
CEDAR HILLS REGIONAL LANDFILL QUARTERLY ENVIRONMENTAL MONITORING REPORT

Third Quarter 2015



Department of Natural Resources and Parks
Solid Waste Division

**KING COUNTY SOLID WASTE
CEDAR HILLS REGIONAL LANDFILL
QUARTERLY ENVIRONMENTAL MONITORING REPORT**

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Cedar Hills Regional Landfill Summary of Quarterly Environmental Monitoring Third Quarter of 2015

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 third quarter are listed in Table 2.

1.1.1 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.

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 or vertical to facilities MW-64 and MW-68; and downgradient wells MW-69, MW-80, MW-86, MW-87, MW-89 and MW-91 also exceeded the standard for arsenic. 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.

Trichloroethene 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.

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 (2014). 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, nitrate in upgradient well MW-94 exceeded prediction limits (Table 5). Adequate background data sets for total metals have now been collected and used to establish initial prediction limit values for Appendix I metals. These calculations indicate limit exceedances for arsenic and barium in down gradient well MW-80. These results will be evaluated per the protocol described in the *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill*.

Volatile Organic Compound (VOC) detections in regional aquifer wells 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-82, MW-83, and MW-94; *cis*-1,2-dichloroethene 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.

Methylene chloride and chloromethane were detected in field, trip and method blanks as well numerous groundwater samples. Acetone was detected in field and method blanks, and styrene and toluene in one field blank. All of these detections are attributable to blank contamination or preservation artifacts. Quality Assurance /Quality Control (QA/QC) samples (field blanks, 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 six perched wells, three in the north and west areas of the

landfill (MW-27A, MW-29, and MW-55), two in the east perched zone (MW-30A and MW-47); and MW-101 in the South Solid Waste Area. Wells MW-28, MW-62 and MW-EB6 were not sampled due to seasonally low water levels. Groundwater quality data for the regularly sampled Perched Zone samples collected during the third quarter of 2015 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 potential analytical error (greater than 10% ion imbalance) only in perched well MW-62.

As with the regional data, perched zone prediction limits are derived from cumulative data through the end of 2014 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. Only 5 surface water stations had adequate flow during the third quarter to collect samples. 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 designated compliance stations SW-GS1 and SW-SL3 this quarter. The benchmarks for turbidity and copper were exceeded for the August sample at SW-GS1. No effluent limits were exceeded (Table 12).

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. No compliance probes exceeded the 5% criteria this quarter.

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 was not detected in any migration monitoring probe during the second quarter.

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

Compliance Probes, 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

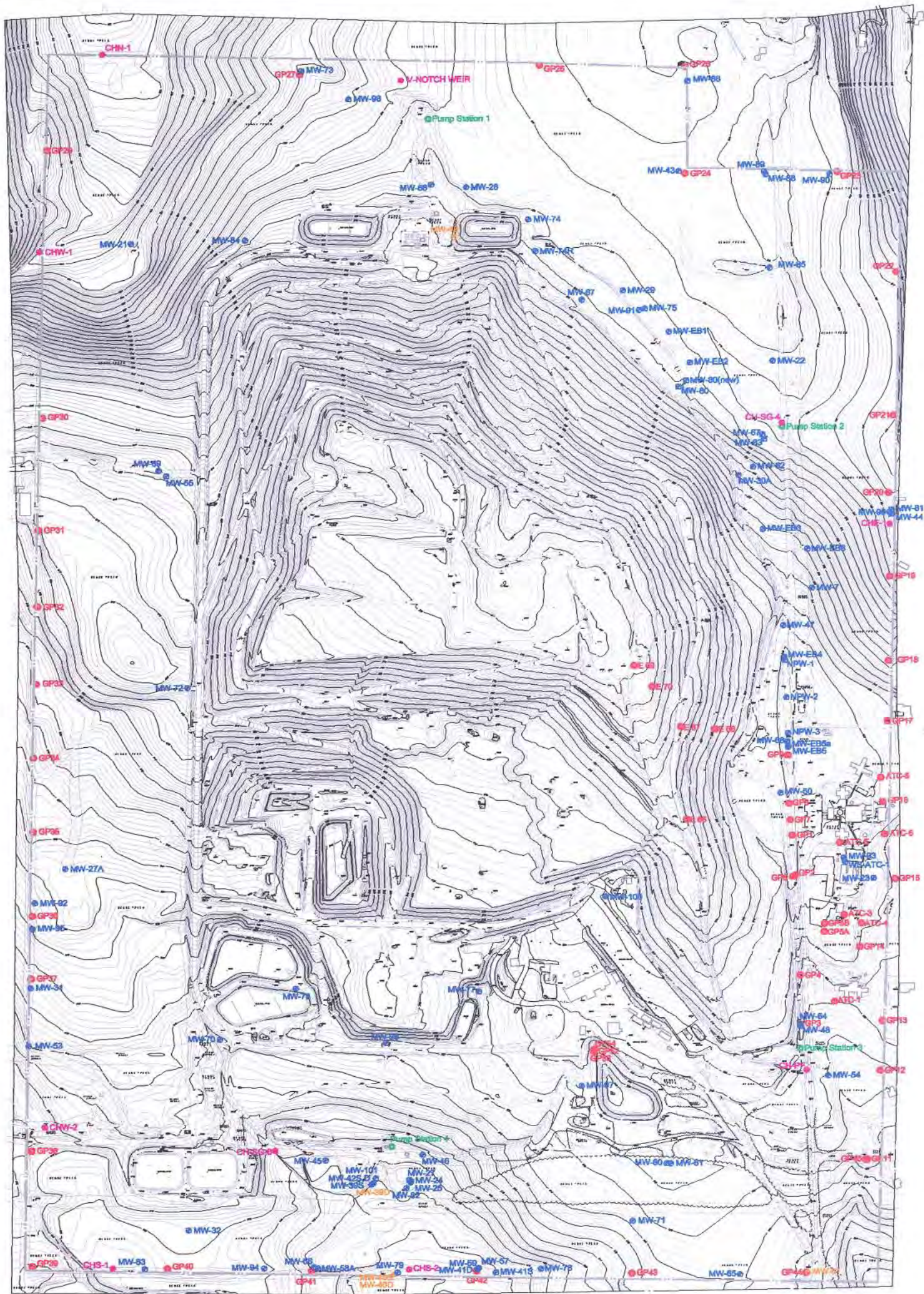
The Prediction Limit is an intra-well statistical test that compares an analytical result to a computed limit value. The limit value is derived from past analytical results from the same well, considered representative historical well data. A value outside of this

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. 1
- 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.
	DESIGNER:				FIGURE NO. 1

TABLE 1
SUMMARY OF CEDAR HILLS REGIONAL LANDFILL GROUNDWATER WELLS

Well Number	Date Constructed	Decommissioned	Aquifer	Zone ¹	Purpose ²	Ground Surface Elevation	Top of Well Casing Elevation	Total Well Depth					Coordinates	
									Screened Interval Depth	Screened Interval Elevation	Screened Interval Depth	Screened Interval 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	4/1/2015	Regional	I	AB	527.9	530.57	221.5	205.1	218.8	322.8	309.1	168699.89	1698412.97
MW-77	10/12/1999	4/1/2015	Regional	I	AB	550.5	552.67	251.5	230	239.5	320.5	311.0	168999.71	1700007.63
MW-78	10/8/1999	4/1/2015	Regional	I	AB	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-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-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-86	12/12/2000	--	Regional	DNF	WL/WQ	533.9	536.04	282.0	250.5	259.3	283.4	274.6	174917.90	1701331.25
MW-88	9/13/2001	--	Regional	DNF	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	DNF	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	DNF	WL/WQ	500.2	502.22	300.0	265	274	235.2	226.2	174300.67	1702203.13
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	--	AB	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	Decommissioned	Aquifer	Zone ¹	Purpose ²	Ground Surface Elevation	Top of Well Casing Elevation	Total Well Depth	Coordinates					
									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	4/1/2015	Perched	SSWA	AB	545.4	547.74	102.9	88.8	97.5	456.6	447.9	168667.73	1699434.47
MW-97	9/5/2001	4/1/2015	Perched	SSWA	AB	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	¹ Position of the well screen in the regional aquifer flow path analysis relative to waste placement and site utilities.													
	² WL = Water Level WQ = Water Quality													
	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													
	² WL = Water Level WQ = Water Quality													

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 3rd QUARTER 2015

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-21	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-21	Regional	7/2/15	Groundwater Sampling	W21-150702-	
MW-22	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-24	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-24	Regional	7/2/15	Groundwater Sampling	W24-150702-	
MW-25	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-27A	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-27A	Perched	7/2/15	Groundwater Sampling	W27A150702-	
MW-28	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-28	Perched	7/2/15	Groundwater Sampling	NA	No Flow, No Sample
MW-29	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-29	Perched	7/2/15	Groundwater Sampling	W29-150702-	
MW-30A	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-30A	Perched	7/10/15	Groundwater Sampling	W30A150710-	
MW-30A	Perched	7/10/15	QA/QC Sample	W30A150710D	Field Duplicate
MW-41D	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-41S	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-43	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-43	Regional	7/8/15	Groundwater Sampling	W43-150708-	
MW-45	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-47	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-47	Perched	8/7/15	Groundwater Sampling	W47-150807-	
MW-47	Perched	8/7/15	QA/QC Sample	W47-150807D	Field Duplicate
MW-48	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-50	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-54	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-55	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-55	Perched	8/7/15	Groundwater Sampling	W55-150807-	
MW-56	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-56	Regional	7/6/15	Groundwater Sampling	W56-150706-	
MW-57	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-57	Regional	7/9/15	Groundwater Sampling	W57-150709-	
MW-58A	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-59	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-59	Regional	7/8/15	Groundwater Sampling	W59-150708-	
MW-60	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-60	Regional	7/9/15	Groundwater Sampling	W60-150709-	
MW-62	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-62	Perched	7/13/15	Groundwater Sampling	NA	No Flow, No Sample
MW-63	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-64	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-64	Regional	7/13/15	Groundwater Sampling	W64-150713-	
MW-65	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-65	Regional	7/10/15	Groundwater Sampling	W65-150710-	
MW-66	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-66	Regional	7/13/15	Groundwater Sampling	W66-150713-	
MW-67	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-67	Regional	7/13/15	Groundwater Sampling	W67-150713-	
MW-68	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-68	Regional	7/9/15	Groundwater Sampling	W68-150709-	
MW-69	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-69	Regional	7/9/15	Groundwater Sampling	W69-150709-	
MW-70	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-72	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-72	Regional	7/13/15	Groundwater Sampling	W72-150713-	

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 3rd QUARTER 2015

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-73	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-73	Regional	7/16/15	Groundwater Sampling	W73-150716-	
MW-74	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-74	Regional	7/10/15	Groundwater Sampling	W74R150710-	
MW-74	Regional	8/14/15	Groundwater Sampling	W74R150814-	
MW-74	Regional	9/11/15	Groundwater Sampling	W74R150911-	
MW-75	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-75	Regional	7/10/15	Groundwater Sampling	W75-150710-	
MW-75	Regional	8/14/15	Groundwater Sampling	W75-150814-	
MW-75	Regional	9/11/15	Groundwater Sampling	W75-150911-	
MW-76	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-76	Regional	7/14/15	Groundwater Sampling	W76-150714-	
MW-77	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-78	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-79	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-80	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-80	Regional	7/17/15	Groundwater Sampling	W80-150717-	
MW-81	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-81	Regional	7/23/15	Groundwater Sampling	W81-150723-	
MW-82	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-82	Regional	7/6/15	Groundwater Sampling	W82-150706-	
MW-83	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-83	Regional	7/14/15	Groundwater Sampling	W83-150714-	
MW-84	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-84	Regional	7/13/15	Groundwater Sampling	W84-150713-	
MW-85	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-85	Regional	7/23/15	Groundwater Sampling	W85-150723-	
MW-86	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-86	Regional	7/16/15	Groundwater Sampling	W86-150716-	
MW-87	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-87	Regional	7/9/15	Groundwater Sampling	W87-150709-	
MW-87	Regional	8/14/15	Groundwater Sampling	W87-150814-	
MW-87	Regional	9/11/15	Groundwater Sampling	W87-150911-	
MW-88	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-88	Regional	7/22/15	Groundwater Sampling	W88-150722-	
MW-89	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-89	Regional	7/22/15	Groundwater Sampling	W89-150722-	
MW-90	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-90	Regional	7/22/15	Groundwater Sampling	W90-150722-	
MW-91	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-91	Regional	8/6/15	Groundwater Sampling	W91-150806-	
MW-93	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-93	Regional	7/17/15	Groundwater Sampling	W93-150717-	
MW-94	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-94	Regional	7/14/15	Groundwater Sampling	W94-150714-	
MW-95	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-95	Regional	7/16/15	Groundwater Sampling	W95-150716-	
MW-96	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-97	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-98	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-99	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-99	Regional	7/10/15	Groundwater Sampling	W99-150710-	
MW-99	Regional	8/14/15	Groundwater Sampling	W99-150814-	
MW-99	Regional	9/11/15	Groundwater Sampling	W99-150911-	
MW-100	Regional	7/1/15	Groundwater Elevation Measurement	NA	

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 3rd QUARTER 2015

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-100	Regional	7/6/15	Groundwater Sampling	W100150716-	
MW-101	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-101	Perched	9/2/15	Groundwater Sampling	W101150902-	
MW-102	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-103	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-104	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-105	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-106	Regional	7/1/15	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	7/1/15	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	7/13/15	Groundwater Sampling	NA	No Flow, No Sample
WS-NPW	Regional	8/7/15	Water Supply Characterization	WNPW150807-	
WS-NPW-1	Regional	7/1/15	Groundwater Elevation Measurement	NA	
WS-NPW-3	Regional	7/1/15	Groundwater Elevation Measurement	NA	
Equipment Blank	NA	8/7/15	QA/QC Sample	WU1H150807E	
Equipment Blank	NA	8/7/15	QA/QC Sample	WU1S150807E	
Equipment Blank	NA	8/7/15	QA/QC Sample	WU1M150807E	
Field Blank	NA	9/11/15	QA/QC Sample	W87-150911F	
Field Blank	NA	7/22/15	QA/QC Sample	W89-150722F	
Field Blank	NA	8/7/15	QA/QC Sample	WNPW150807F	
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 July 1, 2015 to September 30, 2015)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
South, Northeast and Northwest Upgradient and Crossgradient Wells					
Arsenic (Total)	(mg/L)	MW-21	7/2/2015	W21-150702-	0.00104
		MW-93	7/17/2015	W93-150717-	0.00122
		MW-99	7/10/2015	W99-150710-	0.00167
Iron (Dissolved)	(mg/L)	MW-21	7/2/2015	W21-150702-	2.28
		MW-24	7/2/2015	W24-150702-	3.15
		MW-57	7/9/2015	W57-150709-	8.04 D
		MW-59	7/8/2015	W59-150708-	4.55 D
		MW-65	7/10/2015	W65-150710-	4.38 D
Manganese (Dissolved)	(mg/L)	MW-21	7/2/2015	W21-150702-	0.0625
		MW-24	7/2/2015	W24-150702-	0.0985
		MW-56	7/6/2015	W56-150706-	0.181
		MW-57	7/9/2015	W57-150709-	0.218
		MW-59	7/8/2015	W59-150708-	0.104
		MW-65	7/10/2015	W65-150710-	0.186
		MW-93	7/17/2015	W93-150717-	0.216
		MW-95	7/16/2015	W95-150716-	0.138
		MW-99	7/10/2015	W99-150710-	0.12
Trichloroethene	(ug/L)	MW-76	7/14/2015	W76-150714-	8.79
		MW-82	7/6/2015	W82-150706-	6.27
Vinyl Chloride	(ug/L)	MW-65	7/10/2015	W65-150710-	0.0493
Interior and Vertical to Facilities Wells					
Arsenic (Total)	(mg/L)	MW-64	7/13/2015	W64-150713-	0.00118
		MW-68	7/9/2015	W68-150709-	0.0793
Iron (Dissolved)	(mg/L)	MW-68	7/9/2015	W68-150709-	0.595 D
		MW-100	7/16/2015	W100150716-	1.06
Manganese (Dissolved)	(mg/L)	MW-67	7/13/2015	W67-150713-	0.143
		MW-68	7/9/2015	W68-150709-	0.281
		MW-100	7/16/2015	W100150716-	0.174

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 July 1, 2015 to September 30, 2015)

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	7/9/2015	W69-150709-	0.00206
		MW-80	7/17/2015	W80-150717-	0.00397
		MW-86	7/16/2015	W86-150716-	0.00127
		MW-87	7/9/2015	W87-150709-	0.0162
		MW-89	7/22/2015	W89-150722-	0.00422
		MW-91	8/6/2015	W91-150806-	0.121
Iron (Dissolved)	(mg/L)	MW-43	7/8/2015	W43-150708-	1.05 D
		MW-69	7/9/2015	W69-150709-	0.952 D
		MW-72	7/13/2015	W72-150713-	2.41 D
		MW-75	7/10/2015	W75-150710-	1.85 D
		MW-80	7/17/2015	W80-150717-	2.36
		MW-87	7/9/2015	W87-150709-	3.93 D
		MW-89	7/22/2015	W89-150722-	0.897
		MW-90	7/22/2015	W90-150722-	1.27
		MW-91	8/6/2015	W91-150806-	3.63
Manganese (Dissolved)	(mg/L)	MW-43	7/8/2015	W43-150708-	0.224
		MW-69	7/9/2015	W69-150709-	0.231
		MW-72	7/13/2015	W72-150713-	0.319
		MW-75	7/10/2015	W75-150710-	0.151
		MW-80	7/17/2015	W80-150717-	0.274
		MW-87	7/9/2015	W87-150709-	0.406
		MW-89	7/22/2015	W89-150722-	0.196
		MW-90	7/22/2015	W90-150722-	0.245
		MW-91	8/6/2015	W91-150806-	0.462
Vinyl Chloride	µg/L	MW-43	7/8/2015	W43-150708-	0.0253

F1 Primary Federal Drinking Water Quality Standard

F2 Secondary Federal Drinking Water Quality Standard

SGW1 State of Washington Primary Ground Water Quality Criteria

SGW2 State of Washington Secondary Ground Water Quality Criteria

See Data Qualifier List for Qualifier Information.

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

Data Collected from July 1, 2015 to September 30, 2015

Site ID			Upgradient South																	
			MW-24 7/2/15			MW-56 7/6/15			MW-57 7/9/15			MW-59 7/8/15			MW-60 7/9/15			MW-65 7/10/15		
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	13.1	0.653693	38.8	13.2	0.658683	44.8	14.2	0.708583	37.0	14.3	0.713573	38.7	15.1	0.753493	47.7	11.6	0.578842	37.8
Magnesium	24.3	2	8.1	0.664884	39.5	6.9	0.56943	38.7	7.6	0.627031	32.7	8.4	0.692862	37.6	6.9	0.570253	36.1	6.7	0.547213	35.7
Potassium	39.1	1	0.9	0.023889	1.4	1.1	0.027623	1.9	0.9	0.023249	1.2	1.1	0.027878	1.5	1.1	0.028134	1.8	1.0	0.02486	1.6
Sodium	23.0	1	5.1	0.222273	13.2	4.7	0.205309	14.0	6.0	0.258811	13.5	5.5	0.240107	13.0	5.2	0.226188	14.3	5.0	0.217923	14.2
Iron	55.8	2	3.15	0.112808	6.7	0.03	0.001182	0.1	8.04	0.28793	15.0	4.55	0.162945	8.8	0.03	0.001146	0.1	4.38	0.156857	10.2
Manganese	54.9	2	0.10	0.003586	0.2	0.18	0.006589	0.4	0.22	0.007936	0.4	0.10	0.003786	0.2	0.00	4.4E-05	0.0	0.19	0.006771	0.4
Ammonia-N	14.0	1	0.04	0.002834	0.2	0.01	0.000714	0.0	0.02	0.001471	0.1	0.01	0.000714	0.0	0.01	0.000714	0.0	0.01	0.000835	0.1
Total Cations (meq/L)			1.7			1.5			1.9			1.8			1.6			1.5		
Anions																				
Alkalinity, Total	65.0	2	0.05729	0.00191	0.1	0.06383	0.002128	0.1	0.02674	0.000891	0.0	0.04716	0.001572	0.1	0.05772	0.001924	0.1	0.04472	0.001491	0.1
Bicarbonate	61.0	1	78.57	1.287896	73.8	69.53	1.139701	70.0	78.39	1.284915	65.9	79.57	1.304231	71.5	88.82	1.455856	83.8	67.25	1.102343	72.6
Chloride	35.5	1	3.8	0.107184	6.1	5.0	0.139621	8.6	5.9	0.166982	8.6	4.3	0.121005	6.6	2.5	0.069952	4.0	3.5	0.099568	6.6
Nitrate-N	14.0	1	0.02	0.001214	0.1	0.04	0.002642	0.2	0.02	0.001142	0.1	0.02	0.001713	0.1	1.12	0.07996	4.6	0.01	0.000714	0.0
Sulfate	96.1	2	16.7	0.347708	19.9	16.5	0.343544	21.1	23.8	0.495536	25.4	19.0	0.395596	21.7	6.2	0.129714	7.5	15.1	0.314395	20.7
Total Anions (meq/L)			1.7			1.6			1.9			1.8			1.7			1.5		
Total Ions (meq/L)			3.4			3.1			3.9			3.7			3.3			3.1		
Cation/Anion Ratio			0.96			0.90			0.98			1.01			0.91			1.01		
Percent Difference			-1.8			-5.1			-0.9			0.5			-4.7			0.5		
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)			1.56			1.46			1.62			1.67			1.58			1.37		
Calcium						41.78			45.08			43.80			42.62			47.75		
Magnesium						42.49			38.97			38.76			41.38			36.14		
Sodium + Potassium						15.73			15.94			17.44			16.00			16.12		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.74			1.62			1.95			1.82			1.66			1.52		
Sulfate						19.929			21.141			25.434			21.707			7.826		
Chloride						6.143			8.592			8.571			6.640			4.220		
Bicarbonate + Carbonate						73.927			70.267			65.996			71.653			87.953		

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

Data Collected from July 1, 2015 to September 30, 2015

Site ID			Upgradient South												Upgradient Northwest											
			MW-76 7/14/15			MW-82 7/6/15			MW-83 7/14/15			MW-94 7/14/15			MW-21 7/2/15			MW-73 7/16/15			MW-84 7/13/15					
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)	mg/L	meq/L	%(meq)			
Calcium	40.1	2	19.1	0.953094	46.9	23.7	1.182635	45.3	44.2	2.205589	53.8	23.9	1.192615	49.9	9.7	0.484032	39.2	11.2	0.558882	43.7	11.0	0.548902	35.9			
Magnesium	24.3	2	8.4	0.693684	34.1	13.2	1.086196	41.6	17.5	1.440033	35.1	10.3	0.847562	35.4	5.2	0.427073	34.6	5.6	0.460811	36.0	8.4	0.691216	45.2			
Potassium	39.1	1	1.3	0.03325	1.6	1.8	0.044759	1.7	2.8	0.070591	1.7	2.0	0.051665	2.2	1.0	0.025577	2.1	0.8	0.020001	1.6	1.0	0.026344	1.7			
Sodium	23.0	1	8.1	0.353201	17.4	6.8	0.294044	11.3	8.9	0.385824	9.4	6.9	0.298394	12.5	4.9	0.214008	17.3	5.5	0.237497	18.6	6.0	0.261421	17.1			
Iron	55.8	2	0.01	0.000358	0.0	0.03	0.000931	0.0	0.01	0.000358	0.0	0.01	0.000358	0.0	2.28	0.081652	6.6	0.01	0.000358	0.0	0.01	0.000358	0.0			
Manganese	54.9	2	0.00	3.64E-05	0.0	0.00	3.64E-05	0.0	0.00	0.000178	0.0	0.00	3.64E-05	0.0	0.06	0.002275	0.2	0.00	3.64E-05	0.0	0.00	3.64E-05	0.0			
Ammonia-N	14.0	1	0.01	0.000714	0.0	0.01	0.000714	0.0	0.01	0.000714	0.0	0.01	0.000714	0.0	0.01	0.000714	0.1	0.01	0.000714	0.1	0.01	0.000714	0.0			
Total Cations (meq/L)			2.0			2.6			4.1			2.4			1.2			1.3			1.5					
Anions																										
Alkalinity, Total	66					112			141			89			53			54			61					
Carbonate	60.0	2	0.01783	0.000594	0.0	0.10659	0.003553	0.1	0.05347	0.001782	0.0	0.05196	0.001732	0.1	0.17257	0.005752	0.5	0.03653	0.001218	0.1	0.03819	0.001273	0.1			
Bicarbonate	61.0	1	80.97	1.327205	62.3	136.42	2.23611	77.1	171.91	2.817793	63.4	107.86	1.768001	68.0	63.70	1.04409	82.0	66.05	1.082619	76.3	73.98	1.212544	75.1			
Chloride	35.5	1	14.1	0.39771	18.7	9.6	0.270499	9.3	45.6	1.28621	28.9	20.5	0.57823	22.2	2.7	0.076721	6.0	2.4	0.067977	4.8	3.6	0.102107	6.3			
Nitrate-N	14.0	1	0.85	0.060541	2.8	0.60	0.04255	1.5	2.50	0.178482	4.0	1.52	0.108517	4.2	0.01	0.000714	0.1	1.07	0.07639	5.4	0.47	0.03384	2.1			
Sulfate	96.1	2	16.6	0.345626	16.2	16.7	0.347708	12.0	7.7	0.160737	3.6	7.0	0.145121	5.6	7.0	0.146162	11.5	9.1	0.190302	13.4	12.7	0.264425	16.4			
Total Anions (meq/L)			2.1			2.9			4.4			2.6			1.3			1.4			1.6					
Total Ions (meq/L)			4.2			5.5			8.5			5.0			2.5			2.7			3.1					
Cation/Anion Ratio			0.95			0.90			0.92			0.92			0.97			0.90			0.95					
Percent Difference			-2.3			-5.3			-4.0			-4.2			-1.5			-5.2			-2.7					
Trilinear Diagram Data																										
sum (Ca, Mg, Na+K)			2.03			2.61			4.10			2.39			1.15			1.28			1.53					
Calcium						46.88			45.35			53.77			49.90			42.06			43.76			35.93		
Magnesium						34.12			41.65			35.11			35.46			37.11			36.08			45.24		
Sodium + Potassium						19.01			12.99			11.13			14.65			20.82			20.16			18.83		
						100.0									100.0			100.0			100.0			100.0		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			2.07			2.86			4.27			2.49			1.27			1.34			1.58					
Sulfate						16.688			12.167			3.767			5.821			11.484			14.179			16.732		
Chloride						19.202			9.465			30.147			23.193			6.028			5.065			6.461		
Bicarbonate + Carbonate						64.110			78.368			66.086			70.986			82.488			80.756			76.807		

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

Data Collected from July 1, 2015 to September 30, 2015

Site ID			Upgradient Northeast						Cross Gradient					
			MW-81 7/23/15			MW-99 7/10/15			MW-93 7/17/15			MW-95 7/16/15		
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	10.6	0.528942	42.3	9.6	0.480539	36.5	32.7	1.631737	47.1	19.0	0.948104	46.3
Magnesium	24.3	2	5.6	0.459988	36.7	4.3	0.357128	27.1	16.7	1.374203	39.6	9.9	0.810533	39.6
Potassium	39.1	1	0.7	0.01908	1.5	0.9	0.023224	1.8	1.6	0.040411	1.2	1.2	0.030436	1.5
Sodium	23.0	1	5.6	0.242717	19.4	10.2	0.443676	33.7	9.4	0.408878	11.8	5.8	0.250981	12.3
Iron	55.8	2	0.01	0.000358	0.0	0.05	0.001683	0.1	0.01	0.000358	0.0	0.01	0.000358	0.0
Manganese	54.9	2	0.00	3.64E-05	0.0	0.12	0.004369	0.3	0.22	0.007863	0.2	0.14	0.005024	0.2
Ammonia-N	14.0	1	0.01	0.000714	0.1	0.09	0.006504	0.5	0.05	0.003905	0.1	0.02	0.001613	0.1
Total Cations (meq/L)			1.3			1.3			3.5			2.0		
Anions														
Alkalinity, Total		49				59				122				88
Carbonate	60.0	2	0.06144	0.002048	0.2	0.27774	0.009258	0.6	0.12439	0.004147	0.1	0.17832	0.005944	0.3
Bicarbonate	61.0	1	59.66	0.977804	76.8	70.93	1.162567	80.6	148.59	2.435486	64.7	106.75	1.749792	77.7
Chloride	35.5	1	4.4	0.124672	9.8	3.3	0.091671	6.4	2.9	0.082081	2.2	4.9	0.137083	6.1
Nitrate-N	14.0	1	0.12	0.008282	0.7	0.03	0.001928	0.1	0.02	0.001285	0.0	0.01	0.000714	0.0
Sulfate	96.1	2	7.7	0.16032	12.6	8.5	0.17781	12.3	59.5	1.23884	32.9	17.2	0.358118	15.9
Total Anions (meq/L)			1.3			1.4			3.8			2.3		
Total Ions (meq/L)			2.5			2.8			7.2			4.3		
Cation/Anion Ratio			0.98			0.91			0.92			0.91		
Percent Difference			-0.8			-4.6			-4.1			-4.8		
Trilinear Diagram Data														
sum (Ca, Mg, Na+K)			1.25			1.30			3.46			2.04		
Calcium						36.84			47.23			46.47		
Magnesium						27.38			39.77			39.73		
Sodium + Potassium						35.79			13.00			13.79		
						100.0								
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.26			1.44			3.76			2.25		
Sulfate						12.337			32.943			15.910		
Chloride						6.360			2.183			6.090		
Bicarbonate + Carbonate			77.468			81.303			64.874			78.000		

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

Data Collected from July 1, 2015 to September 30, 2015

Site ID			Interior and Vertical to Facilities															Downgradient Northwest							
			MW-100 7/16/15			MW-64 7/13/15			MW-66 7/13/15			MW-67 7/13/15			MW-68 7/9/15			MW-69 7/9/15			MW-72 7/13/15				
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)	mg/L	meq/L	%(meq)		
Calcium	40.1	2	25.7	1.282435	43.8	16.2	0.808383	38.5	19.6	0.978044	37.6	31.0	1.546906	44.8	25.7	1.282435	45.1	28.3	1.412176	48.7	29.1	1.452096	43.5		
Magnesium	24.3	2	14.2	1.168484	39.9	11.6	0.954536	45.5	15.2	1.250771	48.1	18.0	1.481177	42.9	13.8	1.135569	40.0	13.0	1.069739	36.9	17.2	1.415347	42.4		
Potassium	39.1	1	1.8	0.045782	1.6	1.6	0.041434	2.0	1.3	0.032738	1.3	1.7	0.042457	1.2	1.7	0.042969	1.5	1.7	0.042457	1.5	1.8	0.046805	1.4		
Sodium	23.0	1	8.8	0.383649	13.1	6.6	0.286649	13.7	7.8	0.339281	13.0	8.4	0.36712	10.6	8.0	0.347546	12.2	7.6	0.331887	11.4	7.5	0.326232	9.8		
Iron	55.8	2	1.06	0.037961	1.3	0.13	0.004656	0.2	0.01	0.000358	0.0	0.17	0.006124	0.2	0.60	0.021308	0.7	0.95	0.034093	1.2	2.41	0.086307	2.6		
Manganese	54.9	2	0.17	0.006334	0.2	0.04	0.001573	0.1	0.00	3.64E-05	0.0	0.14	0.005206	0.2	0.28	0.01023	0.4	0.23	0.008409	0.3	0.32	0.011613	0.3		
Ammonia-N	14.0	1	0.01	0.000714	0.0	0.03	0.002285	0.1	0.01	0.000714	0.0	0.01	0.000714	0.0	0.02	0.001164	0.0	0.02	0.001271	0.0	0.02	0.001178	0.0		
Total Cations (meq/L)			2.9			2.1			2.6			3.4			2.8			2.9			3.3				
Anions																									
Alkalinity, Total			134			94			112			142			132			133			121				
Carbonate	60.0	2	0.06109	0.002036	0.1	0.06648	0.002216	0.1	0.08277	0.002759	0.1	0.10738	0.003579	0.1	0.03545	0.001182	0.0	0.08177	0.002726	0.1	0.11515	0.003839	0.1		
Bicarbonate	61.0	1	163.36	2.67756	85.8	114.79	1.8815	81.6	136.47	2.236904	80.2	173.02	2.835993	75.0	160.97	2.638421	85.7	162.09	2.656874	84.9	147.39	2.415797	68.7		
Chloride	35.5	1	2.8	0.078414	2.5	3.1	0.088568	3.8	6.6	0.185598	6.7	4.6	0.129185	3.4	2.8	0.07785	2.5	3.8	0.10803	3.5	5.2	0.145545	4.1		
Nitrate-N	14.0	1	0.01	0.000714	0.0	0.01	0.000714	0.0	0.71	0.050546	1.8	0.21	0.015064	0.4	0.01	0.000714	0.0	0.01	0.000714	0.0	0.01	0.000714	0.0		
Sulfate	96.1	2	17.3	0.360201	11.5	16.0	0.333133	14.4	15.1	0.314395	11.3	38.3	0.797438	21.1	17.3	0.360201	11.7	17.3	0.360201	11.5	45.7	0.951512	27.1		
Total Anions (meq/L)			3.1			2.3			2.8			3.8			3.1			3.1			3.5				
Total Ions (meq/L)			6.0			4.4			5.4			7.2			5.9			6.0			6.9				
Cation/Anion Ratio			0.94			0.91			0.93			0.91			0.92			0.93			0.95				
Percent Difference						-3.2			-4.7			-3.5			-4.6			-4.0			-3.8			-2.6	
Trilinear Diagram Data																									
sum (Ca, Mg, Na+K)			2.88			2.09			2.60			3.44			2.81			2.86			3.24				
Calcium						44.52			38.66			37.61			45.00			45.66			49.44			44.81	
Magnesium						40.57			45.65			48.09			43.09			40.43			37.45			43.68	
Sodium + Potassium						14.91			15.69			14.30			11.91			13.90			13.11			11.51	
									100.0															100.0	
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			3.12			2.31			2.74			3.77			3.08			3.13			3.52				
Sulfate						11.552			14.450			11.476			21.174			11.704			11.516			27.057	
Chloride						2.515			3.842			6.774			3.430			2.530			3.454			4.139	
Bicarbonate + Carbonate						85.934			81.708			81.750			75.396			85.767			85.030			68.804	

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

Data Collected from July 1, 2015 to September 30, 2015

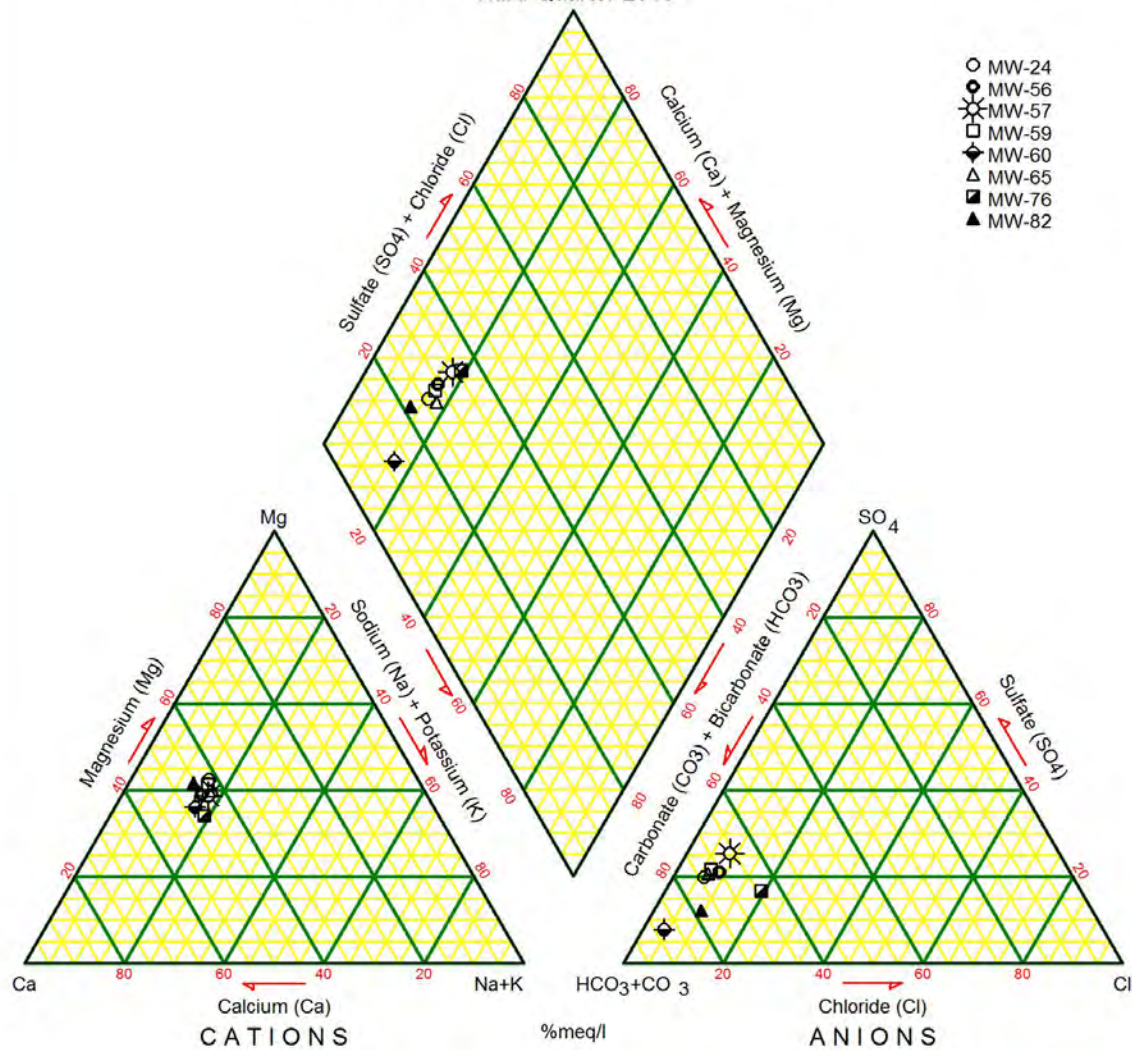
Site ID			Downgradient																	
			MW-74 7/10/15			MW-75 7/10/15			MW-80 7/17/15			MW-85 7/23/15			MW-87 7/9/15			MW-91 8/6/15		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	44.9	2.240519	41.0	23.9	1.192615	39.0	26.3	1.312375	46.0	25.8	1.287425	43.3	39.4	1.966068	41.9	24.6	1.227545	40.8
Magnesium	24.3	2	32.4	2.666118	48.8	17.2	1.415347	46.2	13.3	1.094425	38.4	15.6	1.283686	43.1	25.6	2.106562	44.9	15.4	1.267229	42.1
Potassium	39.1	1	2.1	0.054734	1.0	1.8	0.046038	1.5	1.6	0.040922	1.4	1.5	0.038876	1.3	2.2	0.057291	1.2	1.7	0.044247	1.5
Sodium	23.0	1	11.5	0.500222	9.2	7.7	0.334497	10.9	7.1	0.309268	10.8	8.4	0.36451	12.2	9.3	0.405398	8.6	7.5	0.324927	10.8
Iron	55.8	2	0.01	0.000358	0.0	1.85	0.066252	2.2	2.36	0.084517	3.0	0.01	0.000358	0.0	3.93	0.140742	3.0	3.63	0.129998	4.3
Manganese	54.9	2	0.00	3.64E-05	0.0	0.15	0.005497	0.2	0.27	0.009975	0.3	0.00	3.64E-05	0.0	0.41	0.01478	0.3	0.46	0.016819	0.6
Ammonia-N	14.0	1	0.01	0.000714	0.0	0.01	0.000935	0.0	0.01	0.000714	0.0	0.01	0.000714	0.0	0.02	0.001185	0.0	0.02	0.001414	0.0
Total Cations (meq/L)			5.5			3.1			2.9			3.0			4.7			3.0		
Anions																				
Alkalinity, Total			228			101			105			107			90			96		
Carbonate	60.0	2	0.15019	0.005006	0.1	0.07638	0.002546	0.1	0.1147	0.003824	0.1	0.08669	0.00289	0.1	0.04488	0.001496	0.0	0.07737	0.002579	0.1
Bicarbonate	61.0	1	277.85	4.554307	76.4	123.06	2.01715	60.8	127.87	2.09586	67.9	130.36	2.136788	63.6	109.46	1.794233	36.9	116.35	1.907133	61.3
Chloride	35.5	1	27.4	0.772854	13.0	9.4	0.265986	8.0	5.4	0.152032	4.9	9.2	0.259216	7.7	7.8	0.219163	4.5	9.9	0.278397	9.0
Nitrate-N	14.0	1	0.32	0.022632	0.4	0.01	0.000714	0.0	0.01	0.000714	0.0	1.63	0.11637	3.5	0.02	0.001571	0.0	0.02	0.001642	0.1
Sulfate	96.1	2	29.3	0.610051	10.2	49.5	1.030632	31.1	40.1	0.834916	27.0	40.5	0.843244	25.1	137.0	2.852455	58.6	44.2	0.920281	29.6
Total Anions (meq/L)			6.0			3.3			3.1			3.4			4.9			3.1		
Total Ions (meq/L)			11.4			6.4			5.9			6.3			9.6			6.1		
Cation/Anion Ratio			0.92			0.92			0.92			0.89			0.96			0.97		
Percent Difference			-4.4			-4.0			-4.0			-6.0			-1.9			-1.6		
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)			5.46			2.99			2.76			2.97			4.54			2.86		
Calcium						41.02			39.91			47.60			43.28			43.35		
Magnesium						48.82			47.36			39.70			43.16			46.45		
Sodium + Potassium						10.16			12.73			12.70			13.56			10.20		
						100.0			100.0									100.0		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			5.94			3.32			3.09			3.24			4.87			3.11		
Sulfate						10.266			31.078			27.049			26.009			58.604		
Chloride						13.006			8.021			4.926			7.995			4.503		
Bicarbonate + Carbonate						76.727			60.902			68.025			65.996			36.893		

