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
206.296.6519 Fax 206.296.0192

Memorandum

To: Tom Theno
King County Solid Waste Division

From: Sevin Bilir
King County Water & Land Resources Division

Re: **Potentiometric Groundwater Surface Mapping & Groundwater Velocity Calculations**
Fourth Quarter 2012 Results
Cedar Hills Landfill, King County, Washington
Project No. 1033379 – Task 02.14.137.20

Date: January 17, 2013

King County Water & Land Resources Division (KCWLRD) submits this letter report on groundwater conditions during the fourth quarter of 2012 for the Cedar Hills Landfill (landfill), in accordance with the *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations* (KCWLRD, 2011). King County Solid Waste Division (KCSWD) personnel measured groundwater elevations at the landfill on October 1, 2012. These measurements were received by KCWLRD on December 11, 2012 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.

With the exception of the minor local effects of the pumping at NPW-1, there have been no significant changes in the interpreted groundwater conditions since the report submitted for the first quarter of the 2011 monitoring event.

Groundwater Elevation Data

KCSWD attempted groundwater level measurements at 44 monitoring wells during the fourth quarter of 2012. 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 27 wells with water levels within ten feet of the top of screen were selected.

Figure 1 shows well locations, groundwater elevations at the 27 selected wells, groundwater potentiometric surface contours, and interpreted groundwater flow direction in the regional aquifer for the October 1, 2012 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 October 1, 2012 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-northeast and northeast.

NPW-1 is one of the production wells supplying the on-site non-potable reservoir and showed lower than normal water levels. This occurs occasionally when water level measurements occur close to a pumping cycle at MPW-1. As a result of this, NPW-1 was included in the contour mapping and shows a minor change in the local flow direction to the west in the area between the well and MW-81.

Groundwater Parameters

Horizontal groundwater velocity was calculated using the following formula:

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

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

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 fourth quarter 2012 data. The hydraulic gradient was greatest under the southern portion of the landfill and smallest under the northern portion. On October 1, 2012, average horizontal groundwater velocity within the regional aquifer ranged from 0.012 feet per day (ft/d) under the southern portion of the landfill to 2.2 ft/d under the central portion of the landfill.

References

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

King County Water & Land Resources Division (KCWLRD). 2012. *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations.* Unpublished.

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

Sincerely,

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

Attachments

Table 1: Groundwater Elevations - Fourth Quarter 2012
Table 2: Groundwater Parameters - Fourth Quarter 2012
Figure 1: Groundwater Potentiometric Surface Map - Fourth Quarter 2012 – Regional Aquifer

Table 1: Groundwater Elevations – Fourth Quarter 2012

Cedar Hills Landfill

King County, Washington

							October 1, 2012	
Regional Aquifer Unit	Well Identification	X (ft)	Y (ft)	Top of Casing Elevation (ft MSL)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Measured Depth to Water (ft)	Groundwater Elevations (ft MSL)
Wells with water levels within 10 feet of the top of screen	MW-60	1701154.47	167873.20	567.15	334.81	325.81	227.33	339.82
	MW-64	1701980.27	168772.19	596.55	334.03	320.23	265.88	330.67
	MW-66	1699750.19	174250.32	531.28	294.39	280.59	239.10	292.18
	MW-67	1701776.69	172610.65	516.43	297.80	284.00	221.71	294.72
	MW-68	1701917.32	170609.35	647.07	311.29	292.29	333.22	313.85
	MW-69	1698061.86	172400.20	653.69	293.57	279.97	357.55	296.14
	MW-70	1698412.97	168699.89	530.57	322.75	309.05	205.53	325.04
	MW-72	1698229.92	170987.71	671.87	303.63	294.03	362.63	309.24
	MW-73	1698954.95	174995.59	485.70	288.11	278.81	191.64	294.06
	MW-74R	1700386.85	173813.79	531.26	289.90	280.40	240.75	290.51
	MW-76	1700376.23	167193.13	491.71	351.06	341.56	139.60	352.11
	MW-77	1700007.63	168999.71	552.67	320.47	310.97	228.25	324.42
	MW-78	1698881.94	169027.58	537.35	322.34	309.84	213.01	324.34
	MW-81	1702568.87	172113.99	493.66	309.19	300.19	185.18	308.48
	MW-82	1699553.72	167725.31	474.85	348.88	339.38	123.76	351.09
	MW-83	1697939.89	167212.27	496.81	350.19	340.69	144.19	352.62
	MW-84	1698602.89	173894.54	530.80	292.46	282.96	236.76	294.04
	MW-85	1701828.95	173694.52	531.76	282.56	273.06	246.98	284.78
	MW-86	1701331.25	174917.90	536.04	283.43	274.63	249.72	286.32
	MW-87	1700670.27	173493.76	537.31	283.68	274.38	249.09	288.22
	MW-88	1701807.87	174303.06	513.68	281.52	272.22	227.64	286.04
	MW-93	1702259.35	169851.24	632.15	319.87	310.07	309.24	322.91
	MW-94	1698674.21	167210.22	495.51	357.22	348.52	142.42	353.09
	MW-95	1697265.32	169426.92	571.54	314.60	305.90	251.80	319.74
	MW-100	1700791.72	169610.46	620.32	319.06	309.06	298.50	321.82
	MW-106	1702536.99	173461.69	475.47	280.04	270.04	191.58	283.89
	NPW-1	1701906.96	171138.99	646.33	299.87	284.87	346.25	300.08
Wells with water levels greater than 10 feet above the top of screen	MW-21	1697901.86	173876.38	420.66	263.22	255.22	125.75	294.91
	MW-22P	1701844.34	173088.17	517.09	236.02	231.22	233.48	283.61
	MW-24	1699582.39	167767.76	475.99	286.76	281.76	145.95	330.04
	MW-43	1701274.23	174327.14	547.06	245.63	235.63	264.10	282.96
	MW-54	1702154.28	168435.53	580.43	250.25	228.25	279.29	301.14
	MW-56	1698980.77	167214.82	480.33	323.15	313.15	127.47	352.86
	MW-57	1699993.32	167201.99	456.64	326.65	311.65	104.29	352.35
	MW-58A	1699006.59	167207.16	479.27	270.05	260.05	149.87	329.40
	MW-59	1699983.91	167193.44	457.13	285.08	275.08	124.71	332.42
	MW-65	1701602.10	167146.55	545.83	317.71	308.91	210.00	335.83
	MW-75	1701059.70	173432.42	532.40	271.10	261.00	246.53	285.87
	MW-80	1701309.78	172964.99	530.41	279.17	269.67	240.14	290.27
	MW-89	1701799.57	174319.44	512.82	229.20	219.90	232.85	279.97
	MW-90	1702203.13	174300.67	502.22	235.16	226.16	222.60	279.62
	MW-91	1701023.09	173423.94	532.02	260.81	240.71	249.42	282.60
	MW-99	1702556.06	172098.73	493.64	221.77	212.77	201.61	292.03
	NPW-3	1701922.88	170663.28	645.81	284.87	276.87	332.41	313.40

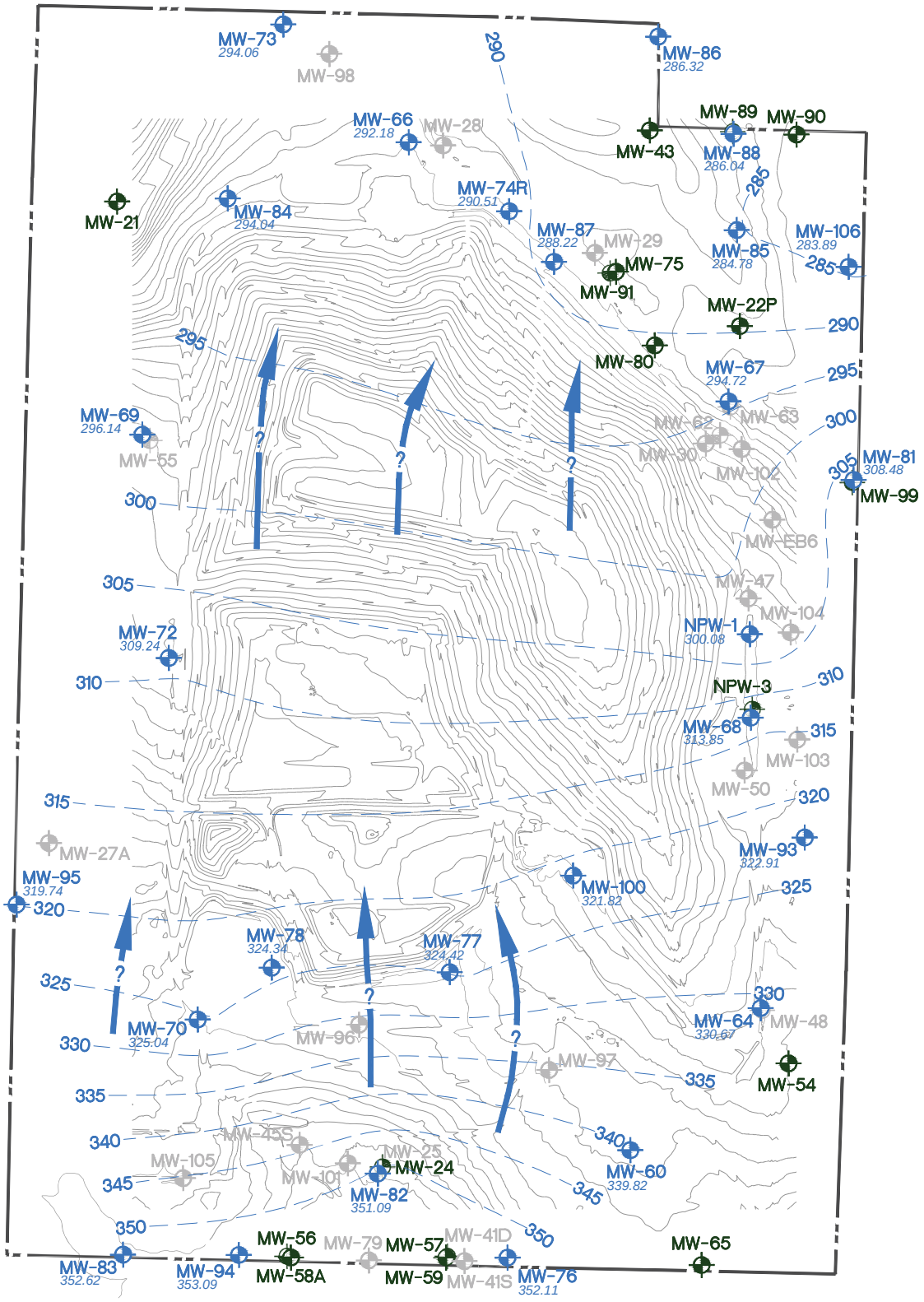
Notes

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 – Fourth Quarter 2012
Cedar Hills Landfill
King County, Washington

Regional Aquifer Zone Beneath the Landfill	Horizontal Hydraulic Conductivity (*K*)			Horizontal Hydraulic Gradient	Effective Porosity (n_{eff})	Horizontal Groundwater Velocity (*v*)	General Groundwater Flow Direction
	Range	(cm/s)	(ft/d)	(ft/ft)		(ft/d)	
Northern	Minimum	2.10E-03	6	0.005	24%	0.135	N, NNE, NE
	Maximum	4.20E-02	120	0.005	24%	2.69	
	Mean	2.10E-02	60	0.005	24%	1.35	
Central	Minimum	2.10E-03	6	0.009	24%	0.22	NNW, N
	Maximum	4.20E-02	120	0.009	24%	4.4	
	Mean	2.10E-02	60	0.009	24%	2.2	
Southern	Minimum	6.40E-06	0.018	0.018	26%	0.0012	NNE, NE
	Maximum	6.40E-04	1.8	0.018	26%	0.12	
	Mean	6.40E-05	0.18	0.018	26%	0.012	

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



Legend

MW-X XXX.XX — Well completed in Regional Aquifer within 10 feet of the water table

MW-X — Wells completed in Regional Aquifer more than 10 ft below water table

MW-X — Wells screened in discontinuous Perched Zones

300 — Regional Aquifer Groundwater Elevation Contour *(feet MSL)*.

? — Inferred Horizontal Groundwater Flow Path

N

0 1000 2000

Feet

Notes:

1. Groundwater measurements made on October 1, 2012.
2. Only wells completed in the Regional Aquifer within 10 feet of the water table were used for contouring.

King County

Groundwater Potentiometric Surface Map
Fourth Quarter 2012 - Regional Aquifer
Cedar Hills Landfill
King County, Washington

DATE: December 2012	PROJECT NO. 1033379
DESIGNED BY: SB	
DRAWN BY: KK	FIGURE NO. 1
REVISED BY: SB	

CH_4Q2012.dwg

APPENDIX B

Field and Analytical Test Results

Groundwater Analytical Data

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater Elevation Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground-Water Elevation (msl)	Comment
MW-21	10/1/2012	420.66	125.75	294.91	
MW-21	10/2/2012	420.66	125.67	294.99	
MW-22	10/1/2012	517.09	233.48	283.61	
MW-24	10/1/2012	475.99	145.95	330.04	
MW-24	10/10/2012	475.99	145.92	330.07	
MW-25	10/1/2012	474.41	13.07	461.34	
MW-27A	10/1/2012	584.23	54.73	529.5	
MW-27A	10/11/2012	584.23	54.47	529.76	
MW-28	10/1/2012	527.75	39.43	488.32	
MW-29	10/1/2012	532.92	16.91	516.01	
MW-29	10/15/2012	532.92	17.03	515.89	
MW-30A	10/1/2012	568.43	30.31	538.12	
MW-30A	10/12/2012	568.43	30.64	537.79	
MW-41S	10/1/2012	462.44	11.94	450.5	
MW-41D	10/1/2012	462.32	29.82	432.5	
MW-43	10/1/2012	547.06	264.1	282.96	
MW-43	10/4/2012	544.67	264.13	280.54	
MW-45	10/1/2012	488.4	18	470.4	
MW-47	10/1/2012	634.6	21.54	613.06	
MW-47	10/8/2012	634.6	21.63	612.97	
MW-48	10/1/2012	594.49			Dry; 46.22 @ bottom
MW-50	10/1/2012	637.02	31.96	605.06	
MW-54	10/1/2012	580.43	279.29	301.14	
MW-55	10/1/2012	652.29	31.61	620.68	
MW-55	10/19/2012	652.29	31.4	620.89	
MW-56	10/1/2012	480.33	127.47	352.86	
MW-56	10/2/2012	480.33	127.52	352.81	
MW-57	10/1/2012	456.64	104.29	352.35	
MW-57	10/8/2012	456.64	104.47	352.17	
MW-58A	10/1/2012	479.27	149.87	329.4	
MW-58A	10/9/2012	479.27	149.79	329.48	
MW-59	10/1/2012	457.13	124.71	332.42	
MW-59	10/8/2012	457.13	124.53	332.6	
MW-60	10/1/2012	567.15	227.33	339.82	
MW-60	10/9/2012	567.15	227.55	339.6	
MW-62	10/1/2012	556.21	54.05	502.16	
MW-63	10/1/2012	515.88	18.54	497.34	
MW-64	10/1/2012	596.55	265.88	330.67	
MW-65	10/1/2012	545.83	210	335.83	
MW-65	10/12/2012	545.83	209.88	335.95	
MW-66	10/1/2012	531.28	239.1	292.18	
MW-66	10/12/2012	531.28	238.96	292.32	
MW-67	10/1/2012	516.43	221.71	294.72	
MW-67	10/15/2012	516.43	221.48	294.95	
MW-68	10/1/2012	647.07	333.22	313.85	

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater Elevation Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground-Water Elevation (msl)	Comment
MW-68	10/16/2012	647.07	332.63	314.44	
MW-69	10/1/2012	653.69	357.55	296.14	
MW-69	10/19/2012	653.69	357.21	296.48	
MW-70	10/1/2012	530.57	205.53	325.04	
MW-70	10/15/2012	530.57	205.46	325.11	
MW-72	10/1/2012	671.87	362.63	309.24	
MW-72	10/4/2012	671.87	362.65	309.22	
MW-73	10/1/2012	485.7	191.64	294.06	
MW-73	10/22/2012	485.7	191.57	294.13	
MW-74	10/1/2012	531.26	240.75	290.51	
MW-74	10/10/2012	531.26	240.91	290.35	
MW-74	11/7/2012	531.26	240.93	290.33	
MW-74	12/7/2012	531.26	240.98	290.28	
MW-75	10/1/2012	532.4	246.53	285.87	
MW-75	10/10/2012	532.4	246.69	285.71	
MW-75	11/7/2012	532.4	246.63	285.77	
MW-75	12/7/2012	532.4	246.5	285.9	
MW-76	10/1/2012	491.71	139.6	352.11	
MW-76	10/26/2012	491.71	140.55	351.16	
MW-77	10/1/2012	552.67	228.25	324.42	
MW-77	10/25/2012	552.67	240.81	311.86	
MW-78	10/1/2012	537.35	213.01	324.34	
MW-78	10/26/2012	537.35	213.18	324.17	
MW-79	10/1/2012	459.17	39.59	419.58	
MW-80	10/1/2012	530.41	240.14	290.27	
MW-80	10/19/2012	530.41	239.82	290.59	
MW-81	10/1/2012	493.66	185.18	308.48	
MW-81	10/22/2012	493.66	184.53	309.13	
MW-82	10/1/2012	474.85	123.76	351.09	
MW-82	10/2/2012	474.85	123.78	351.07	
MW-83	10/1/2012	496.81	144.19	352.62	
MW-83	10/18/2012	496.81	144.43	352.38	
MW-84	10/1/2012	530.8	236.76	294.04	
MW-84	10/22/2012	530.8	236.44	294.36	
MW-85	10/1/2012	531.76	246.98	284.78	
MW-85	10/19/2012	531.76	246.87	284.89	
MW-86	10/1/2012	536.04	249.72	286.32	
MW-86	10/18/2012	536.04	249.77	286.27	
MW-87	10/1/2012	537.31	249.09	288.22	
MW-87	10/5/2012	537.31	249.11	288.2	
MW-87	11/7/2012	537.31	249.2	288.11	
MW-87	12/7/2012	537.31	249.25	288.06	
MW-88	10/1/2012	513.68	227.64	286.04	
MW-88	10/24/2012	513.68	227.74	285.94	
MW-89	10/1/2012	512.82	232.85	279.97	

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater Elevation Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground-Water Elevation (msl)	Comment
MW-89	10/12/2012	512.82	232.72	280.1	
MW-90	10/1/2012	502.22	222.6	279.62	
MW-90	10/22/2012	502.22	222.4	279.82	
MW-91	10/1/2012	532.02	249.42	282.6	
MW-91	10/31/2012	532.02	249.15	282.87	
MW-93	10/1/2012	632.15	309.24	322.91	
MW-93	10/10/2012	632.15	300.04	332.11	
MW-94	10/1/2012	495.51	142.42	353.09	
MW-94	10/18/2012	495.51	142.82	352.69	
MW-95	10/1/2012	571.54	251.8	319.74	
MW-95	10/25/2012	571.54	252.08	319.46	
MW-96	10/1/2012	547.74	99.25	448.49	
MW-97	10/1/2012	564.54	112.89	451.65	
MW-98	10/1/2012	503.73	22.45	481.28	
MW-99	10/1/2012	493.64	201.61	292.03	
MW-99	10/5/2012	493.64	201.56	292.08	
MW-99	11/7/2012	493.64	201.48	292.16	
MW-99	12/7/2012	493.64	201.38	292.26	
MW-100	10/1/2012	620.32	298.5	321.82	
MW-100	10/4/2012	620.32	298.4	321.92	
MW-101	10/1/2012	474.72	35.37	439.35	
MW-101	10/26/2012	474.72	34.78	439.94	
MW-102	10/1/2012	552.48	48.35	504.13	
MW-103	10/1/2012	639.08	18.23	620.85	
MW-104	10/1/2012	629.68	27.68	602	
MW-105	10/1/2012	521.23	23.1	498.13	
MW-106	10/1/2012	475.47	191.58	283.89	
MW-EB6	10/1/2012	589.61	31.11	558.5	
WS-NPW-1	10/1/2012	646.33	346.25	300.08	
WS-NPW-3	10/1/2012	645.81	332.41	313.4	

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater Field Parameters
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field) (std. Units)	Conductance (Field) (umho/cm)	Temperature (^{0}C)	Purge Volume (gal)
MW-21	10/2/2012	W21-121002-	7.93	130	9.5	7.3
MW-24	10/10/2012	W24-121010-	7.22	175	9.8	8.6
MW-27A	10/11/2012	W27A121011-	7.73	160	9.5	6.6
MW-29	10/15/2012	W29-121015-	6.53	85	11.7	11.1
MW-30A	10/12/2012	W30A121012-	6.25	270	11.9	2.2
MW-43	10/4/2012	W43-121004-	7.48	175	9.5	16.3
MW-43	10/4/2012	W43-121004D	7.48	175	9.5	16.3
MW-47	10/8/2012	W47-121008-	6.88	700	10.7	14.5
MW-47	10/8/2012	W47-121008D	6.88	700	10.7	14.5
MW-55	10/19/2012	W55-121019-	7.5	130	10.2	8
MW-56	10/2/2012	W56-121002-	7	165	9.5	22.2
MW-57	10/8/2012	W57-121008-	6.83	230	10.3	26
MW-58A	10/9/2012	W58A121009-	7.56	190	10.6	34
MW-59	10/8/2012	W59-121008-	7.11	180	10.4	27.5
MW-60	10/9/2012	W60-121009-	6.8	160	9.7	14
MW-65	10/12/2012	W65-121012-	6.77	140	9.3	21
MW-66	10/12/2012	W66-121012-	7.11	265	10.1	9
MW-67	10/15/2012	W67-121015-	7.12	305	10.4	11.5
MW-68	10/16/2012	W68-121016-	7.19	275	10.7	17.2
MW-69	10/19/2012	W69-121019-	7.49	220	9.6	10.5
MW-70	10/15/2012	W70-121015-	7.29	160	10	12.5
MW-72	10/4/2012	W72-121004-	7.08	250	10.2	12
MW-73	10/22/2012	W73-121022-	7.08	145	9.3	10.8
MW-74	10/10/2012	W74R121010-	7.08	360	9.8	7
MW-74	11/7/2012	W74R121107-	7.06	300	9.7	7
MW-74	12/7/2012	W74R121207-	7.01	340	9.7	5.6
MW-75	10/10/2012	W75-121010-	6.97	240	9.4	11.3
MW-75	11/7/2012	W75-121107-	6.96	220	9.2	14
MW-75	12/7/2012	W75-121207-	6.93	240	8.7	15.5
MW-76	10/26/2012	W76-121026-	6.29	160	9.5	6
MW-77	10/25/2012	W77-121025-	7.03	190	10.2	10
MW-78	10/26/2012	W78-121026-	6.47	140	10.3	9.5
MW-80	10/19/2012	W80-121019-	7.3	275	10.3	8
MW-81	10/22/2012	W81-121022-	7.12	110	9.4	6.6
MW-82	10/2/2012	W82-121002-	6.92	250	9.7	5
MW-83	10/18/2012	W83-121018-	7.01	355	10.7	4
MW-84	10/22/2012	W84-121022-	7	155	9.6	8.7
MW-85	10/19/2012	W85-121019-	7.19	260	10	9.4
MW-86	10/18/2012	W86-121018-	6.79	140	9	9.3
MW-87	10/5/2012	W87-121005-	6.92	410	10.7	6.3
MW-87	11/7/2012	W87-121107-	6.85	410	11.2	6.5
MW-87	12/7/2012	W87-121207-	6.89	410	10.6	7.2
MW-88	10/24/2012	W88-121024-	7.19	135	9.8	8.7
MW-89	10/12/2012	W89-121012-	7.36	195	9.8	9
MW-90	10/22/2012	W90-121022-	7.29	160	9	7.8

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater Field Parameters
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field) (std. Units)	Conductance (Field) (umho/cm)	Temperature (^{0}C)	Purge Volume (gal)
MW-91	10/31/2012	W91-121031-	7.09	210	9.7	8
MW-93	10/10/2012	W93-121010-	7.25	350	11.5	9.2
MW-94	10/18/2012	W94-121018-	7.09	310	9.7	9
MW-95	10/25/2012	W95-121025-	7.39	180	9.3	7.5
MW-99	10/5/2012	W99-121005-	7.91	130	10.4	9.6
MW-99	11/7/2012	W99-121107-	7.85	130	10.2	9.5
MW-99	12/7/2012	W99-121207-	7.98	135	10.3	9.6
MW-100	10/4/2012	W100121004-	6.86	285	10.7	9
MW-101	10/26/2012	W101121026-	7.19	605	11	7.7
WS-NPW	10/5/2012	WNPW121005-	7.48	315	11.4	
EQUIPMENT BLANK	10/11/2012	WU1H121011E	7.68	6.5	11.6	
EQUIPMENT BLANK	10/11/2012	WU1M121011E	7.68	6.5	11.6	
EQUIPMENT BLANK	10/11/2012	WU1S121011E	7.68	6.5	11.6	
FIELD BLANK	10/19/2012	W55-121019F	7.07	18	15	
FIELD BLANK	12/7/2012	W87-121207F	6.25	7.4	14.4	
FIELD BLANK	10/10/2012	W93-121010F	6.2	4.5	11.6	

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater Conventionals Analytical Data
Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	Alkalinity, Total ($CaCO_3$) (mg/L)	Ammonia, (NH_3) (mg/L)	Chloride (mg/L)	Nitrate-Nitrogen, (NO_3 as N) (mg/L)	Specific Conductance (umho/cm)	Sulfate (SO_4) (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)
MW-21	10/2/2012	W21-121002-	52.7	< 0.01 U	2.8	< 0.01 U	124	5.29	84.1	< 1 U	88.8	2
MW-24	10/10/2012	W24-121010-	64.5	0.0409	4.01	< 0.01 U	173	16.2	105	< 1 U	116	< 1 U
MW-27A	10/11/2012	W27A121011-	80.3	0.168	5.69	0.0522	202	10.6	135	1.07	144	< 1 U
MW-29	10/15/2012	W29-121015-	27.9	< 0.01 U	2.87	2.16	88.8	1.85	153	3.28	797	518
MW-30A	10/12/2012	W30A121012-	193	< 0.01 U	2.14	0.328	389	11.4	237	3.93	245	< 1 U
MW-43	10/4/2012	W43-121004-	70.1	0.0215	3.72	< 0.01 U	179	14.1	122	1.23	129	< 1 U
MW-43	10/4/2012	W43-121004D	72.2	0.0212	3.64	< 0.01 U	179	13.7	122	1.22	126	< 1 U
MW-47	10/8/2012	W47-121008-	676	0.0563	7.66	< 0.01 U	1160	7.19	702	7.41	741	5.7
MW-47	10/8/2012	W47-121008D	675	0.0598	7.63	< 0.01 U	1140	7.28	690	8.63	724	4.1
MW-55	10/19/2012	W55-121019-	66.8	0.0514	2.61	0.015 T	159	11.8	121	< 1 U	115	1
MW-56	10/2/2012	W56-121002-	57	< 0.01 U	4.22	< 0.01 U	174	21.4	114	1.06	116	< 1 U
MW-57	10/8/2012	W57-121008-	87.9	0.0202	5.53	< 0.01 U	229	18.6	163	1 T	174	11.9
MW-58A	10/9/2012	W58A121009-	74	0.0663	3.95	< 0.01 U	189	15.7	126	< 1 U	135	< 1 U
MW-59	10/8/2012	W59-121008-	65.1	< 0.01 U	4.22	< 0.01 U	178	18.7	119	< 1 U	127	2.4
MW-60	10/9/2012	W60-121009-	82.9	< 0.01 U	1.46	1.17	195	7.7	123	1.08	130	< 1 U
MW-65	10/12/2012	W65-121012-	53.2	0.0304	4.57	< 0.01 U	157	17	102	1.39	116	8.3
MW-66	10/12/2012	W66-121012-	119	< 0.01 U	6.91	0.757	286	14	166	1.77	179	< 1 U
MW-67	12/15/2012	W67-121015-	119	< 0.01 U	4.35	0.5	330	17.1	203	< 1 U	212	1.5
MW-68	10/16/2012	W68-121016-	131	0.012 T	2.75	< 0.01 U	290	15.7	170	< 1 U	193	17.8
MW-69	10/19/2012	W69-121019-	126	0.015 T	4.75	< 0.01 U	280	14.1	166	1.11	215	45.9
MW-70	10/15/2012	W70-121015-	80.5	< 0.01 U	7.69	0.028 T	206	38.2	124	< 1 U	132	< 1 U
MW-72	10/4/2012	W72-121004-	115	0.014 T	4.47	< 0.01 U	313	38.5	197	1.69	212	3.1
MW-73	10/22/2012	W73-121022-	54.6	< 0.01 U	3.22	1.69	150	8.68	101	< 1 U	101	< 1 U
MW-74	10/10/2012	W74R121010-	205	< 0.01 U	24.8	0.436	504	24.8	291	2.03	310	< 1 U
MW-75	10/10/2012	W75-121010-	96.3	0.128	8.91	0.012 T	309	48.4	204	1.22	207	1.3
MW-76	10/26/2012	W76-121026-	56.3	< 0.01 U	11.7	0.647	208	21.6	144	1.46	141	1.6
MW-77	10/25/2012	W77-121025-	109	< 0.01 U	4.83	0.862	247	8.6	152	1.3	151	1.6 T
MW-78	10/26/2012	W78-121026-	70.4	< 0.01 U	4.9	0.936	179	7.78	121	1.07	121	< 1 U
MW-80	10/19/2012	W80-121019-	89.5	< 0.01 U	4.82	< 0.01 U	283	44.2	176	< 1 U	194	6.97
MW-81	10/22/2012	W81-121022-	49.4	< 0.01 U	3.54	1.63	138	8.16	90.7	< 1 U	94.9	1.3
MW-82	10/2/2012	W82-121002-	113	< 0.01 U	6.3	0.637	281	17.9	178	1.31	188	< 1 U
MW-83	10/18/2012	W83-121018	145	< 0.01 U	30.2	0.745	395	6.88	238	3.15	255	< 1 U
MW-84	10/22/2012	W84-121022-	60.3	< 0.01 U	3.88	0.541	163	13.2	101	< 1 U	103	< 1 U
MW-84	10/22/2012	W84-121022D	60	< 0.01 U	3.94	0.551	162	13.5	104	< 1 U	102	< 1 U
MW-85	10/19/2012	W85-121019-	97.5	< 0.01 U	7.25	0.129	280	32.1	169	< 1 U	171	< 1 U
MW-86	10/18/2012	W86-121018-	64.9	< 0.01 U	4.66	0.326	177	16.7	106	< 1 U	114	1.6 T
MW-87	10/5/2012	W87-121005-	87.1	0.012 T	5.45	0.013 T	455	134	322	< 1 U	345	7.6
MW-88	10/24/2012	W88-121024-	52.8	< 0.01 U	2.42	0.556	131	6.68	84.7	< 1 U	88.6	< 1 U
MW-89	10/12/2012	W89-121012-	74.6	0.019 T	3.78	< 0.01 U	193	15.4	122	1.19	136	7.47
MW-90	10/22/2012	W90-121022-	69.3	0.016 T	4.17	< 0.01 U	203	26.2	134	< 1 U	139	14.2
MW-91	10/31/2012	W91-121031-	86.1	0.0349	7.66	0.02 T	277	38.7	172	1.36	206	75.6
MW-91	10/31/2012	W91-121031D	85.9	0.0356	7.75	0.021 T	276	39.3	187	1.65	209	40
MW-93	10/10/2012	W93-121010-	114	0.0519	3.01	0.012 T	380	78.3	246	1.02	261	< 1 U
MW-94	10/18/2012	W94-121018-	120	< 0.01 U	21.3	0.946	319	5.41	194	2	200	< 1 U
MW-95	10/25/2012	W95-121025-	85.4	0.0258	5.6	< 0.01 U	233	17.7	138	< 1 U	138	< 1 U

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater Conventionals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Alkalinity, Total ($CaCO_3$) (mg/L)	Ammonia, (NH_3) (mg/L)	Chloride (mg/L)	Nitrate-Nitrogen, (NO_3 as N) (mg/L)	Specific Conductance (umho/cm)	Sulfate (SO_4) (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)
MW-99	10/5/2012	W99-121005-	52.2	0.0516	3.38	0.04 T	133	8.1	93.1	< 1 U	98.8	< 1 U
MW-100	10/4/2012	W100121004-	135	< 0.01 U	2.51	< 0.01 U	309	21.2	181	2.05	198	7.4
MW-101	10/26/2012	W101121026-	381	0.016 T	4.52	< 0.01 U	700	5.02	435	6.7	441	< 1 U
EQUIPMENT BLANK	10/11/2012	WU1S121011E		< 0.01 U								
EQUIPMENT BLANK	10/11/2012	WU1H121011E		0.0326								
EQUIPMENT BLANK	10/11/2012	WU1M121011E		< 0.01 U								
FIELD BLANK	10/10/2012	W93-121010F	1.8 T	< 0.01 U	< 0.1 U	0.0832	3.8 T	< 0.1 U	< 5 U	< 1 U	< 5 U	< 1 U
FIELD BLANK	10/19/2012	W55-121019F	2.8 T	< 0.01 U	0.111	0.105	4.5 T	< 0.1 U	< 5 U	< 1 U	< 5 U	< 1 U
WS-NPW	10/5/2012	WNPW121005-	155	< 0.01 U	3.76	0.011 T	347	23.7	211	1.3	231	1

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill ---Groundwater Metals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Antimony, dissolved (mg/L)	Arsenic, dissolved (mg/L)	Barium, dissolved (mg/L)	Beryllium, dissolved (mg/L)	Cadmium, dissolved (mg/L)	Calcium, dissolved (mg/L)	Chromium, dissolved (mg/L)	Cobalt, dissolved (mg/L)	Copper, dissolved (mg/L)	Iron, dissolved (mg/L)	Lead, dissolved (mg/L)	Magnesium, dissolved (mg/L)
MW-21	10/2/2012	W21-121002-	< 0.001 U	< 0.001 U	0.00266	< 0.001 U	< 0.002 U	9.01	< 0.005 U	< 0.003 U	< 0.002 U	1.66	< 0.001 U	5.08
MW-24	10/10/2012	W24-121010-	< 0.001 U	< 0.001 U	0.00171	< 0.001 U	< 0.002 U	12.3	< 0.005 U	< 0.003 U	< 0.002 U	3.08	< 0.001 U	8.18
MW-27A	10/11/2012	W27A121011-	< 0.001 U	0.016	0.00589	< 0.001 U	< 0.002 U	20.7	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.64
MW-29	10/15/2012	W29-121015-	< 0.001 U	< 0.001 U	0.00142	< 0.001 U	< 0.002 U	7.46	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	2.21
MW-30A	10/12/2012	W30A121012-	< 0.001 U	< 0.001 U	0.00627	< 0.001 U	< 0.002 U	31.9	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	21.5
MW-43	10/4/2012	W43-121004-	< 0.001 U	< 0.001 U	0.00603	< 0.001 U	< 0.002 U	11.8	< 0.005 U	< 0.003 U	< 0.002 U	0.965	< 0.001 U	8.17
MW-43	10/4/2012	W43-121004D	< 0.001 U	< 0.001 U	0.00607	< 0.001 U	< 0.002 U	11.7	< 0.005 U	< 0.003 U	< 0.002 U	0.945	< 0.001 U	8.2
MW-47	10/8/2012	W47-121008-	< 0.001 U	< 0.001 U	0.0335	< 0.001 U	< 0.002 U	123 D	< 0.005 U	< 0.003 U	< 0.002 U	0.217	< 0.001 U	61.2 D
MW-47	10/8/2012	W47-121008D	< 0.001 U	< 0.001 U	0.0344	< 0.001 U	< 0.002 U	125 D	< 0.005 U	< 0.003 U	< 0.002 U	0.189	< 0.001 U	61.9 D
MW-55	10/19/2012	W55-121019-	< 0.001 U	< 0.001 U	0.00483	< 0.001 U	< 0.002 U	12.4	< 0.005 U	< 0.003 U	< 0.002 U	0.332	< 0.001 U	7.13
MW-56	10/2/2012	W56-121002-	< 0.001 U	< 0.001 U	0.00366	< 0.001 U	< 0.002 U	15.1	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.34
MW-57	10/8/2012	W57-121008-	< 0.001 U	< 0.001 U	0.00167	< 0.001 U	< 0.002 U	16	< 0.005 U	< 0.003 U	< 0.002 U	8.83	< 0.001 U	8.7
MW-58A	10/9/2012	W58A121009-	< 0.001 U	< 0.001 U	0.00399	< 0.001 U	< 0.002 U	15.4	< 0.005 U	< 0.003 U	< 0.002 U	0.969	< 0.001 U	7.79
MW-59	10/8/2012	W59-121008-	< 0.001 U	< 0.001 U	0.00306	< 0.001 U	< 0.002 U	12.8	< 0.005 U	< 0.003 U	< 0.002 U	3.98	< 0.001 U	7.78
MW-60	10/9/2012	W60-121009-	< 0.001 U	< 0.001 U	0.00284	< 0.001 U	< 0.002 U	16	< 0.005 U	< 0.003 U	< 0.002 U	0.01 T	< 0.001 U	7.44
MW-65	10/12/2012	W65-121012-	< 0.001 U	< 0.001 U	0.00745	< 0.001 U	< 0.002 U	12.2	< 0.005 U	< 0.003 U	< 0.002 U	4.74	< 0.001 U	8.03
MW-66	10/12/2012	W66-121012-	< 0.001 U	< 0.001 U	0.00576	< 0.001 U	< 0.002 U	21.8	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	18.8
MW-67	12/15/2012	W67-121015-	< 0.001 U	< 0.001 U	0.00918	< 0.001 U	< 0.002 U	30	< 0.005 U	< 0.003 U	< 0.002 U	0.133	< 0.001 U	18.8
MW-68	10/16/2012	W68-121016-	< 0.001 U	< 0.001 U	0.0121	< 0.001 U	< 0.002 U	27.3	< 0.005 U	< 0.003 U	< 0.002 U	1.13	< 0.001 U	16.7
MW-69	10/19/2012	W69-121019-	< 0.001 U	0.00237	0.0114	< 0.001 U	< 0.002 U	28.1	< 0.005 U	< 0.003 U	< 0.002 U	1.23	< 0.001 U	14.4
MW-70	10/15/2012	W70-121015-	< 0.001 U	< 0.001 U	0.00188	< 0.001 U	< 0.002 U	18	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	10.8
MW-72	10/4/2012	W72-121004-	< 0.001 U	< 0.001 U	0.00962	< 0.001 U	< 0.002 U	24.5	< 0.005 U	< 0.003 U	< 0.002 U	2.03	< 0.001 U	14.7
MW-73	10/22/2012	W73-121022-	< 0.001 U	< 0.001 U	0.00248	< 0.001 U	< 0.002 U	11.8	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.44
MW-74	10/10/2012	W74R121010-	< 0.001 U	< 0.001 U	0.0099	< 0.001 U	< 0.002 U	36.8	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	28.6
MW-75	10/10/2012	W75-121010-	< 0.001 U	< 0.001 U	0.00876	< 0.001 U	< 0.002 U	21	< 0.005 U	< 0.003 U	< 0.002 U	1.43	< 0.001 U	15.9
MW-76	10/26/2012	W76-121026-	< 0.001 U	< 0.001 U	0.0032	< 0.001 U	< 0.002 U	16.6	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	7.32
MW-77	10/25/2012	W77-121025-	< 0.001 U	< 0.001 U	0.00301	< 0.001 U	< 0.002 U	20.8	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	11.3
MW-78	10/26/2012	W78-121026-	< 0.001 U	< 0.001 U	0.00163	< 0.001 U	< 0.002 U	14.2	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.87
MW-80	10/19/2012	W80-121019-	< 0.001 U	0.00416	0.0124	< 0.001 U	< 0.002 U	25.4	< 0.005 U	< 0.003 U	< 0.002 U	1.55	< 0.001 U	13.8
MW-81	10/22/2012	W81-121022-	< 0.001 U	< 0.001 U	0.00259	< 0.001 U	< 0.002 U	10.7	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.07
MW-82	10/2/2012	W82-121002-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	21.5	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	12.6
MW-83	10/18/2012	W83-121018	< 0.001 U	< 0.001 U	0.00661	< 0.001 U	< 0.002 U	41.4	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	18.1
MW-84	10/22/2012	W84-121022-	< 0.001 U	< 0.001 U	0.00342	< 0.001 U	< 0.002 U	10.9	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	8.97
MW-84	10/22/2012	W84-121022D	< 0.001 U	< 0.001 U	0.00339	< 0.001 U	< 0.002 U	10.7	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	8.92
MW-85	10/19/2012	W85-121019-	< 0.001 U	< 0.001 U	0.00506	< 0.001 U	< 0.002 U	22.9	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	15.5
MW-86	10/18/2012	W86-121018-	< 0.001 U	< 0.001 U	0.00404	< 0.001 U	< 0.002 U	13.1	< 0.005 U	< 0.003 U	< 0.002 U	0.306	< 0.001 U	9.91
MW-87	10/5/2012	W87-121005-	< 0.001 U	< 0.001 U	0.0186	< 0.001 U	< 0.002 U	33.6	< 0.005 U	< 0.003 U	< 0.002 U	3.21	< 0.001 U	23.4
MW-88	10/24/2012	W88-121024-	< 0.001 U	< 0.001 U	0.00218	< 0.001 U	< 0.002 U	8.3	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.14
MW-89	10/12/2012	W89-121012-	< 0.001 U	0.00138	0.00634	< 0.001 U	< 0.002 U	13.1	< 0.005 U	< 0.003 U	< 0.002 U	0.825	< 0.001 U	10.9
MW-90	10/22/2012	W90-121022-	< 0.001 U	< 0.001 U	0.00543	< 0.001 U	< 0.002 U	16.1	< 0.005 U	< 0.003 U	< 0.002 U	1.08	< 0.001 U	9.96
MW-91	10/31/2012	W91-121031-	< 0.001 U	0.00168 D	0.00878	< 0.001 U	< 0.002 U	20.2	< 0.005 DU	< 0.003 U	< 0.002 DU	2.45 D	< 0.001 U	12.8
MW-91	10/31/2012	W91-121031D	< 0.001 U	0.00174 D	0.00878	< 0.001 U	< 0.002 U	20.3	< 0.005 DU	< 0.003 U	< 0.002 DU	2.5 D	< 0.001 U	12.8
MW-93	10/10/2012	W93-121010-	< 0.001 U	0.0013	0.00757	< 0.001 U	< 0.002 U	32.3	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	16.5
MW-94	10/18/2012	W94-121018-	< 0.001 U	< 0.001 U	0.00301	< 0.001 U	< 0.002 U	30.9	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	15.2
MW-95	10/25/2012	W95-121025-	< 0.001 U	< 0.001 U	0.00339	< 0.001 U	< 0.002 U	18.2	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	9.75

