------

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	0	700	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	700	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	700	0.00000	Gas

NOTES

For CHAREA4, CHAREA5, CHAREA6, CHAREA7, CHAREAS23,
CHCENTRALPIT, CHEMH, CHSEPA, CHSSWA, CHSWMH (10)

PMG BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect collection system	✓				
Gas Visually inspect disposal system	✓				
Gas Verify daily odor log is current	✓				
Gas Note any deficiencies	✓				

PMT BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect ponds	✓				
Gas Visually inspect lagoons	✓				
Gas Visually inspect catch basins	✓				
Gas Visually inspect control structures	✓				
Gas Visually inspect conveyance pipes	✓				
Gas Note any deficiencies					

PMV BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect vegetation	✓				
Gas Visually inspect refuse	✓				
Gas Visually inspect cover	✓				
Gas Visually inspect erosion	✓				
Gas Note any deficiencies					

DATE:

3-12-14

Kur Sma

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA6 License: na

Location: 20

Color:

Year: 2006

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012651

Date In: 02/28/2014 10:22

Date Promised: 03/01/2014 10:22

Date Out: 00:00

WO Status: A Last WO#: 0000012595

WO Priority: Last WO Date: 02/26/2014

Track DownTime: Y Operator: jd

Tire Size 1:

GVW: 0

Tire Size 2:

EAC: 24

Transmission:

Department: 7572:Waste Water, LF Gas

Fuel Type1:

Company: Gas King County Landfill Gas

Fuel Type2:

Site: 20:20- Cedar Hills

Fuel Type3:

Monitor Group:

Oil Capacity: 0.000

Comments:

Fuel Cap1: 0.000

CH Area 6

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
----------	---------	-----------	----------	--------	-----

PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	03/10/2014	Gas System
S	0 - MONTHS	03/28/2014	Scheduled Inspection
T	0 - MONTHS	03/10/2014	Stormwater
V	0 - MONTHS	03/10/2014	Cover System
W	W - WEEKS	03/03/2014	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	0	700	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	700	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	700	0.00000	Gas

NOTES

For CHAREA4, CHAREA5, CHAREA6, CHAREA7, CHAREAS23,
CHCENTRALPIT, CHEMH, CHSEPA, CHSSWA, CHSWMH (10)

PMG BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect collection system	/				
Gas Visually inspect disposal system	/				
Gas Verify daily odor log is current	/				
Gas Note any deficiencies					

PMT BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect ponds	/				
Gas Visually inspect lagoons	/				
Gas Visually inspect catch basins	/				
Gas Visually inspect control structures	/				
Gas Visually inspect conveyance pipes	/				
Gas Note any deficiencies					

PMV BS

Task	OK	Adjust	Repair	Replace	Comments
Gas Visually inspect vegetation	/				
Gas Visually inspect refuse	/				
Gas Visually inspect cover	/				
Gas Visually inspect erosion	/				
Gas Note any deficiencies					

DATE: 2-12-14

[Signature]

WO Company: Gas King County Landfill Gas
 WO Department: 7572 Waste Water, LF Gas
 WO Shop: Gas Landfill Gas

Equipment: CHAREA6TD License: na

Location: 20 Color:
 Year: 2010 Serial: na
 Make: UD Engine:
 Model: UD
 Class: ZZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000012598

Date In: 02/26/2014 11:49

Date Promised: 02/27/2014 11:49

Date Out: 00:00

WO Status: A Last WO#: 0000012495

WO Priority: Last WO Date: 01/30/2014

Track DownTime: Y Operator: jd

Tire Size 1: GVW: 0
 Tire Size 2: EAC: 24
 Transmission: Department: 7572:Waste Water, LF Gas
 Fuel Type1: Company: Gas King County Landfill Gas
 Fuel Type2: Site: 20:20- Cedar Hills
 Fuel Type3: Monitor Group:
 Oil Capacity: 0.000 Comments:
 Fuel Cap1: 0.000 CH Area 6
 Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	03/10/2014	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MIO	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	750	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000012598

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Visually inspect Header					
	2	Gas- Ck for damage @ flare station inlet					
	3	Gas- Ck collection field pipe integrity					
	4	Gas- Ck collection field pipe alignment					
	5	Gas- Ck for damage @ possible stress pts					
	6	Gas- Ck for damage at vertical pipes					
	7	Gas- Ck for damage at well heads					
	8	Gas- Ck for gas leaks with TVA 1000					
	9	Gas- Ck for settlement/ponding					
	10	Gas- Ck surface water conveyance system					
	11	Gas- Ck and open vault covers					
	12	Gas- Exercise field and header valves					
	13	Gas- Ck flex hoses and connections					
	14	Gas- Ck for erosion					
	15	Gas- Ck for vegetation					
	16	Gas- Ck cover system					
	17	Gas- Ck for refuse/litter					
	18	Gas- Note any deficiencies					

5/19/14

45 min

ENGINEERING SERVICES SECTION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: Stevn Larry

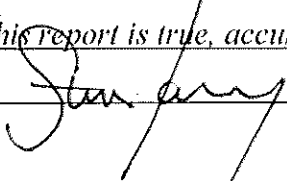
Telephone: (206) 477-5226

Location: Cedar Hills

Ambient Temperature (°F) 40

Weather Condition: Rainy heavy at times

I certify that this report is true, accurate and complete, to the best of my knowledge and beliefs.