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

Data Collected from July 1, 2015 to September 30, 2015

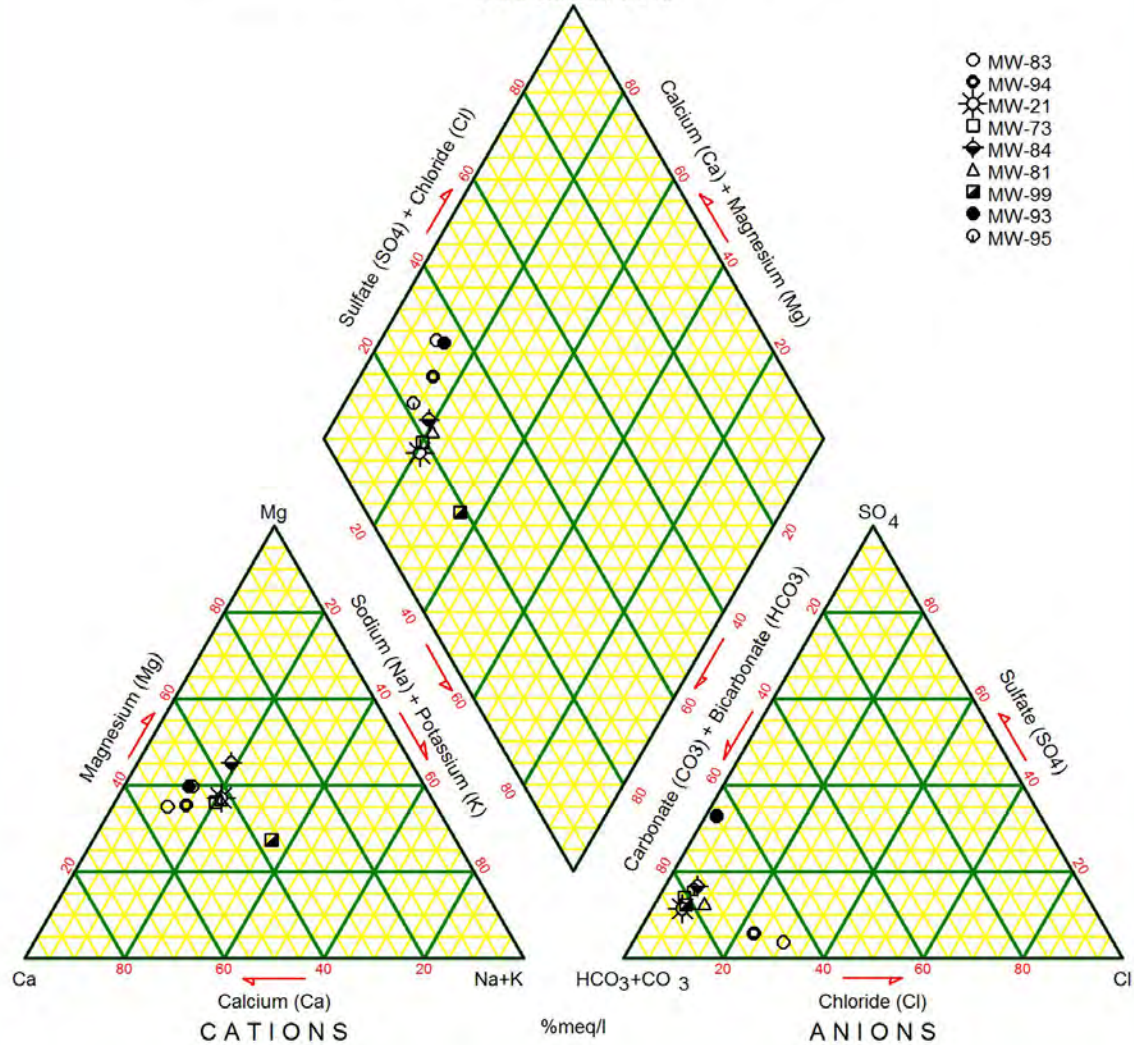
Site ID			Downgradient of North End Facilities														
			MW-86 7/16/15			MW-88 7/22/15			MW-89 7/22/15			MW-90 7/22/15			MW-43 7/8/15		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	12.9	0.643713	38.9	8.5	0.421657	35.4	12.7	0.633733	35.1	16.4	0.818363	41.9	12.8	0.638723	37.8
Magnesium	24.3	2	8.6	0.703559	42.5	6.2	0.50936	42.7	9.1	0.752109	41.6	9.4	0.775149	39.7	8.6	0.708496	42.0
Potassium	39.1	1	1.1	0.027111	1.6	0.8	0.021356	1.8	1.4	0.036574	2.0	1.4	0.034528	1.8	1.4	0.035807	2.1
Sodium	23.0	1	6.2	0.27012	16.3	5.5	0.238367	20.0	7.9	0.342761	19.0	6.2	0.269685	13.8	5.9	0.257071	15.2
Iron	55.8	2	0.23	0.008237	0.5	0.01	0.000358	0.0	0.90	0.032123	1.8	1.27	0.045481	2.3	1.05	0.037603	2.2
Manganese	54.9	2	0.00	0.000165	0.0	0.00	3.64E-05	0.0	0.20	0.007135	0.4	0.25	0.008919	0.5	0.22	0.008155	0.5
Ammonia-N	14.0	1	0.01	0.000714	0.0	0.01	0.000714	0.1	0.02	0.001414	0.1	0.02	0.001371	0.1	0.03	0.001963	0.1
Total Cations (meq/L)			1.7			1.2			1.8			2.0			1.7		
Anions																	
Alkalinity, Total			66			53			74			72			71		
Carbonate	60.0	2	0.053636	0.001788	0.1	0.076568	0.002552	0.2	0.090928	0.003031	0.2	0.091996	0.003067	0.1	0.111231	0.003708	0.2
Bicarbonate	61.0	1	80.65	1.322013	73.2	64.75	1.061288	81.2	90.34	1.480746	75.2	87.29	1.430718	66.5	85.78	1.40608	76.5
Chloride	35.5	1	4.3	0.122134	6.8	2.0	0.057541	4.4	5.2	0.145263	7.4	4.4	0.124108	5.8	4.7	0.131442	7.2
Nitrate-N	14.0	1	0.47	0.033269	1.8	0.60	0.04255	3.3	0.01	0.000714	0.0	0.01	0.000857	0.0	0.01	0.000714	0.0
Sulfate	96.1	2	15.7	0.326887	18.1	6.9	0.142623	10.9	16.3	0.33938	17.2	28.4	0.591312	27.5	14.2	0.295656	16.1
Total Anions (meq/L)			1.8			1.3			2.0			2.2			1.8		
Total Ions (meq/L)			3.5			2.5			3.8			4.1			3.5		
Cation/Anion Ratio			0.92			0.91			0.92			0.91			0.92		
Percent Difference			-4.4			-4.6			-4.3			-4.8			-4.2		
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)			1.64			1.19			1.77			1.90			1.64		
Calcium						39.14			35.41			43.12			38.94		
Magnesium						42.78			42.78			40.85			43.20		
Sodium + Potassium						18.07			21.81			21.49			17.86		
															100.0		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.77			1.26			1.97			2.15			1.84		
Sulfate						18.439			11.283			17.241			27.513		
Chloride						6.889			4.552			7.380			5.775		
Bicarbonate + Carbonate						74.672			84.164			75.379			66.712		

Cedar Hills Regional Landfill
 Figure 2. Regional Aquifer South Upgradient Wells
 Third Quarter 2015



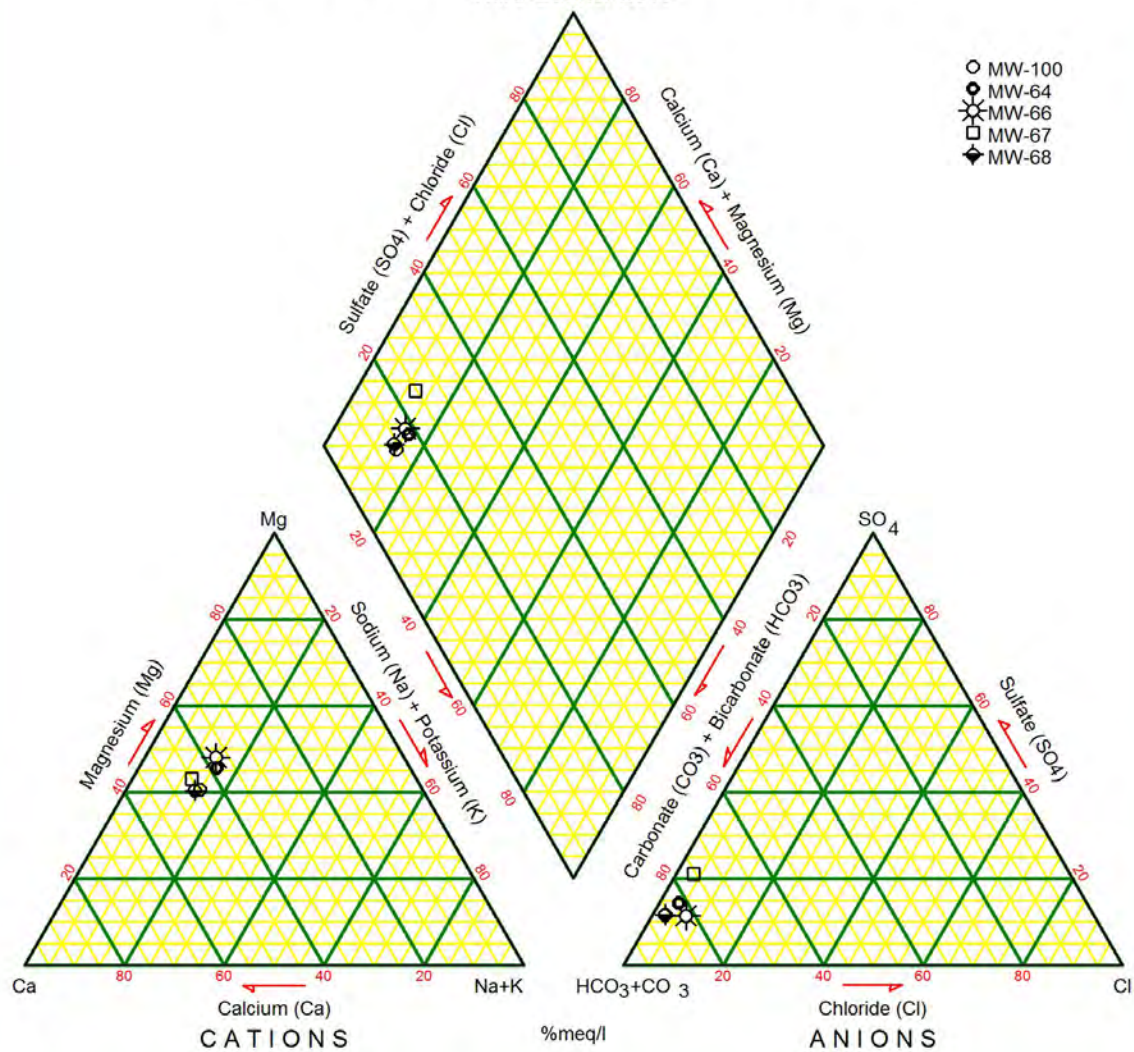
Cedar Hills Regional Landfill

Figure 3. Regional Aquifer South Upgradient and Crossgradient Wells
Third Quarter 2015

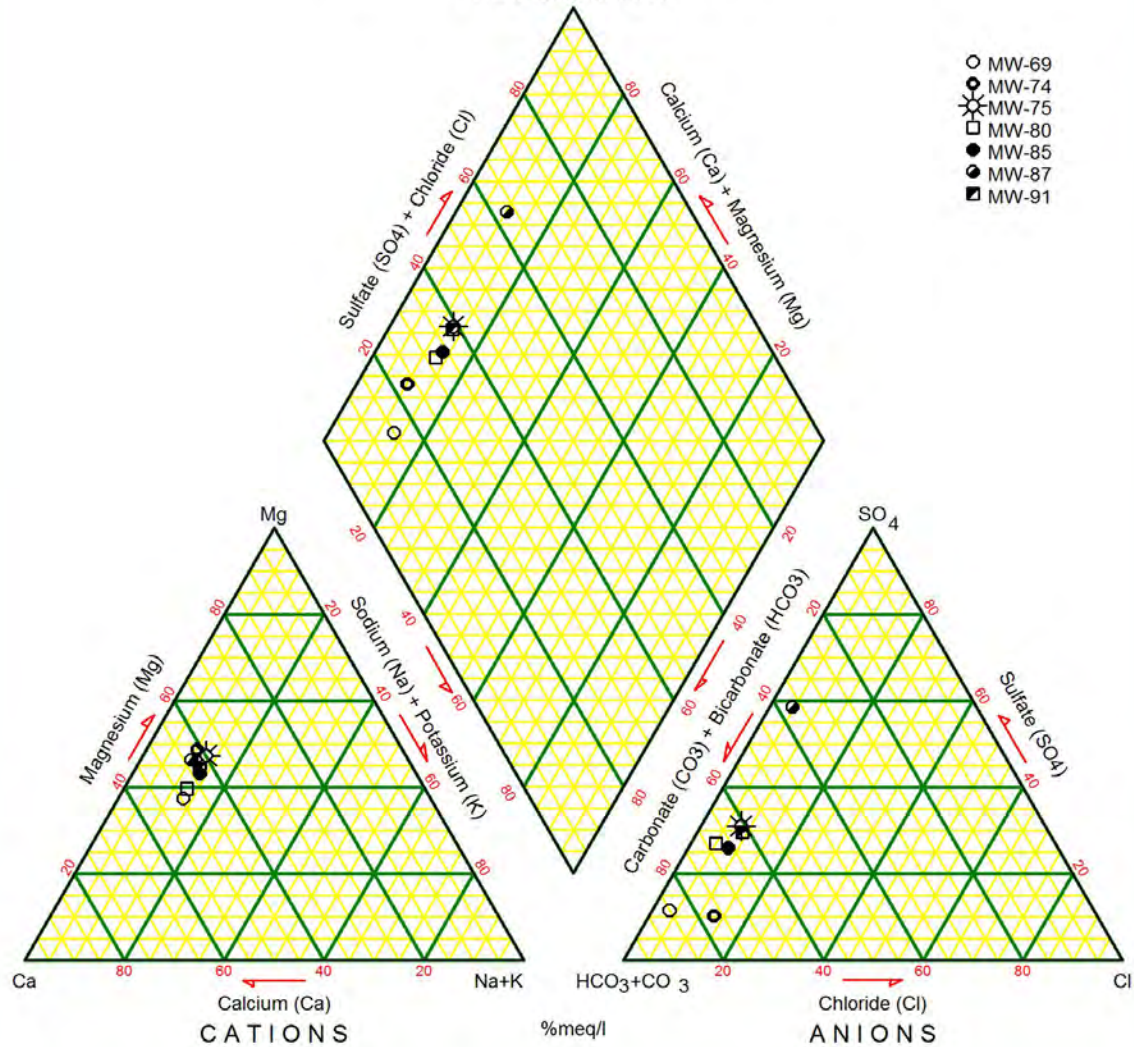


Cedar Hills Regional Landfill

Figure 4. Regional Aquifer Wells Interior and Vertical to Facilities
Third Quarter 2015



Cedar Hills Regional Landfill
 Figure 5. Regional Aquifer Downgradient Wells
 Third Quarter 2015



Cedar Hills Regional Landfill

Figure 6. Regional Aquifer Wells Downgradient of Northend Facilities
Third Quarter 2015

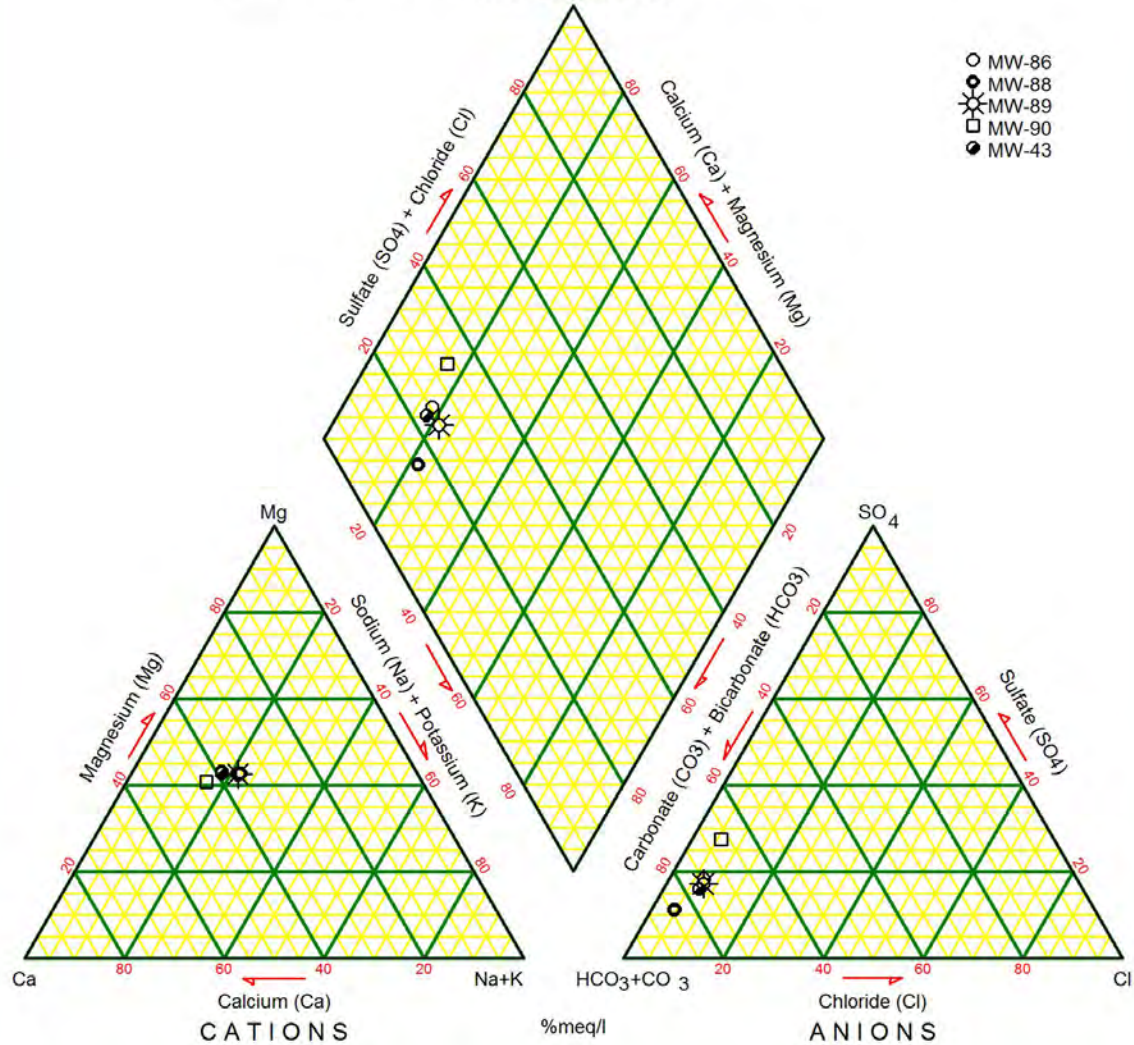


TABLE 5
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT EXCEEDANCES

(Data Collected from July 1, 2015 to September 30, 2015)

Parameter	Units	Well ID	Sample Date	Sample Value	Intrawell Limit Value
South, Northeast and Northwest Upgradient and Crossgradient Wells					
Nitrate as N	mg/L	MW-94	07/14/15	1.52	1.51
Interior and Vertical to Facilities Wells					
NO PREDICTION LIMIT EXCEEDANCES THIS QUARTER					
Wells Downgradient to Waste Cells and North end Facilities					
NO PREDICTION LIMIT EXCEEDANCES THIS QUARTER					

TABLE 6
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN REGIONAL AQUIFER WELLS
(Data Collected from July 1, 2015 to September 30, 2015)

Analyte	Site ID	Date	Sample ID	ug/L
South, Northeast and Northwest Upgradient and Crossgradient Wells				
Chloromethane	MW-24	07/02/15	W24-150702-	0.527
	MW-56	07/06/15	W56-150706-	0.24 T
	MW-60	07/09/15	W60-150709-	0.26 T
	MW-73	07/16/15	W73-150716-	0.21 BT
	MW-76	07/14/15	W76-150714-	1.35
	MW-81	07/23/15	W81-150723-	1.59
	MW-82	07/06/15	W82-150706-	0.444
	MW-84	07/13/15	W84-150713-	0.439
cis -1,2-Dichloroethene	MW-24	07/02/15	W24-150702-	0.21 T
	MW-56	07/06/15	W56-150706-	1.49
	MW-59	07/08/15	W59-150708-	1.08
	MW-76	07/14/15	W76-150714-	0.38 T
Tetrachloroethene	MW-76	07/14/15	W76-150714-	0.467
Trichloroethene	MW-76	7/14/2015	W76-150714-	8.79
	MW-82	7/6/2015	W82-150706-	6.27
	MW-83	7/14/2015	W83-150714-	2.78
	MW-94	07/14/15	W94-150714-	2.52
Vinyl Chloride	MW-65	7/10/2015	W65-150710-	0.0493
Interior and Vertical to Facilities Wells				
Chloromethane	MW-100	7/16/2015	W100150716-	1.07 B
Downgradient Wells				
Chloromethane	MW-43	7/8/2015	W43-150708-	0.32 T
	MW-75	7/10/2015	W75-150710-	0.29 T
	MW-86	7/16/2015	W86-150716-	0.37 BT
	MW-88	7/22/2015	W88-150722-	4.51
	MW-89	7/22/2015	W89-150722-	1.15
	MW-90	7/22/2015	W90-150722-	1.16
	MW-91	8/6/2015	W91-150806-	0.548
Vinyl Chloride	MW-43	7/8/2015	W43-150708-	0.0253

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 July 1, 2015 to September 30, 2015)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
North and West Perched Wells					
Arsenic (Total)	(mg/L)	MW-27A	7/2/15	W27A150702-	0.0162
Manganese (Dissolved)	(mg/L)	MW-27A	7/2/2015	W27A150702-	0.079
		MW-55	8/7/15	W55-150807-	0.151
East Perched Zone Wells					
Manganese (Dissolved)	(mg/L)	MW-47	8/7/15	W47-150807-	1.63
Total Dissolved Solids	(mg/L)	MW-47	8/7/15	W47-150807-	737
1,1-Dichloroethane	(ug/L)	MW-30A	7/10/15	W30A150710-	2.48
Vinyl Chloride	(ug/L)	MW-47	8/7/15	W47-150807-	3.81
South Solid Waste Area Perched Wells					
Arsenic (Total)	(mg/L)	MW-101	9/2/2015	W101150902-	0.00421
Iron (Dissolved)	(mg/L)	MW-101	9/2/2015	W101150902-	0.321
Manganese (Dissolved)	(mg/L)	MW-101	9/2/2015	W101150902-	0.328
Vinyl Chloride	(ug/L)	MW-101	9/2/2015	W101150902-	0.198

See Data Qualifier List for Qualifier Information.

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

Data Collected from July 1, 2015 to September 30, 2015

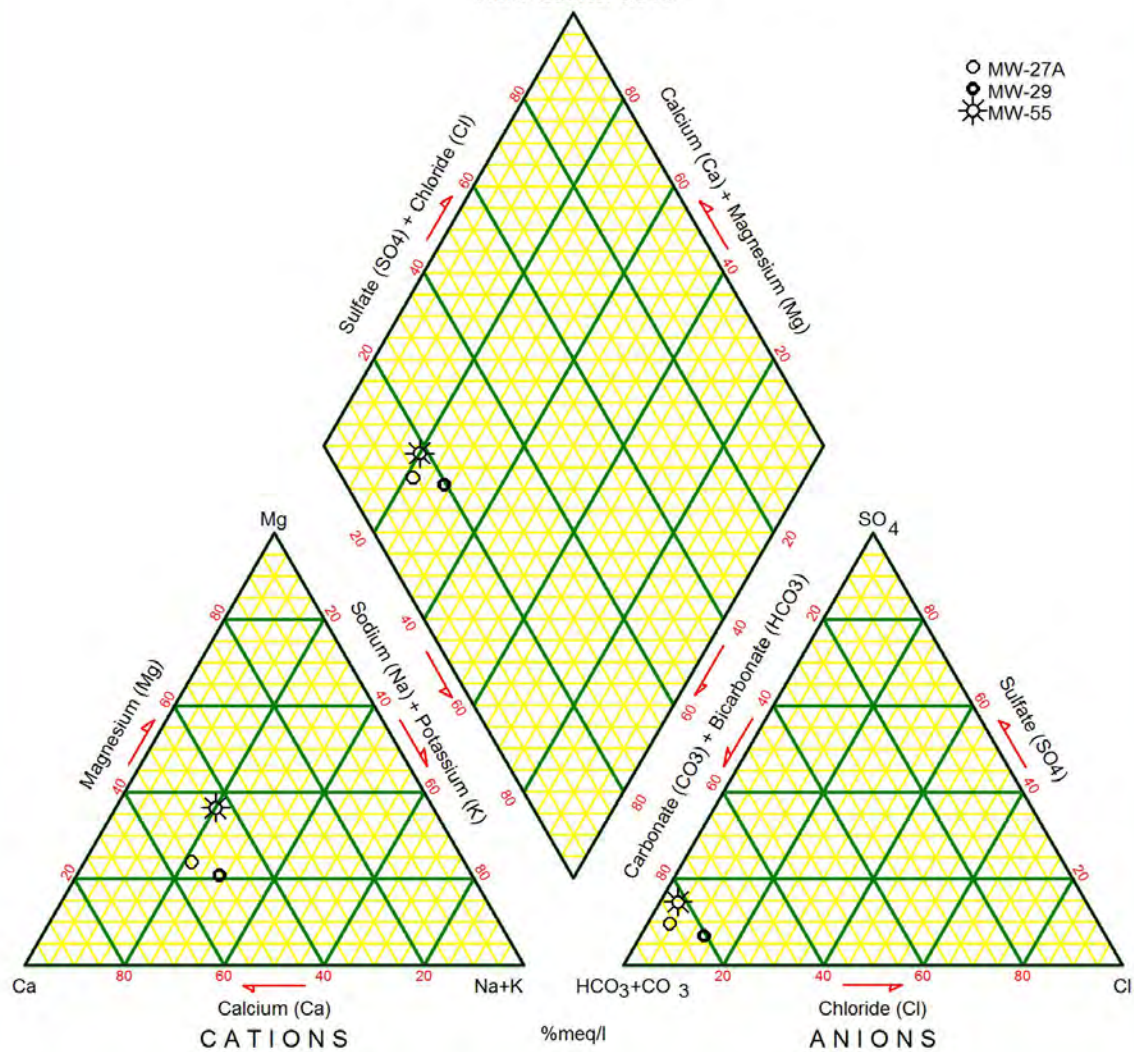
Site ID Date			North and West Perched Wells											
			MW-27A 7/2/15			MW-28 No Sample			MW-29 7/2/15			MW-55 8/7/15		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	18.7	0.93313	54.1				6.8	0.34082	50.4	12.4	0.61876	42.9
Magnesium	24.3	2	5.0	0.40897	23.7				1.7	0.14071	20.8	6.3	0.51841	35.9
Potassium	39.1	1	3.6	0.09156	5.3				0.5	0.01325	2.0	1.7	0.04246	2.9
Sodium	23.0	1	6.4	0.27664	16.0				4.1	0.17965	26.6	5.6	0.24272	16.8
Iron	55.8	2	0.0	0.00036	0.0				0.0	0.00143	0.2	0.3	0.01071	0.7
Manganese	54.9	2	0.1	0.00288	0.2				0.0	3.6E-05	0.0	0.2	0.0055	0.4
Ammonia-N	14.0	1	0.2	0.01249	0.7				0.0	0.00071	0.1	0.1	0.00514	0.4
Total Cations (meq/L)			1.7						0.7			1.4		
Anions														
Alkalinity, Total			83						23.8			65.6		
Carbonate	60.0	2	0.32566	0.01086	0.6				0.00463	0.00015	0.0	0.54951	0.01832	1.1
Bicarbonate	61.0	1	99.99	1.6389	85.3				29.03	0.47577	65.3	78.91	1.29349	80.6
Chloride	35.5	1	3.0	0.0849	4.4				2.7	0.07503	10.3	2.1	0.05782	3.6
Nitrate-N	14.0	1	0.0	0.00071	0.0				1.9	0.13707	18.8	0.0	0.00071	0.0
Sulfate	96.1	2	8.9	0.18614	9.7				2.0	0.0406	5.6	11.3	0.23528	14.7
Total Anions (meq/L)			1.9						0.7			1.6		
Total Ions (meq/L)			3.6						1.4			3.0		
Cation/Anion Ratio			0.90						0.93			0.90		
Percent Difference			-5.4						-3.7			-5.3		
TRILINEAR DIAGRAM DATA														
sum (Ca, Mg, Na+K)			1.71						0.67			1.42		
Calcium			54.6						50.5			43.5		
Magnesium			23.9						20.9			36.4		
Sodium + Potassium			21.5						28.6			20.0		
									100.0					
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.92						0.59			1.60		
Sulfate			9.7						6.9			14.7		
Chloride			4.4						12.7			3.6		
Bicarbonate + Carbonate			85.9						80.5			81.7		

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

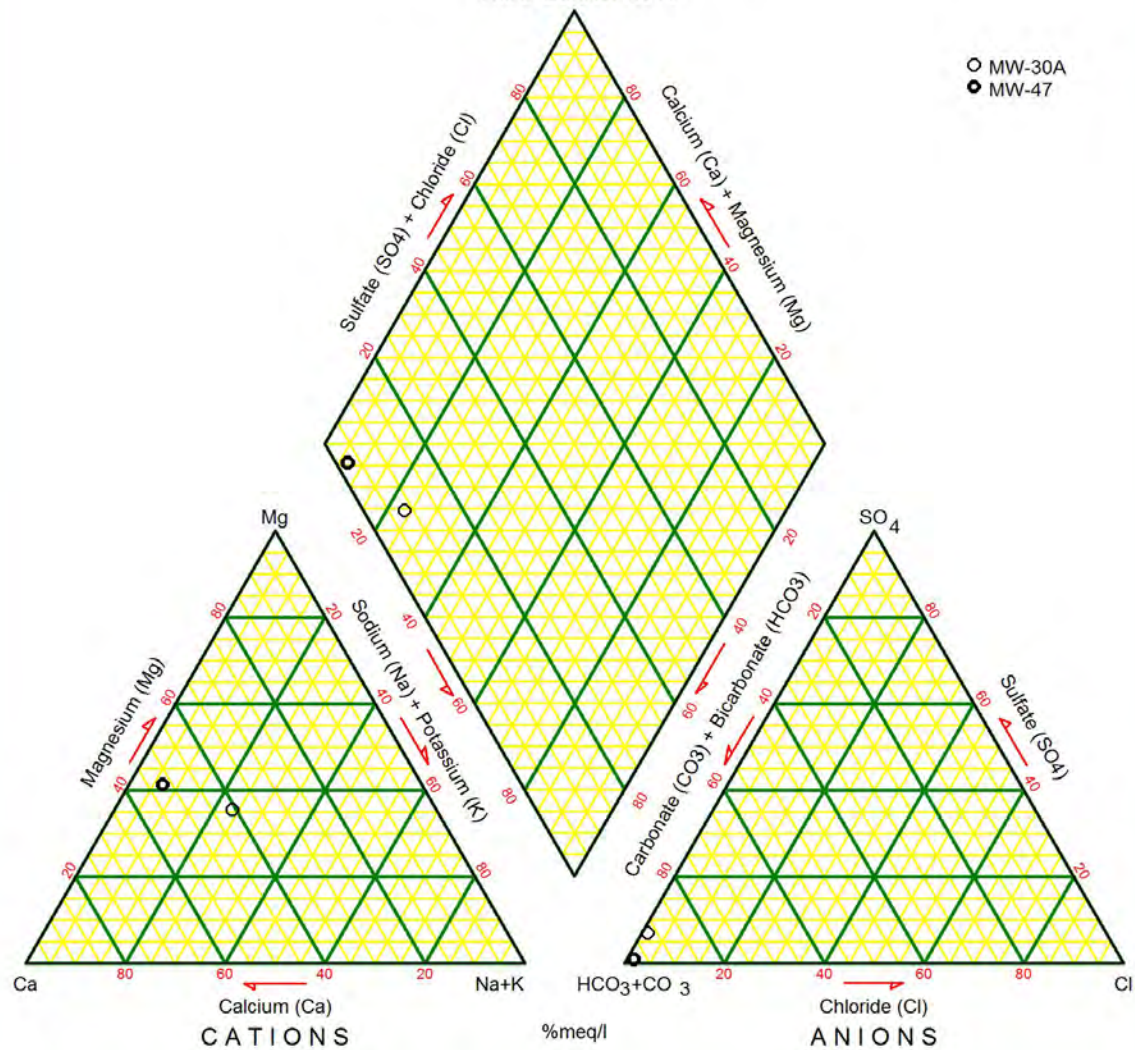
Data Collected from July 1, 2015 to September 30, 2015

Site ID Date	MW	n	East Perched Zone												SSWA		
			MW-30A 7/10/15			MW-47 8/7/15			MW-62 No Sample			MW-EB6 No Sample			MW-101 9/2/15		
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	21.4	1.06786	40.8	130.0	6.48703	51.5							45.6	2.27545	43.9
Magnesium	24.3	2	11.3	0.92985	35.5	63.0	5.18412	41.2							25.1	2.06542	39.9
Potassium	39.1	1	1.5	0.03939	1.5	5.4	0.1376	1.1							2.5	0.06394	1.2
Sodium	23.0	1	13.3	0.57852	22.1	16.3	0.70901	5.6							17.3	0.75251	14.5
Iron	55.8	2	0.0	0.00036	0.0	0.0	0.00158	0.0							0.3	0.0115	0.2
Manganese	54.9	2	0.0	3.6E-05	0.0	1.6	0.05934	0.5							0.3	0.01194	0.2
Ammonia-N	14.0	1	0.0	0.00071	0.0	0.1	0.00588	0.0							0.0	0.00071	0.0
Total Cations (meq/L)			2.6			12.6									5.2		
Anions																	
Alkalinity, Total			112			716									273		
Carbonate	60.0	2	0.02179	0.00073	0.0	0.56692	0.0189	0.1							0.1462	0.00487	0.1
Bicarbonate	61.0	1	136.60	2.23894	78.1	872.37	14.2989	97.5							332.76	5.4543	97.0
Chloride	35.5	1	1.0	0.02713	0.9	7.2	0.20365	1.4							2.8	0.08011	1.4
Nitrate-N	14.0	1	6.0	0.42907	15.0	0.0	0.00071	0.0							0.1	0.00406	0.1
Sulfate	96.1	2	8.3	0.1724	6.0	6.9	0.14429	1.0							3.8	0.07912	1.4
Total Anions (meq/L)			2.9			14.7									5.6		
Total Ions (meq/L)			5.5			27.3									10.8		
Cation/Anion Ratio			0.91			0.86									0.92		
Percent Difference			-4.6			-7.6									-4		
TRILINEAR DIAGRAM DATA																	
sum (Ca, Mg, Na+K)			2.62			12.52									5.16		
Calcium						40.8									44.12		
Magnesium						35.5									40.05		
Sodium + Potassium						23.6									15.83		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			2.44			14.67									5.62		
Sulfate						7.1									1.4		
Chloride						1.1									1.4		
Bicarbonate + Carbonate						91.8									97.2		

Cedar Hills Regional Landfill
Figure 7. Perched Zones Wells North and West
Third Quarter 2015



Cedar Hills Regional Landfill
Figure 8. East Perched Zone Wells
Third Quarter 2015



Cedar Hills Regional Landfill
 Figure 9. South Solid Waste Area Perched Zone Wells
 Third Quarter 2015

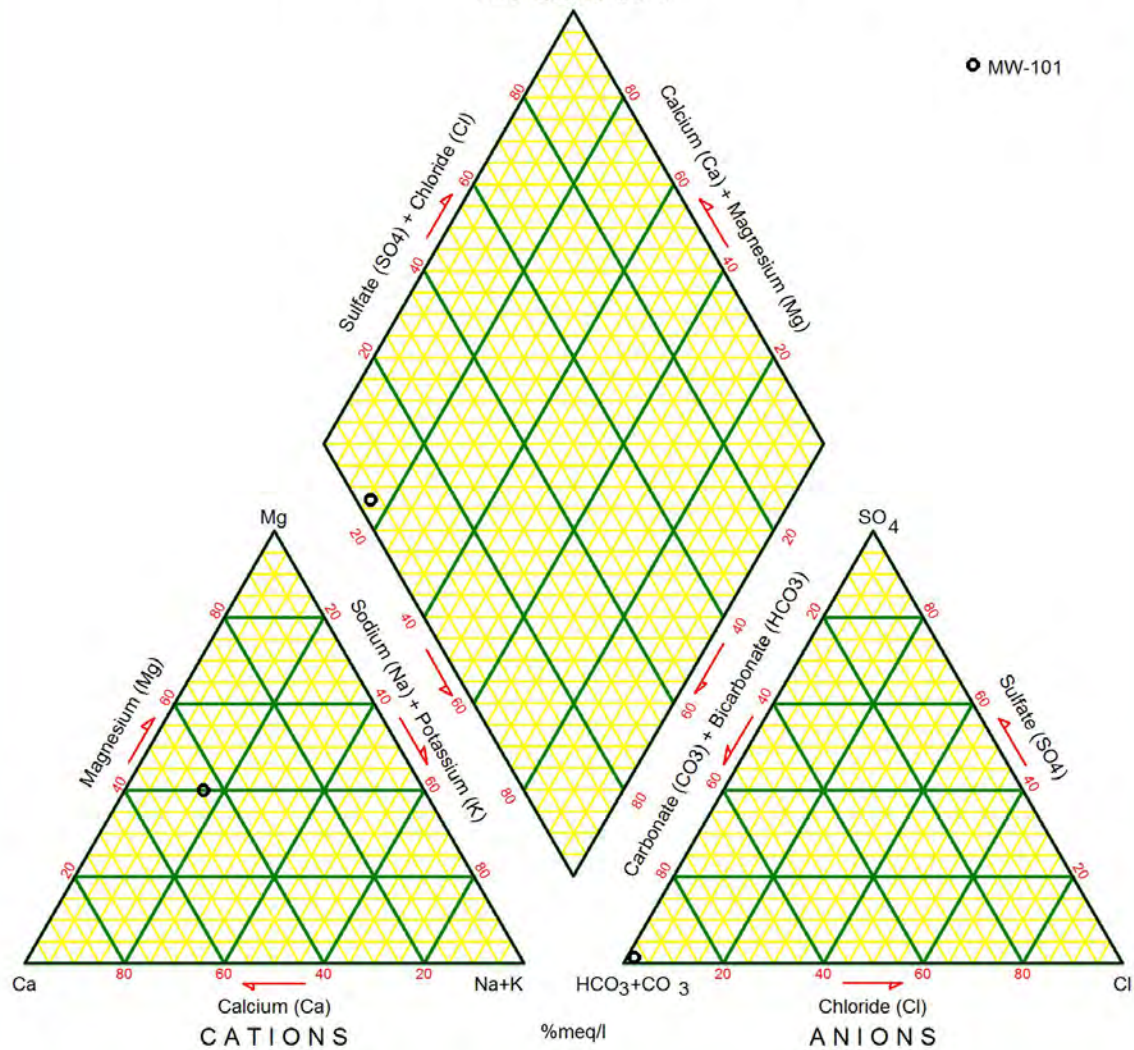


TABLE 9
CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT EXCEEDANCES
(Data Collected from July 1, 2015 to September 30, 2015)

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

TABLE 10
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN PERCHED ZONE WELLS
(Data Collected from July 1, 2015 to September 30, 2015)

Analyte	Site ID	Date	Sample ID	ug/L
North and West Perched Wells				
Acetone	MW-29	7/2/2015	W29-150702-	4 T
Chloromethane	MW-29	7/2/2015	W29-150702-	0.25 T
East Perched Zone Wells				
Acetone	MW-47	8/7/2015	W47-150807-	5 T
1,1-Dichloroethane	MW-30A	7/10/2015	W30A150710-	2.48
	MW-47	8/7/2015	W47-150807-	0.565
<i>cis</i> -1,2-Dichloroethene	MW-30A	7/10/2015	W30A150710-	3.49
	MW-47	8/7/2015	W47-150807-	1.37
Dichlorodifluoromethane	MW-47	8/7/2015	W47-150807-	0.479
Trichloroethene	MW-30A	7/10/2015	W30A150710-	1.27
Vinyl Chloride	MW-47	8/7/2015	W47-150807-	3.81
South Solid Waste Area Perched Wells				
Vinyl Chloride	MW-101	9/2/2015	W101150902-	0.198

See Data Qualifier List for Qualifier Information.

Table 11
Surface Water Monitoring Activities 3rd Quarter 2015

Station ID	Date	Planned Activity	Sample ID	Comment
SW-E1	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-E1	8/17/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-E1	9/23/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-GS1	8/31/15	NPDES Permit Sample	SGS1150831P	
SW-GS1	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-GS1	7/27/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-GS1	8/18/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-GS1	9/24/15	Quarterly Characterization Sample	SGS1150924Q	
SW-LP1	7/20/15	South Lagoon Inlet Characterization	NA	No Flow, No Sample
SW-LP1	8/25/15	South Lagoon Inlet Characterization	NA	No Flow, No Sample
SW-LP1	9/24/15	South Lagoon Inlet Characterization	NA	No Flow, No Sample
SW-LP2	9/24/15	QA/QC Sample	SLP2150924D	
SW-LP2	7/20/15	South Lagoon Inlet Characterization	SLP2150720P	
SW-LP2	8/25/15	South Lagoon Inlet Characterization	SLP2150825P	
SW-LP2	9/24/15	South Lagoon Inlet Characterization	SLP2150924P	
SW-LP3	7/20/15	South Lagoon Inlet Characterization	NA	No Flow, No Sample
SW-LP3	8/25/15	South Lagoon Inlet Characterization	NA	No Flow, No Sample
SW-LP3	9/24/15	South Lagoon Inlet Characterization	NA	No Flow, No Sample
SW-MC	7/21/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-MC	8/17/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-MC	9/24/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-N1	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-N1	8/17/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-N1	9/23/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-N4	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-N4	8/17/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-N4	8/31/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-N4	9/23/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S1	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S1	8/18/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S1	9/23/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S2	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S2	8/18/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S2	9/24/15	Quarterly Characterization Sample	SS2-150924Q	
SW-S3	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S3	8/18/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-S3	9/23/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-SL3	7/20/15	NPDES Permit Sample	NA	No Flow, No Sample
SW-SL3	8/25/15	NPDES Permit Sample	NA	No Flow, No Sample
SW-SL3	8/31/15	NPDES Permit Sample	SSL3150831P	
SW-SL3	9/24/15	NPDES Permit Sample	NA	No Flow, No Sample
SW-SL3	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-SL3	8/18/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-SL3	9/23/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-TD1	8/27/15	Area 5 Top Deck Monitoring	NA	No Flow, No Sample
SW-TD2	8/27/15	Area 5 Top Deck Monitoring	NA	No Flow, No Sample
SW-TD4	8/27/15	Area 5 Top Deck Monitoring	NA	No Flow, No Sample
SW-TD6	8/27/15	Area 5 Top Deck Monitoring	NA	No Flow, No Sample
SW-V	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-V	8/17/15	Quarterly Characterization Sample	NA	No Flow, No Sample

Table 11
Surface Water Monitoring Activities 3rd Quarter 2015

Station ID	Date	Planned Activity	Sample ID	Comment
SW-V	9/23/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-W	7/21/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-W	8/17/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-W	9/24/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-W1	8/17/15	Monthly Characterization Sample	SW1-150817M	
SW-W1	9/23/15	Monthly Characterization Sample	SW1-150923M	
SW-W1	7/20/15	Quarterly Characterization Sample	SW1-150720Q	
SW-W2	7/20/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-W2	8/18/15	Quarterly Characterization Sample	NA	No Flow, No Sample
SW-W2	9/23/15	Quarterly Characterization Sample	NA	No Flow, No Sample
Staff Gages	7/20/15	Monthly Stream Gage Levels	NA	
Staff Gages	8/12/15	Monthly Stream Gage Levels	NA	
Staff Gages	9/23/15	Monthly Stream Gage Levels	NA	

TABLE 12
CEDAR HILLS LANDFILL
SUMMARY OF ISGP* STORMWATER PERMIT EXCEEDANCES
(Data Collected from July 1, 2015 to September 30, 2015)

Parameter	Units	Sampling Location	Date	Value	Regulatory Limit	Type
Turbidity	NTU	SW-GS1	08/31/15	244	25	Benchmark
Copper, Total	ug/L	SW-GS1	08/31/15	20.4	14	Benchmark

*ISGP - Industrial General Stormwater Permit

TABLE 13
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN BLANKS
(Data Collected from July 1, 2015 to September 30, 2015)

Analyte	Site ID	Date	Sample ID	ug/L
Acetone	FIELD BLANK	7/22/2015	W89-150722F	10.9
	FIELD BLANK	8/7/2015	WNPW150807F	9.9 T
	VOA TRIP BLANK	8/6/2015	VTRP150807B	4 T
Methylene Chloride	FIELD BLANK	7/22/2015	W89-150722F	0.418
	FIELD BLANK	9/11/2015	W87-150911F	0.67 G
	VOA TRIP BLANK	7/2/2015	VTRP150706C	0.29 T
	VOA TRIP BLANK	7/6/2015	VTRP150709C	0.28 T
	VOA TRIP BLANK	7/6/2015	VTRP150710C	0.32 T
	VOA TRIP BLANK	7/8/2015	VTRP150710B	0.29 T
	VOA TRIP BLANK	7/10/2015	VTRP150713C	0.29 T
	VOA TRIP BLANK	8/5/2015	VTRP150806C	0.34 T
	VOA TRIP BLANK	8/6/2015	VTRP150807C	0.36 T
	VOA TRIP BLANK	8/6/2015	VTRP150807B	0.36 T
	METHOD BLANK	9/3/2015	WG141480-1	0.28
	VOA TRIP BLANK	9/10/2015	VTRP150911C	0.3 GT
Chloromethane	FIELD BLANK	8/7/2015	WNPW150807F	0.21 T
	VOA TRIP BLANK	7/2/2015	VTRP150708B	0.822
	VOA TRIP BLANK	7/15/2015	VTRP150716B	0.458 B
	VOA TRIP BLANK	7/22/2015	VTRP150723C	1.06
	METHOD BLANK	7/17/2015	WG140395-1	0.618
Styrene	FIELD BLANK	7/22/2015	W89-150722F	0.425
Toluene	FIELD BLANK	7/22/2015	W89-150722F	0.3 T

See Data Qualifier List for Qualifier Information.