* Total Metals

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill ---Groundwater Metals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Antimony, dissolved (mg/L)	Arsenic, dissolved (mg/L)	Barium, dissolved (mg/L)	Beryllium, dissolved (mg/L)	Cadmium, dissolved (mg/L)	Calcium, dissolved (mg/L)	Chromium, dissolved (mg/L)	Cobalt, dissolved (mg/L)	Copper, dissolved (mg/L)	Iron, dissolved (mg/L)	Lead, dissolved (mg/L)	Magnesium, dissolved (mg/L)
MW-99	10/5/2012	W99-121005-	< 0.001 U	0.00206	0.00242	< 0.001 U	< 0.002 U	8.34	< 0.005 U	< 0.003 U	< 0.002 U	0.034 T	< 0.001 U	3.93
MW-100	10/4/2012	W100121004-	< 0.001 U	< 0.001 U	0.00683	< 0.001 U	< 0.002 U	25.8	< 0.005 U	< 0.003 U	< 0.002 U	1.37	< 0.001 U	15.5
MW-101	10/26/2012	W101121026-	< 0.001 U	0.00411	0.0318	< 0.001 U	< 0.002 U	60.4 D	< 0.005 U	< 0.003 U	< 0.002 U	0.192	< 0.001 U	39.2
EQUIPMENT BLANK	10/11/2012	WU1S121011E	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.01 U	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	< 0.015 U
EQUIPMENT BLANK	10/11/2012	WU1H121011E	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.01 U	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	< 0.015 U
FIELD BLANK	10/10/2012	W93-121010F	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.01 U	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	< 0.015 U
FIELD BLANK	10/19/2012	W55-121019F	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.01 U	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	< 0.015 U
WS-NPW	10/5/2012	WNPW121005-	< 0.001 U	0.00123	0.00866	< 0.001 U	< 0.002 U	23.9	< 0.005 U	< 0.003 U	0.0209	0.131	0.00179	13.9

* Total Metals

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill ---Groundwater Metals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Manganese, dissolved (mg/L)	Mercury, dissolved (mg/L)	Nickel, dissolved (mg/L)	Potassium, dissolved (mg/L)	Selenium, dissolved (mg/L)	Silver, dissolved (mg/L)	Sodium, dissolved (mg/L)	Thallium, dissolved (mg/L)	Vanadium, dissolved (mg/L)	Zinc, dissolved (mg/L)
MW-21	10/2/2012	W21-121002-	0.0669	< 0.0001 U	< 0.01 U	0.947	< 0.001 U	< 0.003 U	4.76	< 0.001 U	< 0.002 U	< 0.004 U
MW-24	10/10/2012	W24-121010-	0.106	< 0.0001 U	< 0.01 U	0.801	< 0.001 U	< 0.003 U	5.11	< 0.001 U	< 0.002 U	< 0.004 U
MW-27A	10/11/2012	W27A121011-	0.0671	< 0.0001 U	< 0.01 U	3.77	< 0.001 U	< 0.003 U	6.85	< 0.001 U	< 0.002 U	< 0.004 U
MW-29	10/15/2012	W29-121015-	< 0.001 U	< 0.0001 U	< 0.01 U	0.59	< 0.001 U	< 0.003 U	4.74	< 0.001 U	< 0.002 U	< 0.004 U
MW-30A	10/12/2012	W30A121012-	< 0.001 U	< 0.0001 U	< 0.01 U	1.82	< 0.001 U	< 0.003 U	13.6	< 0.001 U	< 0.002 U	< 0.004 U
MW-43	10/4/2012	W43-121004-	0.197	< 0.0001 U	< 0.01 U	1.19	< 0.001 U	< 0.003 U	5.61	< 0.001 U	< 0.002 U	< 0.004 U
MW-43	10/4/2012	W43-121004D	0.197	< 0.0001 U	< 0.01 U	1.22	< 0.001 U	< 0.003 U	5.6	< 0.001 U	< 0.002 U	< 0.004 U
MW-47	10/8/2012	W47-121008-	1.38 D	< 0.0001 U	< 0.01 U	4.54	< 0.001 DU	< 0.003 U	14.5	< 0.001 U	< 0.002 U	< 0.004 U
MW-47	10/8/2012	W47-121008D	1.39 D	< 0.0001 U	< 0.01 U	4.58	< 0.001 DU	< 0.003 U	14.2	< 0.001 U	< 0.002 U	< 0.004 U
MW-55	10/19/2012	W55-121019-	0.158 D	< 0.0001 U	< 0.01 U	1.71	< 0.001 U	< 0.003 DU	5.72 D	< 0.001 DU	< 0.002 U	< 0.004 U
MW-56	10/2/2012	W56-121002-	0.0824	< 0.0001 U	< 0.01 U	0.97	< 0.001 U	< 0.003 U	4.71	< 0.001 U	< 0.002 U	< 0.004 U
MW-57	10/8/2012	W57-121008-	0.239	< 0.0001 U	< 0.01 U	0.874	< 0.001 U	< 0.003 U	6.01	< 0.001 U	< 0.002 U	< 0.004 U
MW-58A	10/9/2012	W58A121009-	0.313	< 0.0001 U	< 0.01 U	0.913	< 0.001 U	< 0.003 U	4.97	< 0.001 U	< 0.002 U	< 0.004 U
MW-59	10/8/2012	W59-121008-	0.0957	< 0.0001 U	< 0.01 U	0.959	< 0.001 U	< 0.003 U	5.14	< 0.001 U	< 0.002 U	< 0.004 U
MW-60	10/9/2012	W60-121009-	< 0.001 U	< 0.0001 U	< 0.01 U	1.03	< 0.001 U	< 0.003 U	5.06	< 0.001 U	< 0.002 U	< 0.004 U
MW-65	10/12/2012	W65-121012-	0.195	< 0.0001 U	< 0.01 U	0.982	< 0.001 U	< 0.003 U	5.49	< 0.001 U	< 0.002 U	< 0.004 U
MW-66	10/12/2012	W66-121012-	< 0.001 U	< 0.0001 U	< 0.01 U	1.32	< 0.001 U	< 0.003 U	8.32	< 0.001 U	< 0.002 U	< 0.004 U
MW-67	12/15/2012	W67-121015-	0.0918	< 0.0001 U	< 0.01 U	1.64	< 0.001 U	< 0.003 U	8.77	< 0.001 U	< 0.002 U	< 0.004 U
MW-68	10/16/2012	W68-121016-	0.227	< 0.0001 U	< 0.01 U	1.72	< 0.001 U	< 0.003 U	8.35	< 0.001 U	< 0.002 U	< 0.004 U
MW-69	10/19/2012	W69-121019-	0.206	< 0.0001 U	< 0.01 U	1.7	< 0.001 U	< 0.003 U	7.75	< 0.001 U	< 0.002 U	< 0.004 U
MW-70	10/15/2012	W70-121015-	< 0.001 U	< 0.0001 U	< 0.01 U	1.52	< 0.001 U	< 0.003 U	6.32	< 0.001 U	< 0.002 U	< 0.004 U
MW-72	10/4/2012	W72-121004-	0.258	< 0.0001 U	< 0.01 U	1.62	< 0.001 U	< 0.003 U	6.61	< 0.001 U	< 0.002 U	< 0.004 U
MW-73	10/22/2012	W73-121022-	< 0.001 DU	< 0.0001 U	< 0.01 U	0.832	< 0.001 U	< 0.003 DU	5.41 D	< 0.001 DU	< 0.002 U	< 0.004 U
MW-74	10/10/2012	W74R121010-	< 0.001 U	< 0.0001 U	< 0.01 U	1.79	< 0.001 U	< 0.003 U	10.6	< 0.001 U	< 0.002 U	< 0.004 U
MW-75	10/10/2012	W75-121010-	0.111	< 0.0001 U	< 0.01 U	1.53	< 0.001 U	< 0.003 U	7.39	< 0.001 U	< 0.002 U	< 0.004 U
MW-76	10/26/2012	W76-121026-	< 0.001 U	< 0.0001 U	< 0.01 U	1.17	< 0.001 U	< 0.003 U	7.2	< 0.001 U	< 0.002 U	< 0.004 U
MW-77	10/25/2012	W77-121025-	0.0108	< 0.0001 U	< 0.01 U	1.31	< 0.001 U	< 0.003 U	7.27	< 0.001 U	< 0.002 U	< 0.004 U
MW-78	10/26/2012	W78-121026-	< 0.001 U	< 0.0001 U	< 0.01 U	1.91	< 0.001 U	< 0.003 U	5.82	< 0.001 U	< 0.002 U	< 0.004 U
MW-80	10/19/2012	W80-121019-	0.245 D	< 0.0001 U	< 0.01 U	1.56	< 0.001 U	< 0.003 DU	6.84 D	< 0.001 DU	< 0.002 U	< 0.004 U
MW-81	10/22/2012	W81-121022-	< 0.001 DU	< 0.0001 U	< 0.01 U	0.737	0.00103	< 0.003 DU	5.47 D	< 0.001 DU	< 0.002 U	< 0.004 U
MW-82	10/2/2012	W82-121002-	< 0.001 U	< 0.0001 U	< 0.01 U	1.56	< 0.001 U	< 0.003 U	6.28	< 0.001 U	< 0.002 U	< 0.004 U
MW-83	10/18/2012	W83-121018	< 0.001 U	< 0.0001 U	< 0.01 U	2.82	< 0.001 U	< 0.003 U	8.42	< 0.001 U	< 0.002 U	< 0.004 U
MW-84	10/22/2012	W84-121022-	0.00593 D	< 0.0001 U	< 0.01 U	1.01	0.00104	< 0.003 DU	5.82 D	< 0.001 DU	< 0.002 U	< 0.004 U
MW-84	10/22/2012	W84-121022D	0.00311 D	< 0.0001 U	< 0.01 U	0.982	0.00117	< 0.003 DU	5.73 D	< 0.001 DU	< 0.002 U	< 0.004 U
MW-85	10/19/2012	W85-121019-	< 0.001 U	< 0.0001 U	< 0.01 U	1.51	0.00136	< 0.003 U	7.96	< 0.001 U	< 0.002 U	< 0.004 U
MW-86	10/18/2012	W86-121018-	0.00696	< 0.0001 U	< 0.01 U	1.16	0.0016	< 0.003 U	6.41	< 0.001 U	< 0.002 U	< 0.004 U
MW-87	10/5/2012	W87-121005-	0.34	< 0.0001 U	< 0.01 U	1.93	< 0.001 U	< 0.003 U	8.63	< 0.001 U	< 0.002 U	< 0.004 U
MW-88	10/24/2012	W88-121024-	0.00113	< 0.0001 U	< 0.01 U	0.765	< 0.001 U	< 0.003 U	5.21	< 0.001 U	0.00255	< 0.004 U
MW-89	10/12/2012	W89-121012-	0.23	< 0.0001 U	< 0.01 U	1.49	< 0.001 U	< 0.003 U	8.57	< 0.001 U	< 0.002 U	< 0.004 U
MW-90	10/22/2012	W90-121022-	0.244 D	< 0.0001 U	< 0.01 U	1.35	< 0.001 U	< 0.003 DU	5.88 D	< 0.001 DU	< 0.002 U	< 0.004 U
MW-91	10/31/2012	W91-121031-	0.405 D	< 0.0001 U	< 0.01 DU	1.67 D	< 0.001 DU	< 0.003 U	6.69	< 0.001 U	< 0.002 DU	< 0.004 U
MW-91	10/31/2012	W91-121031D	0.391 D	< 0.0001 U	< 0.01 DU	1.66 D	< 0.001 DU	< 0.003 U	6.64	< 0.001 U	< 0.002 DU	< 0.004 U
MW-93	10/10/2012	W93-121010-	0.238	< 0.0001 U	< 0.01 U	1.4	< 0.001 U	< 0.003 U	8.3	< 0.001 U	< 0.002 U	0.0086
MW-94	10/18/2012	W94-121018-	< 0.001 U	< 0.0001 U	< 0.01 U	2.32	< 0.001 U	< 0.003 U	7.62	< 0.001 U	< 0.002 U	< 0.004 U
MW-95	10/25/2012	W95-121025-	0.129	< 0.0001 U	< 0.01 U	1.08	< 0.001 U	< 0.003 U	5.58	< 0.001 U	< 0.002 U	< 0.004 U

* Total Metals

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill ---Groundwater Metals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Manganese, dissolved (mg/L)	Mercury, dissolved (mg/L)	Nickel, dissolved (mg/L)	Potassium, dissolved (mg/L)	Selenium, dissolved (mg/L)	Silver, dissolved (mg/L)	Sodium, dissolved (mg/L)	Thallium, dissolved (mg/L)	Vanadium, dissolved (mg/L)	Zinc, dissolved (mg/L)
MW-99	10/5/2012	W99-121005-	0.0553	< 0.0001 U	< 0.01 U	0.772	< 0.001 U	< 0.003 U	8.6	< 0.001 U	< 0.002 U	< 0.004 U
MW-100	10/4/2012	W100121004-	0.225	< 0.0001 U	< 0.01 U	1.78	< 0.001 U	< 0.003 U	8.88	< 0.001 U	< 0.002 U	< 0.004 U
MW-101	10/26/2012	W101121026-	1.15	< 0.0001 U	< 0.01 U	3	< 0.001 U	< 0.003 U	15.9	< 0.001 U	< 0.002 U	< 0.004 U
EQUIPMENT BLANK	10/11/2012	WU1S121011E	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.617	< 0.001 U	< 0.002 U	< 0.004 U
EQUIPMENT BLANK	10/11/2012	WU1H121011E	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.557	< 0.001 U	< 0.002 U	< 0.004 U
FIELD BLANK	10/10/2012	W93-121010F	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.439	< 0.001 U	< 0.002 U	< 0.004 U
FIELD BLANK	10/19/2012	W55-121019F	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.537	< 0.001 U	< 0.002 U	< 0.004 U
WS-NPW	10/5/2012	WNPW121005-	0.0562	< 0.0001 U	< 0.01 U	15.6 D	< 0.001 U	< 0.003 U	92.4 D	< 0.001 U	< 0.002 U	0.0402

* Total Metals

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	1,1,1,2-Tetrachloroethane 630-20-6 (ug/L)	1,1,1-Trichloroethane 71-55-6 (ug/L)	1,1,2,2-Tetrachloroethane 79-34-5 (ug/L)	1,1,2-Trichloroethane 79-00-5 (ug/L)	1,1-Dichloroethane 75-34-3 (ug/L)	1,1-Dichloroethene 75-35-4 (ug/L)	1,2,3-Trichloropropane 96-18-4 (ug/L)	1,2-Dibromo-3-Chloropropane 96-12-8 (ug/L)	1,2-Dibromoethane 106-93-4 (ug/L)	1,2-Dichlorobenzene 95-50-1 (ug/L)	1,2-Dichloroethane 107-06-2 (ug/L)	1,2-Dichloropropane 78-87-5 (ug/L)
MW-21	10/2/2012	W21-121002-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-24	10/10/2012	W24-121010-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	10/11/2012	W27A121011-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-29	10/15/2012	W29-121015-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	10/12/2012	W30A121012-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.43	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	10/4/2012	W43-121004-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	10/4/2012	W43-121004D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	10/8/2012	W47-121008-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.534	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	10/8/2012	W47-121008D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.519	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-55	10/19/2012	W55-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-56	10/2/2012	W56-121002-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	10/8/2012	W57-121008-	< 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-58A	10/9/2012	W58A121009-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-59	10/8/2012	W59-121008-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	10/9/2012	W60-121009-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-65	10/12/2012	W65-121012-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-66	10/12/2012	W66-121012-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-67	12/15/2012	W67-121015-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-68	10/16/2012	W68-121016-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-69	10/19/2012	W69-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	10/15/2012	W70-121015-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-72	10/4/2012	W72-121004-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-73	10/22/2012	W73-121022-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	10/10/2012	W74R121010-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	11/7/2012	W74R121107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	12/7/2012	W74R121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	10/10/2012	W75-121010-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	11/7/2012	W75-121107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	12/7/2012	W75-121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-76	10/26/2012	W76-121026-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	10/25/2012	W77-121025-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78	10/26/2012	W78-121026-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	10/19/2012	W80-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-81	10/22/2012	W81-121022-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-82	10/2/2012	W82-121002-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	10/18/2012	W83-121018	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-84	10/22/2012	W84-121022-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-84	10/22/2012	W84-121022D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-85	10/19/2012	W85-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-86	10/18/2012	W86-121018-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	10/5/2012	W87-121005-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	11/7/2012	W87-121107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	12/7/2012	W87-121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-88	10/24/2012	W88-121024-	< 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-89	10/12/2012	W89-121012-	< 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 October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sandy Jimenez (206) 296-4411

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-90	10/22/2012	W90-121022-	< 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-91	10/31/2012	W91-121031-	< 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-91	10/31/2012	W91-121031D	< 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-93	10/10/2012	W93-121010-	< 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-94	10/18/2012	W94-121018-	< 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-95	10/25/2012	W95-121025-	< 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	10/5/2012	W99-121005-	< 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	11/7/2012	W99-121107-	< 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	12/7/2012	W99-121207-	< 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	10/4/2012	W100121004-	< 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	10/26/2012	W101121026-	< 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	10/10/2012	W93-121010F	< 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	10/19/2012	W55-121019F	< 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	12/7/2012	W87-121207F	< 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	10/3/2012	VTRP121004C	< 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	10/4/2012	VTRP121005C	< 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	10/5/2012	VTRP121008C	< 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	10/8/2012	VTRP121009C	< 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	10/9/2012	VTRP121010C	< 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	10/10/2012	VTRP121012C	< 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	10/12/2012	VTRP121015C	< 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	10/2/2012	VTRP121004B	< 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	10/4/2012	VTRP121008B	< 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	10/8/2012	VTRP121009B	< 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	10/9/2012	VTRP121010B	< 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	10/18/2012	VTRP121016C	< 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	10/16/2012	VTRP121018C	< 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	10/19/2012	VTRP121022C	< 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	10/23/2012	VTRP121024C	< 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	10/24/2012	VTRP121026C	< 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	11/6/2012	VTRP121107C	< 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	10/10/2012	VTRP121011B	< 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	10/11/2012	VTRP121012B	< 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	10/12/2012	VTRP121015B	< 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	10/15/2012	VTRP121018B	< 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	10/19/2012	VTRP121022B	< 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	10/24/2012	VTRP121025B	< 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	10/29/2012	VTRP121031B	< 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	11/6/2012	VTRP121107B	< 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	12/6/2012	VTRP121207C	< 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	12/6/2012	VTRP121207B	< 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	10/18/2012	VTRP121019C	< 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	10/18/2012	VTRP121019B	< 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	10/25/2012	VTRP121026B	< 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	10/5/2012	WNPW121005-	< 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 October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sandy Jimenez (206) 296-4411

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	10/2/2012	W21-121002-	< 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	10/10/2012	W24-121010-	< 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	10/11/2012	W27A121011-	< 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	10/15/2012	W29-121015-	< 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	10/12/2012	W30A121012-	< 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	10/4/2012	W43-121004-	< 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	10/4/2012	W43-121004D	< 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	10/8/2012	W47-121008-	< 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	10/8/2012	W47-121008D	< 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-55	10/19/2012	W55-121019-	< 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	10/2/2012	W56-121002-	< 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	10/8/2012	W57-121008-	< 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-58A	10/9/2012	W58A121009-	< 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	10/8/2012	W59-121008-	< 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	10/9/2012	W60-121009-	< 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	10/12/2012	W65-121012-	< 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	10/12/2012	W66-121012-	< 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	12/15/2012	W67-121015-	< 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	10/16/2012	W68-121016-	< 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	10/19/2012	W69-121019-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	10/15/2012	W70-121015-	< 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	10/4/2012	W72-121004-	< 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	10/22/2012	W73-121022-	< 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	10/10/2012	W74R121010-	< 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	11/7/2012	W74R121107-	< 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	12/7/2012	W74R121207-	< 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	10/10/2012	W75-121010-	< 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	11/7/2012	W75-121107-	< 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	12/7/2012	W75-121207-	< 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	10/26/2012	W76-121026-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	10/25/2012	W77-121025-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78	10/26/2012	W78-121026-	< 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	10/19/2012	W80-121019-	< 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	10/22/2012	W81-121022-	< 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	10/2/2012	W82-121002-	< 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	10/18/2012	W83-121018	< 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	10/22/2012	W84-121022-	< 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	10/22/2012	W84-121022D	< 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	10/19/2012	W85-121019-	< 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	10/18/2012	W86-121018-	< 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	10/5/2012	W87-121005-	< 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	11/7/2012	W87-121107-	< 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	12/7/2012	W87-121207-	< 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	10/24/2012	W88-121024-	< 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	10/12/2012	W89-121012-	< 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 October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

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-90	10/22/2012	W90-121022-	< 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	10/31/2012	W91-121031-	< 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	10/31/2012	W91-121031D	< 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	10/10/2012	W93-121010-	< 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	10/18/2012	W94-121018-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-95	10/25/2012	W95-121025-	< 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	10/5/2012	W99-121005-	< 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	11/7/2012	W99-121107-	< 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	12/7/2012	W99-121207-	< 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	10/4/2012	W100121004-	< 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	10/26/2012	W101121026-	< 0.2 U	< 4 U	< 4 U	< 4 U	6.37	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	10/10/2012	W93-121010F	< 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	10/19/2012	W55-121019F	< 0.2 U	< 4 U	< 4 U	< 4 U	4.98	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	12/7/2012	W87-121207F	< 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	10/3/2012	VTRP121004C	< 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	10/4/2012	VTRP121005C	< 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	10/5/2012	VTRP121008C	< 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	10/8/2012	VTRP121009C	< 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	10/9/2012	VTRP121010C	< 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	10/10/2012	VTRP121012C	< 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	10/12/2012	VTRP121015C	< 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	10/2/2012	VTRP121004B	< 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	10/4/2012	VTRP121008B	< 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	10/8/2012	VTRP121009B	< 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	10/9/2012	VTRP121010B	< 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	10/18/2012	VTRP121016C	< 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	10/16/2012	VTRP121018C	< 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	10/19/2012	VTRP121022C	< 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	10/23/2012	VTRP121024C	< 0.2 U	< 4 U	< 4 U	< 4 U	4.36	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	10/24/2012	VTRP121026C	< 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	11/6/2012	VTRP121107C	< 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	10/10/2012	VTRP121011B	< 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	10/11/2012	VTRP121012B	< 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	10/12/2012	VTRP121015B	< 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	10/15/2012	VTRP121018B	< 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	10/19/2012	VTRP121022B	< 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	10/24/2012	VTRP121025B	< 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	10/29/2012	VTRP121031B	< 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	11/6/2012	VTRP121107B	< 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	12/6/2012	VTRP121207C	< 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	12/6/2012	VTRP121207B	< 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	10/18/2012	VTRP121019C	< 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	10/18/2012	VTRP121019B	< 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	10/25/2012	VTRP121026B	< 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	10/5/2012	WNPW121005-	< 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 October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sandy Jimenez (206) 296-4411

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-21	10/2/2012	W21-121002-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/10/2012	W24-121010-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.24 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	10/11/2012	W27A121011-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/15/2012	W29-121015-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	10/12/2012	W30A121012-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	4.56	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	10/4/2012	W43-121004-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	10/4/2012	W43-121004D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	10/8/2012	W47-121008-	< 0.2 U	< 0.2 U	< 0.2 U	0.2 T	< 0.2 U	< 0.2 U	1.35	< 0.2 U	< 0.2 U	5.81	< 0.2 U	< 0.2 U
MW-47	10/8/2012	W47-121008D	< 0.2 U	< 0.2 U	< 0.2 U	0.21 T	< 0.2 U	< 0.2 U	1.34	< 0.2 U	< 0.2 U	4.9	< 0.2 U	< 0.2 U
MW-55	10/19/2012	W55-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/2/2012	W56-121002-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.93	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	10/8/2012	W57-121008-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-58A	10/9/2012	W58A121009-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/8/2012	W59-121008-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.679	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	10/9/2012	W60-121009-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/12/2012	W65-121012-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/12/2012	W66-121012-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	12/15/2012	W67-121015-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/16/2012	W68-121016-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/19/2012	W69-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	10/15/2012	W70-121015-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/4/2012	W72-121004-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/22/2012	W73-121022-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/10/2012	W74R121010-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	11/7/2012	W74R121107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	12/7/2012	W74R121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/10/2012	W75-121010-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	11/7/2012	W75-121107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	12/7/2012	W75-121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/26/2012	W76-121026-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.49	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	10/25/2012	W77-121025-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-78	10/26/2012	W78-121026-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	10/19/2012	W80-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/22/2012	W81-121022-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-82	10/2/2012	W82-121002-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	10/18/2012	W83-121018	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/22/2012	W84-121022-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/22/2012	W84-121022D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/19/2012	W85-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/18/2012	W86-121018-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/5/2012	W87-121005-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	11/7/2012	W87-121107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	12/7/2012	W87-121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/24/2012	W88-121024-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-89	10/12/2012	W89-121012-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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 October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sandy Jimenez (206) 296-4411

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-90	10/22/2012	W90-121022-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-91	10/31/2012	W91-121031-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-91	10/31/2012	W91-121031D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-93	10/10/2012	W93-121010-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/18/2012	W94-121018-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-95	10/25/2012	W95-121025-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/5/2012	W99-121005-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	11/7/2012	W99-121107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	12/7/2012	W99-121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/4/2012	W100121004-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-101	10/26/2012	W101121026-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/10/2012	W93-121010F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/19/2012	W55-121019F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	12/7/2012	W87-121207F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.662	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	10/3/2012	VTRP121004C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/4/2012	VTRP121005C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/5/2012	VTRP121008C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/8/2012	VTRP121009C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/9/2012	VTRP121010C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/10/2012	VTRP121012C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/12/2012	VTRP121015C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/2/2012	VTRP121004B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/4/2012	VTRP121008B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/8/2012	VTRP121009B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/9/2012	VTRP121010B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/18/2012	VTRP121016C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/16/2012	VTRP121018C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/19/2012	VTRP121022C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/23/2012	VTRP121024C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/24/2012	VTRP121026C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	11/6/2012	VTRP121107C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/10/2012	VTRP121011B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/11/2012	VTRP121012B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/12/2012	VTRP121015B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/15/2012	VTRP121018B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/19/2012	VTRP121022B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/24/2012	VTRP121025B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/29/2012	VTRP121031B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	11/6/2012	VTRP121107B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	12/6/2012	VTRP121207C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	12/6/2012	VTRP121207B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/18/2012	VTRP121019C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/18/2012	VTRP121019B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/25/2012	VTRP121026B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	10/5/2012	WNPW121005-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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 October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	Methyl Iodide 74-88-4 (ug/L)	Methylene Chloride 75-09-2 (ug/L)	o-Xylene 95-47-6 (ug/L)	Styrene 100-42-5 (ug/L)	Tetrachloro-ethene 127-18-4 (ug/L)	Toluene 108-88-3 (ug/L)	trans-1,2-Dichloro-ethene 156-60-5 (ug/L)	trans-1,3-Dichloro-propene 10061-02-6 (ug/L)	trans-1,4-Dichloro-2-butene 110-57-6 (ug/L)	Trichloro-ethene 79-01-6 (ug/L)	Trichloro-fluoro-methane 75-69-4 (ug/L)	Vinyl Acetate 108-05-4 (ug/L)	Vinyl Chloride 75-01-4 (ug/L)
MW-21	10/2/2012	W21-121002-	< 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	10/10/2012	W24-121010-	< 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	10/11/2012	W27A121011-	< 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	10/15/2012	W29-121015-	< 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	10/12/2012	W30A121012-	< 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	0.86	< 0.2 U	< 0.2 U	< 0.02 U
MW-43	10/4/2012	W43-121004-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-43	10/4/2012	W43-121004D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-47	10/8/2012	W47-121008-	< 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	5.04
MW-47	10/8/2012	W47-121008D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	4.76
MW-55	10/19/2012	W55-121019-	< 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	10/2/2012	W56-121002-	< 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	10/8/2012	W57-121008-	< 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-58A	10/9/2012	W58A121009-	< 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	10/8/2012	W59-121008-	< 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	10/9/2012	W60-121009-	< 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	10/12/2012	W65-121012-	< 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	0.0381
MW-66	10/12/2012	W66-121012-	< 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	12/15/2012	W67-121015-	< 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	10/16/2012	W68-121016-	< 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	10/19/2012	W69-121019-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-70	10/15/2012	W70-121015-	< 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	10/4/2012	W72-121004-	< 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	10/22/2012	W73-121022-	< 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	10/10/2012	W74R121010-	< 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	11/7/2012	W74R121107-	< 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	12/7/2012	W74R121207-	< 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	10/10/2012	W75-121010-	< 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	11/7/2012	W75-121107-	< 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	12/7/2012	W75-121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-76	10/26/2012	W76-121026-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.457	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	10.1	< 0.2 U	< 0.2 U	< 0.02 U
MW-77	10/25/2012	W77-121025-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-78	10/26/2012	W78-121026-	< 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	0.405	< 0.2 U	< 0.2 U	< 0.02 U
MW-80	10/19/2012	W80-121019-	< 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	10/22/2012	W81-121022-	< 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	10/2/2012	W82-121002-	< 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	5.06	< 0.2 U	< 0.2 U	< 0.02 U
MW-83	10/18/2012	W83-121018	< 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	1.62	< 0.2 U	< 0.2 U	< 0.02 U
MW-84	10/22/2012	W84-121022-	< 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-84	10/22/2012	W84-121022D	< 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	10/19/2012	W85-121019-	< 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	10/18/2012	W86-121018-	< 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	10/5/2012	W87-121005-	< 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	11/7/2012	W87-121107-	< 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	12/7/2012	W87-121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-88	10/24/2012	W88-121024-	< 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	10/12/2012	W89-121012-	< 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

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Methyl Iodide 74-88-4 (ug/L)	Methylene Chloride 75-09-2 (ug/L)	o-Xylene 95-47-6 (ug/L)	Styrene 100-42-5 (ug/L)	Tetrachloro-ethene 127-18-4 (ug/L)	Toluene 108-88-3 (ug/L)	trans-1,2-Dichloro-ethene 156-60-5 (ug/L)	trans-1,3-Dichloro-propene 10061-02-6 (ug/L)	trans-1,4-Dichloro-2-butene 110-57-6 (ug/L)	Trichloro-ethene 79-01-6 (ug/L)	Trichloro-fluoro-methane 75-69-4 (ug/L)	Vinyl Acetate 108-05-4 (ug/L)	Vinyl Chloride 75-01-4 (ug/L)
MW-90	10/22/2012	W90-121022-	< 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	10/31/2012	W91-121031-	< 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	10/31/2012	W91-121031D	< 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	10/10/2012	W93-121010-	< 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	10/18/2012	W94-121018-	< 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	2.61	< 0.2 U	< 0.2 U	< 0.02 U
MW-95	10/25/2012	W95-121025-	< 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	10/5/2012	W99-121005-	< 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	11/7/2012	W99-121107-	< 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	12/7/2012	W99-121207-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-100	10/4/2012	W100121004-	< 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	10/26/2012	W101121026-	< 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	0.219
FIELD BLANK	10/10/2012	W93-121010F	< 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	10/19/2012	W55-121019F	< 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	12/7/2012	W87-121207F	< 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	10/3/2012	VTRP121004C	< 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	10/4/2012	VTRP121005C	< 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	10/5/2012	VTRP121008C	< 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	10/8/2012	VTRP121009C	< 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	10/9/2012	VTRP121010C	< 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	10/10/2012	VTRP121012C	< 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	10/12/2012	VTRP121015C	< 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	10/2/2012	VTRP121004B	< 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	10/4/2012	VTRP121008B	< 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	10/8/2012	VTRP121009B	< 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	10/9/2012	VTRP121010B	< 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	10/18/2012	VTRP121016C	< 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	10/16/2012	VTRP121018C	< 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	10/19/2012	VTRP121022C	< 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	10/23/2012	VTRP121024C	< 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	10/24/2012	VTRP121026C	< 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	11/6/2012	VTRP121107C	< 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	10/10/2012	VTRP121011B	< 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	10/11/2012	VTRP121012B	< 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	10/12/2012	VTRP121015B	< 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	10/15/2012	VTRP121018B	< 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	10/19/2012	VTRP121022B	< 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	10/24/2012	VTRP121025B	< 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	10/29/2012	VTRP121031B	< 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	11/6/2012	VTRP121107B	< 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	12/6/2012	VTRP121207C	< 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	12/6/2012	VTRP121207B	< 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	10/18/2012	VTRP121019C	< 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	10/18/2012	VTRP121019B	< 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	10/25/2012	VTRP121026B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
WS-NPW	10/5/2012	WNPW121005-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U

Surface Water Analytical Data

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill ---Surface Water Elevation Data-Staff Gage Measurements
Contact Person: Sendy Jimenez (206) 296-4411

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
SG-1	SW-W1	10/22/2012	415.38	418.84		0.82	416.20	
SG-1	SW-W1	11/13/2012	415.38	418.84		0.87	416.25	
SG-1	SW-W1	12/10/2012	415.38	418.84		0.88	416.26	
SG-2	SW-N1	10/22/2012	355.68	358.21		0.48	356.16	
SG-2	SW-N1	11/13/2012	355.68	358.21		0.73	356.41	
SG-2	SW-N1	12/10/2012	355.68	358.21		0.82	356.50	
SG-3	SW -V	10/22/2012	466.46	469.88	5.50		464.38	
SG-3	SW -V	11/13/2012	466.46	469.88	5.50		464.38	
SG-3	SW -V	12/10/2012	466.46	469.88		0.23	466.69	
SG-4	Upstream of SW-E1	10/22/2012	502.41	505.85	5.56		500.29	
SG-4	Upstream of SW-E1	11/13/2012	502.41	505.85	4.52		501.33	
SG-4	Upstream of SW-E1	12/10/2012	502.41	505.85		0.36	502.77	
SG-5	SW-E1	10/22/2012	486.92	490.34	4.97		485.37	
SG-5	SW-E1	11/13/2012	486.92	490.34		0.29	487.21	
SG-5	SW-E1	12/10/2012	486.92	490.34		0.72	487.64	
SG-6	Upstream of SW-GS1	10/22/2012	490.72	494.12		0.48	491.20	
SG-6	Upstream of SW-GS1	11/13/2012	490.72	494.12		0.40	491.12	
SG-6	Upstream of SW-GS1	12/10/2012	490.72	494.12			NR	
SG-7	SW-S2	10/22/2012	453.03	456.41		0.50	453.53	
SG-7	SW-S2	11/13/2012	453.03	456.41		0.68	453.71	
SG-7	SW-S2	12/10/2012	453.03	456.41			NR	
SG-8	Upstream of SW-S1	10/22/2012	510.61	515.56	4.8		510.76	
SG-8	Upstream of SW-S1	11/13/2012	510.61	515.56		0.48	511.09	
SG-8	Upstream of SW-S1	12/10/2012	510.61	515.56			NR	
SG-9	SW-S1	10/22/2012	490.93	494.35	4.1		490.25	
SG-9	SW-S1	11/13/2012	490.93	494.35		0.67	491.60	
SG-9	SW-S1	12/10/2012	490.93	494.35			NR	

NR = No Reading Taken

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Field Parameters
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field) (std. Units)	Conductance (Field) (umho/cm)	Temperature (°C)	Turbidity (NTU)	Oxygen, Dissolved (mg/L)
SW-E1	12/10/2012	SE1-121210M	5.29	39	7.2	1.78	7.58
SW-GS1	10/23/2012	SGS1121023Q	7.2	195	9.3	2.4	7.93
SW-GS1	10/30/2012	SGS1121030P	7.35	140	13.3	5.93	8.59
SW-GS1	11/13/2012	SGS1121113M	7.29	115	9.3	1.51	9.28
SW-GS1	12/6/2012	SGS1121206P	6.09	7.6	7.7	11.8	10.75
SW-GS1	12/13/2012	SGS1121213M		115		25.5	10.68
SW-SLP1	10/29/2012	SLP1121029P	7.71	420	13.9	5.05	9.65
SW-SLP1	11/5/2012	SLP1121105P	7.3	150	13.3	7.22	9.25
SW-SLP1	12/11/2012	SLP1121211P	6.62	280	9.5	14.61	9.78
SW-SLP2	10/29/2012	SLP2121029P	7.25	130	13.1	14	9.42
SW-SLP2	11/5/2012	SLP2121105P	7.24	100	11.7	7.89	10.24
SW-SLP2	12/11/2012	SLP2121211P	6.23	100	7.3	7.34	10.94
SW-SLP3	10/29/2012	SLP3121029P	6.93	260	14.1	11.1	7.23
SW-MC	10/25/2012	SMC-121025Q	7.22	110	9.5	2.07	10.07
SW-MC	11/13/2012	SMC-121113M	7.22	100	9.4	2.21	10.5
SW-MC	12/11/2012	SMC-121211M	5.81	89	9.1	2.58	10.78
SW-N1	10/24/2012	SN1-121024Q	7.27	105	9.2	1.85	9.14
SW-N1	11/13/2012	SN1-121113M	7.23	90	9.3	1.96	10.08
SW-N1	12/10/2012	SN1-121210M	6.2	91	8.1	2.31	10.75
SW-N4	10/24/2012	SN4-121024Q	7.52	110	10.7	5.03	10.51
SW-N4	11/13/2012	SN4-121113M	7.57	95	9.9	2.36	11.05
SW-N4	12/6/2012	SN4-121206P	6.21	85	8	4.09	11.21
SW-N4	12/10/2012	SN4-121210M	6.19	88	8.7	3.61	11.29
SW-S1	11/13/2012	SS1-121113Q	6.73	62	9.4	0.97	6.1
SW-S1	12/13/2012	SS1-121213D	7.47	52	7.2	1.3	8.46
SW-S1	12/13/2012	SS1-121213M	7.47	52	7.2	1.3	8.46
SW-S2	10/23/2012	SS2-121023Q	6.92	190	10.6	4.23	7.21
SW-S2	10/24/2012	SS2-121024F	7.2	3.2	14.3	0.15	9.5
SW-S2	11/13/2012	SS2-121113M	7.06	125	9.2	2.35	6.67
SW-S2	12/13/2012	SS2-121213M	7.71	105	8	9.68	8.64
SW-SL3	10/23/2012	SSL3121023Q	7.31	505	10.2	7.33	9.18
SW-SL3	10/30/2012	SSL3121030P	7.22	140	12.8	6.34	8.11
SW-SL3	11/5/2012	SSL3121105P	7.09	100	12.6	3.38	7.76
SW-SL3	11/13/2012	SSL3121113M	7.38	130	9.5	6.5	7.34
SW-SL3	12/6/2012	SSL3121206P	6.29	106	7.4	4.95	9.84
SW-SL3	12/11/2012	SSL3121211D	6.27	100	7.1	2.91	9.17
SW-SL3	12/11/2012	SSL3121211P	6.27	100	7.1	2.91	9.17
SW-SL3	12/13/2012	SSL3121213M	7.78	150	7.5	4.89	10.38
SW-TD1	10/23/2012	STD1121023-	7.43	155	8.2	2.06	9.07
SW-TD2	10/30/2012	STD2121030-	7.23	35	14	4.21	

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Field Parameters
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field) (std. Units)	Conductance (Field) (umho/cm)	Temperature (°C)	Turbidity (NTU)	Oxygen, Dissolved (mg/L)
SW-TD4	10/25/2012	STD4121025-	7.32	175	8.6	31.1	9.66
SW-TD6	10/25/2012	STD6121025-	7.53	215	9.5	35.4	9.05
SW-V	12/10/2012	SV--121210M	5.85	90	10.6	0.55	9.67
SW-W1	10/24/2012	SW1-121024Q	7.51	125	8.2	3	11.12
SW-W1	11/13/2012	SW1-121113M	7.43	110	8.4	3	11.21
SW-W1	12/10/2012	SW1-121210M	6.23	97	8.1	1.62	11.34
SW-W	11/13/2012	SW--121113Q	6.48	90	9.5	3.74	7.34
SW-W	12/11/2012	SW--121211M	5.81	90	9.1	1.86	7.94
SW-W2	10/30/2012	SW2-121030Q	6.65	83	11.4	27.4	6.92
SW-W2	11/13/2012	SW2-121113M	6.81	67	8.7	5.46	7.96
SW-W2	12/13/2012	SW2-121213M	7.24	54	7.2	0.59	8.75
FIELD BLANK	11/13/2012	SW--121113F	7.06	13	14.7	0.48	10.04

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Conventionals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Alkalinity, Total (CaCO3) (mg/L)	Ammonia, (NH3) (mg/L)	Biological Oxygen Demand (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Coliforms, Fecal (CFU/100m	Coliforms, Total (CFU/100m	Cyanide (mg/L)	Fluoride (mg/L)	Hardness (mg/L)	Nitrate-Nitrogen, (NO3 as N) (mg/L)	Nitrate+Nitrite (NO3+NO2 as N) (mg/L)
SW-E1	12/10/2012	SE1-121210M	13.3	< 0.01 U		7.3 T	1.71	10	40			15.3	0.31	0.31
SW-GS1	10/23/2012	SGS1121023Q	39	< 0.01 U	< 2 U	25.4	6.17	200	1300	< 0.02 U	< 0.1 U	78	0.434	0.434
SW-GS1	10/30/2012	SGS1121030P		< 0.01 U	< 2 U									
SW-GS1	11/13/2012	SGS1121113M	34.7	< 0.01 U		15 T	4.44	32	500			44.6	0.146	0.146
SW-GS1	12/13/2012	SGS1121213M	36	0.02 T		8.6 T	1.91	80	1700			46.2	0.612	0.612
SW-GS1	12/6/2012	SGS1121206P		< 0.01 U	< 2 U									
SW-MC	10/25/2012	SMC-121025Q	42	< 0.01 U	< 2 U	20.2	6.64	55	230	< 0.02 U	0.122	48.9	0.443	0.443
SW-MC	11/13/2012	SMC-121113M	37.1	< 0.01 U		5.1 T	4.04	21	310			44.3	0.789	0.8
SW-MC	12/11/2012	SMC-121211M	33.2	< 0.01 U		9 T	2.54	10	110			37.5	1.1	1.1
SW-N1	10/24/2012	SN1-121024Q	43.7	< 0.01 U	< 2 U	24.1	6.1	240	390	< 0.02 U	0.212	48.9	0.379	0.379
SW-N1	11/13/2012	SN1-121113M	36.8	0.011 T		5.4 T	4.48	23	120			45.1	0.788	0.788
SW-N1	12/10/2012	SN1-121210M	32.6	< 0.01 U		10 T	2.38	8	290			37.1	1.07	1.07
SW-N4	10/24/2012	SN4-121024Q	45.2	0.0353	3.93	30.8	6.08	2	47	< 0.02 U	0.211	52.6	0.466	0.482
SW-N4	11/13/2012	SN4-121113M	35.2	0.0276		5.5 T	4.46	140	700			47.2	0.788	0.806
SW-N4	12/6/2012	SN4-121206P		0.018 T	< 2 U									
SW-N4	12/10/2012	SN4-121210M	33.5	0.0257		15 T	1.22	21	1900			39.8	0.76	0.76
SW-S1	11/13/2012	SS1-121113Q	13.7	< 0.01 U	< 2 U	< 5 U	4.48	84	140	< 0.02 U	< 0.1 U	18.2	0.198	0.198
SW-S1	12/13/2012	SS1-121213D	12.1	< 0.01 U		5.8 T	2.38	5	190			15.8	1.35	1.35
SW-S1	12/13/2012	SS1-121213M	12.1	< 0.01 U		< 5 U	2.39	10	23			14.9	1.36	1.36
SW-S2	10/23/2012	SS2-121023Q	26.8	< 0.01 U	< 2 U	22.2	6.24	66	360	< 0.02 U	< 0.1 U	69.5	0.121	0.121
SW-S2	10/24/2012	SS2-121024F	6.18	< 0.01 U	< 2 U	< 5 U	< 0.1 U	< 1 U	< 1 U	< 0.02 U	< 0.1 U	< 1 U	0.106	0.106
SW-S2	11/13/2012	SS2-121113M	37	< 0.01 U		11 T	4.99	33	280			48.4	0.13	0.13
SW-S2	12/13/2012	SS2-121213M	33.5	< 0.01 U		7.4 T	1.85	13	230			37.8	0.748	0.748
SW-SL3	10/23/2012	SSL3121023Q	61.2	1.26	2.27	67.9	64.6	490	2200	< 0.02 U	0.186	168	7.94	8.15
SW-SL3	11/13/2012	SSL3121113M	36.3	< 0.01 U		14 T	4.83	160	3300			42.4	0.0836	0.0836
SW-SL3	10/30/2012	SSL3121030P		< 0.01 U	< 2 U			160	1500					
SW-SL3	12/13/2012	SSL3121213M	60	< 0.01 U		13 T	3.3	30	220			53.8	0.444	0.444
SW-SL3	12/6/2012	SSL3121206P		< 0.01 U	< 2 U									
SW-SL3	12/11/2012	SSL3121211P		< 0.01 U	< 2 U			21	340					
SW-SL3	12/11/2012	SSL3121211D		< 0.01 U	< 2 U			23	430					
SW-SLP1	10/29/2012	SLP1121029P		0.24	4.87			240	2000					
SW-SLP1	12/11/2012	SLP1121211P		0.068	< 2 U			250	3000					
SW-SLP2	10/29/2012	SLP2121029P		0.0283	< 2 U			1000	8000					
SW-SLP2	12/11/2012	SLP2121211P		0.014 T	< 2 U			15	4100					
SW-SLP3	10/29/2012	SLP3121029P		0.01 T	< 2 U			120	1900					
SW-SLP3	10/29/2012	SLP3121029D		0.013 T	< 2 U			95	2300					
SW-TD1	10/23/2012	STD1121023-	38.4			39.4	4.71							
SW-TD2	10/20/2012	STD2121030-	9.41			45.2	0.41							
SW-TD4	10/25/2012	STD4121025-	24.3			51.1	9.48							
SW-TD6	10/25/2012	STD6121025-	36.7			40.9	8.14							
SW-V	12/10/2012	SV--121210M	28.9	< 0.01 U		< 5 U	3.09	2	40			31.5	1.41	1.41
SW-W	11/13/2012	SW--121113Q	31.9	0.013 T	< 2 U	14 T	5.15	120	330	< 0.02 U	< 0.1 U	35.9	1.01	1.01
SW-W	12/11/2012	SW--121211M	31.3	0.019 T		5.9 T	3.74	19	500			32.6	1.48	1.48
SW-W1	10/24/2012	SW1-121024Q	60.6	< 0.01 U	< 2 U	24.7	4.74	15	30	< 0.02 U	0.15	58.9	0.608	0.608
SW-W1	11/13/2012	SW1-121113M	44.8	0.0324		13 T	5.48	30	90			47.9	1.24	1.26