Inspector's Signature: 

Date: January 9 & 10 2014

ACTION CODES

A. Gas System	OK	Not OK	B. Leachate System	OK	Not OK	C. Landfill Operations	OK	Not OK
1. Pipe Penetrations	X		1. Pump Stations	X		1. Fueling Stations	X	
2. Collection Piping	X		2. Aeration Lagoons / Basins	X		2. Vehicle Wash Stations	X	
3. Gas Extraction Wells	X		3. Aerators	X		3. Equipment	X	
4. Valve Stations	X		4. Weeps (strip drains)	X		4. Perimeter Fences	X	
5. Odor	X		5. Collection System	X		5. Vegetation	X	
6. Flare Stations	X		a. Collection Pipes	X		6. Landfill Cover	X	
7. Air Compressors	X		b. Forcemains	X		7. Drain Rock		X
8. Noise Control	X		c. Manholes	X		9. Air Quality	X	
			d. Cleanouts	X		10. Stockpiles		X
D. Stormwater System			6. Generators	X		11. Vectors	X	
1. Ponds		X	7. Extraction Wells	X		12. Litter		X
2. CB / Control Structures		X	8. Valve / Cleanout	X		13. Dust control	X	
3. Pipes / Culverts		X	9. Groundwater Extraction Wells	X		14. Other	X	
4. Trash Racks	X							
5. Ditches		X	E. Roadway System			Cover System / ESC		
6. Runoff Control Berms	X		1. Road Sweeping	X		F. Vegetation	X	
7. General	X		2. Access Roads		X	1. Refuse	X	
			3. Road Erosion	X		2. Cover Erosion	X	
G. Operations			4. Road Pavement	X		3. Silt Fences, Filter Fabric, etc.		X
1. Records Obtain / Review	X		5. Lane Striping	X				

Item No.	Action Code(s)	Area Code(s) (See below or over for map) Area Map	Status G F P	State Reason if "Fair or Poor"	Date Corrective Action Implemented
1	D1	H3		Ponds are over loaded, currently draining to prepare for big rain storm scheduled to arrive over the weekend	
2	D2 ,3, 5	F,G, H, 2		Rock checks and road catches needs cleaning during a dry break period	
3	E2	G4		Excessively dirty road next to MW-77 just southwest of the outdoor weld shop	
4	C7	F2		Rumble strip need raking to induce drainage, currently not draining to surface water channels	
5	C10	G4		Silt fences need maintenance in 2	

Item No.	Action Code(s)	Area Code(s) (See below or over for map)		Status			State Reason if "Fair or Poor"	Date Corrective Action Implemented
		Area	Map	G	F	P		
							locations around the soil stock piles south of the outdoor weld shop , next to MW-77	
6								
7								
8								
9								
10								
11								

AREA CODES (for Cedar Hills)

East Main Hill = EMH

Southwest Main Hill = SWMH

Southeast Pit Area = SEPA

G = Good

Area 2/3 = A2/3

Area 4 = A4

Stockpile = SP

F = Fair

Aeration Ponds = AP

So. Solid Waste Area = SSWA

North Flare Station = NFS

P = Poor

Area 5 = A5

Area 6 = A6

Central Pit = CP

State the needs of the repairs in the suggested remedy box.

1. *Regulatory Priority* - permit, regulations & code & compliance driven.
2. *Safety Priority* - potential to adversely affect the safety of workers or the related environment.
3. *Maintenance Priority* - Ensures continuation of existing level of facility operations to ensure proper efficiency without interruption. This priority has the following four potential levels
 - a. *Emergency* - stops the continuing operation of the facility
 - b. *Urgent* - While not completely prohibiting continuing use of the facility, may threaten use of entire facility or continuing use may results in significant & extensive repair of facility.
 - c. *Routine* - need to be completed & not necessarily. May be completed under existing operations preventative programs.
 - d. *Deferred* - desirable but not required to maintain status quo operations (e.g., planting or wild life enhancement projects etc.)

Overall site description day of site inspection: The site looks fair, there are a number of sedimentation and erosion control repairs or modifications needed. The rock check dams in the asphalt channels need cleaning to remove the buildup of silt and leaves. The same is true for the road side catches along the haul roads.

Operations will schedule the clean up during a break in the weather for the surface water ditches.

Mike McEwen and I will install sediment control around MW-77.

The asphalt road next to MW-77 needs mud scraped and removed from the road surface. I will arrange it with operations.

Operations will need to rake the rumble strip. The rock is packed and not draining.

Operations will need to repair silt fences and schedule litter pickup around identified locations.

ENGINEERING SERVICES SECTION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: Stevn Larry

Telephone: (206) 477-5226

Location: Cedar Hill Ambient Temperature (°F) 36 Weather Condition: Ocast

I certify that this report is true, accurate and complete, to the best of my knowledge and beliefs.