Table 14
Groundwater Quality Criteria

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

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 July 1, 2015 to September 30, 2015)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value	Cause of Unuseability
Acetone	ug/L	MW-47	08/07/15	W47-150807-	5 T	Blank Contamination
Chloromethane	ug/L	MW-24	7/2/2015	W24-150702-	0.527	Blank Contamination
		MW-29	7/2/2015	W29-150702-	0.25 T	Blank Contamination
		MW-43	7/8/2015	W43-150708-	0.32 T	Blank Contamination
		MW-56	7/6/2015	W56-150706-	0.24 T	Blank Contamination
		MW-60	7/9/2015	W60-150709-	0.26 T	Blank Contamination
		MW-73	7/16/2015	W73-150716-	0.21 BT	Blank Contamination
		MW-75	7/10/2015	W75-150710-	0.29 T	Blank Contamination
		MW-76	7/14/2015	W76-150714-	1.35	Blank Contamination
		MW-81	7/23/2015	W81-150723-	1.59	Blank Contamination
		MW-82	7/6/2015	W82-150706-	0.444	Blank Contamination
		MW-84	7/13/2015	W84-150713-	0.439	Blank Contamination
		MW-86	7/16/2015	W86-150716-	0.37 BT	Blank Contamination
		MW-88	7/22/2015	W88-150722-	4.51	Blank Contamination
		MW-89	7/22/2015	W89-150722-	1.15	Blank Contamination
		MW-90	7/22/2015	W90-150722-	1.16	Blank Contamination
		MW-91	8/6/2015	W91-150806-	0.548	Blank Contamination
		MW-100	7/16/2015	W100150716-	1.07 B	Blank Contamination

See Data Qualifier List for Qualifier Information.

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

201 South Jackson Street, Suite 600

Seattle, WA 98104-3855

206-477-4800 Fax 206-296-0192

TTY Relay: 711

Memorandum

October 29, 2015

TO: Tom Theno, Engineer II, Engineering Services Section, Solid Waste Division,
Department of Natural Resources and Parks (DNRP)

FM: Sevin Bilir, Environmental Scientist IV, Science and Technical Support Section,
Water and Land Resources Division, DNRP

RE: Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations
Third Quarter 2015 Results
Cedar Hills Landfill, King County, Washington
Project No. 1033379 – Task 02.14.137.20

The King County Water and Land Resources Division (KCWLR Division) submits this memorandum report on groundwater conditions during the third quarter of 2015 for the Cedar Hills Landfill (landfill), in accordance with the *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations* (KCWLR Division, 2013). King County Solid Waste Division (KCSWD) personnel measured groundwater elevations at the landfill on July 1, 2015. These measurements were received by KCWLR Division on September 28, 2015 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 second quarter of the 2015 monitoring event.

Groundwater Elevation Data

KCSWD attempted groundwater level measurements at 41 monitoring wells during the third quarter of 2015. 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 24 wells with water levels within ten feet of the top of screen were selected.

Figure 1 shows well locations, groundwater elevations at the 24 selected wells, groundwater potentiometric surface contours, and interpreted groundwater flow direction in the regional aquifer for the July 1, 2015 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 July 1, 2015 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 north-northwest and north-northeast. At the northern end of the landfill, groundwater generally flowed to the north and north-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 third quarter 2015 data. The hydraulic gradient was greatest under the southern portion of the landfill and smallest under the northern portion. On July 1, 2015, average horizontal groundwater velocity within the regional aquifer ranged from 0.009 feet per day (ft/d) under the southern portion of the landfill to 2.6 ft/d under the central portion of the landfill.

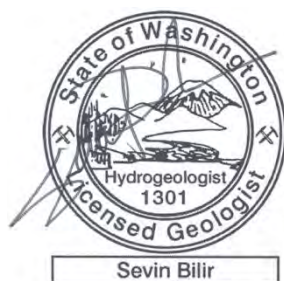
References

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

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

Thank you for the opportunity to provide hydrogeologic services to the KCSWD. If you have any questions, please feel free to contact me at 206-477-4646 or sevin.bilir@kingcounty.gov.

Sincerely,



Sevin Bilir, WA LHG
Environmental Scientist IV
King County Water and Land Resources Division

Enclosures:

- Table 1: Groundwater Elevations - Third Quarter 2015
- Table 2: Groundwater Parameters - Third Quarter 2015
- Figure 1: Groundwater Potentiometric Surface Map – Third Quarter 2015 – Regional Aquifer

Table 1: Groundwater Elevations – Third Quarter 2015

Cedar Hills Regional Landfill
King County, Washington

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)	July 1, 2015	
							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	264.8	341.31
	MW-64	1701980.27	168772.19	596.55	334.03	320.23	208.86	331.75
	MW-66	1699750.19	174250.32	531.28	294.39	280.59	220.27	293.06
	MW-67	1701776.69	172610.65	516.43	297.80	284.00	332.4	296.16
	MW-68	1701917.32	170609.35	647.07	311.29	292.29	356.14	314.67
	MW-69	1698061.86	172400.20	653.69	293.57	279.97	361.17	297.55
	MW-72	1698229.92	170987.71	671.87	303.63	294.03	190.75	310.7
	MW-73	1698954.95	174995.59	485.70	288.11	278.81	239.64	294.95
	MW-74R	1700386.85	173813.79	531.26	289.90	280.40	245.38	291.62
	MW-76	1700376.23	167193.13	491.71	351.06	341.56	238.75	354.61
	MW-81	1702568.87	172113.99	493.66	309.19	300.19	122.03	309.71
	MW-82	1699553.72	167725.31	474.85	348.88	339.38	143.56	352.82
	MW-83	1697939.89	167212.27	496.81	350.19	340.69	235.67	353.25
	MW-84	1698602.89	173894.54	530.80	292.46	282.96	245.75	295.13
	MW-85	1701828.95	173694.52	531.76	282.56	273.06	249.1	286.01
	MW-86	1701331.25	174917.90	536.04	283.43	274.63	247.95	286.94
	MW-87	1700670.27	173493.76	537.31	283.68	274.38	226.69	289.36
	MW-88	1701807.87	174303.06	513.68	281.52	272.22	231.78	286.99
	MW-93	1702259.35	169851.24	632.15	319.87	310.07	141.17	323.95
	MW-94	1698674.21	167210.22	495.51	357.22	348.52	260.87	354.34
	MW-95	1697265.32	169426.92	571.54	314.60	305.90	200.41	320.67
	MW-100	1700791.72	169610.46	620.32	319.06	309.06	297.4	322.92
	MW-106	1702536.99	173461.69	475.47	280.04	270.04	190.25	285.22
Wells with water levels greater than 10 feet above the top of screen	NPW-1	1701906.96	171138.99	646.33	299.87	284.87	331.48	301.17
	MW-21	1697901.86	173876.38	420.66	263.22	255.22	124.68	295.98
	MW-22P	1701844.34	173088.17	517.09	236.02	231.22	232.32	284.77
	MW-24	1699582.39	167767.76	475.99	286.76	281.76	144.71	331.28
	MW-43	1701274.23	174327.14	547.06	245.63	235.63	263.21	283.85
	MW-54	1702154.28	168435.53	580.43	250.25	228.25	278.3	302.13
	MW-56	1698980.77	167214.82	480.33	323.15	313.15	125.98	354.35
	MW-57	1699993.32	167201.99	456.64	326.65	311.65	102.2	354.44
	MW-58A	1699006.59	167207.16	479.27	270.05	260.05	123.43	330.55
	MW-59	1699983.91	167193.44	457.13	285.08	275.08	225.84	333.7
	MW-65	1701602.10	167146.55	545.83	317.71	308.91	238.22	336.97
	MW-75	1701059.70	173432.42	532.40	271.10	261.00	137.1	287.02
	MW-80	1701309.78	172964.99	530.41	279.17	269.67	183.95	291.66
	MW-89	1701799.57	174319.44	512.82	229.20	219.90	221.49	281.04
	MW-90	1702203.13	174300.67	502.22	235.16	226.16	246.52	280.73
	MW-91	1701023.09	173423.94	532.02	260.81	240.71	308.2	285.5
	MW-99	1702556.06	172098.73	493.64	221.77	212.77	345.16	293.23
	NPW-3	1701922.88	170663.28	645.81	284.87	276.87	331.48	314.33

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 – Third Quarter 2015

Cedar Hills Regional Landfill
King County, Washington

Regional Aquifer Zone Beneath the Landfill	Horizontal Hydraulic Conductivity (K)			Horizontal Hydraulic Gradient (DH/DL)	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	0.007	24%	0.163	NNE, NE
	Maximum	4.20E-02	120	0.007	24%	3.25	
	Mean	2.10E-02	60	0.007	24%	1.63	
Central	Minimum	2.10E-03	6	0.010	24%	0.26	N, NNW
	Maximum	4.20E-02	120	0.010	24%	5.2	
	Mean	2.10E-02	60	0.010	24%	2.6	
Southern	Minimum	6.40E-06	0.018	0.014	26%	0.0009	N, NNE, NNW
	Maximum	6.40E-04	1.8	0.014	26%	0.09	
	Mean	6.40E-05	0.18	0.014	26%	0.009	

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

APPENDIX B

Field and Analytical Test Results

Groundwater Analytical Data

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Groundwater Elevation Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Reference Elevation	Depth to Water	Ground- Water Elevation
		(msl)	(feet)	(msl)
MW-21	7/1/2015	420.66	124.68	295.98
MW-21	7/2/2015	420.66	124.76	295.90
MW-22	7/1/2015	517.09	232.32	284.77
MW-24	7/2/2015	475.99	145.69	330.30
MW-27A	7/2/2015	584.23	54.25	529.98
MW-28	7/1/2015	527.75	37.2	490.55
MW-28	7/2/2015	527.75	37.36	490.36
MW-29	7/1/2015	532.92	15.47	517.45
MW-29	7/2/2015	532.92	15.56	517.36
MW-30A	7/1/2015	568.43	29.98	538.45
MW-30A	7/10/2015	568.43	30.22	538.21
MW-43	7/1/2015	547.06	263.21	283.85
MW-43	7/8/2015	547.06	262.98	284.08
MW-47	7/1/2015	634.6	20.13	614.47
MW-47	8/7/2015	634.6	21.57	613.03
MW-48	7/1/2015	594.49	45.2	549.29
MW-55	7/1/2015	652.29	30.77	621.52
MW-55	8/7/2015	652.29	31.76	620.53
MW-56	7/6/2015	480.33	126.26	354.07
MW-57	7/9/2015	456.64	103.52	353.12
MW-59	7/8/2015	457.13	123.5	333.63
MW-60	7/9/2015	567.15	225.81	341.34
MW-62	7/1/2015	556.21	53.9	502.31
MW-62	7/13/2015	556.21	53.91	502.30
MW-63	7/1/2015	515.88	18.55	497.33
MW-64	7/13/2015	596.55	265.43	331.12
MW-65	7/10/2015	545.83	208.92	336.91
MW-66	7/1/2015	531.28	238.22	293.06
MW-66	7/13/2015	531.28	238.48	292.80
MW-67	7/1/2015	516.43	220.27	296.16
MW-67	7/13/2015	516.43	220.49	295.94
MW-68	7/9/2015	647.07	331.92	315.15
MW-69	7/1/2015	653.69	356.14	297.55
MW-69	7/9/2015	653.69	355.92	297.22
MW-70	7/1/2015	530.57		
MW-72	7/1/2015	671.87	361.17	310.70
MW-72	7/13/2015	671.87	361.32	310.55
MW-73	7/1/2015	485.7	190.75	294.95
MW-73	7/16/2015	294.77	190.93	485.70
MW-74	7/1/2015	531.26	239.64	291.62
MW-74	7/10/2015	531.26	239.67	291.59
MW-74	8/14/2015	531.26	239.89	291.37
MW-74	9/11/2015	531.26	240	291.26
MW-75	7/1/2015	532.4	245.38	287.02
MW-75	7/10/2015	532.4	245.44	286.96

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

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)
MW-75	8/14/2015	532.4	245.7	286.70
MW-75	9/11/2015	532.4	245.87	286.53
MW-76	7/14/2015	491.71	137.87	353.84
MW-77	7/1/2015	552.67		
MW-78	7/1/2015	537.35		
MW-79	7/1/2015	459.17	39.3	419.87
MW-80	7/1/2015	530.41	238.75	291.66
MW-80	7/17/2015	530.14	239	291.14
MW-81	7/1/2015	493.66	183.95	309.71
MW-81	7/23/2015	493.66	184.26	309.40
MW-82	7/6/2015	474.85	122.3	352.55
MW-82	7/22/2015	512.82	232.03	280.79
MW-83	7/14/2015	496.81	143.83	352.98
MW-84	7/1/2015	530.8	235.67	295.13
MW-84	7/13/2015	530.8	235.77	295.03
MW-85	7/1/2015	531.76	245.75	286.01
MW-85	7/23/2015	531.76	246	285.76
MW-86	7/1/2015	536.04	249.1	286.94
MW-86	7/16/2015	536.04	249.33	286.71
MW-87	7/1/2015	537.31	247.95	289.36
MW-87	7/9/2015	537.31	247.83	289.48
MW-87	8/14/2015	537.31	248.18	289.13
MW-87	9/11/2015	537.31	248.72	288.59
MW-88	7/1/2015	513.68	226.69	286.99
MW-88	7/22/2015	513.68	226.82	286.86
MW-89	7/1/2015	512.82	231.78	281.04
MW-90	7/1/2015	502.22	221.49	280.73
MW-90	7/22/2015	502.22	221.72	280.50
MW-91	7/1/2015	532.02	246.52	285.50
MW-91	8/6/2015	532.02	247.05	284.97
MW-93	7/17/2015	632.15	299.28	332.87
MW-94	7/14/2015	495.51	141.62	353.89
MW-95	7/16/2015	571.54	251	320.54
MW-96	7/1/2015	547.74		
MW-97	7/1/2015	564.54		
MW-98	7/1/2015	503.73	20.57	483.16
MW-99	7/1/2015	493.64	200.41	293.23
MW-99	7/10/2015	493.64	200.45	293.19
MW-99	8/14/2015	493.64	200.81	292.83
MW-99	9/11/2015	493.64	200.84	292.80
MW-100	7/16/2015	620.32	297.59	322.73
MW-101	9/2/2015	474.72	35.39	439.33
MW-102	7/1/2015	552.48	47.52	504.96
MW-104	7/1/2015	629.68	26.04	603.64
MW-106	7/1/2015	475.47	190.25	285.22

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

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)
MW-EB6	7/1/2015	589.61	29.82	559.79
MW-EB6	7/13/2015	589.61	29.95	559.65
WS-NPW-1	7/1/2015	646.33	345.16	301.17
WS-NPW-3	7/1/2015	645.81	331.48	314.33

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Groundwater Field Parameters

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Dissolved Oxygen	Oxidation Reduction Potential	Temperature	Purge Volume	Turbidity
			(std. Units)	(umhos/cm)	(mg/L)	(mV)	(°C)	(gal)	(NTU)
MW-21	7/2/2015	W21-150702-	7.74	85			10.2	10.1	
MW-24	7/2/2015	W24-150702-	7.17	200			8	10.4	
MW-27A	7/2/2015	W27A150702-	7.82	190			10	10.4	
MW-29	7/2/2015	W29-150702-	6.51	60			12.6	12.2	
MW-30A	7/10/2015	W30A150710-	6.51	225			3	12.1	
MW-30A	7/10/2015	W30A150710D	6.51	225			3	12.1	
MW-43	7/8/2015	W43-150708-	7.42	165			9.6	10.6	
MW-47	8/7/2015	W47-150807-	7.12	785			21.6	11.4	
MW-47	8/7/2015	W47-150807D	7.12	785			21.6	11.4	
MW-55	8/7/2015	W55-150807-	8.15	130			27	11.3	
MW-56	7/6/2015	W56-150706-	7.27	170			20	10.5	
MW-57	7/9/2015	W57-150709-	6.84	180			19.8	11	
MW-59	7/8/2015	W59-150708-	7.08	170			27.9	11.7	
MW-60	7/9/2015	W60-150709-	7.12	150			12	11.1	
MW-64	7/13/2015	W64-150713-	7.07	185			10	12.3	
MW-65	7/10/2015	W65-150710-	7.13	145			21.6	9.9	
MW-66	7/13/2015	W66-150713-	7.09	220			9.5	11.1	
MW-67	7/13/2015	W67-150713-	7.1	280			8.3	11.1	
MW-68	7/9/2015	W68-150709-	6.65	296.3	0.73	13		12.49	28.45
MW-69	7/9/2015	W69-150709-	7.01	310.5	0.83	-70		10.37	< 2
MW-72	7/13/2015	W72-150713-	7.2	275			12.9	11.5	
MW-73	7/16/2015	W73-150716-	7.05	143	9.63	261	3	10.29	< 2
MW-74	7/10/2015	W74R150710-	7.04	405			6	10.9	
MW-74	8/14/2015	W74R150814-	7.03	395			7.2	10.8	
MW-74	9/11/2015	W74R150911-	7.08	465			9.1	10.5	
MW-75	7/10/2015	W75-150710-	7.1	275			9.5	10.6	
MW-75	8/14/2015	W75-150814-	7.06	260			11.5	10.3	
MW-75	9/11/2015	W75-150911-	7	270			14	10.4	
MW-76	7/14/2015	W76-150714-	6.65	185			9.8	9.8	
MW-80	7/17/2015	W80-150717-	7.26	250			7.2	10.3	
MW-81	7/23/2015	W81-150723-	7.32	115			5.5	10.5	
MW-82	7/6/2015	W82-150706-	7.2	270			5	10.8	
MW-83	7/14/2015	W83-150714-	6.8	355			4	10.6	
MW-84	7/13/2015	W84-150713-	7.02	145			5.6	10.8	
MW-85	7/23/2015	W85-150723-	7.13	250			7.2	10.3	
MW-86	7/16/2015	W86-150716-	7.13	140			7.2	10.3	
MW-87	7/9/2015	W87-150709-	6.92	360			7.5	13.7	
MW-87	8/14/2015	W87-150814-	6.93	400			6	11.3	
MW-87	9/11/2015	W87-150911-	6.91	405			6	11	
MW-88	7/22/2015	W88-150722-	7.38	110			8.4	9.7	
MW-89	7/22/2015	W89-150722-	7.31	155			8	9.9	
MW-90	7/22/2015	W90-150722-	7.33	165			7.6	10	
MW-91	8/6/2015	W91-150806-	7.13	245			14	10.3	
MW-93	7/17/2015	W93-150717-	7.23	270			8.8	12.5	
MW-94	7/14/2015	W94-150714-	6.99	220			6	9.3	

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Groundwater Field Parameters

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Dissolved Oxygen	Oxidation Reduction Potential	Temperature	Purge Volume	Turbidity
			(std. Units)	(umhos/cm)	(mg/L)	(mV)	(°C)	(gal)	(NTU)
MW-95	7/16/2015	W95-150716-	7.53	110			7.2	10.1	
MW-99	7/10/2015	W99-150710-	8.01	120			9.2	11	
MW-99	8/14/2015	W99-150814-	8	150			11.5	10.8	
MW-99	9/11/2015	W99-150911-	7.9	130			9.2	10.6	
MW-100	7/16/2015	W100150716-	6.88	305.3	1.71	14	5	11.56	55.08
MW-101	9/2/2015	W101150902-	6.95	430			0.6	11.8	
WS-NPW	8/7/2015	WNPW150807-	7.64	245				17.6	
EQUIPMENT BLANK	8/7/2015	WU1S150807E	8.6	2				20	
EQUIPMENT BLANK	8/7/2015	WU1H150807E	8.17	2				21	
EQUIPMENT BLANK	8/7/2015	WU1M150807E	7.91	2.5				20.9	
FIELD BLANK	7/22/2015	W89-150722F	7.98	2.8				15.4	
FIELD BLANK	8/7/2015	WNPW150807F	8.24	3.7				17.7	
FIELD BLANK	9/11/2015	W87-150911F	5.43	2.5				14.8	

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Groundwater Conventional Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Alkalinity, Total (as CaCO ₃)	Ammonia, (NH ₃)	Chloride	Nitrate- Nitrogen (NO ₃ as N)	Nitrate + Nitrite as N	Phosphorus, Soluble Reactive	Specific Conductance	Sulfate, (SO ₄)	Total Dissolved Solids	Total Organic Carbon	Total Solids	Total Suspended Solids
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(umhos/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-21	7/2/2015	W21-150702-	52.5	0.01 U	2.72	0.01 U			125	7.02	83.9	1 U	87.7	1.76
MW-24	7/2/2015	W24-150702-	64.5	0.0397	3.8	0.017 T			172	16.7	114	1.5	122	2.8
MW-27A	7/2/2015	W27A150702-	82.5	0.175	3.01	0.01 U			188	8.94	133	1 U	146	2.11
MW-29	7/2/2015	W29-150702-	23.8	0.01 U	2.66	1.92			80	1.95	72.7	1 U	82.3	10.6
MW-30A	7/10/2015	W30A150710-	112	0.01 U	0.962	6.01			279	8.28	193	1 U	204	15.2
MW-30A Duplicate	7/10/2015	W30A150710D	117	0.01 U	1.07	5.73			289	9.43	201	1 U	199	1.79
MW-43	7/8/2015	W43-150708-	70.5	0.0275	4.66	0.01 U			180	14.2	122	1 U	118	1 U
MW-47	8/7/2015	W47-150807-	716	0.0824	7.22	0.01 U			1230	6.93	737	3.44	760	3.75
MW-47 Duplicate	8/7/2015	W47-150807D	720	0.105	7.35	0.01 U			1230	6.94	746	3.4	761	3.87
MW-55	8/7/2015	W55-150807-	65.6	0.072	2.05	0.01 U			160	11.3	120	1 U	121	14.2
MW-56	7/6/2015	W56-150706-	57.1	0.01 U	4.95	0.037 T			163	16.5	103	1 U	110	1 U
MW-57	7/9/2015	W57-150709-	64.3	0.0206	5.92	0.016 T			193	23.8	142	1 U	149	4.81
MW-59	7/8/2015	W59-150708-	65.3	0.01 U	4.29	0.024 T			180	19	116	1 U	116	1 U
MW-60	7/9/2015	W60-150709-	72.9	0.01 U	2.48	1.12			170	6.23	117	1 U	114	1.5
MW-64	7/13/2015	W64-150713-	94.2	0.032	3.14	0.01 U			221	16	125	1 U	131	1 U
MW-65	7/10/2015	W65-150710-	55.2	0.0117	3.53	0.01 U			152	15.1	98.9	1 U	103	5.27
MW-66	7/13/2015	W66-150713-	112	0.01 U	6.58	0.708			266	15.1	165	1 U	167	1 U
MW-67	7/13/2015	W67-150713-	142	0.01 U	4.58	0.211			354	38.3	219	1 U	224	1 U
MW-68	7/9/2015	W68-150709-	132	0.0163	2.76	0.01 U			288	17.3	172	1 U	175	6
MW-69	7/9/2015	W69-150709-	133	0.0178	3.83	0.01 U			294	17.3	176	1 U	177	1 U
MW-72	7/13/2015	W72-150713-	121	0.0165	5.16	0.01 U			333	45.7	209	1 U	221	4
MW-73	7/16/2015	W73-150716-	54.2	0.01 U	2.41	1.07			145	9.14	97.2	1 U	103	1.1 T
MW-74	7/10/2015	W74R150710-	228	0.01 U	27.4	0.317			542	29.3	319	1 U	337	1 U
MW-75	7/10/2015	W75-150710-	101	0.0131	9.43	0.01 U			319	49.5	205	1 U	215	5.86
MW-76	7/14/2015	W76-150714-	66.4	0.01 U	14.1	0.848			217	16.6	133	1.49	133	1 U
MW-80	7/17/2015	W80-150717-	105	0.01 U	5.39	0.01 U			306	40.1	190	1 U	209	4.78
MW-81	7/23/2015	W81-150723-	49	0.01 U	4.42	0.116			144	7.7	91.4	1 U	96.4	1 U
MW-82	7/6/2015	W82-150706-	112	0.01 U	9.59	0.596			281	16.7	187	1 U	195	4.1
MW-83	7/14/2015	W83-150714-	141	0.01 U	45.6	2.5			450	7.72	282	2.36	317	1 U
MW-84	7/13/2015	W84-150713-	60.7	0.01 U	3.62	0.474			159	12.7	99.3	1 U	98.7	1 U
MW-85	7/23/2015	W85-150723-	107	0.01 U	9.19	1.63			323	40.5	202	1 U	205	1 U
MW-86	7/16/2015	W86-150716-	66.2	0.01 U	4.33	0.466			182	15.7	111	1 U	122	1.4
MW-87	7/9/2015	W87-150709-	89.8	0.0166	7.77	0.022 T			472	137	327	1 U	390	34.3
MW-88	7/22/2015	W88-150722-	53.2	0.01 U	2.04	0.596			132	6.85	81.4	1 U	83.1	1 U
MW-89	7/22/2015	W89-150722-	74.2	0.0198	5.15	0.01 T			197	16.3	123	1 U	130	8.86
MW-90	7/22/2015	W90-150722-	71.7	0.0192	4.4	0.012 T			218	28.4	140	1 U	142	2.53
MW-91	8/6/2015	W91-150806-	95.5	0.0198	9.87	0.023 T			307	44.2	207	1 U	345	201
MW-93	7/17/2015	W93-150717-	122	0.0547	2.91	0.018 T			374	59.5	232	1 U	251	1 U
MW-94	7/14/2015	W94-150714-	88.5	0.01 U	20.5	1.52			266	6.97	172	1.55	192	1 U
MW-95	7/16/2015	W95-150716-	87.8	0.0226	4.86	0.01 U			225	17.2	135	1 U	141	1 U
MW-99	7/10/2015	W99-150710-	58.6	0.0911	3.25	0.027 T			142	8.54	94.1	1 U	89.4	1 U
MW-100	7/16/2015	W100150716-	134	0.01 U	2.78	0.01 U			301	17.3	163	1 U	182	4.77
WS-NPW	8/7/2015	WNPW150807-	141	0.0167	3.24	0.01 U			314	16.8	189	1 U	189	1 U
FIELD BLANK	7/22/2015	W89-150722F	1 U	0.01 U	0.1 U	0.01 U			2.1 T	0.1 U	5 U	1 U	5 U	1 U
FIELD BLANK	8/7/2015	WNPW150807F	1 U	0.01 U	0.1 U	0.01 U			2.3 T	0.1 U	5 U	1 U	5 U	1 U
EQUIPMENT BLANK	8/7/2015	WU1M150807E		0.01 U			0.01 U	0.01 U						

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Aluminum, Dissolved (mg/L)	Aluminum, Total (mg/L)	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)
MW-21	7/2/2015	W21-150702-			< 0.001 U	< 0.001 U	< 0.001 U	0.00104	0.00396	0.00437	< 0.001 U	< 0.001 U	< 0.002 U
MW-24	7/2/2015	W24-150702-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00184	0.00194	< 0.001 U	< 0.001 U	< 0.002 U
MW-27A	7/2/2015	W27A150702-			< 0.001 U	< 0.001 U	0.0168	0.0162	0.00554	0.0298	< 0.001 U	< 0.001 U	< 0.002 U
MW-29	7/2/2015	W29-150702-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00149	0.00342	< 0.001 U	< 0.001 U	< 0.002 U
MW-30A	7/10/2015	W30A150710-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00438	0.00546	< 0.001 U	< 0.001 U	< 0.002 U
MW-30A Dup	7/10/2015	W30A150710D			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00447	0.00508	< 0.001 U	< 0.001 U	< 0.002 U
MW-43	7/8/2015	W43-150708-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00647	0.00687	< 0.001 U	< 0.001 U	< 0.002 U
MW-47	8/7/2015	W47-150807-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0398	0.0396	< 0.001 U	< 0.001 U	< 0.002 U
MW-47 Dup	8/7/2015	W47-150807D			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0392	0.039	< 0.001 U	< 0.001 U	< 0.002 U
MW-55	8/7/2015	W55-150807-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0044	0.00536	< 0.001 U	< 0.001 U	< 0.002 U
MW-56	7/6/2015	W56-150706-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00285	0.00331	< 0.001 U	< 0.001 U	< 0.002 U
MW-57	7/9/2015	W57-150709-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00147	0.00161	< 0.001 U	< 0.001 U	< 0.002 U
MW-59	7/8/2015	W59-150708-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00338	0.00332	< 0.001 U	< 0.001 U	< 0.002 U
MW-60	7/9/2015	W60-150709-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00259	0.0027	< 0.001 U	< 0.001 U	< 0.002 U
MW-64	7/13/2015	W64-150713-			< 0.001 U	< 0.001 U	< 0.001 DU	0.00118	0.00768	0.00806	< 0.001 U	< 0.001 U	< 0.002 U
MW-65	7/10/2015	W65-150710-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00675	0.0067	< 0.001 U	< 0.001 U	< 0.002 U
MW-66	7/13/2015	W66-150713-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00511	0.00523	< 0.001 U	< 0.001 U	< 0.002 U
MW-67	7/13/2015	W67-150713-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.0106	0.0108	< 0.001 U	< 0.001 U	< 0.002 U
MW-68	7/9/2015	W68-150709-			< 0.001 U	< 0.001 U	0.0176 D	0.0793	0.0108	0.0121	< 0.001 U	< 0.001 U	< 0.002 U
MW-69	7/9/2015	W69-150709-			< 0.001 U	< 0.001 U	0.00205 D	0.00206	0.0109	0.0109	< 0.001 U	< 0.001 U	< 0.002 U
MW-72	7/13/2015	W72-150713-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.0113	0.0115	< 0.001 U	< 0.001 U	< 0.002 U
MW-73	7/16/2015	W73-150716-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00226	0.00251	< 0.001 U	< 0.001 U	< 0.002 U
MW-74	7/10/2015	W74R150710-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.0116	0.0122	< 0.001 U	< 0.001 U	< 0.002 U
MW-75	7/10/2015	W75-150710-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.0101	0.0131	< 0.001 U	< 0.001 U	< 0.002 U
MW-76	7/14/2015	W76-150714-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00333	0.00332	< 0.001 U	< 0.001 U	< 0.002 U
MW-80	7/17/2015	W80-150717-			< 0.001 U	< 0.001 U	0.00577	0.00397	0.0132	0.0132	< 0.001 U	< 0.001 U	< 0.002 U
MW-81	7/23/2015	W81-150723-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00249	0.00262	< 0.001 U	< 0.001 U	< 0.002 U
MW-82	7/6/2015	W82-150706-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00106	0.00148	< 0.001 U	< 0.001 U	< 0.002 U
MW-83	7/14/2015	W83-150714-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00653	0.00696	< 0.001 U	< 0.001 U	< 0.002 U
MW-84	7/13/2015	W84-150713-			< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00353	0.00337	< 0.001 U	< 0.001 U	< 0.002 U
MW-85	7/23/2015	W85-150723-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00545	0.0057	< 0.001 U	< 0.001 U	< 0.002 U
MW-86	7/16/2015	W86-150716-			< 0.001 U	< 0.001 U	< 0.001 U	0.00127	0.00326	0.00357	< 0.001 U	< 0.001 U	< 0.002 U
MW-87	7/9/2015	W87-150709-			< 0.001 U	< 0.001 U	< 0.001 DU	0.0162	0.022	0.0303	< 0.001 U	< 0.001 U	< 0.002 U
MW-88	7/22/2015	W88-150722-			< 0.001 U	< 0.001 U	0.00102	< 0.001 U	0.00202	0.00209	< 0.001 U	< 0.001 U	< 0.002 U
MW-89	7/22/2015	W89-150722-			< 0.001 U	< 0.001 U	0.00103	0.00422	0.00584	0.00779	< 0.001 U	< 0.001 U	< 0.002 U
MW-90	7/22/2015	W90-150722-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00553	0.00627	< 0.001 U	< 0.001 U	< 0.002 U
MW-91	8/6/2015	W91-150806-			< 0.001 U	< 0.001 U	0.00746	0.121	0.0108	0.0374	< 0.001 U	< 0.001 U	< 0.002 U
MW-93	7/17/2015	W93-150717-			< 0.001 U	< 0.001 U	0.00127	0.00122	0.00797	0.00831	< 0.001 U	< 0.001 U	< 0.002 U
MW-94	7/14/2015	W94-150714-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00184	0.00196	< 0.001 U	< 0.001 U	< 0.002 U
MW-95	7/16/2015	W95-150716-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00365	0.00384	< 0.001 U	< 0.001 U	< 0.002 U
MW-99	7/10/2015	W99-150710-			< 0.001 U	< 0.001 U	0.00173 D	0.00167	0.00332	0.00349	< 0.001 U	< 0.001 U	< 0.002 U
MW-100	7/16/2015	W100150716-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.006	0.00663	< 0.001 U	< 0.001 U	< 0.002 U
MW-101	9/2/2015	W101150902-			< 0.001 U	< 0.001 U	0.00327	0.00421	0.015	0.0171	< 0.001 U	< 0.001 U	< 0.002 U
WS-NPW	8/7/2015	WNPW150807-			< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U		0.01	< 0.001 U	< 0.001 U	< 0.002 U
EQUIPMENT BLANK	8/7/2015	WU1S150807E	< 0.02 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.002 U
EQUIPMENT BLANK	8/7/2015	WU1H150807E	< 0.02 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.002 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill ---Groundwater Metals Analytical Data

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

Site	Date	Sample ID	Aluminum, Dissolved (mg/L)	Aluminum, Total (mg/L)	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)
FIELD BLANK	7/22/2015	W89-150722F			< 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
FIELD BLANK	8/7/2015	WNPW150807F				< 0.001 U		< 0.001 U		< 0.001 U		< 0.001 U	

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Cadmium, Total (mg/L)	Calcium, Dissolved (mg/L)	Calcium, Total (mg/L)	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)
MW-21	7/2/2015	W21-150702-	< 0.002 U	9.7	10.3	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	2.28	2.98	< 0.001 U	< 0.001 U
MW-24	7/2/2015	W24-150702-	< 0.002 U	13.1	13.5	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	3.15	3.34	< 0.001 U	< 0.001 U
MW-27A	7/2/2015	W27A150702-	< 0.002 U	18.7	19.5	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00231	< 0.01 U	0.255	< 0.001 U	< 0.001 U
MW-29	7/2/2015	W29-150702-	< 0.002 U	6.83	7.11	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.04 T	0.339	< 0.001 U	< 0.001 U
MW-30A	7/10/2015	W30A150710-	< 0.002 U	21.4	19.2	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	< 0.01 DU	0.378	< 0.001 U	< 0.001 U
MW-30A Dup	7/10/2015	W30A150710D	< 0.002 U	20.8	20.2	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	< 0.01 DU	0.13	< 0.001 U	< 0.001 U
MW-43	7/8/2015	W43-150708-	< 0.002 U	12.8	12.4	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	1.05 D	1.33	< 0.001 U	< 0.001 U
MW-47	8/7/2015	W47-150807-	< 0.002 U	130	156 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.044 T	0.218	< 0.001 U	< 0.001 U
MW-47 Dup	8/7/2015	W47-150807D	< 0.002 U	145	155 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.0539	0.214	< 0.001 U	< 0.001 U
MW-55	8/7/2015	W55-150807-	< 0.002 U	12.4	12	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00207	0.299	0.466	< 0.001 U	< 0.001 U
MW-56	7/6/2015	W56-150706-	< 0.002 U	13.2	14	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.033 T	0.14	< 0.001 U	< 0.001 U
MW-57	7/9/2015	W57-150709-	< 0.002 U	14.2	13.1	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	8.04 D	7.55	< 0.001 U	< 0.001 U
MW-59	7/8/2015	W59-150708-	< 0.002 U	14.3	13.4	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	4.55 D	4.2	< 0.001 U	< 0.001 U
MW-60	7/9/2015	W60-150709-	< 0.002 U	15.1	14.6	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	0.032 DT	0.0924	< 0.001 U	< 0.001 U
MW-64	7/13/2015	W64-150713-	< 0.002 U	16.2	15.6	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	0.13 D	0.294	< 0.001 U	< 0.001 U
MW-65	7/10/2015	W65-150710-	< 0.002 U	11.6	11	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	4.38 D	4.14	< 0.001 U	< 0.001 U
MW-66	7/13/2015	W66-150713-	< 0.002 U	19.6	18.9	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	< 0.01 DU	0.016 T	< 0.001 U	< 0.001 U
MW-67	7/13/2015	W67-150713-	< 0.002 U	31	30.6	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	0.171 D	0.202	< 0.001 U	< 0.001 U
MW-68	7/9/2015	W68-150709-	< 0.002 U	25.7	25.3	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	0.595 D	1.89	< 0.001 U	< 0.001 U
MW-69	7/9/2015	W69-150709-	< 0.002 U	28.3	26.7	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	0.952 D	0.929	< 0.001 U	< 0.001 U
MW-72	7/13/2015	W72-150713-	< 0.002 U	29.1	27.5	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	2.41 D	2.77	< 0.001 U	< 0.001 U
MW-73	7/16/2015	W73-150716-	< 0.002 U	11.2	11.3	< 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
MW-74	7/10/2015	W74R150710-	< 0.002 U	44.9	44.9	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	< 0.01 DU	0.038 T	< 0.001 U	< 0.001 U
MW-75	7/10/2015	W75-150710-	< 0.002 U	23.9	22.9	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	1.85 D	2.46	< 0.001 U	< 0.001 U
MW-76	7/14/2015	W76-150714-	< 0.002 U	19.1	18.2	< 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
MW-80	7/17/2015	W80-150717-	< 0.002 U	26.3	26.3	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	2.36	1.94	< 0.001 U	< 0.001 U
MW-81	7/23/2015	W81-150723-	< 0.002 U	10.6	10.8	< 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
MW-82	7/6/2015	W82-150706-	< 0.002 U	23.7	24.5	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.026 T	0.078	< 0.001 U	< 0.001 U
MW-83	7/14/2015	W83-150714-	< 0.002 U	44.2	44.9	< 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
MW-84	7/13/2015	W84-150713-	< 0.002 U	11	10.1	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	< 0.01 DU	< 0.01 U	< 0.001 U	< 0.001 U
MW-85	7/23/2015	W85-150723-	< 0.002 U	25.8	26	< 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
MW-86	7/16/2015	W86-150716-	< 0.002 U	12.9	13.2	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.23	0.883	< 0.001 U	< 0.001 U
MW-87	7/9/2015	W87-150709-	< 0.002 U	39.4	38	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	3.93 D	16.8	< 0.001 U	< 0.001 U
MW-88	7/22/2015	W88-150722-	< 0.002 U	8.45	8.49	< 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
MW-89	7/22/2015	W89-150722-	< 0.002 U	12.7	12.8	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.897	3.07	< 0.001 U	< 0.001 U
MW-90	7/22/2015	W90-150722-	< 0.002 U	16.4	17.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	1.27	1.75	< 0.001 U	< 0.001 U
MW-91	8/6/2015	W91-150806-	< 0.002 U	24.6	22.7	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	3.63	52.4 D	< 0.001 U	< 0.001 U
MW-93	7/17/2015	W93-150717-	< 0.002 U	32.7	32.8	< 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
MW-94	7/14/2015	W94-150714-	< 0.002 U	23.9	24.2	< 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
MW-95	7/16/2015	W95-150716-	< 0.002 U	19	19.5	< 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
MW-99	7/10/2015	W99-150710-	< 0.002 U	9.63	9.28	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	0.047 DT	0.0787	< 0.001 U	< 0.001 U
MW-100	7/16/2015	W100150716-	< 0.002 U	25.7	26.6	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	1.06	1.76	< 0.001 U	< 0.001 U
MW-101	9/2/2015	W101150902-	< 0.002 U	45.6	47	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.321	0.882	< 0.001 U	< 0.001 U
WS-NPW	8/7/2015	WNPW150807-	< 0.002 U		28.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U		1.25	< 0.001 U	< 0.001 U
EQUIPMENT BLANK	8/7/2015	WU1S150807E		< 0.01 U		< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U	
EQUIPMENT BLANK	8/7/2015	WU1H150807E		< 0.01 U		< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U	

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill ---Groundwater Metals Analytical Data

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

Site	Date	Sample ID	Cadmium, Total (mg/L)	Calcium, Dissolved (mg/L)	Calcium, Total (mg/L)	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)
FIELD BLANK	7/22/2015	W89-150722F	< 0.002 U	< 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	8/7/2015	WNPW150807F	< 0.002 U		< 0.01 U		< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Magnesium, Dissolved (mg/L)	Magnesium, Total (mg/L)	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)
MW-21	7/2/2015	W21-150702-	5.19	5.99	0.0625	0.0734	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1	1.03
MW-24	7/2/2015	W24-150702-	8.08	9.16	0.0985	0.102	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.934	0.941
MW-27A	7/2/2015	W27A150702-	4.97	5.64	0.079	0.576	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	3.58	3.64
MW-29	7/2/2015	W29-150702-	1.71	1.94	< 0.001 U	0.00551	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.518	0.554
MW-30A	7/10/2015	W30A150710-	11.3	10.6	< 0.001 U	0.00354	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.54 D	1.46
MW-30A Dup	7/10/2015	W30A150710D	11.1	11.3	< 0.001 U	0.00139	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.54 D	1.47
MW-43	7/8/2015	W43-150708-	8.61	8.78	0.224	0.222	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.4 D	1.33
MW-47	8/7/2015	W47-150807-	63	76.6 D	1.63	1.58 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	5.38	5.33
MW-47 Dup	8/7/2015	W47-150807D	64.1	76.2 D	1.88	1.59 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	5.3	5.3
MW-55	8/7/2015	W55-150807-	6.3	6.43	0.151	0.178	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.66	1.64
MW-56	7/6/2015	W56-150706-	6.92	8.19	0.181	0.192	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.08	1.14
MW-57	7/9/2015	W57-150709-	7.62	7.37	0.218	0.206	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	0.909 D	0.853
MW-59	7/8/2015	W59-150708-	8.42	8.41	0.104	0.0996	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.09 D	1.03
MW-60	7/9/2015	W60-150709-	6.93	6.98	0.00121	0.00187	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.1 D	1.04
MW-64	7/13/2015	W64-150713-	11.6	12.1	0.0432	0.0832	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.62 D	1.51
MW-65	7/10/2015	W65-150710-	6.65	6.71	0.186	0.186	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	0.972 D	0.921
MW-66	7/13/2015	W66-150713-	15.2	15.4	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.28 D	1.24
MW-67	7/13/2015	W67-150713-	18	18.2	0.143	0.143	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.66 D	1.66
MW-68	7/9/2015	W68-150709-	13.8	14.3	0.281	0.284	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.68 D	1.66
MW-69	7/9/2015	W69-150709-	13	12.9	0.231	0.222	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.66 D	1.61
MW-72	7/13/2015	W72-150713-	17.2	16.9	0.319	0.313	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.83 D	1.83
MW-73	7/16/2015	W73-150716-	5.6	5.71	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.782	0.835
MW-74	7/10/2015	W74R150710-	32.4	33.3	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	2.14 D	2.09
MW-75	7/10/2015	W75-150710-	17.2	17.3	0.151	0.152	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.8 D	1.69
MW-76	7/14/2015	W76-150714-	8.43	8.58	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.3	1.3
MW-80	7/17/2015	W80-150717-	13.3	13.2	0.274	0.274	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.6	1.67
MW-81	7/23/2015	W81-150723-	5.59	5.66	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.746	0.815
MW-82	7/6/2015	W82-150706-	13.2	14.9	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.75	1.79
MW-83	7/14/2015	W83-150714-	17.5	17.9	0.00489	0.00604	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.76	2.84
MW-84	7/13/2015	W84-150713-	8.4	8.09	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	1.03 D	0.971
MW-85	7/23/2015	W85-150723-	15.6	15.7	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.52	1.57
MW-86	7/16/2015	W86-150716-	8.55	8.76	0.00453	0.00578	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.06	1.14
MW-87	7/9/2015	W87-150709-	25.6	25.3	0.406	0.404	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	2.24 D	2.19
MW-88	7/22/2015	W88-150722-	6.19	6.19	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.835	0.876
MW-89	7/22/2015	W89-150722-	9.14	9.2	0.196	0.215	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.43	1.51
MW-90	7/22/2015	W90-150722-	9.42	9.84	0.245	0.264	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.35	1.47
MW-91	8/6/2015	W91-150806-	15.4	14.2	0.462	1.16 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.73	1.64
MW-93	7/17/2015	W93-150717-	16.7	16.8	0.216	0.234	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.58	1.65
MW-94	7/14/2015	W94-150714-	10.3	10.4	< 0.001 U	0.00184	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.02	2.07
MW-95	7/16/2015	W95-150716-	9.85	10.1	0.138	0.146	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.19	1.24
MW-99	7/10/2015	W99-150710-	4.34	4.46	0.12	0.118	< 0.0001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	0.908 D	0.878
MW-100	7/16/2015	W100150716-	14.2	14.8	0.174	0.184	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.79	1.89
MW-101	9/2/2015	W101150902-	25.1	25.5	0.328	0.479	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.5	2.75
WS-NPW	8/7/2015	WNPW150807-		14.7		0.384		< 0.0001 U		< 0.01 U		1.58
EQUIPMENT BLANK	8/7/2015	WU1S150807E	< 0.015 U		< 0.001 U		< 0.0001 U		< 0.01 U		< 0.3 U	
EQUIPMENT BLANK	8/7/2015	WU1H150807E	< 0.015 U		< 0.001 U		< 0.0001 U		< 0.01 U		< 0.3 U	