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Conventionals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Alkalinity, Total (CaCO3) (mg/L)	Ammonia, (NH3) (mg/L)	Biological Oxygen Demand (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Coliforms, Fecal (CFU/100m	Coliforms, Total (CFU/100m	Cyanide (mg/L)	Fluoride (mg/L)	Hardness (mg/L)	Nitrate-Nitrogen, (NO3 as N) (mg/L)	Nitrate+Nitrite (NO3+NO2 as N) (mg/L)
SW-W1	12/10/2012	SW1-121210M	34.3	0.018 T		27.6	3.95	47	280			37.4	1.46	1.46
SW-W2	10/30/2012	SW2-121030Q	12.9	< 0.01 U	< 2 U	39.1	6.28	3800	4700 C	< 0.02 U	0.137	46.6	0.479	0.479
SW-W2	11/13/2012	SW2-121113M	15.2	< 0.01 U		10 T	5.03	560	400			20.5	0.096	0.096
SW-W2	12/13/2012	SW2-121213M	12.8	< 0.01 U		< 5 U	2.49	5	27			15.5	1.31	1.31
EQUIPMENT BLAN	10/11/2012	WU1S121011E		< 0.01 U										0.111
EQUIPMENT BLAN	10/11/2012	WU1H121011E		0.0326										0.115
EQUIPMENT BLAN	10/11/2012	WU1M121011E		< 0.01 U										0.113
FIELD BLANK	11/13/2012	SW--121113F	1.6 T	< 0.01 U	< 2 U	< 5 U	< 0.1 U	< 1 U	< 1 U	< 0.02 U	< 0.1 U	< 1 U	0.105	0.105

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Conventionals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Soluble Reactive Phosphorus (mg/L)	Phosphorus, Total (as P) (mg/L)	Specific Conductance (umho/cm)	Sulfate (SO4) (mg/L)	Total Dissolved Solids (mg/L)	Total Kjeldahl Nitrogen (TKN as N) (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
SW-E1	12/10/2012	SE1-121210M	0.021 T	0.088	43.6	2.06	40.3	0.251	4.67	59.4	7.3	13
SW-GS1	10/23/2012	SGS1121023Q	0.011 T	0.0162	203	42.2	158	0.507	7.63	156	5.3	5.64
SW-GS1	10/30/2012	SGS1121030P									1.4	5.73
SW-GS1	11/13/2012	SGS1121113M	0.019 JT	0.0105 J	113	11.5	76.5	0.257	5.81	91	< 1 U	1.71
SW-GS1	12/13/2012	SGS1121213M	0.022 T	0.0398	106	9.6	90.4	0.299	4.58	100	11.3	30
SW-GS1	12/6/2012	SGS1121206P									4.7	13.2
SW-MC	10/25/2012	SMC-121025Q	0.016 T	0.0519	129	7.56	92.1	0.495	9.47	97.3	1.7	2
SW-MC	11/13/2012	SMC-121113M	0.0877 J	0.0231 J	119	12.3	83.8	0.419	6.21	105	1.5	2
SW-MC	12/11/2012	SMC-121211M	0.0337	0.0418	100	6.43	80.2	0.336	4.71	80.3	1.1	2.16
SW-N1	10/24/2012	SN1-121024Q	0.017 T	0.0422	130	7.33	96.3	0.609	8.1	97.4	1.2	1.73
SW-N1	11/13/2012	SN1-121113M	0.02 T	0.0232	119	9.5	86.6	0.462	6.39	103	1.5	2.57
SW-N1	12/10/2012	SN1-121210M	0.036	0.0311	99	6.59	76	0.398	5.45	81.4	1.9	2.35
SW-N4	10/24/2012	SN4-121024Q	0.013 T	0.0642	133	7.03	96.3	0.922	11.2	100	3.7	4.76
SW-N4	11/13/2012	SN4-121113M	0.0306	0.0308	122	9.73	90.7	0.592	7.36	112	1.8	2.61
SW-N4	12/6/2012	SN4-121206P									1.13	4.07
SW-N4	12/10/2012	SN4-121210M	0.0487	0.04	98.5	8.26	75.9	0.433	7.33	85.1	1.6 T	3.95
SW-S1	11/13/2012	SS1-121113Q	0.021 JT	< 0.01 JU	62.2	4.77	53.7	0.298	5.16	61.6	< 1 U	0.944
SW-S1	12/13/2012	SS1-121213D	0.014 T	0.0111	53.4	2.36	53.1	0.33	3.8	58.9	2.7	1.96
SW-S1	12/13/2012	SS1-121213M	0.013 T	< 0.01 U	53.7	2.37	49.1	0.257	3.99	55.7	< 1 U	0.47 T
SW-S2	10/23/2012	SS2-121023Q	0.022 T	0.0315	188	45.5	137	0.291	7.31	153	< 1 U	4.66
SW-S2	10/24/2012	SS2-121024F	< 0.01 U	< 0.01 U	4.3 T	< 0.1 U	< 5 U	< 0.1 U	< 1 U	< 5 U	< 1 U	< 0.2 U
SW-S2	11/13/2012	SS2-121113M	0.024 T	0.0206	125	13.8	85.9	0.307	6.05	101	< 1 U	2.71
SW-S2	12/13/2012	SS2-121213M	0.0323	0.0205	98.1	8.15	80.1	0.301	4.38	85.1	2.5	10.6
SW-SL3	10/23/2012	SSL3121023Q	0.0943	0.0536	564	66.4	438	3.67	27	463	2.96	7.86
SW-SL3	11/13/2012	SSL3121113M	0.021 T	0.0224	111	9.19	76.4	0.347	8.57	84.4	1.5	6.99
SW-SL3	10/30/2012	SSL3121030P									< 1 U	5.78
SW-SL3	12/13/2012	SSL3121213M	0.0558	0.0639	147	5.97	109	0.662	7.97	112	< 1 U	5.63
SW-SL3	12/6/2012	SSL3121206P									< 1 U	4.25
SW-SL3	12/11/2012	SSL3121211P									< 1 U	2.47
SW-SL3	12/11/2012	SSL3121211D									< 1 U	2.54
SW-SLP1	10/29/2012	SLP1121029P									2.3	4.27
SW-SLP1	12/11/2012	SLP1121211P									5.8	13.5
SW-SLP2	10/29/2012	SLP2121029P									4.8	13
SW-SLP2	12/11/2012	SLP2121211P									< 1 U	6.85
SW-SLP3	10/29/2012	SLP3121029P									11.9	8.03
SW-SLP3	10/29/2012	SLP3121029D									18.7	9.73
SW-TD1	10/23/2012	STD1121023-				22			14.4			
SW-TD2	10/20/2012	STD2121030-				2.68			11.6			
SW-TD4	10/25/2012	STD4121025-				40.8			26.7			
SW-TD6	10/25/2012	STD6121025-				52.4			15.6			
SW-V	12/10/2012	SV--121210M	0.019 T	< 0.01 U	99.6	6.88	70.4	0.18 T	2.06	74.5	< 1 U	0.97
SW-W	11/13/2012	SW--121113Q	0.09 J	0.0357 J	110	7.29	88.4	0.657	7.45	99.2	1.3	2.26
SW-W	12/11/2012	SW--121211M	0.024 T	0.026	100	5	86.9	0.356	4.99	85.8	1.4	1.82
SW-W1	10/24/2012	SW1-121024Q	0.016 T	0.0467	150	4.31	106	0.302	8.65	115	8.4	5.02
SW-W1	11/13/2012	SW1-121113M	0.15 J	0.0593 J	133	6.68	90.5	0.605	6.92	147	8.3	15.2

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Conventionals Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Soluble Reactive Phosphorus (mg/L)	Phosphorus, Total (as P) (mg/L)	Specific Conductance (umho/cm)	Sulfate (SO4) (mg/L)	Total Dissolved Solids (mg/L)	Total Kjeldahl Nitrogen (TKN as N) (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
SW-W1	12/10/2012	SW1-121210M	0.021 T	0.0762	109	5.91	73.9	0.832	7.89	116	28.8	11.6
SW-W2	10/30/2012	SW2-121030Q	< 0.01 U	0.167	85.5	9.89	84.9	0.609	9.15	148	155	37.9
SW-W2	11/13/2012	SW2-121113M	0.015 T	0.0303	68.3	5.68	57.3	0.384	7.06	80	9.2	7.12
SW-W2	12/13/2012	SW2-121213M	0.012 T	< 0.01 U	55.3	3.82	58.8	0.214	3.81	57	1.5	0.981
EQUIPMENT BLAN	10/11/2012	WU1S121011E	< 0.01 U									
EQUIPMENT BLAN	10/11/2012	WU1H121011E	< 0.01 U									
EQUIPMENT BLAN	10/11/2012	WU1M121011E	< 0.01 U									
FIELD BLANK	11/13/2012	SW--121113F	< 0.01 U	< 0.01 U	4.8 T	< 0.1 U	< 5 U	< 0.1 U	1.13	< 5 U	< 1 U	0.24 T

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Metal Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

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)	Cadmium, total (mg/L)
SW-E1	12/10/2012	SE1-121210M	0.0913	1.06	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00291	0.00942	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	10/23/2012	SGS1121023Q	< 0.02 U	0.135	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00795	0.00938	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	10/30/2012	SGS1121030P												
SW-GS1	11/13/2012	SGS1121113M	< 0.02 U	0.0841	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00323 D	0.00375	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	12/13/2012	SGS1121213M	0.0227	1.42	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00494	0.0132	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	12/6/2012	SGS1121206P												
SW-MC	10/25/2012	SMC-121025Q	0.0274	0.117	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00533	0.00682	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-MC	11/13/2012	SMC-121113M	0.0218	0.106	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0045 D	0.00527	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-MC	12/11/2012	SMC-121211M	0.0436	0.146	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00423	0.00499	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	10/24/2012	SN1-121024Q	0.0219	0.0639	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00441	0.00521	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	11/13/2012	SN1-121113M	0.0303	0.093	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00463 D	0.00505	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	12/10/2012	SN1-121210M	0.0373	0.158	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00412	0.00502	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4	10/24/2012	SN4-121024Q	< 0.02 U	0.0611	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00347	0.00443	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4	11/13/2012	SN4-121113M	0.0228	0.0824	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00395 D	0.00481	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4	12/6/2012	SN4-121206P												
SW-N4	12/10/2012	SN4-121210M	0.0632	0.202	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00394	0.00503	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S1	11/13/2012	SS1-121113Q	0.069	0.0854	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0077 D	0.0076	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S1	12/13/2012	SS1-121213D	0.0448	0.296	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00584	0.00713	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S1	12/13/2012	SS1-121213M	0.045	0.0557	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00586	0.00562	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	10/23/2012	SS2-121023Q	0.0211	0.21	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.0108	0.0122	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	10/24/2012	SS2-121024F	< 0.02 U	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	11/13/2012	SS2-121113M	0.0268	0.13	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00869 D	0.00909	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	12/13/2012	SS2-121213M	0.039	0.506 D	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00614	0.00867	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	10/23/2012	SSL3121023Q	< 0.02 U	0.261	< 0.001 U	< 0.001 U	0.00104	0.00111	0.0579	0.0554	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	11/13/2012	SSL3121113M	0.0243	0.256	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0091	0.0106	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	10/30/2012	SSL3121030P												
SW-SL3	12/13/2012	SSL3121213M	0.0303	0.243	< 0.001 U	< 0.001 U	0.00108	0.0011	0.00994	0.0108	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	12/6/2012	SSL3121206P												
SW-SL3	12/11/2012	SSL3121211P												
SW-SL3	12/11/2012	SSL3121211D												
SW-SLP1	10/29/2012	SLP1121029P												
SW-SLP1	12/11/2012	SLP1121211P												
SW-SLP2	10/29/2012	SLP2121029P												
SW-SLP2	12/11/2012	SLP2121211P												
SW-SLP3	10/29/2012	SLP3121029P												
SW-SLP3	10/29/2012	SLP3121029D												
SW-TD1	10/23/2012	STD1121023-												
SW-TD2	10/20/2012	STD2121030-												
SW-TD4	10/25/2012	STD4121025-												
SW-TD6	10/25/2012	STD6121025-												
SW-V	12/10/2012	SV--121210M	< 0.02 U	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00324	0.00336	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W	11/13/2012	SW--121113Q	0.12	0.226	< 0.001 U	< 0.001 U	0.00109	0.00111	0.00656 D	0.00737	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W	12/11/2012	SW--121211M	0.091	0.121	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00507	0.00469	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W1	10/24/2012	SW1-121024Q	< 0.02 U	0.183	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	0.00527	0.00754	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W1	11/13/2012	SW1-121113M	< 0.02 U	1.07 D	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00598 D	0.0183	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Metal Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

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)	Cadmium, total (mg/L)
SW-W1	12/10/2012	SW1-121210M	0.0234	0.411	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00602	0.00951	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W2	10/30/2012	SW2-121030Q	0.0956	15.7 D	< 0.001 U	< 0.001 U	< 0.001 U	0.00321	0.0106	0.0753	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W2	11/13/2012	SW2-121113M	0.0802	0.5	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00788 D	0.0101	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W2	12/13/2012	SW2-121213M	0.0508	0.0561	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00616	0.00592	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
EQUIPMENT BLAN	10/11/2012	WU1S121011E	< 0.02 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.002 U	
EQUIPMENT BLAN	10/11/2012	WU1H121011E	< 0.02 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.001 U		< 0.002 U	
FIELD BLANK	11/13/2012	SW--121113F	< 0.02 U	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Metal Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	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)
SW-E1	12/10/2012	SE1-121210M	4	4.26	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.046 T	0.796	< 0.001 U	0.00104
SW-GS1	10/23/2012	SGS1121023Q	19	20	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	0.00454 D	0.00422	< 0.01 DU	0.133	< 0.001 U	< 0.001 U
SW-GS1	10/30/2012	SGS1121030P								0.0072				
SW-GS1	11/13/2012	SGS1121113M	11.2	11.3	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	0.00458	0.00452	0.011 T	0.0841	< 0.001 U	< 0.001 U
SW-GS1	12/13/2012	SGS1121213M	11.4	11.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00233	0.00578	0.019 T	1.74	< 0.001 U	0.00176
SW-GS1	12/6/2012	SGS1121206P								0.00401				
SW-MC	10/25/2012	SMC-121025Q	11	12.2	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	0.00351 D	0.0036	0.0974 D	0.22	< 0.001 U	< 0.001 U
SW-MC	11/13/2012	SMC-121113M	10.6	11.2	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	0.00447	0.00491	0.0513	0.15	< 0.001 U	< 0.001 U
SW-MC	12/11/2012	SMC-121211M	9.43	9.32	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00459	0.00469	0.0573	0.152	< 0.001 U	< 0.001 U
SW-N1	10/24/2012	SN1-121024Q	11.2	12.3	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	0.00328 D	0.00321	0.0881 D	0.181	< 0.001 U	< 0.001 U
SW-N1	11/13/2012	SN1-121113M	11.3	11.4	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	0.00515	0.00526	0.0655	0.155	< 0.001 U	< 0.001 U
SW-N1	12/10/2012	SN1-121210M	9.5	9.24	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00548	0.00603	0.0582	0.186	< 0.001 U	< 0.001 U
SW-N4	10/24/2012	SN4-121024Q	12	13.2	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	0.00436 D	0.00454	0.0714 D	0.275	< 0.001 U	< 0.001 U
SW-N4	11/13/2012	SN4-121113M	10.8	11.9	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	0.00747	0.00857	0.039 T	0.131	< 0.001 U	< 0.001 U
SW-N4	12/6/2012	SN4-121206P								0.0146				
SW-N4	12/10/2012	SN4-121210M	10.1	9.72	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0123	0.0119	0.0703	0.226	< 0.001 U	< 0.001 U
SW-S1	11/13/2012	SS1-121113Q	5.22	5.12	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	< 0.002 U	< 0.002 U	0.02 T	0.044 T	0.0028	< 0.001 U
SW-S1	12/13/2012	SS1-121213D	4.46	4.46	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.012 T	0.216	< 0.001 U	< 0.001 U
SW-S1	12/13/2012	SS1-121213M	4.44	4.26	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.013 T	0.022 T	< 0.001 U	< 0.001 U
SW-S2	10/23/2012	SS2-121023Q	17.2	18	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	0.00389 D	0.00411	0.029 DT	0.207	< 0.001 U	< 0.001 U
SW-S2	10/24/2012	SS2-121024F	< 0.01 U	< 0.01 U	< 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
SW-S2	11/13/2012	SS2-121113M	12.8	12.3	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	0.00296	0.00325	0.032 T	0.142	< 0.001 U	< 0.001 U
SW-S2	12/13/2012	SS2-121213M	10.1	9.74	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00225	0.00313	0.029 T	0.519	< 0.001 U	< 0.001 U
SW-SL3	10/23/2012	SSL3121023Q	43.1	43.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.014	0.0135	0.02 T	0.31	< 0.001 U	< 0.001 U
SW-SL3	11/13/2012	SSL3121113M	10.5	10.7	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00456	0.00508	0.033 T	0.345	< 0.001 U	< 0.001 U
SW-SL3	10/30/2012	SSL3121030P								0.0112				
SW-SL3	12/13/2012	SSL3121213M	14.3	13.8	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00593	0.00611	0.0514	0.274	< 0.001 U	< 0.001 U
SW-SL3	12/6/2012	SSL3121206P								0.00727				
SW-SL3	12/11/2012	SSL3121211P								0.00502				
SW-SL3	12/11/2012	SSL3121211D								0.00503				
SW-SLP1	10/29/2012	SLP1121029P								0.0191				
SW-SLP1	12/11/2012	SLP1121211P								0.00329				
SW-SLP2	10/29/2012	SLP2121029P								0.0187				
SW-SLP2	12/11/2012	SLP2121211P								0.0106				
SW-SLP3	10/29/2012	SLP3121029P								0.00463				
SW-SLP3	10/29/2012	SLP3121029D								0.00478				
SW-TD1	10/23/2012	STD1121023-									0.036 T	0.101		
SW-TD2	10/20/2012	STD2121030-									0.0763	0.254		
SW-TD4	10/25/2012	STD4121025-									0.0663	7.16		
SW-TD6	10/25/2012	STD6121025-									0.0683	1.79		
SW-V	12/10/2012	SV--121210M	8.89	8.78	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.021 T	< 0.001 U	< 0.001 U
SW-W	11/13/2012	SW--121113Q	9.62	9.56	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	0.00381	0.00467	0.219	0.306	< 0.001 U	< 0.001 U
SW-W	12/11/2012	SW--121211M	8.74	8.48	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00594	0.00969	0.132	0.149	< 0.001 U	< 0.001 U
SW-W1	10/24/2012	SW1-121024Q	13.5	15.1	< 0.005 DU	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 DU	< 0.002 U	0.698 D	0.934	< 0.001 U	< 0.001 U
SW-W1	11/13/2012	SW1-121113M	10.9	12.7	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	< 0.002 U	0.00266	0.239	1.83	< 0.001 U	0.00131

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Metal Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	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)
SW-W1	12/10/2012	SW1-121210M	9.7	9.69	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.0664	0.576	< 0.001 U	< 0.001 U
SW-W2	10/30/2012	SW2-121030Q	6.41	10.5	< 0.005 U	0.0136	< 0.003 U	0.0051	< 0.002 U	0.0263	0.04 T	11.8	< 0.001 U	0.0149
SW-W2	11/13/2012	SW2-121113M	5.75	5.71	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	< 0.002 U	< 0.002 U	0.028 T	0.409	< 0.001 U	< 0.001 U
SW-W2	12/13/2012	SW2-121213M	4.63	4.49	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.018 T	0.022 T	< 0.001 U	< 0.001 U
EQUIPMENT BLAN	10/11/2012	WU1S121011E	< 0.01 U		< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U	
EQUIPMENT BLAN	10/11/2012	WU1H121011E	< 0.01 U		< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U	
FIELD BLANK	11/13/2012	SW--121113F	< 0.01 U	< 0.01 U	< 0.005 U	< 0.005 U	< 0.003 DU	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Metal Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Magnesium, dissolved (mg/L)	Magnesium, total (mg/L)	Manganese, dissolved (mg/L)	Manganese, total (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)	Silver, dissolved (mg/L)
SW-E1	12/10/2012	SE1-121210M	0.893	1.13	0.0264	0.289	< 0.0001 U	< 0.01 U	< 0.01 U	0.48 T	0.512 D	< 0.001 U	< 0.001 U	< 0.003 U
SW-GS1	10/23/2012	SGS1121023Q	6.43	6.82	0.00542 D	0.0122	< 0.0001 U	< 0.01 DU	< 0.01 U	1.89 D	1.59	< 0.001 DU	< 0.001 U	< 0.003 U
SW-GS1	10/30/2012	SGS1121030P												
SW-GS1	11/13/2012	SGS1121113M	3.66	3.99	0.00376 D	0.00557	< 0.0001 U	< 0.01 U	< 0.01 U	1.18	1.18	< 0.001 U	< 0.001 U	< 0.003 DU
SW-GS1	12/13/2012	SGS1121213M	3.58	4.48	0.00383	0.0394	< 0.0001 U	< 0.01 U	< 0.01 U	1.08	1.09 D	< 0.001 U	< 0.001 U	< 0.003 U
SW-GS1	12/6/2012	SGS1121206P												
SW-MC	10/25/2012	SMC-121025Q	3.99	4.48	0.00279 D	0.0067	< 0.0001 U	< 0.01 DU	< 0.01 U	2.56 D	2.74	< 0.001 DU	< 0.001 U	< 0.003 U
SW-MC	11/13/2012	SMC-121113M	3.52	3.98	0.00327 D	0.00647	< 0.0001 U	< 0.01 U	< 0.01 U	1.62	1.73	< 0.001 U	< 0.001 U	< 0.003 DU
SW-MC	12/11/2012	SMC-121211M	3.03	3.46	0.00305	0.00713	< 0.0001 U	< 0.01 U	< 0.01 U	1.15	1.12 D	< 0.001 U	< 0.001 U	< 0.003 U
SW-N1	10/24/2012	SN1-121024Q	3.96	4.41	0.0113 D	0.0125	< 0.0001 U	< 0.01 DU	< 0.01 U	2.29 D	2.45	< 0.001 DU	< 0.001 U	< 0.003 U
SW-N1	11/13/2012	SN1-121113M	3.7	4.06	0.00938 D	0.0159	< 0.0001 U	< 0.01 U	< 0.01 U	1.97	1.76	< 0.001 U	< 0.001 U	< 0.003 DU
SW-N1	12/10/2012	SN1-121210M	3.12	3.41	0.00523	0.0147	< 0.0001 U	< 0.01 U	< 0.01 U	1.21	1.18 D	< 0.001 U	< 0.001 U	< 0.003 U
SW-N4	10/24/2012	SN4-121024Q	4.31	4.74	0.00793 D	0.0247	< 0.0001 U	< 0.01 DU	< 0.01 U	2.65 D	2.84	< 0.001 DU	< 0.001 U	< 0.003 U
SW-N4	11/13/2012	SN4-121113M	3.57	4.21	0.00952 D	0.0162	< 0.0001 U	< 0.01 U	< 0.01 U	1.86	1.98	< 0.001 U	< 0.001 U	< 0.003 DU
SW-N4	12/6/2012	SN4-121206P												
SW-N4	12/10/2012	SN4-121210M	3.36	3.76	0.0102	0.0172	< 0.0001 U	< 0.01 U	< 0.01 U	1.53	1.52 D	< 0.001 U	< 0.001 U	< 0.003 U
SW-S1	11/13/2012	SS1-121113Q	1.23	1.32	0.00355 D	0.00603	< 0.0001 U	< 0.01 U	< 0.01 U	0.837	0.732	< 0.001 U	< 0.001 U	< 0.003 DU
SW-S1	12/13/2012	SS1-121213D	1.05	1.13	< 0.001 U	0.0206	< 0.0001 U	< 0.01 U	< 0.01 U	0.631	0.6	< 0.001 U	< 0.001 U	< 0.003 U
SW-S1	12/13/2012	SS1-121213M	1.05	1.02	0.00102	0.00158	< 0.0001 U	< 0.01 U	< 0.01 U	0.628	0.581	< 0.001 U	< 0.001 U	< 0.003 U
SW-S2	10/23/2012	SS2-121023Q	5.64	5.97	0.00119 D	0.00383	< 0.0001 U	< 0.01 DU	< 0.01 U	2.24 D	1.83	< 0.001 DU	< 0.001 U	< 0.003 U
SW-S2	10/24/2012	SS2-121024F	< 0.015 U	< 0.015 U	< 0.001 DU	< 0.001 U	< 0.0001 U	< 0.01 DU	< 0.01 U	< 0.3 DU	< 0.3 U	< 0.001 DU	< 0.001 U	< 0.003 U
SW-S2	11/13/2012	SS2-121113M	4.05	4.31	0.00768 D	0.00889	< 0.0001 U	< 0.01 U	< 0.01 U	1.7	1.45	< 0.001 U	< 0.001 U	< 0.003 DU
SW-S2	12/13/2012	SS2-121213M	3.16	3.26	0.00265	0.0101	< 0.0001 U	< 0.01 U	< 0.01 U	0.992	0.947	< 0.001 U	< 0.001 U	< 0.003 U
SW-SL3	10/23/2012	SSL3121023Q	15.7	14.7	0.00147 D	0.00603	< 0.0001 U	< 0.01 U	< 0.01 U	15.5	14.5	< 0.001 U	< 0.001 U	< 0.003 DU
SW-SL3	11/13/2012	SSL3121113M	3.47	3.81	< 0.001 U	0.00496	< 0.0001 U	< 0.01 U	< 0.01 U	1.86	1.79	< 0.001 U	< 0.001 U	< 0.003 U
SW-SL3	10/30/2012	SSL3121030P												
SW-SL3	12/13/2012	SSL3121213M	4.81	4.7	0.00202	0.00482	< 0.0001 U	< 0.01 U	< 0.01 U	4.92	4.6	< 0.001 U	< 0.001 U	< 0.003 U
SW-SL3	12/6/2012	SSL3121206P												
SW-SL3	12/11/2012	SSL3121211P												
SW-SL3	12/11/2012	SSL3121211D												
SW-SLP1	10/29/2012	SLP1121029P												
SW-SLP1	12/11/2012	SLP1121211P												
SW-SLP2	10/29/2012	SLP2121029P												
SW-SLP2	12/11/2012	SLP2121211P												
SW-SLP3	10/29/2012	SLP3121029P												
SW-SLP3	10/29/2012	SLP3121029D												
SW-TD1	10/23/2012	STD1121023-												
SW-TD2	10/20/2012	STD2121030-												
SW-TD4	10/25/2012	STD4121025-												
SW-TD6	10/25/2012	STD6121025-												
SW-V	12/10/2012	SV--121210M	2.05	2.34	0.00155	0.00374	< 0.0001 U	< 0.01 U	< 0.01 U	1.01	0.967 D	< 0.001 U	< 0.001 U	< 0.003 U
SW-W	11/13/2012	SW--121113Q	2.78	2.93	0.0104 D	0.0102	< 0.0001 U	< 0.01 U	< 0.01 U	1.39	1.35	< 0.001 U	< 0.001 U	< 0.003 DU
SW-W	12/11/2012	SW--121211M	2.48	2.77	0.01	0.00993	< 0.0001 U	< 0.01 U	< 0.01 U	1.18	1.12 D	< 0.001 U	< 0.001 U	< 0.003 U
SW-W1	10/24/2012	SW1-121024Q	4.54	5.13	0.00333 D	0.0416	< 0.0001 U	< 0.01 DU	< 0.01 U	1.42 D	1.58	< 0.001 DU	< 0.001 U	< 0.003 U
SW-W1	11/13/2012	SW1-121113M	3.23	3.94	0.0019 D	0.309	< 0.0001 U	< 0.01 U	< 0.01 U	1.45	1.47	< 0.001 U	< 0.001 U	< 0.003 DU

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Metal Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Magnesium, dissolved (mg/L)	Magnesium, total (mg/L)	Manganese, dissolved (mg/L)	Manganese, total (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)	Silver, dissolved (mg/L)
SW-W1	12/10/2012	SW1-121210M	2.78	3.2	0.00481	0.0808	< 0.0001 U	< 0.01 U	< 0.01 U	1	0.972 D	< 0.001 U	< 0.001 U	< 0.003 U
SW-W2	10/30/2012	SW2-121030Q	1.56	4.98	0.00414	0.37	< 0.0001 U	< 0.01 U	0.0141	3.4	3.21	< 0.001 U	< 0.001 U	< 0.003 U
SW-W2	11/13/2012	SW2-121113M	1.29	1.52	0.00285 D	0.013	< 0.0001 U	< 0.01 U	< 0.01 U	1.02	0.973	< 0.001 U	< 0.001 U	< 0.003 DU
SW-W2	12/13/2012	SW2-121213M	1.07	1.04	< 0.001 U	0.00109	< 0.0001 U	< 0.01 U	< 0.01 U	0.806	0.604	< 0.001 U	< 0.001 U	< 0.003 U
EQUIPMENT BLAN	10/11/2012	WU1S121011E	< 0.015 U		< 0.001 U			< 0.01 U		< 0.3 U		< 0.001 U		< 0.003 U
EQUIPMENT BLAN	10/11/2012	WU1H121011E	< 0.015 U		< 0.001 U			< 0.01 U		< 0.3 U		< 0.001 U		< 0.003 U
FIELD BLANK	11/13/2012	SW--121113F	< 0.015 U	< 0.015 U	< 0.001 DU	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.3 U	< 0.001 U	< 0.001 U	< 0.003 DU

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Metal Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	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)	Vanadium, total (mg/L)	Zinc, dissolved (mg/L)	Zinc, total (mg/L)
SW-E1	12/10/2012	SE1-121210M	< 0.003 U	2.35	2.69	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	0.00767
SW-GS1	10/23/2012	SGS1121023Q	< 0.003 U	4.37	4.71	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
SW-GS1	10/30/2012	SGS1121030P											< 0.004 U
SW-GS1	11/13/2012	SGS1121113M	< 0.003 U	2.96	3.28	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-GS1	12/13/2012	SGS1121213M	< 0.003 U	2.87	3.29	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.00391	0.00704	0.00654
SW-GS1	12/6/2012	SGS1121206P											< 0.004 U
SW-MC	10/25/2012	SMC-121025Q	< 0.003 U	4.64	5.38	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 DU	< 0.002 U	0.00737	0.00997
SW-MC	11/13/2012	SMC-121113M	< 0.003 U	3.52	3.89	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00817	0.0101
SW-MC	12/11/2012	SMC-121211M	< 0.003 U	3.82	4.41	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00938	0.00996
SW-N1	10/24/2012	SN1-121024Q	< 0.003 U	4.63	5.24	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 DU	< 0.002 U	0.00927	0.0102
SW-N1	11/13/2012	SN1-121113M	< 0.003 U	3.54	3.88	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0113	0.0128
SW-N1	12/10/2012	SN1-121210M	< 0.003 U	3.61	3.97	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0128	0.0137
SW-N4	10/24/2012	SN4-121024Q	< 0.003 U	4.16	4.66	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 DU	< 0.002 U	0.0186	0.0608
SW-N4	11/13/2012	SN4-121113M	< 0.003 U	2.4	2.76	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0157	0.0217
SW-N4	12/6/2012	SN4-121206P											0.035
SW-N4	12/10/2012	SN4-121210M	< 0.003 U	2.32	2.54	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0236	0.0251
SW-S1	11/13/2012	SS1-121113Q	< 0.003 U	3.18	3.42	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S1	12/13/2012	SS1-121213D	< 0.003 U	2.91	2.94	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S1	12/13/2012	SS1-121213M	< 0.003 U	2.92	2.83	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S2	10/23/2012	SS2-121023Q	< 0.003 U	4.23	4.47	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
SW-S2	10/24/2012	SS2-121024F	< 0.003 U	0.544	0.609	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 DU	< 0.002 U	< 0.004 U	< 0.004 U
SW-S2	11/13/2012	SS2-121113M	< 0.003 U	3.24	3.48	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S2	12/13/2012	SS2-121213M	< 0.003 U	2.59	2.58	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00416	< 0.004 U
SW-SL3	10/23/2012	SSL3121023Q	< 0.003 U	26.9 D	25.7	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0258	0.023
SW-SL3	11/13/2012	SSL3121113M	< 0.003 U	3.77	3.92	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00761	0.00919
SW-SL3	10/30/2012	SSL3121030P											0.0111
SW-SL3	12/13/2012	SSL3121213M	< 0.003 U	4.46	4.36	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0119	0.0105
SW-SL3	12/6/2012	SSL3121206P											0.00945
SW-SL3	12/11/2012	SSL3121211P											0.007
SW-SL3	12/11/2012	SSL3121211D											0.00697
SW-SLP1	10/29/2012	SLP1121029P											0.01
SW-SLP1	12/11/2012	SLP1121211P											0.0175
SW-SLP2	10/29/2012	SLP2121029P											0.0347
SW-SLP2	12/11/2012	SLP2121211P											0.0221
SW-SLP3	10/29/2012	SLP3121029P											0.0342
SW-SLP3	10/29/2012	SLP3121029D											0.0357
SW-TD1	10/23/2012	STD1121023-											
SW-TD2	10/20/2012	STD2121030-											
SW-TD4	10/25/2012	STD4121025-											
SW-TD6	10/25/2012	STD6121025-											
SW-V	12/10/2012	SV--121210M	< 0.003 U	5.28	6.01	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W	11/13/2012	SW--121113Q	< 0.003 U	5.32	5.6	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00443	< 0.004 U
SW-W	12/11/2012	SW--121211M	< 0.003 U	5.19	5.97	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W1	10/24/2012	SW1-121024Q	< 0.003 U	5.81	6.57	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 DU	< 0.002 U	< 0.004 U	0.0063
SW-W1	11/13/2012	SW1-121113M	< 0.003 U	5.95	6.83	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.00293	< 0.004 U	0.0259

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Metal Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	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)	Vanadium, total (mg/L)	Zinc, dissolved (mg/L)	Zinc, total (mg/L)
SW-W1	12/10/2012	SW1-121210M	< 0.003 U	5.55	6.33	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	0.00753
SW-W2	10/30/2012	SW2-121030Q	< 0.003 U	3.14	3.83	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	0.0253	< 0.004 U	0.0642
SW-W2	11/13/2012	SW2-121113M	< 0.003 U	3.96	4.28	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W2	12/13/2012	SW2-121213M	< 0.003 U	3.04	2.97	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
EQUIPMENT BLAN	10/11/2012	WU1S121011E		0.617		< 0.001 U		< 0.01 U		< 0.002 U		< 0.004 U	
EQUIPMENT BLAN	10/11/2012	WU1H121011E		0.557		< 0.001 U		< 0.01 U		< 0.002 U		< 0.004 U	
FIELD BLANK	11/13/2012	SW--121113F	< 0.003 U	0.408	0.529	< 0.001 DU	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Pesticide/Herbicide Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	2,4,5-T	2,4,5-TP	2,4-D	Dinoseb	Endrin	Lindane	Methoxy-chlor	Toxaphene	4-Methyl-phenol	alpha Terpineol	Benzoic Acid	Phenol
			93-76-5 (ug/L)	93-72-1 (ug/L)	94-75-7 (ug/L)	88-85-7 (ug/L)	72-20-8 (ug/L)	58-89-9 (ug/L)	72-43-5 (ug/L)	8001-35-2 (ug/L)	106-44-5 (ug/L)	98-55-5 (ug/L)	65-85-0 (ug/L)	108-95-2 (ug/L)
SW-E1	12/10/2012	SE1-121210M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	10/23/2012	SGS1121023Q	< 2 GU	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	10/30/2012	SGS1121030P									< 10 U	< 5 U	< 50 U	< 4 U
SW-GS1	11/13/2012	SGS1121113M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	12/13/2012	SGS1121213M	< 2 U	< 1 U	< 5 U	< 1 JU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	12/6/2012	SGS1121206P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-MC	10/25/2012	SMC-121025Q	< 2 GU	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-MC	11/13/2012	SMC-121113M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-MC	12/11/2012	SMC-121211M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	10/24/2012	SN1-121024Q	< 2 GU	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	11/13/2012	SN1-121113M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	12/10/2012	SN1-121210M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	10/24/2012	SN4-121024Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	11/13/2012	SN4-121113M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	12/6/2012	SN4-121206P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-N4	12/10/2012	SN4-121210M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S1	11/13/2012	SS1-121113Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S1	12/13/2012	SS1-121213D	< 2 U	< 1 U	< 5 U	< 1 JU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S1	12/13/2012	SS1-121213M	< 2 U	< 1 U	< 5 U	< 1 JU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	10/23/2012	SS2-121023Q	< 2 GU	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	10/24/2012	SS2-121024F	< 2 GU	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	11/13/2012	SS2-121113M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	12/13/2012	SS2-121213M	< 2 U	< 1 U	< 5 U	< 1 JU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	10/23/2012	SSL3121023Q	< 2 GU	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	11/13/2012	SSL3121113M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	10/30/2012	SSL3121030P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SL3	12/13/2012	SSL3121213M	< 2 U	< 1 U	< 5 U	< 1 JU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	12/6/2012	SSL3121206P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SL3	12/11/2012	SSL3121211P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SL3	12/11/2012	SSL3121211D									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SLP1	10/29/2012	SLP1121029P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP1	12/11/2012	SLP1121211P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SLP2	10/29/2012	SLP2121029P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP2	12/11/2012	SLP2121211P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SLP3	10/29/2012	SLP3121029P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP3	10/29/2012	SLP3121029D									< 10 U	< 5 U	< 50 U	< 4 U
SW-V	12/10/2012	SV--121210M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W	11/13/2012	SW--121113Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W	12/11/2012	SW--121211M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W1	10/24/2012	SW1-121024Q	< 2 GU	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Surface Water Pesticide/Herbicide Analytical Data
Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	2,4,5-T	2,4,5-TP	2,4-D	Dinoseb	Endrin	Lindane	Methoxy-chlor	Toxaphene	4-Methyl-phenol	alpha Terpineol	Benzoic Acid	Phenol
			93-76-5 (ug/L)	93-72-1 (ug/L)	94-75-7 (ug/L)	88-85-7 (ug/L)	72-20-8 (ug/L)	58-89-9 (ug/L)	72-43-5 (ug/L)	8001-35-2 (ug/L)	106-44-5 (ug/L)	98-55-5 (ug/L)	65-85-0 (ug/L)	108-95-2 (ug/L)
SW-W1	11/13/2012	SW1-121113M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W1	12/10/2012	SW1-121210M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	10/30/2012	SW2-121030O	< 2 HU	< 1 HU	< 5 HU	< 1 HU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	11/13/2012	SW2-121113M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	12/13/2012	SW2-121213M	< 2 U	< 1 U	< 5 U	< 1 JU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
FIELD BLANK	11/13/2012	SW--121113F	< 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 4th Quarter 2012

Station ID	Date	Activity	Sample ID	Comment
API	10/3/12	Monthly Characterization Sample	LAPI121003M	
API	11/14/12	Monthly Characterization Sample	LAPI121114M	
API	12/12/12	Monthly Characterization Sample	LAPI121212M	
LEPS	10/3/12	Monthly Characterization Sample	LEPS121003M	
LEPS	10/3/12	Permit Sample	LEPS121003P	
LEPS	10/17/12	Permit Sample	LEPS121017P	
LEPS	10/31/12	Permit Sample	LEPS121031P	
LEPS	11/14/12	Monthly Characterization Sample	LEPS121114M	
LEPS	11/14/12	Permit Sample	LEPS121114P	
LEPS	11/28/12	Permit Sample	LEPS121128P	
LEPS	12/12/12	Monthly Characterization Sample	LEPS121212M	
LEPS	12/12/12	Permit Sample	LEPS121212P	
LEPS	12/24/12	Permit Sample	LEPS121224P	
MH-46N	10/3/12	Monthly Characterization Sample	L46N121003M	
MH-46N	11/14/12	Monthly Characterization Sample	L46N121114M	
MH-46N	12/12/12	Monthly Characterization Sample	L46N121212M	
PS2A	10/3/12	Monthly Characterization Sample	LP2A121003M	
PS2A	11/14/12	Monthly Characterization Sample	LP2A121114M	
PS2A	12/12/12	Monthly Characterization Sample	LP2A121212M	
Field Blank	11/14/12	QA/QC Sample	LEPS121114F	

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate Field Parameters
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field) (std. Units)	Conductance (Field) (umho/cm)	Temperature (o C)
LS-API	10/3/2012	LAPI121003M	8.28	8300	7.5
LS-API	11/14/2012	LAPI121114M	7.33	2200	7.7
LS-API	12/12/2012	LAPI121212M	7.38	2900	6.2
LS-LEPS	10/3/2012	LEPS121003M	8.5	7000	12.3
LS-LEPS	10/3/2012	LEPS121003P	8.5	7000	12.3
LS-LEPS	10/17/2012	LEPS121017P	8.48	6700	9.8
LS-LEPS	10/31/2012	LEPS121031P	8.22	3600	11.7
LS-LEPS	11/14/2012	LEPS121114M	8.16	3200	12.6
LS-LEPS	11/14/2012	LEPS121114P	8.16	3200	12.6
LS-LEPS	11/28/2012	LEPS121128P	8.23	2200	5.2
LS-LEPS	12/12/2012	LEPS121212M	8.11	2300	6.5
LS-LEPS	12/12/2012	LEPS121212P	8.11	2300	6.5
LS-LEPS	12/24/2012	LEPS121224P	7.95	2450	8.2
LS-MH46N	10/3/2012	L46N121003M	7.45	8500	25.7
LS-MH46N	11/14/2012	L46N121114M	733	10350	19.8
LS-MH46N	12/12/2012	L46N121212M	7.33	7900	22.5
LS-PS2A	10/3/2012	LP2A121003M	8.18	5400	12.6
LS-PS2A	11/14/2012	LP2A121114M	6.33	255	12.9
LS-PS2A	12/12/2012	LP2A121212M	6.8	395	11.1