Inspector's Signature: _____ Date: 2/19/2014

ACTION CODES

A. Gas System			B. Leachate System			C. Landfill Operations		
	OK	Not OK		OK	Not OK		OK	Not OK
1. Pipe Penetrations	X		1. Pump Stations	X		1. Fueling Stations	X	
2. Collection Piping	X		2. Aeration Lagoons / Basins	X		2. Vehicle Wash Stations	X	
3. Gas Extraction Wells	X		3. Aerators	X		3. Equipment	X	
4. Valve Stations	X		4. Weeps (strip drains)	X		4. Perimeter Fences	X	
5. Odor	X		5. Collection System	X		5. Vegetation	X	
6. Flare Stations	X		a. Collection Pipes	X		6. Landfill Cover	X	
7. Air Compressors	X		b. Forcemains	X		7. Drain Rock	X	
8. Noise Control	X		c. Manholes	X		9. Air Quality	X	
			d. Cleanouts	X		10. Stockpiles	X	
D. Stormwater System			6. Generators	X		11. Vectors	X	
1. Ponds		X	7. Extraction Wells	X		12. Litter	X	
2. CB / Control Structures		X	8. Valve / Cleanout	X		13. Dust control	X	
3. Pipes / Culverts	X		9. Groundwater Extraction Wells	X		14. Other	X	
4. Trash Racks	X							
5. Ditches		X	E. Roadway System			Cover System / ESC		
6. Runoff Control Berms		X	1. Road Sweeping	X		F. Vegetation	X	
7. General	X		2. Access Roads	X		1. Refuse	X	
			3. Road Erosion	X		2. Cover Erosion	X	
G. Operations			4. Road Pavement	X		3. Silt Fences, Filter Fabric, etc.	X	
1. Records Obtain / Review			5. Lane Striping	X				

Item No.	Action Code(s)	Area Code(s) (See below or over for map)		Status			State Reason if "Fair or Poor"	Date Corrective Action Implemented
		Area	Map	G	F	P		
1	D1	(F,G) -2				X	A high number of intense rains storms have caused the pond levels to reach capacity. The overflow outlets are draining. Sediment contained in the ponds have been mobilized and are flowing out.	Pond outlets must be left open because of the intensity and high number of storms.
2	D2						Some catch basin control structures contain sediment. Operations is currently clearing the structures.	On going, clearing began on 2/18/2014
3	D5	(E,F,G) -2				X	Rock check ditches need sediment clearing.	Vactor truck on site and is in the process of cleaning the

Item No.	Action Code(s)	Area Code(s) (See below or over for map)		Status			State Reason if "Fair or Poor"	Date Corrective Action Implemented
		Area	Map	G	F	P		
								rock check dams
4	D6	(E,F,G) -2			X		Silt screens along the haul road next to the asphalt lined ditches need improvement to prevent flows from going around the edges.	
5								
6								
7								
8								
9								
10								
11								

AREA CODES (for Cedar Hills)

East Main Hill = EMH
Southwest Main Hill = SWMH
Southeast Pit Area = SEPA

G = Good
Area 2/3 = A2/3
Area 4 = A4
Stockpile = SP

F = Fair
Aeration Ponds = AP
So. Solid Waste Area = SSWA
North Flare Station = NFS

P = Poor
Area 5 = A5
Area 6 = A6
Central Pit = CP

State the needs of the repairs in the suggested remedy box.

1. *Regulatory Priority* - permit, regulations & code & compliance driven.
2. *Safety Priority* - potential to adversely affect the safety of workers or the related environment.
3. *Maintenance Priority* - Ensures continuation of existing level of facility operations to ensure proper efficiency without interruption. This priority has the following four potential levels
 - a. *Emergency* - stops the continuing operation of the facility
 - b. *Urgent* - While not completely prohibiting continuing use of the facility, may threaten use of entire facility or continuing use may results in significant & extensive repair of facility.
 - c. *Routine* - need to be completed & not necessarily. May be completed under existing operations preventative programs.
 - d. *Deferred* - desirable but not required to maintain status quo operations (e.g., planting or wild life enhancement projects etc.)

Overall site description day of site inspection: A series of intense rain storms have caused the surface water conveyance system to reach capacity. Sediment from stock pile erosion has entered the south side stormwater conveyance system. Sediment has over whelmed the conveyance system and has led to high turbidity flows. Operations Waste Water, is in the process of removing sediment build up behind the rock check dams in the asphalt line channels and the catch basins. Pond overflow outlets are being left in the open position to prevent ponds from over topping. The outlets will be throttled back after high water levels have be reduced. These actions will allow for longer sediment retention time and will reduce sediment effluent. The silt screens along the haul road need modification to prevent flows from going around the bottom edges. Operations will schedule the utility crews to make modifications.

ENGINEERING SERVICES SECTION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: MIKE McEWEN

Telephone: 206-296-0485

Location: CEDAR HILLS Ambient Temperature (°F) 45

Weather Condition: CLEAR 45°F

I certify that this report is true, accurate and complete, to the best of my knowledge and beliefs.