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill ---Groundwater Metals Analytical Data

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

Site	Date	Sample ID	Magnesium, Dissolved (mg/L)	Magnesium, Total (mg/L)	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)
FIELD BLANK	7/22/2015	W89-150722F	< 0.015 U	< 0.015 U	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.3 U
FIELD BLANK	8/7/2015	WNPW150807F		< 0.015 U		< 0.001 U		< 0.0001 U		< 0.01 U		< 0.3 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Selenium, Dissolved (mg/L)	Selenium, Total (mg/L)	Silver, Dissolved (mg/L)	Silver, Total (mg/L)	Sodium, Dissolved (mg/L)	Sodium, Total (mg/L)	Thallium, Dissolved (mg/L)	Thallium, Total (mg/L)	Tin, Dissolved (mg/L)
MW-21	7/2/2015	W21-150702-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	4.92	5.46	< 0.001 U	< 0.001 U	
MW-24	7/2/2015	W24-150702-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	5.11	5.58	< 0.001 U	< 0.001 U	
MW-27A	7/2/2015	W27A150702-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	6.36	6.91	< 0.001 U	< 0.001 U	
MW-29	7/2/2015	W29-150702-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	4.13	4.52	< 0.001 U	< 0.001 U	
MW-30A	7/10/2015	W30A150710-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	13.3	13	< 0.001 U	< 0.001 U	
MW-30A Dup	7/10/2015	W30A150710D	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	12.8	12.6	< 0.001 U	< 0.001 U	
MW-43	7/8/2015	W43-150708-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	5.91	5.93	< 0.001 U	< 0.001 U	
MW-47	8/7/2015	W47-150807-	< 0.001 U	< 0.001 DU	< 0.003 U	< 0.003 U	16.3	16.1	< 0.001 U	< 0.001 U	
MW-47 Dup	8/7/2015	W47-150807D	< 0.001 U	< 0.001 DU	< 0.003 U	< 0.003 U	16.7	16	< 0.001 U	< 0.001 U	
MW-55	8/7/2015	W55-150807-	< 0.001 U	< 0.001 DU	< 0.003 U	< 0.003 U	5.58	5.63	< 0.001 U	< 0.001 U	
MW-56	7/6/2015	W56-150706-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	4.72	5.31	< 0.001 U	< 0.001 U	
MW-57	7/9/2015	W57-150709-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	5.95	5.56	< 0.001 U	< 0.001 U	
MW-59	7/8/2015	W59-150708-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	5.52	5.46	< 0.001 U	< 0.001 U	
MW-60	7/9/2015	W60-150709-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	5.2	5.1	< 0.001 U	< 0.001 U	
MW-64	7/13/2015	W64-150713-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	6.59	6.71	< 0.001 U	< 0.001 U	
MW-65	7/10/2015	W65-150710-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	5.01	4.97	< 0.001 U	< 0.001 U	
MW-66	7/13/2015	W66-150713-	0.00101 D	< 0.001 U	< 0.003 U	< 0.003 U	7.8	7.69	< 0.001 U	< 0.001 U	
MW-67	7/13/2015	W67-150713-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	8.44	8.53	< 0.001 U	< 0.001 U	
MW-68	7/9/2015	W68-150709-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	7.99	8.16	< 0.001 U	< 0.001 U	
MW-69	7/9/2015	W69-150709-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	7.63	7.43	< 0.001 U	< 0.001 U	
MW-72	7/13/2015	W72-150713-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	7.5	7.23	< 0.001 U	< 0.001 U	
MW-73	7/16/2015	W73-150716-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	5.46	5.24	< 0.001 U	< 0.001 U	
MW-74	7/10/2015	W74R150710-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	11.5	11.7	< 0.001 U	< 0.001 U	
MW-75	7/10/2015	W75-150710-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	7.69	7.67	< 0.001 U	< 0.001 U	
MW-76	7/14/2015	W76-150714-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	8.12	8.13	< 0.001 U	< 0.001 U	
MW-80	7/17/2015	W80-150717-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	7.11	6.68	< 0.001 U	< 0.001 U	
MW-81	7/23/2015	W81-150723-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	5.58	5.43	< 0.001 U	< 0.001 U	
MW-82	7/6/2015	W82-150706-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	6.76	7.24	< 0.001 U	< 0.001 U	
MW-83	7/14/2015	W83-150714-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	8.87	8.44	< 0.001 U	< 0.001 U	
MW-84	7/13/2015	W84-150713-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	6.01	5.68	< 0.001 U	< 0.001 U	
MW-85	7/23/2015	W85-150723-	0.00119	0.00103	< 0.003 U	< 0.003 U	8.38	7.91	< 0.001 U	< 0.001 U	
MW-86	7/16/2015	W86-150716-	0.00163	0.00148	< 0.003 U	< 0.003 U	6.21	6.07	< 0.001 U	< 0.001 U	
MW-87	7/9/2015	W87-150709-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	9.32	9.09	< 0.001 U	< 0.001 U	
MW-88	7/22/2015	W88-150722-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	5.48	5.22	< 0.001 U	< 0.001 U	
MW-89	7/22/2015	W89-150722-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	7.88	7.67	< 0.001 U	< 0.001 U	
MW-90	7/22/2015	W90-150722-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	6.2	6.06	< 0.001 U	< 0.001 U	
MW-91	8/6/2015	W91-150806-	< 0.001 U	< 0.001 DU	< 0.003 U	< 0.003 U	7.47	6.89	< 0.001 U	< 0.001 U	
MW-93	7/17/2015	W93-150717-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	9.4	8.82	< 0.001 U	< 0.001 U	
MW-94	7/14/2015	W94-150714-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	6.86	6.46	< 0.001 U	< 0.001 U	
MW-95	7/16/2015	W95-150716-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	5.77	5.63	< 0.001 U	< 0.001 U	
MW-99	7/10/2015	W99-150710-	< 0.001 DU	< 0.001 U	< 0.003 U	< 0.003 U	10.2	10.4	< 0.001 U	< 0.001 U	
MW-100	7/16/2015	W100150716-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	8.82	8.8	< 0.001 U	< 0.001 U	
MW-101	9/2/2015	W101150902-	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	17.3	18.6	< 0.001 DU	< 0.001 U	
WS-NPW	8/7/2015	WNPW150807-	< 0.001 U	< 0.001 DU	< 0.003 U	< 0.003 U		7.8	< 0.001 U	< 0.001 U	
EQUIPMENT BLANK	8/7/2015	WU1S150807E	< 0.001 U		< 0.003 U		< 0.05 U		< 0.001 U		< 0.01 U
EQUIPMENT BLANK	8/7/2015	WU1H150807E	< 0.001 U		< 0.003 U		< 0.05 U		< 0.001 U		< 0.01 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Selenium, Dissolved (mg/L)	Selenium, Total (mg/L)	Silver, Dissolved (mg/L)	Silver, Total (mg/L)	Sodium, Dissolved (mg/L)	Sodium, Total (mg/L)	Thallium, Dissolved (mg/L)	Thallium, Total (mg/L)	Tin, Dissolved (mg/L)
FIELD BLANK	7/22/2015	W89-150722F	< 0.001 U	< 0.001 U	< 0.003 U	< 0.003 U	< 0.05 U	< 0.05 U	< 0.001 U	< 0.001 U	
FIELD BLANK	8/7/2015	WNPW150807F		< 0.001 DU		< 0.003 U		< 0.05 U		< 0.001 U	

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: ~~Sandy Jimenez (206) 477-5224~~

Site	Date	Sample ID	Tin, Total (mg/L)	Vanadium, Dissolved (mg/L)	Vanadium, Total (mg/L)	Zinc, Dissolved (mg/L)	Zinc, Total (mg/L)
MW-21	7/2/2015	W21-150702-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-24	7/2/2015	W24-150702-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-27A	7/2/2015	W27A150702-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-29	7/2/2015	W29-150702-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-30A	7/10/2015	W30A150710-		< 0.002 DU	0.0023	0.00657	0.00572
MW-30A Dup	7/10/2015	W30A150710D		< 0.002 DU	< 0.002 U	0.00566	0.00571
MW-43	7/8/2015	W43-150708-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-47	8/7/2015	W47-150807-		0.00301	0.00307	< 0.004 U	< 0.004 U
MW-47 Dup	8/7/2015	W47-150807D		0.00291	0.00303	< 0.004 U	< 0.004 U
MW-55	8/7/2015	W55-150807-		< 0.002 U	< 0.002 U	0.0055	0.00953
MW-56	7/6/2015	W56-150706-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-57	7/9/2015	W57-150709-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-59	7/8/2015	W59-150708-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-60	7/9/2015	W60-150709-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-64	7/13/2015	W64-150713-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-65	7/10/2015	W65-150710-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-66	7/13/2015	W66-150713-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-67	7/13/2015	W67-150713-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-68	7/9/2015	W68-150709-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-69	7/9/2015	W69-150709-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-72	7/13/2015	W72-150713-		< 0.002 DU	< 0.002 U	< 0.004 U	0.00528
MW-73	7/16/2015	W73-150716-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-74	7/10/2015	W74R150710-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-75	7/10/2015	W75-150710-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-76	7/14/2015	W76-150714-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-80	7/17/2015	W80-150717-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-81	7/23/2015	W81-150723-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-82	7/6/2015	W82-150706-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-83	7/14/2015	W83-150714-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-84	7/13/2015	W84-150713-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-85	7/23/2015	W85-150723-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-86	7/16/2015	W86-150716-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-87	7/9/2015	W87-150709-		< 0.002 DU	0.00271	< 0.004 U	< 0.004 U
MW-88	7/22/2015	W88-150722-		0.00255	0.00266	< 0.004 U	< 0.004 U
MW-89	7/22/2015	W89-150722-		< 0.002 U	< 0.002 U	< 0.004 U	0.00653
MW-90	7/22/2015	W90-150722-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-91	8/6/2015	W91-150806-		< 0.002 U	0.00273	< 0.004 U	< 0.004 U
MW-93	7/17/2015	W93-150717-		< 0.002 U	< 0.002 U	0.00545	0.00697
MW-94	7/14/2015	W94-150714-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-95	7/16/2015	W95-150716-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-99	7/10/2015	W99-150710-		< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
MW-100	7/16/2015	W100150716-		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
MW-101	9/2/2015	W101150902-		< 0.002 U	< 0.002 U	0.00688	0.00723
WS-NPW	8/7/2015	WNPW150807-			< 0.002 U		0.00603
EQUIPMENT BLANK	8/7/2015	WU1S150807E		< 0.002 U		< 0.004 U	
EQUIPMENT BLANK	8/7/2015	WU1H150807E		< 0.002 U		< 0.004 U	

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill ---Groundwater Metals Analytical Data

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

Site	Date	Sample ID	Tin, Total (mg/L)	Vanadium, Dissolved (mg/L)	Vanadium, Total (mg/L)	Zinc, Dissolved (mg/L)	Zinc, Total (mg/L)
FIELD BLANK	7/22/2015	W89-150722F		< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
FIELD BLANK	8/7/2015	WNPW150807F			< 0.002 U		< 0.004 U

Data Collected from July 1, 2015 to September 30, 2015
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sindy Jimenez (206) 477-5224

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Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Groundwater 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)	1,2,3-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-95	7/16/2015	W95-150716-	< 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-99	7/10/2015	W99-150710-	< 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-99	8/14/2015	W99-150814-	< 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-99	9/11/2015	W99-150911-	< 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-100	7/16/2015	W100150716-	< 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-101	9/2/2015	W101150902-	< 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
WS-NPW	8/7/2015	WNPW150807-	< 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
FIELD BLANK	7/22/2015	W89-150722F	< 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
FIELD BLANK	8/7/2015	WNPW150807F	< 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
FIELD BLANK	9/11/2015	W87-150911F	< 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	7/6/2015	VTRP150709C	< 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	7/6/2015	VTRP150710C	< 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	7/10/2015	VTRP150713C	< 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	7/13/2015	VTRP150714C	< 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	7/15/2015	VTRP150716C	< 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	7/13/2015	VTRP150717C	< 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	7/17/2015	VTRP150722C	< 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	7/22/2015	VTRP150723C	< 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	8/5/2015	VTRP150806C	< 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	8/6/2015	VTRP150807C	< 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	8/13/2015	VTRP150814C	< 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	7/2/2015	VTRP150708B	< 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	9/1/2015	VTRP150902C	< 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	9/10/2015	VTRP150911C	< 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	7/8/2015	VTRP150709B	< 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	7/8/2015	VTRP150710B	< 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	7/10/2015	VTRP150713B	< 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	7/2/2015	VTRP150706C	< 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	7/15/2015	VTRP150716B	< 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	8/6/2015	VTRP150807B	< 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	8/13/2015	VTRP150814B	< 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	9/10/2015	VTRP150911B	< 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 July 1, 2015 to September 30, 2015

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	7/2/2015	W21-150702-	< 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-24	7/2/2015	W24-150702-	< 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	7/2/2015	W27A150702-	< 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	7/2/2015	W29-150702-	< 0.2 U	< 4 U	< 4 U	< 4 U	4 T	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	7/10/2015	W30A150710-	< 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 Duplicate	7/10/2015	W30A150710D	< 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	7/8/2015	W43-150708-	< 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	8/7/2015	W47-150807-	< 0.2 U	< 4 U	< 4 U	< 4 U	5 T	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47 Duplicate	8/7/2015	W47-150807D	< 0.2 U	< 4 U	< 4 U	< 4 U	5.9 T	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-55	8/7/2015	W55-150807-	< 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	7/6/2015	W56-150706-	< 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	7/9/2015	W57-150709-	< 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	7/8/2015	W59-150708-	< 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	7/9/2015	W60-150709-	< 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	7/13/2015	W64-150713-	< 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	7/10/2015	W65-150710-	< 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	7/13/2015	W66-150713-	< 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	7/13/2015	W67-150713-	< 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	7/9/2015	W68-150709-	< 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	7/9/2015	W69-150709-	< 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	7/13/2015	W72-150713-	< 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	7/16/2015	W73-150716-	< 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	7/10/2015	W74R150710-	< 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	8/14/2015	W74R150814-	< 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	9/11/2015	W74R150911-	< 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	7/10/2015	W75-150710-	< 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	8/14/2015	W75-150814-	< 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	9/11/2015	W75-150911-	< 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	7/14/2015	W76-150714-	< 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	7/17/2015	W80-150717-	< 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	7/23/2015	W81-150723-	< 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	7/6/2015	W82-150706-	< 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	7/14/2015	W83-150714-	< 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	7/13/2015	W84-150713-	< 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	7/23/2015	W85-150723-	< 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	7/16/2015	W86-150716-	< 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	7/9/2015	W87-150709-	< 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	8/14/2015	W87-150814-	< 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	9/11/2015	W87-150911-	< 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	7/22/2015	W88-150722-	< 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-89	7/22/2015	W89-150722-	< 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	7/22/2015	W90-150722-	< 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	8/6/2015	W91-150806-	< 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-93	7/17/2015	W93-150717-	< 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	7/14/2015	W94-150714-	< 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 July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy 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-95	7/16/2015	W95-150716-	< 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	7/10/2015	W99-150710-	< 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	8/14/2015	W99-150814-	< 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	9/11/2015	W99-150911-	< 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	7/16/2015	W100150716-	< 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	9/2/2015	W101150902-	< 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	8/7/2015	WNPW150807-	< 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	7/22/2015	W89-150722F	< 0.2 U	< 4 U	< 4 U	< 4 U	10.9	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	8/7/2015	WNPW150807F	< 0.2 U	< 4 U	< 4 U	< 4 U	9.9 T	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	9/11/2015	W87-150911F	< 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	7/6/2015	VTRP150709C	< 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	7/6/2015	VTRP150710C	< 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	7/10/2015	VTRP150713C	< 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	7/13/2015	VTRP150714C	< 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	7/15/2015	VTRP150716C	< 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	7/13/2015	VTRP150717C	< 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	7/17/2015	VTRP150722C	< 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	7/22/2015	VTRP150723C	< 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	8/5/2015	VTRP150806C	< 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	8/6/2015	VTRP150807C	< 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	8/13/2015	VTRP150814C	< 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	7/2/2015	VTRP150708B	< 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	9/1/2015	VTRP150902C	< 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	9/10/2015	VTRP150911C	< 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	7/8/2015	VTRP150709B	< 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	7/8/2015	VTRP150710B	< 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	7/10/2015	VTRP150713B	< 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	7/2/2015	VTRP150706C	< 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	7/15/2015	VTRP150716B	< 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	8/6/2015	VTRP150807B	< 0.2 U	< 4 U	< 4 U	< 4 U	4 T	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	8/13/2015	VTRP150814B	< 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	9/10/2015	VTRP150911B	< 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 July 1, 2015 to September 30, 2015
Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Carbon Tetrachloride	Chloro- benzene	Chloro- dibromo- methane	Chloro- ethane	Chloroform	Chloro- methane	cis-1,2- Dichloro- ethene	cis-1,3- Dichloro- propene	Dibromo- methane	Dichloro- difluoro- methane	Ethyl - benzene	m, p-Xylene
			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)	(ug/L)
MW-21	7/2/2015	W21-150702-	< 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	7/2/2015	W24-150702-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.527	0.21 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	7/2/2015	W27A150702-	< 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	7/2/2015	W29-150702-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.25 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	7/10/2015	W30A150710-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	3.49	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A Duplicate	7/10/2015	W30A150710D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.68	4.26	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	7/8/2015	W43-150708-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.32 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	8/7/2015	W47-150807-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.37	< 0.2 U	< 0.2 U	0.479	< 0.2 U	< 0.2 U
MW-47 Duplicate	8/7/2015	W47-150807D	< 0.2 U	< 0.2 U	< 0.2 U	0.23 T	< 0.2 U	< 0.2 U	1.38	< 0.2 U	< 0.2 U	0.39 T	< 0.2 U	< 0.2 U
MW-55	8/7/2015	W55-150807-	< 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	7/6/2015	W56-150706-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.24 T	1.49	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	7/9/2015	W57-150709-	< 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	7/8/2015	W59-150708-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.08	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	7/9/2015	W60-150709-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.26 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64	7/13/2015	W64-150713-	< 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	7/10/2015	W65-150710-	< 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	7/13/2015	W66-150713-	< 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	7/13/2015	W67-150713-	< 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	7/9/2015	W68-150709-	< 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	7/9/2015	W69-150709-	< 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	7/13/2015	W72-150713-	< 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	7/16/2015	W73-150716-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.21 BT	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	7/10/2015	W74R150710-	< 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	8/14/2015	W74R150814-	< 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	9/11/2015	W74R150911-	< 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	7/10/2015	W75-150710-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.29 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	8/14/2015	W75-150814-	< 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	9/11/2015	W75-150911-	< 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	7/14/2015	W76-150714-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.35	0.38 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	7/17/2015	W80-150717-	< 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	7/23/2015	W81-150723-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 0.2 U	1.59	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-82	7/6/2015	W82-150706-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.444	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	7/14/2015	W83-150714-	< 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	7/13/2015	W84-150713-	< 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	7/23/2015	W85-150723-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 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	7/16/2015	W86-150716-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.37 BT	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	7/9/2015	W87-150709-	< 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	8/14/2015	W87-150814-	< 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	9/11/2015	W87-150911-	< 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	7/22/2015	W88-150722-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 0.2 U	4.51	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-89	7/22/2015	W89-150722-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 0.2 U	1.15	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-90	7/22/2015	W90-150722-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 0.2 U	1.16	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-91	8/6/2015	W91-150806-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.548	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-93	7/17/2015	W93-150717-	< 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-94	7/14/2015	W94-150714-	< 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 July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy 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)
MW-95	7/16/2015	W95-150716-	< 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-99	7/10/2015	W99-150710-	< 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-99	8/14/2015	W99-150814-	< 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-99	9/11/2015	W99-150911-	< 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-100	7/16/2015	W100150716-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.07 B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-101	9/2/2015	W101150902-	< 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
WS-NPW	8/7/2015	WNPW150807-	< 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
FIELD BLANK	7/22/2015	W89-150722F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 0.2 U	< 0.2 GU	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	8/7/2015	WNPW150807F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.21 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	9/11/2015	W87-150911F	< 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	7/6/2015	VTRP150709C	< 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	7/6/2015	VTRP150710C	< 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	7/10/2015	VTRP150713C	< 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	7/13/2015	VTRP150714C	< 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	7/15/2015	VTRP150716C	< 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	7/13/2015	VTRP150717C	< 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	7/17/2015	VTRP150722C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 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	7/22/2015	VTRP150723C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 0.2 U	1.06	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	8/5/2015	VTRP150806C	< 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	8/6/2015	VTRP150807C	< 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	8/13/2015	VTRP150814C	< 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	7/2/2015	VTRP150708B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.822	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	9/1/2015	VTRP150902C	< 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	9/10/2015	VTRP150911C	< 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	7/8/2015	VTRP150709B	< 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	7/8/2015	VTRP150710B	< 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	7/10/2015	VTRP150713B	< 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	7/2/2015	VTRP150706C	< 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	7/15/2015	VTRP150716B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.458 B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	8/6/2015	VTRP150807B	< 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	8/13/2015	VTRP150814B	< 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	9/10/2015	VTRP150911B	< 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 July 1, 2015 to September 30, 2015
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)
MW-21	7/2/2015	W21-150702-	< 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	7/2/2015	W24-150702-	< 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	7/2/2015	W27A-150702-	< 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	7/2/2015	W29-150702-	< 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	7/10/2015	W30A-150710-	< 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	1.27	< 0.2 U	< 0.2 U	< 0.02 U
MW-30A Duplicate	7/10/2015	W30A-150710D	< 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	1.27	< 0.2 U	< 0.2 U	< 0.02 U
MW-43	7/8/2015	W43-150708-	< 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	0.0253
MW-47	8/7/2015	W47-150807-	< 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	3.81
MW-47 Duplicate	8/7/2015	W47-150807D	< 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	3.91
MW-55	8/7/2015	W55-150807-	< 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	7/6/2015	W56-150706-	< 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	7/9/2015	W57-150709-	< 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	7/8/2015	W59-150708-	< 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	7/9/2015	W60-150709-	< 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	7/13/2015	W64-150713-	< 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	7/10/2015	W65-150710-	< 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	0.0493
MW-66	7/13/2015	W66-150713-	< 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	7/13/2015	W67-150713-	< 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	7/9/2015	W68-150709-	< 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	7/9/2015	W69-150709-	< 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	7/13/2015	W72-150713-	< 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	7/16/2015	W73-150716-	< 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	7/10/2015	W74R-150710-	< 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	8/14/2015	W74R-150814-	< 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	9/11/2015	W74R-150911-	< 0.2 U	< 0.2 GU	< 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	7/10/2015	W75-150710-	< 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	8/14/2015	W75-150814-	< 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	9/11/2015	W75-150911-	< 0.2 U	< 0.2 GU	< 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	7/14/2015	W76-150714-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.467	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	8.79	< 0.2 U	< 0.2 U	< 0.02 U
MW-80	7/17/2015	W80-150717-	< 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	7/23/2015	W81-150723-	< 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	7/6/2015	W82-150706-	< 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	6.27	< 0.2 U	< 0.2 U	< 0.02 U
MW-83	7/14/2015	W83-150714-	< 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	2.78	< 0.2 U	< 0.2 U	< 0.02 U
MW-84	7/13/2015	W84-150713-	< 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	7/23/2015	W85-150723-	< 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	7/16/2015	W86-150716-	< 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	7/9/2015	W87-150709-	< 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	8/14/2015	W87-150814-	< 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	9/11/2015	W87-150911-	< 0.2 U	< 0.2 GU	< 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	7/22/2015	W88-150722-	< 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-89	7/22/2015	W89-150722-	< 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	7/22/2015	W90-150722-	< 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	8/6/2015	W91-150806-	< 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	7/17/2015	W93-150717-	< 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	7/14/2015	W94-150714-	< 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	2.52	< 0.2 U	< 0.2 U	< 0.02 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy 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)
MW-95	7/16/2015	W95-150716-	< 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	7/10/2015	W99-150710-	< 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	8/14/2015	W99-150814-	< 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	9/11/2015	W99-150911-	< 0.2 U	< 0.2 GU	< 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	7/16/2015	W100150716-	< 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	9/2/2015	W101150902-	< 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	0.198
WS-NPW	8/7/2015	WNPW150807-	< 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	7/22/2015	W89-150722F	< 0.2 U	0.418	< 0.2 U	0.425	< 0.2 U	0.3 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
FIELD BLANK	8/7/2015	WNPW150807F	< 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	9/11/2015	W87-150911F	< 0.2 U	0.67 G	< 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	7/6/2015	VTRP150709C	< 0.2 U	0.28 T	< 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	7/6/2015	VTRP150710C	< 0.2 U	0.32 T	< 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	7/10/2015	VTRP150713C	< 0.2 U	0.29 T	< 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	7/13/2015	VTRP150714C	< 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	7/15/2015	VTRP150716C	< 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	7/13/2015	VTRP150717C	< 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	7/17/2015	VTRP150722C	< 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	7/22/2015	VTRP150723C	< 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	8/5/2015	VTRP150806C	< 0.2 U	0.34 T	< 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	8/6/2015	VTRP150807C	< 0.2 U	0.36 T	< 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	8/13/2015	VTRP150814C	< 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	7/2/2015	VTRP150708B	< 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	9/1/2015	VTRP150902C	< 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	9/10/2015	VTRP150911C	< 0.2 U	0.3 GT	< 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	7/8/2015	VTRP150709B	< 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	7/8/2015	VTRP150710B	< 0.2 U	0.29 T	< 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	7/10/2015	VTRP150713B	< 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	7/2/2015	VTRP150706C	< 0.2 U	0.29 T	< 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	7/15/2015	VTRP150716B	< 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	8/6/2015	VTRP150807B	< 0.2 U	0.36 T	< 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	8/13/2015	VTRP150814B	< 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	9/10/2015	VTRP150911B	< 0.2 U	< 0.2 GU	< 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 July 1, 2015 to September 30, 2015

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	7/20/2015	415.38	418.84	2.91		415.93	Water in creek not quite on staff gage.
SW-G1	SW-W1	8/12/2015	415.38	418.84	2.95		415.89	Almost dry.
SW-G1	SW-W1	9/23/2015	415.38	418.84		0.70	416.08	
SW-G2	SW-N1	7/20/2015	355.68	358.21	5.43		352.78	
SW-G2	SW-N1	8/12/2015	355.68	358.21			NA	
SW-G2	SW-N1	9/23/2015	355.68	358.21	3.36		354.85	
SW-G3	SW -V	7/20/2015	466.46	469.88			NA	
SW-G3	SW -V	8/12/2015	466.46	469.88			NA	
SW-G3	SW -V	9/23/2015	466.46	469.88	5.3		464.58	Mud bottom.
SW-G4	Upstream of SW-E1	7/20/2015	502.41	505.85			NA	
SW-G4	Upstream of SW-E1	8/12/2015	502.41	505.85			NA	
SW-G4	Upstream of SW-E1	9/23/2015	502.41	505.85	6.5		499.35	Mud bottom.
SW-G5	SW-E1	7/20/2015	486.92	490.34			NA	
SW-G5	SW-E1	8/12/2015	486.92	490.34			NA	
SW-G5	SW-E1	9/23/2015	486.92	490.34	5.1		485.24	Mud bottom.
SW-G6	Upstream of SW-GS1	7/20/2015	490.72	494.12			NA	
SW-G6	Upstream of SW-GS1	8/12/2015	490.72	494.12			NA	
SW-G6	Upstream of SW-GS1	9/23/2015	490.72	494.12		0.56	491.28	
SW-G7	SW-S2	7/20/2015	453.03	456.41			NA	
SW-G7	SW-S2	8/12/2015	453.03	456.41			NA	
SW-G7	SW-S2	9/23/2015	453.03	456.41	3.97		452.44	
SW-G8	Upstream of SW-S1	7/20/2015	510.61	515.56			NA	
SW-G8	Upstream of SW-S1	8/12/2015	510.61	515.56			NA	
SW-G8	Upstream of SW-S1	9/23/2015	510.61	515.56	4.7		510.86	Mud bottom.
SW-G9	SW-S1	7/20/2015	490.93	494.35			NA	
SW-G9	SW-S1	8/12/2015	490.93	494.35			NA	
SW-G9	SW-S1	9/23/2015	490.93	494.35	6.3		488.05	Mud bottom.

NR = No Reading Taken

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Surface Water Field Parameters

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Dissolved Oxygen	Temperature	Turbidity
			(std. Units)	(umhos/cm)	(mg/L)	(° C)	(NTU)
SW-GS1	8/31/2015	SGS1150831P	6.56	215	4.59	17.5	244
SW-GS1	9/24/2015	SGS1150924Q	7.2	115	8.58	14.5	9.3
SW-S2	9/24/2015	SS2-150924Q	7.91	115	6.61	13.7	2.76
SW-SL3	8/31/2015	SSL3150831P	6.62	125	5.95	16.5	12.4
SW-SLP2	7/20/2015	SLP2150720P	7.67	270	8.22	18.5	15.7
SW-SLP2	8/25/2015	SLP2150825P	8.01	315	9.86	15.2	6.01
SW-SLP2 Duplicate	9/24/2015	SLP2150924D	7.33	265	10.1	12.7	7.07
SW-SLP2	9/24/2015	SLP2150924P	7.33	265	10.1	12.7	7.07
SW-W1	7/20/2015	SW1-150720Q	7.22	140	8.79	15.6	0.6
SW-W1	8/17/2015	SW1-150817M	7.94	145	10.33	14	0.42
SW-W1	9/23/2015	SW1-150923M	8.58	140	12.08	9.9	0.33

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Surface Water Conventional Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Alkalinity, Total (as CaCO ₃)	Ammonia, (NH ₃ as N)	Biological Oxygen Demand	Chemical Oxygen Demand	Chloride	Coliforms, Fecal	Coliforms, Total	Cyanide	Fluoride	Hardness	Nitrate- Nitrogen (NO ₃ as N)
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(CFU/100mL)	(CFU/100mL)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-GS1	8/31/2015	SGS1150831P		0.583	2.77 H								
SW-GS1	9/24/2015	SGS1150924Q	32.4	0.0248	< 2 U	17 T	3.39	32	200	< 0.02 U	< 0.1 U	47.4	0.0495
SW-S2	9/24/2015	SS2-150924Q	22.1	< 0.01 U	< 2 U	23.3	3.64	120	1700	< 0.02 U	< 0.1 U	49.2	0.039 T
SW-SL3	8/31/2015	SSL3150831P		0.0237	2.47 H								
SW-SLP2	7/20/2015	SLP2150720P		0.0146	< 2 U			5	220				
SW-SLP2	8/25/2015	SLP2150825P		0.0239	< 2 U			66	3200				
SW-SLP2	9/24/2015	SLP2150924D		0.0328	< 2 U			23	190				
SW-SLP2	9/24/2015	SLP2150924P		0.0333	< 2 U			27	260				
SW-W1	7/20/2015	SW1-150720O	62.4	< 0.01 U	< 2 U	8.3 T	3.73	120	1900	< 0.02 U	< 0.1 U	56.8	1.19
SW-W1	8/17/2015	SW1-150817M	62.7	< 0.01 U		11 T	3.98	99	600			62.8	1.19
SW-W1	9/23/2015	SW1-150923M	63.7	< 0.01 U		< 5 U	3.96	2	400			66.4	1.13
EQUIPMENT BLANK	8/7/2015	WU1M150807E		< 0.01 U									

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Surface Water Conventional Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Nitrate + Nitrite (NO ₃ + NO ₂ as N)	Phosphorous, Soluble Reactive	Specific Conductance	Sulfate, (SO ₄)	Total Dissolved Solids	Total Kjeldahl Nitrogen (TKN as N)	Total Organic Carbon	Total Solids	Total Suspended Solids	Turbidity
			(mg/L)	(mg/L)	(umhos/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(NTU)
SW-GS1	8/31/2015	SGS1150831P									18	209
SW-GS1	9/24/2015	SGS1150924Q	0.0495	< 0.01 U	128	20.1	93.5	0.25	6.33	95.3	4.2	
SW-S2	9/24/2015	SS2-150924Q	0.039 T	< 0.01 U	130	26.5	108	0.398	12.4	112	< 1 U	
SW-SL3	8/31/2015	SSL3150831P									4.1	11.4
SW-SLP2	7/20/2015	SLP2150720P									1.71	15.2
SW-SLP2	8/25/2015	SLP2150825P									1.67	6.08
SW-SLP2	9/24/2015	SLP2150924D									1.9	
SW-SLP2	9/24/2015	SLP2150924P									1.4	
SW-W1	7/20/2015	SW1-150720O	1.19	0.0214	158	5.23	99.5	0.15 T	1.06	113	7.8	0.607
SW-W1	8/17/2015	SW1-150817M	1.19	0.0177	160	5.63	106	0.235	1.19	107	2.2	0.4 T
SW-W1	9/23/2015	SW1-150923M	1.13	0.0148	161	5.59	111	0.13 T	2.73	119	2.84	0.36 T
EQUIPMENT BLANK	8/7/2015	WU1M150807E	< 0.01 U	< 0.01 U								

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Aluminum, Dissolved (mg/L)	Aluminum, Total (mg/L)	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)
SW-GS1	8/31/2015	SGS1150831P									
SW-GS1	9/24/2015	SGS1150924O	0.0311	0.168	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00813	0.00916	< 0.001 U
SW-S2	9/24/2015	SS2-150924O	0.0508	1.76	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0103	0.0214	< 0.001 U
SW-SL3	8/31/2015	SSL3150831P									
SW-SLP2	7/20/2015	SLP2150720P									
SW-SLP2	8/25/2015	SLP2150825P									
SW-SLP2	9/24/2015	SLP2150924D									
SW-SLP2	9/24/2015	SLP2150924P									
SW-W1	7/20/2015	SW1-150720Q	< 0.02 U	0.0587	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00571	0.00634	< 0.001 U
SW-W1	8/17/2015	SW1-150817M	< 0.02 U	0.586	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00591	0.0116	< 0.001 U
SW-W1	9/23/2015	SW1-150923M	< 0.02 U	0.644	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00556	0.0115	< 0.001 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Beryllium, Total (mg/L)	Cadmium, Dissolved (mg/L)	Cadmium, Total (mg/L)	Calcium, Dissolved (mg/L)	Calcium, Total (mg/L)	Chromium, Dissolved (mg/L)	Chromium, Total (mg/L)	Cobalt, Dissolved (mg/L)	Cobalt, Total (mg/L)
SW-GS1	8/31/2015	SGS1150831P									
SW-GS1	9/24/2015	SGS1150924O	< 0.001 U	< 0.002 U	< 0.002 U	11.7	12.8	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U
SW-S2	9/24/2015	SS2-150924O	< 0.001 U	< 0.002 U	< 0.002 U	13.1	12.9	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U
SW-SL3	8/31/2015	SSL3150831P									
SW-SLP2	7/20/2015	SLP2150720P									
SW-SLP2	8/25/2015	SLP2150825P									
SW-SLP2	9/24/2015	SLP2150924D									
SW-SLP2	9/24/2015	SLP2150924P									
SW-W1	7/20/2015	SW1-150720Q	< 0.001 U	< 0.002 U	< 0.002 U	13.8	14	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U
SW-W1	8/17/2015	SW1-150817M	< 0.001 U	< 0.002 U	< 0.002 U	14.8	15.6	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U
SW-W1	9/23/2015	SW1-150923M	< 0.001 U	< 0.002 U	< 0.002 U	15.4	16.4	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	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)	Manganese, Dissolved (mg/L)
SW-GS1	8/31/2015	SGS1150831P		0.0204							
SW-GS1	9/24/2015	SGS1150924O	0.00376	0.0037	0.04 T	0.158	< 0.001 U	< 0.001 U	3.44	3.78	0.022
SW-S2	9/24/2015	SS2-150924O	0.00779	0.0127	0.0594	1.42	< 0.001 U	0.00223	3.88	4.13	0.00123
SW-SL3	8/31/2015	SSL3150831P		0.00696							
SW-SLP2	7/20/2015	SLP2150720P		0.00202							
SW-SLP2	8/25/2015	SLP2150825P		0.002 T							
SW-SLP2	9/24/2015	SLP2150924D		0.00327							
SW-SLP2	9/24/2015	SLP2150924P		0.0033							
SW-W1	7/20/2015	SW1-150720Q	< 0.002 U	< 0.002 U	< 0.01 U	0.059	< 0.001 U	< 0.001 U	5.22	5.28	< 0.001 U
SW-W1	8/17/2015	SW1-150817M	< 0.002 U	0.002 T	< 0.01 U	0.576	< 0.001 U	< 0.001 U	5.85	5.76	< 0.001 DU
SW-W1	9/23/2015	SW1-150923M	< 0.002 U	< 0.002 U	< 0.01 U	0.584	< 0.001 U	< 0.001 U	5.77	6.16	< 0.001 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	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)
SW-GS1	8/31/2015	SGS1150831P									
SW-GS1	9/24/2015	SGS1150924O	0.0366		< 0.0001 U	< 0.01 U	< 0.01 U	1.32	1.3	< 0.001 U	< 0.001 U
SW-S2	9/24/2015	SS2-150924O	0.0591		< 0.0001 U	< 0.01 U	< 0.01 U	1.29	1.29	< 0.001 U	< 0.001 U
SW-SL3	8/31/2015	SSL3150831P									
SW-SLP2	7/20/2015	SLP2150720P									
SW-SLP2	8/25/2015	SLP2150825P									
SW-SLP2	9/24/2015	SLP2150924D									
SW-SLP2	9/24/2015	SLP2150924P									
SW-W1	7/20/2015	SW1-150720Q	0.00691		< 0.0001 U	< 0.01 U	< 0.01 U	1.06	1.05	< 0.001 U	< 0.001 U
SW-W1	8/17/2015	SW1-150817M	0.0682		< 0.0001 U	< 0.01 U	< 0.01 U	1.07 D	1.11	< 0.001 U	< 0.001 U
SW-W1	9/23/2015	SW1-150923M	0.066		< 0.0001 U	< 0.01 U	< 0.01 U	1.03	0.996	< 0.001 U	< 0.001 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Surface Water Metal 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)	Tin, Dissolved (mg/L)	Tin, Total (mg/L)	Vanadium, Dissolved (mg/L)
SW-GS1	8/31/2015	SGS1150831P									
SW-GS1	9/24/2015	SGS1150924O	< 0.003 U	< 0.003 U	3.91	4.2	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U
SW-S2	9/24/2015	SS2-150924O	< 0.003 U	< 0.003 U	3.81	3.71	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U
SW-SL3	8/31/2015	SSL3150831P									
SW-SLP2	7/20/2015	SLP2150720P									
SW-SLP2	8/25/2015	SLP2150825P									
SW-SLP2	9/24/2015	SLP2150924D									
SW-SLP2	9/24/2015	SLP2150924P									
SW-W1	7/20/2015	SW1-150720Q	< 0.003 U	< 0.003 U	6.01	5.67	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U
SW-W1	8/17/2015	SW1-150817M	< 0.003 U	< 0.003 U	5.95	5.73	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U
SW-W1	9/23/2015	SW1-150923M	< 0.003 U	< 0.003 U	5.85	5.96	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

Cedar Hills Landfill --- Surface Water Metal Analytical Data

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	Vanadium, Total (mg/L)	Zinc, Dissolved (mg/L)
SW-GS1	8/31/2015	SGS1150831P		
SW-GS1	9/24/2015	SGS1150924O	< 0.002 U	0.00596
SW-S2	9/24/2015	SS2-150924O	0.00416	0.00655
SW-SL3	8/31/2015	SSL3150831P		
SW-SLP2	7/20/2015	SLP2150720P		
SW-SLP2	8/25/2015	SLP2150825P		
SW-SLP2	9/24/2015	SLP2150924D		
SW-SLP2	9/24/2015	SLP2150924P		
SW-W1	7/20/2015	SW1-150720Q	< 0.002 U	< 0.004 U
SW-W1	8/17/2015	SW1-150817M	0.00253	< 0.004 U
SW-W1	9/23/2015	SW1-150923M	0.00274	< 0.004 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to September 30, 2015

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 Silvex	2,4-D	Dinoseb	Endrin	Lindane (Gamma BHC)	Methoxychlor	Toxaphene	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)	65-85-0 (ug/L)	108-95-2 (ug/L)
SW-GS1	8/31/2015	SGS1150831P									50 U	4 U
SW-GS1	9/24/2015	SGS1150924O	2 U	1 U	5 U	1 U	0.1 U	0.025 U	2 U	2.5 U		
SW-S2	9/24/2015	SS2-150924O	2 U	1 U	5 U	1 U	0.1 U	0.025 U	2 U	2.5 U		
SW-SL3	8/31/2015	SSL3150831P									50 U	4 U
SW-SLP2	7/20/2015	SLP2150720P									50 U	4 U
SW-SLP2	8/25/2015	SLP2150825P									50 U	4 U
SW-SLP2	9/24/2015	SLP2150924D									50 U	4 U
SW-SLP2	9/24/2015	SLP2150924P									50 U	4 U
SW-W1	7/20/2015	SW1-150720O	2 U	1 U	5 U	1 U	0.1 U	0.025 U	2 U	2.5 U		
SW-W1	8/17/2015	SW1-150817M	2 U	1 U	5 U	1 U	0.1 U	0.025 U	2 U	2.5 U		
SW-W1	9/23/2015	SW1-150923M	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 3rd Quarter 2015

Station ID	Date	Activity	Sample ID	Comment
API	7/15/15	Monthly Characterization Sample	LAPI150715M	
API	8/5/15	Monthly Characterization Sample	LAPI150805M	
API	9/9/15	Monthly Characterization Sample	LAPI150909M	
API	9/9/15	QA/QC Sample	LAPI150909F	
LEPS	7/14/15	Permit Sample	NA	No Sample Collected, Pumps not running
LEPS	7/14/15	Monthly Characterization Sample	NA	No Sample Collected, Pumps not running
LEPS	7/16/15	Permit Sample	LEPS150716P	
LEPS	7/16/15	Monthly Characterization Sample	LEPS150716M	
LEPS	8/4/15	Permit Sample	LEPS150804P	
LEPS	8/4/15	Monthly Characterization Sample	LEPS150804M	
LEPS	8/26/15	Permit Sample	LEPS150826P	
LEPS	9/9/15	Monthly Characterization Sample	LEPS150908M	
LEPS	9/9/15	Permit Sample	LEPS150908P	
MH46N	7/15/15	Monthly Characterization Sample	L46N150715M	
MH46N	8/5/15	Monthly Characterization Sample	L46N150805M	
MH46N	9/9/2015	Monthly Characterization Sample	L46N150909M	
PS2A	7/15/15	Monthly Characterization Sample	LP2A150715M	
PS2A	8/5/15	Monthly Characterization Sample	LP2A150805M	
PS2A	9/9/15	Monthly Characterization Sample	LP2A150909M	

NA = No sample ID assigned, No sample collected.