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate Conventionals Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Alkalinity, Total (CaCO3) (mg/L)	Ammonia, (NH3 as N) (mg/L)	Biological Oxygen Demand (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Coliforms, Fecal (CFU/100mL)	Coliforms, Total (CFU/100mL)	Cyanide (mg/L)	Fluoride (mg/L)	Nitrate+Nitrite (NO3+NO2 as N) (mg/L)	Soluble Reactive Phosphorus (mg/L)	Phosphorus, Total (as P) (mg/L)
LS-API	10/3/2012	LAPI121003M	8720	1500	3990	8830	2110	77000	1500000	< 0.02 SU	< 0.1 U	0.323	2.65	11 S
LS-API	11/14/2012	LAPI121114M	1470	185	976	1590	282	4700	59000	< 0.02 SU	< 0.1 U	0.922	0.151	2.34
LS-API	12/12/2012	LAPI121212M	1610	257	738	1730	363	23000	260000	< 0.02 SU	30.6	0.308	0.346	2.43
LS-LEPS	10/3/2012	LEPS121003P												
LS-LEPS	10/3/2012	LEPS121003M	1630	150	75.3	1340	1180	1000	69000	0.037 ST	1.03	211	0.186	2.61
LS-LEPS	10/17/2012	LEPS121017P												
LS-LEPS	10/31/2012	LEPS121031P												
LS-LEPS	11/14/2012	LEPS121114P												
LS-LEPS	11/14/2012	LEPS121114M	1230	163	199	747	267	4100	31000	< 0.02 SU	< 0.1 U	0.014 T	0.0379	1.37
LS-LEPS	11/28/2012	LEPS121128P												
LS-LEPS	12/12/2012	LEPS121212M	972	135	193	587	197	2	< 1 U	< 0.02 U	2.37	0.019 T	0.048	1.01
LS-LEPS	12/12/2012	LEPS121212P												
LS-LEPS	12/24/2012	LEPS121224P												
LS-MH46N	10/3/2012	L46N121003M	3550	663	103	1840	1770	< 1 U	9	< 0.02 SU	5.69	1.9	3.35	4.16
LS-MH46N	11/14/2012	L46N121114M	3680	613	154	1960	1730	< 1 U	2	< 0.02 SU	4.43	0.55	2.48	4.07
LS-MH46N	12/12/2012	L46N121212M	2800	476	138	1420	1430	< 1 U	90	< 0.02 SU	3.47	0.06	2.15	3.28
LS-PS2A	10/3/2012	LP2A121003M	2030	481	52.9	814	1580	1	120000	< 0.02 SU	6.42	6.75	0.568	1.31
LS-PS2A	11/14/2012	LP2A121114M	64	6.3	9.47	35	14.3	< 1 U	1500	< 0.02 U	0.25 T	1.95	< 0.01 U	0.18 T
LS-PS2A	12/12/2012	LP2A121212M	108	14.3	7.22	62	33.3	4700	3200	< 0.02 U	0.279	1.89	0.0424	< 0.1 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate Conventionals Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Specific Conductance (umho/cm)	Sulfate (SO4) (mg/L)	Sulfide Total (mg/L)	Total Fats, Oils and Grease (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	10/3/2012	LAPI121003M	21300	31.8	1.27	8.8	2130	3290	120	4500	88
LS-API	11/14/2012	LAPI121114M	3880	45.1	0.13 T	< 2 U	267	577	35	962	20
LS-API	12/12/2012	LAPI121212M	4310	30.2	0.462	< 2 U	308	544 S	61	967	35
LS-LEPS	10/3/2012	LEPS121003P									
LS-LEPS	10/3/2012	LEPS121003M	8160	67.9	< 0.01 U	< 2 U	205	412	152	1320	129
LS-LEPS	10/17/2012	LEPS121017P									
LS-LEPS	10/31/2012	LEPS121031P									
LS-LEPS	11/14/2012	LEPS121114P									
LS-LEPS	11/14/2012	LEPS121114M	3240	41.1	0.0417	< 2 U	204	142	280	573	216
LS-LEPS	11/28/2012	LEPS121128P									
LS-LEPS	12/12/2012	LEPS121212M	2520	30.8	0.036 T	< 2 U	168	130	144	467	133
LS-LEPS	12/12/2012	LEPS121212P									
LS-LEPS	12/24/2012	LEPS121224P									
LS-MH46N	10/3/2012	L46N121003M	12100	3.47	0.426	6.1	715	655	4.2	1340	3.3
LS-MH46N	11/14/2012	L46N121114M	12000	3.5	0.15 T	< 2 U	752	523 S	2.3	1310	1.8
LS-MH46N	12/12/2012	L46N121212M	9060	0.79 T	0.383	< 2 U	591	442 S	1.1	1070	< 1 U
LS-PS2A	10/3/2012	LP2A121003M	6600	209	0.228	< 2 GU	492	421	42	528	32
LS-PS2A	11/14/2012	LP2A121114M	247	13.9	0.0889	< 2 U	8.13	16	38	83.3	25
LS-PS2A	12/12/2012	LP2A121212M	395	12.1	< 0.01 U	< 2 U	16.5	28.4	2	80.6	1.8 T

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate Metal Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Aluminum, total (mg/L)	Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Cadmium, total (mg/L)	Calcium, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Copper, total (mg/L)	Iron, total (mg/L)	Lead, total (mg/L)
LS-API	10/3/2012	LAPI121003M	0.586 S	0.022 ST	0.194 S	0.24 S	< 0.001 SU	< 0.002 SU	284 S	0.21 S	0.061 S	0.0086 ST	25.6 S	< 0.001 SU
LS-API	11/14/2012	LAPI121114M	1.79	< 0.001 U	0.039 T	0.0958	< 0.001 U	< 0.002 U	117	0.0382	0.015 T	0.011 T	12.8	< 0.001 U
LS-API	12/12/2012	LAPI121212M	2.07	< 0.001 U	0.042 T	0.105	< 0.001 U	< 0.002 U	107	0.0434	0.0151	0.011 T	12.8	< 0.001 U
LS-LEPS	10/3/2012	LEPS121003P			0.097 T			< 0.002 U		0.0874		0.0056 T		< 0.001 U
LS-LEPS	10/3/2012	LEPS121003M	0.21 T	0.022 T	0.097 T	0.0793	< 0.001 U	< 0.002 U	92.5	0.0877	0.0369	0.0063 T	7.88	< 0.001 U
LS-LEPS	10/17/2012	LEPS121017P			0.1 T			< 0.002 U		0.088		0.0096 T		< 0.001 U
LS-LEPS	10/31/2012	LEPS121031P			0.027 T			< 0.002 U		0.0344		0.0088 T		< 0.001 U
LS-LEPS	11/14/2012	LEPS121114P			0.035 T			< 0.002 U		0.028		0.0076 T		< 0.001 U
LS-LEPS	11/14/2012	LEPS121114M	0.45 T	< 0.001 U	0.031 T	0.0654	< 0.001 U	< 0.002 U	79.3	0.0271	0.011 T	0.0073 T	6.3	< 0.001 U
LS-LEPS	11/28/2012	LEPS121128P			< 0.001 U			< 0.002 U		0.0204		0.0099 T		< 0.001 U
LS-LEPS	12/12/2012	LEPS121212M	0.687	< 0.001 U	0.026 T	0.0597	< 0.001 U	< 0.002 U	69.1	0.0207	0.0085 T	0.0062 T	4.96	< 0.001 U
LS-LEPS	12/12/2012	LEPS121212P			0.029 T			< 0.002 U		0.0217		0.0067 T		< 0.001 U
LS-LEPS	12/24/2012	LEPS121224P			0.028 T			< 0.002 U		0.0251		0.0083 T		< 0.001 U
LS-MH46N	10/3/2012	L46N121003M	< 0.02 U	< 0.001 U	0.089 T	0.458	< 0.001 U	< 0.002 U	88	0.107	0.0366	< 0.002 U	2.27	< 0.001 U
LS-MH46N	11/14/2012	L46N121114M	0.11 T	< 0.001 U	0.089 T	0.483	< 0.001 U	< 0.002 U	86	0.109	0.0351	0.004 T	2.29	< 0.001 U
LS-MH46N	12/12/2012	L46N121212M	< 0.02 U	< 0.001 U	0.069 T	0.33	< 0.001 U	< 0.002 U	79.9	0.077	0.0271	< 0.002 U	2	< 0.001 U
LS-PS2A	10/3/2012	LP2A121003M	< 0.02 U	0.066 T	0.14	0.0826	< 0.001 U	< 0.002 U	43.3	0.0174	0.0235	0.0517	4.73	< 0.001 U
LS-PS2A	11/14/2012	LP2A121114M	0.14 T	< 0.001 U	< 0.001 U	0.0199	< 0.001 U	< 0.002 U	14.1	< 0.005 U	< 0.003 U	0.024	5.34	< 0.001 U
LS-PS2A	12/12/2012	LP2A121212M	< 0.02 U	< 0.001 U	< 0.001 U	0.0146	< 0.001 U	< 0.002 U	13.4	< 0.005 U	< 0.003 U	0.022	1.62	< 0.001 U
FIELD BLANK	11/14/2012	LEPS121114F			< 0.001 U			< 0.002 U		< 0.005 U		< 0.002 U		< 0.001 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate Metal Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Magnesium, total (mg/L)	Manganese, total (mg/L)	Mercury, total (mg/L)	Nickel, total (mg/L)	Potassium, total (mg/L)	Selenium, total (mg/L)	Silver, total (mg/L)	Sodium, total (mg/L)	Thallium, total (mg/L)	Tin, total (mg/L)	Vanadium, total (mg/L)	Zinc, total (mg/L)
LS-API	10/3/2012	LAPI121003M	166 S	3.78 S	< 0.0001 SU	0.42 DS	776 DS	< 0.001 SU	< 0.003 SU	2050 S	< 0.001 SU	0.042 ST	0.085 S	1.35 DS
LS-API	11/14/2012	LAPI121114M	37.7	1.54	< 0.0001 U	0.0679	117	< 0.001 U	< 0.003 U	320	< 0.001 U	< 0.01 U	0.019 T	0.336
LS-API	12/12/2012	LAPI121212M	35.9	1.52	< 0.0001 U	0.0713	135	< 0.001 U	< 0.003 U	351	< 0.001 U	< 0.01 U	0.022 T	0.403
LS-LEPS	10/3/2012	LEPS121003P				0.205			< 0.003 U					0.268
LS-LEPS	10/3/2012	LEPS121003M	86.2	0.765	< 0.0001 U	0.209	397 D	< 0.001 U	< 0.003 U	1080	< 0.001 U	< 0.01 U	0.044 T	0.267
LS-LEPS	10/17/2012	LEPS121017P				0.199			< 0.003 U					0.354
LS-LEPS	10/31/2012	LEPS121031P				0.0858			< 0.003 U					0.172
LS-LEPS	11/14/2012	LEPS121114P				0.0599			< 0.003 U					0.175
LS-LEPS	11/14/2012	LEPS121114M	32.4	0.902	< 0.0001 U	0.058	105	< 0.001 U	< 0.003 U	285	< 0.001 U	< 0.01 U	0.015 T	0.171
LS-LEPS	11/28/2012	LEPS121128P				0.043			< 0.003 U					0.138
LS-LEPS	12/12/2012	LEPS121212M	22.5	0.905	< 0.0001 U	0.0418	74.1	< 0.001 U	< 0.003 U	190	< 0.001 U	< 0.01 U	< 0.002 U	0.143
LS-LEPS	12/12/2012	LEPS121212P				0.0393			< 0.003 U					0.146
LS-LEPS	12/24/2012	LEPS121224P				0.0448			< 0.003 U					0.242
LS-MH46N	10/3/2012	L46N121003M	60.6	0.479	< 0.0001 U	0.168	409 D	< 0.001 U	< 0.003 U	1270	< 0.001 U	< 0.01 U	0.146	0.012 T
LS-MH46N	11/14/2012	L46N121114M	60.5	0.452	< 0.0001 U	0.166	394 D	< 0.001 U	< 0.003 U	1310	< 0.001 U	< 0.01 U	0.149	0.0284
LS-MH46N	12/12/2012	L46N121212M	51.7	0.483	< 0.0001 U	0.124	326	< 0.001 U	< 0.003 U	977	< 0.001 U	< 0.01 U	0.0968	0.0289
LS-PS2A	10/3/2012	LP2A121003M	26.2	0.871	< 0.0001 U	0.0846	170	< 0.001 U	< 0.003 U	488	< 0.001 U	0.022 T	0.014 T	0.0793
LS-PS2A	11/14/2012	LP2A121114M	5.35	0.536	< 0.0001 U	< 0.01 U	4.18	< 0.001 U	< 0.003 U	12	< 0.001 U	< 0.01 U	< 0.002 U	0.022 T
LS-PS2A	12/12/2012	LP2A121212M	5.38	0.172	< 0.0001 U	0.016 T	9.51	< 0.001 U	< 0.003 U	27.8	< 0.001 U	< 0.01 U	< 0.002 U	0.01 T
FIELD BLANK	11/14/2012	LEPS121114F				< 0.01 U			< 0.003 U					< 0.004 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate VOA Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	1,1,1,2-Tetrachloro-ethane 630-20-6 (ug/L)	1,1,1-Trichloro-ethane 71-55-6 (ug/L)	1,1,2,2-Tetrachloro-ethane 79-34-5 (ug/L)	1,1,2-Trichloro-ethane 79-00-5 (ug/L)	1,1-Dichloro-ethane 75-34-3 (ug/L)	1,1-Dichloro-ethene 75-35-4 (ug/L)	1,1-Dichloro-propene 563-58-6 (ug/L)	1,2,3-Trichloro-propane 96-18-4 (ug/L)	1,2-Dibromo-3-Chloropropan 96-12-8 (ug/L)	1,2-Dibromo-ethane 106-93-4 (ug/L)	1,2-Dichloro-benzene 95-50-1 (ug/L)	1,2-Dichloro-ethane 107-06-2 (ug/L)
LS-API	10/3/2012	LAPI121003M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	6.7 T
LS-API	11/14/2012	LAPI121114M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	7 T
LS-API	12/12/2012	LAPI121212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	5.2 T
LS-LEPS	10/3/2012	LEPS121003M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	11/14/2012	LEPS121114M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	12/12/2012	LEPS121212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	10/3/2012	L46N121003M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	11/14/2012	L46N121114M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	12/12/2012	L46N121212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	10/3/2012	LP2A121003M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	11/14/2012	LP2A121114M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	12/12/2012	LP2A121212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	10/2/2012	VTRP121003C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	11/13/2012	VTRP121114C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	11/13/2012	VTRP121114B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	12/11/2012	VTRP121212C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	12/11/2012	VTRP121212B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate VOA Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	1,2-Dichloro-propane 78-87-5 (ug/L)	1,3 Dichloro-benzene 541-73-1 (ug/L)	1,3-Dichloro-propane 142-28-9 (ug/L)	1,4-Dichloro-benzene 106-46-7 (ug/L)	2,2-Dichloro-propane 594-20-7 (ug/L)	2-Butanone 78-93-3 (ug/L)	2-Hexanone 591-78-6 (ug/L)	2-Methyl-1-propanol 78-83-1 (ug/L)	3-Chloro-propene 107-05-1 (ug/L)	4-Methyl-2-Pentanone 108-10-1 (ug/L)	Acetone 67-64-1 (ug/L)	Acetonitrile 75-05-8 (ug/L)
LS-API	10/3/2012	LAPI121003M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	17100 D	< 4 U	< 100 U	< 10 U	89 T	17100 D	< 100 U
LS-API	11/14/2012	LAPI121114M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2190 D	< 4 U	< 100 U	< 10 U	< 4 U	2080	< 100 U
LS-API	12/12/2012	LAPI121212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	5910 D	< 4 U	< 100 U	< 10 U	< 4 U	5030 D	< 100 U
LS-LEPS	10/3/2012	LEPS121003M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	125	< 100 U
LS-LEPS	11/14/2012	LEPS121114M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	339	< 4 U	< 100 U	< 10 U	< 4 U	445	< 100 U
LS-LEPS	12/12/2012	LEPS121212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1430	< 4 U	< 100 U	< 10 U	< 4 U	1740	< 100 U
LS-MH46N	10/3/2012	L46N121003M	< 0.2 U	< 0.2 U	< 0.2 U	6.7 T	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	80 T	< 100 U
LS-MH46N	11/14/2012	L46N121114M	< 0.2 U	< 0.2 U	< 0.2 U	6.3 T	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	140	< 100 U
LS-MH46N	12/12/2012	L46N121212M	< 0.2 U	< 0.2 U	< 0.2 U	8 T	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-PS2A	10/3/2012	LP2A121003M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	581	< 4 U	< 100 U	< 10 U	< 4 U	829	< 100 U
LS-PS2A	11/14/2012	LP2A121114M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-PS2A	12/12/2012	LP2A121212M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	81 T	< 100 U
VOA TRIP BLANK	10/2/2012	VTRP121003C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	4.39	< 100 U
VOA TRIP BLANK	11/13/2012	VTRP121114C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	11/13/2012	VTRP121114B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	12/11/2012	VTRP121212C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	12/11/2012	VTRP121212B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate VOA Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Acrolein	Acrylonitrile	Benzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloroethane
			107-02-8 (ug/L)	107-13-1 (ug/L)	71-43-2 (ug/L)	74-97-5 (ug/L)	75-27-4 (ug/L)	75-25-2 (ug/L)	74-83-9 (ug/L)	75-15-0 (ug/L)	56-23-5 (ug/L)	108-90-7 (ug/L)	124-48-1 (ug/L)	75-00-3 (ug/L)
LS-API	10/3/2012	LAPI121003M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-API	11/14/2012	LAPI121114M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-API	12/12/2012	LAPI121212M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	10/3/2012	LEPS121003M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	8.8 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	11/14/2012	LEPS121114M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	12/12/2012	LEPS121212M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	10/3/2012	L46N121003M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	11/14/2012	L46N121114M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	12/12/2012	L46N121212M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	10/3/2012	LP2A121003M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	11/14/2012	LP2A121114M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	12/12/2012	LP2A121212M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	10/2/2012	VTRP121003C	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	11/13/2012	VTRP121114C	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	11/13/2012	VTRP121114B	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	12/11/2012	VTRP121212C	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	12/11/2012	VTRP121212B	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate VOA Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Chloroform	Chloro-methane	Chloroprene	cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Dibromo-methane	Dichloro-difluoro-methane	Ethylbenzene	m & p Xylenes	Methyl Iodide	Methyl Methacrylate	Methylacrylo-nitrile
			67-66-3 (ug/L)	74-87-3 (ug/L)	126-99-8 (ug/L)	156-59-2 (ug/L)	10061-01-5 (ug/L)	74-95-3 (ug/L)	75-71-8 (ug/L)	100-41-4 (ug/L)	mpx (ug/L)	74-88-4 (ug/L)	80-62-6 (ug/L)	126-98-7 (ug/L)
LS-API	10/3/2012	LAPI121003M	< 0.2 U	6.3 T	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	8.2 T	< 0.2 U	< 2 U	< 5 U
LS-API	11/14/2012	LAPI121114M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	6.6 T	17.3	< 0.2 U	< 2 U	< 5 U
LS-API	12/12/2012	LAPI121212M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	8.3 T	20.1	< 0.2 U	< 2 U	< 5 U
LS-LEPS	10/3/2012	LEPS121003M	< 0.2 U	32.6	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	5.8 T	< 2 U	< 5 U
LS-LEPS	11/14/2012	LEPS121114M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-LEPS	12/12/2012	LEPS121212M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-MH46N	10/3/2012	L46N121003M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	25	30.1	< 0.2 U	< 2 U	< 5 U
LS-MH46N	11/14/2012	L46N121114M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	21.3	26.1	< 0.2 U	< 2 U	< 5 U
LS-MH46N	12/12/2012	L46N121212M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	33.7	44.9	< 0.2 U	< 2 U	< 5 U
LS-PS2A	10/3/2012	LP2A121003M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-PS2A	11/14/2012	LP2A121114M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-PS2A	12/12/2012	LP2A121212M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	10/2/2012	VTRP121003C	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	11/13/2012	VTRP121114C	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	11/13/2012	VTRP121114B	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	12/11/2012	VTRP121212C	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	12/11/2012	VTRP121212B	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate VOA Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Methylene Chloride 75-09-2 (ug/L)	o-Xylene 95-47-6 (ug/L)	Proprionitrile 107-12-0 (ug/L)	Styrene 100-42-5 (ug/L)	Tetrachloro-ethene 127-18-4 (ug/L)	Toluene 108-88-3 (ug/L)	trans-1,2-Dichloro-ethene 156-60-5 (ug/L)	trans-1,3-Dichloro-propene 10061-02-6 (ug/L)	trans-1,4-Dichloro-2-butene 110-57-6 (ug/L)	Trichloro-ethene 79-01-6 (ug/L)	Trichloro-fluoro-methane 75-69-4 (ug/L)	Vinyl Acetate 108-05-4 (ug/L)	Vinyl Chloride 75-01-4 (ug/L)
LS-API	10/3/2012	LAPI121003M	17.6	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	15.2	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-API	11/14/2012	LAPI121114M	37.9	6.3 T	< 60 U	< 0.2 U	< 0.2 U	45.6	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.705
LS-API	12/12/2012	LAPI121212M	< 0.2 U	8.5 T	< 60 U	< 0.2 U	< 0.2 U	47.3	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.643
LS-LEPS	10/3/2012	LEPS121003M	15.4	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-LEPS	11/14/2012	LEPS121114M	28.1	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-LEPS	12/12/2012	LEPS121212M	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-MH46N	10/3/2012	L46N121003M	15.2	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	1.51
LS-MH46N	11/14/2012	L46N121114M	31.3	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	1.83
LS-MH46N	12/12/2012	L46N121212M	< 0.2 U	6.8 T	< 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	2.51
LS-PS2A	10/3/2012	LP2A121003M	15.3	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-PS2A	11/14/2012	LP2A121114M	27.1	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-PS2A	12/12/2012	LP2A121212M	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	10/2/2012	VTRP121003C	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	11/13/2012	VTRP121114C	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	11/13/2012	VTRP121114B	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	12/11/2012	VTRP121212C	0.21 T	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	12/11/2012	VTRP121212B	0.21 T	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate Pesticide/Herbicide Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	2,4,5-T 93-76-5 (ug/L)	2,4,5-TP 93-72-1 (ug/L)	2,4-D 94-75-7 (ug/L)	4,4'-DDD 72-54-8 (ug/L)	4,4'-DDE 72-55-9 (ug/L)	4,4'-DDT 50-29-3 (ug/L)	Aldrin 309-00-2 (ug/L)	Alpha BHC 319-84-6 (ug/L)	Alpha Chlordane 57-74-9 (ug/L)	Aroclor 1016 12674-11-2 (ug/L)	Aroclor 1221 11104-28-2 (ug/L)	Aroclor 1232 11141-16-5 (ug/L)
LS-API	10/3/2012	LAPI121003M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-API	11/14/2012	LAPI121114M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-API	12/12/2012	LAPI121212M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-LEPS	10/3/2012	LEPS121003M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-LEPS	11/14/2012	LEPS121114M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-LEPS	12/12/2012	LEPS121212M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-MH46N	10/3/2012	L46N121003M	< 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	11/14/2012	L46N121114M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-MH46N	12/12/2012	L46N121212M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-PS2A	10/3/2012	LP2A121003M	< 2 U	4 T	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-PS2A	11/14/2012	LP2A121114M	< 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	12/12/2012	LP2A121212M	< 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 October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate Pesticide/Herbicide Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

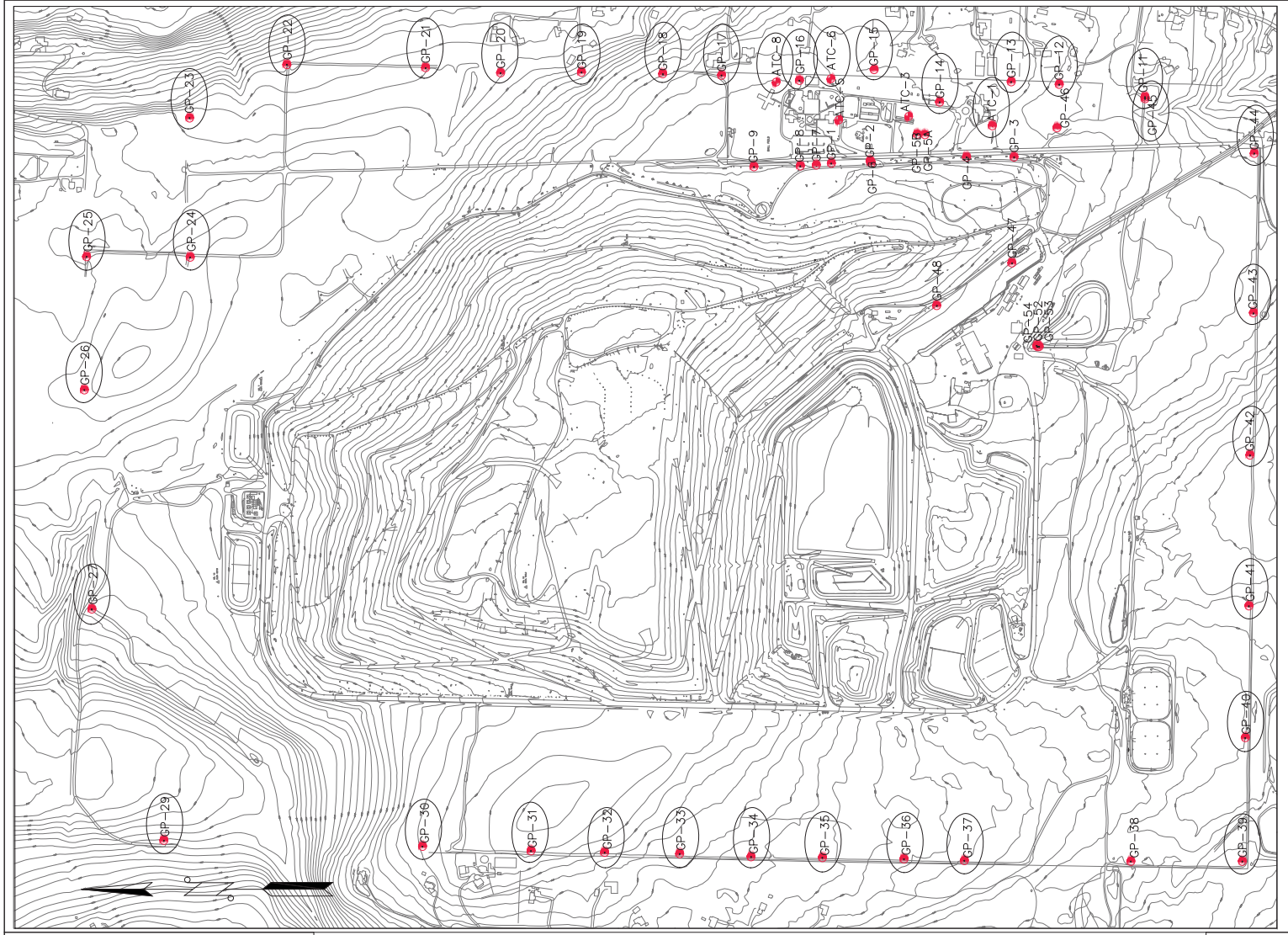
Site	Date	Sample ID	Aroclor 1242 53469-21-9 (ug/L)	Aroclor 1248 12672-29-6 (ug/L)	Aroclor 1254 11097-69-1 (ug/L)	Aroclor 1260 11096-82-5 (ug/L)	Aroclors Total (ug/L)	Beta BHC 319-85-7 (ug/L)	Delta BHC 319-86-8 (ug/L)	Dieldrin 60-57-1 (ug/L)	Dinoseb 88-85-7 (ug/L)	Endo-sulfan I 959-98-8 (ug/L)	Endo-sulfan II 33213-65-9 (ug/L)	Endo-sulfan Sulfate 1031-07-8 (ug/L)
LS-API	10/3/2012	LAPI121003M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 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	11/14/2012	LAPI121114M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 GU	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-API	12/12/2012	LAPI121212M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 GU	< 0.1 U	< 0.5 U	< 0.1 GU
LS-LEPS	10/3/2012	LEPS121003M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 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	11/14/2012	LEPS121114M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 GU	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-LEPS	12/12/2012	LEPS121212M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 GU	< 0.1 U	< 0.5 U	< 0.1 GU
LS-MH46N	10/3/2012	L46N121003M	0.36 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-MH46N	11/14/2012	L46N121114M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 GU	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-MH46N	12/12/2012	L46N121212M	0.2 T	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 GU	< 0.1 U	< 0.5 U	< 0.1 GU
LS-PS2A	10/3/2012	LP2A121003M	0.187	< 0.01 U	0.056 T	< 0.01 GU	< 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	11/14/2012	LP2A121114M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 GU	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-PS2A	12/12/2012	LP2A121212M	0.027 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

Environmental Monitoring Data

Data Collected from October 1, 2012 to December 31, 2012
Cedar Hills Landfill --- Leachate Pesticide/Herbicide Analytical Data
Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Endrin	Endrin Aldehyde	Heptachlor	Heptachlor Epoxide	Isodrin	Lindane	Methoxy-chlor	Toxaphene
			72-20-8 (ug/L)	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	10/3/2012	LAPI121003M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 GU	< 0.025 U	< 2.5 U
LS-API	11/14/2012	LAPI121114M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 0.025 U	< 2.5 U
LS-API	12/12/2012	LAPI121212M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	< 0.025 U	< 2.5 U
LS-LEPS	10/3/2012	LEPS121003M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 GU	< 0.025 U	< 2.5 U
LS-LEPS	11/14/2012	LEPS121114M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 0.025 U	< 2.5 U
LS-LEPS	12/12/2012	LEPS121212M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	< 0.025 U	< 2.5 U
LS-MH46N	10/3/2012	L46N121003M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	0.36 T	< 2.5 U
LS-MH46N	11/14/2012	L46N121114M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 0.025 U	< 2.5 U
LS-MH46N	12/12/2012	L46N121212M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	0.2 T	< 2.5 U
LS-PS2A	10/3/2012	LP2A121003M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 GU	0.243	< 2.5 U
LS-PS2A	11/14/2012	LP2A121114M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 0.025 U	< 2.5 U
LS-PS2A	12/12/2012	LP2A121212M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	0.027 T	< 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	1,697,308.06	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
170,063.32	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	1,697,252.06	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

LEGEND

INTERIOR LFG MONITORING PROBES

LFG MIGRATION MONITORING PROBES

DATE	REVISION	BY

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

S:\CAD\Cedarhill\gas-prob-loc\gll-lfg-loc2006_GasProbeOnly.dwg

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

October 2012 Monitoring

Bar.Start:	**30.26**
Bar Stop:	**30.32**
Amb. Temp:	**52 F.**
Tech:	**JP**

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	10/25/2012 11:41	0.0	0.0	20.5	0	-0.3	
ATC-01S	10/25/2012 11:40	0.0	0.1	20.5	0	-0.08	
ATC-06D	10/25/2012 12:39	0.0	0.3	20.6	0	-0.44	
ATC-06S	10/25/2012 12:38	0.0	1.2	20.1	0	0	
ATC-08D	10/25/2012 12:49	0.0	0.3	20.1	0	-0.17	
ATC-08S	10/25/2012 12:48	0.0	1.5	19.5	0	0	
GP-11A	10/25/2012 9:21	0.0	2.1	19.7	0	0	
GP-11B	10/25/2012 9:22	0.0	0.1	20.7	0	-3.14	
GP-11C	10/25/2012 9:23	0.0	0.1	20.7	0	-2.68	
GP-11D	10/25/2012 9:25	0.0	0.2	20.7	0	0	
GP-12A	10/25/2012 11:57	0.0	0.2	20.6	0	0	
GP-12B	10/25/2012 11:58	0.0	0.0	20.7	0	0	
GP-12C	10/25/2012 12:00	0.0	0.1	20.1	0	0	
GP-12D	10/25/2012 12:01	0.0	0.2	18.1	0	-7.14	
GP-13A	10/25/2012 11:48	0.0	1.3	19.7	0	0	
GP-13B	10/25/2012 11:50	0.0	0.0	20.6	0	-0.07	
GP-13C	10/25/2012 11:51	0.0	0.0	20.6	0	-0.21	
GP-13D	10/25/2012 11:53	0.0	0.0	20.6	0	-6.77	
GP-14A	10/25/2012 12:07	0.0	0.0	20.8	0	-6.27	
GP-14B	10/25/2012 12:09	0.0	0.0	20.8	0	-6.45	
GP-15A	10/25/2012 12:14	0.0	6.5	6.4	0	0.29	
GP-15C	10/25/2012 12:16	0.0	0.2	20.1	0	-2.92	
GP-15D	10/25/2012 12:17	0.0	0.2	20.6	0	-3.27	
GP-16A	10/25/2012 12:42	0.0	2.2	18.9	0	0	
GP-16B	10/25/2012 12:44	0.0	0.1	20.7	0	-6.44	
GP-16C	10/25/2012 12:45	0.0	0.1	20.6	0	-6.52	
GP-17A	10/25/2012 13:56	--	--	--	--	--	No Reading, Water
GP-17B	10/25/2012 13:57	0.0	0.9	16.4	0	0	
GP-17C	10/25/2012 13:59	0.0	0.0	20.4	0	-6.11	
GP-18A	10/25/2012 14:02	0.0	2.2	18.2	0	0	
GP-18B	10/25/2012 14:03	0.0	0.4	14.2	0	0	
GP-18C	10/25/2012 14:05	0.0	0.1	20.4	0	-6.54	
GP-19A	10/25/2012 14:08	0.0	1.4	18.1	0	0	
GP-19B	10/25/2012 14:09	0.0	0.7	15.9	0	0	
GP-19C	10/25/2012 14:11	0.0	0.0	20.5	0	-0.53	
GP-20A	10/25/2012 14:15	0.0	0.2	20.5	0	0	
GP-20B	10/25/2012 14:16	0.0	0.1	20.3	0	-0.33	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

October 2012 Monitoring

Bar.Start: 30.26
Bar Stop: 30.32
Amb. Temp: 52 F.
Tech: JP

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-20C	10/25/2012 14:18	0.0	0.2	4.5	0	0	
GP-21A	10/25/2012 14:21	0.0	1.4	18.7	0	0	
GP-21B	10/25/2012 14:22	0.0	0.1	10.0	0	0	
GP-21C	10/25/2012 14:23	--	--	--	--	--	No Reading, Water
GP-22A	10/25/2012 14:24	0.0	0.2	10.6	0	0	Broken
GP-22B	10/25/2012 14:24	0.0	0.2	10.6	0	0	Broken
GP-22C	10/25/2012 14:24	0.0	0.2	10.5	0	0	Broken
GP-23A	10/25/2012 14:29	0.0	1.0	19.9	0	0	
GP-23B	10/25/2012 14:30	0.0	0.0	20.6	0	0	
GP-23C	10/25/2012 14:32	0.0	0.0	20.6	0	0	
GP-24A	10/25/2012 14:35	0.0	4.1	16.3	0	0	
GP-24B	10/25/2012 14:36	0.0	0.2	20.3	0	-1.33	
GP-025	10/25/2012 14:39	0.0	2.5	18.7	0	0	
GP-026	10/25/2012 14:42	0.0	0.1	20.6	0	-2.19	
GP-027	10/25/2012 14:45	0.0	8.1	12.4	0	-0.08	
GP-29A	10/25/2012 14:50	0.0	0.5	20.3	0	0	
GP-29B	10/25/2012 14:51	0.0	0.2	20.6	0	-0.15	
GP-30A	10/25/2012 7:53	0.0	1.6	19.9	0	-1.39	
GP-30B	10/25/2012 7:55	0.0	1.8	19.5	0	-3.14	
GP-31A	10/25/2012 7:58	0.0	5.4	15.8	0	0	
GP-31B	10/25/2012 8:01	0.0	0.1	20.0	0	-1.74	
GP-31C	10/25/2012 8:02	0.0	1.5	16.0	0	0	
GP-32A	10/25/2012 8:06	0.0	0.1	21.0	0	-0.03	
GP-32B	10/25/2012 8:08	0.0	0.2	20.6	0	-0.02	
GP-32C	10/25/2012 8:10	0.0	0.2	20.6	0	-0.03	
GP-33A	10/25/2012 8:12	0.0	2.6	18.6	0	0	
GP-33B	10/25/2012 8:14	0.0	0.8	19.1	0	0	
GP-33C	10/25/2012 8:15	0.0	0.1	20.8	0	-3.17	
GP-34A	10/25/2012 8:18	0.0	9.2	10.0	0	0	
GP-34B	10/25/2012 8:20	0.0	0.1	20.8	0	-0.6	
GP-34C	10/25/2012 8:21	0.0	0.1	18.9	0	-5.72	
GP-35A	10/25/2012 8:24	0.0	4.7	17.2	0	0	
GP-35B	10/25/2012 8:25	0.0	0.1	20.9	0	0	
GP-35C	10/25/2012 8:27	0.0	0.1	20.9	0	-0.25	
GP-36A	10/25/2012 8:30	0.0	0.9	20.0	0	-6.04	
GP-36B	10/25/2012 8:31	0.0	3.6	18.0	0	0	
GP-36C	10/25/2012 8:33	0.0	0.3	15.9	0	-5.82	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

October 2012 Monitoring

Bar.Start:	**30.26**
Bar Stop:	**30.32**
Amb. Temp:	**52 F.**
Tech:	**JP**

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-37A	10/25/2012 8:36	0.0	2.0	17.9	0	-10.9	
GP-37B	10/25/2012 8:37	0.0	1.9	17.9	0	-3.55	
GP-37C	10/25/2012 8:39	0.0	0.4	13.0	0	-5.98	
GP-039	10/25/2012 8:43	0.0	1.0	19.3	0	-0.32	
GP-040	10/25/2012 8:47	0.0	0.1	20.8	0	-0.06	
GP-41A	10/25/2012 8:50	0.0	3.9	18.0	0	0	
GP-41B	10/25/2012 8:51	0.0	0.8	6.2	0	0	
GP-41C	10/25/2012 8:53	0.0	0.1	20.7	0	0	
GP-42A	10/25/2012 8:56	0.0	5.0	9.5	0	0	
GP-42B	10/25/2012 8:57	0.0	0.3	20.1	0	-2.52	
GP-43A	10/25/2012 9:01	0.0	0.1	20.8	0	-0.11	
GP-43B	10/25/2012 9:03	0.0	0.1	20.8	0	0	
GP-43C	10/25/2012 9:04	0.0	0.0	20.8	0	-0.22	
GP-44A	10/25/2012 9:08	0.0	0.8	20.2	0	0	
GP-44B	10/25/2012 9:09	0.0	0.2	19.5	0	-1.63	
GP-44C	10/25/2012 9:11	0.0	0.0	20.7	0	0	
GP-45D	10/25/2012 9:19	0.0	0.0	20.7	0	-2.13	
GP-45I	10/25/2012 9:17	0.0	0.0	20.7	0	-0.14	
GP-45S	10/25/2012 9:16	0.0	0.0	20.7	0	0	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

November 2012 Monitoring

Bar.Start: 30.12
Bar Stop: 30.00
Amb. Temp: 39 F
Tech: DB

Probe ID	Date/Time	CH_4 %vol	CO_2 %vol	O_2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	11/15/2012 13:09	0.0	0.1	21.0	0	0.2	
ATC-01S	11/15/2012 13:08	0.0	0.1	21.0	0	0.07	
ATC-06D	11/15/2012 13:35	0.0	0.8	15.3	0	1.07	
ATC-06S	11/15/2012 13:33	0.0	0.1	21.0	0	0.06	
ATC-08D	11/15/2012 13:46	0.0	0.4	15.8	0	0.36	
ATC-08S	11/15/2012 13:44	0.0	4.2	15.6	0	0	
GP-11A	11/15/2012 12:31	0.0	1.9	20.0	0	4.5	
GP-11B	11/15/2012 12:32	0.0	0.1	21.0	0	1.59	
GP-11C	11/15/2012 12:34	0.0	0.1	21.0	0	1.29	
GP-11D	11/15/2012 12:35	0.0	0.2	21.0	0	0.22	
GP-12A	11/15/2012 12:43	0.0	1.3	20.2	0	0.58	
GP-12B	11/15/2012 12:45	0.0	0.1	21.0	0	0	
GP-12C	11/15/2012 12:46	0.0	0.2	19.3	0	3.32	
GP-12D	11/15/2012 12:48	0.0	0.3	17.7	0	0.32	
GP-13A	11/15/2012 12:51	0.0	1.4	19.7	0	0.08	
GP-13B	11/15/2012 12:53	0.0	0.1	21.0	0	0.24	
GP-13C	11/15/2012 12:55	0.0	0.1	21.0	0	0.07	
GP-13D	11/15/2012 12:56	0.0	0.1	21.0	0	1.35	
GP-14A	11/15/2012 13:02	0.0	0.1	21.0	0	1.09	
GP-14B	11/15/2012 13:03	0.0	0.2	21.0	0	0.76	
GP-15A	11/15/2012 13:22	--	--	--	--	0.02	No Reading, Water
GP-15C	11/15/2012 13:24	0.0	3.4	0.9	0	4.52	
GP-15D	11/15/2012 13:25	0.0	0.3	21.0	0	-5	
GP-16A	11/15/2012 13:38	0.0	0.2	21.0	0	0.07	
GP-16B	11/15/2012 13:40	0.0	0.2	21.0	0	0.58	
GP-16C	11/15/2012 13:41	0.0	0.1	21.0	0	1.57	
GP-17A	11/15/2012 14:53	--	--	--	--	6.45	No Reading, Water
GP-17B	11/15/2012 14:54	0.0	0.9	16.7	0	0.07	
GP-17C	11/15/2012 14:55	0.0	0.1	21.0	0	1.56	
GP-18A	11/15/2012 14:58	0.0	2.1	18.6	0	0.14	
GP-18B	11/15/2012 15:00	0.0	0.4	16.4	0	0.09	
GP-18C	11/15/2012 15:01	0.0	0.5	18.9	0	1.5	
GP-19A	11/15/2012 15:04	0.0	0.1	21.0	0	0	
GP-19B	11/15/2012 15:06	0.0	0.7	16.4	0	0	
GP-19C	11/15/2012 15:07	0.0	0.1	21.0	0	0.1	
GP-20A	11/15/2012 15:10	0.0	0.3	21.0	0	0.06	
GP-20B	11/15/2012 15:12	0.0	0.2	21.0	0	0.08	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