Inspector's Signature: [Signature]

Date: 3/24/14

ACTION CODES

A. Gas System	OK	Not OK	B. Leachate System	OK	Not OK	C. Landfill Operations	OK	Not OK
1. Pipe Penetrations			1. Pump Stations			1. Fueling Stations		
2. Collection Piping			2. Aeration Lagoons / Basins			2. Vehicle Wash Stations		
3. Gas Extraction Wells			3. Aerators			3. Equipment		
4. Valve Stations			4. Weeps (strip drains)			4. Perimeter Fences		
5. Odor			5. Collection System			5. Vegetation		
6. Flare Stations			a. Collection Pipes			6. Landfill Cover		
7. Air Compressors			b. Forcemains			7. Drain Rock		
8. Noise Control			c. Manholes			9. Air Quality		
			d. Cleanouts			10. Stockpiles		
D. Stormwater System			6. Generators			11. Vectors		
1. Ponds		✓	7. Extraction Wells			12. Litter		
2. CB / Control Structures		✓	8. Valve / Cleanout			13. Dust control		
3. Pipes / Culverts			9. Groundwater Extraction Wells			14. Other		
4. Trash Racks								
5. Ditches			E. Roadway System			Cover System / ESC		
6. Runoff Control Berms		✓	1. Road Sweeping			F. Vegetation		
7. General			2. Access Roads			1. Refuse		
			3. Road Erosion			2. Cover Erosion		
G. Operations			4. Road Pavement			3. Silt Fences, Filter Fabric, etc.		
1. Records Obtain / Review			5. Lane Striping					

Item No.	Action Code(s)	Area Code(s) (See below or over for map) Area Map	Status G F P	State Reason if "Fair or Poor"	Date Corrective Action Implemented
1	B6	G4	✓	S. STORM POND OUTLET IS	
2				FLEXING	
3	D6	H6	✓	RD. GRADE @ S.E. FENCE COR	
4				@ GATE - RAISE RD ~ 4" S	
5				RAISE GATE	
6	D2	A3	✓	COVER OLD M4	
7					
8					
9					
10					
11					

AREA CODES (for Cedar Hills)

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Friday, January 10, 2014 Time In: 2:06 pm Time Out: 3:09 pm Inspector: Edward Davis Result: UNSATISFACTORY

VIOLATIONS OBSERVED (if any)

0120 - Cover meets quantity and time constraints

Exposed solid waste on the surface in non-active portions of Area 7 (south and east of the tipping area) - WAC 173-351-200(2)(a) - Refer to Note #1 Below

OVERALL INSPECTION COMMENTS:

Note #1-Area 7 was observed from a vantage point located at Area 6 with the landfill manager and lead equipment operator for the site. Specific areas of uncovered waste were identified for additional cover. I noted that several debris piles noted in the 12/30/13 routine inspection had been removed. It was indicated that additional soil cover would be applied during the weekend to achieve compliance.

Good Line Parking Area: Inspected the area with the Landfill Manager and pointed out the need for litter/debris pick-up to avoid a future violation associated with this area.



Ed Davis
HEI III

PIC Phone #: 206-296-4490

Email: emily.robbs@kingcounty.gov; pam.badger@kingcounty.gov

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Thursday, February 20, 2014 Time In: 2:15 pm Time Out: 3:22 pm Inspector: Edward Davis Result: UNSATISFACTORY

VIOLATIONS OBSERVED (if any)

0120 - Cover meets quantity and time constraints

In the northern portion of Area 5, ponded/pooled water is present in an area of settlement. Observed multiple points of gas release at the bottom of the ponded/pooled area.

WAC 173-351-500 - Closure and post closure care

WAC 173-351-500(1)(a)(ii)]

WAC 173-351-500(1)(a)(i)

WAC 173-351-500(2)

0141 - Gas production/migration

In the northern portion of Area 5, ponded/pooled water is present in an area of settlement. Observed multiple points of gas release at the bottom of the ponded/pooled area.

WAC 173-351-500 - Closure and post closure care

WAC 173-351-500(1)(a)(ii)]

WAC 173-351-500(1)(a)(i)

WAC 173-351-500(2)

0146 - Gas management systems

In the northern portion of Area 5, ponded/pooled water is present in an area of settlement. Observed multiple points of gas release at the bottom of the ponded/pooled area.

WAC 173-351-500 - Closure and post closure care

WAC 173-351-500(1)(a)(ii)]

WAC 173-351-500(1)(a)(i)

WAC 173-351-500(2)

OVERALL INSPECTION COMMENTS:

Good Line Parking –

- Plastic related garbage item present on ground at west end of parking area
- TR identification placards needing maintenance attention:
- Trailer I.D. placards in need of re-decaling; TR#519; TR#527 TR#544; TR#513
- Trailer I.D Placards in need of timely maintenance- TR#465; TR#602; TR#530; TR#462; TR#483; TR#549
- Identification placard for TR#489 is in need of re-decaling.