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature
			(std. Units)	(umhos/cm)	(° C)
LS-API	7/15/2015	LAPI150715M	900	8.22	23.8
LS-API	8/5/2015	LAPI150805M	8200	8.12	18.1
LS-API	9/9/2015	LAPI150909M	8500	8.12	21.4
LS-LEPS	7/16/2015	LEPS150716M	5500	8	21.5
LS-LEPS	7/16/2015	LEPS150716P	5500	8	21.5
LS-LEPS	8/4/2015	LEPS150804P	3700	8.2	19.4
LS-LEPS	8/4/2015	LEPS150804M	3700	8.2	19.4
LS-LEPS	8/26/2015	LEPS150826R	4150	8.68	12.2
LS-LEPS	9/8/2015	LEPS150908P	6400	8.46	17.3
LS-LEPS	9/8/2015	LEPS150908M	6400	8.46	17.3
LS-MH46N	7/15/2015	L46N150715M	980	7.26	23.2
LS-MH46N	8/5/2015	L46N150805M	7000	7.21	24
LS-MH46N	9/9/2015	L46N150909M		7.31	22.8
LS-PS2A	7/15/2015	LP2A150715M	320	7.42	15.7
LS-PS2A	8/5/2015	LP2A150805M	8000	7.71	15.9
LS-PS2A	9/9/2015	LP2A150909M	255	6.77	17.2

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	Alkalinity, Total (as CaCO ₃)	Ammonia, (NH ₃ as N)	Biological Oxygen Demand	Chemical Oxygen Demand	Chloride	Coliforms, Fecal	Coliforms, Total	Cyanide	Fluoride	Nitrate + Nitrite (NO ₃ + NO ₂ as N)	Phosphorus, Total (as P)
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(CFU/100 mL)	(CFU/100 mL)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LS-API	7/15/2015	LAPI150715M	8340	1950	2040	6060	2370	100000	750000	0.025 ST	0.1 U	0.1 T	11.6
LS-API	8/5/2015	LAPI150805M	9000	2080	2790	7660 S	2520	150000	640000	0.03 ST	0.1 U	0.11 T	7.6
LS-API	9/9/2015	LAPI150909M	8090	470	2030	6150 S	2310	150000	620000	0.036 ST	0.1 U	0.15 T	8.91
LS-LEPS	7/16/2015	LEPS150716M	1410	302	116	1600 S	1350	600	6600	0.075 ST	1.1 T	381	2.04
LS-LEPS	8/4/2015	LEPS150804M	2860	438	244	1830	1540	7600	55000	0.0532 S	1.2 T	151	2.05
LS-LEPS	9/8/2015	LEPS150908M	3440	516	253	1990	1570	900	27000	0.028 HST	1.15	30.6	2.8
LS-MH46N	7/15/2015	L46N150715M	3160	717	76.4	1810	1970	1 U	1 CU	0.02 SU	0.1 U	0.051 T	3.55
LS-MH46N	8/5/2015	L46N150805M	3200	701	92.9	1920	2050	1 U	1 U	0.02 SU	2 T	0.3 T	3.52
LS-MH46N	9/9/2015	L46N150909M	3350	738	18.97 L	1990	2150	1 U	70 C	0.021 ST	0.1 U	0.641	3.39
LS-PS2A	7/15/2015	LP2A150715M	457	220	13.5	387	349	1 U	33000	0.02 SU	0.1 U	7.36	0.367
LS-PS2A	8/5/2015	LP2A150805M	1530	590	762	1650	1540	1 U	1600000	0.023 ST	1.2 T	28.6	0.375
LS-PS2A	9/9/2015	LP2A150909M	45.8	7.5 T	5.63	28.9	13.7	1 U	8000	0.02 U	0.1 U	6.07	0.01 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	Specific Conductance (umhos/cm)	Sulfate, (SO ₄) (mg/L)	Sulfide, Total (mg/L)	Total Fats, Oils and Grease (FOG) (mg/L)	Total Kjeldahl Nitrogen (TKN as N) (mg/L)	Total Organic Carbon (mg/L)	Total Suspended Solids (mg/L)	Total Volatile Solids (mg/L)	Volatile Suspended Solids (mg/L)
LS-API	7/15/2015	LAPI150715M	21900	115	18 T	10 B	1880	1620 S	132	4760	77.2
LS-API	8/5/2015	LAPI150805M	23000	48.2	7.3 T	19.7	1860 S	2180 S	37.5	5130	32.7
LS-API	9/9/2015	LAPI150909M	20800	23	2.08	53.8	1800 S	2020 S	43.5	5360	31
LS-LEPS	7/16/2015	LEPS150716M	9330	78	0.01 U	2 U	320 S	373	243	2120	207
LS-LEPS	8/4/2015	LEPS150804M	10500	87.6	0.01 U	4.6 T	511	466 S	914	2300	529
LS-LEPS	9/8/2015	LEPS150908M	10900	79.3	1.1 T	29.6	612	594 S	320	2440	227
LS-MH46N	7/15/2015	L46N150715M	11900	0.1 U	0.397	7 B	744	510	5.29	1440	2.35
LS-MH46N	8/5/2015	L46N150805M	12300	5.9 T	0.44	6.8	754	545 S	1.16	1630	1.16
LS-MH46N	9/9/2015	L46N150909M	12600	4.86	0.429	3.9 T	787	764 S	1 U	2190	1 U
LS-PS2A	7/15/2015	LP2A150715M	3430	563	0.16 T	2 U	190	103	2.2	472	2.1
LS-PS2A	8/5/2015	LP2A150805M	10200	1240	0.36 T	8.9 G	649	420	9	1750	7
LS-PS2A	9/9/2015	LP2A150909M	278	32.8	0.019 T	2 U	8.8	17.9	14.4	304 B	6.57

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	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)
LS-API	7/15/2015	LAPI150715M	1.24 S	0.068 ST	0.349 S	0.348 S	0.001 SU	0.002 DSU	89.7 S	0.315 S	0.0631 S	0.0267 S	15.7 S	0.001 SU
LS-API	8/5/2015	LAPI150805M	0.831	0.0881	0.346	0.359	0.001 U	0.002 DU	93.5 D	0.329	0.0607	0.0093 T	6.59	0.001 U
LS-API	9/9/2015	LAPI150909M	0.988	0.039 T	0.274	0.325	0.001 U	0.002 U	73.4	0.307	0.0562	0.012 T	6.86	0.001 U
LS-LEPS	7/16/2015	LEPS150716M	1.9	0.048 T	0.233	0.187	0.001 U	0.002 U	77.2	0.168	0.0385	0.0094 T	9.77	0.001 U
LS-LEPS	7/16/2015	LEPS150716P			0.24			0.002 U		0.191		0.0099 T		0.001 U
LS-LEPS	8/4/2015	LEPS150804M	4.81	0.041 T	0.272	0.314	0.001 U	0.002 U	123	0.172	0.0438	0.0372	18.7	0.001 U
LS-LEPS	8/4/2015	LEPS150804P			0.31 T			0.002 U		0.225		0.002 U		0.001 U
LS-LEPS	8/26/2015	LEPS150826R			0.301			0.002 U		0.258		0.0361		0.001 U
LS-LEPS	9/8/2015	LEPS150908M	3.88	0.051 T	0.242	0.25	0.001 U	0.002 U	89.9	0.203	0.0424	0.0245	13.8	0.001 U
LS-LEPS	9/8/2015	LEPS150908P			0.243			0.002 DU		0.204		0.0216		0.001 U
LS-MH46N	7/15/2015	L46N150715M	0.02 U	0.001 U	0.094 T	0.496	0.001 U	0.002 U	89.1	0.113	0.037	0.002 U	2.39	0.001 U
LS-MH46N	8/5/2015	L46N150805M	0.02 U	0.001 U	0.09 T	0.497	0.001 U	0.002 U	88.4	0.114	0.0383	0.002 U	2.45	0.001 U
LS-MH46N	9/9/2015	L46N150909M	0.02 U	0.001 U	0.088 T	0.523	0.001 U	0.002 U	92.4	0.122	0.0406	0.002 U	2.28	0.001 U
LS-PS2A	7/15/2015	LP2A150715M	0.02 U	0.028 T	0.047 T	0.0636	0.001 U	0.002 U	41.8	0.0075 T	0.0097 T	0.012 T	0.818	0.001 U
LS-PS2A	8/5/2015	LP2A150805M	0.728	0.051 T	0.148	0.233	0.001 U	0.002 U	75.8	0.0486	0.0485	0.0957	51.7	0.05 T
LS-PS2A	9/9/2015	LP2A150909M	0.02 U	0.001 U	0.001 U	0.0147	0.001 U	0.002 U	19.2	0.005 U	0.003 U	0.02 T	1.74	0.001 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	Magnesium, Total	Manganese, Total	Mercury, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Tin, Total	Vanadium, Total	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)
LS-API	7/15/2015	LAPI150715M	127 S	0.704 DS	0.0001 SU	0.354 S	849 DS	0.001 SU	0.003 SU	2350 S	0.001 SU	0.052 ST	0.108 S	0.66 S
LS-API	8/5/2015	LAPI150805M	140	0.59 D	0.0001 GU	0.339	874 D	0.001 U	0.003 U	2400 D	0.001 U	0.062 T	0.105	0.561
LS-API	9/9/2015	LAPI150909M	128	0.526	0.0001 U	0.313	805 D	0.001 U	0.003 U	2260	0.001 U	0.059 T	0.0991	0.539
LS-LEPS	7/16/2015	LEPS150716M	74.5	0.852 D	0.0001 U	0.19	456 D	0.001 DU	0.003 U	1330	0.001 U	0.024 T	0.0564	0.28
LS-LEPS	7/16/2015	LEPS150716P				0.193								0.243
LS-LEPS	8/4/2015	LEPS150804M	87.3	1.9	0.00011 GT	0.221	515 D	0.001 U	0.003 U	1490	0.001 U	0.022 T	0.0815	0.82
LS-LEPS	8/4/2015	LEPS150804P				0.18 T								0.758
LS-LEPS	8/26/2015	LEPS150826R				0.261								0.575
LS-LEPS	9/8/2015	LEPS150908M	88.1	0.964	0.0001 U	0.214	535 D	0.001 U	0.003 U	1510	0.001 U	0.03 T	0.0814	0.46
LS-LEPS	9/8/2015	LEPS150908P				0.21 DT								0.411 D
LS-MH46N	7/15/2015	L46N150715M	58.7	0.498	0.0001 U	0.162	413 D	0.001 U	0.003 U	1370	0.001 U	0.01 U	0.147	0.0056 T
LS-MH46N	8/5/2015	L46N150805M	59.8	0.486	0.0001 GU	0.169	419 D	0.001 U	0.003 U	1360	0.001 U	0.01 U	0.15	0.0062 T
LS-MH46N	9/9/2015	L46N150909M	61.6	0.462	0.0001 U	0.171	442 D	0.001 U	0.003 U	1460	0.001 U	0.01 U	0.158	0.012 T
LS-PS2A	7/15/2015	LP2A150715M	22.5	0.397	0.00012 T	0.0389	82.1	0.001 U	0.003 U	278	0.001 U	0.01 U	0.002 U	0.0354
LS-PS2A	8/5/2015	LP2A150805M	43.4	1.29	0.000558 G	0.196	307	0.001 U	0.003 U	1100	0.001 U	0.039 T	0.065	4.04
LS-PS2A	9/9/2015	LP2A150909M	6.86	0.119	0.0001 U	0.012 T	4.07	0.001 U	0.003 U	8.74	0.001 U	0.01 U	0.002 U	0.0336

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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-Chloropropane 96-12-8 (ug/L)	1,2-Dibromo-ethane 106-93-4 (ug/L)
LS-API	7/15/2015	LAPI150715M	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
LS-API	8/5/2015	LAPI150805M	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
LS-API	9/9/2015	LAPI150909M	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
LS-LEPS	7/16/2015	LEPS150716M	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
LS-LEPS	8/4/2015	LEPS150804M	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
LS-LEPS	9/8/2015	LEPS150908M	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
LS-MH46N	7/15/2015	L46N150715M	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
LS-MH46N	8/5/2015	L46N150805M	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
LS-MH46N	9/9/2015	L46N150909M	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
LS-PS2A	7/15/2015	LP2A150715M	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
LS-PS2A	8/5/2015	LP2A150805M	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
LS-PS2A	9/9/2015	LP2A150909M	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

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	1,2-Dichloro- benzene	1,2-Dichloro- ethane	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
			95-50-1 (ug/L)	107-06-2 (ug/L)	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)
LS-API	7/15/2015	LAPI150715M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.3 T	0.2 U	4260 D	4 U	100 U
LS-API	8/5/2015	LAPI150805M	0.2 U	2.9 T	0.2 U	0.2 U	0.2 U	2.5 T	0.2 U	7410 D	4 U	100 U
LS-API	9/9/2015	LAPI150909M	0.2 U	3 T	0.2 U	0.2 U	0.2 U	2.6 T	0.2 U	5250 D	4 U	100 U
LS-LEPS	7/16/2015	LEPS150716M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	4 U	100 U
LS-LEPS	8/4/2015	LEPS150804M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	4 U	100 U
LS-LEPS	9/8/2015	LEPS150908M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	4 U	100 U
LS-MH46N	7/15/2015	L46N150715M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5.7	0.2 U	4 U	4 U	100 U
LS-MH46N	8/5/2015	L46N150805M	2.4 T	0.2 U	0.2 U	0.2 U	0.2 U	10.4	0.2 U	4 U	4 U	100 U
LS-MH46N	9/9/2015	L46N150909M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.01	0.2 U	4 U	4 U	100 U
LS-PS2A	7/15/2015	LP2A150715M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	4 U	100 U
LS-PS2A	8/5/2015	LP2A150805M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	4 U	100 U
LS-PS2A	9/9/2015	LP2A150909M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	22 T	4 U	100 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	3-Chloro- propene	4-Methyl-2- Pentanone	Acetone	Acetonitrile	Acrolein	Acrylonitrile	Benzene	Bromochloro- methane	Bromodichloro- methane	Bromoform
			107-05-1 (ug/L)	108-10-1 (ug/L)	67-64-1 (ug/L)	75-05-8 (ug/L)	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)
LS-API	7/15/2015	LAPI150715M	10 U	38 T	4070 D	100 U	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U
LS-API	8/5/2015	LAPI150805M	10 U	66	6260 D	137	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U
LS-API	9/9/2015	LAPI150909M	10 U	49.2	5200 D	100 U	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U
LS-LEPS	7/16/2015	LEPS150716M	10 U	4 U	4 U	100 U	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U
LS-LEPS	8/4/2015	LEPS150804M	10 U	4 U	43 T	100 U	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U
LS-LEPS	9/8/2015	LEPS150908M	10 U	4 U	4 U	100 U	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U
LS-MH46N	7/15/2015	L46N150715M	10 U	4 U	4 U	100 U	10 U	0.07 U	2.5 T	0.2 U	0.2 U	0.2 U
LS-MH46N	8/5/2015	L46N150805M	10 U	4 U	4 U	100 U	10 U	0.07 U	3.8 T	0.2 U	0.2 U	0.2 U
LS-MH46N	9/9/2015	L46N150909M	10 U	4 U	4 U	100 U	10 U	0.07 U	3.3 T	0.2 U	0.2 U	0.2 U
LS-PS2A	7/15/2015	LP2A150715M	10 U	4 U	4 U	100 U	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U
LS-PS2A	8/5/2015	LP2A150805M	10 U	4 U	4 U	100 U	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U
LS-PS2A	9/9/2015	LP2A150909M	10 U	4 U	4 U	100 U	10 U	0.07 U	0.2 U	0.2 U	0.2 U	0.2 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo- methane	Chloroethane	Chloroform	Chloro-methane	Chloroprene	cis-1,2-Dichloro ethene
			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)	67-66-3 (ug/L)	74-87-3 (ug/L)	126-99-8 (ug/L)	156-59-2 (ug/L)
LS-API	7/15/2015	LAPI150715M	0.2 U	13.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U
LS-API	8/5/2015	LAPI150805M	0.2 U	9.36	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	2 T
LS-API	9/9/2015	LAPI150909M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	2.2 T
LS-LEPS	7/16/2015	LEPS150716M	7.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	15.3	20 U	0.2 U
LS-LEPS	8/4/2015	LEPS150804M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U
LS-LEPS	9/8/2015	LEPS150908M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U
LS-MH46N	7/15/2015	L46N150715M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U
LS-MH46N	8/5/2015	L46N150805M	0.2 U	0.2 U	0.2 U	2.2 T	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U
LS-MH46N	9/9/2015	L46N150909M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U
LS-PS2A	7/15/2015	LP2A150715M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U
LS-PS2A	8/5/2015	LP2A150805M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U
LS-PS2A	9/9/2015	LP2A150909M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.2 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	cis-1,3-Dichloro- propene	Dibromo- methane	Dichloro- difluoro- methane	Ethylbenzene	m & p Xylenes	Methyl Iodide	Methyl Methacrylate	Methylacrylo- nitrile	Methylene Chloride	o-Xylene
			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)	75-09-2 (ug/L)	95-47-6 (ug/L)
LS-API	7/15/2015	LAPI150715M	0.2 U	0.2 U	0.2 U	3.9 T	8.54	0.2 U	2 U	5 U	14.6	4.45
LS-API	8/5/2015	LAPI150805M	0.2 U	0.2 U	0.2 U	5.25	11.7	0.2 U	2 U	5 U	2.9 T	5.95
LS-API	9/9/2015	LAPI150909M	0.2 U	0.2 U	0.2 U	5.25	13.1	0.2 U	2 U	5 U	2.9 T	6.83
LS-LEPS	7/16/2015	LEPS150716M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	0.2 U	0.2 U
LS-LEPS	8/4/2015	LEPS150804M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	2.1 BT	0.2 U
LS-LEPS	9/8/2015	LEPS150908M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	0.2 U	0.2 U
LS-MH46N	7/15/2015	L46N150715M	0.2 U	0.2 U	0.2 U	26.7	24.3	0.2 U	2 U	5 U	13.3	2.4 T
LS-MH46N	8/5/2015	L46N150805M	0.2 U	0.2 U	0.2 U	47.4	43.6	0.2 U	2 U	5 U	2.6 T	4.53
LS-MH46N	9/9/2015	L46N150909M	0.2 U	0.2 U	0.2 U	34.1	32.8	0.2 U	2 U	5 U	2.8 T	4.42
LS-PS2A	7/15/2015	LP2A150715M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	17.1	0.2 U
LS-PS2A	8/5/2015	LP2A150805M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	2.5 T	0.2 U
LS-PS2A	9/9/2015	LP2A150909M	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	3 T	0.2 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	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
			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)
LS-API	7/15/2015	LAPI150715M	60 U	0.2 U	0.2 U	13.3	0.2 U	0.2 U	100 U	0.2 U	0.2 U	0.2 U
LS-API	8/5/2015	LAPI150805M	60 U	0.2 U	0.2 U	23.2	0.2 U	0.2 U	100 U	0.2 U	0.2 U	0.2 U
LS-API	9/9/2015	LAPI150909M	60 U	0.2 U	0.2 U	21	0.2 U	0.2 U	100 U	0.2 U	0.2 U	0.2 U
LS-LEPS	7/16/2015	LEPS150716M	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
LS-LEPS	8/4/2015	LEPS150804M	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
LS-LEPS	9/8/2015	LEPS150908M	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
LS-MH46N	7/15/2015	L46N150715M	60 U	0.2 U	0.2 U	3.4 T	0.2 U	0.2 U	100 U	0.2 U	0.2 U	0.2 U
LS-MH46N	8/5/2015	L46N150805M	60 U	0.2 U	0.2 U	5.54	0.2 U	0.2 U	100 U	0.2 U	0.2 U	0.2 U
LS-MH46N	9/9/2015	L46N150909M	60 U	0.2 U	0.2 U	5.32	0.2 U	0.2 U	100 U	0.2 U	0.2 U	0.2 U
LS-PS2A	7/15/2015	LP2A150715M	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
LS-PS2A	8/5/2015	LP2A150805M	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
LS-PS2A	9/9/2015	LP2A150909M	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

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	Vinyl Chloride
			75-01-4 (ug/L)
LS-API	7/15/2015	LAPI150715M	9.38 D
LS-API	8/5/2015	LAPI150805M	0.264
LS-API	9/9/2015	LAPI150909M	15.4 D
LS-LEPS	7/16/2015	LEPS150716M	0.02 U
LS-LEPS	8/4/2015	LEPS150804M	0.02 U
LS-LEPS	9/8/2015	LEPS150908M	0.02 U
LS-MH46N	7/15/2015	L46N150715M	2.85
LS-MH46N	8/5/2015	L46N150805M	3.29
LS-MH46N	9/9/2015	L46N150909M	4.5
LS-PS2A	7/15/2015	LP2A150715M	0.02 U
LS-PS2A	8/5/2015	LP2A150805M	0.02 U
LS-PS2A	9/9/2015	LP2A150909M	0.02 U

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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	7/15/2015	LAPI150715M	2 U	1 U	5 U	0.1 U	0.1 GU	0.1 U	0.025 GU	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U
LS-API	8/5/2015	LAPI150805M	2 U	2.52 L	5 U	0.1 U	0.1 GU	0.1 U	0.025 GU	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U
LS-API	9/9/2015	LAPI150909M	2 U	1 U	5 U	0.1 U	0.1 GU	0.1 U	0.025 GU	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U
LS-LEPS	7/16/2015	LEPS150716M	2 U	1.34	5 U	0.1 U	0.1 GU	0.1 U	0.025 GU	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U
LS-LEPS	8/4/2015	LEPS150804M	2 U	2.04 L	5 U	0.1 U	0.1 GU	0.1 U	0.025 GU	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U
LS-LEPS	9/8/2015	LEPS150908M	2 U	1 U	5 U	0.1 U	0.1 GU	0.1 U	0.025 GU	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U
LS-MH46N	7/15/2015	L46N150715M	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-MH46N	8/5/2015	L46N150805M	2 U	1 LU	5 U	0.1 U	0.1 GU	0.1 U	0.025 GU	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U
LS-MH46N	9/9/2015	L46N150909M	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	7/15/2015	LP2A150715M	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	8/5/2015	LP2A150805M	2 U	12.8 L	5 U	0.1 U	0.1 GU	0.1 U	0.025 GU	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U
LS-PS2A	9/9/2015	LP2A150909M	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

Environmental Monitoring Data

Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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	7/15/2015	LAPI150715M	0.65 T	0.01 U	0.23 JT	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-API	8/5/2015	LAPI150805M	0.43 T	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-API	9/9/2015	LAPI150909M	0.45 T	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-LEPS	7/16/2015	LEPS150716M	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-LEPS	8/4/2015	LEPS150804M	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-LEPS	9/8/2015	LEPS150908M	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-MH46N	7/15/2015	L46N150715M	0.207	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-MH46N	8/5/2015	L46N150805M	0.222	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-MH46N	9/9/2015	L46N150909M	0.19	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	7/15/2015	LP2A150715M	0.16 T	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	8/5/2015	LP2A150805M	0.522	0.01 U	0.15 T	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	9/9/2015	LP2A150909M	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

Environmental Monitoring Data

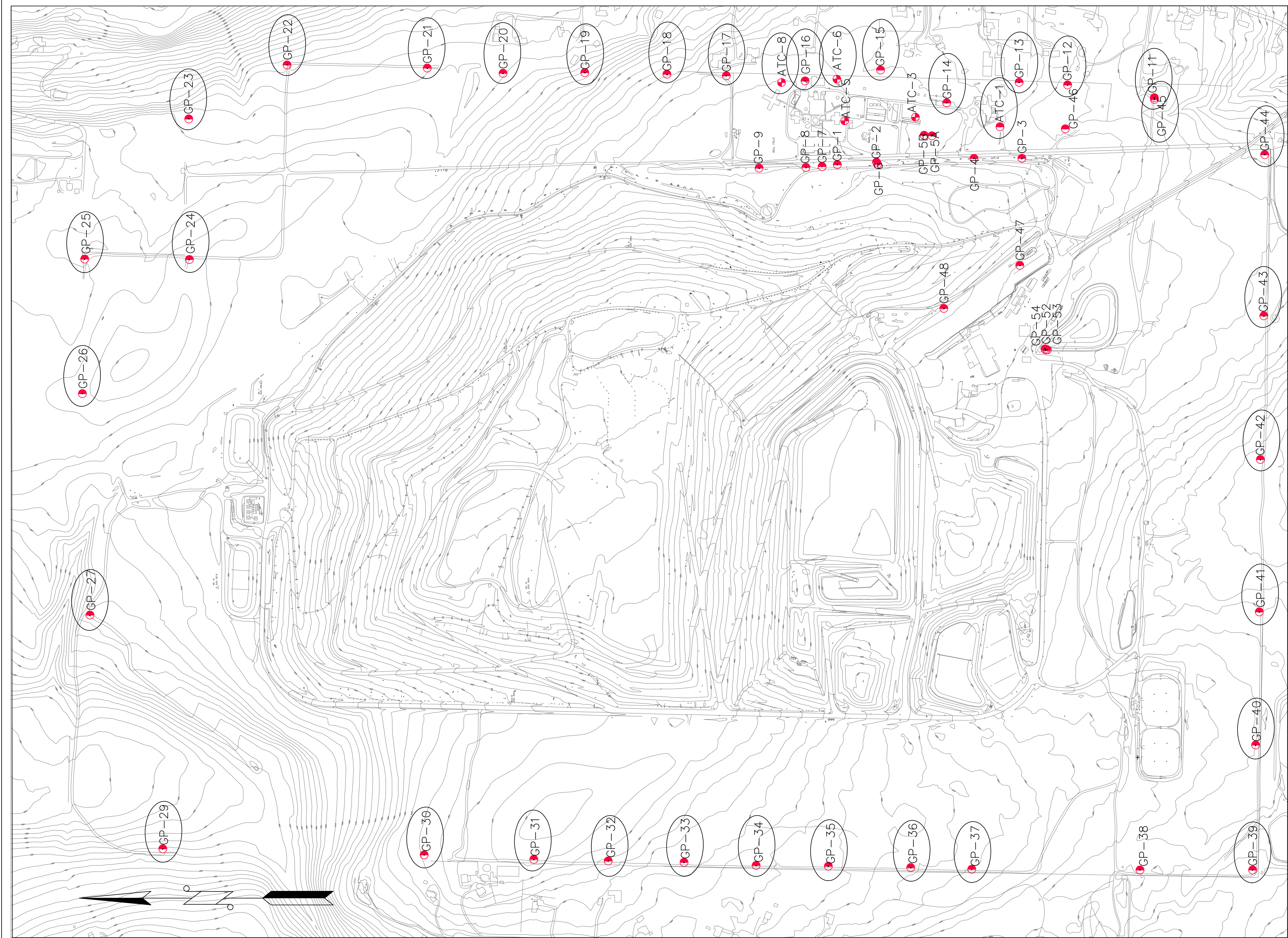
Data Collected from July 1, 2015 to Sept 30, 2015

Cedar Hills Landfill --- Leachate Field Parameters

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	7/15/2015	LAPI150715M	0.2 GU	0.025 U	0.025 U	10 GU	0.025 U	2 U	2.5 U
LS-API	8/5/2015	LAPI150805M	0.2 GU	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-API	9/9/2015	LAPI150909M	0.2 U	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-LEPS	7/16/2015	LEPS150716M	0.2 GU	0.025 U	0.025 U	10 GU	0.025 U	2 U	2.5 U
LS-LEPS	8/4/2015	LEPS150804M	0.2 GU	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-LEPS	9/8/2015	LEPS150908M	0.2 U	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-MH46N	7/15/2015	L46N150715M	0.2 U	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-MH46N	8/5/2015	L46N150805M	0.2 GU	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-MH46N	9/9/2015	L46N150909M	0.2 U	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-PS2A	7/15/2015	LP2A150715M	0.2 U	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-PS2A	8/5/2015	LP2A150805M	0.2 GU	0.025 U	0.025 U	10 U	0.025 U	2 U	2.5 U
LS-PS2A	9/9/2015	LP2A150909M	0.2 U	0.025 U	0.025 U	10 U	0.025 U	2 U	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\cewpm\lgas-prob-loc\alt-llg-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
July 2015 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	7/20/2015 7:46	0.0	0.1	20.6	0	0	
ATC-01S	7/20/2015 7:44	0.0	1.9	19.7	0	0	
ATC-06D	7/20/2015 9:03	0.0	0.2	21.0	0	-0.07	
ATC-06S	7/20/2015 9:02	0.0	1.3	20.6	0	0.04	
ATC-08D	7/20/2015 8:52	0.0	0.1	20.9	0	0.03	
ATC-08S	7/20/2015 8:50	0.0	0.1	21.0	0	0.01	
GP-11A	7/20/2015 9:39	0.0	1.7	19.8	0	0.01	
GP-11B	7/20/2015 9:41	0.0	0.1	21.0	0	-0.06	
GP-11C	7/20/2015 9:43	0.0	0.1	21.0	0	-0.63	
GP-11D	7/20/2015 9:44	0.0	0.1	20.9	0	0.06	
GP-12A	7/20/2015 8:03	0.0	0.2	20.6	0	-0.03	
GP-12B	7/20/2015 8:05	0.0	0.1	20.8	0	-0.03	
GP-12C	7/20/2015 8:06	0.0	0.1	20.7	0	-0.04	
GP-12D	7/20/2015 8:08	0.0	0.1	20.8	0	-0.15	
GP-13A	7/20/2015 7:52	0.0	1.5	19.4	0	0.02	
GP-13B	7/20/2015 7:54	0.0	0.1	20.7	0	0.03	
GP-13C	7/20/2015 7:56	0.0	0.1	20.7	0	-0.02	
GP-13D	7/20/2015 7:58	0.0	0.1	20.7	0	-1.25	
GP-14A	7/20/2015 8:15	0.0	0.1	20.9	0	-0.52	
GP-14B	7/20/2015 8:16	0.0	0.1	20.9	0	-0.49	
GP-15A	7/20/2015 8:39	0.0	4.0	11.9	0	0	
GP-15C	7/20/2015 8:41	0.0	0.7	17.0	0	-0.07	
GP-15D	7/20/2015 8:42	0.0	0.1	21.0	0	-1.25	
GP-16A	7/20/2015 8:55	0.0	2.2	19.8	0	0.02	
GP-16B	7/20/2015 8:56	0.0	0.1	21.0	0	-2.63	
GP-16C	7/20/2015 8:58	0.0	0.1	21.0	0	-1.38	
GP-17A	7/20/2015 11:11	0.0	3.2	17.1	0	0	
GP-17B	7/20/2015 11:12	0.0	0.6	18.3	0	-0.01	
GP-17C	7/20/2015 11:14	0.0	0.1	21.0	0	-1.3	
GP-18A	7/20/2015 11:18	0.0	2.0	18.2	0	0.01	
GP-18B	7/20/2015 11:19	0.0	0.2	16.4	0	0.04	
GP-18C	7/20/2015 11:21	0.0	0.1	19.8	0	-0.89	
GP-19A	7/20/2015 11:23	0.0	1.0	19.6	0	0.01	
GP-19B	7/20/2015 11:25	0.0	0.4	17.8	0	0	
GP-19C	7/20/2015 11:26	0.0	0.1	21.0	0	0	
GP-20A	7/20/2015 11:35	0.0	1.0	20.3	0	0.01	
GP-20B	7/20/2015 11:37	0.0	0.2	19.1	0	0.02	
GP-20C	7/20/2015 11:39	0.0	0.3	17.7	0	0.04	
GP-21A	7/20/2015 11:42	0.0	1.2	19.0	0	0.03	
GP-21B	7/20/2015 11:43	0.0	0.1	10.1	0	0.04	
GP-21C	7/20/2015 11:45	0.0	0.1	20.7	0	-0.01	
GP-22A	7/20/2015 11:48	0.0	2.8	17.2	0	0.01	
GP-22C	7/20/2015 11:50	0.0	1.9	4.9	0	-0.86	
GP-23A	7/20/2015 11:54	0.0	0.1	20.8	0	0	
GP-23B	7/20/2015 11:55	0.0	0.0	21.0	0	-0.01	
GP-23C	7/20/2015 11:57	0.0	0.0	21.0	0	0.08	
GP-24A	7/20/2015 12:00	0.0	5.0	15.4	0	0.01	
GP-24B	7/20/2015 12:01	0.0	0.1	21.0	0	-0.13	
GP-25	7/20/2015 12:04	0.0	3.1	19.0	0	-0.02	
GP-26	7/20/2015 12:07	0.0	0.3	20.8	0	-0.46	
GP-27	7/20/2015 12:10	0.0	9.7	12.5	0	0	
GP-29A	7/20/2015 12:14	0.0	1.2	20.1	0	0.01	
GP-29B	7/20/2015 12:16	0.0	0.3	20.8	0	0	
GP-30A	7/20/2015 12:50	0.0	1.9	19.5	0	-0.02	
GP-30B	7/20/2015 12:51	0.0	1.0	20.5	0	-0.08	
GP-31A	7/20/2015 12:54	0.0	5.9	12.5	0	0.01	
GP-31B	7/20/2015 12:56	0.0	0.2	18.2	0	-0.16	
GP-31C	7/20/2015 12:57	0.0	1.1	16.7	0	0.01	
GP-32A	7/20/2015 13:00	0.0	0.1	20.6	0	0.03	
GP-32B	7/20/2015 13:01	0.0	0.1	20.6	0	0.04	
GP-32C	7/20/2015 13:03	0.0	0.2	20.5	0	0.04	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
July 2015 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-33A	7/20/2015 13:05	0.0	2.4	18.3	0	0.03	
GP-33B	7/20/2015 13:07	0.0	0.5	19.5	0	0.03	
GP-33C	7/20/2015 13:08	0.0	0.1	20.7	0	-0.43	
GP-34A	7/20/2015 13:11	0.0	8.8	8.0	0	-0.04	
GP-34B	7/20/2015 13:13	0.0	0.1	20.6	0	-0.02	
GP-34C	7/20/2015 13:14	0.0	0.1	20.6	0	-0.87	
GP-35A	7/20/2015 13:17	0.0	2.6	18.3	0	-0.02	
GP-35B	7/20/2015 13:18	0.0	0.1	20.8	0	0	
GP-35C	7/20/2015 13:20	0.0	0.1	20.9	0	-0.02	
GP-36A	7/20/2015 13:22	0.0	0.5	20.6	0	-0.88	
GP-36B	7/20/2015 13:24	0.0	3.7	17.8	0	-0.02	
GP-36C	7/20/2015 13:25	0.0	0.3	11.9	0	-0.92	
GP-37A	7/20/2015 13:29	0.0	1.6	16.8	0	-0.04	
GP-37B	7/20/2015 13:30	0.0	0.1	20.0	0	0.03	
GP-37C	7/20/2015 13:32	0.0	0.2	14.5	0	-0.86	
GP-39	7/20/2015 13:36	0.0	1.2	19.5	0	0.02	
GP-40	7/20/2015 13:41	0.0	0.1	15.6	0	0.03	
GP-41A	7/20/2015 13:44	0.0	3.7	17.4	0	0.04	
GP-41B	7/20/2015 13:46	0.0	0.7	6.7	0	0.06	
GP-41C	7/20/2015 13:48	0.0	0.1	20.4	0	0.02	
GP-42A	7/20/2015 13:52	0.0	4.1	13.8	0	0.08	
GP-42B	7/20/2015 13:53	0.0	0.5	19.5	0	-0.05	
GP-43A	7/20/2015 13:57	0.0	0.1	20.5	0	0.03	
GP-43B	7/20/2015 13:58	0.0	0.0	20.7	0	0.02	
GP-43C	7/20/2015 14:00	0.0	0.0	20.7	0	0.04	
GP-44A	7/20/2015 14:03	0.0	4.5	14.0	0	0.06	
GP-44B	7/20/2015 14:05	0.0	0.1	20.6	0	0.06	
GP-44C	7/20/2015 14:07	0.0	0.0	20.8	0	0.08	
GP-45D	7/20/2015 9:49	0.0	0.1	20.8	0	-0.5	
GP-45I	7/20/2015 9:48	0.0	0.1	20.9	0	-0.05	
GP-45S	7/20/2015 9:46	0.0	0.1	20.9	0	-0.02	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

August 2015 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	8/19/2015 10:39	0.0	0.1	20.5	0	-0.02	
ATC-01S	8/19/2015 10:38	0.0	1.9	20.2	0	-0.02	
ATC-06D	8/19/2015 12:03	0.0	0.2	20.0	0	0.06	
ATC-06S	8/19/2015 12:01	0.0	0.7	20.2	0	-0.03	
ATC-08D	8/19/2015 11:51	0.0	0.1	19.5	0	0.07	
ATC-08S	8/19/2015 11:49	0.0	1.1	19.5	0	0.05	
GP-11A	8/19/2015 12:21	0.0	1.3	20.2	0	-0.07	
GP-11B	8/19/2015 12:23	0.0	0.6	14.5	0	0.15	
GP-11C	8/19/2015 12:25	0.0	0.0	20.4	0	0.48	
GP-11D	8/19/2015 12:27	0.0	0.1	20.9	0	0.01	
GP-12A	8/19/2015 10:56	0.0	0.9	20.0	0	-0.03	
GP-12B	8/19/2015 10:58	0.0	0.1	20.6	0	0.03	
GP-12C	8/19/2015 11:00	0.0	0.1	19.9	0	0.04	
GP-12D	8/19/2015 11:01	0.0	0.1	19.8	0	0.11	
GP-13A	8/19/2015 10:46	0.0	1.5	19.5	0	0	
GP-13B	8/19/2015 10:47	0.0	0.1	20.6	0	0.01	
GP-13C	8/19/2015 10:49	0.0	0.1	20.6	0	0.02	
GP-13D	8/19/2015 10:51	0.0	0.1	20.4	0	0.76	
GP-14A	8/19/2015 11:08	0.0	0.1	20.1	0	0.27	
GP-14B	8/19/2015 11:10	0.0	0.1	20.4	0	0.34	
GP-15A	8/19/2015 11:37	0.0	6.3	7.7	0	0.07	
GP-15C	8/19/2015 11:39	0.0	2.0	8.0	0	0.13	
GP-15D	8/19/2015 11:41	0.0	0.1	20.1	0	-2.79	
GP-16A	8/19/2015 11:54	0.0	1.8	19.2	0	0	
GP-16B	8/19/2015 11:56	0.0	0.1	20.4	0	-0.52	
GP-16C	8/19/2015 11:58	0.0	0.6	14.2	0	1.05	
GP-17A	8/19/2015 14:15	0.0	3.3	16.3	0	0.03	
GP-17B	8/19/2015 14:16	0.0	0.6	17.7	0	0.06	
GP-17C	8/19/2015 14:18	0.0	0.0	20.8	0	1.1	
GP-18A	8/19/2015 14:21	0.0	1.9	18.5	0	0.1	
GP-18B	8/19/2015 14:23	0.0	0.2	14.7	0	0.06	
GP-18C	8/19/2015 14:25	0.0	0.1	16.6	0	1.57	
GP-19A	8/19/2015 14:28	0.0	1.0	18.8	0	0.01	
GP-19B	8/19/2015 14:30	0.0	0.4	16.8	0	-0.03	
GP-19C	8/19/2015 14:31	0.0	0.0	21.0	0	0.14	
GP-20A	8/19/2015 14:55	0.0	1.4	20.2	0	0.02	
GP-20B	8/19/2015 14:57	0.0	0.1	21.0	0	0.32	
GP-20C	8/19/2015 14:58	0.0	0.1	9.3	0	0.14	
GP-21A	8/19/2015 15:02	0.0	1.1	19.3	0	0.03	
GP-21B	8/19/2015 15:03	0.0	0.1	9.8	0	0.04	
GP-21C	8/19/2015 15:04	0.0	0.1	10.1	0	-0.08	
GP-22A	8/19/2015 15:08	0.0	1.8	19.6	0	0	
GP-22C	8/19/2015 15:10	0.1	1.9	3.9	2	2.01	
GP-23A	8/19/2015 15:15	0.0	0.0	20.4	0	-0.01	
GP-23B	8/19/2015 15:17	0.0	0.0	20.8	0	0.02	
GP-23C	8/19/2015 15:18	0.0	0.0	20.9	0	-0.01	
GP-24A	8/19/2015 15:22	0.0	4.6	15.8	0	-0.03	
GP-24B	8/19/2015 15:23	0.0	0.8	18.4	0	0.46	
GP-25	8/19/2015 15:26	0.0	2.5	18.5	0	0.14	
GP-26	8/19/2015 15:29	0.0	0.5	19.9	0	0.94	
GP-27	8/19/2015 15:33	0.0	7.6	14.1	0	0.02	
GP-29A	8/19/2015 15:42	0.0	1.0	19.8	0	0.01	
GP-29B	8/19/2015 15:43	0.0	0.2	20.6	0	0.05	
GP-30A	8/19/2015 16:03	0.0	1.8	19.6	0	0.06	
GP-30B	8/19/2015 16:04	0.0	1.3	19.4	0	0.61	
GP-31A	8/19/2015 16:08	0.0	5.5	15.0	0	0.03	
GP-31B	8/19/2015 16:09	0.0	0.2	16.4	0	0.05	
GP-31C	8/19/2015 16:11	0.0	1.1	16.7	0	0.02	
GP-32A	8/28/2015 10:12	0.0	0.2	20.9	0	0	
GP-32B	8/28/2015 10:13	0.0	0.1	20.9	0	-0.02	
GP-32C	8/28/2015 10:15	0.0	0.2	20.8	0	0	
GP-33A	8/28/2015 10:17	0.0	2.1	19.3	0	0	
GP-33B	8/28/2015 10:19	0.0	0.4	20.5	0	-0.05	
GP-33C	8/28/2015 10:21	0.0	0.1	20.8	0	-0.09	