November 2012 Monitoring

Bar.Start: 30.12
Bar Stop: 30.00
Amb. Temp: 39 F
Tech: DB

Probe ID	Date/Time	CH_4 %vol	CO_2 %vol	O_2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-20C	11/15/2012 15:13	0.0	0.3	5.5	0	0.38	
GP-21A	11/15/2012 15:16	0.0	0.1	21.0	0	1.09	
GP-21B	11/15/2012 15:17	0.0	0.2	9.5	0	0.07	
GP-21C	11/15/2012 15:18	--	--	--	--	-0.24	No Reading, Water
GP-22A	11/15/2012 10:32	--	--	--	--	--	Broken
GP-22B	11/15/2012 10:32	--	--	--	--	--	Broken
GP-22C	11/15/2012 10:33	--	--	--	--	--	Broken
GP-23A	11/15/2012 10:35	0.0	0.1	21.0	0	0.12	
GP-23B	11/15/2012 10:36	0.0	0.1	21.0	0	0.01	
GP-23C	11/15/2012 10:38	0.0	0.1	21.0	0	0.1	
GP-24A	11/15/2012 10:44	0.0	5.6	13.6	0	0.15	
GP-24B	11/15/2012 10:46	0.0	0.6	20.6	0	0.99	
GP-025	11/15/2012 10:49	0.0	2.7	16.1	0	0.11	
GP-026	11/15/2012 10:52	0.0	0.8	20.6	0	0.18	
GP-027	11/15/2012 10:56	0.0	8.4	10.4	0	0.18	
GP-29A	11/15/2012 11:01	0.0	0.6	20.8	0	0.07	
GP-29B	11/15/2012 11:03	0.0	0.2	21.0	0	0.1	
GP-30A	11/15/2012 8:05	0.0	2.1	18.8	0	-2.26	
GP-30B	11/15/2012 8:07	0.0	1.7	19.2	0	-0.89	
GP-31A	11/15/2012 8:11	0.0	6.1	14.3	0	0.22	
GP-31B	11/15/2012 8:12	0.0	0.3	15.5	0	0.89	
GP-31C	11/15/2012 8:13	0.0	1.4	15.7	0	0.23	
GP-32A	11/15/2012 8:17	0.0	0.5	20.0	0	0.23	
GP-32B	11/15/2012 8:18	0.0	0.2	20.9	0	0.12	
GP-32C	11/15/2012 8:20	0.0	0.3	20.9	0	0	
GP-33A	11/15/2012 8:23	0.0	3.2	16.6	0	0.15	
GP-33B	11/15/2012 8:24	0.0	0.1	21.0	0	0.15	
GP-33C	11/15/2012 8:26	0.0	2.4	13.7	0	-0.32	
GP-34A	11/15/2012 8:36	0.0	2.8	17.2	0	-1.45	
GP-34B	11/15/2012 8:38	0.0	0.2	21.0	0	0.14	
GP-34C	11/15/2012 8:39	0.0	0.1	21.0	0	0	
GP-35A	11/15/2012 8:45	0.0	0.1	21.0	0	0.13	
GP-35B	11/15/2012 8:46	0.0	0.1	21.0	0	-0.01	
GP-35C	11/15/2012 8:48	0.0	0.1	21.0	0	0.02	
GP-36A	11/15/2012 8:52	0.0	0.4	20.1	0	1.39	
GP-36B	11/15/2012 8:54	0.0	0.1	21.0	0	0.12	
GP-36C	11/15/2012 8:55	0.0	0.3	9.3	0	-0.01	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

November 2012 Monitoring

Bar.Start:	**30.12**
Bar Stop:	**30.00**
Amb. Temp:	**39 F**
Tech:	**DB**

Probe ID	Date/Time	CH_4 %vol	CO_2 %vol	O_2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-37A	11/15/2012 8:58	--	--	--	--	22.07	No Reading, Water
GP-37B	11/15/2012 8:59	0.0	1.5	17.6	0	-2.39	
GP-37C	11/15/2012 9:01	0.0	0.6	2.5	0	0.51	
GP-039	11/15/2012 9:07	0.0	0.6	18.2	0	0.18	
GP-040	11/15/2012 9:11	0.0	0.1	20.9	0	0.76	
GP-41A	11/15/2012 9:15	0.0	0.1	21.0	0	0.15	
GP-41B	11/15/2012 9:17	0.0	0.1	21.0	0	0.2	
GP-41C	11/15/2012 9:18	0.0	0.1	21.0	0	0.04	
GP-42A	11/15/2012 9:22	0.0	0.1	21.0	0	-0.03	
GP-42B	11/15/2012 9:24	0.0	0.4	21.0	0	0.83	
GP-43A	11/15/2012 9:28	0.0	0.1	21.0	0	0.01	
GP-43B	11/15/2012 9:29	0.0	0.1	21.0	0	0.05	
GP-43C	11/15/2012 9:31	0.0	0.1	21.0	0	0.1	
GP-44A	11/15/2012 9:35	0.0	0.1	21.0	0	0.14	
GP-44B	11/15/2012 9:37	0.0	0.8	12.7	0	1.36	
GP-44C	11/15/2012 9:38	0.0	0.1	21.0	0	0	
GP-45D	11/15/2012 12:29	0.0	0.1	21.0	0	1.21	
GP-45I	11/15/2012 12:27	0.0	0.1	21.0	0	0.26	
GP-45S	11/15/2012 12:26	0.0	0.1	21.0	0	0.14	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

December 2012 Monitoring

Bar.Start: 30.10
Bar Stop: 30.10
Amb. Temp: 38 F.
Tech: JP

Probe ID	Date/Time	CH_4 %vol	CO_2 %vol	O_2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	12/28/2012 13:16	0.0	0.0	20.7	0	-0.25	
ATC-01S	12/28/2012 13:15	--	--	--	--	--	No Reading, Water
ATC-06D	12/28/2012 14:02	0.0	0.9	3.3	0	0.41	
ATC-06S	12/28/2012 14:00	0.0	0.1	20.9	0	-3.21	
ATC-08D	12/28/2012 14:07	0.0	0.3	14.0	0	-2.68	
ATC-08S	12/28/2012 14:05	0.0	0.1	20.8	0	-4.93	
GP-11A	12/28/2012 12:55	0.0	0.4	20.6	0	0.08	
GP-11B	12/28/2012 12:57	0.0	0.0	20.8	0	-0.69	
GP-11C	12/28/2012 12:58	0.0	0.0	20.8	0	-0.3	
GP-11D	12/28/2012 13:00	0.0	0.1	20.7	0	0.11	
GP-12A	12/28/2012 13:30	0.0	0.0	21.0	0	0.72	
GP-12B	12/28/2012 13:32	0.0	0.0	21.0	0	-0.1	
GP-12C	12/28/2012 13:33	0.0	0.2	17.4	0	4.59	
GP-12D	12/28/2012 13:35	0.0	0.6	7.5	0	-3.65	
GP-13A	12/28/2012 13:22	0.0	0.0	20.9	0	0	
GP-13B	12/28/2012 13:23	0.0	0.1	20.8	0	0.02	
GP-13C	12/28/2012 13:25	0.0	0.0	20.9	0	0	
GP-13D	12/28/2012 13:26	0.0	0.0	21.0	0	-3.02	
GP-14A	12/28/2012 13:41	0.0	0.1	20.8	0	-3.31	
GP-14B	12/28/2012 13:42	0.0	0.0	21.0	0	-3.39	
GP-15A	--						No Data
GP-15C	--						No Data
GP-15D	--						No Data
GP-16A	12/28/2012 13:55	0.0	0.5	20.8	0	-12.45	
GP-16B	12/28/2012 13:56	0.0	0.1	21.0	0	-2.18	
GP-16C	12/28/2012 13:58	0.0	0.0	21.0	0	-3.12	
GP-17A	12/28/2012 14:46	--	--	--	--	--	No Reading, Water
GP-17B	12/28/2012 14:47	0.0	0.9	15.7	0	-1.41	
GP-17C	12/28/2012 14:49	0.0	0.1	20.8	0	-3.06	
GP-18A	12/28/2012 14:52	--	--	--	--	--	No Reading, Water
GP-18B	12/28/2012 14:53	0.0	0.4	12.4	0	0	
GP-18C	12/28/2012 14:55	0.0	0.2	20.7	0	-3.29	
GP-19A	12/28/2012 14:58	0.0	0.0	20.9	0	0	
GP-19B	12/28/2012 14:59	0.0	0.7	15.6	0	4.81	
GP-19C	12/28/2012 15:01	0.0	0.0	20.9	0	-0.21	
GP-20A	12/28/2012 15:04	0.0	0.1	20.9	0	-0.98	
GP-20B	12/28/2012 15:05	0.0	0.2	17.9	0	0	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

December 2012 Monitoring

Bar.Start: 30.10
Bar Stop: 30.10
Amb. Temp: 38 F.
Tech: JP

Probe ID	Date/Time	CH_4 %vol	CO_2 %vol	O_2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-20C	12/28/2012 15:07	0.0	0.2	11.0	0	0	
GP-21A	12/28/2012 15:10	0.0	0.1	20.8	0	0	
GP-21B	12/28/2012 15:11	0.0	0.1	8.9	0	0	
GP-21C	12/28/2012 15:12	--	--	--	--	--	No Reading, Water
GP-22A	12/28/2012 15:16	0.0	0.0	0.0	0	0	Broken
GP-22B	12/28/2012 15:16	0.0	0.0	0.0	0	0	Broken
GP-22C	12/28/2012 15:16	0.0	0.0	0.0	0	0	Broken
GP-23A	12/28/2012 15:18	0.0	0.0	20.9	0	0	
GP-23B	12/28/2012 15:19	0.0	0.0	21.0	0	0	
GP-23C	12/28/2012 15:21	0.0	0.0	21.0	0	-0.47	
GP-24A	12/28/2012 15:25	0.0	0.2	20.7	0	0	
GP-24B	12/28/2012 15:26	0.0	2.8	13.9	0	0.04	
GP-025	12/28/2012 15:29	0.0	2.3	12.5	0	0	
GP-026	12/28/2012 15:32	0.0	1.1	19.1	0	-0.02	
GP-027	12/28/2012 15:36	0.0	7.2	9.2	0	-0.26	
GP-29A	12/28/2012 15:41	0.0	0.8	20.2	0	0	
GP-29B	12/28/2012 15:42	0.0	0.7	20.3	0	0	
GP-30A	12/28/2012 7:39	0.0	1.8	16.5	0	1.05	
GP-30B	12/28/2012 7:40	0.0	1.4	19.6	0	-2.06	
GP-31A	12/28/2012 7:43	--	--	--	--	--	No Reading, Water
GP-31B	12/28/2012 7:45	0.0	0.3	14.5	0	0.18	
GP-31C	12/28/2012 7:47	0.0	1.8	9.7	0	4.19	
GP-32A	12/28/2012 7:50	0.0	0.5	19.9	0	0	
GP-32B	12/28/2012 7:51	0.0	0.3	20.5	0	0.02	
GP-32C	12/28/2012 7:53	0.0	0.4	20.3	0	-0.03	
GP-33A	12/28/2012 7:55	0.0	0.7	19.3	0	1.6	
GP-33B	12/28/2012 7:57	0.0	0.1	20.8	0	-6.35	
GP-33C	12/28/2012 7:58	0.0	0.1	21.0	0	-1.82	
GP-34A	12/28/2012 8:01	--	--	--	--	--	No Reading, Water
GP-34B	12/28/2012 8:03	0.0	0.1	20.8	0	-0.24	
GP-34C	12/28/2012 8:05	0.0	0.0	20.8	0	-3.27	
GP-35A	12/28/2012 8:07	0.0	0.0	20.8	0	0	
GP-35B	12/28/2012 8:09	0.0	0.0	20.8	0	0	
GP-35C	12/28/2012 8:10	0.0	0.1	20.8	0	-0.23	
GP-36A	12/28/2012 8:15	0.0	0.1	20.8	0	0.02	
GP-36B	12/28/2012 8:16	--	--	--	--	--	No Reading, Water
GP-36C	12/28/2012 8:17	0.0	0.3	14.4	0	-3.11	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

December 2012 Monitoring

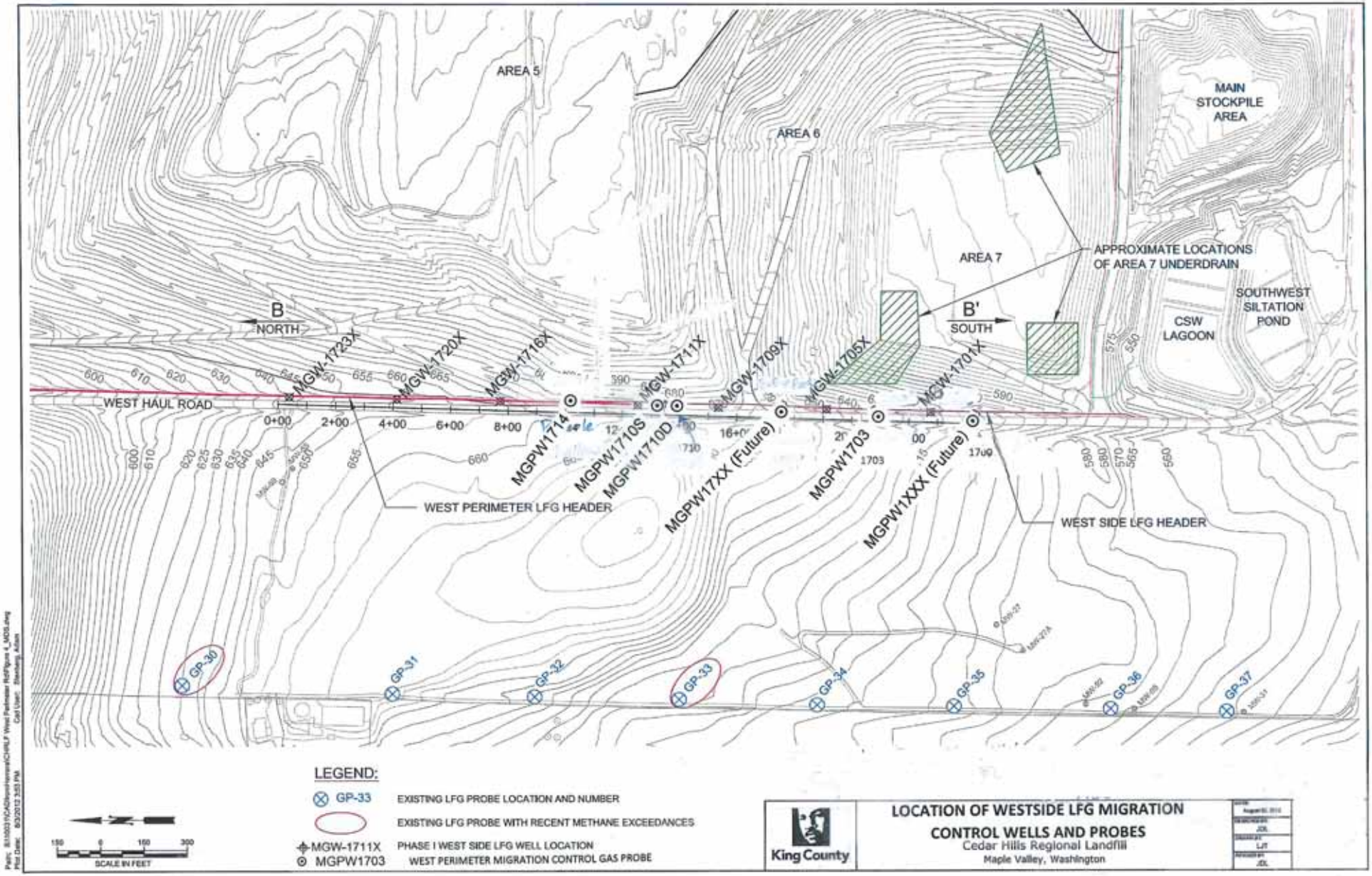
Bar.Start:	**30.10**
Bar Stop:	**30.10**
Amb. Temp:	**38 F.**
Tech:	**JP**

Probe ID	Date/Time	CH_4 %vol	CO_2 %vol	O_2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-37A	12/28/2012 8:20	--	--	--	--	--	No Reading, Water
GP-37B	12/28/2012 8:21	0.0	0.6	11.5	0	-0.32	
GP-37C	12/28/2012 8:23	0.0	0.5	10.5	0	-2.78	
GP-039	12/28/2012 9:19	0.0	0.8	18.1	0	2.42	
GP-040	12/28/2012 9:25	0.0	0.1	19.0	0	-8.62	
GP-41A	12/28/2012 9:29	0.0	0.0	20.2	0	0	
GP-41B	12/28/2012 9:30	0.0	0.0	20.3	0	0	
GP-41C	12/28/2012 9:32	0.0	0.0	20.3	0	0	
GP-42A	12/28/2012 9:35	--	--	--	--	--	No Reading, Water
GP-42B	12/28/2012 9:37	0.0	0.1	20.4	0	-1.04	
GP-43A	12/28/2012 9:40	0.0	0.1	20.4	0	-0.24	
GP-43B	12/28/2012 9:42	0.0	0.0	20.5	0	-0.02	
GP-43C	12/28/2012 9:43	0.0	0.0	20.5	0	-0.09	
GP-44A	12/28/2012 9:47	0.0	0.0	20.5	0	-0.03	
GP-44B	12/28/2012 9:50	0.0	0.7	12.4	0	-4.89	
GP-44C	12/28/2012 9:52	0.0	0.0	20.5	0	0	
GP-45D	12/28/2012 12:54	0.0	0.0	20.8	0	-0.54	
GP-45I	12/28/2012 12:52	0.0	0.0	20.8	0	0	
GP-45S	12/28/2012 12:51	0.0	0.0	20.8	0	0	

FOURTH QUARTER
BUILDING MONITORING

King County	INSTRUMENT: Place check by instrument used :		WEATHER:	DATE: 10/09/12
	HEATH DetectoPak III (sn:8746-4)			TECH: DB
	Foxboro TVA 1000 FID/PID (sn: 7785301)	X		

LOCATION ID	BLDG #	DESCRIPTION	CH_4 (ppm)	BAR PRESS (in. Hg)	TIME	REMARKS
GOC- 121009	1	FRONT OFFICE	0	30.12	9:45am	
GCR- 121009	2	CONF ROOM	0		9:47am	
GAO- 121009	3	PAYROLL OFFICE	0		9:50am	
GEO- 121009	4	ENGR. OFFICE	0		9:53am	
GLRC- 121009	5	LUNCHROOM	0		9:55am	
GSPC 121009		SPOC	0		10:40am	
GELO- 121009 A	6A	DRY STORAGE	0		10:10am	
GELO- 121009 B	6B	ELECTRICIAN OFFICE	0		10:07am	
GAP- 121009		ACCOUNT PAYABLE	0		10:05am	
GSO- 121009 A	7A	SHOP OFFICE	0		10:25am	
GPR- 121009 B	7B	PARTS ROOM	0		10:20am	
GMS- 121009 C	7C	SHOP PIT AREA/BAY	0		10:22am	
GTB- 121009 D	7D	SHOP TIRE BAY	0		10:27am	
GEW- 121009 E	7E	EAST WELD SHOP	0		10:30am	
GWW- 121009 F	7F	WEST WELD SHOP	0		10:33am	
GCS- 121009	8	CARPENTER'S	0		11:20am	
GSS- 121009	9	WASTEWATER	0		11:23am	
GSS- 121009 B	9B	CARPENTER/STORAGE	0		11:25am	
GSH- 121009	10	SCALEHOUSE	0		11:10am	
GB13- 121009	13	WW COMPRESSOR	0		12:20am	
GB16- 121009	16	GENERATOR	0		11:35am	
GB19- 121009	19	LEPS (P.S.# 5)	0		11:40am	
GB19- 121009 B	19B	LEPS/H_2O_2 ROOM	0		11:42am	
GB20- 121009	20	LEPS ELEC PANALS	0		11:45am	
GB21- 121009	21	STORAGE(OLD PS 1)	0		12:00am	
GB22- 121009	22	STORAGE/N FLARE	0		12:35am	
GB23- 121009	23	LFGAS	0		12:37am	
GB24- 121009	24	NE GENERATOR BLDG	0		12:10am	
GBWW- 121009	30	WOMEN BRK RM	0		10:15am	
GPWT- 121009	PW	PRESSURE WASH RM	0		11:00am	
GBRR- 121009	RR	TRUCKWASH RR W	0		10:57am	
GBSS- 121009	SS	TRUCKWASH RR E	0		10:55am	
GBZZ- 121009	29	MANAGERS TRAILER	0		9:57am	
GBPT- 121009		CCG FASTER	0		10:00am	
GCLS- 121009		CHLORINE SHED	0		10:50am	


AREA 5
AREA 6
AREA 7
MAIN STOCKPILE AREA
APPROXIMATE LOCATIONS OF AREA 7 UNDERDRAIN
SOUTHWEST SILTATION POND
CSW LAGOON
B
NORTH
B'
SOUTH
WEST HAUL ROAD
MGW-1723X
MGW-1720X
MGW-1716X
MGW-1711X
MGW-1709X
MGW-1705X
MGW-1701X
MGPW1714
MGPW1710S
MGPW1710D
MGPW17XX (Future)
MGPW1703
MGPW1XXX (Future)
WEST PERIMETER LFG HEADER
WEST SIDE LFG HEADER
GP-30
GP-31
GP-32
GP-33
GP-34
GP-35
GP-36
GP-37
LEGEND:
GP-33 EXISTING LFG PROBE LOCATION AND NUMBER
EXISTING LFG PROBE WITH RECENT METHANE EXCEEDANCES
MGW-1711X PHASE I WEST SIDE LFG WELL LOCATION
MGPW1703 WEST PERIMETER MIGRATION CONTROL GAS PROBE
SCALE IN FEET
King County
LOCATION OF WESTSIDE LFG MIGRATION CONTROL WELLS AND PROBES
Cedar Hills Regional Landfill
Maple Valley, Washington

CEDAR HILLS REGIONAL LANDFILL
Supplemental Gas Migration Monitoring
Compliance Probes GP-30B and GP-33C
Fourth Quarter 2012

Probe ID	Date	Time	Barometric Pressure in. Hg	CH_4 %vol	CO_2 %vol	O_2 %vol	Static Pressure in. WC
GP-30B	10/1/12	7:55am	30.27	0.0	1.2	19.8	-0.19
GP-30B	10/2/12	8:07am	30.18	0.0	1.3	19.9	-0.71
GP-30B	10/3/12	8:55am	30.30	0.0	1.5	20	-1.00
GP-30B	10/4/12	8:18am	30.24	0.0	0.7	21.0	-0.40
GP-30B	10/5/12	10:10am	30.22	0.0	1.1	19.9	-0.59
GP-30B	10/6/12	8:40am	30.22	0.0	0.5	20.5	-0.35
GP-30B	10/7/12	8:29am	30.08	0.0	1.0	20.1	-0.08
GP-30B	10/8/12	8:02am	29.95	0.0	1.0	20.6	-0.3
GP-30B	10/9/12	8:35am	30.12	0.0	1.1	20.5	-0.9
GP-30B	10/10/12	9:03am	30.03	0.0	0.7	20.6	-0.41
GP-30B	10/11/12	8:55am	29.98	0.0	1.1	20.6	-0.2
GP-30B	10/12/12	9:32am	29.92	0.0	1.3	19.9	-0.66
GP-30B	10/13/12	9:17am	30.08	0.0	0.2	21.0	-1.2
GP-30B	10/14/12	8:40am	30.06	0.0	0.7	20.6	0.4
GP-30B	10/15/12	9:08am	29.98	0.0	0.5	20.6	-0.7
GP-30B	10/16/12	9:01am	29.84	0.0	0.2	21.0	-2.1
GP-30B	10/17/12	9:02am	30.22	0.0	0.2	20.8	-1.09
GP-30B	10/18/12	9:15am	30.10	0.0	0.9	20.0	0.4
GP-30B	10/19/12	9:24am	29.87	0.0	1.1	19.8	-1.04
GP-30B	10/20/12	7:26am	29.88	0.0	1.3	19.7	-2.28
GP-30B	10/21/12	9:04am	29.90	0.0	1.4	19.5	-2.32
GP-30B	10/22/12	7:53am	29.69	0.0	1.3	20.1	0
GP-30B	10/23/12	8:41am	29.79	0.0	1.7	19.2	-2.68
GP-30B	10/24/12	8:33am	29.90	0.0	1.6	20.1	-1.9
GP-30B	10/25/12	8:04am	30.25	0.0	1.7	19.8	-3.02
GP-30B	10/26/12	9:10am	30.14	0.0	1.7	19.3	-1.17
GP-30B	10/27/12	8:23am	30.04	0.0	1.5	19.8	-1.03
GP-30B	10/28/12	10:44am	29.97	0.0	1.6	19.2	-2.71
GP-30B	10/29/12	8:42am	29.84	0.0	1.6	19.8	-1.5
GP-30B	10/30/12	8:29am	29.90	0.0	1.7	19.3	-1.49
GP-30B	10/31/12	9:12am	29.72	0.0	1.7	19.2	-0.7

CEDAR HILLS REGIONAL LANDFILL
Supplemental Gas Migration Monitoring
Compliance Probes GP-30B and GP-33C
Fourth Quarter 2012

Probe ID	Date	Time	Barometric Pressure in. Hg	CH_4 %vol	CO_2 %vol	O_2 %vol	Static Pressure in. WC
GP-30B	11/1/12	9:00am	29.81	0.0	1.7	19.7	-2.1
GP-30B	11/2/12	8:49am	30.01	0.0	1.8	19.2	-2.17
GP-30B	11/3/12	8:35am	30.01	0.0	1.6	19.2	-2.45
GP-30B	11/4/12	8:25am	30.17	0.0	1.6	19.4	-2.55
GP-30B	11/5/12	7:59am	30.30	0.0	1.7	19.3	-2.24
GP-30B	11/6/12	8:19am	30.06	0.0	1.8	19.2	-0.87
GP-30B	11/7/12	10:05am	30.10	0.0	1.9	19.1	-2.24
GP-30B	11/8/12	8:24am	29.88	0.0	1.8	19.8	-1
GP-30B	11/9/2012	9:48am	29.9	0.0	1.9	19.3	-1.83
GP-30B	11/10/2012	8:30am	30.02	0.0	1.9	19.7	-2.1
GP-30B	11/11/2012	8:05am	30.16	0.0	1.7	19.6	-1.8
GP-30B	11/12/2012	8:36am	30.12	0.0	1.8	19.4	-1.2
GP-30B	11/13/2012	10:13am	30.18	0.0	1.7	19.3	-2.58
GP-30B	11/14/2012	8:41am	30.2	0.0	1.9	18.9	-2.26
GP-30B	11/15/2012	8:05am	30.12	0.0	1.7	19.2	-0.89
GP-30B	11/16/2012	9:30am	29.92	0.0	1.9	19.2	-1.72
GP-30B	11/17/2012	7:57am	29.63	0.0	1.7	19.3	-0.71
GP-30B	11/18/2012	8:14am	29.78	0.0	1.6	19.4	-2.81
GP-30B	11/19/2012	8:57AM	29.58	0.0	1.9	19.9	-0.2
GP-30B	11/20/2012	8:17am	29.69	0.0	1.6	19.2	-1.56
GP-30B	11/21/2012	11:23am	29.81	0.0	1.6	19.4	-3.19
GP-30B	11/22/2012	8:27am	30.3	0.0	1.3	19.6	-3.43
GP-30B	11/23/2012	9:14am	30.1	0.0	1.6	19.2	-2.32
GP-30B	11/24/2012	8:44am	30.18	0.0	1.5	19.6	-3.18
GP-30B	11/25/2012	8:17am	30.26	0.0	1.5	19.7	-3.18
GP-30B	11/26/2012	8:45am	30.1	0.0	0.4	21	-0.5
GP-30B	11/27/2012	9:12am	30.05	0.0	1.9	18.9	-3.52
GP-30B	11/28/2012	9:00am	29.78	0.0	1.7	19	-1.54
GP-30B	11/29/2012	8:33am	29.62	0.0	1.7	19.4	-0.4
GP-30B	11/30/2012	8:42am	29.52	0.0	1.7	19.4	-2.05

CEDAR HILLS REGIONAL LANDFILL
Supplemental Gas Migration Monitoring
Compliance Probes GP-30B and GP-33C
Fourth Quarter 2012

Probe ID	Date	Time	Barometric Pressure in. Hg	CH_4 %vol	CO_2 %vol	O_2 %vol	Static Pressure in. WC
GP-30B	12/1/2012	8:03am	29.66	0.0	1.6	19.6	-3.94
GP-30B	12/2/2012	8:18am	29.42	0.0	1.6	19.3	-2.26
GP-30B	12/3/2012	8:20am	29.92	0.0	1.3	20	-3.6
GP-30B	12/4/2012	10:50am	29.78	0.0	1.5	19.3	-2.69
GP-30B	12/5/2012	8:35am	30.08	0.0	1.1	19.9	-5.12
GP-30B	12/6/2012	8:26am	30.1	0.0	1.3	20	-1.47
GP-30B	12/7/2012	8:59am	29.99	0.0	1.4	19.5	-1.9
GP-30B	12/8/2012	8:26am	30.1	0.0	1.4	19.9	-3.5
GP-30B	12/9/2012	8:52am	30.28	0.0	1.3	19.6	-1.4
GP-30B	12/10/2012	8:40am	30.3	0.0	1.5	20	-2.7
GP-30B	12/11/2012	8:11am	29.88	0.0	1.4	19.7	1.15
GP-30B	12/12/2012	9:10am	29.79	0.0	1.9	19.5	-2.6
GP-30B	12/13/2012	10:25am	30.01	0.0	1.2	19.9	-1.89
GP-30B	12/14/2012	9:21am	29.86	0.0	1.5	19.3	-2.23
GP-30B	12/15/2012	7:35am	29.81	0.0	1.4	19.5	-1.52
GP-30B	12/16/2012	7:33am	29.78	0.0	1.5	19.4	-2.4
GP-30B	12/17/2012	8:46am	29.44	0.0	2	19.8	-4.4
GP-30B	12/18/2012	8:24am	29.92	0.0	1.4	20	-3.3
GP-30B	12/19/2012	10:24am	29.78	0.0	1	20.1	-1.26
GP-30B	12/20/2012	9:29am	29.62	0.0	1.3	19.3	-2.32
GP-30B	12/21/2012	11:11am	29.78	0.0	1.3	19.6	-1.79
GP-30B	12/22/2012	10:20am	29.58	0.0	1.4	19.2	-1.06
GP-30B	12/23/2012	9:26am	29.77	0.0	1.5	19.5	-2.79
GP-30B	12/24/2012	8:16am	30	0.0	1.2	20.3	-4.35
GP-30B	12/25/2012	10:47am	29.76	0.0	1.5	19.4	-0.72
GP-30B	12/26/2012	9:26am	29.78	0.0	1.6	19	-2.78
GP-30B	12/27/2012	11:05am	30.09	0.0	1.2	19.8	-3.21
GP-30B	12/28/2012	7:35am	30.1	0.0	1.5	19.4	-2.06
GP-30B	12/29/2012	7:40am	30.15	0.0	1.7	19.6	-3.01
GP-30B	12/30/2012	8:14am	30.22	0.0	1.7	19.7	-4.53
GP-30B	12/31/2012	8:20am	30.2	0.0	2	19.3	-2.4

CEDAR HILLS REGIONAL LANDFILL
Supplemental Gas Migration Monitoring
Compliance Probes GP-30B and GP-33C
Fourth Quarter 2012

Probe ID	Date	Time	Barometric Pressure in. Hg	CH_4 %vol	CO_2 %vol	O_2 %vol	Static Pressure in. WC
GP-33C	10/1/2012	8:00am	30.27	0.0	0.1	21	-1.1
GP-33C	10/2/2012	8:10am	30.18	0.0	0.1	21	-1.39
GP-33C	10/3/2012	9:00am	30.3	0.0	0.4	21	-1.8
GP-33C	10/4/2012	8:25am	30.24	0.0	0.3	21	-1.2
GP-33C	10/5/2012	10:15am	30.22	0.0	0	20.8	-1.24
GP-33C	10/6/2012	8:45am	30.22	0.0	0.1	21	-1.11
GP-33C	10/7/2012	8:35am	30.08	0.0	0.1	20.9	-0.65
GP-33C	10/8/2012	8:05am	29.95	0.0	0.1	21	-0.8
GP-33C	10/9/2012	8:40am	30.12	0.0	0.1	21	-1.7
GP-33C	10/10/2012	9:07am	30.03	0.0	0.1	21	-1.1
GP-33C	10/11/2012	8:59am	29.98	0.0	0.1	21	-0.6
GP-33C	10/12/2012	9:40am	29.92	0.0	0	20.8	-1.25
GP-33C	10/13/2012	9:20am	30.08	0.0	0.1	21	-1.9
GP-33C	10/14/2012	8:44am	30.06	0.0	0.1	21	-0.2
GP-33C	10/15/2012	9:12am	29.98	0.0	0.1	21	-1.4
GP-33C	10/16/2012	9:05am	29.84	0.0	0.1	21	-3.4
GP-33C	10/17/2012	9:07am	30.22	0.0	0	20.9	-2.34
GP-33C	10/18/2012	9:22am	30.1	0.0	0.1	20.9	-0.32
GP-33C	10/19/2012	9:29am	29.87	0.0	0	20.7	-0.77
GP-33C	10/20/2012	7:32am	29.88	0.0	0.1	20.8	-1.55
GP-33C	10/21/2012	9:09am	29.9	0.0	0.2	20.9	-1.36
GP-33C	10/22/2012	7:57am	29.69	0.0	0.3	17	0.4
GP-33C	10/23/2012	8:46am	29.79	0.0	0	20.8	-2.22
GP-33C	10/24/2012	8:36am	29.9	0.0	0.2	21	-1.8
GP-33C	10/25/2012	8:10am	30.25	0.0	0.1	21	-3.63
GP-33C	10/26/2012	9:15am	30.14	0.0	0.2	20.6	-0.15
GP-33C	10/27/2012	8:30am	30.04	0.0	0.2	20.9	-0.43
GP-33C	10/28/2012	10:50am	29.97	0.0	0.1	20.9	-1.15
GP-33C	10/29/2012	8:45am	29.84	0.0	0.2	21	-1.3
GP-33C	10/30/2012	8:34am	29.9	0.0	0	20.9	-0.45
GP-33C	10/31/2012	9:17am	29.72	0.0	0.3	18.4	-0.03

CEDAR HILLS REGIONAL LANDFILL
Supplemental Gas Migration Monitoring
Compliance Probes GP-30B and GP-33C
Fourth Quarter 2012

Probe ID	Date	Time	Barometric Pressure in. Hg	CH_4 %vol	CO_2 %vol	O_2 %vol	Static Pressure in. WC
GP-33C	11/1/2012	9:03am	29.81	0.0	0.5	16.3	-1.6
GP-33C	11/2/2012	8:54am	30.01	0.0	0.7	13.7	-1.71
GP-33C	11/3/2012	8:41am	30.01	0.0	0.9	14.2	-1.76
GP-33C	11/4/2012	8:31am	30.17	0.0	1.3	11.4	-2.16
GP-33C	11/5/2012	8:03am	30.3	0.0	1.8	9	-2.61
GP-33C	11/6/2012	8:23am	30.06	0.0	2.3	7.6	-0.26
GP-33C	11/7/2012	10:09am	30.1	0.0	2.7	5.9	-2.02
GP-33C	11/8/2012	8:29am	29.88	0.0	2.9	7.6	-0.2
GP-33C	11/9/2012	9:53am	29.9	0.0	3.1	5.9	-1.66
GP-33C	11/10/2012	8:34am	30.02	0.0	3.6	4.4	-2.4
GP-33C	11/11/2012	8:08am	30.16	0.0	3.8	4.7	-2.1
GP-33C	11/12/2012	8:40am	30.12	0.0	1.8	17.8	-1.4
GP-33C	11/13/2012	10:18am	30.18	0.0	0.6	20.7	-1.63
GP-33C	11/14/2012	8:45am	30.2	0.0	2	16.7	-2.39
GP-33C	11/15/2012	8:25am	30.12	0.0	2.4	13.6	-0.33
GP-33C	11/16/2012	9:34am	29.92	0.0	3.1	11.1	-0.87
GP-33C	11/17/2012	8:02am	29.63	0.0	3.3	8.9	-0.02
GP-33C	11/18/2012	8:18am	29.78	0.0	2.6	6.8	-1.61
GP-33C	11/19/2012	9:01AM	29.58	0.0	4.1	4.5	0
GP-33C	11/20/2012	8:22am	29.69	0.0	0.7	20.1	-0.79
GP-33C	11/21/2012	11:28am	29.81	0.0	1.9	16	-3.73
GP-33C	11/22/2012	8:32am	30.3	0.0	0.3	20.9	-4.35
GP-33C	11/23/2012	9:19am	30.1	0.0	0.9	17	-1.32
GP-33C	11/24/2012	8:49am	30.18	0.0	1.4	14.6	-2.91
GP-33C	11/25/2012	8:22am	30.26	0.0	2	12	-2.76
GP-33C	11/26/2012	8:50am	30.1	0.0	2.5	9.5	-0.6
GP-33C	11/27/2012	9:17am	30.05	0.0	3.1	8.8	-1.34
GP-33C	11/28/2012	9:05am	29.78	0.0	3.3	7.9	0.47
GP-33C	11/29/2012	8:37am	29.62	0.0	3.5	7.4	0.3
GP-33C	11/30/2012	8:47am	29.52	0.0	3.6	6.4	-0.9

CEDAR HILLS REGIONAL LANDFILL
Supplemental Gas Migration Monitoring
Compliance Probes GP-30B and GP-33C
Fourth Quarter 2012

Probe ID	Date	Time	Barometric Pressure in. Hg	CH_4 %vol	CO_2 %vol	O_2 %vol	Static Pressure in. WC
GP-33C	12/1/2012	8:09am	29.66	0.0	3.9	5.2	-3.4
GP-33C	12/2/2012	8:23am	29.42	0.0	3.9	5.1	-1.69
GP-33C	12/3/2012	8:24am	29.92	0.0	0.3	21	-4.7
GP-33C	12/4/2012	10:55am	29.78	0.0	0.8	18.6	-2.87
GP-33C	12/5/2012	8:41am	30.08	0.0	0.2	20.9	-5.35
GP-33C	12/6/2012	8:30am	30.1	0.0	0.1	21	-2.22
GP-33C	12/7/2012	9:05am	29.99	0.0	0.2	20.9	-1.02
GP-33C	12/8/2012	8:29am	30.1	0.0	0.2	21	-3.2
GP-33C	12/9/2012	8:56am	30.28	0.0	0.2	20.9	-2.7
GP-33C	12/10/2012	8:45am	30.3	0.0	0.4	21	-3
GP-33C	12/11/2012	8:15am	29.88	0.0	0.4	20.4	1.49
GP-33C	12/12/2012	9:13am	29.79	0.0	0.9	15.6	-2.7
GP-33C	12/13/2012	10:29am	30.01	0.0	1.2	12.2	-2.42
GP-33C	12/14/2012	9:25am	29.86	0.0	1.5	10.9	-2.19
GP-33C	12/15/2012	7:40am	29.81	0.0	1.8	9.1	-0.32
GP-33C	12/16/2012	7:48am	29.78	0.0	2.3	7.2	-2.13
GP-33C	12/17/2012	8:50am	29.44	0.0	2.7	6.1	-3.8
GP-33C	12/18/2012	8:31am	29.92	0.0	0.3	21	-3.6
GP-33C	12/19/2012	10:28am	29.78	0.0	0	21	-0.34
GP-33C	12/20/2012	9:34am	29.62	0.0	0.1	21	-1.31
GP-33C	12/21/2012	11:15am	29.78	0.0	0	21	-1.66
GP-33C	12/22/2012	10:24am	29.58	0.0	0	21	-0.76
GP-33C	12/23/2012	9:29am	29.77	0.0	0	21	-1.79
GP-33C	12/24/2012	8:40am	30	0.0	0	21	-4.89
GP-33C	12/25/2012	10:52am	29.76	0.0	0	17.4	0.29
GP-33C	12/26/2012	9:31am	29.78	0.0	0.1	20.9	-2.38
GP-33C	12/27/2012	11:05am	30.09	0.0	0	20.9	-3.75
GP-33C	12/28/2012	7:52am	30.1	0.0	0	21	-1.82
GP-33C	12/29/2012	7:45am	30.15	0.0	0.1	20.8	-2.23
GP-33C	12/30/2012	8:19a,	30.22	0.0	0.1	21	-2.86
GP-33C	12/31/2012	8:25am	30.2	0.0	0.5	18	-1.9

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1703	10/1/2012	8:07am	30.32	0.0	0.2	21.0	-4.17
MGPW1703	10/2/2012	8:06am	30.27	0.0	0.1	21.0	-2.46
MGPW1703	10/3/2012	8:14am	30.18	0.0	0.1	21.0	-1.3
MGPW1703	10/4/2012	8:45am	30.30	0.2	0.7	20.9	-2.8
MGPW1703	10/5/2012	7:55am	30.24	0.1	0.8	21.0	-1.4
MGPW1703	10/6/2012	9:55am	30.22	0.0	0.4	20.9	-1.6
MGPW1703	10/7/2012	8:15am	30.22	0.0	0.3	20.6	-0.83
MGPW1703	10/8/2012	8:02am	30.08	0.0	0.6	3.4	0.8
MGPW1703	10/9/2012	7:37am	29.95	0.2	0.7	3.5	1.5
MGPW1703	10/10/2012	8:08am	30.12	0.0	0.3	21.0	-0.8
MGPW1703	10/11/2012	9:13am	30.03	0.0	0.2	13.9	-0.09
MGPW1703	10/12/2012	8:27am	29.98	0.2	0.7	3.5	0.4
MGPW1703	10/13/2012	9:05am	29.92	0.0	0.7	3.1	0.54
MGPW1703	10/14/2012	8:50am	30.08	0.1	0.3	21.0	-2.1
MGPW1703	10/15/2012	8:11am	30.06	0.2	0.4	20.9	-0.1
MGPW1703	10/16/2012	8:40am	29.98	0.0	0.3	21.0	-0.3
MGPW1703	10/17/2012	8:30am	29.84	0.1	0.4	21.0	-1
MGPW1703	10/18/2012	8:45am	30.22	0.0	0.2	20.9	-0.2
MGPW1703	10/19/2012	8:40am	30.10	0.0	0.2	20.6	-1.11
MGPW1703	10/20/2012	8:45am	29.87	0.0	0.7	3.1	1.45
MGPW1703	10/21/2012	7:53am	29.88	0.0	0.6	3.4	0.22
MGPW1703	10/22/2012	9:27am	29.90	0.0	0.2	16.9	-0.17
MGPW1703	10/23/2012	7:24am	29.69	0.1	0.8	3.3	3.1
MGPW1703	10/24/2012	8:20am	29.79	0.0	0.3	16.9	-0.36
MGPW1703	10/25/2012	8:23am	29.90	0.3	0.6	21.0	-1.6
MGPW1703	10/26/2012	7:40am	30.25	0.0	0.2	21.0	-6.2
MGPW1703	10/27/2012	8:25am	30.14	0.0	0.5	20.7	-2.07
MGPW1703	10/28/2012	7:59am	30.04	0.0	0.3	20.9	-0.59
MGPW1703	10/29/2012	11:16am	29.97	0.3	0.3	19.1	-0.19
MGPW1703	10/30/2012	8:53am	29.84	0.6	0.7	3.7	0.4
MGPW1703	10/31/2012	8:00am	29.90	0.2	0.7	3.6	0.44