Ed Davis

HEI III

PIC Phone #: 206-296-4490

Email: emily.robbins@kingcounty.gov; pam.badger@kingcounty.gov

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Friday, February 28, 2014 Time In: 10:55 am Time Out: 12:18 pm Inspector: Edward Davis Result: UNSATISFACTORY

VIOLATIONS OBSERVED (if any)

0120 - Cover meets quantity and time constraints

In the northern portion of Area 5, ponded/pooled water is present in an area of settlement. Observed multiple points of gas release at the bottom of the ponded/pooled area (i.e. occurring primarily in the south and west portions of the ponded water).

WAC 173-351-500 - Closure and post closure care

WAC 173-351-500(1)(a)(ii)]

WAC 173-351-500(1)(a)(i)

WAC 173-351-500(2)

0141 - Gas production/migration

In the northern portion of Area 5, ponded/pooled water is present in an area of settlement. Observed multiple points of gas release at the bottom of the ponded/pooled area (i.e. occurring primarily in the south and west portions of the area where the ponded/pooled water is present)

WAC 173-351-500 - Closure and post closure care

WAC 173-351-500(1)(a)(ii)]

WAC 173-351-500(1)(a)(i)

WAC 173-351-500(2)

0146 - Gas management systems

In the northern portion of Area 5, ponded/pooled water is present in an area of settlement. Observed multiple points of gas release at the bottom of the ponded/pooled area (i.e. primarily in the south and west portions of the ponded/pooled area).

WAC 173-351-500 - Closure and post closure care

WAC 173-351-500(1)(a)(ii)]

WAC 173-351-500(1)(a)(i)

WAC 173-351-500(2)

OVERALL INSPECTION COMMENTS:

Good Line Parking Area:

The plastic debris noted in several previous routine inspections has been removed. The area appears void of litter and debris.

TR Placards needing aggressive cleaning include: TR#522; TR#514; TR#521. TR Placards in need of affixment of replacement lettering/decals include: TR#518; TR#602

In the area located southeast of the Good Line Parking Area additional TR units needing placard work and/or cleaning are as follows:

TR Placards needing aggressive cleaning include: TR#549; TR#478; TR Placards in need of affixment of replacement lettering/decals include: TR#513; TR#472; TR#492; TR#573.



Ed Davis

HEI III

PIC Phone #: 206-296-4490

Email: emily.robbins

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Thursday, March 6, 2014 Time In: 1:10 pm Time Out: 2:25 pm Inspector: Edward Davis Result: SATISFACTORY

VIOLATIONS OBSERVED (if any)

OVERALL INSPECTION COMMENTS:

In the northern portion of Area 5, ponded/pooled water is present in an area of settlement. Multiple points indicating release of gas were observed. [WAC 173-351-500(1)(a)(ii)(C)]



Ed Davis

HEI III

PIC Phone #: 206-296-4490

Email: emily.robins@kingcounty.gov; pamela.badger@kingcounty.gov

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385	INSPECTION INFORMATION: Date of Inspection: Friday, March 14, 2014 Time In: 11:05 am Time Out: 12:25 pm
 Program Record: PR0015736	 Inspector: Edward Davis Result: SATISFACTORY

VIOLATIONS OBSERVED (if any)

OVERALL INSPECTION COMMENTS:

In the northern portion of Area 5, ponded/pooled water is present in an area of settlement. Multiple points indicating release of gas were observed. [WAC 173-351-500(1)(a)(ii)(C)]

Good Line Parking –

•
TR identification placards needing maintenance attention:

- Trailer I.D. placards in need of re-decating; TR#511; TR#484 TR#573; TR#519
- Trailer I.D Placards in need of timely maintenance- TR#459; TR#465; TR#468

Ed Davis

Ed Davis

HEI III

PIC Phone #: 206-296-4490

Email: emily.robins@kingcounty.gov; pamela.badger@kingcounty.gov

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Friday, March 21, 2014 Time In: 3:29 pm Time Out: 4:22 pm Inspector: Edward Davis Result: SATISFACTORY

VIOLATIONS OBSERVED (if any)

OVERALL INSPECTION COMMENTS:

It appears measures to improve drainage of the ponded area in Area 5 have been activated. It appears fewer points of gas release are demonstrable as that observed during the previous inspection of 3/14/14. [WAC 173-351-500(1)(a)(ii)(C)]

Trailer Identification placards observed during this inspection:

Good Line Parking Area:

- Trailer I.D. placard in need of re-decating; TR#541

Area east of the SSWA:

- Trailer I.D. placards in need of re-decating; TR#492; TR#513; TR#472



Ed Davis

HEI III

PIC Phone #: 206-296-4490

Email: emily.robbs@kingcounty.gov; pamela.badger@kingcounty.gov



PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Wednesday, March 26, 2014 Time In: 2:53 pm Time Out: 3:58 pm Inspector: Edward Davis Result: UNSATISFACTORY

VIOLATIONS OBSERVED (if any)

0112 - Closure requirements met

In conjunction with this routine inspection, methane readings in Area 5 and Area 6 were obtained by landfill staff. Measurements exceeding 500 ppm. were determined. Under a Public Health letter of approval and subject to a limited time period (@ 8 years), interim cover is present in Area 5 and Area 6, in lieu of final cover. The interim cover in both areas (Area 5 and Area 6) represents an alternative final cover approved by Public Health for the prescribed limited time period. Subsequently, interim cover(s) are to meet conditions indicated in the approval granted by public health. [WAC 173-351-500(a)(ii)]; [WAC 173-351-500(a)(ii)(C)]

0141 - Gas production/migration

In conjunction with this routine inspection, methane readings in Area 5 and Area 6 were obtained by landfill staff. Measurements exceeding 500 ppm. were determined.