No Reading Water

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

August 2015 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-34A	8/28/2015 10:24	0.0	8.1	12.6	0	0	
GP-34B	8/28/2015 10:25	0.0	0.1	20.6	0	0	
GP-34C	8/28/2015 10:27	0.0	0.1	20.5	0	0.15	
GP-35A	8/28/2015 10:29	0.0	4.8	17.1	0	0.02	
GP-35B	8/28/2015 10:31	0.0	0.1	20.6	0	0.02	
GP-35C	8/28/2015 10:32	0.0	0.1	20.8	0	0.02	
GP-36A	8/28/2015 10:35	0.0	0.5	20.5	0	-0.47	
GP-36B	8/28/2015 10:36	0.0	2.9	18.8	0	0.04	
GP-36C	8/28/2015 10:38	0.0	0.3	11.4	0	0.12	
GP-37A	8/28/2015 10:41	0.0	1.9	17.5	0	0.01	
GP-37B	8/28/2015 10:42	0.0	1.7	17.6	0	0.44	
GP-37C	8/28/2015 10:43	0.0	0.5	1.7	0	0.45	
GP-39	8/28/2015 10:47	0.0	1.1	19.1	0	0.04	
GP-40	8/28/2015 10:50	0.0	0.1	18.2	0	0.03	
GP-41A	8/28/2015 10:53	0.0	3.8	17.8	0	0.03	
GP-41B	8/28/2015 10:55	0.0	0.7	7.3	0	0.02	
GP-41C	8/28/2015 10:56	0.0	0.1	20.4	0	0.04	
GP-42A	8/28/2015 11:01	0.0	4.3	14.5	0	0.01	
GP-42B	8/28/2015 11:03	0.0	0.6	18.7	0	0.29	
GP-43A	8/28/2015 11:05	0.0	0.3	19.6	0	0.08	
GP-43B	8/28/2015 11:07	0.0	0.0	20.5	0	0.04	
GP-43C	8/28/2015 11:09	0.0	0.0	20.6	0	0.08	
GP-44A	8/28/2015 11:12	0.0	5.2	15.3	0	0.07	
GP-44B	8/28/2015 11:14	0.0	0.2	19.9	0	0.06	
GP-44C	8/28/2015 11:15	0.0	0.0	20.6	0	0.06	
GP-45D	8/19/2015 12:32	0.0	0.0	20.9	0	0.37	
GP-45I	8/19/2015 12:31	0.0	0.0	21.0	0	-0.05	
GP-45S	8/19/2015 12:29	0.0	0.0	21.0	0	-0.06	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

September 2015 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	9/16/2015 8:21	0.0	0.3	20.3	0	0.01	
ATC-01S	9/16/2015 8:18	0.0	1.8	19.7	0	0.02	
ATC-06D	9/16/2015 9:22	0.0	0.6	19.1	0	0.02	
ATC-06S	9/16/2015 9:20	0.0	0.9	20.0	0	0.03	
ATC-08D	9/16/2015 9:29	0.0	0.2	19.5	0	-0.57	
ATC-08S	9/16/2015 9:27	0.0	1.4	19.5	0	0.04	
GP-11A	9/16/2015 7:54	0.0	1.4	20.6	0	0.03	
GP-11B	9/16/2015 7:56	0.0	0.8	13.1	0	0.04	
GP-11C	9/16/2015 7:58	0.0	0.2	14.4	0	-0.03	
GP-11D	9/16/2015 8:00	0.0	0.2	21.0	0	0.06	
GP-12A	9/16/2015 8:28	0.0	0.9	20.0	0	0.01	
GP-12B	9/16/2015 8:30	0.0	0.1	20.7	0	-0.02	
GP-12C	9/16/2015 8:31	0.0	0.1	20.0	0	-0.02	
GP-12D	9/16/2015 8:33	0.0	0.2	18.7	0	0.01	
GP-13A	9/16/2015 8:37	0.0	1.5	19.7	0	0.02	
GP-13B	9/16/2015 8:39	0.0	0.1	20.3	0	-0.04	
GP-13C	9/16/2015 8:40	0.0	0.2	20.5	0	-0.01	
GP-13D	9/16/2015 8:42	0.0	0.1	20.9	0	-0.1	
GP-14A	9/16/2015 8:47	0.0	0.2	19.5	0	0.02	
GP-14B	9/16/2015 8:50	0.0	0.1	20.9	0	0.02	
GP-15A	9/16/2015 8:58	0.0	0.3	20.8	0	-0.03	
GP-15C	9/16/2015 9:00	0.0	2.1	9.2	0	-0.02	
GP-15D	9/16/2015 9:02	0.0	0.2	20.8	0	-0.05	
GP-16A	9/16/2015 9:32	0.0	2.3	18.8	0	0.03	
GP-16B	9/16/2015 9:34	0.0	0.3	19.8	0	0.37	
GP-16C	9/16/2015 9:36	0.0	1.0	13.7	0	0.12	
GP-17A	9/16/2015 11:35	0.0	3.7	16.4	0	0.28	
GP-17B	9/16/2015 11:37	0.0	0.8	16.3	0	0.02	
GP-17C	9/16/2015 11:39	0.0	0.1	19.6	0	-0.13	
GP-18A	9/16/2015 11:43	0.0	2.2	17.7	0	-0.01	
GP-18B	9/16/2015 11:44	0.0	0.4	14.2	0	0.07	
GP-18C	9/16/2015 11:46	0.0	0.3	14.2	0	0.03	
GP-19A	9/16/2015 11:50	0.0	1.2	17.9	0	0.09	
GP-19B	9/16/2015 11:52	0.0	0.6	16.0	0	0.05	
GP-19C	9/16/2015 11:54	0.0	0.1	20.3	0	0.05	
GP-20A	9/16/2015 11:58	0.0	1.2	19.4	0	0.03	
GP-20B	9/16/2015 12:00	0.0	0.2	18.7	0	0.01	
GP-20C	9/16/2015 12:02	0.0	0.2	6.1	0	0.13	
GP-21A	9/16/2015 12:11	0.0	1.3	18.7	0	0	
GP-21B	9/16/2015 12:13	0.0	0.1	9.9	0	0	
GP-21C	9/16/2015 12:15	0.0	0.0	0.0	0	0	No Reading Water
GP-22A	9/16/2015 12:18	0.0	2.5	18.3	0	-0.32	
GP-22C	9/16/2015 12:20	0.0	2.0	4.1	0	0.42	
GP-23A	9/16/2015 13:10	0.0	0.1	20.5	0	0.06	
GP-23B	9/16/2015 13:12	0.0	0.1	20.6	0	0.05	
GP-23C	9/16/2015 13:14	0.0	0.1	20.6	0	0.06	
GP-24A	9/16/2015 13:18	0.0	4.6	15.6	0	0.06	
GP-24B	9/16/2015 13:20	0.0	1.7	17.8	0	0.09	
GP-25	9/16/2015 13:26	0.0	3.3	17.6	0	0.05	
GP-26	9/16/2015 13:29	0.0	0.6	19.0	0	-0.13	
GP-27	9/16/2015 13:33	0.0	9.1	10.5	0	0.06	
GP-29A	9/16/2015 13:39	0.0	1.5	19.3	0	0.04	
GP-29B	9/16/2015 13:41	0.0	0.5	19.9	0	0.02	
GP-30A	9/16/2015 15:09	0.0	1.3	19.2	0	0.13	
GP-30B	9/16/2015 15:11	0.0	0.4	20.1	0	0.05	
GP-31A	9/16/2015 15:17	0.0	5.9	14.9	0	0.14	
GP-31B	9/16/2015 15:19	0.0	0.3	16.2	0	0.11	
GP-31C	9/16/2015 15:21	0.0	1.3	16.3	0	0.15	
GP-32A	9/16/2015 15:24	0.0	0.3	20.3	0	0.09	
GP-32B	9/16/2015 15:25	0.0	0.1	20.6	0	0.11	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

September 2015 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-32C	9/16/2015 15:27	0.0	0.2	20.4	0	0.07	
GP-33A	9/16/2015 15:30	0.0	2.1	18.3	0	0.1	
GP-33B	9/16/2015 15:32	0.0	0.3	20.4	0	0.08	
GP-33C	9/16/2015 15:33	0.0	0.1	20.8	0	-0.28	
GP-34A	9/16/2015 15:36	0.0	9.5	10.7	0	0.05	
GP-34B	9/16/2015 15:38	0.0	0.2	16.9	0	0.14	
GP-34C	9/16/2015 15:40	0.0	0.1	3.7	0	0.7	
GP-35A	9/16/2015 15:43	0.0	6.2	14.3	0	-0.01	
GP-35B	9/16/2015 15:44	0.0	0.1	20.7	0	0.14	
GP-35C	9/16/2015 15:46	0.0	0.1	20.1	0	0.11	
GP-36A	9/16/2015 15:49	0.0	1.0	19.9	0	-0.67	
GP-36B	9/16/2015 15:51	0.0	2.7	18.0	0	0.17	
GP-36C	9/16/2015 15:53	0.0	0.3	8.6	0	0.54	
GP-37A	9/16/2015 15:56	0.0	1.8	17.5	0	0.14	
GP-37B	9/16/2015 15:57	0.0	0.4	19.6	0	0.08	
GP-37C	9/16/2015 15:59	0.0	0.6	1.1	0	0.49	
GP-39	9/16/2015 16:04	0.0	0.5	18.2	0	0.03	
GP-40	9/16/2015 16:08	0.0	0.0	18.4	0	0.04	
GP-41A	9/16/2015 16:11	0.0	3.9	17.5	0	0.04	
GP-41B	9/16/2015 16:12	0.0	0.7	7.1	0	-0.41	
GP-41C	9/16/2015 16:14	0.0	0.1	20.7	0	0.11	
GP-42A	9/16/2015 16:18	0.0	4.5	13.5	0	0.05	
GP-42B	9/16/2015 16:20	0.0	0.7	15.5	0	0.33	
GP-43A	9/16/2015 16:22	0.0	0.5	17.5	0	0.34	
GP-43B	9/16/2015 16:24	0.0	0.1	20.9	0	0.03	
GP-43C	9/16/2015 16:26	0.0	0.1	18.1	0	0.01	
GP-44A	9/16/2015 16:29	0.0	10.7	9.2	0	0.06	
GP-44B	9/16/2015 16:31	0.0	0.4	19.7	0	-0.03	
GP-44C	9/16/2015 16:32	0.0	0.1	20.9	0	0.01	
GP-45D	9/16/2015 8:07	0.0	0.1	21.0	0	-0.01	
GP-45I	9/16/2015 8:05	0.0	0.1	21.0	0	-0.03	
GP-45S	9/16/2015 8:03	0.0	0.1	21.0	0	0.06	

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Second Quarter 2015 Monitoring

Probe ID	Date	Time	Barometric				Static Pressure in INWC
			Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	
MGPW 1700	7/7/2015	10:48am	30.04	0.0	0.0	20.9	-0.1
MGPW 1700	7/27/2015	2:07pm	30.14	0.0	0.1	21.0	0
MGPW 1700	8/5/2015	1:47pm	30.06	0.0	0.2	20.2	-0.1
MGPW 1700	8/26/2015	2:16pm	30.01	0.0	0.2	19.0	0.03
MGPW 1700	9/1/2015	11:39am	29.89	0.0	0.0	20.8	0.03
MGPW 1700	9/18/2015	8:37am	30.09	0.0	0.0	20.8	-0.11
MGPW 1708	7/7/2015	10:44am	30.04	0.0	0.0	20.9	-0.2
MGPW 1708	7/27/2015	2:23pm	30.14	0.0	0.2	20.6	-2.1
MGPW 1708	8/5/2015	1:24pm	30.06	0.0	0.1	20.1	-1.94
MGPW 1708	8/26/2015	2:20pm	30.01	0.0	0.0	19.1	-0.53
MGPW 1708	9/1/2015	11:35am	29.89	0.0	0.0	20.8	-0.47
MGPW 1708	9/18/2015	8:32am	30.09	0.0	0.0	20.7	-1.9
MGPW 1710S	7/7/2015	10:38am	30.04	0.0	0.0	20.9	-0.10
MGPW 1710S	7/27/2015	2:39pm	30.14	0.0	0.3	20.5	-1.90
MGPW 1710S	8/5/2015	1:14pm	30.06	0.0	0.1	20.1	-1.76
MGPW 1710S	8/26/2015	2:26pm	30.01	0.0	0.0	19.3	-0.69
MGPW 1710S	9/1/2015	11:30am	29.89	0.0	0.0	20.9	-0.61
MGPW 1710S	9/18/2015	8:27am	30.09	0.0	0.0	20.7	-1.93
MGPW 1710D	7/7/2015	10:41am	30.04	0.0	0.0	20.8	-0.1
MGPW 1710D	7/27/2015	2:41pm	30.14	0.0	0.1	21.0	-1.9
MGPW 1710D	8/5/2015	1:17pm	30.06	0.0	0.1	20.2	-1.77
MGPW 1710D	8/26/2015	2:24pm	30.01	0.0	0.0	19.3	-0.65
MGPW 1710D	9/1/2015	11:32am	29.89	0.0	0.0	20.9	-0.52
MGPW 1710D	9/18/2015	8:29am	30.09	0.0	0.0	20.7	-1.94
MGPW 1714	7/7/2015	10:33am	30.04	0.0	0.0	20.9	-0.1
MGPW 1714	7/27/2015	2:47pm	30.14	0.0	0.2	21.0	-1.7
MGPW 1714	8/5/2015	1:09pm	30.06	0.0	0.1	20.3	-1.67
MGPW 1714	8/26/2015	2:28pm	30.01	0.0	0.0	19.3	-0.68
MGPW 1714	9/1/2015	11:28am	29.89	0.0	0.0	20.8	-0.52
MGPW 1714	9/18/2015	8:24am	30.09	0.0	0.0	20.7	-1.9

KING COUNTY SOLID WASTE DIVISION
QUALIFIER INFORMATION
(Effective 8/27/2015)

QUAL	QUALIFIER DESCRIPTION
U	Undetected; Analyte Concentration Less than Method Detection Limit (< MDL)
T	Estimated; Less than Reporting Detection Limit (<RDL) but Greater than Method Detection Limit (> MDL)
J	Reported Value is an Estimate
B	Matrix Target Analyte Present in Blank, AND, Sample Result Less than or Equal to 10x Blank Detection
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	Re-analysis Due to Dilution
P	PASS – Qualitative Result Acceptable
F	FAIL – Qualitative Result is not Acceptable
G	Estimated with Low Bias (Coliform; BOD; All Other Chemistry Parameters)
L	Estimated with High Bias (BOD; All Other Chemistry Parameters)

APPENDIX C

Meteorological Data

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JULY , 2015

IN MILES PER HOUR

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
	NOTE: ALL TIMES ARE PST!																							
1	7.3	4.5	5.7	7.0	7.1	6.6	2.2	2.5	4.3	5.7	6.1	9.0	10.3	9.2	9.8	9.5	9.6	8.4	8.0	8.5	8.6	4.3	5.8	6.7
2	7.2	3.1	2.9	2.8	1.7	3.1	2.3	2.6	3.5	7.6	8.4	8.1	9.5	8.6	7.2	8.4	6.3	8.1	9.0	7.0	7.1	5.5	4.0	5.1
3	4.8	3.5	3.4	3.2	2.1	1.3	2.8	3.1	3.6	4.2	5.3	9.2	7.3	8.7	8.9	8.8	9.2	8.0	6.1	6.6	8.2	6.2	3.2	5.1
4	3.6	3.2	3.7	3.9	3.6	1.5	1.7	2.4	3.3	6.1	9.5	8.9	8.8	8.5	9.6	10.5	9.4	7.3	7.1	8.4	4.2	4.1	2.6	3.3
5	1.9	1.3	3.0	2.6	1.7	1.7	2.0	1.9	2.9	2.8	3.0	5.0	5.7	7.3	7.0	7.4	6.2	5.3	5.8	4.9	2.1	5.3	2.2	5.7
6	4.7	4.6	3.5	2.8	4.3	4.7	3.7	2.6	3.3	3.2	5.4	6.9	7.4	8.1	7.4	7.3	7.9	7.3	6.3	7.4	4.3	5.8	4.7	5.3
7	6.0	2.6	3.8	4.0	1.2	2.0	2.1	3.9	3.3	3.9	4.7	3.8	6.2	6.9	6.6	6.8	7.1	6.3	5.4	3.5	8.5	5.7	3.2	2.2
8	2.3	3.4	3.8	3.3	4.0	2.6	2.8	3.0	2.8	3.1	5.2	7.5	7.8	8.2	10.1	7.7	7.8	7.1	6.3	3.0	3.4	5.1	2.7	1.7
9	3.5	4.2	1.4	4.2	5.5	2.1	2.0	2.4	3.2	3.5	4.2	4.9	6.3	7.6	7.8	6.2	8.9	8.8	8.2	7.0	7.9	6.0	6.1	7.4
10	6.4	7.2	7.0	5.6	6.3	6.0	5.6	5.4	3.8	4.7	4.6	4.3	6.3	4.8	4.3	4.4	5.3	7.8	7.2	5.2	3.6	2.7	3.1	4.1
11	4.1	3.6	2.0	1.7	1.1	3.6	4.7	4.5	6.2	5.6	7.4	9.4	7.5	3.1	3.5	3.1	8.5	8.0	9.0	6.5	4.4	6.1	4.6	3.4
12	3.1	4.0	4.0	2.2	2.8	2.8	3.5	3.7	3.6	3.9	3.2	3.2	4.5	5.7	6.7	7.6	8.7	7.6	6.2	7.7	7.3	6.6	4.3	4.9
13	2.0	1.2	2.8	1.5	3.0	2.5	2.5	2.6	3.9	3.0	3.8	4.5	5.3	3.8	6.2	7.1	7.0	9.3	8.0	7.4	8.1	10.0	8.4	8.9
14	10.7	8.6	5.2	7.2	10.9	4.6	2.0	4.7	5.3	3.8	5.9	7.8	7.7	7.3	8.4	7.6	10.4	9.1	10.4	7.2	5.4	5.1	3.1	4.9
15	5.4	5.7	2.9	4.0	4.6	5.0	5.6	4.5	3.7	3.0	3.6	5.0	7.5	7.3	8.4	8.4	7.8	10.9	13.3	13.7	14.8	12.4	12.2	13.3
16	8.9	7.8	5.7	5.7	3.2	1.9	1.9	2.3	3.6	2.3	3.5	5.9	6.7	6.9	7.2	9.8	9.5	7.4	8.3	8.6	5.4	3.6	6.3	4.1
17	4.9	5.3	4.3	4.0	1.7	0.2	1.8	1.6	3.1	5.4	7.3	10.7	10.3	9.3	8.6	9.3	10.2	12.4	10.9	6.4	3.6	5.5	5.7	3.5
18	4.2	4.8	4.8	2.3	3.1	3.2	1.3	2.4	2.8	2.8	6.8	10.7	5.2	6.9	9.6	8.3	9.9	10.8	9.3	8.6	3.7	2.1	2.1	3.7
19	3.8	1.9	1.3	2.4	1.4	1.1	1.5	1.9	2.8	4.8	7.1	7.0	7.8	8.3	9.1	9.6	11.6	11.5	9.0	7.8	6.1	7.0	6.7	8.8
20	9.0	9.0	8.2	10.9	10.6	9.0	8.9	8.3	8.2	7.9	5.4	6.2	7.4	6.7	8.1	8.1	9.4	10.3	9.2	8.7	5.8	9.6	7.2	8.8
21	6.5	4.1	6.0	4.9	5.2	5.0	5.8	2.5	1.9	3.7	6.8	5.2	4.6	5.8	4.4	3.8	5.2	4.2	4.3	9.0	9.8	7.1	5.7	9.1
22	4.8	4.2	5.3	5.2	3.9	3.9	4.8	5.7	5.9	5.6	5.4	4.0	4.8	4.9	4.0	5.3	6.1	6.2	7.4	6.7	10.3	7.4	3.8	5.3
23	4.2	2.2	1.2	4.1	2.3	0.6	1.4	1.7	3.0	4.2	4.5	6.0	7.1	5.7	6.0	6.8	4.4	2.5	4.7	6.2	6.1	6.0	3.9	3.3
24	3.1	2.6	3.8	5.9	7.6	7.0	7.3	9.6	7.7	6.7	8.0	5.2	7.2	7.7	9.8	7.9	6.1	7.3	7.9	5.6	3.8	5.4	6.2	6.1
25	7.1	5.5	6.0	7.7	6.1	2.5	3.1	4.0	4.3	6.9	4.8	4.0	3.8	4.8	7.4	8.1	5.9	6.2	5.8	6.4	7.3	4.1	3.0	4.6
26	4.7	3.5	2.8	4.0	3.4	2.9	3.1	5.1	6.3	4.7	2.9	5.3	5.8	4.0	9.7	10.6	6.2	5.4	1.7	2.7	2.9	2.4	1.0	1.4
27	3.7	2.6	1.9	1.8	3.2	3.6	4.4	2.0	2.5	2.1	2.7	2.1	3.1	3.8	5.9	2.9	6.0	7.2	4.7	5.6	4.9	4.0	1.9	2.5
28	7.6	7.9	5.4	2.0	1.3	1.9	1.9	2.0	5.6	7.5	8.8	7.8	8.1	10.2	10.0	9.1	9.1	7.5	5.8	5.0	3.1	4.1	1.9	2.2
29	6.7	6.3	5.3	4.7	5.3	3.8	1.1	2.0	2.9	4.4	9.1	11.0	9.5	9.3	10.2	9.7	11.1	9.7	8.0	5.4	4.1	4.5	4.7	7.5
30	8.6	7.0	6.2	4.2	4.0	3.8	2.7	1.7	3.1	4.1	8.3	10.9	10.8	10.8	11.0	9.5	8.0	8.5	8.4	6.6	7.9	7.8	6.6	9.9
31	11.2	8.6	8.5	5.0	3.3	3.0	3.9	4.6	8.6	8.3	6.7	7.7	6.2	6.9	7.6	6.7	5.9	5.8	5.6	4.9	7.8	12.4	11.0	8.3

MONTHLY AVERAGE = 5.65

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JULY , 2015

IN DEGREES

(MEASURED CLOCKWISE FROM NORTH)
HOUR ENDING **NOTE: ALL TIMES ARE PST!**

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	24.	28.	32.	34.	40.	41.	36.	21.	30.	14.	323.	343.	334.	3.	357.	1.	353.	330.	350.	347.	16.	56.	42.	45.	133.
2	51.	79.	134.	146.	240.	285.	324.	58.	266.	276.	299.	321.	310.	318.	316.	312.	350.	338.	318.	325.	345.	23.	41.	25.	229.
3	26.	41.	177.	251.	235.	107.	173.	186.	258.	294.	298.	321.	314.	295.	299.	304.	304.	308.	332.	353.	17.	30.	25.	131.	212.
4	181.	209.	211.	208.	199.	200.	78.	225.	296.	0.	20.	34.	13.	353.	356.	359.	17.	27.	11.	345.	25.	32.	24.	153.	149.
5	334.	99.	26.	37.	90.	337.	282.	207.	45.	31.	31.	286.	273.	272.	272.	254.	252.	262.	294.	323.	325.	46.	150.	193.	197.
6	201.	198.	251.	235.	187.	189.	204.	215.	241.	262.	272.	274.	281.	277.	280.	250.	267.	278.	278.	269.	278.	260.	257.	282.	249.
7	256.	246.	259.	259.	240.	198.	219.	214.	202.	202.	225.	286.	280.	276.	284.	308.	309.	326.	315.	344.	27.	39.	22.	277.	234.
8	35.	176.	160.	157.	155.	171.	200.	215.	234.	302.	333.	280.	269.	271.	255.	267.	290.	309.	319.	295.	310.	37.	31.	276.	223.
9	176.	182.	213.	263.	280.	280.	245.	260.	255.	238.	265.	257.	268.	269.	264.	284.	259.	271.	268.	250.	230.	250.	237.	210.	249.
10	197.	177.	175.	147.	149.	169.	151.	150.	148.	188.	223.	245.	232.	229.	221.	226.	242.	251.	247.	243.	248.	220.	184.	205.	203.
11	246.	270.	317.	25.	190.	136.	136.	150.	196.	178.	177.	189.	194.	235.	165.	272.	252.	244.	249.	242.	134.	135.	133.	163.	193.
12	167.	126.	160.	163.	178.	179.	174.	175.	158.	217.	225.	266.	227.	224.	292.	285.	273.	270.	262.	245.	244.	243.	237.	232.	218.
13	15.	355.	274.	341.	248.	318.	295.	250.	203.	226.	248.	285.	270.	250.	268.	315.	280.	304.	319.	322.	359.	25.	33.	31.	243.
14	29.	31.	37.	35.	34.	23.	341.	28.	59.	330.	327.	338.	338.	343.	335.	349.	312.	305.	311.	317.	355.	29.	109.	35.	198.
15	48.	32.	50.	40.	89.	152.	160.	156.	211.	254.	295.	274.	260.	264.	296.	243.	251.	276.	13.	24.	30.	48.	32.	33.	147.
16	43.	35.	32.	27.	43.	37.	256.	235.	73.	141.	259.	301.	309.	319.	339.	354.	326.	337.	334.	351.	22.	27.	20.	61.	178.
17	122.	136.	160.	177.	164.	160.	199.	101.	350.	36.	4.	340.	338.	354.	354.	339.	345.	324.	329.	352.	10.	18.	25.	14.	198.
18	19.	35.	37.	89.	62.	138.	101.	186.	273.	319.	325.	325.	328.	335.	24.	343.	305.	298.	326.	344.	38.	73.	145.	70.	189.
19	62.	170.	256.	200.	151.	61.	220.	214.	238.	279.	264.	270.	281.	275.	250.	248.	255.	245.	240.	234.	230.	216.	194.	194.	219.
20	193.	191.	192.	189.	196.	202.	227.	224.	222.	219.	200.	240.	249.	235.	252.	250.	255.	243.	258.	251.	319.	22.	37.	26.	204.
21	25.	145.	223.	201.	176.	147.	182.	54.	64.	159.	205.	202.	175.	202.	211.	249.	274.	276.	332.	10.	19.	19.	30.	30.	151.
22	33.	155.	204.	202.	188.	200.	189.	199.	192.	187.	154.	207.	252.	276.	253.	286.	271.	268.	307.	350.	22.	29.	28.	46.	187.
23	51.	108.	18.	36.	35.	23.	312.	243.	232.	201.	221.	231.	269.	267.	278.	255.	352.	39.	18.	310.	295.	43.	57.	170.	169.
24	168.	180.	178.	164.	154.	141.	142.	174.	188.	206.	194.	190.	222.	220.	211.	242.	245.	247.	250.	230.	207.	223.	180.	180.	197.
25	178.	188.	214.	294.	309.	281.	69.	118.	96.	41.	43.	34.	69.	153.	4.	31.	41.	38.	35.	30.	27.	34.	88.	170.	108.
26	182.	189.	162.	137.	142.	131.	141.	200.	218.	228.	234.	228.	206.	245.	270.	326.	352.	38.	87.	47.	33.	49.	186.	140.	174.
27	192.	112.	98.	38.	199.	158.	170.	58.	151.	219.	125.	354.	306.	5.	40.	6.	22.	19.	343.	311.	354.	36.	38.	8.	140.
28	33.	35.	46.	90.	205.	39.	71.	58.	40.	31.	20.	10.	12.	2.	343.	348.	358.	1.	342.	331.	25.	16.	49.	46.	106.
29	31.	32.	31.	40.	41.	26.	313.	359.	60.	41.	31.	27.	17.	30.	21.	0.	353.	342.	314.	287.	352.	10.	53.	37.	119.
30	38.	39.	44.	27.	34.	39.	36.	22.	43.	35.	25.	33.	33.	31.	31.	7.	345.	327.	325.	355.	45.	38.	45.	34.	85.
31	32.	34.	41.	58.	64.	127.	38.	31.	23.	32.	3.	39.	349.	295.	284.	288.	301.	304.	336.	0.	33.	25.	34.	36.	117.

MONTHLY AVERAGE = 181.19

SIGMA THETA FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JULY , 2015

IN DEGREES

DAY	HOUR ENDING									NOTE: ALL TIMES ARE PST!															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	23.2	8.4	9.0	8.0	9.2	8.2	40.5	56.7	22.8	19.6	29.0	21.7	21.4	19.7	13.8	20.1	17.6	17.4	13.8	9.4	11.9	21.8	18.1	19.6	19.2
2	11.3	33.0	18.8	15.9	33.4	16.8	36.8	35.2	39.9	18.5	20.6	23.8	18.0	23.4	27.1	18.8	29.9	19.1	8.3	10.3	16.5	15.6	17.4	6.8	21.5
3	6.6	38.3	22.9	11.1	14.7	22.4	31.0	30.7	33.6	31.9	41.3	18.4	23.7	20.5	18.1	16.5	12.9	13.3	14.9	14.8	10.2	24.2	23.4	15.3	21.3
4	12.9	6.5	6.0	6.1	8.0	18.3	36.8	35.6	42.8	33.6	19.6	20.7	29.6	28.6	17.9	20.8	19.2	12.1	10.2	11.3	19.6	11.2	12.2	42.4	20.1
5	17.3	23.8	14.0	10.0	33.0	13.6	19.4	44.1	34.8	30.7	35.9	24.4	23.7	19.3	16.4	13.8	14.9	15.4	9.0	11.8	22.5	8.1	29.1	6.5	20.5
6	6.8	7.7	10.4	13.4	8.6	10.1	13.8	32.8	33.3	40.0	30.1	22.8	22.7	16.8	18.0	19.5	14.6	12.1	11.1	6.8	26.4	10.4	7.2	6.5	16.7
7	8.4	11.8	6.6	4.9	15.6	35.3	31.4	26.5	34.5	31.9	40.2	53.3	27.1	23.4	24.1	22.6	17.2	19.9	13.5	18.5	8.9	8.6	27.4	28.3	22.5
8	12.5	33.6	8.7	9.0	10.2	13.1	16.0	29.1	34.0	50.7	30.0	22.0	23.1	18.0	14.6	18.5	15.9	13.4	9.7	18.6	18.3	8.1	12.1	34.2	19.7
9	25.7	17.7	33.3	10.4	7.6	12.9	24.6	36.7	32.0	43.5	34.5	28.8	22.4	21.0	22.2	27.6	15.0	12.8	10.5	8.2	7.3	8.6	8.1	8.5	20.0
10	11.8	12.6	10.5	8.5	7.9	11.8	11.0	8.6	20.9	18.8	24.0	20.5	18.7	16.8	25.4	20.9	14.4	9.0	9.1	8.6	11.8	19.0	17.9	14.4	14.7
11	15.2	17.4	13.2	7.4	12.3	16.5	10.8	24.5	15.9	14.8	18.4	14.3	17.5	53.1	38.2	46.5	13.0	10.6	10.9	18.8	13.5	10.3	11.0	17.6	18.4
12	15.9	8.7	15.4	15.9	18.8	13.7	11.5	17.4	25.3	39.3	43.8	43.6	38.8	41.8	30.9	26.3	17.7	14.1	13.3	8.1	7.9	8.1	13.2	9.3	20.8
13	20.2	18.5	11.8	33.5	11.9	19.7	16.2	30.3	19.1	39.1	30.2	32.8	24.9	57.9	29.9	28.1	30.2	11.4	10.7	13.6	20.7	15.2	16.3	13.3	23.2
14	10.9	11.5	13.5	13.4	8.8	17.8	32.8	20.8	26.6	48.1	37.5	23.2	26.2	27.4	20.2	33.7	16.9	15.4	8.1	9.2	16.1	29.4	47.5	23.5	22.4
15	12.7	18.7	27.0	14.2	19.1	11.0	13.8	33.4	26.9	60.7	60.1	43.4	25.9	28.3	29.2	25.8	18.3	31.3	11.8	11.6	11.4	16.7	12.9	12.6	24.0
16	14.4	14.1	12.6	7.6	9.1	11.1	33.8	28.0	35.2	56.9	45.0	33.5	30.6	23.5	28.7	25.5	17.5	18.3	12.5	10.5	11.8	11.1	7.3	31.6	22.1
17	8.9	6.6	9.2	9.9	8.4	6.5	24.5	48.9	47.5	24.9	23.7	20.2	22.1	21.9	24.1	22.9	16.5	11.0	13.0	22.2	30.2	23.9	8.2	18.1	19.7
18	8.9	8.6	13.9	15.3	21.8	18.6	69.6	36.2	48.4	43.2	36.0	13.7	50.1	38.6	22.5	25.6	15.8	12.2	10.7	9.0	12.8	20.3	49.2	20.9	25.9
19	15.1	28.2	26.6	18.5	16.0	32.3	52.2	51.9	29.0	31.3	23.5	25.1	18.9	22.9	21.1	23.4	15.6	9.1	11.5	7.5	9.8	8.9	9.6	7.8	21.5
20	9.9	8.8	7.7	10.0	9.2	11.4	8.3	10.4	11.1	15.6	27.2	38.2	34.5	34.8	22.5	22.7	17.6	13.2	11.3	6.8	27.6	13.3	18.2	10.4	16.7
21	11.4	19.4	10.4	12.9	10.2	11.9	21.5	14.1	21.9	35.9	19.9	35.5	47.6	33.0	49.1	49.6	23.1	43.7	28.3	12.6	10.6	16.6	15.1	10.4	23.5
22	11.8	14.4	11.0	14.8	17.9	11.7	15.7	18.0	17.5	26.8	37.6	52.8	29.3	33.7	32.0	26.6	22.2	21.6	16.6	13.3	10.6	10.2	12.3	11.6	20.4
23	11.5	19.1	18.0	9.6	7.6	19.8	27.7	52.2	35.9	49.8	39.5	50.9	20.3	38.6	32.0	34.0	21.7	13.5	24.3	9.4	15.2	17.2	36.8	17.8	25.9
24	18.4	27.8	20.2	8.7	6.4	8.9	10.1	13.0	17.0	24.5	23.0	27.1	29.2	18.2	17.8	13.3	14.4	12.8	10.2	16.1	15.5	13.6	9.2	10.7	16.1
25	10.5	9.7	22.1	7.5	11.3	39.0	20.1	18.8	19.0	16.8	13.2	14.2	21.9	24.6	37.2	9.7	15.7	11.6	11.6	9.4	9.0	11.6	36.7	18.0	17.5
26	8.2	10.8	17.8	8.8	10.5	10.6	17.5	14.5	17.3	18.1	30.5	30.8	32.5	54.3	22.7	13.7	14.6	28.9	47.2	43.9	9.7	8.9	40.0	37.5	22.9
27	24.4	14.1	20.0	27.1	37.8	14.7	13.1	20.4	30.3	29.2	59.8	55.2	45.8	48.5	23.9	43.9	26.7	15.0	19.5	5.9	19.0	20.8	23.9	46.3	28.6
28	10.0	10.2	12.6	31.2	22.5	17.1	28.7	47.5	18.7	17.8	19.1	24.4	33.0	21.6	21.3	25.6	23.1	16.1	15.5	10.3	26.6	9.8	42.5	24.6	22.1
29	7.7	7.2	7.3	6.9	8.0	11.4	33.8	31.2	42.8	17.6	14.2	12.2	14.6	18.0	18.7	19.7	14.5	17.1	17.9	26.6	25.1	26.2	15.3	10.6	17.7
30	9.9	7.7	7.8	7.1	6.9	7.7	12.6	58.3	21.4	43.9	30.6	10.5	12.1	11.2	11.7	15.5	16.7	11.1	9.9	16.3	7.9	7.2	11.5	7.5	15.1
31	7.3	7.2	7.5	11.6	18.1	29.6	16.9	22.9	11.3	11.8	30.4	19.0	30.5	24.5	21.6	24.8	21.5	20.0	10.8	26.6	11.4	9.0	10.6	7.8	17.2

MONTHLY AVERAGE = 20.58

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JULY , 2015

IN DEGREES C

DAY	HOUR ENDING										NOTE: ALL TIMES ARE PST!														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	19.6	17.9	16.6	15.6	15.2	16.2	18.4	20.1	21.9	23.6	25.5	27.2	28.5	29.5	30.1	30.5	30.4	30.2	29.3	27.4	25.0	23.6	22.9	22.4	23.7
2	21.2	20.9	20.5	19.2	18.7	19.7	21.5	22.8	25.0	26.4	28.0	29.5	30.2	30.8	31.7	32.2	32.4	31.9	30.7	28.3	27.2	26.0	25.2	23.3	26.0
3	21.6	21.1	20.4	19.4	18.9	20.0	21.0	22.4	23.9	25.7	27.5	29.4	30.6	31.4	31.7	31.5	31.6	31.3	30.6	28.7	26.8	25.0	24.1	21.4	25.7
4	20.5	19.9	18.7	17.2	16.3	16.7	19.1	20.0	22.4	25.6	27.1	28.3	29.6	30.6	30.7	30.6	30.2	29.6	28.7	27.4	25.5	24.2	23.7	21.7	24.4
5	20.9	20.7	19.8	19.5	19.4	18.8	19.7	21.7	22.8	25.5	26.5	27.9	29.1	30.1	31.0	31.2	31.5	31.5	30.5	28.0	26.5	24.2	23.5	21.0	25.1
6	19.7	18.5	18.3	17.3	16.5	16.8	17.7	19.4	21.1	23.3	24.8	25.9	26.8	27.4	27.9	28.4	28.5	27.8	27.0	24.9	22.6	20.4	19.0	17.2	22.4
7	15.9	15.0	14.1	13.5	13.3	13.9	14.4	15.3	16.4	18.2	20.2	22.2	23.4	24.7	25.8	26.0	26.1	25.5	24.1	22.5	21.2	19.9	18.9	18.0	19.5
8	16.9	16.3	15.6	15.7	15.4	15.8	17.0	18.4	19.9	22.0	23.8	25.1	26.4	27.7	28.4	29.0	29.2	28.8	27.6	26.0	24.0	22.3	21.6	20.4	22.2
9	18.9	18.2	18.1	17.2	15.0	15.2	16.1	17.5	19.1	20.9	22.9	24.5	25.6	26.6	27.4	28.5	28.3	27.5	26.0	24.0	21.4	19.1	17.4	16.5	21.3
10	16.3	16.1	15.4	14.9	14.8	14.7	14.6	14.8	15.6	16.6	17.1	17.5	17.8	17.7	18.2	18.5	18.6	18.2	17.8	17.6	17.4	17.3	16.8	16.7	16.7
11	16.6	16.3	16.1	15.7	15.8	15.5	15.9	17.4	17.3	17.3	18.3	18.7	18.4	18.7	19.6	19.8	19.4	18.4	17.5	16.4	16.1	15.9	16.1	16.3	17.2
12	16.3	15.7	15.7	15.8	15.7	15.7	16.0	16.8	17.5	18.2	19.7	20.8	22.0	23.4	23.8	24.6	24.3	23.6	23.0	22.3	21.0	19.9	18.9	18.2	19.5
13	17.1	16.8	16.8	16.1	15.8	15.8	16.1	16.7	17.5	18.3	19.0	19.8	20.4	22.0	23.1	23.8	23.9	23.3	22.2	20.5	18.7	17.3	16.5	15.9	18.9
14	15.6	15.1	14.7	15.0	15.0	15.4	16.7	17.8	18.9	20.2	21.7	22.7	23.3	24.2	24.9	25.3	25.1	24.7	23.7	22.0	20.3	18.5	17.4	16.9	19.8
15	16.7	16.4	14.9	13.9	13.1	14.1	15.1	16.4	17.5	19.4	21.1	22.5	23.4	23.8	24.1	24.4	24.4	23.6	20.8	18.8	17.7	16.9	16.3	15.7	18.8
16	15.5	15.4	15.1	14.7	14.6	14.9	15.4	15.8	16.9	17.9	19.1	20.5	21.9	22.4	23.1	23.3	22.8	22.9	22.3	21.1	19.4	18.0	16.6	15.9	18.6
17	14.9	14.9	14.4	13.7	13.4	13.8	14.2	15.9	18.0	19.3	21.1	22.6	23.8	24.8	25.3	25.7	25.5	24.8	24.0	23.0	22.1	21.5	19.9	18.4	19.8
18	17.7	16.3	16.0	16.5	15.6	16.2	19.0	20.6	22.5	24.8	27.1	28.3	29.4	30.4	30.8	31.6	31.5	31.2	30.2	28.6	26.8	25.7	24.0	22.4	24.3
19	21.2	21.8	21.0	19.9	20.1	21.2	22.7	24.6	26.3	28.4	29.4	30.5	31.4	32.4	32.8	33.1	32.4	30.7	29.3	26.9	24.8	23.0	21.4	19.6	26.0
20	18.1	17.1	16.7	16.4	16.3	16.4	16.5	16.8	17.4	18.3	19.2	21.0	22.2	23.4	24.5	24.9	24.7	24.5	23.6	21.8	19.4	17.6	16.5	16.3	19.6
21	16.1	15.9	15.6	15.2	14.5	13.9	13.9	14.1	15.1	16.2	17.3	18.4	18.9	19.9	20.6	20.9	21.4	21.6	21.0	18.0	16.3	15.7	15.2	15.1	17.1
22	14.9	14.6	14.4	14.0	13.8	13.9	14.0	14.6	15.2	16.5	18.5	18.9	19.5	20.2	20.6	21.7	21.6	21.3	21.0	19.2	16.9	15.6	15.1	14.0	17.1
23	13.7	13.7	13.8	12.9	13.1	13.7	14.7	15.6	16.5	18.1	19.2	20.8	21.2	22.3	23.0	23.7	22.7	22.2	22.4	21.1	19.4	17.6	16.3	16.1	18.1
24	15.6	14.9	14.2	13.1	12.3	12.6	13.3	15.2	16.3	17.2	18.2	18.8	19.8	20.5	21.3	21.0	20.8	20.5	19.7	19.0	18.7	18.2	16.4	15.9	17.2
25	15.9	15.9	15.7	14.7	13.9	13.7	13.4	13.6	13.5	12.7	13.0	13.9	15.4	17.2	16.8	16.8	17.7	17.3	16.7	16.0	15.1	14.5	14.2	13.8	15.1
26	13.7	13.6	13.4	13.1	13.0	13.1	13.7	14.4	15.0	15.2	15.8	17.1	18.5	19.1	20.0	16.3	15.5	14.6	14.9	14.0	12.7	12.6	12.1	11.8	14.7
27	11.3	11.4	11.5	11.5	11.2	10.7	11.4	12.0	13.3	14.2	16.1	17.0	18.3	19.4	19.8	20.3	20.9	21.2	20.7	19.1	18.5	17.1	17.0	15.0	15.8
28	13.5	13.6	13.7	13.6	12.7	12.9	14.3	16.5	17.9	19.6	21.1	22.4	23.6	24.5	25.1	25.4	25.2	25.0	24.4	22.7	21.2	20.3	18.0	16.6	19.3
29	15.7	14.9	14.3	14.1	13.6	14.1	16.6	19.2	21.2	23.3	25.3	26.5	28.1	29.5	30.2	30.7	30.7	30.1	28.8	26.7	25.7	24.7	22.6	21.9	22.8
30	19.3	17.5	16.5	16.1	16.2	16.5	17.8	20.8	22.8	25.4	27.6	29.2	31.1	32.2	33.0	33.5	33.4	32.5	30.8	28.8	26.0	25.4	23.7	21.0	24.9
31	20.0	19.5	20.2	20.4	20.7	20.4	21.9	23.5	25.1	26.9	28.7	29.8	31.5	32.3	33.1	33.2	33.2	32.7	31.2	28.5	25.6	24.6	23.6	22.0	26.2

MONTHLY AVERAGE = 20.57

BAROMETRIC PRESSURE FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF JULY , 2015

IN INCHES HG

DAY	HOUR ENDING										NOTE: ALL TIMES ARE PST!														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	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2
2	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
3	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1
4	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.9	28.9	29.0	29.0	29.0	29.0	29.0
5	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.0
6	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.1	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.1
7	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1
8	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	29.0
9	29.0	29.0	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	29.0	28.9
10	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
11	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
12	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2
13	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
14	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2
15	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
16	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
17	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.2	29.2	29.2	29.2	29.2	29.2
18	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
19	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.1
20	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.2	29.2	29.1	29.2
21	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.1	29.1	29.1	29.1
22	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1
23	29.1	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.1
24	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
25	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
26	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
27	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.3
28	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.3	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4
29	29.4	29.3	29.3	29.3	29.3	29.3	29.3	29.4	29.4	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3
30	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
31	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2