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1703	11/1/2012	9:26am	29.72	0.0	0.5	3.3	2.33
MGPW1703	11/2/2012	9:10am	29.81	0.0	0.5	3.6	0
MGPW1703	11/3/2012	8:22am	30.01	0.0	0.0	21.0	-2.26
MGPW1703	11/4/2012	9:40am	30.01	0.0	0.1	20.9	-2.25
MGPW1703	11/5/2012	7:57am	30.17	0.0	0.3	20.9	-3.73
MGPW1703	11/6/2012	9:08am	30.30	0.0	0.1	20.9	-5.05
MGPW1703	11/7/2012	8:25am	30.06	0.0	0.1	20.6	-0.35
MGPW1703	11/8/2012	9:37am	30.10	0.0	0.0	20.8	-1.73
MGPW1703	11/9/2012	8:12am	29.88	0.4	1.0	3.4	1.7
MGPW1703	11/10/2012	9:23am	29.90	0.0	0.6	3.2	0.25
MGPW1703	11/11/2012	8:40am	30.02	0.0	0.2	21.0	-1.9
MGPW1703	11/12/2012	7:53am	30.16	0.0	0.6	21.0	-3.2
MGPW1703	11/13/2012	8:47am	30.12	0.0	0.1	21.0	-1.9
MGPW1703	11/14/2012	9:25am	30.18	0.0	0.2	20.6	-2.44
MGPW1703	11/15/2012	8:10am	30.20	0.0	0.0	20.9	-2.96
MGPW1703	11/16/2012	9:04am	30.11	0.0	0.0	20.6	-0.47
MGPW1703	11/17/2012	8:45am	29.92	0.0	0.6	3.1	1.31
MGPW1703	11/18/2012	8:10am	29.63	0.0	0.4	3.4	4.75
MGPW1703	11/19/2012	8:31am	29.78	0.0	0.4	3.4	1.22
MGPW1703	11/20/2012	9:10AM	29.58	0.0	0.5	3.3	3.8
MGPW1703	11/21/2012	7:43am	29.69	0.0	0.5	3.0	1.26
MGPW1703	11/22/2012	10:54am	29.81	0.0	0.0	21.0	-2.45
MGPW1703	11/23/2012	8:40am	30.30	0.0	0.1	20.9	-7.48
MGPW1703	11/24/2012	9:25am	30.10	0.0	0.1	20.7	-3.27
MGPW1703	11/25/2012	8:57am	30.18	0.0	0.1	21.0	-4.41
MGPW1703	11/26/2012	8:30am	30.26	0.0	0.1	21.0	-4.52
MGPW1703	11/27/2012	8:56am	30.10	0.0	0.2	21.0	-1.7
MGPW1703	11/28/2012	8:42am	30.05	0.0	0.3	20.8	-0.71
MGPW1703	11/28/2012	9:14am	29.78	0.0	0.5	3.3	3.09
MGPW1703	11/29/2012	8:44am	29.68	0.0	0.5	3.3	4.2
MGPW1703	11/30/2012	8:52am	29.52	0.0	0.5	3.4	3.97

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1703	12/1/2012	8:16am	29.66	0.0	0.5	3.3	0.25
MGPW1703	12/2/2012	8:06am	29.42	0.0	0.6	3.2	2.9
MGPW1703	12/3/2012	8:10am	29.92	0.0	0.5	21.0	-4.2
MGPW1703	12/4/2012	11:04am	29.78	0.0	0.1	21.0	-1.72
MGPW1703	12/5/2012	8:46am	30.08	0.0	0.1	20.9	-6.26
MGPW1703	12/6/2012	8:35am	30.10	0.0	0.1	21.0	-4.39
MGPW1703	12/7/2012	9:11am	29.99	0.0	0.1	21.0	-1.96
MGPW1703	12/8/2012	8:35am	30.10	0.0	0.1	21.0	-4.4
MGPW1703	12/9/2012	9:32am	30.28	0.0	0.1	21.0	-5
MGPW1703	12/10/2012	8:50am	30.30	0.0	0.1	21.0	-4.9
MGPW1703	12/11/2012	8:21am	29.88	0.0	0.4	3.5	2.9
MGPW1703	12/12/2012	9:18am	29.97	0.0	0.4	3.5	1.3
MGPW1703	12/13/2012	9:55am	30.01	0.0	0.3	20.7	-1.31
MGPW1703	12/14/2012	9:10am	29.86	0.0	0.6	3.4	0.3
MGPW1703	12/15/2012	7:24am	29.81	0.0	0.5	6.0	1.44
MGPW1703	12/16/2012	7:21am	29.78	0.0	0.5	3.5	0.57
MGPW1703	12/17/2012	8:58am	29.44	0.0	0.5	3.2	2
MGPW1703	12/18/2012	8:39am	29.92	0.0	0.2	21.0	-3.1
MGPW1703	12/19/2012	9:54am	29.78	0.0	0.3	19.6	0.1
MGPW1703	12/20/2012	9:18am	29.62	0.0	0.6	3.3	1.16
MGPW1703	12/21/2012	10:40am	29.78	0.0	0.0	21.0	-0.81
MGPW1703	12/22/2012	10:15am	29.58	0.0	0.4	3.4	1.44
MGPW1703	12/23/2012	9:21am	29.77	0.0	0.0	20.9	-1.13
MGPW1703	12/24/2012	8:34am	30.00	0.0	0.0	21.0	-5.45
MGPW1703	12/25/2012	10:06am	29.76	0.0	0.0	20.9	0.39
MGPW1703	12/26/2012	9:13am	29.78	0.0	0.2	20.8	-1.08
MGPW1703	12/27/2012	10:50am	30.09	0.0	0.0	20.7	-4.86
MGPW1703	12/28/2012	9:49am	30.10	0.0	0.3	20.8	-4.07
MGPW1703	12/29/2012	7:29am	30.15	0.0	0.2	20.8	-3.95
MGPW1703	12/30/2012	8:01am	30.22	0.0	0.3	20.9	-4.66
MGPW1703	12/31/2012	8:32am	30.20	0.0	0.2	21.0	-3.2

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1710S	10/1/2012	8:09am	30.27	0.0	0.0	21.0	-0.66
MGPW1710S	10/2/2012	8:17am	30.18	0.0	0.1	21.0	-0.78
MGPW1710S	10/3/2012	8:47am	30.30	0.0	0.5	21.0	-0.80
MGPW1710S	10/4/2012	8:00am	30.24	0.0	0.7	20.9	-0.50
MGPW1710S	10/5/2012	10:00am	30.22	0.0	0.2	20.9	-0.74
MGPW1710S	10/6/2012	8:23am	30.22	0.0	0.2	20.8	-0.66
MGPW1710S	10/7/2012	8:12am	30.08	0.0	0.2	20.7	-0.45
MGPW1710S	10/8/2012	7:45am	29.95	0.0	0.4	21.0	-0.50
MGPW1710S	10/9/2012	8:18am	30.12	0.0	0.2	21.0	-0.90
MGPW1710S	10/10/2012	9:13am	30.03	0.0	0.1	20.9	-1.24
MGPW1710S	10/11/2012	8:32am	29.98	0.0	0.2	21.0	-0.40
MGPW1710S	10/12/2012	9:15am	29.92	0.0	0.3	2.9	-0.84
MGPW1710S	10/13/2012	8:58am	30.08	0.0	0.3	21.0	-1.00
MGPW1710S	10/14/2012	8:20am	30.06	0.0	0.4	21.0	-0.30
MGPW1710S	10/15/2012	8:49am	29.98	0.0	0.3	21.0	-0.80
MGPW1710S	10/16/2012	8:40am	29.84	0.0	0.3	21.0	-1.40
MGPW1710S	10/17/2012	8:53am	30.22	0.0	0.1	20.8	-1.52
MGPW1710S	10/18/2012	8:48am	30.10	0.0	0.2	20.8	-0.44
MGPW1710S	10/19/2012	8:52am	29.87	0.0	0.2	21.0	-0.66
MGPW1710S	10/20/2012	8:02am	29.88	0.0	0.2	21.0	-1.09
MGPW1710S	10/21/2012	9:36am	29.90	0.0	0.1	20.8	-0.97
MGPW1710S	10/22/2012	7:34am	29.69	0.0	0.2	21.0	0.00
MGPW1710S	10/23/2012	8:30am	29.79	0.0	0.0	20.9	-1.49
MGPW1710S	10/24/2012	8:25am	29.90	0.0	0.4	21.0	-1.20
MGPW1710S	10/25/2012	7:48am	30.25	0.0	0.1	21.0	-2.21
MGPW1710S	10/26/2012	8:36am	30.14	0.0	0.0	21.0	-0.25
MGPW1710S	10/27/2012	8:08am	30.04	0.0	0.2	20.9	-0.51
MGPW1710S	10/28/2012	11:26am	29.97	0.0	0.1	20.9	-0.94
MGPW1710S	10/29/2012	8:56am	29.84	0.0	0.1	21.0	-1.20
MGPW1710S	10/30/2012	8:09am	29.90	0.0	0.0	2.8	-0.59
MGPW1710S	10/31/2012	9:38am	29.72	0.0	0.1	20.9	-0.35

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1710S	11/1/2012	9:13am	29.81	0.0	0.1	21.0	-1.30
MGPW1710S	11/2/2012	8:30am	30.01	0.0	0.0	20.8	-1.37
MGPW1710S	11/3/2012	9:07am	30.01	0.0	0.1	20.8	-1.37
MGPW1710S	11/4/2012	8:05am	30.17	0.0	0.2	20.9	-1.71
MGPW1710S	11/5/2012	9:13am	30.30	0.0	0.1	21.0	-2.12
MGPW1710S	11/6/2012	8:32am	30.06	0.0	0.1	20.9	-0.65
MGPW1710S	11/7/2012	9:46am	30.10	0.0	0.0	20.9	-1.77
MGPW1710S	11/8/2012	8:15am	29.88	0.0	0.3	21.0	-0.50
MGPW1710S	11/9/2012	9:29am	29.90	0.0	0.0	21.0	-1.51
MGPW1710S	11/10/2012	8:43am	30.02	0.0	0.1	21.0	-2
MGPW1710S	11/11/2012	7:56am	30.16	0.0	0.3	21.0	-1.7
MGPW1710S	11/12/2012	8:50am	30.12	0.0	0.1	21.0	-1.5
MGPW1710S	11/13/2012	9:57am	30.18	0.0	0.0	21.0	-1.57
MGPW1710S	11/14/2012	8:18am	30.20	0.0	0.0	21.0	-2.31
MGPW1710S	11/15/2012	9:11am	30.11	0.0	0.0	21.0	-1.04
MGPW1710S	11/16/2012	9:04am	29.92	0.0	0.0	20.8	-1.33
MGPW1710S	11/17/2012	8:14am	29.63	0.0	0.0	20.8	0
MGPW1710S	11/18/2012	8:34am	29.78	0.0	0.0	20.8	-1.34
MGPW1710S	11/19/2012	9:12AM	29.58	0.0	0.1	21.0	-0.4
MGPW1710S	11/20/2012	7:57am	29.69	0.0	0.0	21.0	-1.05
MGPW1710S	11/21/2012	11:03am	29.81	0.0	0.0	21.0	-2.92
MGPW1710S	11/22/2012	8:43am	30.30	0.0	0.1	21.0	-3.37
MGPW1710S	11/23/2012	9:25am	30.10	0.0	0.1	20.7	-1.48
MGPW1710S	11/24/2012	9:02am	30.18	0.0	0.1	21.0	-2.49
MGPW1710S	11/25/2012	8:33am	30.26	0.0	0.1	21.0	-2.71
MGPW1710S	11/26/2012	8:58am	30.10	0.0	0.1	21.0	-0.9
MGPW1710S	11/27/2012	8:53am	30.05	0.0	0.0	21.0	-1.32
MGPW1710S	11/28/2012	9:17am	29.78	0.0	0.1	20.7	-0.19
MGPW1710S	11/29/2012	8:47am	29.68	0.0	0.1	21.0	-0.2
MGPW1710S	11/30/2012	8:55am	29.52	0.0	0.1	20.8	-0.94

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1710S	12/1/2012	8:19am	29.66	0.0	0.1	21.0	-2.72
MGPW1710S	12/2/2012	8:08am	29.42	0.0	0.2	20.9	-1.35
MGPW1710S	12/3/2012	8:12am	29.92	0.0	0.2	21.0	-3.7
MGPW1710S	12/4/2012	11:06am	29.78	0.0	0.1	21.0	-2.21
MGPW1710S	12/5/2012	8:49am	30.08	0.0	0.1	20.9	-4.27
MGPW1710S	12/6/2012	8:38am	30.10	0.0	0.0	21.0	-2.18
MGPW1710S	12/7/2012	9:13am	29.99	0.0	0.1	21.0	-1.86
MGPW1710S	12/8/2012	8:39am	30.10	0.0	0.1	21.0	-2.7
MGPW1710S	12/9/2012	9:28am	30.28	0.0	0.1	21.0	-2.4
MGPW1710S	12/10/2012	8:53am	30.30	0.0	0.1	21.0	-3.3
MGPW1710S	12/11/2012	8:24am	29.88	0.5	3.9	18.0	0.41
MGPW1710S	12/12/2012	9:21am	29.79	0.0	0.2	21.0	-2.3
MGPW1710S	12/13/2012	10:05am	30.01	0.0	0.0	21.0	-2.3
MGPW1710S	12/14/2012	9:13am	29.86	0.0	0.2	20.9	-1.86
MGPW1710S	12/15/2012	7:26am	29.81	0.0	0.2	20.9	-0.51
MGPW1710S	12/16/2012	7:24am	29.78	0.0	0.1	21.0	-1.79
MGPW1710S	12/17/2012	9:01am	29.44	0.0	0.2	21.0	-2.7
MGPW1710S	12/18/2012	8:43am	29.92	0.0	0.1	21.0	-3.2
MGPW1710S	12/19/2012	9:57am	29.78	0.0	0.0	20.9	-0.8
MGPW1710S	12/20/2012	9:20am	29.62	0.0	0.2	20.7	-1.23
MGPW1710S	12/21/2012	10:44am	29.78	0.0	0.0	21.0	-1.71
MGPW1710S	12/22/2012	10:11am	29.58	0.0	0.0	20.8	-1.05
MGPW1710S	12/23/2012	9:17am	29.77	0.0	0.0	20.9	-2.05
MGPW1710S	12/24/2012	8:27am	30.00	0.0	0.0	21.0	-4.31
MGPW1710S	12/25/2012	10:00am	29.76	0.0	0.0	21.0	-0.28
MGPW1710S	12/26/2012	9:16am	29.78	0.0	0.2	20.9	-2.02
MGPW1710S	12/27/2012	10:55am	30.09	0.0	0.0	20.9	-3.36
MGPW1710S	12/28/2012	9:52am	30.10	0.0	0.2	20.9	-2.13
MGPW1710S	12/29/2012	7:33am	30.15	0.0	0.2	20.9	-2.13
MGPW1710S	12/30/2012	8:04am	30.22	0.0	0.2	20.8	-2.62
MGPW1710S	12/31/2012	8:35am	30.20	0.0	0.1	21.0	-1.5

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1710D	10/10/2012	8:15am	30.12	0.0	0.3	21.0	-2.6
MGPW1710D	10/11/2012	9:15am	30.03	0.0	0.1	21.0	-1.96
MGPW1710D	10/12/2012	8:30am	29.98	0.0	0.3	21.0	-1.7
MGPW1710D	10/13/2012	0.3798611	29.92	0.0	0.1	20.9	-1.5
MGPW1710D	10/14/2012	9:00am	30.08	0.0	0.2	21.0	-3
MGPW1710D	10/15/2012	8:22am	30.06	0.2	0.4	20.9	-1
MGPW1710D	10/16/2012	8:51am	29.98	0.0	0.2	21.0	-2.2
MGPW1710D	10/17/2012	8:42am	29.84	0.0	0.2	21.0	-4.4
MGPW1710D	10/18/2012	8:50am	30.22	0.0	0.0	20.8	-3.56
MGPW1710D	10/19/2012	8:46am	30.10	0.0	0.2	20.7	-1.05
MGPW1710D	10/20/2012	8:54am	29.87	0.0	0.0	20.8	-1.34
MGPW1710D	10/21/2012	7:59am	29.88	0.0	0.2	21.0	-2.44
MGPW1710D	10/22/2012	9:31am	29.90	0.0	0.2	20.8	-2.21
MGPW1710D	10/23/2012	7:32am	29.69	0.0	0.3	21.0	0
MGPW1710D	10/24/2012	8:28am	29.79	0.0	0.0	20.9	-3.28
MGPW1710D	10/25/2012	8:27am	29.90	0.0	0.3	21.0	-2.9
MGPW1710D	10/26/2012	7:46am	30.25	0.0	0.2	21.0	-4.99
MGPW1710D	10/27/2012	8:33am	30.14	0.0	0.3	20.9	-0.5
MGPW1710D	10/28/2012	8:06am	30.04	0.0	0.2	20.9	-1.04
MGPW1710D	10/29/2012	11:24am	29.97	0.0	0.2	20.8	-1.87
MGPW1710D	10/30/2012	8:58am	29.84	0.0	0.0	21.0	-2.1
MGPW1710D	10/31/2012	8:11am	29.90	0.0	0.0	20.9	-1

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1710D	11/1/2012	9:35am	29.72	0.0	0.2	20.9	-0.56
MGPW1710D	11/2/2012	9:15am	29.81	0.0	0.1	21.0	-2.1
MGPW1710D	11/3/2012	8:33am	30.01	0.0	0.0	20.8	-2.36
MGPW1710D	11/4/2012	9:10am	30.01	0.0	0.1	20.9	-1.61
MGPW1710D	11/5/2012	8:08am	30.17	0.0	0.1	21.0	-3.07
MGPW1710D	11/6/2012	9:11am	30.30	0.0	0.1	21.0	-3.46
MGPW1710D	11/7/2012	8:30am	30.06	0.0	0.1	20.9	-1.02
MGPW1710D	11/8/2012	9:48am	30.10	0.0	0.0	20.8	-2.91
MGPW1710D	11/9/2012	8:17am	29.88	0.0	0.2	21.0	-0.8
MGPW1710D	11/10/2012	9:31am	29.90	0.0	0.0	21.0	-2.46
MGPW1710D	11/11/2012	8:45am	30.02	0.0	0.1	21.0	-3.3
MGPW1710D	11/12/2012	7:58am	30.16	0.0	0.2	21.0	-2.9
MGPW1710D	11/13/2012	8:52am	30.12	0.0	0.1	21.0	-2.5
MGPW1710D	11/14/2012	9:54am	30.18	0.0	0.0	21.0	-2.48
MGPW1710D	11/15/2012	8:16am	30.20	0.0	0.0	21.0	-3.26
MGPW1710D	11/16/2012	9:13am	30.11	0.0	0.0	21.0	-1.02
MGPW1710D	11/17/2012	9:06am	29.92	0.0	0.0	20.8	-1.43
MGPW1710D	11/18/2012	8:16am	29.63	0.0	0.0	20.9	-0.02
MGPW1710D	11/19/2012	8:36am	29.78	0.0	0.0	20.9	-2.34
MGPW1710D	11/20/2012	9:13AM	29.58	0.0	0.1	21.0	-0.3
MGPW1710D	11/21/2012	7:59am	29.69	0.0	0.0	20.7	-1.64
MGPW1710D	11/22/2012	11:05am	29.81	0.0	0.0	20.9	-4.48
MGPW1710D	11/23/2012	8:45am	30.30	0.0	0.1	20.9	-5.49
MGPW1710D	11/24/2012	9:29am	30.10	0.0	0.1	20.7	-2.2
MGPW1710D	11/25/2012	9:00am	30.18	0.0	0.1	21.0	-3.81
MGPW1710D	11/26/2012	8:35am	30.26	0.0	0.1	21.0	-3.61
MGPW1710D	11/27/2012	9:00am	30.10	0.0	0.1	21.0	-1.4
MGPW1710D	11/28/2012	8:55am	30.05	0.0	0.0	20.9	-2.07
MGPW1710D	11/28/2012	9:19am	29.78	0.0	0.1	20.5	-0.26
MGPW1710D	11/29/2012	8:50am	29.68	0.0	0.1	21.0	-0.3
MGPW1710D	11/30/2012	8:54am	29.52	0.0	0.1	20.9	-1.52

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1710D	12/1/2012	8:21am	29.66	0.0	0.1	21.0	-4.26
MGPW1710D	12/2/2012	8:10am	29.42	0.0	0.1	21.0	-2.27
MGPW1710D	12/3/2012	8:14am	29.92	0.0	0.2	21.0	-5.5
MGPW1710D	12/4/2012	11:08am	29.78	0.0	0.1	21.0	-3.51
MGPW1710D	12/5/2012	8:51am	30.08	0.0	0.1	20.9	-6.37
MGPW1710D	12/6/2012	8:40am	30.10	0.0	0.1	20.9	-3.23
MGPW1710D	12/7/2012	9:15am	29.99	0.0	0.1	21.0	-1.27
MGPW1710D	12/8/2012	8:41am	30.10	0.0	0.1	21.0	-4.1
MGPW1710D	12/9/2012	9:30am	30.28	0.0	0.1	21.0	-3.6
MGPW1710D	12/10/2012	8:55am	30.30	0.0	0.1	21.0	-3.3
MGPW1710D	12/11/2012	8:26am	29.88	0.0	0.1	21.0	0.63
MGPW1710D	12/12/2012	9:23am	29.79	0.0	0.1	21.0	-3.4
MGPW1710D	12/13/2012	10:08am	30.01	0.0	0.0	21.0	-3.44
MGPW1710D	12/14/2012	9:15am	29.86	0.0	0.1	21.0	-2.9
MGPW1710D	12/15/2012	7:27am	29.81	0.0	0.1	21.0	-0.83
MGPW1710D	12/16/2012	7:26am	29.78	0.0	0.1	21.0	-2.9
MGPW1710D	12/17/2012	9:03am	29.78	0.0	0.1	21.0	-4.5
MGPW1710D	12/18/2012	8:45am	29.92	0.0	0.1	21.0	-4.8
MGPW1710D	12/19/2012	9:59am	29.78	0.0	0.0	21.0	-1.14
MGPW1710D	12/20/2012	9:22am	29.62	0.0	0.1	20.9	-2.13
MGPW1710D	12/21/2012	10:47am	29.78	0.0	0.0	20.9	-2.53
MGPW1710D	12/22/2012	10:12am	29.58	0.0	0.0	20.9	-1.57
MGPW1710D	12/23/2012	9:18am	29.77	0.0	0.0	21.0	-3.06
MGPW1710D	12/24/2012	8:29am	30.00	0.0	0.0	21.0	-6.07
MGPW1710D	12/25/2012	10:02am	29.76	0.0	0.0	21.0	-0.28
MGPW1710D	12/26/2012	9:18am	29.78	0.0	0.1	21.0	-3.13
MGPW1710D	12/27/2012	10:57am	30.09	0.0	0.0	21.0	-4.87
MGPW1710D	12/28/2012	9:54am	30.10	0.0	0.1	21.0	-3.29
MGPW1710D	12/29/2012	7:33am	30.15	0.0	0.1	20.9	-3.25
MGPW1710D	12/30/2012	8:06am	30.22	0.0	0.1	20.9	-3.94
MGPW1710D	12/31/2012	8:37am	30.20	0.0	0.1	21.0	-2.2

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1714	10/1/2012	8:18am	30.32	0.0	0.1	21.0	-3.36
MGPW1714	10/2/2012	11:00am	30.23	0.0	0.0	21.0	-1.5
MGPW1714	10/3/2012	8:20am	30.18	0.0	0.0	21.0	-2.18
MGPW1714	10/4/2012	8:50am	30.30	0.0	0.4	21.0	-2.7
MGPW1714	10/5/2012	8:05am	30.24	0.0	0.4	21.0	-1.8
MGPW1714	10/6/2012	10:03am	30.22	0.0	0.0	20.9	-2.02
MGPW1714	10/7/2012	8:28am	30.22	0.0	0.2	20.9	-1.67
MGPW1714	10/8/2012	8:17am	30.08	0.0	0.1	20.9	-1.05
MGPW1714	10/9/2012	7:50am	29.95	0.0	0.2	21.0	-1.3
MGPW1714	10/10/2012	8:24am	30.12	0.0	0.2	21.0	-2.4
MGPW1714	10/11/2012	9:18am	30.03	0.0	0.1	20.9	-1.68
MGPW1714	10/12/2012	8:37am	29.98	0.0	0.2	21.0	-1.3
MGPW1714	10/13/2012	9:15am	29.92	0.0	0.0	21.0	-1.85
MGPW1714	10/14/2012	9:05am	30.08	0.0	0.2	21.0	-2.7
MGPW1714	10/15/2012	8:26am	30.06	0.0	0.2	21.0	-0.7
MGPW1714	10/16/2012	8:56am	29.98	0.0	0.2	21.0	-1.9
MGPW1714	10/17/2012	8:46am	29.84	0.0	0.3	21.0	-4.1
MGPW1714	10/18/2012	8:58am	30.22	0.0	0.0	20.9	-3.16
MGPW1714	10/19/2012	8:56am	30.10	0.0	0.2	20.8	-0.77
MGPW1714	10/20/2012	9:04am	29.87	0.0	0.0	20.9	-1.13
MGPW1714	10/21/2012	8:05am	29.88	0.0	0.1	21.0	-2.1
MGPW1714	10/22/2012	9:40am	29.90	0.0	0.1	20.9	-1.87
MGPW1714	10/23/2012	7:38am	29.69	0.0	0.2	21.0	0.1
MGPW1714	10/24/2012	8:32am	29.79	0.0	0.0	21.0	-2.97
MGPW1714	10/25/2012	8:30am	29.90	0.0	0.2	21.0	-2.5
MGPW1714	10/26/2012	7:52am	30.25	0.0	0.2	21.0	-4.54
MGPW1714	10/27/2012	8:40am	30.14	0.0	0.0	20.9	-0.33
MGPW1714	10/28/2012	8:13am	30.04	0.0	0.1	21.0	-0.8
MGPW1714	10/29/2012	11:31am	29.97	0.0	0.1	20.9	-1.58
MGPW1714	10/30/2012	9:00am	29.84	0.0	0.0	21.0	-1.8
MGPW1714	10/31/2012	8:16am	29.90	0.0	0.0	21.0	-0.75

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1714	11/1/2012	9:42am	29.72	0.0	0.1	20.9	-0.38
MGPW1714	11/2/2012	9:18am	29.81	0.0	0.1	21.0	-1.8
MGPW1714	11/3/2012	8:38am	30.01	0.0	0.0	20.8	-2.04
MGPW1714	11/4/2012	9:03am	30.01	0.0	0.1	20.8	-2.16
MGPW1714	11/5/2012	8:12am	30.17	0.0	0.0	21.0	-2.7
MGPW1714	11/6/2012	9:15am	30.30	0.0	0.0	21.0	-3.06
MGPW1714	11/7/2012	8:35am	30.06	0.0	0.1	20.9	-0.73
MGPW1714	11/8/2012	9:52am	30.10	0.0	0.0	20.7	-2.54
MGPW1714	11/9/2012	8:19am	29.88	0.0	0.2	21.0	-0.6
MGPW1714	11/10/2012	9:36am	29.90	0.0	0.0	21.0	-1.91
MGPW1714	11/11/2012	8:47am	30.02	0.0	0.1	21.0	-3
MGPW1714	11/12/2012	8:00am	30.16	0.0	0.2	21.0	-2.8
MGPW1714	11/13/2012	8:55am	30.12	0.0	0.1	21.0	-2.1
MGPW1714	11/14/2012	10:00am	30.18	0.0	0.0	21.0	-2.07
MGPW1714	11/15/2012	8:28am	30.20	0.0	0.0	21.0	-2.92
MGPW1714	11/16/2012	9:18am	30.11	0.0	0.0	20.8	-0.62
MGPW1714	11/17/2012	9:17am	29.92	0.0	0.0	20.9	-1.09
MGPW1714	11/18/2012	8:18am	29.63	0.0	2.3	16.0	0.21
MGPW1714	11/19/2012	8:38am	29.78	0.0	0.0	20.9	-1.99
MGPW1714	11/20/2012	9:15AM	29.58	0.0	0.1	21.0	-0.2
MGPW1714	11/21/2012	8:03am	29.69	0.0	0.0	20.7	-1.29
MGPW1714	11/22/2012	11:10am	29.81	0.0	0.0	20.9	-4.12
MGPW1714	11/23/2012	8:48am	30.30	0.0	0.1	20.8	-5
MGPW1714	11/24/2012	9:32am	30.10	0.0	0.1	20.7	-1.86
MGPW1714	11/25/2012	9:05am	30.18	0.0	0.1	21.0	-3.4
MGPW1714	11/26/2012	8:38am	30.26	0.0	0.1	21.0	-3.22
MGPW1714	11/27/2012	9:02am	30.10	0.0	0.1	21.0	-1.1
MGPW1714	11/28/2012	8:58am	30.05	0.0	0.0	20.9	-1.71
MGPW1714	11/28/2012	9:22am	29.78	0.0	0.1	20.6	-0.04
MGPW1714	11/29/2012	8:53am	29.62	0.0	0.1	21.0	-0.2
MGPW1714	11/30/2012	8:58am	29.52	0.0	0.1	21.0	-1.21

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Fourth Quarter 2012 Monitoring

Probe ID	Date	Time	Barometric Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Static Pressure in INWC
MGPW1714	12/1/2012	8:25am	29.66	0.0	0.1	21.0	-3.88
MGPW1714	12/2/2012	8:13am	29.42	0.0	0.1	21.0	-1.98
MGPW1714	12/3/2012	8:16am	29.92	0.0	0.1	21.0	-5
MGPW1714	12/4/2012	11:22am	29.78	0.0	0.1	21.0	-3.23
MGPW1714	12/5/2012	8:54am	30.08	0.0	0.1	20.9	-5.85
MGPW1714	12/6/2012	8:43am	30.10	0.0	0.1	21.0	-2.78
MGPW1714	12/7/2012	9:18am	29.99	0.0	0.1	21.0	-1.46
MGPW1714	12/8/2012	8:43am	30.10	0.0	0.1	21.0	-3.7
MGPW1714	12/9/2012	9:26am	30.28	0.0	0.2	21.0	-3.3
MGPW1714	12/10/2012	8:58am	30.30	0.0	0.1	21.0	-3.6
MGPW1714	12/11/2012	8:29am	29.88	0.0	1.1	18.7	0.97
MGPW1714	12/12/2012	9:25am	29.79	0.0	0.1	21.0	-3.1
MGPW1714	12/13/2012	10:13am	30.01	0.0	0.0	20.9	-2.98
MGPW1714	12/14/2012	9:17am	29.86	0.0	0.1	21.0	-2.55
MGPW1714	12/15/2012	7:30am	29.81	0.0	0.1	21.0	-0.59
MGPW1714	12/16/2012	7:29am	29.78	0.0	0.1	21.0	-2.52
MGPW1714	12/17/2012	9:06am	29.44	0.0	0.1	21.0	-4.2
MGPW1714	12/18/2012	8:47am	29.92	0.0	0.1	21.0	-4.3
MGPW1714	12/19/2012	10:02am	29.78	0.0	0.0	21.0	-0.8
MGPW1714	12/20/2012	9:24am	29.62	0.0	0.1	20.9	-1.91
MGPW1714	12/21/2012	10:50am	29.78	0.0	0.0	21.0	-2.14
MGPW1714	12/22/2012	10:08am	29.58	0.0	0.0	21.0	-1.2
MGPW1714	12/23/2012	9:14am	29.77	0.0	0.0	20.8	-2.7
MGPW1714	12/24/2012	8:25am	30.00	0.0	0.1	21.0	-5.56
MGPW1714	12/25/2012	9:51am	29.76	0.0	0.0	21.0	-0.03
MGPW1714	12/26/2012	9:21am	29.78	0.0	0.1	21.0	-2.78
MGPW1714	12/27/2012	11:00am	30.09	0.0	0.0	20.9	-4.4
MGPW1714	12/28/2012	9:56am	30.10	0.0	0.1	20.9	-2.86
MGPW1714	12/29/2012	7:35am	30.15	0.0	0.1	20.9	-2.81
MGPW1714	12/30/2012	8:09am	30.22	0.0	0.1	21.0	-3.5
MGPW1714	12/31/2012	8:39am	30.20	0.0	0.1	21.0	-2

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

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

APPENDIX C

Meteorological Data

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF OCTOBER , 2012

IN MILES PER HOUR

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	3.3	2.6	5.7	5.6	4.8	3.2	2.7	1.1	1.8	2.2	3.2	4.8	4.9	7.1	8.1	7.2	8.0	6.9	9.1	11.1	13.7	15.6	11.0	7.2	6.3
2	5.1	2.8	2.3	3.7	5.9	4.7	2.6	3.6	5.8	10.0	11.6	10.2	8.3	8.9	9.3	9.6	12.2	10.8	7.5	4.0	3.0	7.1	5.1	5.5	6.6
3	3.7	6.2	5.7	8.1	9.5	8.6	10.9	10.4	13.8	14.6	14.8	16.1	14.3	15.7	16.2	16.2	14.1	10.3	10.5	11.4	11.9	10.6	10.4	11.6	11.5
4	12.7	11.1	10.9	7.8	10.4	11.8	8.5	8.8	6.8	8.8	11.3	12.6	15.1	16.4	16.2	16.2	13.4	13.5	12.4	9.6	9.6	5.0	5.5	6.0	10.8
5	6.0	6.7	6.7	7.1	6.9	7.4	8.1	7.1	6.7	6.5	8.4	9.8	14.9	10.6	11.4	11.7	8.5	8.1	6.3	6.1	4.5	6.9	6.5	5.7	7.9
6	0.5	1.8	3.9	5.9	4.0	6.0	6.1	6.3	4.6	4.9	7.8	12.7	16.5	11.5	10.4	5.7	8.3	11.4	9.3	9.2	6.1	2.5	3.3	4.1	6.8
7	3.2	3.4	3.1	6.0	5.1	4.9	6.9	4.9	1.8	1.6	3.2	3.9	4.8	4.9	5.1	4.2	3.7	3.3	3.5	2.4	0.5	0.2	1.0	1.7	3.5
8	1.3	2.2	2.1	2.8	1.1	2.0	4.4	2.8	5.0	5.0	5.8	4.1	4.6	5.1	5.9	6.0	5.4	5.6	3.1	4.9	4.9	3.5	4.0	3.8	4.0
9	2.8	2.1	4.3	5.7	3.5	2.7	3.2	3.3	3.2	2.7	1.7	2.4	3.8	3.1	2.9	2.7	3.0	1.2	2.3	2.8	4.0	3.9	2.9	3.7	3.1
10	2.6	1.7	1.8	2.2	2.4	0.4	2.4	1.9	2.6	2.0	3.1	4.1	5.6	3.8	5.0	5.2	3.2	1.7	0.6	2.7	1.7	3.2	1.7	4.4	2.7
11	2.7	2.7	4.6	4.0	1.6	1.5	1.3	2.3	1.7	2.8	3.6	4.6	2.6	3.4	3.9	5.0	5.4	3.4	4.0	3.7	3.3	4.2	3.7	3.7	3.3
12	3.1	6.1	5.3	6.7	6.3	7.5	8.8	6.2	5.3	5.3	5.8	8.3	9.0	8.4	5.4	4.2	4.3	3.4	4.7	3.1	3.7	3.2	6.4	6.8	5.7
13	4.9	7.1	7.3	6.9	9.0	7.3	4.8	5.1	4.4	4.7	6.5	6.1	6.3	6.2	7.7	8.2	6.8	4.8	5.0	5.7	5.1	3.0	6.8	2.9	5.9
14	3.7	5.4	3.8	3.5	4.5	1.9	2.9	5.6	5.8	5.0	6.7	11.4	10.5	7.8	6.7	1.8	5.8	7.8	8.0	7.9	7.6	7.4	7.5	4.7	6.0
15	4.2	7.7	9.3	8.3	8.0	6.8	4.2	5.3	4.7	6.3	6.6	4.4	2.7	6.3	11.0	13.9	9.1	10.7	13.1	14.1	18.7	17.7	18.8	16.5	9.5
16	16.1	18.5	18.4	19.1	15.8	8.5	6.4	10.2	8.3	8.0	12.3	16.9	16.7	17.6	16.6	13.1	15.1	10.9	9.5	6.7	4.9	2.8	4.2	2.8	11.6
17	4.5	4.5	4.0	3.8	2.5	2.6	4.2	4.1	2.9	2.8	3.7	3.6	4.7	6.2	7.9	6.2	5.9	6.1	6.2	5.1	3.5	4.6	4.3	4.4	4.5
18	2.5	3.5	1.6	2.9	2.6	1.4	4.3	3.5	1.6	4.2	5.1	7.4	9.7	9.2	6.3	6.4	2.5	4.6	8.3	9.3	6.6	7.7	8.4	6.8	5.3
19	7.6	10.1	13.7	12.8	13.8	14.6	10.6	9.5	10.3	12.8	11.4	13.1	9.1	9.2	9.2	10.7	5.8	6.3	6.7	8.2	9.7	3.9	4.3	9.5	9.7
20	15.3	11.4	11.4	14.8	9.1	13.9	10.7	8.4	8.0	10.7	13.0	13.2	10.3	9.2	10.4	11.1	10.4	8.6	8.7	8.2	7.2	8.3	7.7	5.6	10.2
21	4.7	3.0	2.5	2.1	4.6	7.0	8.1	6.4	5.4	5.9	6.4	7.7	4.5	5.5	3.7	8.7	4.6	3.4	5.8	5.2	4.9	2.6	3.3	5.6	5.1
22	5.2	3.8	4.3	3.8	3.7	3.7	2.8	5.1	3.2	3.9	4.8	4.1	3.4	4.0	4.1	5.2	4.7	3.2	4.2	4.8	3.1	2.9	5.6	6.1	4.1
23	6.0	4.5	5.6	5.7	5.4	4.5	5.2	4.2	3.1	4.1	4.3	5.9	5.3	6.6	4.5	8.6	4.1	1.0	2.5	3.3	3.3	1.7	2.7	3.1	4.4
24	3.2	4.4	2.1	6.1	7.2	5.1	3.9	4.0	1.6	1.9	1.4	2.1	3.0	4.6	4.8	4.9	3.8	6.1	4.1	5.4	3.9	3.1	3.2	3.4	3.9
25	1.2	1.7	1.3	2.7	3.5	2.0	1.7	1.1	3.5	3.2	4.6	4.2	3.1	1.9	2.1	2.6	3.1	2.2	2.1	1.8	2.7	2.9	3.8	4.7	2.6
26	5.5	5.9	5.3	5.9	5.5	6.1	5.7	10.4	7.7	3.6	4.6	8.7	4.5	7.5	7.7	8.4	9.8	7.9	8.0	6.7	6.2	5.7	5.9	7.5	6.7
27	8.3	6.1	8.9	6.9	8.2	6.0	7.0	7.3	6.8	6.7	5.5	5.9	7.2	11.6	11.7	8.2	9.3	11.0	9.0	9.5	10.8	13.8	16.7	19.5	9.2
28	18.6	17.3	15.6	15.6	12.1	6.5	7.7	6.4	6.4	5.5	3.8	3.2	2.0	4.7	5.0	2.6	0.5	1.5	2.7	3.0	4.5	2.8	4.8	5.9	6.6
29	3.8	10.3	8.9	13.1	14.3	15.1	17.2	18.7	16.2	14.8	13.6	16.5	14.4	13.3	13.5	10.4	5.9	3.5	2.7	4.1	2.6	4.4	3.6	3.1	10.2
30	5.3	7.8	5.0	3.5	6.1	7.7	5.0	5.8	6.5	5.8	4.8	3.9	4.7	5.5	5.1	10.0	10.2	9.9	10.1	9.8	7.8	7.8	6.7	6.4	6.7
31	5.5	3.8	3.9	2.6	3.7	3.5	4.0	3.2	1.4	2.9	3.0	2.3	2.9	7.9	8.1	8.9	7.8	5.5	4.1	5.2	3.1	2.7	3.4	4.2	4.3

MONTHLY AVERAGE = 6.41

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF OCTOBER , 2012

IN DEGREES

(MEASURED CLOCKWISE FROM NORTH)
HOUR ENDING

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	41.	45.	34.	38.	15.	39.	110.	195.	250.	30.	323.	297.	281.	269.	5.	12.	1.	5.	21.	28.	24.	21.	359.	341.	116.
2	325.	348.	63.	319.	8.	3.	26.	36.	22.	39.	34.	37.	28.	338.	333.	333.	345.	357.	0.	17.	43.	13.	358.	16.	143.
3	20.	43.	15.	44.	26.	27.	33.	27.	20.	18.	22.	22.	24.	15.	11.	11.	13.	43.	33.	23.	25.	23.	26.	25.	25.
4	25.	23.	20.	32.	15.	19.	29.	31.	33.	27.	25.	23.	19.	19.	18.	10.	19.	28.	34.	41.	37.	30.	24.	17.	25.
5	23.	25.	25.	23.	27.	23.	26.	30.	44.	49.	50.	69.	69.	94.	96.	85.	30.	26.	33.	63.	64.	79.	74.	73.	50.
6	87.	48.	77.	45.	36.	31.	33.	46.	31.	35.	60.	92.	102.	108.	108.	79.	28.	34.	33.	33.	36.	78.	48.	22.	55.
7	35.	53.	46.	27.	0.	31.	28.	26.	40.	280.	9.	40.	43.	19.	34.	19.	277.	286.	31.	89.	148.	27.	92.	80.	73.
8	158.	162.	118.	172.	82.	296.	198.	150.	191.	174.	192.	213.	226.	264.	271.	257.	256.	254.	307.	256.	218.	213.	193.	232.	211.
9	262.	216.	170.	190.	158.	135.	146.	175.	199.	211.	180.	199.	325.	321.	325.	322.	338.	347.	28.	32.	27.	41.	33.	29.	184.
10	26.	252.	197.	152.	4.	165.	288.	24.	24.	243.	15.	355.	309.	288.	307.	310.	1.	23.	100.	186.	84.	11.	32.	25.	143.
11	14.	5.	14.	22.	74.	30.	353.	87.	39.	48.	319.	303.	252.	197.	238.	267.	278.	356.	28.	170.	220.	169.	166.	247.	162.
12	200.	182.	128.	143.	141.	126.	136.	150.	146.	133.	134.	148.	144.	152.	149.	146.	142.	128.	119.	199.	205.	180.	196.	144.	153.
13	135.	169.	180.	151.	157.	162.	149.	168.	121.	140.	149.	128.	147.	137.	127.	125.	142.	141.	176.	195.	147.	109.	185.	150.	149.
14	148.	144.	156.	135.	135.	84.	125.	145.	133.	182.	185.	209.	195.	172.	144.	59.	138.	140.	144.	144.	149.	163.	146.	184.	148.
15	182.	203.	214.	246.	263.	246.	266.	205.	162.	134.	136.	146.	133.	136.	126.	125.	134.	131.	155.	189.	209.	209.	220.	210.	183.
16	204.	212.	201.	205.	206.	207.	206.	205.	187.	188.	223.	240.	235.	234.	226.	226.	231.	213.	187.	168.	154.	135.	170.	173.	202.
17	124.	120.	115.	116.	117.	155.	123.	143.	193.	240.	230.	288.	326.	5.	23.	10.	11.	29.	35.	47.	145.	137.	143.	185.	127.
18	178.	170.	179.	139.	95.	58.	328.	6.	21.	184.	202.	180.	145.	156.	288.	276.	124.	205.	198.	155.	129.	132.	155.	208.	163.
19	167.	160.	179.	161.	157.	168.	171.	182.	184.	199.	207.	226.	216.	207.	219.	232.	203.	233.	238.	257.	244.	220.	247.	214.	204.
20	208.	191.	204.	201.	171.	188.	195.	163.	156.	177.	178.	186.	190.	181.	181.	142.	151.	159.	158.	161.	140.	155.	161.	160.	173.
21	148.	187.	272.	114.	163.	130.	140.	144.	148.	147.	176.	192.	212.	196.	116.	49.	82.	27.	22.	50.	48.	61.	33.	24.	120.
22	24.	46.	12.	322.	95.	73.	26.	352.	353.	36.	343.	196.	126.	126.	121.	179.	195.	121.	115.	115.	137.	147.	151.	155.	149.
23	170.	153.	151.	146.	142.	139.	153.	163.	174.	148.	156.	161.	181.	213.	158.	209.	222.	103.	95.	120.	121.	81.	121.	75.	148.
24	56.	158.	78.	77.	109.	159.	81.	124.	131.	99.	190.	65.	93.	258.	18.	48.	51.	47.	134.	55.	68.	129.	61.	128.	101.
25	101.	82.	53.	189.	112.	116.	73.	358.	124.	136.	143.	232.	48.	58.	257.	37.	56.	50.	95.	143.	109.	112.	101.	118.	121.
26	105.	124.	130.	109.	112.	114.	120.	144.	146.	178.	121.	126.	115.	133.	139.	138.	131.	135.	147.	136.	138.	146.	159.	170.	134.
27	174.	155.	179.	161.	166.	140.	140.	139.	139.	134.	112.	114.	125.	128.	130.	134.	135.	139.	140.	151.	168.	183.	186.	197.	149.
28	194.	192.	202.	218.	213.	165.	158.	181.	212.	221.	164.	163.	166.	230.	248.	246.	74.	162.	101.	340.	352.	15.	206.	163.	191.
29	159.	156.	161.	168.	180.	188.	196.	203.	219.	213.	214.	219.	225.	225.	238.	217.	198.	200.	165.	122.	117.	140.	163.	148.	185.
30	183.	125.	116.	65.	90.	134.	141.	132.	133.	161.	131.	126.	135.	148.	129.	126.	141.	137.	135.	130.	120.	121.	119.	125.	129.
31	183.	193.	98.	60.	46.	59.	42.	50.	51.	37.	74.	72.	209.	187.	165.	162.	149.	172.	145.	148.	150.	56.	32.	50.	108.