OVERALL INSPECTION COMMENTS:

Additional Observations: Area 5 and Area 6
Ponded/pooled water is present in what appears to be areas of settlement.
WAC 173-351-500(1)(a)(i)(B)

Assisting with the routine inspection is Bill Lasby, SKCHD Solid Waste Program Supervisor
A copy of the inspection is being sent to emily.robbs@kingcounty.gov and
pamela.badger@kingcounty.gov

Ed Davis

Ed Davis
HEI III

PIC Phone #: 206-296-4490

Email: emily.robbs@kingcounty.gov; pamela.badger@kingcounty.gov

Landfill Site: Cedar Hills
10 Days after Exceedance

Date: 1-1-1984

Cal. Time: 9:00

Calibration :

Technician: 

Test Instrument used: TVA-1000

Surveyor McGowan

Cal. Gas Lot No: 20328

Cal Gas Used:

CH₄ 496 ppm

O₂ Ambient

Barometric Pressure	Time
Start 29.96	9:00
Stop 29.96	11:30am

90% response time in seconds:

1 5 seconds

2 6 seconds

3 5 seconds

avg. 6 seconds

Weather Conditions: Overcast

Wind Speed &

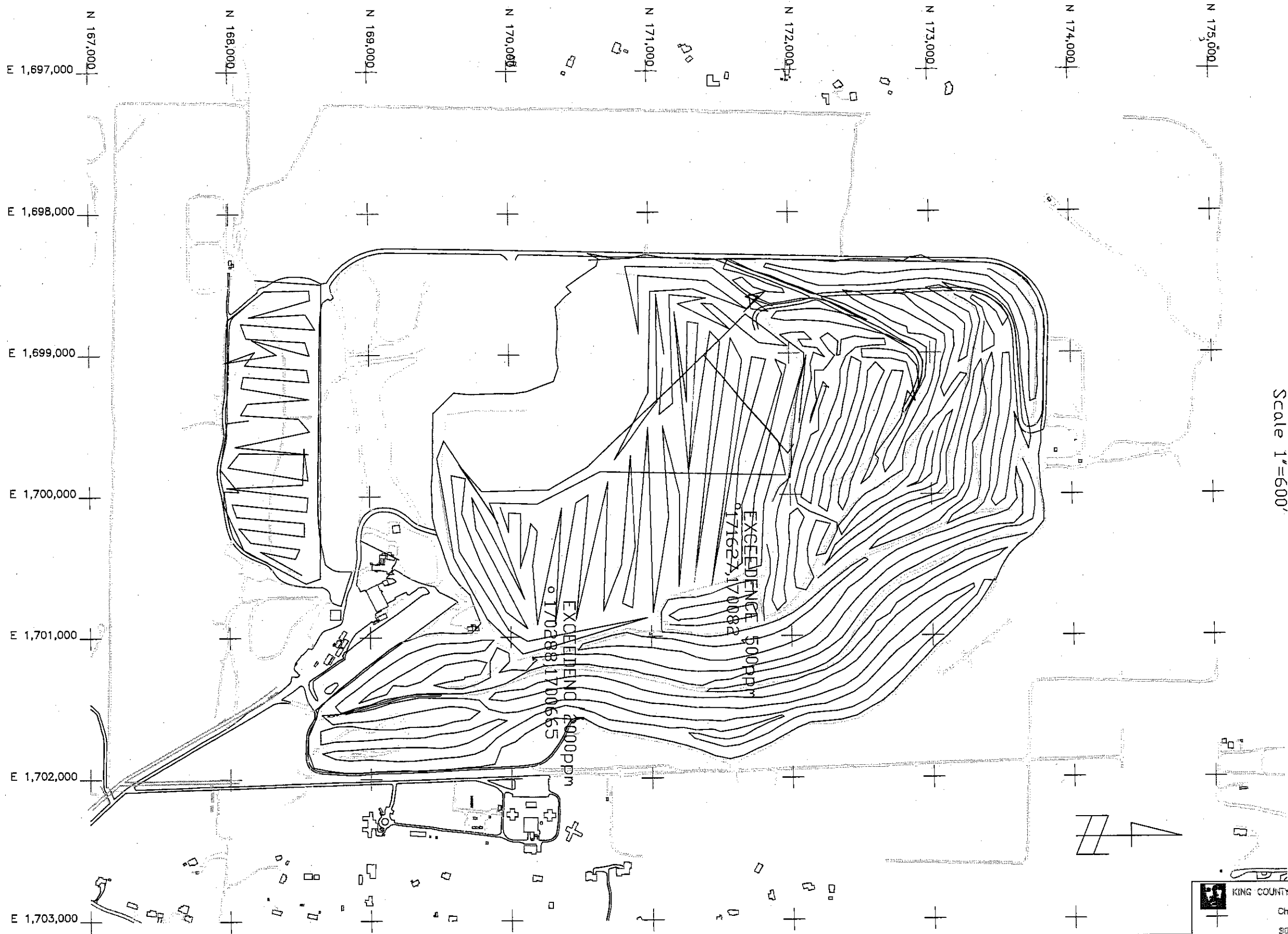
Direction (out of): 4 mph SSE

[illegible]