MONTHLY AVERAGE = 29.16

IN INCHES

MONTHLY TOTAL = 0.17

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JULY , 2015

IN MPH/DIR

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

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF AUGUST , 2015

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	
NOTE: ALL TIMES ARE PST!																									
1	7.4	9.7	6.8	5.6	4.9	2.5	2.6	1.9	2.9	4.2	5.2	5.7	7.7	10.2	9.6	8.2	7.6	8.3	10.0	7.8	9.3	10.0	12.5	8.1	7.0
2	10.5	10.0	3.4	1.7	3.1	3.7	1.7	4.6	2.8	3.4	2.9	3.8	6.6	7.6	4.4	3.2	4.1	4.4	2.5	2.1	4.3	4.8	7.3	5.3	4.5
3	7.3	3.6	3.0	3.0	4.2	4.4	4.3	3.3	1.9	2.7	4.6	4.0	5.1	5.4	5.6	7.9	7.2	6.9	7.7	10.3	7.8	4.4	3.9	2.7	5.0
4	2.4	2.9	3.4	4.4	5.0	6.3	5.5	5.7	5.6	5.7	4.9	6.3	6.2	7.0	8.7	9.1	6.8	5.2	7.7	10.9	5.0	2.2	2.1	2.5	5.5
5	2.0	2.7	3.6	4.6	3.3	3.5	4.5	5.3	7.3	7.1	8.0	8.8	7.1	7.6	7.4	9.1	9.4	8.7	14.7	14.6	13.9	10.4	6.6	7.7	7.4
6	3.6	4.8	4.5	2.7	4.5	4.7	2.8	3.5	1.4	2.1	2.8	4.0	5.5	4.8	5.7	6.0	8.5	8.5	7.7	6.5	5.9	5.7	6.5	8.6	5.0
7	10.5	8.6	7.9	4.5	3.6	3.1	1.5	1.9	2.7	7.5	6.6	8.3	8.1	7.8	8.2	9.6	9.8	9.4	8.7	7.2	8.9	12.2	9.5	8.5	7.3
8	3.0	5.6	4.8	3.9	4.0	5.2	4.9	5.3	6.3	6.5	4.9	6.6	6.8	9.3	10.9	10.4	8.4	8.8	8.4	8.5	3.2	3.2	3.1	3.3	6.0
9	3.0	3.9	3.7	3.1	2.3	2.2	1.8	3.2	3.9	3.8	3.5	4.3	5.1	8.1	7.4	8.5	7.8	5.2	5.3	3.8	5.3	1.2	2.9	2.7	4.3
10	3.9	1.4	3.4	2.9	3.6	4.6	4.5	4.6	3.0	3.0	5.1	5.4	6.5	8.1	7.4	7.8	8.9	7.8	6.0	5.7	2.6	4.8	2.2	3.7	4.9
11	6.0	7.0	4.3	6.2	7.7	8.3	8.4	12.4	12.8	12.7	11.9	12.2	10.0	7.6	6.6	9.5	10.4	7.2	8.3	8.2	5.9	1.5	4.4	4.9	8.1
12	3.1	2.1	2.2	2.6	6.6	3.0	2.5	2.1	5.2	4.7	11.4	5.0	7.9	4.2	5.3	6.4	4.8	7.0	2.0	4.2	5.5	5.2	1.4	5.4	4.6
13	2.6	2.4	4.7	3.9	5.4	3.9	4.1	4.5	3.7	2.9	3.4	4.4	5.7	7.1	7.7	9.9	7.3	6.6	5.4	4.1	3.1	2.2	2.8	3.8	4.6
14	3.4	4.7	4.2	5.2	6.7	7.7	5.2	5.3	4.7	5.7	6.1	8.1	9.4	12.5	13.8	9.5	6.8	8.7	9.7	8.9	9.2	8.9	9.7	9.3	7.6
15	8.7	7.2	7.5	7.4	5.3	6.1	6.7	4.8	5.7	7.0	6.4	6.4	3.1	3.7	6.8	8.8	9.3	6.6	4.1	9.6	5.4	7.9	8.3	10.4	6.8
16	10.4	6.5	7.5	6.6	8.6	5.2	2.0	2.3	2.0	5.0	7.1	8.0	8.6	7.5	7.2	9.1	8.1	6.5	7.5	6.7	2.9	2.0	5.4	8.9	6.3
17	11.6	7.0	4.2	1.7	1.2	0.2	0.9	1.7	1.7	4.9	7.6	6.4	7.7	7.2	6.5	6.9	7.6	7.5	7.9	7.6	4.8	3.8	2.5	1.8	5.0
18	1.9	3.0	3.6	3.2	4.2	3.7	4.2	4.4	3.6	4.6	5.8	6.6	8.5	9.2	8.5	8.5	8.2	6.4	4.8	5.5	9.2	8.8	4.0	0.8	5.5
19	1.9	1.3	2.5	3.9	3.8	3.2	1.8	1.9	2.3	4.0	4.2	8.6	8.6	9.1	7.4	6.5	7.4	4.2	4.6	8.2	6.9	6.9	8.2	4.8	5.1
20	5.7	3.6	6.8	5.8	6.7	5.5	9.2	7.8	8.1	5.5	4.0	5.8	6.4	8.4	9.0	7.7	9.0	7.5	9.0	8.5	7.3	6.5	9.1	6.4	7.1
21	7.8	8.6	8.1	9.1	7.6	6.9	4.3	6.7	8.5	7.1	7.0	7.6	5.9	5.1	5.6	4.7	4.2	5.2	4.6	3.2	2.2	2.5	1.4	3.2	5.7
22	2.6	2.0	3.1	3.9	3.7	2.3	2.4	1.4	2.2	2.3	2.9	5.7	5.9	5.0	7.9	8.9	8.6	6.5	5.3	7.4	10.4	11.1	8.5	8.4	5.4
23	8.5	4.9	5.1	2.9	1.8	1.4	4.1	2.1	2.4	2.7	3.5	3.2	4.3	5.0	6.3	7.0	6.4	5.0	5.1	4.1	8.7	9.3	6.7	4.8	4.8
24	4.3	5.4	3.2	1.7	3.5	3.6	4.8	5.1	4.3	3.0	4.1	5.4	5.6	5.1	7.7	7.2	5.5	5.7	2.5	9.6	11.8	11.1	10.0	8.1	5.8
25	6.9	8.4	8.0	7.6	6.4	3.4	3.9	3.7	7.8	8.3	7.1	8.6	8.6	6.7	7.5	9.4	9.7	9.2	7.2	6.2	6.8	8.4	9.8	10.8	7.5
26	7.9	6.0	5.9	2.9	1.8	1.3	0.7	1.6	2.3	3.3	3.6	3.9	6.3	5.8	6.0	5.9	6.2	5.8	5.1	4.6	5.5	4.3	2.9	2.3	4.3
27	4.3	3.5	5.7	6.5	6.7	5.6	4.9	5.1	3.1	2.5	3.0	5.0	4.6	4.8	6.4	6.5	5.4	4.1	2.3	2.2	2.5	5.5	3.3	5.2	4.5
28	6.5	3.1	5.3	7.2	6.3	7.2	5.5	4.4	4.1	3.3	4.6	3.7	4.5	7.9	7.3	6.9	5.6	5.9	7.0	7.6	6.5	9.0	6.8	4.6	5.9
29	3.3	3.7	5.0	2.7	11.2	5.5	8.3	10.0	13.3	21.9	21.0	23.7	23.0	22.0	18.7	13.0	11.6	12.1	4.6	5.1	8.7	4.4	4.9	7.8	11.1
30	5.1	4.2	2.5	4.0	3.7	5.0	7.8	7.6	7.6	9.1	11.7	5.8	11.6	12.6	11.1	8.9	7.5	8.8	9.8	7.0	6.5	6.8	6.6	7.9	7.5
31	10.7	9.9	16.0	11.3	7.7	8.9	4.1	4.4	*****																9.1

MONTHLY AVERAGE = 6.04

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF AUGUST , 2015

IN DEGREES

(MEASURED CLOCKWISE FROM NORTH)
HOUR ENDING **NOTE: ALL TIMES ARE PST!**

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	34.	41.	40.	44.	19.	32.	36.	272.	345.	45.	284.	351.	287.	22.	18.	335.	345.	329.	330.	357.	25.	21.	18.	30.	153.	
2	23.	27.	18.	100.	42.	30.	161.	187.	178.	248.	226.	277.	287.	270.	257.	250.	233.	184.	142.	62.	359.	24.	35.	41.	152.	
3	36.	68.	174.	228.	194.	171.	151.	182.	132.	252.	243.	221.	172.	204.	242.	253.	252.	282.	270.	249.	244.	246.	254.	254.	207.	
4	269.	183.	160.	159.	172.	169.	176.	189.	173.	150.	186.	195.	216.	253.	284.	252.	250.	266.	255.	254.	254.	214.	256.	252.	216.	
5	190.	130.	146.	158.	164.	138.	124.	153.	170.	222.	216.	234.	233.	222.	230.	267.	271.	287.	23.	27.	32.	44.	55.	38.	157.	
6	87.	151.	100.	85.	98.	109.	69.	38.	38.	274.	312.	345.	341.	332.	8.	11.	3.	338.	325.	349.	1.	37.	43.	33.	147.	
7	32.	35.	35.	36.	19.	48.	184.	243.	314.	35.	18.	323.	2.	330.	345.	320.	323.	337.	360.	352.	22.	33.	34.	39.	159.	
8	132.	134.	138.	156.	185.	204.	171.	161.	190.	179.	195.	189.	217.	246.	256.	254.	253.	255.	264.	250.	231.	208.	145.	111.	197.	
9	96.	143.	170.	182.	148.	112.	91.	175.	89.	323.	173.	264.	291.	282.	293.	298.	303.	326.	321.	1.	41.	194.	44.	121.	187.	
10	137.	86.	121.	142.	205.	212.	132.	153.	220.	276.	325.	317.	330.	302.	323.	318.	304.	335.	13.	26.	342.	40.	98.	69.	201.	
11	39.	44.	31.	16.	23.	22.	28.	14.	13.	16.	26.	29.	39.	45.	3.	11.	14.	350.	350.	4.	24.	27.	29.	43.	52.	
12	57.	79.	18.	65.	14.	63.	142.	45.	24.	264.	288.	225.	260.	308.	275.	285.	326.	277.	332.	96.	133.	212.	49.	140.	166.	
13	154.	132.	193.	260.	225.	177.	199.	199.	208.	191.	221.	237.	271.	271.	280.	292.	310.	320.	300.	295.	354.	228.	239.	268.	243.	
14	237.	213.	148.	137.	147.	172.	144.	173.	164.	143.	202.	216.	191.	206.	205.	184.	174.	176.	179.	178.	167.	168.	160.	150.	176.	
15	155.	152.	150.	150.	144.	144.	154.	148.	155.	177.	183.	207.	45.	54.	38.	26.	27.	17.	14.	22.	15.	27.	40.	32.	95.	
16	30.	43.	28.	17.	22.	51.	48.	41.	18.	30.	28.	356.	347.	338.	355.	4.	356.	356.	311.	319.	353.	46.	42.	29.	149.	
17	22.	25.	23.	40.	296.	11.	155.	241.	283.	294.	281.	1.	352.	341.	349.	2.	19.	334.	344.	20.	35.	21.	60.	51.	150.	
18	27.	18.	51.	24.	26.	20.	32.	30.	52.	36.	37.	20.	20.	21.	6.	19.	6.	355.	322.	309.	34.	30.	41.	230.	73.	
19	302.	41.	29.	30.	41.	149.	178.	240.	192.	227.	296.	359.	13.	317.	351.	296.	263.	252.	299.	33.	32.	42.	43.	205.	176.	
20	244.	222.	188.	143.	150.	151.	190.	200.	222.	205.	273.	276.	240.	248.	278.	274.	256.	261.	256.	238.	233.	226.	189.	184.	223.	
21	172.	180.	184.	185.	189.	181.	137.	156.	185.	200.	184.	192.	177.	191.	194.	247.	312.	296.	297.	5.	40.	104.	123.	113.	177.	
22	129.	63.	138.	183.	203.	352.	19.	26.	343.	29.	4.	286.	281.	343.	28.	11.	342.	328.	318.	39.	31.	29.	38.	33.	150.	
23	30.	32.	54.	59.	48.	8.	302.	25.	211.	246.	258.	310.	287.	284.	277.	274.	255.	269.	310.	7.	37.	34.	45.	96.	157.	
24	142.	193.	219.	145.	178.	180.	167.	156.	185.	234.	232.	218.	224.	270.	265.	270.	276.	349.	7.	27.	26.	27.	30.	36.	169.	
25	43.	37.	40.	41.	46.	196.	189.	202.	17.	15.	12.	356.	350.	356.	10.	3.	352.	346.	334.	10.	39.	32.	34.	33.	129.	
26	45.	33.	48.	58.	71.	14.	28.	349.	358.	35.	24.	14.	269.	296.	283.	281.	273.	274.	293.	334.	32.	57.	60.	65.	150.	
27	52.	129.	152.	154.	168.	170.	164.	194.	238.	247.	284.	274.	275.	285.	275.	287.	287.	241.	141.	112.	163.	204.	155.	199.	202.	
28	198.	178.	214.	236.	182.	132.	130.	139.	147.	204.	271.	249.	279.	280.	316.	343.	354.	5.	18.	31.	5.	36.	56.	25.	168.	
29	33.	77.	105.	240.	251.	158.	138.	190.	188.	190.	187.	213.	204.	205.	206.	189.	182.	197.	159.	146.	267.	173.	169.	214.	178.	
30	168.	153.	149.	167.	159.	175.	142.	145.	160.	173.	188.	192.	220.	216.	224.	200.	147.	210.	186.	174.	162.	164.	157.	160.	175.	
31	159.	159.	183.	150.	146.	161.	111.	126.	*****																	149.

MONTHLY AVERAGE = 164.27

SIGMA THETA FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF AUGUST , 2015

IN DEGREES

DAY											HOUR ENDING	NOTE: ALL TIMES ARE PST!														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	7.5	9.2	9.0	13.1	16.0	22.1	16.6	43.3	34.1	29.8	22.1	40.5	28.3	17.9	15.9	18.8	23.2	13.0	9.3	9.4	10.4	14.1	10.3	10.7	18.5	
2	12.8	15.1	46.4	24.3	38.7	10.5	38.5	14.1	39.3	70.3	51.8	39.3	16.2	15.2	37.6	31.2	22.7	12.6	12.8	10.4	12.4	21.5	10.2	37.8	26.7	
3	11.5	42.4	45.5	36.0	17.8	11.2	16.4	17.1	23.6	41.5	25.9	32.1	39.9	32.1	34.8	18.4	24.8	16.6	13.8	7.1	9.1	13.1	10.2	13.6	23.1	
4	16.3	18.5	12.5	6.1	8.1	5.2	10.0	12.5	19.1	33.8	35.3	42.1	30.4	31.9	22.8	21.4	21.6	19.2	11.6	7.4	16.4	28.6	21.5	19.1	19.6	
5	20.5	36.6	9.0	10.6	16.3	17.3	11.7	18.8	19.5	19.8	21.6	22.0	25.3	20.3	27.2	18.4	13.9	43.5	11.3	12.2	13.4	11.9	13.6	12.3	18.6	
6	12.2	10.8	11.0	16.0	12.7	10.7	11.6	9.8	23.5	35.6	45.1	36.7	31.7	42.5	31.4	18.2	21.2	17.2	14.6	8.4	17.3	11.1	9.7	7.2	19.4	
7	8.4	10.1	8.7	9.1	14.5	11.2	36.0	31.3	34.1	16.5	26.0	21.9	30.9	23.1	25.9	20.9	16.0	12.8	13.7	12.5	12.2	9.5	8.9	10.1	17.7	
8	35.5	7.0	7.5	13.4	13.7	8.0	9.0	9.0	12.9	15.6	39.4	35.2	31.9	31.3	16.2	10.4	12.1	11.2	15.0	12.4	16.2	18.9	20.2	28.1	17.9	
9	21.4	32.0	13.7	12.3	19.0	13.8	20.6	36.0	28.4	35.2	60.6	59.4	48.6	31.7	28.5	20.5	17.3	14.4	8.8	10.9	15.6	31.6	31.4	30.7	26.8	
10	23.7	35.0	10.4	12.2	11.6	9.0	17.3	22.7	48.5	44.3	31.8	37.7	59.1	28.7	35.8	32.2	16.9	19.7	10.6	10.2	45.2	19.0	39.0	20.0	26.7	
11	13.6	12.1	22.7	12.7	11.1	10.4	9.8	10.3	10.7	12.0	14.6	13.0	18.6	14.1	21.3	18.1	15.3	16.3	11.3	9.5	8.9	42.6	16.2	12.9	14.9	
12	17.2	18.9	8.3	30.0	38.8	36.5	32.8	48.9	42.7	31.0	20.5	39.3	15.4	24.0	25.1	20.5	32.5	13.4	7.1	7.4	18.5	19.8	27.6	19.8	24.8	
13	17.5	21.2	10.6	20.3	8.1	13.9	16.3	23.2	35.5	45.3	32.2	56.1	31.4	21.6	22.8	17.2	20.0	11.6	10.0	6.0	12.7	39.3	18.6	12.4	21.8	
14	12.0	13.2	26.1	14.5	10.3	14.6	18.5	17.8	19.5	13.1	16.1	14.3	9.8	10.6	12.6	15.7	14.2	10.0	8.6	11.3	10.9	10.4	8.4	8.8	13.4	
15	6.3	7.7	6.8	7.3	7.4	7.5	7.6	12.3	11.8	13.4	16.1	24.2	34.9	21.4	13.7	10.1	10.8	11.2	11.6	9.1	25.6	11.6	8.5	7.8	12.7	
16	9.6	17.8	16.0	18.4	17.9	22.7	21.8	33.3	45.3	28.1	21.6	22.8	24.5	21.0	25.0	23.0	20.1	19.9	7.1	6.0	23.5	20.8	13.5	9.4	20.4	
17	6.9	11.9	18.5	24.0	22.2	13.9	23.2	26.8	51.4	29.1	19.8	38.3	29.9	25.6	36.6	29.8	16.1	13.3	11.0	10.9	12.0	40.8	25.1	24.3	23.4	
18	11.8	9.7	21.8	6.8	8.1	7.1	14.8	16.1	23.9	30.6	15.5	29.7	34.3	18.4	19.4	13.7	18.6	20.8	19.9	21.2	11.0	9.2	12.1	21.1	17.3	
19	28.0	9.1	9.4	7.6	22.5	25.4	48.4	51.6	41.7	46.6	35.0	34.7	20.4	17.3	28.9	32.7	19.1	23.5	14.3	12.0	18.9	27.4	11.6	28.6	25.6	
20	9.8	15.3	8.9	9.5	8.3	11.6	11.3	13.3	10.1	19.4	29.5	25.7	36.5	25.8	18.4	25.8	15.9	17.6	8.9	7.2	7.5	8.5	8.2	10.5	15.2	
21	11.8	12.1	10.6	10.9	9.4	10.6	13.4	13.4	12.5	12.4	13.4	14.6	20.2	37.4	31.3	42.5	41.2	20.0	12.5	11.4	9.6	23.0	38.7	22.3	19.0	
22	27.3	36.2	14.2	15.9	16.8	18.1	14.4	14.4	21.6	44.2	32.0	21.3	26.0	58.5	30.2	14.9	15.8	14.6	19.5	14.9	8.0	8.3	8.6	10.2	21.1	
23	8.4	9.6	12.7	8.9	15.5	12.8	7.9	36.2	39.4	31.7	30.3	40.9	31.4	22.7	17.9	12.7	11.4	7.4	4.5	13.8	8.4	9.4	9.6	11.2	17.3	
24	13.4	6.1	23.3	30.4	6.7	8.6	10.4	14.7	29.7	39.0	39.3	28.5	34.3	41.1	18.9	20.7	28.1	16.8	16.3	8.8	8.7	8.9	11.1	10.3	19.7	
25	12.4	9.9	9.4	9.2	10.5	24.5	18.6	24.4	21.5	14.4	22.3	25.6	24.1	31.5	22.6	16.5	12.8	13.4	12.9	12.2	9.3	10.1	7.6	8.0	16.0	
26	8.7	9.5	8.3	10.2	11.0	17.6	16.5	33.9	35.4	26.4	34.2	37.3	21.0	33.0	25.5	17.2	14.1	7.3	9.3	12.6	9.4	16.5	22.1	15.7	18.9	
27	8.8	22.0	14.2	5.3	8.9	10.9	10.1	12.3	27.1	49.7	41.8	38.3	35.4	41.4	23.3	18.5	16.8	21.7	15.7	28.5	24.5	11.2	45.2	26.6	23.3	
28	10.6	13.5	11.9	10.9	14.2	8.4	14.1	25.3	22.8	40.7	32.5	36.2	54.5	20.9	19.0	17.5	15.7	15.7	11.4	12.1	22.2	16.1	11.2	30.9	20.3	
29	44.7	37.8	37.2	58.3	24.3	27.4	17.3	11.3	11.6	9.7	9.8	10.3	10.6	11.3	12.8	11.6	11.9	9.2	13.5	9.3	13.8	33.0	21.4	14.3	19.7	
30	18.9	14.4	17.1	14.4	28.4	19.2	13.0	11.4	12.3	12.9	11.2	21.9	13.8	12.2	15.2	16.1	13.1	15.9	10.6	9.2	8.3	7.7	7.2	6.6	13.8	
31	6.6	7.3	12.8	11.4	12.3	11.3	27.6	40.4	*****															16.2		

MONTHLY AVERAGE = 19.75

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF AUGUST , 2015

IN DEGREES C

DAY											HOUR ENDING	NOTE: ALL TIMES ARE PST!																		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	20.7	20.2	19.7	18.5	18.1	18.6	19.1	20.7	22.6	24.7	26.0	28.4	29.6	30.9	31.4	32.2	32.2	31.2	29.5	27.7	25.8	24.1	23.6	22.1	24.9					
2	22.6	21.6	20.0	18.9	17.4	16.6	18.2	19.1	21.3	22.3	24.8	26.6	26.7	26.8	27.4	28.5	28.3	27.8	26.9	25.7	24.7	23.6	22.8	22.2	23.4					
3	21.3	21.2	20.6	20.2	18.3	17.2	17.4	18.0	18.7	19.7	21.1	22.2	23.7	24.9	25.9	26.3	26.3	26.4	25.9	23.5	21.1	19.4	18.3	17.5	21.5					
4	16.7	15.6	14.8	14.4	14.1	13.5	14.1	14.7	16.0	17.4	19.0	20.8	22.2	23.0	24.1	23.7	23.9	23.8	23.2	20.6	18.5	17.3	16.5	15.6	18.5					
5	14.8	13.7	13.0	12.4	12.0	12.3	13.1	13.9	14.9	15.4	16.7	18.4	19.5	20.5	21.2	21.4	20.6	19.7	16.3	14.9	14.4	14.4	14.6	14.5	15.9					
6	14.4	14.0	12.9	12.9	12.7	12.9	13.3	13.9	15.6	17.0	18.2	19.3	20.4	21.0	22.5	22.3	22.8	22.5	21.6	19.9	18.8	17.1	16.6	15.6	17.4					
7	14.6	13.7	13.1	12.7	12.3	12.1	14.4	16.3	18.8	20.2	22.0	23.4	24.6	25.4	26.1	26.0	26.0	25.4	24.3	22.9	21.1	19.7	18.6	18.0	19.7					
8	17.1	16.6	15.6	15.3	15.6	15.3	15.0	15.2	15.7	16.5	18.5	21.7	22.7	23.1	22.7	22.5	22.2	21.1	19.8	18.2	17.1	17.1	16.8	16.5	18.2					
9	16.2	15.9	15.6	15.6	15.2	15.3	16.9	17.6	19.2	19.6	21.8	23.0	24.5	25.4	25.9	26.4	26.3	26.1	25.1	23.6	21.4	20.5	19.2	18.2	20.6					
10	17.6	17.7	18.0	18.1	17.4	16.7	16.2	17.5	19.6	21.8	23.7	25.3	26.5	27.0	27.6	27.8	27.7	27.0	25.4	23.9	22.6	21.0	19.8	18.7	21.9					
11	17.8	17.2	16.8	16.3	16.3	16.6	17.7	18.4	20.0	21.4	22.2	24.0	25.6	26.5	27.8	28.5	28.3	27.7	26.3	24.9	23.9	23.2	21.6	20.3	22.0					
12	19.5	19.5	19.8	18.9	18.2	17.8	19.1	21.0	23.3	24.3	22.9	23.7	23.6	24.2	26.0	26.6	27.0	26.3	25.8	24.4	24.1	22.9	21.6	20.7	22.6					
13	20.5	20.5	18.2	17.7	16.0	15.5	15.6	15.6	16.2	17.1	19.4	22.4	24.5	26.0	26.9	27.4	27.1	26.9	26.0	24.1	23.0	21.7	20.3	18.5	21.1					
14	17.5	16.5	15.9	15.8	15.8	15.7	15.8	16.1	16.6	16.8	16.1	16.2	15.8	15.4	14.9	14.8	14.6	14.5	14.5	14.6	14.5	14.4	14.0	13.8	15.4					
15	13.7	13.7	13.7	13.7	13.4	13.4	13.9	14.3	15.1	15.7	16.7	17.2	17.5	18.1	17.8	17.6	18.2	17.9	17.5	16.4	15.6	15.3	14.9	15.1	15.7					
16	14.7	13.8	13.6	13.7	13.6	12.9	13.5	15.1	17.2	18.5	19.8	20.8	21.9	22.0	22.7	22.8	22.8	22.2	20.9	19.0	18.6	17.3	16.4	16.0	17.9					
17	16.1	16.0	15.9	14.8	13.6	13.4	14.7	16.3	18.3	19.9	21.2	23.2	24.2	25.2	25.8	26.1	25.6	25.0	23.4	21.6	20.1	18.6	17.2	17.0	19.7					
18	17.1	16.2	14.7	14.9	14.2	14.5	14.9	16.6	19.0	21.1	22.9	24.7	26.1	27.3	28.1	28.7	28.9	28.4	27.4	25.2	23.9	23.1	21.7	20.5	21.7					
19	19.7	19.0	18.6	18.0	16.6	17.5	18.7	20.5	22.1	23.9	25.9	27.2	28.8	29.9	30.3	30.6	30.4	30.0	28.4	25.6	23.4	21.4	19.5	18.8	23.5					
20	17.5	16.4	16.0	15.7	15.2	14.8	14.7	14.6	14.7	15.2	16.1	17.7	19.3	20.6	21.0	21.3	21.0	20.6	19.3	17.6	16.5	15.2	14.4	14.0	17.1					
21	13.6	13.5	13.4	13.3	13.2	13.2	13.3	13.7	14.3	14.7	15.2	15.9	16.4	17.8	18.9	20.2	20.5	20.5	19.6	17.9	16.8	16.0	15.7	14.5	15.9					
22	14.0	13.1	12.7	11.9	11.5	11.7	12.1	13.4	15.3	17.5	19.6	21.2	22.8	25.1	25.9	26.3	25.9	25.0	23.2	21.4	20.2	19.5	18.0	17.1	18.5					
23	15.6	14.8	14.6	15.4	15.9	15.1	15.1	15.5	17.5	19.1	21.1	22.9	24.4	25.1	25.6	25.7	25.6	24.7	23.5	22.0	19.6	18.4	17.2	16.7	19.6					
24	16.3	15.2	14.7	13.7	13.0	12.7	12.6	13.6	15.3	16.8	18.5	20.0	21.2	22.1	22.5	22.9	23.1	21.8	20.5	18.5	17.0	15.9	15.0	14.2	17.4					
25	13.5	13.5	13.1	12.7	12.4	11.3	12.0	13.5	16.9	18.5	20.0	21.5	22.4	23.4	24.0	23.9	23.6	22.9	21.5	20.1	18.4	17.8	16.7	15.4	17.9					
26	14.7	14.2	14.1	14.0	14.2	14.6	14.3	15.9	17.9	19.5	22.0	23.6	24.6	25.5	26.5	26.7	26.9	26.1	24.8	23.0	21.3	20.2	19.9	18.8	20.1					
27	17.7	17.9	17.4	17.2	16.8	16.0	16.9	18.2	19.6	21.6	23.6	24.8	25.9	27.4	27.9	27.6	27.2	26.5	25.4	24.0	22.8	21.6	21.3	20.8	21.9					
28	20.1	19.6	18.6	17.7	16.3	14.7	15.4	16.5	17.4	19.5	20.2	20.6	22.2	22.1	22.1	21.8	21.7	21.2	20.7	20.3	19.8	19.4	18.7	17.8	19.4					
29	17.8	17.0	16.9	16.6	16.0	15.5	16.0	17.5	18.2	19.9	19.9	18.6	18.2	20.4	20.4	17.5	17.0	17.2	16.5	17.0	15.5	13.9	13.9	13.4	17.1					
30	12.9	12.8	12.9	13.0	12.9	12.4	11.9	12.0	12.4	14.1	14.9	15.0	16.4	17.4	17.8	16.2	16.2	17.1	16.5	15.6	14.6	14.2	14.1	14.1	14.5					
31	14.5	14.7	15.1	14.8	14.3	14.9	14.0	13.9	*****															14.5						

MONTHLY AVERAGE = 19.32

BAROMETRIC PRESSURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF AUGUST , 2015

IN INCHES HG

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	29.2	29.2	29.2	29.2	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.1
3	29.0	29.0	29.1	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1
4	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.1
5	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
6	29.2	29.2	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
7	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1
8	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
9	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
10	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1
11	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1
12	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.1
13	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
14	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.2
15	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
16	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.4
17	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3
18	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2
19	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1
20	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
21	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1
22	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2
23	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
24	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
25	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.2	29.2	29.1	29.1	29.1	29.2
26	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2
27	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.1	29.2
28	29.1	29.1	29.1	29.1	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	28.9	28.9	28.8	29.1
29	28.8	28.8	28.8	28.7	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	29.0	28.9	28.9	28.8
30	28.9	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.1
31	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	29.1

MONTHLY AVERAGE = 29.14

PRECIPITATION FOR CEDAR HILLS LANDFILL
 METEOROLOGICAL MONITORING SYSTEM FOR
 THE MONTH OF AUGUST , 2015

IN INCHES

DAY	HOUR ENDING												NOTE: ALL TIMES ARE PST!												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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.01	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
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	0.01	0.01	0.00	0.00	0.00	0.02
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00
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	0.01	0.09	0.16	0.12	0.08	0.12	0.08	0.03	0.01	0.00	0.00	0.00	0.70
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.02	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	0.00	0.02
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	0.00	0.00	0.00	0.00	0.00	0.00	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	0.02	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	0.00	0.00	0.02
29	0.00	0.00	0.01	0.01	0.08	0.21	0.03	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.05	0.04	0.01	0.00	0.00	0.01	0.12	0.12	0.15	0.20	1.08
30	0.08	0.00	0.01	0.01	0.12	0.20	0.05	0.00	0.02	0.00	0.00	0.10	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
31	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	*****															0.03	

MONTHLY TOTAL = 2.50

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF AUGUST , 2015

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

APPENDIX D

Area 5 Top Deck Report

CEDAR HILLS REGIONAL LANDFILL AREA 5 TOP DECK MONITORING REPORT

Third Quarter 2015



Department of Natural Resources and Parks
Solid Waste Division

November 2015
Printed on recycled paper

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AREA 5 TOP DECK MONITORING QUARTERLY REPORT

THIRD QUARTER 2015

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 currently experiencing technical issues with the leachate volume monitoring system for Area 5. Work is underway to resolve these issues and the logged data will be reported as it becomes available in subsequent Top Deck Monitoring Reports.

KCSWD staff continues to evaluate leachate volumes collected throughout the landfill that are pumped to the wastewater treatment plant. Comparisons of the historical volumes generated through typical landfill construction and closure with the phased closure and interim top deck cover utilized in Area 5 have been made. These comparisons provide an initial assessment of 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**CEDAR HILLS REGIONAL LANDFILL LEACHATE PRODUCTION for 3RD QUARTER of 2015**

Year	Leachate	Surface Area of Refuse Areas	Refuse In Place	Precipitation	Flow			
	(MG/yr)	(Acres)	(lbs)	(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	189.14	353.12*	57,638,062,970	64.07	535,631	8,360	0.0033	0.00005
2015	88.34	353.12*	58,959,542,970	25.78	250,170	9,704	0.0015	0.00006
2015: Precipitation, leachate and refuse in place through 3 RD Quarter of 2015								

* 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

KCSWD's plan for monitoring the surface of the Area 5 Top Deck is comprised of three components:

1. Landfill gas inspections, including a serpentine walk;
2. Leachate seep inspections; and,
3. 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

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

Also throughout the 3rd Quarter, Facility Engineering and Science (FESU) staff performed monthly Landfill Facility Site Inspections. These inspections are also included in Appendix A: *Inspection Reports*.

During the 3rd Quarter of 2015, no inspections were performed by Public Health – Seattle & King County (PHSKC).

Serpentine Walk

Each quarter, serpentine walks are conducted across the Area 5 Top Deck and its side slopes to verify that methane gas levels in the air column do not exceed air quality standards. The results from the 3rd Quarter Serpentine Surface Monitoring Data walk that was conducted from September 14th to the 22nd, 2015 can be found in Appendix B: *Gas Monitoring Reports*, along with a plot of GPS generated track lines.

For the 3rd Quarter of 2015, no exceedances were detected during the serpentine walk for air quality standards.

Leachate Seep Inspections

Visual inspections for leachate seeps are conducted each quarter by KCSWD personnel in conjunction with the surface emissions monitoring and monthly inspections. No indications of leachate seeps were recorded during the 3rd Quarter of 2015 by KCSWD staff, or by PHSKC 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 for Area 5 were measured on July 2nd, 2015. The survey data is given in Table 2, and the settlement at each point is given in Table 3.

As noted in Table 3, the average refuse settlement rate (measured in feet/month) for Area 5 continues to decline. For the approximate five month interval of February 9th, 2015 to July 2nd, 2015, the average rate was calculated to be 0.03 feet/month, versus 0.04 feet/month from the previous time period. This is approximately a 25% reduction in the settlement rate.

Also to note, no settlement due to erosion was observed in Area 5 during the 3rd Quarter of 2015.

Future plans for Area 5 are for continued filling to the approved 800 foot elevation. This filling will occur following the filling of Area 8, which was approved by the King County Council on Dec. 6th, 2010.

TABLE 2
CEDAR HILLS REGIONAL LANDFILL AREA 5 SURFACE SURVEY DATA for 3rd QUARTER of 2015

A5SM-1 ^a		A5SM-2		A5SM-3 ^b		PMX20074 ^c	
Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
10/4/2005	699.18	10/4/2005	785.17	2/14/2007	786.4	8/16/2007	781.56
2/1/2006	697.7	2/1/2006	782.52	4/20/2007	786.25	2/29/2008	780.1
6/27/2006	696.51	6/27/2006	780.48	7/24/2007	785.68	7/29/2008	779.13
2/14/2007	694.53	4/20/2007	776.95	2/29/2008	784.87	11/24/2008	778.21
7/24/2007	693.34	7/24/2007	775.63	7/29/2008	784.31	4/6/2009	777.41
2/29/2008	691.77	2/29/2008	773.44	11/24/2008	783.76	7/9/2009	776.99
7/29/2008	691.26	7/29/2008	772.2	4/6/2009	783.35	12/22/2009	776.1
11/24/2008	690.61	11/24/2008	771.29	7/9/2009	783.05	3/1/2010	775.81
4/6/2009	690.16	4/6/2009	770.35	12/22/2009	782.44	8/2/2010	775.29
7/9/2009	689.77	7/9/2009	769.79	3/1/2010	782.08	12/21/2010	774.79
12/22/2009	689.13	12/22/2009	768.6	8/2/2010	781.78	4/6/2011	774.42
3/1/2010	688.77	3/1/2010	768.05	12/21/2010	781.25	8/8/2011	774.19
8/2/2010	688.6	8/2/2010	767.28	4/6/2011	780.94	1/23/2012	773.79
12/21/2010	688.1	12/21/2010	766.53	8/8/2011	780.66	5/18/2012	773.41
4/6/2011	687.83	4/6/2011	765.86	1/23/2012	780.26	7/12/2012	773.26
8/8/2011	687.46	8/8/2011	765.34	5/18/2012	779.9	--	--
1/23/2012	687.19	1/23/2012	764.53	7/12/2012	779.69	--	--
5/18/2012	686.78	5/18/2012	763.99	11/2/2012	779.56	--	--
7/12/2012	686.69	7/12/2012	763.83	5/22/2013	779.09	--	--
11/2/2012	686.55	11/6/2012	763.35	9/5/2013	779.66	--	--
5/22/2013	686.09	5/22/2013	762.77	2/19/2014	777.68	--	--
--	--	8/8/2013	762.53	2/9/2015	777.63	--	--
--	--	2/19/2014	762.06	4/6/2015	777.51	--	--
--	--	2/9/2015	761.09	7/2/2015	777.38	--	--
--	--	4/6/2015	761.11			--	--
--	--	7/2/2015	760.96			--	--

^a A5SM-1 was destroyed by filling Area 7 during Lift 4.

^b A5SM-3 is NEW as of 2/14/2007.

^c PMX20074 was destroyed during Phase 3 of Area 6.

TABLE 3**CEDAR HILLS REGIONAL LANDFILL AREA 5 SETTLEMENT for 3rd QUARTER of 2015**

Settlement Monitoring Locations	Units	SETTLEMENT DATE RANGE (MM/YY)									
		6/06 - 7/07	7/07 - 7/08	7/08 - 7/09	7/09 - 8/10	8/10 - 8/11	8/11 - 7/12	7/12-5/13	5/13-2/14	2/14- 2/15	2/15-7/15
A5SM-1	Feet	3.17	2.08	1.49	1.17	1.14	0.77	0.60	N/A	N/A	N/A
A5SM-2	Feet	4.85	3.43	2.41	2.51	1.94	1.51	1.06	0.71	0.97	0.13
A5SM-3	Feet	N/A	1.37	1.26	1.27	1.12	0.97	0.60	1.41	0.05	0.25
PMX2007-4	Feet	N/A	2.43	2.14	1.7	1.1	0.93	N/A	N/A	N/A	N/A
Average Settlement for Area 5	Feet/Date Range	4.01	2.33	1.83	1.66	1.33	1.05	0.75	1.06	0.51	0.19
	Feet/Month	0.31	0.19	0.15	0.13	0.11	0.1	0.19	0.11	0.04	0.03

III. STORMWATER & LEACHATE MONITORING

Collection of Stormwater & Leachate Samples

Samples were collected at stormwater sample location SW-S1, and leachate sample location LS-API during the 3rd Quarter of 2015. However, no samples were collected from the Area 5 Top Deck stormwater monitoring stations SW-A5TD1, SW-A5TD2, SW-A5TD4, SW-A5TD6 as there was no flow when the stations were checked. Therefore, no comparisons can be made with the stormwater or leachate samples, nor can a review be performed for evaluating exceedances for the 3rd Quarter of 2015.

IV. CONCLUSION

Stormwater samples for the Area 5 Top Deck were not able to be collected during the 3rd Quarter of 2015 due to 'No Flow' conditions when the sampling stations were checked. This observation was in line with the overall regional precipitation levels for the quarter, which were substantially lower than historical levels. Therefore, no determinations can be made regarding Area 5's stormwater runoff during the 3rd Quarter of 2015 with respect to exceedances of water quality criteria or benchmarks, nor can comparisons be made with background stormwater flow (from SW-S1), and leachate effluent (from LS-API).

Inspection reports however showed no issues with the interim cover system for Area 5. Additionally, Area 5 continues to settle at a declining rate, without any indication of major differential settling, nor signs of surficial erosion.

Regardless of the absence of stormwater runoff sampling results from Area 5 in the 3rd Quarter of 2015, the recent compliant historical performance trend for Area 5, coupled with on-going inspection results verifying the integrity of the cover all provides evidence that the Area 5 Top Deck Interim Cover System continues to function to prevent interaction between refuse and stormwater.

Figures



LEGEND:

○ ACTIVE MONITORING STATION

AERIAL FLOWN SEPTEMBER 2014

DATE	REVISION	BY



KING COUNTY DEPARTMENT OF
NATURAL RESOURCES AND PARKS
SOLID WASTE DIVISION

CEDAR HILLS REGIONAL LANDFILL
SETTLEMENT MONITORING LOCATIONS

APPROVED VOO DATE Feb 2014
RECOMMENDED _____ DATE _____
DESIGNED _____ DRAWN _____
PROJECT NO. _____ SURVEY NO. _____ SHEET 1 OF 1
S:\CAD\CEDARHILL\annual report monitoring\settl\CH annual settlements 2014.dwg

P:\ACAD\PROJECT\King County Expansion Proposal\CARLA WORK\Figure 1.dwg Aug 01, 2007 - 3:18pm

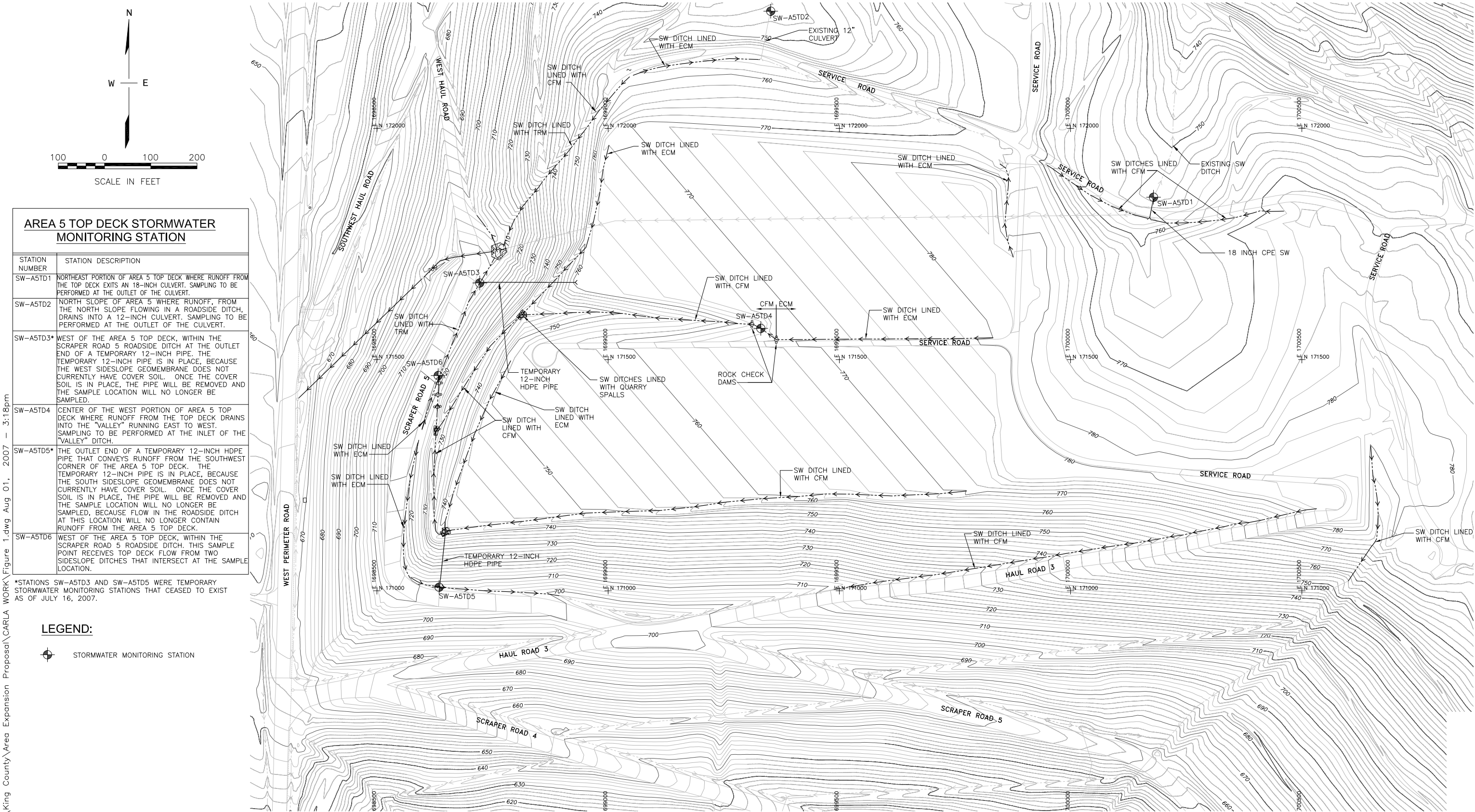


Figure 2
Area 5 Top Deck
Stormwater Monitoring Stations

Appendix A:

Inspection Reports

SOLID WASTE DIVISION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: Stevn Larry

Telephone: 206 477-5226

Location: C.H.