MONTHLY AVERAGE = 136.23

SIGMA THETA FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF OCTOBER , 2012

IN DEGREES

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	19.1	27.7	10.3	7.8	9.9	14.8	13.4	23.3	51.6	39.6	35.1	21.8	26.4	17.7	22.8	18.6	11.6	14.3	12.1	11.7	13.1	15.2	26.9	39.1	21.0
2	42.8	39.3	57.5	40.6	32.5	24.2	48.3	31.4	24.0	14.8	12.4	16.1	19.6	19.4	16.7	14.8	13.2	11.2	14.3	45.0	54.0	19.5	16.6	10.2	26.6
3	14.2	18.2	10.4	10.5	9.6	8.3	9.3	12.2	9.7	10.4	10.4	10.1	10.1	11.2	9.4	9.9	10.5	18.6	12.9	9.5	8.9	9.1	8.4	10.1	10.9
4	9.5	8.6	8.3	12.2	10.3	9.2	8.6	8.4	10.3	9.4	9.2	10.0	10.1	10.1	11.3	10.7	12.2	11.8	12.3	10.4	9.9	9.7	8.5	8.7	10.0
5	9.6	7.7	7.9	7.4	7.3	8.5	10.5	8.2	12.3	15.9	17.5	18.3	17.0	19.3	16.0	18.1	13.0	8.6	11.0	15.7	21.3	13.3	15.3	17.0	13.2
6	14.8	26.9	20.9	11.1	12.3	9.6	8.2	12.1	16.9	17.4	28.0	20.3	13.6	16.0	13.2	21.8	13.8	13.3	8.4	7.2	12.8	13.3	14.2	28.9	15.6
7	14.6	20.0	33.9	8.4	36.5	7.7	7.2	8.4	45.4	53.8	32.7	17.9	17.2	32.1	15.5	25.9	11.5	11.1	16.6	16.7	12.3	7.3	43.0	25.8	21.7
8	17.4	26.1	21.6	11.3	21.0	22.1	8.2	23.5	7.2	18.1	19.5	34.9	27.7	24.9	17.7	15.2	9.8	11.8	11.3	5.8	8.9	20.0	8.2	8.0	16.7
9	6.6	15.9	10.0	6.6	9.5	13.2	15.3	28.7	23.9	20.2	41.2	31.2	33.1	35.8	37.8	30.4	19.1	20.4	6.6	4.5	4.9	6.7	6.7	6.5	18.1
10	27.6	6.7	11.4	17.1	22.8	3.5	15.6	13.4	26.1	35.4	46.8	29.1	28.0	36.4	29.2	27.1	17.9	35.0	26.6	16.4	29.9	22.6	22.6	10.1	23.2
11	11.2	12.7	9.2	11.9	36.6	27.2	27.1	15.3	39.3	37.3	33.9	36.9	49.5	36.7	27.4	12.3	7.6	10.5	8.3	24.4	31.6	13.8	13.2	16.2	22.9
12	21.5	10.1	8.6	8.7	8.8	9.1	9.2	11.4	9.7	11.1	9.5	8.7	10.1	10.5	13.2	20.4	17.3	17.0	9.0	30.3	23.7	13.5	11.7	10.5	13.1
13	11.2	8.4	9.8	13.4	7.7	9.9	9.2	12.3	11.4	13.8	11.4	11.2	11.9	10.2	9.0	8.4	9.7	8.7	11.9	7.1	11.4	50.9	18.2	13.0	12.5
14	12.6	15.2	22.5	13.4	11.3	23.0	32.8	15.8	9.1	19.6	11.4	10.6	9.1	11.8	9.6	31.7	15.5	8.8	8.8	8.9	9.6	11.1	18.5	18.3	15.0
15	11.4	11.6	8.6	11.0	10.5	11.4	14.2	16.0	14.5	15.2	15.8	21.9	23.7	22.9	11.7	10.1	10.9	8.1	9.4	12.6	10.9	9.7	10.5	10.1	13.0
16	9.4	9.6	10.5	11.2	10.7	23.7	15.3	8.9	19.2	15.6	10.8	10.6	11.2	9.8	8.6	10.9	8.0	8.5	10.1	13.6	18.7	20.4	14.0	16.4	12.8
17	8.0	9.5	8.5	10.2	10.3	15.4	19.2	14.6	18.5	42.3	22.6	37.6	28.1	33.0	13.9	13.1	12.4	9.0	6.5	7.8	20.6	9.4	7.1	9.8	16.1
18	17.4	10.3	21.3	17.5	16.6	25.9	13.9	7.3	23.6	21.3	11.8	16.1	12.5	11.7	26.8	19.7	15.9	16.2	19.4	10.8	14.8	11.5	12.4	9.1	16.0
19	10.4	8.3	9.2	8.6	8.8	8.3	10.4	9.8	9.1	10.3	14.9	9.4	11.5	11.0	10.0	9.3	37.0	15.3	17.0	7.5	10.5	39.8	48.7	32.2	15.3
20	8.9	11.1	12.3	7.9	13.2	8.6	10.4	13.2	13.6	13.7	12.8	12.0	11.0	10.8	20.7	11.4	11.4	10.1	7.8	9.6	9.1	6.6	7.6	10.2	11.0
21	10.0	29.1	25.4	29.3	15.4	9.2	8.6	9.2	12.0	15.2	20.6	16.3	20.8	23.5	41.1	44.4	10.6	39.5	9.4	12.0	9.5	18.1	10.9	7.5	18.7
22	8.8	19.0	21.0	51.6	35.0	30.1	43.3	28.3	62.9	18.4	32.7	12.3	12.5	8.6	8.0	9.1	6.1	10.9	13.9	8.8	16.9	28.8	10.6	7.8	21.1
23	11.9	11.6	10.0	6.2	7.7	8.0	8.1	13.2	16.6	17.0	18.2	20.2	22.2	18.8	32.2	14.2	33.5	15.0	13.2	28.8	15.2	24.6	27.1	19.1	17.2
24	16.1	17.3	29.7	14.8	15.3	18.7	9.9	9.1	34.5	21.7	22.4	29.7	27.0	24.4	14.5	16.5	40.1	10.1	42.3	8.7	30.4	19.0	17.4	10.1	20.8
25	12.9	14.8	6.3	11.0	13.1	37.9	17.1	26.4	10.7	14.6	17.5	30.0	24.1	30.1	32.6	45.2	7.8	8.2	11.6	12.4	9.0	6.8	9.9	18.8	17.9
26	15.6	13.4	16.8	18.6	14.5	20.1	22.6	13.9	15.9	27.5	23.5	10.9	15.5	14.3	11.8	12.8	11.1	10.6	10.0	9.5	8.3	8.1	10.9	10.1	14.4
27	10.2	10.7	7.2	9.5	11.2	9.2	8.5	9.5	8.8	10.3	10.8	11.8	11.3	10.2	10.7	18.8	11.2	12.3	11.3	10.5	10.9	8.1	7.8	7.4	10.3
28	8.7	8.8	9.6	7.6	11.2	14.2	11.8	14.2	9.9	11.7	33.4	18.3	49.5	33.3	13.8	18.3	10.8	27.8	22.8	16.5	21.9	22.6	24.9	12.3	18.1
29	33.2	10.3	8.5	7.9	7.6	8.1	7.6	9.7	9.6	9.9	11.1	9.8	9.5	10.6	9.0	8.2	8.6	13.6	25.1	10.6	11.6	9.8	13.9	19.4	11.8
30	20.6	11.3	22.9	23.2	16.3	11.8	8.9	7.4	11.3	13.2	12.1	10.2	11.3	22.2	34.6	8.8	9.5	8.8	8.2	8.1	9.8	9.5	11.1	14.3	13.6
31	28.9	30.9	8.5	14.5	18.8	21.8	20.9	18.4	42.0	13.8	22.5	43.5	23.5	20.3	10.2	10.1	7.6	10.8	37.8	20.9	22.4	32.5	22.3	12.6	21.5

MONTHLY AVERAGE = 16.45

WIND GUST FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF OCTOBER , 2012

IN MILES PER HOUR

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MAX
1	9.7	6.3	10.3	8.2	7.6	5.2	5.6	3.5	3.9	4.9	7.0	8.5	10.4	11.3	15.3	13.6	13.5	13.7	16.1	18.2	23.3	25.6	27.8	18.5	27.8
2	14.4	10.0	6.1	10.0	13.7	9.6	8.1	7.5	14.7	16.7	17.1	15.7	15.8	15.0	15.1	15.7	19.5	17.3	12.6	11.5	8.1	15.5	11.6	8.1	19.5
3	7.0	10.5	10.0	13.7	13.1	15.4	16.7	20.2	22.0	21.2	23.1	23.4	22.3	21.4	22.1	22.8	21.6	18.5	16.9	18.1	17.5	15.5	14.9	19.8	23.4
4	19.4	16.2	16.5	12.7	16.8	20.1	15.5	14.2	10.9	13.1	15.9	19.1	21.5	24.0	23.8	23.1	21.9	22.3	23.3	15.9	15.6	8.8	8.4	8.4	24.0
5	9.8	9.7	10.1	10.1	10.5	11.0	12.6	11.7	11.1	12.5	17.0	19.0	24.2	21.1	19.6	20.2	15.8	12.8	10.2	10.5	10.2	12.2	11.9	10.9	24.2
6	6.0	4.7	8.9	9.4	6.6	9.5	9.0	10.6	8.5	8.4	22.4	24.4	27.0	18.9	20.2	11.2	18.3	20.8	15.3	14.4	10.2	6.6	5.6	7.1	27.0
7	5.5	8.1	7.1	8.8	8.7	8.6	9.2	8.9	5.2	3.8	5.6	6.5	8.4	10.1	10.5	8.4	6.2	5.2	5.9	5.8	1.5	1.4	3.3	3.4	10.5
8	2.6	4.6	3.3	4.5	4.8	3.5	6.7	5.8	7.8	8.2	10.0	9.5	8.9	9.1	8.6	9.2	7.3	7.5	5.4	6.6	7.7	5.8	6.6	6.6	10.0
9	4.0	3.8	7.0	7.2	6.1	4.8	6.7	6.8	5.8	6.0	4.7	5.9	8.5	6.4	6.2	6.2	5.0	2.5	3.1	3.7	5.4	5.7	4.4	5.2	8.5
10	4.2	3.0	2.8	3.1	4.9	2.3	5.0	6.2	5.5	4.0	8.3	8.9	10.1	7.8	8.9	9.4	7.3	4.8	3.0	4.6	3.1	5.4	3.7	8.2	10.1
11	5.2	5.5	7.0	7.9	4.4	5.4	3.3	4.4	6.3	6.7	7.9	8.3	6.0	7.3	7.3	7.6	7.0	4.9	5.2	5.3	5.5	6.9	6.7	7.8	8.3
12	7.1	9.1	8.2	9.9	9.6	11.7	13.0	10.9	7.8	8.6	8.7	13.2	13.2	12.2	9.3	8.9	7.6	7.8	7.3	6.4	7.3	7.1	10.3	11.5	13.2
13	9.6	11.1	12.7	12.2	15.1	12.2	6.9	8.3	8.5	11.2	12.3	10.1	10.6	9.9	11.8	11.4	11.1	8.2	8.1	8.2	9.2	8.4	12.5	5.9	15.1
14	7.1	9.4	5.5	6.5	7.4	6.0	6.0	8.6	9.6	8.1	14.6	23.7	19.8	13.5	11.8	5.3	11.2	13.6	11.7	13.8	12.3	13.1	11.6	8.8	23.7
15	7.0	17.5	17.2	14.1	12.3	11.2	7.0	9.8	7.6	9.3	10.9	10.2	6.9	10.9	16.2	20.7	15.3	16.2	19.9	26.5	28.9	34.1	28.9	26.4	34.1
16	25.6	30.1	31.2	31.4	31.2	22.8	10.2	16.4	14.6	12.4	21.5	26.8	24.7	27.9	24.2	22.0	22.4	16.8	13.4	11.2	10.8	7.0	8.6	5.4	31.4
17	7.1	6.3	6.1	4.7	3.8	5.2	7.4	6.8	5.2	6.4	6.7	8.8	9.4	11.2	11.8	9.9	10.4	8.8	9.3	7.7	5.6	6.6	6.6	6.5	11.8
18	4.0	6.4	3.7	6.5	6.1	2.8	7.8	5.3	3.9	7.9	7.6	17.4	15.0	14.3	12.5	10.8	5.8	10.5	17.0	14.1	14.5	13.6	15.2	12.9	17.4
19	12.3	15.6	22.6	21.5	21.7	21.5	19.2	14.6	15.5	20.0	17.3	22.2	16.4	14.4	15.4	16.7	13.2	13.9	12.3	14.6	19.5	9.6	16.7	18.5	22.6
20	23.9	23.6	19.9	23.1	16.6	20.5	21.8	13.4	11.9	17.5	19.0	20.6	16.5	14.2	24.5	21.6	19.2	12.8	12.8	13.3	11.2	11.2	11.6	8.7	24.5
21	7.9	6.3	6.8	5.2	10.7	11.2	12.1	9.3	8.6	9.1	10.5	11.2	9.0	11.9	10.1	34.5	6.7	9.7	9.2	7.7	7.8	6.3	7.9	9.5	34.5
22	7.9	7.1	7.9	9.5	12.1	7.8	7.2	9.1	10.5	7.1	8.4	6.8	6.3	5.8	5.9	7.4	6.9	5.7	8.4	9.4	5.7	5.7	8.9	9.2	12.1
23	9.6	8.1	8.8	8.3	9.2	7.4	8.2	6.6	5.2	6.8	7.8	11.2	10.9	12.9	10.8	14.1	11.1	2.6	4.4	5.8	8.8	3.4	7.5	5.5	14.1
24	5.2	10.1	4.5	10.9	11.9	8.6	7.2	5.5	4.1	4.0	3.8	5.1	6.5	9.7	8.8	7.9	7.0	10.1	12.1	9.3	9.0	7.4	5.7	6.5	12.1
25	2.8	2.8	2.7	7.2	6.4	5.1	3.4	3.0	6.4	5.9	7.8	7.2	5.6	4.7	5.7	4.9	4.6	3.2	3.9	2.9	6.9	4.2	6.6	12.4	12.4
26	8.7	11.9	12.5	11.1	10.1	14.8	13.6	17.3	15.1	9.7	10.2	14.8	11.6	16.1	12.1	13.9	15.7	12.2	11.8	10.2	9.3	8.8	9.9	14.9	17.3
27	13.3	10.1	13.8	12.3	15.9	9.6	10.9	11.4	11.0	10.6	8.1	10.6	16.0	17.9	17.6	17.4	15.3	20.7	15.2	14.7	16.8	18.2	23.0	27.3	27.3
28	27.3	24.0	23.1	22.5	20.3	10.8	12.2	10.8	9.4	9.5	7.6	6.4	4.8	10.5	10.1	6.9	1.6	3.6	6.7	5.2	8.9	5.6	11.6	9.3	27.3
29	7.7	17.5	15.4	20.7	21.5	22.0	24.5	26.6	30.0	23.3	25.0	26.6	23.2	23.0	18.4	15.4	10.8	8.6	6.2	7.4	4.4	10.0	7.5	5.7	30.0
30	8.5	13.4	8.8	7.3	12.4	13.6	8.4	8.8	10.1	9.7	6.6	7.0	8.6	8.9	10.4	16.0	14.8	13.6	15.0	13.6	12.5	13.4	11.6	12.4	16.0
31	10.6	8.7	7.2	4.5	6.7	6.4	8.2	6.0	5.9	5.9	6.3	6.4	7.6	16.5	15.3	15.7	17.8	10.6	14.0	10.7	7.3	5.9	6.3	9.3	17.8

MONTHLY MAXIMUM = 34.55

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF OCTOBER , 2012

IN DEGREES C

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG
1	10.8	9.9	8.9	8.5	9.1	9.2	9.3	12.1	13.7	15.9	18.1	19.9	21.7	22.5	22.4	22.5	21.5	20.0	18.4	18.1	17.1	14.8	13.5	13.0	15.5
2	12.4	11.9	11.3	11.1	10.5	10.2	10.2	11.0	12.6	13.5	14.8	15.4	15.7	16.1	16.0	15.7	14.3	12.6	11.4	10.6	9.8	9.7	8.9	7.9	12.2
3	7.1	5.7	5.7	4.3	3.9	4.3	5.2	7.2	9.6	10.6	12.1	13.8	15.7	16.5	16.8	16.6	15.9	15.1	14.1	12.9	12.0	11.1	10.0	9.2	10.6
4	9.0	8.8	8.3	7.3	6.8	7.4	7.6	7.7	9.3	11.2	13.2	14.9	16.3	17.2	17.5	17.1	16.1	15.2	14.8	13.1	12.4	11.3	10.3	9.9	11.8
5	8.7	8.4	7.5	6.9	6.4	6.1	5.7	7.7	11.8	15.3	17.1	18.9	19.7	20.5	20.8	20.3	18.5	16.6	15.5	15.3	14.5	14.8	14.4	15.5	13.6
6	15.2	14.3	14.5	12.3	12.5	10.8	11.0	12.3	13.7	16.0	19.3	21.1	21.9	22.7	22.8	22.8	20.4	18.7	17.0	16.2	15.6	15.4	14.9	13.9	16.5
7	13.6	11.2	11.4	10.1	9.9	8.4	7.9	10.1	13.3	16.5	18.0	19.3	20.9	22.1	22.5	22.6	21.8	19.8	17.8	16.4	16.2	15.7	15.1	14.1	15.6
8	13.7	13.3	13.3	12.9	12.1	12.3	10.2	12.8	13.9	15.8	17.2	18.5	19.7	20.1	20.2	20.5	19.9	17.9	16.8	15.5	13.7	12.2	11.3	10.4	15.2
9	10.1	9.4	8.6	8.1	8.1	8.1	7.9	7.9	8.0	8.2	8.8	9.8	11.2	13.3	14.7	15.2	14.5	13.2	11.9	11.2	10.4	9.7	10.4	9.1	10.3
10	8.8	9.6	8.8	8.9	7.1	7.4	6.6	6.1	6.7	8.1	10.1	10.9	11.3	12.3	13.0	12.6	11.5	10.9	10.6	10.3	10.0	9.7	9.5	9.1	9.6
11	8.9	8.8	8.4	8.1	8.1	7.9	8.0	7.9	8.6	10.4	11.4	12.8	14.5	16.0	16.6	16.2	14.4	12.6	11.8	11.3	11.0	11.0	10.8	9.3	11.0
12	8.1	7.8	7.9	8.1	8.3	8.5	8.7	9.4	10.0	10.4	10.5	10.6	10.9	11.5	12.1	12.4	12.4	12.0	11.7	11.7	11.4	11.4	11.3	11.2	10.3
13	11.5	12.0	12.4	12.3	12.8	12.8	12.6	12.6	12.6	13.1	13.5	13.7	13.9	13.6	13.6	13.8	14.1	14.3	14.6	14.4	13.5	13.9	14.3	14.3	13.3
14	14.7	14.6	14.1	14.8	15.2	14.6	14.2	14.9	16.2	16.5	17.0	17.0	16.1	15.4	15.0	14.8	14.6	14.3	13.9	14.1	14.2	14.0	13.7	13.9	14.9
15	13.7	13.7	13.6	13.4	12.8	11.9	11.2	11.1	11.4	12.1	13.7	14.8	15.0	14.8	14.8	14.4	14.5	14.6	15.5	16.4	16.7	16.3	15.4	14.1	14.0
16	13.3	12.7	11.8	11.3	11.1	10.6	10.2	9.9	10.7	11.1	11.9	12.8	13.0	13.7	13.2	12.6	12.0	11.1	10.2	9.0	8.7	9.0	9.2	9.1	11.2
17	8.3	8.0	7.7	7.7	7.4	7.1	6.1	6.5	7.5	9.5	10.5	12.0	12.9	13.6	13.6	13.1	12.4	11.5	10.9	10.6	10.3	9.8	9.9	9.5	9.9
18	9.0	9.4	8.8	8.9	9.0	8.6	8.7	8.8	10.9	13.6	16.1	18.2	20.3	21.2	18.6	16.9	16.1	15.8	14.9	11.9	11.3	11.7	13.1	12.8	13.1
19	12.8	13.6	13.8	13.7	13.8	14.1	13.3	13.0	13.0	13.2	12.9	12.1	12.1	12.2	12.1	11.8	11.7	11.1	10.6	9.9	8.9	8.6	7.8	8.2	11.8
20	8.1	7.4	6.9	6.4	5.9	6.1	6.2	5.5	5.7	6.4	6.5	7.3	8.2	8.7	6.3	5.2	4.8	4.9	5.2	5.4	5.3	5.3	5.4	5.2	6.2
21	5.2	5.1	4.6	4.3	4.2	4.0	4.1	4.6	6.2	7.3	8.4	8.9	9.3	9.9	9.3	5.1	5.0	4.9	3.8	3.8	3.4	3.4	3.1	2.5	5.4
22	2.7	3.6	3.3	4.4	5.3	5.3	4.6	4.4	5.3	5.4	5.3	4.9	4.5	4.8	4.9	5.1	4.7	4.4	4.4	4.8	5.2	5.2	5.4	5.4	4.7
23	5.4	5.0	5.0	4.8	4.8	5.1	5.2	5.6	5.8	6.6	7.6	8.2	9.2	8.8	8.6	9.1	8.6	7.4	6.1	5.8	6.5	5.6	5.9	5.5	6.5
24	5.0	5.7	5.1	5.0	5.7	5.5	5.2	5.5	5.8	6.6	7.4	7.7	9.3	9.3	8.8	8.2	7.5	6.6	6.3	5.7	5.6	5.4	5.0	5.2	6.4
25	5.2	5.2	5.3	5.4	5.2	5.3	5.3	5.4	6.1	6.8	8.2	8.3	8.6	9.4	9.9	9.5	8.8	8.0	7.0	7.2	7.1	6.5	6.9	6.9	7.0
26	7.4	7.8	8.1	7.9	8.1	8.1	8.6	9.1	8.7	8.4	7.5	7.3	7.8	8.4	8.1	7.2	7.3	7.6	8.2	8.6	9.2	9.4	9.4	9.6	8.2
27	9.8	9.6	10.0	9.4	9.1	8.6	8.4	8.1	7.9	8.3	8.3	8.4	8.5	8.7	9.0	9.1	9.6	10.4	10.4	11.3	12.1	13.0	13.4	13.7	9.8
28	13.8	13.6	13.4	12.9	12.4	11.9	11.6	11.8	11.8	12.0	12.2	12.6	13.5	14.0	13.8	13.4	12.9	12.6	11.7	10.7	10.6	10.6	10.0	10.6	12.3
29	11.4	12.1	12.9	13.8	14.5	14.5	14.6	14.5	14.0	14.2	14.8	15.2	15.3	15.5	14.9	13.9	13.4	13.1	12.7	12.2	12.4	12.6	12.6	12.6	13.7
30	12.3	11.9	12.1	11.8	11.5	12.0	12.1	12.3	12.9	13.3	13.5	14.1	14.1	13.6	13.1	13.5	13.8	13.9	14.0	14.3	13.7	13.6	13.5	13.4	13.1
31	13.4	12.8	12.7	12.8	12.7	12.6	12.4	12.3	12.5	12.7	13.2	13.9	14.3	14.5	14.0	13.8	12.7	12.7	12.9	12.8	13.0	11.1	11.0	10.7	12.8

MONTHLY AVERAGE = 11.18

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF OCTOBER , 2012

IN INCHES

	HOUR ENDING																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOT
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.06	0.01	0.02	0.00	0.18
13	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.02	0.02	0.01	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.01	0.01	0.04	0.00	0.00	0.00	0.30
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.08	0.08	0.12	0.05	0.08	0.06	0.00	0.00	0.02	0.03	0.01	0.58
15	0.01	0.03	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.06	0.14	0.03	0.01	0.02	0.00	0.00	0.10	0.00	0.50
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	0.24	0.33	0.20	0.03	0.11	0.91
19	0.01	0.01	0.01	0.00	0.00	0.01	0.10	0.07	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.03	0.00	0.41
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	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	0.04	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.23
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.04	0.06	0.05	0.02	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.32
23	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
24	0.00	0.00	0.02	0.03	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.01	0.13	0.05	0.02	0.36
25	0.00	0.00	0.00	0.00	0.00	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.02	0.01	0.03	0.03	0.00	0.00	0.00	0.00	0.01	0.13
27	0.00	0.00	0.00	0.00	0.07	0.12	0.07	0.07	0.08	0.06	0.03	0.01	0.00	0.00	0.00	0.07	0.07	0.05	0.14	0.02	0.01	0.03	0.03	0.04	0.97
28	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.07	0.04	0.06	0.03	0.07	0.03	0.33
29	0.22	0.11	0.04	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.41
30	0.05	0.04	0.01	0.06	0.08	0.05	0.01	0.01	0.04	0.03	0.01	0.01	0.06	0.13	0.11	0.05	0.05	0.06	0.03	0.10	0.09	0.06	0.07	0.02	1.23
31	0.01	0.02	0.06	0.03	0.03	0.00	0.02	0.02	0.02	0.01	0.00	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.33

MONTHLY TOTAL = 7.40

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF OCTOBER , 2012

IN MPH/DIR

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

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF NOVEMBER , 2012

IN MILES PER HOUR

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	5.7	5.1	2.9	6.8	9.8	5.1	3.9	2.8	4.0	4.9	3.1	1.5	4.6	5.9	5.4	7.4	5.8	5.2	5.8	5.8	5.6	5.4	5.1	4.6	5.1
2	4.4	3.5	3.7	4.9	4.3	2.5	3.5	3.7	2.5	3.9	2.5	1.3	1.8	2.5	2.2	3.1	4.2	3.9	3.9	2.5	2.8	3.3	3.9	3.2	3.2
3	2.1	4.2	3.2	5.3	6.0	7.7	5.9	4.3	5.6	4.7	4.5	4.0	4.6	6.0	7.5	9.7	10.8	9.3	8.0	7.8	6.6	4.9	2.2	2.8	5.7
4	4.9	3.0	3.5	5.5	6.2	8.8	8.3	6.8	5.0	6.3	7.4	5.3	4.9	5.4	7.1	7.7	9.0	4.4	4.2	6.4	5.8	5.0	8.3	10.7	6.2
5	9.3	9.3	13.3	14.8	11.8	8.4	3.7	3.4	1.9	5.6	10.0	13.2	9.6	10.0	9.2	8.2	9.1	9.8	6.8	8.6	5.9	3.3	1.6	3.4	7.9
6	2.9	4.4	3.0	2.4	1.7	3.6	3.7	0.7	3.6	6.9	4.9	4.0	5.5	6.5	6.7	7.7	10.5	11.1	9.3	11.1	13.0	13.3	11.9	12.2	6.7
7	10.8	10.0	11.8	12.9	8.6	6.0	5.3	4.9	5.9	5.5	5.6	5.6	7.9	7.7	5.5	6.3	5.3	4.3	5.0	3.2	2.6	2.8	3.1	2.3	6.2
8	1.2	3.3	5.1	3.6	4.2	4.2	2.5	2.9	5.0	3.2	5.1	12.2	8.8	8.0	9.6	7.3	4.9	3.7	1.5	2.0	2.3	2.7	4.1	2.7	4.6
9	2.4	2.0	2.3	2.8	1.4	1.5	1.7	1.8	1.9	3.8	2.7	3.7	4.9	4.7	4.1	3.3	2.5	2.3	2.2	2.3	0.8	1.7	1.8	1.4	2.5
10	1.8	2.0	1.5	0.6	0.5	1.3	2.0	2.0	2.4	3.5	2.9	4.4	5.3	5.7	6.4	4.8	3.6	3.4	3.0	2.9	3.7	4.1	4.2	4.9	3.2
11	3.9	5.2	4.9	2.9	3.6	4.4	3.2	2.8	2.1	4.8	4.7	6.2	9.9	8.3	8.2	9.1	13.0	17.2	18.4	18.4	15.9	14.8	14.9	13.1	8.7
12	8.0	6.1	11.6	4.4	3.2	5.7	5.4	4.1	4.3	4.4	6.6	7.5	6.1	5.7	5.1	4.7	5.3	4.5	4.7	4.8	4.9	5.6	6.7	5.3	5.6
13	5.3	5.2	5.1	3.7	3.3	2.4	5.1	6.0	4.7	5.1	3.9	2.1	2.2	2.5	3.1	1.2	2.5	5.1	5.5	7.0	5.5	4.6	3.5	3.4	4.1
14	3.1	4.9	5.9	5.8	6.5	5.0	3.9	3.9	2.7	4.4	3.0	3.2	6.5	4.8	4.3	4.2	5.7	6.0	6.6	5.8	6.9	6.5	3.3	1.4	4.8
15	2.3	4.7	3.5	2.7	4.6	4.4	4.3	5.3	6.1	1.4	1.3	1.1	1.4	2.4	6.0	5.3	1.6	4.6	3.0	2.2	0.9	2.3	2.6	3.2	3.2
16	2.9	3.5	2.7	4.2	3.0	2.6	4.9	7.6	4.0	6.4	8.5	7.2	6.3	5.9	5.1	4.1	5.2	7.8	11.5	13.0	15.6	16.8	18.4	16.3	7.7
17	13.8	18.7	18.3	17.3	19.0	20.4	18.8	18.1	20.7	21.7	19.5	17.2	15.8	12.2	11.3	11.9	11.3	6.9	7.3	6.7	9.0	7.2	10.1	10.1	14.3
18	9.5	10.4	10.5	8.8	6.8	9.4	10.1	10.2	12.5	12.6	15.0	11.4	12.4	13.6	14.8	16.4	17.7	19.4	19.0	14.5	10.1	14.0	15.9	13.3	12.8
19	14.5	14.1	15.2	15.2	11.5	14.6	13.6	17.0	17.4	13.9	17.3	20.6	20.3	21.3	16.8	12.0	13.6	19.0	19.7	12.3	6.1	6.6	8.0	7.6	14.5
20	6.8	5.8	7.5	7.2	6.3	6.1	6.8	7.5	5.0	3.7	5.4	5.3	8.6	13.5	10.8	13.1	10.8	9.5	11.0	10.3	5.8	6.8	6.7	4.5	7.7
21	6.1	4.8	6.1	10.4	14.3	22.5	20.4	12.4	12.8	8.1	7.9	13.9	12.6	14.3	14.3	15.2	13.8	9.9	10.8	8.8	7.2	6.8	6.2	5.5	11.0
22	5.2	4.8	3.4	4.6	5.4	6.4	6.8	6.1	4.1	4.3	4.2	4.7	3.1	3.0	7.9	11.5	12.4	12.6	14.8	16.2	16.4	15.5	11.8	13.3	8.3
23	10.4	10.6	13.4	11.0	13.8	12.4	15.0	6.1	3.6	4.8	7.4	4.4	3.7	3.8	3.3	4.0	2.3	4.7	5.3	7.4	9.6	9.7	9.6	8.0	7.7
24	7.0	5.8	5.8	4.6	4.4	3.0	0.6	2.1	2.2	2.4	4.4	1.9	2.9	3.2	2.8	1.9	2.3	3.2	4.3	3.7	1.7	1.7	2.4	1.6	3.2
25	2.3	2.4	1.3	1.7	2.4	1.7	2.7	3.0	2.8	4.4	6.0	7.3	6.2	11.4	11.7	8.0	9.0	11.6	10.2	9.9	10.9	9.7	9.6	8.1	6.4
26	8.3	10.9	9.8	7.2	7.7	8.1	7.7	6.4	5.8	3.7	4.4	4.3	3.3	3.3	2.8	4.2	4.6	4.7	3.0	4.3	5.4	2.4	3.0	6.1	5.5
27	7.1	7.9	5.7	7.2	8.3	5.6	3.3	5.8	3.3	1.5	3.2	2.7	2.2	2.5	2.2	1.9	1.5	4.4	2.9	1.9	2.8	2.3	3.9	1.4	3.8
28	3.0	8.6	5.2	5.6	5.3	3.3	2.8	4.1	3.4	5.1	6.9	5.3	4.2	9.6	8.8	7.5	17.4	18.2	13.9	10.5	10.8	7.4	5.3	6.2	7.4
29	5.1	7.4	7.7	15.6	15.8	14.2	15.3	16.7	19.3	8.8	6.0	11.0	9.5	8.4	6.8	8.1	9.5	7.5	5.7	9.9	5.9	9.6	6.2	6.1	9.8
30	12.1	7.8	6.9	10.2	9.8	12.7	15.8	13.0	10.9	12.4	10.7	10.6	13.3	18.1	16.4	8.6	7.4	5.8	3.0	2.2	3.6	4.9	5.2	7.4	9.5

MONTHLY AVERAGE = 6.92

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF NOVEMBER , 2012

IN DEGREES

(MEASURED CLOCKWISE FROM NORTH)
HOUR ENDING

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	47.	106.	61.	163.	152.	132.	97.	74.	29.	46.	47.	75.	196.	209.	187.	171.	148.	138.	172.	184.	140.	152.	168.	131.	126.
2	137.	138.	147.	139.	126.	87.	104.	140.	146.	212.	146.	27.	342.	2.	298.	270.	229.	302.	309.	70.	111.	157.	51.	228.	163.
3	158.	166.	164.	145.	123.	135.	142.	146.	142.	146.	160.	166.	147.	168.	174.	203.	185.	167.	153.	150.	151.	152.	129.	128.	154.
4	118.	121.	72.	136.	129.	130.	133.	132.	162.	153.	130.	152.	177.	157.	174.	165.	146.	166.	186.	151.	234.	204.	207.	228.	157.
5	261.	22.	19.	18.	23.	26.	9.	282.	135.	34.	34.	31.	33.	23.	15.	16.	22.	30.	26.	35.	44.	47.	83.	136.	59.
6	85.	25.	98.	204.	162.	172.	190.	141.	181.	190.	202.	153.	183.	235.	218.	176.	159.	161.	165.	190.	192.	189.	176.	175.	168.
7	184.	173.	176.	180.	188.	193.	188.	161.	166.	196.	229.	256.	238.	232.	231.	206.	185.	127.	191.	64.	144.	115.	114.	146.	179.
8	127.	58.	31.	30.	25.	35.	22.	18.	37.	15.	18.	18.	26.	26.	16.	17.	7.	340.	332.	331.	214.	164.	177.	132.	92.
9	129.	301.	164.	158.	133.	143.	119.	138.	137.	164.	194.	345.	296.	278.	10.	16.	343.	46.	73.	64.	130.	122.	109.	184.	158.
10	198.	203.	136.	218.	174.	158.	140.	141.	129.	193.	260.	293.	12.	33.	38.	8.	353.	57.	89.	113.	128.	158.	132.	138.	146.
11	151.	145.	152.	139.	125.	132.	142.	129.	106.	142.	156.	124.	128.	135.	138.	140.	125.	125.	128.	130.	133.	132.	133.	126.	134.
12	107.	128.	126.	128.	90.	128.	138.	140.	157.	162.	134.	130.	148.	153.	144.	139.	158.	139.	157.	168.	158.	153.	146.	143.	141.
13	142.	137.	149.	171.	146.	148.	144.	148.	130.	138.	148.	152.	234.	277.	304.	358.	148.	111.	123.	136.	152.	167.	139.	166.	170.
14	157.	161.	181.	180.	183.	186.	207.	264.	330.	310.	320.	55.	10.	17.	15.	7.	16.	29.	42.	28.	14.	33.	76.	28.	119.
15	55.	27.	36.	46.	20.	29.	44.	35.	35.	357.	178.	282.	3.	137.	198.	192.	274.	309.	295.	210.	314.	312.	221.	166.	157.
16	169.	164.	140.	172.	179.	181.	164.	214.	136.	164.	138.	140.	145.	139.	114.	126.	78.	126.	133.	127.	127.	130.	132.	138.	145.
17	126.	130.	131.	132.	129.	127.	135.	130.	129.	129.	128.	128.	233.	215.	201.	180.	167.	144.	126.	146.	153.	143.	164.	144.	149.
18	149.	142.	154.	156.	166.	146.	129.	132.	137.	132.	129.	134.	131.	135.	124.	122.	125.	126.	126.	135.	159.	176.	173.	149.	141.
19	135.	138.	138.	149.	130.	128.	125.	126.	131.	140.	134.	158.	164.	202.	184.	139.	158.	182.	206.	196.	148.	135.	123.	137.	150.
20	154.	152.	136.	145.	143.	148.	137.	134.	121.	136.	140.	162.	144.	178.	179.	163.	158.	162.	149.	161.	143.	144.	142.	141.	149.
21	127.	144.	154.	162.	184.	186.	207.	194.	167.	194.	176.	200.	190.	184.	200.	201.	196.	184.	183.	184.	163.	147.	143.	141.	175.
22	139.	140.	134.	129.	126.	126.	123.	124.	106.	115.	122.	114.	88.	133.	124.	129.	131.	126.	127.	131.	135.	142.	149.	148.	128.
23	166.	129.	136.	150.	133.	131.	134.	135.	68.	124.	171.	162.	148.	270.	9.	206.	142.	147.	164.	194.	207.	218.	220.	240.	159.
24	217.	208.	211.	202.	185.	157.	81.	101.	116.	152.	197.	168.	227.	231.	253.	225.	227.	326.	349.	91.	107.	30.	21.	53.	172.
25	24.	1.	63.	27.	14.	30.	69.	37.	41.	23.	12.	25.	22.	10.	15.	13.	33.	40.	28.	22.	26.	27.	30.	29.	28.
26	25.	27.	28.	23.	34.	30.	30.	31.	25.	58.	77.	99.	203.	34.	23.	61.	50.	62.	57.	102.	121.	67.	92.	123.	62.
27	135.	155.	148.	161.	140.	137.	116.	138.	98.	34.	64.	58.	38.	34.	18.	115.	46.	15.	39.	73.	72.	105.	99.	93.	89.
28	120.	157.	115.	25.	20.	25.	81.	37.	69.	99.	109.	94.	339.	117.	100.	139.	126.	129.	130.	143.	137.	144.	136.	137.	114.
29	119.	127.	124.	123.	133.	131.	126.	120.	139.	165.	150.	128.	136.	142.	153.	138.	128.	129.	124.	121.	152.	137.	111.	126.	133.
30	130.	147.	98.	128.	135.	128.	127.	133.	136.	144.	146.	153.	176.	188.	193.	176.	122.	174.	230.	77.	95.	96.	126.	151.	142.