APPENDIX B: GAS MONITORING REPORTS

Cedar Hills Regional Landfill Quarterly Surface Emission Monitoring Plot of GPS Generated Track Lines

MARCH 2014
 Scale 1"=600'



KING COUNTY DEPARTMENT OF NATURAL RESOURCES
 AND PARKS
 Christie True, Director
 SOLID WASTE DIVISION
 CEDAR HILLS QUARTERLY
 GAS EMISSIONS MONITORING

APPROVED _____ DATE XX-XX-XX
 RECOMMENDED _____ DATE ____
 DESIGNED MJM DRAWN MJM
 PROJECT NO. _____ SURVEY NO. _____ SHEET 1 OF 1

DATE	REVISION	BY

KING COUNTY SOLID WASTE
 201 S JACKSON ST. SUITE 701
 SEATTLE, WA 98104-3553

KING COUNTY SOLID WASTE
 DEPARTMENT OF
 SOLID WASTE

CEDAR HILLS REGIONAL LANDFILL
 SCALE: 1" = 600'
 CONTOUR INTERVAL: 5 FT.
 DATE OF PHOTOGRAPHY: 01-17-00

LEGEND
 TRACK LINE
 CONTOUR LINE
 BOUNDARY LINE
 ROAD
 BUILDING
 POWER LINE

PREPARED BY
 J. D. J. LLC
 1000 1st Ave.
 Seattle, WA 98101
 (206) 461-1000

[illegible]

[illegible]

NO EXCEEDANCE DETECTED.

No EXCESSANCE'S. DATED.

Landfill Site: CEDAR HILLS

Date: 3-20-14

Cal. Time: 7:00 AM

Technician: D. B. 24

Test Instrument used: IVA 1000

Surveyor M. McLEWIS

Cal. Gas Lot No: 20328

Barometric Pressure	Time
Start 30.24	7:00 AM
Stop 30.27	12:00 PM

CH₄ 496 ppm

O2 AmBilatt

1	<u>4</u>	seconds
2	<u>4</u>	seconds
3	<u>5</u>	seconds
avg.	<u>4</u>	seconds

Weather Conditions: Mostly Cloudy

Wind Speed &

Direction (out of): 3 mph SW

Northings (UTM #)

Easting (10 T #)

Time

Comments

[illegible]

[illegible]

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 3/2/14

Cal. Time: 8:30

Calibration :

Technician:

Test Instrument used: TVA-1000

Surveyor McGowan

Cal. Gas Lot No: 20328

Cal Gas Used:

CH₄ 496 ppm.

O2 Amb

Barometric Pressure	Time
Start 30.26	8:30-
Stop 30.24	12:30-

90% response time in seconds:

1 5 seconds

2 6 seconds

3 5 seconds

avg. 3 seconds

Weather Conditions: Partly Cloudy

Wind Speed &

Direction (out of): 1 mph E

Northing (UTM #)

Easting (10 T #)

Time

Comments

[illegible]

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 3/22/14

Cal. Time: 12:00pm

Calibration :

Technician: Dye

Test Instrument used: TVA-1000

Surveyor McEwen

Cal. Gas Lot No: 20328

Cal Gas Used:

CH₄ 49600m

O2 Amb

Barometric Pressure	Time
Start 30.24	12:30 pm
Stop 30.22	2:45 pm

90% response time in seconds:

1.6 seconds

2 5 seconds

3 5 seconds

avg. 2 seconds

Weather Conditions: Mostly Cloudy

Wind Speed &

Direction (out of): 2 mph SW

Northing (UTM #)

Easting (10 T #)

Time

Comments

A 10x10 grid with a diagonal line running from the top-left corner to the bottom-right corner. The grid is composed of 10 columns and 10 rows. The diagonal line starts at the top-left cell (row 1, column 1) and ends at the bottom-right cell (row 10, column 10). The cells along the diagonal are shaded gray, while the other cells are white.

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 3-24-14

Cal. Time: 11:30

Calibration :

Test Instrument used: TVA-1000

Technician: Dye

Surveyor McGinn

Cal. Gas Lot No: 20328

Cal Gas Used:

CH4 496ppm

O₂ Amb

Barometric Pressure	Time
Start 30.07	11:30
Stop 29.98	3:45 pm

90% response time in seconds:

1 seconds

2 4 seconds

3 6 seconds

avg. 5 seconds

Weather Conditions: Pretty Cloudy

Wind Speed &

Direction (out of): 9 mph SE

Northing (UTM #)

Easting (10 T #)

Time

Comments

A blank graph grid consisting of 10 columns and 10 rows. A diagonal line is drawn from the top-left corner (0, 10) to the bottom-right corner (10, 0). The line passes through the points (1, 9), (2, 8), (3, 7), (4, 6), (5, 5), (6, 4), (7, 3), (8, 2), and (9, 1).