Ambient Temperature (°F) 75

Weather Condition: Sunny

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				
D. Stormwater System			6. Generators	X		11. Vectors	X	
1. Ponds	X		7. Extraction Wells	X		12. Litter	X	
2. CB / Control Structures			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			1. Road Sweeping	X		F. Vegetation	X	
7. Discharge Points	X		2. Access Roads	X		1. Refuse	X	
8. General	X		3. Road Erosion	X		2. Cover Erosion	X	
			4. Road Pavement	X		3. Silt Fences/Filter Fabric	X	
G. Operations			5. Lane Striping	X				
1. Records Obtain / Review	X							

Item No.	Action Code(s)	Area Code(s) (See below or over for map) Area Map	Status			State Reason if "Fair or Poor"	Date Corrective Action Implemented
			G	F	P		
1	F3	H, (2-3)				The new silt fencing installed "south edge" of the new south haul road has many rips and tears. Contractor must address.	
2	D6, F3	H, (2)			X	The soil stock piles located adjacent to the south stormwater "cement pond" ponds require silt fencing along the perimeter of the soil stock piles to prevent pond	
3	G2, F3	H, (2)			X	Large piles of unfenced rock and soil sitting at the drop inlets leading to the South stormwater "cement" pond.	
4	F1	G, (3-4)			X	The refuge hauled to the top of area 6 remains without cover or BMP controls.	
5							

6	Photos taken during the inspection can be found at:						P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW inspections\SW Inspection 15\July 2015	
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: Overall the landfill appears maintained. Construction of the new access roads, excavation of new roads and Area 8 development has the generated a lot of dust and soil tracking onto harden surfaces. Contractors are a bit behind in the cleanup. The North leachate pond has been drained and sediment removed. An inspection of the liner revealed a couple of breaks in the liner. The breaks are above the average water level and are not a problem. Photos of the inspection can be found at:

P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW inspections\SW Inspection 15\June 2015

<i>Category number:</i> F3 Area H, (2-3)	Action to be Completed. Suggested Remedy: (Area -8 Development), The contractors will be informed of the damage to the silt fencing that occurred during installation and they will be asked to make corrections/repairs or replacement of the damaged sections of the fence.
<i>Category number:</i> D6 Area H, (2)	Action to be Completed. Suggested Remedy: (Area -8 Development), The contractor will be asked to install silt fencing containment around stock piles of soils adjacent to the South stormwater pond.
<i>Category number:</i> G2 Area H, (2)	Action to be Completed. Suggested Remedy: (Area -8 Development), The contractor will be asked to install silt fencing containment around stock piles of soils adjacent to the drop inlet to the South stormwater pond.
<i>Category number:</i> F1 Area G, (3-4)	Action to be Completed. Suggested Remedy: (Area -8 relocated refuge), The contractor will be asked to install cover and silt fencing containment around deposits.

SWPPP Modifications Necessary? (circle **Y** or **N**)
If **Y**, log changes in Appendix I of SWPPP.

Potential Pollutant Sources **Y** / **N**

Site Map **Y** / **N**

1

2

3

4

5

6

7

A

B

C

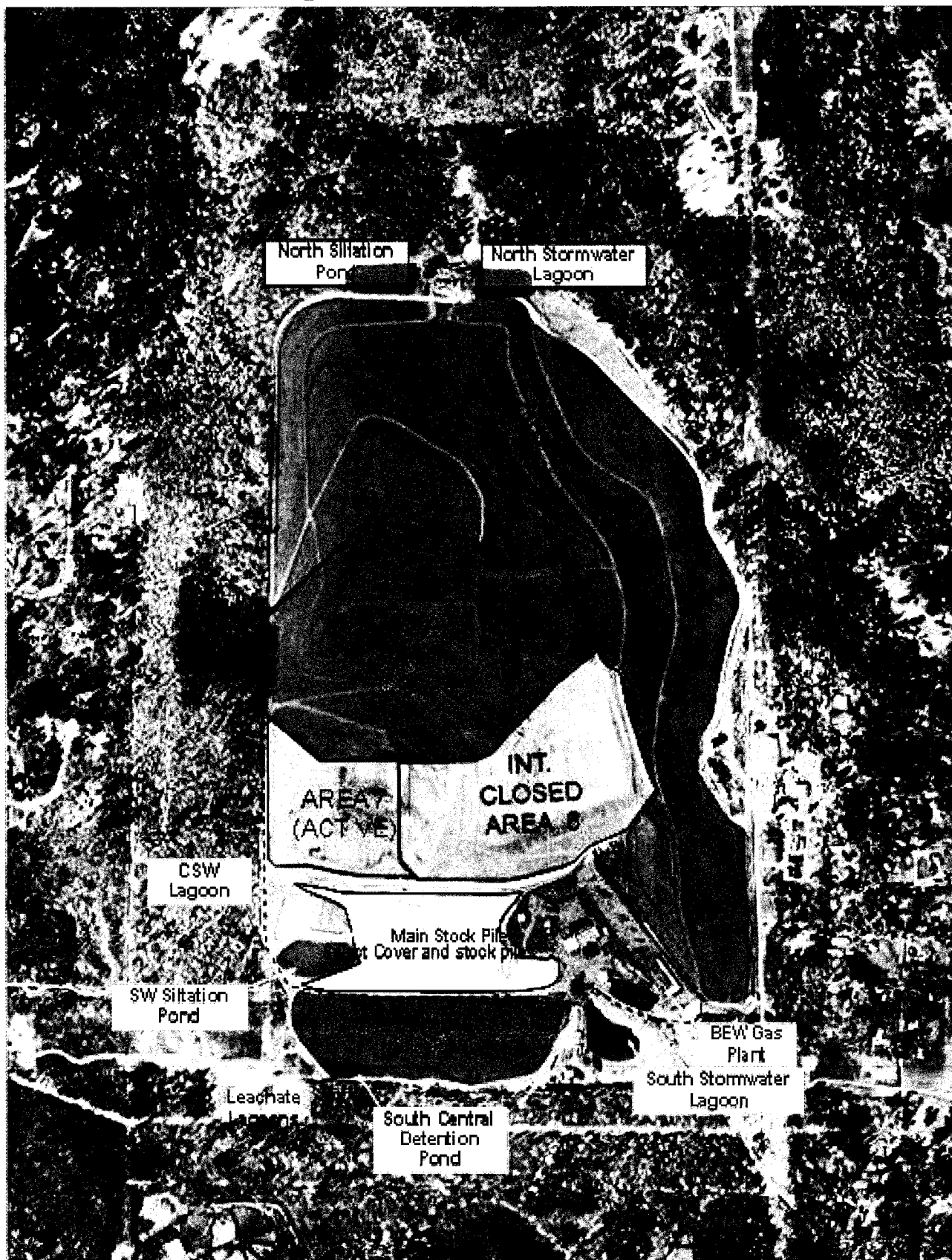
D

E

F

G

H



INSPECTION REPORT SIGNATURE PAGE

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

☒ The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

☐ The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP*.

* Immediately notify Environmental Compliance Coordinator

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

Printed name: Stevn Larry, Engineer II

Signature: _____ Date: _____

DULY AUTHORIZED REPRESENTATIVE

Based on professional judgment, which of the following statements is true: (select one)

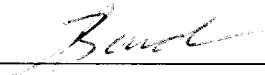
☒ The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

☐ The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP*.

* Immediately notify Environmental Compliance Coordinator

I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name: Bill Berni, Operations Manager

Signature:  Date: _____

SOLID WASTE DIVISION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspection

Date: _____

Inspected By: _____ Telephone: _____

Location: _____ Ambient Temperature (°F) _____ Weather Condition: _____

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. Discharge Points	✓		2. Access Roads	✓		1. Refuse	✓	
8. General	✓		3. Road Erosion	✓		2. Cover Erosion	✓	
			4. Road Pavement	✓		3. Silt Fences/Filter Fabric	✓	
G. Operations			5. Lane Striping	✓		4. Liner System	✓	✓
1. Records Obtain / Review								

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	F4	F2-5			✓		Top of green liner/trash in ditch	
2	F4	F2-5			✓		Tears in green liner	
3	D1	G-3			✓		No sediment control around stock	
4	G12	F3-4			✓		piles above SW siltation pond	
5	G12	F3-4			✓		Litter along abandoned haul rd on south side.	
6								
7								
8								
9								
10								
11								

AREA CODES (for Cedar Hills)

East Main Hill = EMH

Southwest Main Hill = SWMH

G = Good

Area 2/3 = A2/3

Area 4 = A4

F = Fair

Aeration Ponds = AP

So. Solid Waste Area = SSWA

P = Poor

Area 5 = A5

Area 6 = A6

Southeast Pit Area = SEPA

Stockpile = SP

North Flare Station = NFS

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:

<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:

SWPPP Modifications Necessary? (circle **Y** or **N**)
 If **Y**, log changes in Appendix I of SWPPP.

Potential Pollutant Sources **Y / N**

Site Map **Y / N**

1 | 2 | 3 | 4 | 5 | 6 | 7

A

B

C

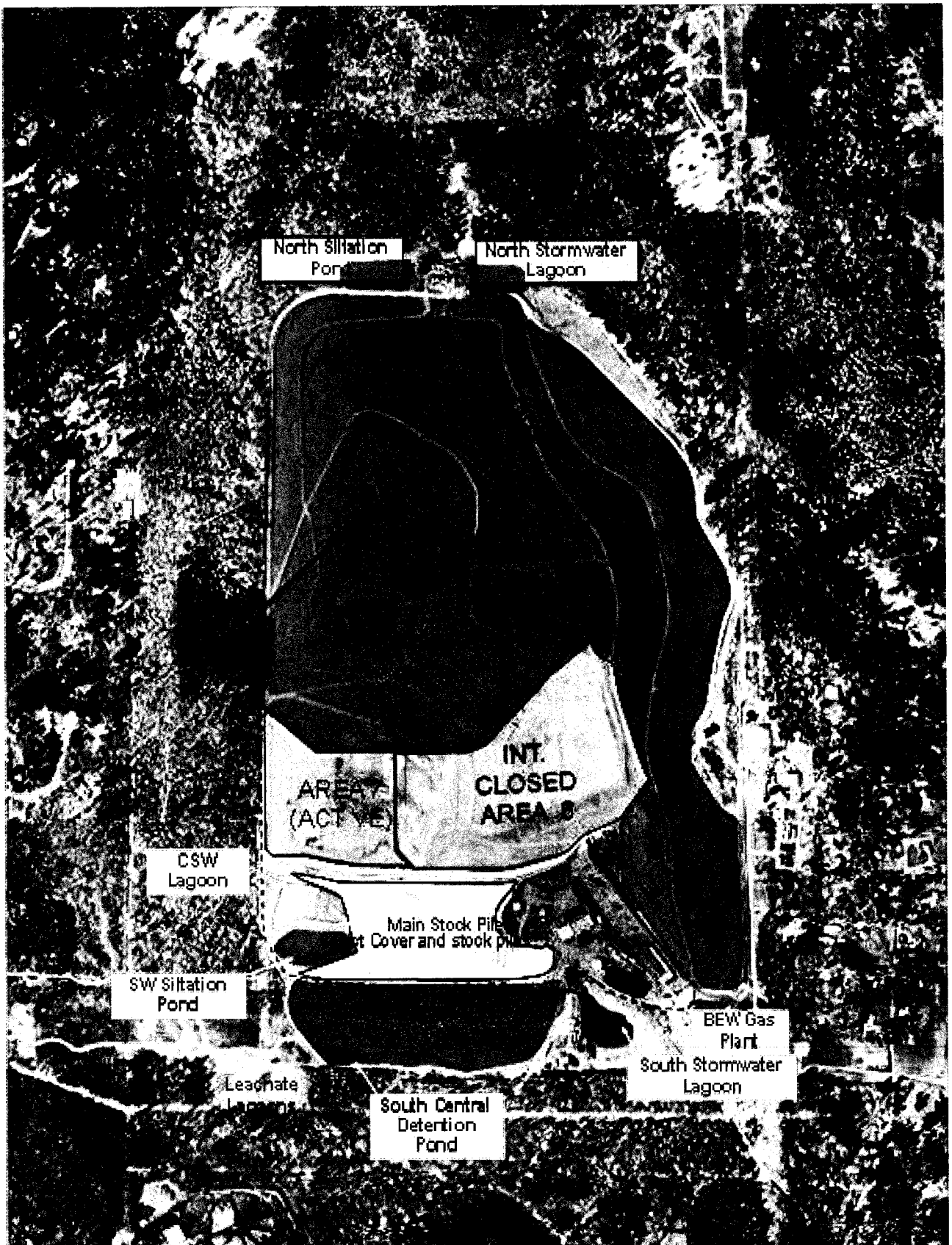
D

E

F

G

H



INSPECTION REPORT SIGNATURE PAGE

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

- ☐ *The site is in compliance with the terms and conditions of the SWPPP and the ISGP.*
☐ *The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP*.*

* Immediately notify Environmental Compliance Coordinator

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

Printed name: Stevn Larry, Engineer II

Signature: _____ Date: _____

DULY AUTHORIZED REPRESENTATIVE

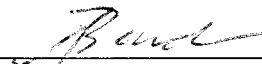
Based on professional judgment, which of the following statements is true: (select one)

- ☐ *The site is in compliance with the terms and conditions of the SWPPP and the ISGP.*
☐ *The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP*.*

* Immediately notify Environmental Compliance Coordinator

I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name: Bill Berni, Operations Manager

Signature:  Date: 8/25/15

SOLID WASTE DIVISION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspection Date: Sept. 28, 2015

Inspected By: Stevn Larry

Telephone: (206) 477-5226

Location: Cedar Hills

Ambient Temperature (°F) 52F

Weather Condition: Sunny

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		
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					
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. Discharge Points	X		2. Access Roads			1. Refuse		
8. General	X		3. Road Erosion	X		2. Cover Erosion	X	
			4. Road Pavement	X		3. Silt Fences/Filter Fabric		
G. Operations			5. Lane Striping	X				
1. Records Obtain / Review	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	C4	H4					Tree fall on the fence. The fence has some damage but remains standing. Repair when there is an opportunity.	
2	F1	F-(4-5)					Good Fellow leftover construction debris. To be removed.	
3	E2	E (6-7)					The access road just north of Passage Point (PP) would benefit from additional road 2 two locations.	
4								
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: Overall, the site appears clean and maintained. There is a lot of Good Fellow construction taking place and many things are in flux. Only three observations needing addressing are noted.

- 1) There is some leftover Good Fellow construction debris along the base shoulder of the new hill access road.
- 2) There is some damage to the fence line from tree limb fall located along the south perimeter access road.
- 3) There are two locations along the buffer fence line located north of Passage Point next to the cell phone towers that could use some additional rock. (Great job on grading and grubbing the buffer roads!).

Photos taken during the site inspection can be found at: P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW inspections\SW Inspection 15\Sept 2015

Category number:	Action to be Completed. Suggested Remedy:
Category number:	Action to be Completed. Suggested Remedy:
Category number:	Action to be Completed. Suggested Remedy:
Category number:	Action to be Completed. Suggested Remedy:

SWPPP Modifications Necessary? (circle Y or N)
If Y, log changes in Appendix I of SWPPP.

Potential Pollutant Sources Y / N

Site Map Y / N

INSPECTION REPORT SIGNATURE PAGE

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

☒ X The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

☐ The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP*.

* Immediately notify Environmental Compliance Coordinator

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

Printed name: Stevn Larry, Engineer II

Signature: [Signature] Date: Sept 29, 2015

DULY AUTHORIZED REPRESENTATIVE

Based on professional judgment, which of the following statements is true: (select one)

☒ X The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

☐ The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP*.

* Immediately notify Environmental Compliance Coordinator

I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name: Bill Berni, Operations Manager

Signature: [Signature] Date: 9-30-15

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Cedar Hills Area 5 Maintenance

for the period 07/01/2015 to 09/30/2015

Click the blue 'Y' to see notes

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
Area 5						
	CHAREA5	0000014912	CLOSED	Monthly Gas System PM	07/23/2015	N
	CHAREA5	0000014912	CLOSED	Monthly Stormwater PM	07/23/2015	N
	CHAREA5	0000014912	CLOSED	Monthly Cover System PM	07/23/2015	N
	CHAREA5	0000015004	CLOSED	Monthly Gas System PM	08/17/2015	N
	CHAREA5	0000015004	CLOSED	Monthly Stormwater PM	08/17/2015	N
	CHAREA5	0000015004	CLOSED	Monthly Cover System PM	08/17/2015	N
	CHAREA5	0000015185	CLOSED	Monthly Gas System PM	09/22/2015	N
	CHAREA5	0000015185	CLOSED	Monthly Stormwater PM	09/22/2015	N
	CHAREA5	0000015185	CLOSED	Monthly Cover System PM	09/22/2015	N
	CHAREA5E	0000014839	CLOSED	Monthly Header PM	07/08/2015	N
	CHAREA5E	0000014969	CLOSED	Monthly Header PM	08/26/2015	N
	CHAREA5E	0000015118	CLOSED	Monthly Header PM	09/16/2015	N
	CHAREA5W	0000014838	CLOSED	Monthly Header PM	07/08/2015	N
	CHAREA5W	0000014968	CLOSED	Monthly Header PM	08/22/2015	N
	CHAREA5W	0000015117	CLOSED	Monthly Header PM	09/16/2015	N

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Cedar Hills Landfill Storm Water Pollution Prevention Plan Maintenance

for the period 07/01/2015 to 09/30/2015

Click the blue 'Y' to see notes

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
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Catch Basins

Cedar Hills	0000028913	CLOSED	PMM	07/06/2015	Y
Cedar Hills	0000029262	CLOSED	PMM	08/02/2015	N
Cedar Hills	0000029626	CLOSED	PMM	09/02/2015	N

Trash Racks

Cedar Hills	0000029043	CLOSED	PMW	07/06/2015	Y
Cedar Hills	0000029087	CLOSED	PMW	07/14/2015	N
Cedar Hills	0000029159	CLOSED	PMW	07/19/2015	Y
Cedar Hills	0000029202	CLOSED	PMW	07/27/2015	Y
Cedar Hills	0000029292	CLOSED	PMW	08/10/2015	Y
Cedar Hills	0000029293	CLOSED	PMW	08/02/2015	Y
Cedar Hills	0000029456	CLOSED	PMW	08/17/2015	Y
Cedar Hills	0000029526	CLOSED	PMW	08/26/2015	Y
Cedar Hills	0000029639	CLOSED	PMW	08/31/2015	Y
Cedar Hills	0000029694	CLOSED	PMW	09/10/2015	Y
Cedar Hills	0000029793	CLOSED	PMW	09/16/2015	N
Cedar Hills	0000029852	CLOSED	PMW	09/24/2015	Y
Cedar Hills	0000029963	CLOSED	PMW	09/30/2015	Y

Ditches

Cedar Hills	0000028913	CLOSED	PMM	07/06/2015	Y
Cedar Hills	0000029043	CLOSED	PMW	07/06/2015	Y
Cedar Hills	0000029087	CLOSED	PMW	07/14/2015	N
Cedar Hills	0000029159	CLOSED	PMW	07/19/2015	Y
Cedar Hills	0000029202	CLOSED	PMW	07/27/2015	Y
Cedar Hills	0000029262	CLOSED	PMM	08/02/2015	N
Cedar Hills	0000029292	CLOSED	PMW	08/10/2015	Y
Cedar Hills	0000029293	CLOSED	PMW	08/02/2015	Y
Cedar Hills	0000029456	CLOSED	PMW	08/17/2015	Y
Cedar Hills	0000029526	CLOSED	PMW	08/26/2015	Y

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	Cedar Hills	0000029626	CLOSED	PMM	09/02/2015	N
	Cedar Hills	0000029627	CLOSED	PMQ	09/02/2015	N
	Cedar Hills	0000029639	CLOSED	PMW	08/31/2015	Y
	Cedar Hills	0000029694	CLOSED	PMW	09/10/2015	Y
	Cedar Hills	0000029793	CLOSED	PMW	09/16/2015	N
	Cedar Hills	0000029852	CLOSED	PMW	09/24/2015	Y
	Cedar Hills	0000029963	CLOSED	PMW	09/30/2015	Y

Pipes/Culverts

Cedar Hills	0000029627	CLOSED	PMQ	09/02/2015	N
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Ponds/Lagoons

Cedar Hills	0000029043	CLOSED	PMW	07/06/2015	Y
Cedar Hills	0000029087	CLOSED	PMW	07/14/2015	N
Cedar Hills	0000029159	CLOSED	PMW	07/19/2015	Y
Cedar Hills	0000029202	CLOSED	PMW	07/27/2015	Y
Cedar Hills	0000029292	CLOSED	PMW	08/10/2015	Y
Cedar Hills	0000029293	CLOSED	PMW	08/02/2015	Y
Cedar Hills	0000029456	CLOSED	PMW	08/17/2015	Y
Cedar Hills	0000029526	CLOSED	PMW	08/26/2015	Y
Cedar Hills	0000029627	CLOSED	PMQ	09/02/2015	N
Cedar Hills	0000029639	CLOSED	PMW	08/31/2015	Y
Cedar Hills	0000029694	CLOSED	PMW	09/10/2015	Y
Cedar Hills	0000029793	CLOSED	PMW	09/16/2015	N
Cedar Hills	0000029852	CLOSED	PMW	09/24/2015	Y
Cedar Hills	0000029963	CLOSED	PMW	09/30/2015	Y

General

Cedar Hills	0000029043	CLOSED	PMW	07/06/2015	Y
Cedar Hills	0000029087	CLOSED	PMW	07/14/2015	N
Cedar Hills	0000029159	CLOSED	PMW	07/19/2015	Y
Cedar Hills	0000029202	CLOSED	PMW	07/27/2015	Y
Cedar Hills	0000029292	CLOSED	PMW	08/10/2015	Y
Cedar Hills	0000029293	CLOSED	PMW	08/02/2015	Y
Cedar Hills	0000029456	CLOSED	PMW	08/17/2015	Y

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	Cedar Hills	0000029526	CLOSED	PMW	08/26/2015	Y
	Cedar Hills	0000029627	CLOSED	PMQ	09/02/2015	N
	Cedar Hills	0000029639	CLOSED	PMW	08/31/2015	Y
	Cedar Hills	0000029694	CLOSED	PMW	09/10/2015	Y
	Cedar Hills	0000029793	CLOSED	PMW	09/16/2015	N
	Cedar Hills	0000029852	CLOSED	PMW	09/24/2015	Y
	Cedar Hills	0000029963	CLOSED	PMW	09/30/2015	Y

Leachate System

Cedar Hills	0000029627	CLOSED	PMQ	09/02/2015	N
CHPS1	0000029018	CLOSED	PMW	07/06/2015	N
CHPS1	0000029078	CLOSED	PMW	07/12/2015	N
CHPS1	0000029150	CLOSED	PMW	07/19/2015	N
CHPS1	0000029218	CLOSED	PMW	07/26/2015	N
CHPS1	0000029278	CLOSED	PMW	08/02/2015	Y
CHPS1	0000029375	CLOSED	PMW	08/09/2015	N
CHPS1	0000029442	CLOSED	PMW	08/17/2015	N
CHPS1	0000029512	CLOSED	PMW	08/24/2015	N
CHPS1	0000029577	CLOSED	PMW	08/31/2015	N
CHPS1	0000029701	CLOSED	PMW	09/07/2015	N
CHPS1	0000029759	CLOSED	PMW	09/14/2015	Y
CHPS1	0000029828	CLOSED	PMW	09/21/2015	N
CHPS1	0000029888	CLOSED	PMW	09/27/2015	N
CHPS2	0000029019	CLOSED	PMW	07/06/2015	N
CHPS2	0000029079	CLOSED	PMW	07/12/2015	Y
CHPS2	0000029157	CLOSED	PMW	07/19/2015	N
CHPS2	0000029219	CLOSED	PMW	07/26/2015	N
CHPS2	0000029279	CLOSED	PMW	08/02/2015	N
CHPS2	0000029376	CLOSED	PMW	08/09/2015	N
CHPS2	0000029443	CLOSED	PMW	08/17/2015	N
CHPS2	0000029513	CLOSED	PMW	08/24/2015	N
CHPS2	0000029578	CLOSED	PMW	09/07/2015	N
CHPS2	0000029758	CLOSED	PMW	09/14/2015	N
CHPS2	0000029830	CLOSED	PMW	09/21/2015	N
CHPS2	0000029983	CLOSED	PMW	09/27/2015	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHPS3	0000028906	CLOSED	PMW	07/01/2015	Y
	CHPS3	0000029020	CLOSED	PMW	07/06/2015	N
	CHPS3	0000029081	CLOSED	PMW	07/12/2015	N
	CHPS3	0000029152	CLOSED	PMW	07/19/2015	N
	CHPS3	0000029220	CLOSED	PMW	07/26/2015	N
	CHPS3	0000029280	CLOSED	PMW	08/02/2015	N
	CHPS3	0000029378	CLOSED	PMW	08/09/2015	Y
	CHPS3	0000029444	CLOSED	PMW	08/17/2015	N
	CHPS3	0000029514	CLOSED	PMW	08/24/2015	N
	CHPS3	0000029579	CLOSED	PMW	08/31/2015	N
	CHPS3	0000029700	CLOSED	PMW	09/07/2015	N
	CHPS3	0000029761	CLOSED	PMW	09/14/2015	Y
	CHPS3	0000029826	CLOSED	PMW	09/20/2015	N
	CHPS3	0000029889	CLOSED	PMW	09/27/2015	N
	CHPS4	0000029021	CLOSED	PMW	07/06/2015	N
	CHPS4	0000029082	CLOSED	PMW	07/12/2015	N
	CHPS4	0000029153	CLOSED	PMW	07/19/2015	Y
	CHPS4	0000029221	CLOSED	PMW	07/26/2015	N
	CHPS4	0000029281	CLOSED	PMW	08/02/2015	Y
	CHPS4	0000029379	CLOSED	PMW	08/09/2015	N
	CHPS4	0000029445	CLOSED	PMW	08/17/2015	N
	CHPS4	0000029515	CLOSED	PMW	08/24/2015	N
	CHPS4	0000029580	CLOSED	PMW	08/31/2015	N
	CHPS4	0000029699	CLOSED	PMW	09/07/2015	N
	CHPS4	0000029762	CLOSED	PMW	09/14/2015	Y
	CHPS4	0000029827	CLOSED	PMW	09/21/2015	N
	CHPS4	0000029890	CLOSED	PMW	09/27/2015	Y
	LEPS	0000028909	CLOSED	PMM	07/01/2015	Y
	LEPS	0000028909	CLOSED	PMM	07/01/2015	Y
	LEPS	0000029013	CLOSED	PMW	07/06/2015	N
	LEPS	0000029086	CLOSED	PMW	07/12/2015	N
	LEPS	0000029154	CLOSED	PMW	07/19/2015	N
	LEPS	0000029215	CLOSED	PMW	07/26/2015	N
	LEPS	0000029258	CLOSED	PMM	08/05/2015	Y
	LEPS	0000029258	CLOSED	PMM	08/05/2015	Y

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	LEPS	0000029282	CLOSED	PMW	08/02/2015	N
	LEPS	0000029381	CLOSED	PMW	08/09/2015	N
	LEPS	0000029448	CLOSED	PMW	08/17/2015	N
	LEPS	0000029509	CLOSED	PMW	08/24/2015	N
	LEPS	0000029575	CLOSED	PMW	08/31/2015	N
	LEPS	0000029613	CLOSED	PMM	09/04/2015	Y
	LEPS	0000029613	CLOSED	PMM	09/04/2015	Y
	LEPS	0000029704	CLOSED	PMW	09/07/2015	Y
	LEPS	0000029754	CLOSED	PMW	09/14/2015	N
	LEPS	0000029822	CLOSED	PMW	09/21/2015	Y
	LEPS	0000029894	CLOSED	PMW	09/27/2015	Y

Landfill Cover

CHAPONDS	0000014910	CLOSED	PMV	07/23/2015	N
CHAPONDS	0000015002	CLOSED	PMV	08/17/2015	N
CHAPONDS	0000015183	CLOSED	PMV	09/22/2015	N
CHAREA4	0000014911	CLOSED	PMV	07/23/2015	N
CHAREA4	0000015003	CLOSED	PMV	08/17/2015	N
CHAREA4	0000015184	CLOSED	PMV	09/22/2015	N
CHAREA5	0000014912	CLOSED	PMV	07/23/2015	N
CHAREA5	0000015004	CLOSED	PMV	08/17/2015	N
CHAREA5	0000015185	CLOSED	PMV	09/22/2015	N
CHAREA6	0000014913	CLOSED	PMV	07/23/2015	N
CHAREA6	0000015005	CLOSED	PMV	08/17/2015	N
CHAREA6	0000015186	CLOSED	PMV	09/22/2015	N
CHAREAS23	0000014915	CLOSED	PMV	07/23/2015	N
CHAREAS23	0000015007	CLOSED	PMV	08/17/2015	N
CHAREAS23	0000015188	CLOSED	PMV	09/22/2015	N
CHCENTRALPIT	0000014916	CLOSED	PMV	07/23/2015	N
CHCENTRALPIT	0000015008	CLOSED	PMV	08/17/2015	N
CHCENTRALPIT	0000015189	CLOSED	PMV	09/22/2015	N
CHEMH	0000014917	CLOSED	PMV	07/23/2015	N
CHEMH	0000015009	CLOSED	PMV	08/17/2015	N
CHEMH	0000015190	CLOSED	PMV	09/22/2015	N
CHNFLARESTN	0000014921	CLOSED	PMV	07/23/2015	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHNFLARESTN	0000015013	CLOSED	PMV	08/17/2015	N
	CHNFLARESTN	0000015194	CLOSED	PMV	09/22/2015	N
	CHSEPA	0000014918	CLOSED	PMV	07/23/2015	N
	CHSEPA	0000015010	CLOSED	PMV	08/17/2015	N
	CHSEPA	0000015191	CLOSED	PMV	09/22/2015	N
	CHSSWA	0000014919	CLOSED	PMV	07/23/2015	Y
	CHSSWA	0000015011	CLOSED	PMV	08/17/2015	N
	CHSSWA	0000015192	CLOSED	PMV	09/22/2015	N
	CHSTOCKPILE	0000014909	CLOSED	PMV	07/23/2015	N
	CHSTOCKPILE	0000015001	CLOSED	PMV	08/17/2015	N
	CHSTOCKPILE	0000015182	CLOSED	PMV	09/22/2015	N
	CHSWMH	0000014920	CLOSED	PMV	07/23/2015	N
	CHSWMH	0000015012	CLOSED	PMV	08/17/2015	N
	CHSWMH	0000015193	CLOSED	PMV	09/22/2015	N

Landfill Gas

CHAREA5E	0000014832	CLOSED	PMW	07/07/2015	N
CHAREA5E	0000014887	CLOSED	PMW	07/27/2015	N
CHAREA5E	0000014963	CLOSED	PMW	08/05/2015	N
CHAREA5E	0000015047	CLOSED	PMW	08/26/2015	N
CHAREA5E	0000015112	CLOSED	PMW	09/01/2015	N
CHAREA5E	0000015162	CLOSED	PMW	09/28/2015	N
CHAREA5W	0000014833	CLOSED	PMW	07/07/2015	N
CHAREA5W	0000014888	CLOSED	PMW	07/27/2015	N
CHAREA5W	0000014964	CLOSED	PMW	08/05/2015	N
CHAREA5W	0000015048	CLOSED	PMW	08/26/2015	N
CHAREA5W	0000015113	CLOSED	PMW	09/01/2015	N
CHAREA5W	0000015163	CLOSED	PMW	09/18/2015	N
CHAREA6	0000014834	CLOSED	PMW	07/08/2015	N
CHAREA6	0000014889	CLOSED	PMW	07/23/2015	N
CHAREA6	0000014965	CLOSED	PMW	08/04/2015	N
CHAREA6	0000015049	CLOSED	PMW	08/20/2015	N
CHAREA6	0000015114	CLOSED	PMW	09/10/2015	N
CHAREA6	0000015164	CLOSED	PMW	09/23/2015	N
CHAREAS23	0000014792	CLOSED	PMW	07/01/2015	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHAREAS23	0000014857	CLOSED	PMW	07/22/2015	N
	CHAREAS23	0000014925	CLOSED	PMW	08/05/2015	N
	CHAREAS23	0000015017	CLOSED	PMW	08/24/2015	N
	CHAREAS23	0000015065	CLOSED	PMW	09/08/2015	N
	CHAREAS23	0000015131	CLOSED	PMW	09/24/2015	N
	CHCMH	0000014809	CLOSED	PMW	07/07/2015	N
	CHCMH	0000014864	CLOSED	PMW	07/22/2015	N
	CHCMH	0000014955	CLOSED	PMW	08/08/2015	N
	CHCMH	0000015039	CLOSED	PMW	08/22/2015	N
	CHCMH	0000015089	CLOSED	PMW	09/09/2015	N
	CHCMH	0000015145	CLOSED	PMW	09/22/2015	N
	CHEMH	0000014801	CLOSED	PMW	07/08/2015	N
	CHEMH	0000014863	CLOSED	PMW	07/17/2015	N
	CHEMH	0000014942	CLOSED	PMW	08/04/2015	N
	CHEMH	0000015026	CLOSED	PMW	08/14/2015	N
	CHEMH	0000015076	CLOSED	PMW	09/03/2015	N
	CHEMH	0000015136	CLOSED	PMW	09/17/2015	N
	CHSEPA	0000014804	CLOSED	PMW	07/01/2015	N
	CHSEPA	0000014862	CLOSED	PMW	07/17/2015	N
	CHSEPA	0000014943	CLOSED	PMW	08/07/2015	N
	CHSEPA	0000015027	CLOSED	PMW	08/21/2015	N
	CHSEPA	0000015077	CLOSED	PMW	09/02/2015	N
	CHSEPA	0000015137	CLOSED	PMW	09/15/2015	N
	CHSSWA	0000014835	CLOSED	PMW	07/07/2015	Y
	CHSSWA	0000014890	CLOSED	PMW	07/23/2015	Y

Landfill Roads

	CHACTIVEAREA	0000014900	CLOSED	PMR	07/23/2015	N
	CHACTIVEAREA	0000014992	CLOSED	PMR	08/17/2015	N
	CHACTIVEAREA	0000015173	CLOSED	PMR	09/22/2015	N
	CHMAINGATE	0000014901	CLOSED	PMR	07/23/2015	N
	CHMAINGATE	0000014993	CLOSED	PMR	08/17/2015	N
	CHMAINGATE	0000015174	CLOSED	PMR	09/22/2015	N
	CHPSR	0000014902	CLOSED	PMR	07/23/2015	N
	CHPSR	0000014994	CLOSED	PMR	08/17/2015	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHPSR	0000015175	CLOSED	PMR	09/22/2015	N
	CHSTOCKPILE	0000014909	CLOSED	PMR	07/23/2015	N
	CHSTOCKPILE	0000015001	CLOSED	PMR	08/17/2015	N
	CHSTOCKPILE	0000015182	CLOSED	PMR	09/22/2015	N

Landfill Roads

Sweeper	0	see Equipment Operator Spreadsheet	NA	0	N
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Equipment

Click the word 'Equipment' to see Work Order Numbers

Appendix B:

Gas Monitoring Reports

A graph of a linear function on a coordinate plane. The x-axis is labeled from -4 to 4, and the y-axis is labeled from -4 to 4. A line passes through the points $(-4, 4)$, $(-2, 2)$, $(0, 0)$, $(2, -2)$, and $(4, -4)$.

A graph on a grid with 10 horizontal and 10 vertical lines. A straight line is plotted, starting from the top-left corner and extending to the bottom-right corner. The line passes through the intersection of the 5th vertical line and the 5th horizontal line from the top.

The graph shows the function $f(x) = 1 - 2x$ on the interval $[0, 1]$. The x-axis is labeled from 0 to 1, and the y-axis is labeled from 0 to 1. The function is a straight line from $(0, 1)$ to $(1, 0)$.

NO EXCESSANCE DETECTED.

NO EXCHANGE DETECTED.

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

SEPTEMBER 2015
Scale 1"=800'



KING COUNTY SOLID WASTE
201 S JACKSON ST. SUITE 701
SEATTLE, WA 98104-3285

KING COUNTY SOLID WASTE
201 S JACKSON ST. SUITE 701
SEATTLE, WA 98104-3285

CEDAR HILLS REGIONAL LANDFILL
SCALE 1" = 800'
DATE OF MEASUREMENT: 9-17-15

DATE OF MEASUREMENT: 9-17-15

DATE OF MEASUREMENT: 9-17-15

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 PJM	DRAWN PJM	9-2015
PROJECT NO.	SURVEY NO.	SHEET 1 OF 1

DATE	REVISION	BY

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WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CEDAR HILLS License: na

Location: 20

Color:

Year: 2006

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000015057

Date In: 09/01/2015 11:16

Date Promised: 09/02/2015 11:16

Date Out: 00:00

WO Status: A Last WO#: 0000014991

WO Priority: Last WO Date: 08/04/2015

Track DownTime: Y Operator: WG

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

Cedar Hills

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
I	A - SET AN ANNUAL DATE	07/07/2016	Annual Inspection
Q	0 - MONTHS	09/06/2015	Quarterly Inspection
S	0 - MONTHS	01/01/2016	Scheduled Inspection
X	0 - MONTHS	09/10/2015	Prohibited Activities

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMQ BS	PM Service PMQ per list Billable Scheduled, Target	0	761		0.00000
PMQ BS	PM Service PMQ per list Billable Scheduled, Target	0	762		0.00000

NOTES

Work Order Task List

Repair Code: PHQ BS

Equipment: CEDAR HILLS

Work Order: 0000015057

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Ck liner integrity- Serpentine walk	✓				
	1	Gas- Ck liner integrity- Serpentine walk	✓				

9-14-15 10 hrs

9-15-15 10 hrs

9-16-15 8 hrs

9-17-15 7 hrs

9-21-15 8 HR

9-22-15 2.5 HR.

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

TECHNICIAN COPY

**WO#: 0000014912**

Date In: 07/13/2015 11:46

Date Promised: 07/14/2015 11:46

Date Out: 00:00

WO Status: A Last WO#: 0000014729

WO Priority: Last WO Date: 06/03/2015

Track DownTime: Y Operator: WG

Equipment: CHAREA5 License: na

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

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	07/10/2015	Gas System
T	0 - MONTHS	07/10/2015	Stormwater
V	0 - MONTHS	07/10/2015	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	750 PB	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	750 PB	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	750 PB	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: 7-23-15

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#: 0000015004

Date In: 08/05/2015 00:07

Date Promised: 08/06/2015 00:07

Date Out: 00:00

WO Status: A Last WO#:0000014912

WO Priority: Last WO Date: 07/13/2015

Track DownTime: Y Operator: WG

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	08/10/2015	Gas System
T	0 - MONTHS	08/10/2015	Stormwater
V	0 - MONTHS	08/10/2015	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	761 7187	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	761 7187	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	761 7187	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:

8-17-15

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#: 0000015185

Date In: 09/02/2015 14:31

Date Promised: 09/03/2015 14:31

Date Out: 00:00

WO Status: A Last WO#: 0000015004

WO Priority: Last WO Date: 08/05/2015

Track DownTime: Y Operator: WG

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	09/10/2015	Gas System
T	0 - MONTHS	09/10/2015	Stormwater
V	0 - MONTHS	09/10/2015	Cover System

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	762 JD	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	762 JD	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	762 JD	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: 9-22-15

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#: 0000014913

Date In: 07/13/2015 11:46

Date Promised: 07/14/2015 11:46

Date Out: 00:00

WO Status: A Last WO#: 0000014889

WO Priority: Last WO Date: 07/13/2015

Track DownTime: Y Operator: WG

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
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	07/10/2015	Gas System
S	0 - MONTHS	07/28/2015	Scheduled Inspection
T	0 - MONTHS	07/10/2015	Stormwater
V	0 - MONTHS	07/10/2015	Cover System
W	W - WEEKS	07/05/2015	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	750 RB	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	750 RB	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	750 RB	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: 7-23-15

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#: 0000015005

Date In: 08/05/2015 00:08

Date Promised: 08/06/2015 00:08

Date Out: 00:00

WO Status: A Last WO#: 0000014967

WO Priority: Last WO Date: 07/29/2015

Track DownTime: Y Operator: WG

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	LTO

PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	08/10/2015	Gas System
S	0 - MONTHS	08/28/2015	Scheduled Inspection
T	0 - MONTHS	08/10/2015	Stormwater
V	0 - MONTHS	08/10/2015	Cover System
W	W - WEEKS	08/16/2015	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MIO	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	0	761 <i>7/13</i>	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	761 <i>7/13</i>	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	761 <i>7/13</i>	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: 8-17-15

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#: 0000015186**

Date In: 09/02/2015 14:32

Date Promised: 09/03/2015 14:32

Date Out: 00:00

WO Status: A Last WO#: 0000015164

WO Priority: Last WO Date: 09/02/2015

Track DownTime: Y Operator: WG

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
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	09/10/2015	Gas System
S	0 - MONTHS	09/28/2015	Scheduled Inspection
T	0 - MONTHS	09/10/2015	Stormwater
V	0 - MONTHS	09/10/2015	Cover System
W	W - WEEKS	09/13/2015	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	762 JD	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	762 JD	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	762 JD	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: 9-22-15

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: ZZZZZZZG5: Landfill Gas - not classified

TECHNICIAN COPY

**WO#: 0000014811**

Date In: 07/06/2015 13:41

Date Promised: 07/07/2015 13:41

Date Out: 00:00

WO Status: A Last WO#: 0000014677

WO Priority: Last WO Date: 06/03/2015

Track DownTime: Y Operator: WG

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	07/10/2015	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	762 JD	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV 85

Equipment: CHAREA5TD

Work Order: 0000014811

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	✓				
7-29	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	✓				

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

Equipment: CHAREASTD License: na

Location: 20 Color:
 Year: 2010 Serial: na
 Make: UD Engine:
 Model: UD
 Class: ZZZZZZZG5: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000014935

Date In: 07/29/2015 10:12

Date Promised: 07/30/2015 10:12

Date Out: 00:00

WO Status: A Last WO#: 0000014811

WO Priority: Last WO Date: 07/06/2015

Track DownTime: Y Operator: WG

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	07/10/2015	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	761	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA5TD

Work Order: 0000014935

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					

8-27-15



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#: 0000015091

Date In: 09/02/2015 11:24

Date Promised: 09/03/2015 11:24

Date Out: 00:00

WO Status: A Last WO#: 0000014935

WO Priority: Last WO Date: 07/29/2015

Track DownTime: Y Operator: WG

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	09/10/2015	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMV BS	PM Service PH Cover System Billable Scheduled, Target	0	750	2.3	0.00000 Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA5TD

Work Order: 0000015091

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	/				

9/25/15

45 min.

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: ZZZZZZZZ6S: Landfill Gas - not classified

TECHNICIAN COPY

**WO#: 0000014840**

Date In: 07/06/2015 14:52

Date Promised: 07/07/2015 14:52

Date Out: 00:00

WO Status: A Last WO#:0000014707

WO Priority: Last WO Date: 06/03/2015

Track DownTime: Y Operator: WG

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
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PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	07/10/2015	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	D	761	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000014840

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	✓				

7-8-15

10min

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: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY

**WO#: 0000014970**

Date In: 07/29/2015 11:19

Date Promised: 07/30/2015 11:19

Date Out: 00:00

WO Status: A Last WO#: 0000014840

WO Priority: Last WO Date: 07/06/2015

Track DownTime: Y Operator: WG

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	08/10/2015	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	762 JD	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000014970

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
8/19	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

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: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000015119

Date In: 09/02/2015 12:31

Date Promised: 09/03/2015 12:31

Date Out: 00:00

WO Status: A Last WO#: 0000014970

WO Priority: Last WO Date: 07/29/2015

Track DownTime: Y Operator: WG

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	09/10/2015	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: 0000015119

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
9/22	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	/				

30m