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 3/24/14

Cal. Time: 7:45

Calibration :

Technician: D42

Test Instrument used: TVA-1000

Surveyor McEwen

Cal. Gas Lot No: 20328

Cal Gas Used:

CH₄ 496000

O₂ Amb

Barometric Pressure	Time
Start 29.63	9:00
Stop 29.62	12:15pm

90% response time in seconds:

1 5 seconds

2 5 seconds

3 5 seconds

avg. 5 seconds

Weather Conditions: Mostly Cloudy / overcast / Shiny

Wind Speed &

Direction (out of): 6 mph SE

[illegible]

[illegible]

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 3/26/20

Cal. Time: 8:00

Calibration :

Technician: Dr

Test Instrument used: TWA-100

Surveyor McEwen

Cal. Gas Lot No: 20328

Cal. Gas Used:

CH₄ 496 nm

O₂ Amb

Barometric Pressure	Time
Start 29.80	8:00
Stop 29.80	12:00 p.m.

90% response time in seconds:

1 3 seconds

2 6 seconds

3 5 seconds

avg. 5 seconds

Weather Conditions: Overcast / Rain

Wind Speed &

Direction (out of): 8 mph SE

Northing (UTM #)

Easting (10 T #)

Time

Comments

A graph on a grid showing a decreasing curve. The curve starts at the top left and slopes downwards to the bottom right, passing through approximately 10 grid units horizontally and 10 grid units vertically.

Landfill Site: Cedar Hills

Date: 3/29/14

Cal. Time: 8:00

Technician: De

Test Instrument used: TV4-1000

Surveyor McEwen

Cal. Gas Lot No: 20328

Barometric Pressure	Time
Start 29.77	8:00 a
Stop 29.82	1:00 p

CH₄ 496 ppm

O₂ Amb

1 5 seconds

2 6 seconds

3 5 seconds

avg. Σ seconds

Weather Conditions: Overcast / Rain

Wind Speed &

Direction (out of): 8 mph SE

Comments

[illegible]

APPENDIX C: ANALYTICAL TEST RESULTS

ANALYTICAL TEST RESULTS

Location	Date	Sample ID	ALK. TOT'L	COD	CHLORIDE	IRON	IRON	SULFATE	TOC	FIELD TESTS			
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	COND (F)	PH (F)	TURB	TEMP
			N	N	N	D	T	N	N	umhos/cm	pH units	ntu	deg. C
SW-S1	1/22/2014	SS1-140122Q	12.5	< 5 U	2.59	< 0.01 U	0.013 T	2.27	2.81	55	8.21	0.21	6.8
SW-S1	2/27/2014	SS1-140227M	11.1	< 5 U	2.41	< 0.01 U	0.013 T	2.19	2.46	53	7.63	0.41	6.9
SW-S1	3/19/2014	SS1-140319M	10.5	< 5 U	1.95	0.014 T	0.018 T	2.26	2.3	47	7.44	3.82	9
SW-TD1	1/29/2014	STD1140129-	14.7	21.1	1.37	0.048 T	0.277	2.25	5.92	41	7.34	5.87	6.7
SW-TD2	1/29/2014	STD2140129-	8.81	34.5	1.48	0.0679	0.209	1.99	10.8	32	8.09	4.98	6.2
SW-TD4	1/29/2014	STD4140129-	12.3	27.6	2.32	0.039 T	0.137	3.48	7.56	43	7.45	3.77	7.5
SW-TD6	1/29/2014	STD6140129-	15.3	24	1.64	0.042 T	0.278	3.35	7	47	8.05	6.94	11.8

	DUPLICATE SAMPLE TEST RESULTS
	EXCEEDED INDUSTRIAL STORMWATER GENERAL PERMIT BENCHMARK
RESULT	EXCEEDED WAC 173
RESULT	EXCEEDED EPA LIMITS

Location	Date	Sample ID	ALK. TOT'L mg/L	COD mg/L	CHLORIDE mg/L	IRON DISS. mg/L	IRON TOT'L mg/L	SULFATE mg/L	TOC mg/L	COND (F) umhos/cm	PH (F) pH units	TURB ntu	TEMP deg c
LS-API	1/8/2014	LAPI140108M	1780	2670	407	N/A	19	71	814	2700	7.5	N/A	7.8
LS-API	2/12/2014	LAPI140212M	1540	1590	318	N/A	12.9	42.4	472	2300	7.39	N/A	6
LS-API	3/12/2014	LAPI140312M	361	1310	177	N/A	9.07	57.1	397	1080	7.36	N/A	4.5
LS-API	MATHEMATICAL AVERAGE		1227.0	1856.7	300.7	N/A	28.3	56.8	2700.0	2026.7	7.4	N/A	6.1