MONTHLY AVERAGE = 135.19

SIGMA THETA FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF NOVEMBER , 2012

IN DEGREES

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	32.8	30.6	23.1	16.6	10.7	10.1	9.8	12.9	9.7	10.0	16.3	39.6	16.1	14.7	18.4	11.3	9.6	11.7	10.6	13.0	8.5	13.1	10.2	8.9	15.3
2	20.0	19.9	24.1	13.6	14.5	20.8	18.4	25.3	19.2	14.6	21.1	41.0	33.7	27.5	31.3	19.6	14.3	31.7	12.8	23.4	19.2	27.9	34.4	23.0	23.0
3	22.4	13.5	34.7	15.4	10.6	10.9	11.1	17.5	11.2	12.5	14.3	11.2	9.7	12.0	9.3	8.6	9.2	9.5	7.8	7.0	8.0	11.6	15.5	14.7	12.8
4	15.8	26.2	21.1	11.8	10.6	9.1	8.6	11.9	11.0	14.5	18.3	20.4	15.5	12.1	16.0	13.9	9.4	27.4	8.2	21.3	24.8	13.9	11.1	9.0	15.1
5	12.8	20.3	11.1	12.6	14.8	19.9	35.5	47.9	69.2	48.1	14.2	11.6	12.1	12.2	12.5	10.1	9.8	11.3	23.2	8.5	8.4	20.4	28.6	17.5	20.5
6	14.1	8.5	22.2	29.4	19.2	13.0	15.0	26.3	16.7	10.7	15.8	18.2	16.9	14.9	20.6	15.9	10.4	12.4	11.9	9.7	8.1	7.8	9.4	8.1	14.8
7	9.0	11.4	8.3	8.7	11.4	10.4	8.8	10.8	12.8	20.8	20.9	18.2	11.8	18.0	22.1	11.8	8.1	11.4	37.1	12.1	17.9	7.6	17.1	37.8	15.2
8	18.9	12.2	8.1	14.4	12.2	7.8	36.7	20.9	12.4	22.7	18.5	10.0	11.6	11.1	11.7	12.6	11.6	24.7	21.4	22.4	18.2	11.3	11.6	15.7	15.8
9	23.8	32.3	35.9	17.4	12.0	17.5	17.3	17.7	11.1	14.0	35.0	15.2	19.3	20.1	18.3	10.5	14.8	15.1	6.5	10.8	25.1	8.4	13.7	14.1	17.7
10	19.6	11.0	11.4	14.1	7.8	14.2	6.8	18.1	12.8	13.2	19.0	23.7	20.2	26.0	12.9	11.6	14.2	15.3	7.8	12.5	10.4	9.3	12.0	9.5	13.9
11	8.4	11.4	11.5	7.8	14.6	13.8	13.6	21.0	18.8	19.5	24.8	12.3	11.4	11.0	9.8	9.1	10.6	10.6	9.9	10.2	10.3	10.6	10.5	11.8	12.6
12	16.3	29.7	10.1	37.4	22.8	28.1	24.1	24.4	22.7	23.1	17.0	9.7	13.7	10.0	9.7	9.6	24.7	10.6	10.5	15.3	19.7	8.1	6.8	7.9	17.2
13	7.3	7.7	18.2	20.6	21.2	25.0	17.6	10.7	9.3	11.9	19.1	32.9	32.7	27.9	11.7	16.4	18.5	9.8	9.7	10.1	10.3	14.0	7.7	17.9	16.2
14	18.0	9.7	8.5	7.8	6.4	7.5	10.7	12.1	22.1	12.2	28.2	15.9	10.1	9.5	13.1	9.6	12.1	6.8	7.5	5.7	7.5	8.3	21.6	11.6	11.8
15	22.1	7.5	12.7	14.2	10.0	7.6	9.3	7.5	41.0	39.3	41.1	47.2	40.7	26.7	9.9	12.6	25.1	6.0	36.7	18.0	16.8	12.3	12.8	10.4	20.3
16	12.2	10.3	13.6	13.6	10.3	13.2	18.9	11.4	30.1	11.7	11.5	12.3	21.9	23.9	17.9	10.7	17.8	19.0	10.4	9.8	9.9	10.3	9.5	13.3	14.3
17	10.3	10.0	8.8	9.2	9.9	11.3	10.1	11.4	10.6	9.8	10.7	10.6	19.7	13.6	10.3	10.9	10.4	9.9	13.9	9.4	7.5	8.3	10.5	9.4	10.7
18	10.2	8.4	6.7	6.8	11.1	8.4	8.8	11.1	14.5	11.8	9.1	9.5	10.1	11.1	10.6	10.8	9.7	10.0	11.7	11.2	14.2	9.6	8.8	8.5	10.1
19	9.5	8.6	9.8	8.3	9.9	10.0	9.9	9.6	9.2	10.9	9.0	9.2	8.5	12.1	15.4	10.5	8.7	9.2	10.1	10.0	15.2	13.3	10.6	9.7	10.3
20	8.1	9.4	7.5	7.9	13.1	11.6	10.2	11.3	17.1	18.1	15.9	28.9	14.4	12.8	11.6	8.9	7.8	11.4	7.0	9.9	8.8	7.6	9.4	17.9	12.0
21	18.5	32.9	26.2	7.4	9.4	10.3	9.5	12.6	8.7	23.8	15.1	8.8	9.7	10.2	9.1	9.6	8.8	10.3	10.4	9.4	11.4	9.2	7.5	8.7	12.4
22	7.6	10.5	10.9	6.2	7.1	8.3	11.6	11.6	13.0	14.8	17.8	13.4	18.8	23.4	14.7	11.1	11.1	11.8	10.7	11.1	11.3	11.5	11.9	12.1	12.2
23	14.4	16.7	13.3	12.4	12.5	10.1	10.2	30.6	45.5	26.0	38.4	44.9	30.5	28.9	41.7	32.7	39.2	10.1	14.4	8.0	7.4	8.2	7.9	12.0	21.5
24	13.4	8.6	7.1	10.6	12.8	18.5	15.4	27.2	22.4	29.7	10.1	29.2	16.8	18.2	34.7	25.7	22.7	15.9	16.1	8.1	17.0	24.1	14.6	19.1	18.3
25	17.1	24.3	25.6	40.0	15.6	9.7	9.3	9.6	10.6	9.9	17.9	12.1	18.7	11.0	10.4	12.5	14.0	12.5	11.3	10.5	9.4	16.6	9.7	8.9	14.5
26	9.5	8.3	8.1	9.7	9.0	10.1	9.7	9.1	8.3	21.2	19.5	25.8	63.1	25.5	33.0	21.5	21.6	13.8	11.9	11.6	13.1	23.9	22.4	9.8	17.5
27	10.7	9.6	16.7	10.5	9.9	15.3	28.4	11.9	22.3	29.7	27.5	21.2	17.6	14.2	24.1	23.8	30.1	11.0	24.8	19.1	14.7	41.3	16.5	34.6	20.2
28	20.8	11.7	26.6	9.3	8.0	18.0	38.1	16.7	37.5	26.7	37.4	31.4	56.8	17.0	16.4	21.1	10.9	9.2	12.0	16.4	9.5	11.7	19.4	33.5	21.5
29	17.8	12.6	14.5	11.2	12.8	12.3	13.2	10.8	11.3	20.1	32.3	12.5	11.6	17.1	11.5	10.3	11.7	22.8	16.2	15.5	34.5	15.6	14.4	18.3	15.9
30	11.0	20.6	12.9	14.9	13.4	9.9	11.1	9.6	8.6	7.7	9.1	9.8	11.6	8.6	8.7	13.7	11.7	27.5	36.6	18.6	24.0	13.8	25.0	19.7	14.9

MONTHLY AVERAGE = 15.61

WIND GUST FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF NOVEMBER , 2012

IN MILES PER HOUR

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MAX
1	8.8	8.7	6.6	14.0	16.8	8.0	7.4	6.1	7.7	7.2	5.7	4.5	8.1	10.4	8.9	11.4	14.2	7.8	9.8	8.6	9.4	8.3	12.1	7.2	16.8
2	8.5	5.7	6.5	8.1	7.3	4.6	8.0	8.9	4.8	6.5	5.4	3.2	4.0	4.4	5.0	6.0	7.6	7.6	5.3	5.3	5.9	7.0	6.2	6.3	8.9
3	6.1	7.0	7.5	9.4	10.8	10.4	9.9	7.8	9.0	7.5	7.0	6.5	8.1	9.9	11.3	18.4	15.6	15.3	12.0	10.2	11.0	8.2	4.2	5.9	18.4
4	8.1	6.0	5.9	9.4	10.0	13.1	11.7	10.3	6.7	11.1	13.3	8.5	7.1	8.4	14.4	14.8	13.5	8.0	7.6	10.5	13.0	9.8	14.4	17.2	17.2
5	15.3	16.7	21.4	27.3	21.5	16.7	11.0	9.5	8.1	14.1	17.1	20.2	17.1	15.7	14.4	13.4	16.8	16.2	14.1	12.1	9.9	6.6	4.4	6.2	27.3
6	5.2	7.4	4.7	6.2	4.2	7.2	5.7	2.7	8.9	9.7	7.1	8.6	9.2	13.0	14.9	13.1	16.2	18.0	14.4	17.7	17.9	19.6	17.7	17.4	19.6
7	19.4	17.7	16.9	19.7	13.9	10.9	7.7	8.7	9.8	10.4	12.0	9.0	11.7	13.3	11.4	10.2	9.1	6.6	10.4	5.7	5.2	6.1	4.8	5.0	19.7
8	2.9	5.0	8.4	6.7	6.3	8.1	7.0	5.7	8.6	7.8	13.4	19.8	16.9	14.7	16.5	12.0	9.0	7.3	7.1	4.2	3.8	4.0	6.1	5.4	19.8
9	4.7	6.2	4.4	4.8	3.6	3.3	4.2	3.2	3.7	6.1	5.7	7.9	10.6	9.4	8.4	6.9	4.5	3.7	3.8	4.3	3.5	3.2	3.6	3.4	10.6
10	3.3	3.3	3.7	2.1	2.0	3.2	4.0	3.7	4.5	5.3	5.3	8.4	10.1	10.5	9.7	8.4	6.1	4.7	4.6	4.2	6.1	6.5	7.6	6.9	10.5
11	6.8	7.8	6.8	5.4	5.4	8.8	5.3	4.4	4.2	8.8	8.2	12.4	15.3	13.6	11.9	13.9	20.7	25.0	26.2	26.7	26.5	22.3	22.1	22.1	26.7
12	14.7	14.5	17.8	11.4	5.6	10.7	11.5	7.4	8.1	8.1	10.5	10.8	10.2	8.4	7.6	7.5	8.8	7.1	6.2	6.9	8.7	8.1	10.1	7.8	17.8
13	7.7	7.4	7.9	5.8	5.7	4.9	8.1	8.8	7.6	7.6	7.1	5.5	5.8	4.5	5.2	3.2	4.6	7.9	8.8	11.0	9.4	7.3	6.0	5.6	11.0
14	5.4	8.4	8.7	8.6	8.9	8.0	8.2	7.3	4.7	8.5	5.8	8.0	9.4	8.6	7.3	7.4	8.7	9.6	9.6	9.0	11.2	10.1	6.7	3.4	11.2
15	4.9	6.7	4.8	5.0	7.0	7.7	7.6	8.6	12.2	3.3	4.4	4.0	4.2	5.3	8.2	8.6	5.4	5.7	5.3	5.5	4.1	4.8	4.4	5.1	12.2
16	5.2	5.4	6.0	6.8	6.7	6.2	11.3	12.2	8.0	10.0	13.3	12.3	10.7	13.7	10.2	6.6	13.0	16.1	16.6	18.9	23.5	27.5	26.2	25.5	27.5
17	23.9	27.2	25.8	25.3	28.6	28.3	27.6	28.0	27.7	32.9	28.1	27.8	31.8	22.1	18.0	22.6	21.1	10.5	11.0	11.8	13.6	15.3	20.6	17.6	32.9
18	15.5	15.9	15.5	13.7	11.6	15.9	15.6	16.2	20.9	20.6	21.7	17.8	18.0	21.4	23.4	25.3	27.9	28.4	27.9	24.4	16.1	25.0	23.9	26.0	28.4
19	21.5	19.8	23.3	24.9	17.8	24.0	20.0	23.9	25.2	22.5	25.2	29.3	29.8	42.1	29.9	22.0	22.4	28.2	32.0	23.7	12.4	10.4	13.9	12.1	42.1
20	10.9	9.3	10.7	9.6	9.4	8.8	10.9	12.9	9.2	8.8	8.3	11.2	13.5	24.4	18.3	18.8	16.1	16.5	15.7	19.3	9.5	10.1	11.1	8.1	24.4
21	10.5	11.2	11.4	15.3	26.2	44.0	36.7	23.9	18.7	18.2	14.6	21.9	22.3	22.5	22.3	27.5	20.4	15.9	17.2	13.9	11.5	10.9	9.3	8.8	44.0
22	7.7	7.5	5.1	6.3	7.6	9.0	12.3	10.6	7.2	8.9	6.8	11.1	9.3	7.4	14.9	18.5	19.4	20.6	21.9	25.5	26.4	26.1	19.0	20.1	26.4
23	19.5	21.1	22.3	17.6	21.4	17.3	22.6	15.6	6.6	13.3	17.5	16.5	10.1	7.8	7.7	11.4	4.6	9.0	9.4	14.1	14.2	16.8	16.1	14.7	22.6
24	13.6	9.2	9.5	7.2	9.1	6.7	2.3	4.1	4.6	5.7	6.5	4.6	5.6	6.6	5.0	4.3	4.0	5.5	6.7	6.6	4.3	4.1	4.2	3.2	13.6
25	5.6	7.4	3.7	4.2	4.8	3.1	4.5	5.5	5.4	7.8	12.6	12.6	13.4	19.1	17.7	13.4	18.1	19.2	16.5	14.8	17.0	14.9	14.6	14.4	19.2
26	13.9	16.4	14.3	10.7	13.6	15.0	12.3	9.4	8.4	7.2	8.4	9.8	10.7	6.7	4.7	9.7	9.1	9.3	5.8	9.8	12.2	6.4	6.4	14.8	16.4
27	15.4	12.3	10.5	11.8	12.9	11.2	9.9	10.6	6.7	4.9	5.8	6.0	4.0	5.6	4.7	6.5	3.7	7.6	6.0	4.1	6.1	7.4	7.2	4.9	15.4
28	7.8	14.4	11.1	11.1	8.0	7.7	7.3	8.5	7.9	10.5	15.4	14.6	9.6	20.4	19.9	20.0	27.1	26.4	21.7	15.9	17.1	12.1	9.3	14.8	27.1
29	7.9	15.6	18.2	23.9	24.5	20.5	24.9	26.5	30.5	20.3	9.5	19.6	15.8	16.3	10.2	13.8	14.1	16.0	14.5	19.5	11.1	17.3	13.3	16.0	30.5
30	20.3	17.3	15.0	16.8	21.6	18.1	22.7	19.8	16.1	17.2	16.2	15.9	26.6	29.7	26.9	14.8	11.2	10.5	6.9	5.6	10.8	8.3	11.5	15.4	29.7

MONTHLY MAXIMUM = 43.95

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF NOVEMBER , 2012

IN DEGREES C

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG
1	10.4	10.3	10.3	10.2	10.2	9.9	9.9	9.9	10.1	10.4	11.1	12.5	13.2	12.7	12.3	12.4	11.6	11.5	11.3	11.3	11.1	11.2	11.3	11.1	11.1
2	11.2	11.2	11.2	11.1	11.1	10.7	10.7	10.9	11.3	11.5	12.7	13.7	14.4	14.1	14.4	13.4	12.1	11.7	11.3	10.9	10.9	11.1	10.6	10.9	11.8
3	10.6	10.7	10.7	10.7	10.7	11.2	11.7	11.7	12.1	12.6	12.8	13.0	13.4	13.8	14.1	14.0	13.8	13.4	12.8	12.6	12.4	12.5	12.6	12.6	12.3
4	12.1	12.1	11.8	12.0	12.4	12.3	12.7	13.5	13.9	14.4	14.6	15.7	16.1	16.7	16.2	16.5	16.6	16.7	16.2	15.6	15.2	14.9	14.9	14.9	14.5
5	14.4	11.8	10.7	10.5	10.7	10.6	10.3	10.3	10.9	12.1	12.3	12.7	13.1	13.0	12.5	12.1	11.2	10.4	9.6	8.9	8.5	8.4	8.6	8.1	10.9
6	8.2	7.3	8.2	8.7	7.0	7.3	7.0	7.7	8.7	9.8	11.3	14.0	14.8	14.2	12.5	11.7	11.2	11.3	11.3	10.9	10.6	10.0	9.4	9.0	10.1
7	8.8	8.1	7.9	7.6	7.3	7.2	7.0	6.9	7.5	7.8	8.3	8.6	9.2	9.8	10.1	10.0	9.3	7.8	6.9	6.2	5.9	4.9	5.0	4.5	7.6
8	3.7	3.3	2.4	2.2	2.1	2.1	1.3	1.1	0.9	1.6	2.5	4.6	5.5	5.8	6.0	6.3	6.1	5.5	5.6	5.8	4.6	4.4	3.9	3.8	3.8
9	3.9	3.8	3.6	3.1	3.0	2.7	2.2	2.5	3.3	4.4	5.4	5.0	5.6	6.6	6.3	5.4	4.8	3.7	2.6	2.1	1.8	1.3	1.1	0.6	3.5
10	0.0	0.2	0.1	-0.1	0.1	-0.2	0.4	0.5	1.1	2.1	3.3	4.2	4.6	5.0	4.9	4.7	3.8	2.5	1.4	1.4	1.0	1.0	0.5	1.1	1.8
11	1.0	0.8	0.8	1.0	1.1	1.7	2.2	2.5	2.9	4.0	5.5	6.1	7.2	7.8	7.9	7.2	5.9	5.5	5.4	5.4	5.3	5.3	5.3	5.7	4.3
12	5.7	5.8	6.1	5.9	5.4	5.6	6.2	6.6	6.6	6.9	7.2	8.0	8.7	9.4	9.6	9.3	8.8	8.4	8.3	7.9	7.7	7.6	7.5	7.7	7.4
13	7.9	8.5	7.7	7.6	7.1	7.3	7.1	7.1	7.6	8.3	9.6	10.3	11.3	10.5	9.5	9.0	8.9	8.5	8.7	8.7	8.6	8.4	8.3	8.5	8.5
14	8.2	8.0	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.9	8.1	8.3	8.6	8.7	9.1	9.0	8.0	6.8	6.9	6.1	5.7	5.1	4.8	4.3	7.5
15	3.5	3.0	2.7	2.7	1.3	1.5	1.4	1.4	2.4	3.2	4.1	5.2	5.9	6.4	5.2	4.7	4.9	5.1	4.7	3.8	3.8	4.0	2.8	1.9	3.6
16	2.3	2.9	3.2	2.9	2.5	2.5	1.8	1.4	2.6	4.9	6.8	8.3	8.4	9.2	8.4	7.7	7.7	8.6	9.2	9.8	10.2	10.0	10.6	10.1	6.3
17	10.8	11.3	11.2	10.9	11.1	11.1	10.8	10.4	10.4	10.6	10.6	10.6	8.5	7.2	6.5	5.9	5.3	5.0	5.3	5.5	5.4	5.6	5.3	5.2	8.3
18	5.4	5.9	6.3	6.3	5.9	5.8	6.3	6.6	6.6	6.1	6.1	6.8	7.3	7.6	7.4	7.4	7.8	8.2	7.9	8.6	9.5	9.9	9.5	8.4	7.2
19	8.2	8.7	9.1	9.0	8.1	8.2	8.5	8.9	9.1	9.2	10.2	12.2	12.3	11.6	11.0	10.3	11.3	12.2	11.2	9.6	8.8	8.5	8.6	8.6	9.7
20	8.8	9.1	9.4	9.3	8.9	8.6	8.2	8.6	7.9	9.1	8.2	7.5	8.3	8.9	8.8	8.5	8.1	7.7	7.9	7.9	7.7	7.9	7.6	6.9	8.3
21	7.1	7.6	6.4	7.0	7.4	7.1	5.2	5.0	5.2	5.0	5.3	5.1	5.1	5.5	5.6	5.5	5.5	5.2	5.3	5.2	5.0	4.4	4.4	4.6	5.6
22	4.5	4.7	4.9	5.2	5.3	5.1	5.0	5.0	4.7	5.4	6.1	6.9	7.3	8.1	8.6	8.5	8.3	8.4	8.4	8.4	8.7	8.9	8.7	8.8	6.8
23	7.5	6.4	7.3	7.5	7.8	7.8	7.8	7.3	6.6	6.7	7.6	7.4	7.5	7.9	7.6	7.7	7.9	8.2	8.7	8.8	8.8	8.8	8.7	8.5	7.8
24	8.2	7.9	7.6	7.3	6.8	6.3	6.2	6.2	6.5	7.7	7.3	7.4	7.5	7.9	7.8	7.4	6.8	6.1	5.7	5.1	5.0	4.6	4.4	3.9	6.6
25	3.9	4.2	3.5	3.5	3.6	3.4	2.7	2.3	2.9	3.2	4.7	4.6	4.2	5.3	5.2	5.1	4.4	4.2	4.1	3.8	3.2	2.5	1.9	1.6	3.7
26	1.3	1.2	1.0	0.5	0.2	0.0	-0.2	-0.5	0.1	2.4	5.1	7.4	8.7	7.9	8.1	6.9	5.9	5.6	5.0	5.3	5.3	4.8	4.9	4.8	3.8
27	5.0	5.3	4.5	4.2	5.2	5.2	4.0	4.8	4.3	5.1	5.8	6.7	7.7	8.9	9.1	9.0	7.8	7.2	7.1	6.9	6.5	6.4	6.7	6.6	6.3
28	6.6	6.9	5.8	3.9	4.1	4.8	6.2	4.4	5.9	6.6	8.0	9.5	9.1	8.6	7.6	7.7	8.5	9.4	9.0	9.6	9.7	9.4	9.7	9.1	7.5
29	8.4	8.9	9.6	11.2	11.8	11.3	10.6	10.9	11.1	10.2	9.3	9.2	9.8	11.0	10.9	10.5	10.4	10.0	9.6	9.2	8.7	9.5	9.5	9.6	10.1
30	8.9	7.9	8.0	8.7	8.9	9.3	9.6	8.9	9.2	10.5	11.2	12.0	13.4	13.6	12.7	10.9	9.5	8.9	8.4	8.1	8.1	8.2	8.2	8.2	9.6

MONTHLY AVERAGE = 7.55

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF NOVEMBER , 2012

IN INCHES

	HOUR ENDING																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOT
1	0.02	0.05	0.06	0.10	0.03	0.05	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.48
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	0.01	0.09	0.04	0.00	0.00	0.00	0.02	0.01	0.00	0.17
3	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.07
4	0.00	0.01	0.00	0.01	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	0.01	0.01	0.00	0.02	0.01	0.10	0.06	0.24
5	0.03	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04
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	0.02	0.00	0.00	0.00	0.00	0.00	0.02
8	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.02	0.10	0.12	0.11	0.07	0.03	0.05	0.09	0.05	0.64
12	0.02	0.03	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.08	0.00	0.19
13	0.00	0.00	0.01	0.01	0.03	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.05	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.23
14	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.10	0.10	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	0.24
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
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	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04
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	0.04	0.05	0.15	0.09	0.04	0.02	0.00	0.00	0.01	0.01	0.01	0.00	0.42
18	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.01	0.02	0.06	0.01	0.00	0.01	0.00	0.01	0.04	0.01	0.00	0.03	0.01	0.01	0.01	0.01	0.04	0.33
19	0.00	0.01	0.00	0.06	0.20	0.17	0.20	0.11	0.10	0.11	0.04	0.01	0.07	0.28	0.07	0.02	0.00	0.00	0.19	0.03	0.00	0.00	0.00	0.01	1.68
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.02	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
21	0.00	0.00	0.02	0.00	0.00	0.03	0.13	0.00	0.00	0.04	0.01	0.10	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
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	0.02	0.03	0.00	0.01	0.01	0.02	0.04	0.06	0.06	0.15	0.12	0.09	0.08	0.06	0.15	0.19	0.06	0.06	0.01	0.02	0.01	0.01	0.00	0.00	1.26
24	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
29	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.07
30	0.10	0.04	0.00	0.03	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.03	0.08	0.14	0.07	0.11	0.06	0.07	0.08	0.90

MONTHLY TOTAL = 7.90

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF NOVEMBER , 2012

IN MPH/DIR

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

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF DECEMBER , 2012

IN MILES PER HOUR

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	10.1	8.0	5.2	12.4	17.4	17.4	13.3	13.3	10.1	8.7	12.2	17.3	20.6	22.5	18.6	16.0	10.6	9.0	10.8	7.8	8.8	13.4	11.2	12.6	12.8
2	16.0	13.6	10.8	7.1	9.0	10.6	14.7	13.2	14.7	13.6	11.6	16.9	13.0	15.3	14.2	9.7	10.4	12.4	14.3	14.9	13.5	15.4	15.7	11.6	13.0
3	8.2	8.1	11.8	11.3	9.0	5.6	11.3	12.1	10.2	10.8	10.9	8.8	7.3	4.7	3.8	7.4	6.6	7.8	11.2	10.2	10.6	4.4	6.2	11.9	8.8
4	7.2	14.5	17.3	16.7	13.9	16.1	17.8	16.4	15.0	15.1	12.1	12.1	12.2	11.8	10.5	8.3	8.5	7.3	12.8	15.2	14.4	11.6	10.1	12.1	12.9
5	16.5	14.7	13.1	9.2	11.4	13.3	8.8	8.1	9.5	11.2	9.8	11.1	11.0	11.2	8.4	7.7	4.9	7.7	6.4	6.8	6.9	7.8	6.3	6.1	9.5
6	7.8	7.7	8.5	6.4	7.2	9.4	12.7	11.7	11.6	11.6	13.1	13.2	13.4	12.0	10.5	9.5	9.6	8.4	7.3	5.7	7.7	8.5	7.7	8.4	9.6
7	10.9	9.8	10.8	11.3	11.6	11.4	11.8	14.5	18.2	19.0	14.7	13.3	14.9	11.0	8.8	3.3	2.5	2.1	2.3	3.0	4.1	4.1	5.9	5.0	9.4
8	4.6	5.4	5.7	5.3	5.1	5.1	5.3	3.9	3.1	1.7	2.7	1.5	4.3	3.7	4.1	4.3	3.6	2.6	1.7	2.1	2.2	1.4	2.1	3.1	3.5
9	4.0	4.8	4.4	4.1	4.3	4.1	3.6	4.6	7.3	5.3	4.5	8.5	5.4	1.8	2.3	1.3	3.4	1.6	2.2	1.6	1.2	5.6	1.9	2.0	3.7
10	2.5	1.0	1.9	5.7	2.1	2.5	2.1	1.1	1.1	1.6	0.5	1.8	1.4	1.4	2.4	2.1	3.0	2.9	4.1	5.0	5.0	5.8	6.0	3.8	2.8
11	5.4	4.1	4.7	2.3	3.6	7.3	8.5	11.4	5.2	4.3	3.9	7.1	5.8	6.5	5.8	7.2	6.3	5.8	4.9	4.5	4.2	8.0	8.2	7.3	5.9
12	7.0	7.8	9.1	7.5	6.2	6.7	7.2	8.2	3.9	4.6	4.7	2.6	1.9	3.5	3.0	3.4	2.5	1.5	2.9	3.5	1.6	2.7	1.6	1.3	4.4
13	0.6	0.9	1.5	1.7	2.1	2.8	3.2	5.8	5.2	3.7	5.2	5.2	6.0	5.1	6.2	5.1	5.4	5.4	4.0	3.0	3.2	6.0	6.1	5.9	4.1
14	4.5	4.4	4.3	4.1	2.3	1.3	1.3	2.1	1.8	2.0	2.1	2.1	4.6	3.2	3.8	7.8	3.3	1.3	1.9	3.5	4.5	5.3	5.8	5.8	3.5
15	6.7	7.0	6.1	7.1	7.5	12.1	12.7	10.2	12.4	15.5	17.8	17.9	17.8	15.9	13.7	12.5	10.5	10.5	8.2	8.3	11.7	10.0	10.9	10.6	11.4
16	9.9	9.8	12.2	12.6	10.6	8.8	6.8	5.9	7.0	7.6	5.8	6.0	4.9	10.3	14.3	17.7	17.5	21.9	23.1	20.5	15.3	13.2	11.6	12.8	11.9
17	14.3	13.6	20.4	24.4	28.4	29.7	25.9	27.0	24.2	22.5	19.7	21.4	23.0	19.2	21.8	22.1	12.6	10.2	12.3	8.1	7.5	10.1	11.9	10.8	18.4
18	11.6	8.1	8.6	6.1	7.5	9.8	8.8	8.2	8.6	8.1	8.0	8.1	7.7	9.4	10.6	10.4	11.1	7.2	5.6	5.6	5.2	4.7	6.5	8.5	8.1
19	8.9	9.8	10.2	11.8	15.4	13.7	14.4	15.8	18.4	19.1	18.4	17.6	17.3	16.5	12.2	5.6	8.0	11.6	9.6	14.1	12.7	11.8	13.0	11.9	13.2
20	14.0	14.4	12.1	9.4	7.9	7.8	8.0	4.5	4.5	4.8	12.7	10.0	13.1	10.7	8.1	6.1	5.4	6.6	4.0	2.1	2.4	2.5	3.2	3.6	7.4
21	3.0	4.1	2.0	3.4	5.7	4.4	10.5	10.9	10.9	15.0	10.5	8.0	5.8	3.6	1.5	2.5	3.5	2.5	2.6	2.1	3.3	5.2	6.8	4.6	5.5
22	4.0	4.5	4.8	5.5	6.1	9.8	11.0	6.0	2.8	8.1	7.0	3.6	5.3	8.4	14.3	16.1	13.7	9.3	12.1	6.7	7.4	5.2	5.0	5.6	7.6
23	3.8	6.2	5.5	7.5	7.4	6.5	3.7	5.4	9.4	4.4	2.3	9.4	5.4	2.3	3.8	6.5	3.8	1.9	4.5	5.3	6.7	7.1	4.0	4.2	5.3
24	4.0	4.3	6.2	5.4	5.2	4.7	3.7	3.6	3.1	3.6	3.9	4.7	4.1	5.4	5.9	6.4	6.1	2.9	3.7	2.0	2.2	1.7	3.6	4.0	4.2
25	3.2	5.5	4.8	6.5	7.5	11.6	13.1	13.1	18.2	20.3	20.3	20.5	22.9	20.2	20.7	18.7	13.1	13.1	17.1	17.9	17.7	15.6	14.9	13.4	14.6
26	6.5	3.8	4.6	7.0	5.4	9.1	12.9	14.3	11.6	11.4	10.4	9.1	6.8	6.7	7.5	8.2	8.5	8.8	8.5	9.6	11.1	11.4	12.1	11.2	9.0
27	10.9	7.9	5.2	4.5	5.5	4.9	4.6	3.5	4.3	5.9	5.9	8.6	7.2	8.0	5.4	3.6	6.3	4.1	4.1	4.4	4.0	4.4	3.5	4.6	5.5
28	7.1	6.2	3.0	2.8	2.4	1.3	2.5	1.9	2.9	1.5	1.3	1.7	3.8	5.9	5.0	7.4	7.3	7.7	5.1	5.6	5.9	8.1	8.0	6.5	4.6
29	5.9	5.1	6.2	6.3	6.6	5.5	4.4	2.2	2.7	2.1	3.6	5.7	1.5	2.0	1.7	0.4	0.2	1.8	0.6	0.8	1.3	4.4	5.8	4.9	3.4
30	3.3	3.2	2.9	3.4	3.0	2.8	2.5	2.5	2.4	2.2	1.6	0.8	2.4	2.4	2.6	3.5	3.5	3.3	3.6	3.6	4.4	3.6	2.5	2.0	2.8
31	4.1	4.8	4.0	3.5	2.7	2.2	0.4	0.3	1.5	1.9	1.1	1.0	3.2	3.1	2.6	2.2	3.2	4.3	5.9	6.7	4.4	3.5	2.5	2.6	3.0

MONTHLY AVERAGE = 7.73

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF DECEMBER , 2012

IN DEGREES

(MEASURED CLOCKWISE FROM NORTH)
HOUR ENDING

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	134.	150.	170.	180.	196.	197.	190.	177.	167.	142.	164.	182.	192.	193.	188.	187.	184.	173.	177.	131.	159.	120.	107.	122.	166.
2	128.	131.	122.	160.	134.	181.	189.	186.	190.	186.	177.	201.	171.	169.	170.	159.	158.	162.	183.	188.	186.	202.	194.	183.	171.
3	156.	144.	186.	166.	177.	190.	216.	179.	160.	157.	149.	131.	123.	115.	107.	131.	124.	141.	124.	130.	126.	109.	137.	148.	147.
4	129.	125.	126.	129.	142.	177.	187.	192.	205.	213.	199.	180.	190.	192.	200.	156.	170.	145.	152.	222.	195.	177.	188.	184.	174.
5	209.	194.	192.	184.	188.	194.	157.	142.	146.	158.	178.	196.	195.	194.	184.	178.	147.	167.	146.	141.	147.	155.	164.	179.	172.
6	180.	171.	178.	152.	149.	177.	188.	187.	190.	189.	190.	196.	197.	189.	194.	196.	206.	201.	219.	198.	186.	183.	184.	175.	186.
7	183.	169.	195.	200.	192.	194.	194.	197.	199.	208.	220.	220.	240.	265.	314.	249.	91.	173.	106.	115.	126.	119.	124.	128.	184.
8	130.	129.	134.	130.	132.	153.	158.	137.	153.	106.	171.	222.	20.	37.	36.	24.	37.	38.	63.	63.	60.	172.	130.	146.	108.
9	126.	137.	141.	126.	160.	135.	126.	133.	120.	129.	152.	142.	146.	124.	140.	133.	28.	82.	36.	93.	4.	17.	42.	253.	114.
10	12.	34.	18.	31.	46.	8.	307.	42.	227.	237.	48.	320.	39.	45.	115.	174.	142.	108.	120.	141.	137.	168.	178.	176.	120.
11	162.	201.	211.	195.	142.	155.	156.	149.	148.	150.	156.	153.	151.	159.	155.	139.	126.	129.	139.	200.	177.	183.	187.	187.	163.
12	184.	190.	195.	189.	172.	181.	204.	199.	113.	116.	123.	98.	114.	115.	97.	103.	90.	31.	28.	35.	78.	123.	286.	10.	128.
13	56.	139.	152.	132.	128.	160.	164.	132.	150.	183.	160.	156.	154.	142.	146.	134.	129.	141.	127.	174.	121.	157.	142.	139.	142.
14	125.	137.	141.	111.	57.	67.	31.	88.	160.	140.	166.	217.	307.	10.	29.	46.	219.	130.	79.	132.	154.	160.	142.	142.	125.
15	142.	136.	142.	138.	148.	126.	125.	148.	149.	126.	122.	123.	127.	125.	132.	137.	127.	139.	143.	156.	182.	184.	191.	192.	144.
16	186.	172.	190.	173.	177.	158.	149.	139.	148.	162.	123.	120.	108.	124.	122.	123.	120.	121.	122.	123.	130.	137.	138.	136.	142.
17	152.	152.	185.	199.	203.	214.	214.	215.	214.	214.	209.	218.	212.	211.	216.	210.	197.	184.	182.	162.	144.	170.	191.	177.	194.
18	183.	157.	172.	140.	139.	158.	167.	155.	164.	174.	178.	156.	158.	196.	194.	195.	214.	201.	177.	162.	165.	153.	145.	145.	169.
19	141.	138.	135.	132.	124.	134.	129.	123.	126.	130.	135.	136.	134.	133.	143.	151.	152.	149.	140.	130.	132.	127.	120.	120.	134.
20	131.	132.	135.	151.	152.	163.	137.	124.	136.	140.	201.	171.	190.	177.	151.	154.	146.	140.	144.	111.	72.	108.	119.	110.	141.
21	37.	44.	152.	84.	116.	75.	127.	112.	120.	137.	136.	156.	166.	190.	10.	124.	96.	19.	20.	360.	12.	153.	124.	117.	112.
22	67.	32.	63.	102.	115.	126.	138.	145.	159.	157.	187.	139.	168.	171.	191.	186.	184.	187.	172.	171.	190.	168.	144.	149.	146.
23	153.	154.	137.	157.	145.	139.	159.	156.	136.	69.	121.	120.	100.	94.	292.	292.	337.	107.	173.	184.	135.	149.	110.	148.	157.
24	159.	168.	192.	185.	182.	180.	177.	166.	152.	113.	148.	171.	190.	200.	186.	185.	152.	117.	84.	79.	114.	65.	93.	40.	146.
25	30.	98.	140.	132.	122.	132.	134.	128.	124.	115.	121.	122.	122.	122.	123.	123.	118.	118.	124.	122.	124.	128.	130.	130.	120.
26	120.	119.	104.	144.	152.	137.	126.	126.	128.	127.	126.	139.	146.	139.	145.	132.	136.	151.	147.	147.	154.	164.	171.	182.	140.
27	184.	192.	177.	150.	114.	117.	112.	134.	150.	181.	165.	184.	177.	194.	175.	143.	179.	129.	117.	144.	135.	140.	126.	125.	152.
28	120.	97.	105.	105.	15.	8.	63.	125.	133.	141.	136.	33.	117.	139.	151.	129.	117.	131.	134.	144.	147.	145.	161.	164.	115.
29	162.	154.	155.	167.	123.	140.	159.	145.	133.	139.	139.	152.	198.	116.	125.	141.	98.	227.	0.	25.	352.	13.	16.	24.	129.
30	62.	341.	44.	126.	126.	77.	89.	120.	99.	108.	35.	62.	77.	33.	21.	25.	27.	23.	33.	27.	36.	36.	12.	102.	72.
31	132.	131.	160.	162.	138.	147.	127.	160.	184.	260.	135.	31.	32.	334.	41.	6.	359.	28.	37.	45.	35.	174.	346.	84.	137.

MONTHLY AVERAGE = 143.55

SIGMA THETA FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF DECEMBER , 2012

IN DEGREES

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG.
1	9.2	15.8	13.6	9.2	8.7	9.3	8.4	10.9	10.1	11.3	9.1	9.5	9.6	9.8	9.7	8.5	7.7	13.4	10.6	9.7	17.2	11.3	12.0	11.8	10.7
2	10.8	10.1	11.4	33.3	13.0	15.0	8.2	9.0	7.9	8.3	9.6	8.5	9.5	8.9	9.3	11.9	7.6	7.5	9.3	9.0	9.9	9.9	11.0	10.6	10.8
3	8.8	11.7	11.1	9.8	13.1	45.6	10.4	8.0	7.9	8.6	11.4	11.0	10.3	11.3	21.9	14.6	13.8	14.8	9.0	12.6	10.6	22.9	17.0	13.1	13.7
4	10.6	11.4	9.7	9.4	8.6	8.9	8.0	8.8	9.6	9.7	10.4	10.5	10.5	9.7	11.0	12.1	19.3	13.1	8.9	20.0	9.8	10.8	9.7	7.6	10.8
5	10.1	9.1	9.4	9.5	11.4	7.2	10.8	10.5	8.4	10.2	10.4	11.2	9.2	9.3	9.0	8.9	18.3	13.1	7.9	8.3	10.8	6.9	8.5	9.1	9.9
6	8.1	8.6	9.2	8.3	9.1	10.4	8.2	8.7	8.0	8.6	8.5	8.4	10.4	9.2	10.7	13.4	12.2	9.5	10.4	7.3	7.5	7.9	10.7	9.6	9.3
7	7.0	11.5	8.5	7.9	9.5	11.0	11.0	9.8	9.2	10.3	9.2	9.2	9.5	39.1	18.9	39.5	25.4	25.9	21.4	11.5	11.0	23.5	14.7	11.6	15.3
8	10.1	6.6	8.2	9.2	8.2	11.0	16.1	27.2	31.7	15.0	23.9	22.7	32.6	15.8	8.9	8.4	8.6	7.2	12.6	10.9	12.5	15.3	8.7	9.8	14.2
9	10.3	6.2	14.2	13.3	11.0	7.3	9.1	11.4	11.4	14.6	16.7	9.5	15.1	52.6	17.6	21.5	13.0	14.5	11.4	16.7	18.9	10.4	12.0	34.5	15.6
10	11.0	27.8	19.5	9.9	16.2	18.0	18.1	14.9	4.8	15.9	9.7	18.6	17.7	12.8	18.4	20.0	14.4	10.7	7.2	7.4	8.6	9.1	8.0	16.5	14.0
11	14.9	12.6	13.6	15.4	20.4	10.6	12.3	8.3	11.9	14.2	24.4	12.6	11.5	16.4	16.2	11.4	13.8	10.8	13.5	11.9	11.9	8.0	7.3	6.5	12.9
12	8.5	7.8	8.4	8.4	10.2	7.6	9.9	10.9	15.8	16.3	10.1	13.0	13.4	11.4	9.6	9.8	15.2	16.0	15.5	10.9	25.6	9.9	26.1	30.0	13.4
13	6.7	13.1	17.5	8.3	7.7	32.0	20.9	6.8	11.3	15.1	11.4	13.2	10.7	10.5	9.4	7.7	9.0	8.9	12.8	22.1	20.0	9.9	8.2	7.5	12.5
14	9.2	13.6	9.5	10.6	17.6	10.5	7.2	10.4	14.2	18.1	12.5	19.0	17.2	23.9	18.3	7.9	29.9	26.9	10.0	20.8	16.1	11.1	5.8	9.3	14.6
15	9.4	10.2	12.2	11.8	11.7	9.7	9.6	19.4	14.8	10.2	11.1	10.9	11.5	12.7	12.6	20.9	10.5	10.3	10.2	9.2	11.0	15.7	12.1	13.8	12.2
16	8.3	13.2	8.9	9.8	9.7	10.0	10.0	8.8	11.8	11.4	10.6	10.5	13.0	9.8	10.7	10.1	10.4	10.2	10.6	10.8	10.2	10.7	9.7	10.9	10.4
17	10.9	9.9	9.2	9.0	9.8	9.8	9.5	9.7	10.0	9.8	9.9	9.8	9.5	10.5	10.2	8.1	14.2	13.4	9.9	15.1	12.6	13.2	9.4	12.9	10.7
18	9.1	8.8	11.8	9.6	12.2	9.6	12.0	10.2	7.4	10.3	9.5	10.9	10.6	11.3	10.2	8.7	9.9	8.5	11.2	11.2	8.4	10.4	6.9	7.4	9.8
19	8.8	8.3	8.7	13.0	10.2	10.5	9.8	11.2	10.7	9.5	9.5	8.7	9.3	9.6	15.0	20.8	23.9	10.9	11.9	9.2	9.0	10.9	11.4	11.8	11.3
20	11.2	10.1	10.2	11.4	13.9	12.5	12.5	28.8	26.1	19.9	11.9	11.6	8.4	11.3	9.6	10.9	13.2	9.1	14.9	25.9	24.6	57.1	17.4	10.4	16.4
21	12.0	32.7	23.0	30.0	16.9	20.3	13.7	13.3	11.8	12.0	12.4	12.4	13.1	21.9	36.4	44.6	14.0	13.4	22.2	23.4	26.8	20.8	9.6	12.9	19.6
22	16.9	8.9	15.1	22.6	10.5	13.6	11.9	13.1	17.6	12.2	18.5	20.5	25.6	18.7	8.4	9.3	10.9	9.0	10.2	8.9	12.6	16.9	16.4	15.4	14.3
23	29.8	14.2	11.6	14.2	11.4	23.7	26.7	19.2	17.5	15.8	22.8	13.3	17.2	33.4	20.6	5.9	21.6	23.5	17.1	11.1	13.7	9.4	11.8	15.7	17.6
24	14.2	10.4	7.5	7.3	7.9	8.6	13.1	14.8	19.7	11.9	17.5	13.6	12.7	10.9	10.4	11.6	10.7	16.7	9.3	16.0	16.4	19.4	12.1	11.1	12.7
25	14.6	14.1	13.0	13.0	11.8	9.5	11.4	13.3	13.4	13.3	12.7	12.3	10.8	11.0	10.2	10.4	11.9	13.0	10.9	11.0	11.2	11.6	11.0	12.0	12.0
26	22.3	31.6	20.8	14.1	12.3	10.4	11.5	10.3	10.4	10.6	11.4	14.5	14.7	16.8	15.0	8.2	8.4	11.3	8.0	7.8	6.9	8.4	8.5	8.7	12.6
27	9.0	10.5	18.8	14.6	9.0	8.5	7.6	15.4	9.4	9.1	10.7	7.9	9.0	8.4	13.4	15.1	10.7	7.8	12.7	11.3	11.9	6.1	6.2	9.3	10.5
28	14.7	8.6	12.2	14.0	6.3	4.9	12.6	13.6	7.8	12.7	31.1	35.6	21.6	12.1	12.2	10.8	9.9	12.6	12.8	10.1	8.3	10.1	9.9	11.5	13.2
29	12.0	13.7	11.1	16.5	9.3	8.6	8.9	8.3	11.4	10.1	9.1	9.1	16.0	12.1	13.3	7.1	2.7	15.6	6.2	6.0	11.6	11.1	13.2	18.1	10.9
30	28.6	12.1	10.4	14.3	12.3	11.9	11.1	35.8	14.8	21.7	13.3	21.7	18.4	6.4	7.9	7.5	6.6	6.7	7.3	8.6	7.5	9.1	19.7	20.5	13.9
31	23.6	15.1	15.7	10.4	7.6	12.6	8.9	3.6	13.0	44.2	15.2	11.0	25.0	30.9	12.6	33.6	12.9	10.9	14.6	12.6	12.8	25.4	16.7	15.7	16.9

MONTHLY AVERAGE = 12.98

WIND GUST FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF DECEMBER , 2012

IN MILES PER HOUR

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MAX
1	18.2	11.9	8.1	25.2	28.9	29.1	19.9	20.1	17.5	15.2	23.8	25.8	31.4	33.0	30.3	24.2	20.5	15.9	21.3	11.7	26.7	21.7	18.1	19.3	33.0
2	23.6	22.9	17.5	11.7	13.1	18.8	23.3	19.0	20.9	17.9	16.6	28.9	18.5	21.7	24.0	16.5	14.9	18.6	21.4	26.3	20.7	22.1	29.8	24.9	29.8
3	12.1	15.1	21.5	16.3	17.2	15.6	22.1	17.6	14.5	16.4	17.1	12.9	10.5	9.0	6.4	11.7	11.5	12.0	17.0	16.0	16.7	11.1	15.0	21.6	22.1
4	14.0	26.3	26.2	25.2	20.8	26.6	26.8	26.2	25.6	24.0	18.2	21.2	19.0	18.2	15.4	14.2	17.8	12.2	17.7	30.1	24.2	21.7	15.5	19.0	30.1
5	33.5	21.2	20.7	14.9	23.2	19.4	15.1	13.5	15.2	16.2	16.3	18.5	16.4	16.9	12.7	12.7	16.4	19.3	10.1	10.3	10.8	11.7	9.8	10.6	33.5
6	12.5	12.4	14.1	9.0	11.2	16.0	18.3	17.8	16.9	21.4	18.7	18.7	25.4	18.8	21.7	22.1	16.1	15.0	11.8	8.1	11.7	13.6	11.5	12.6	25.4
7	14.9	15.8	18.8	17.8	18.5	17.9	18.2	26.8	28.2	28.5	21.4	19.1	24.9	22.2	21.5	9.7	7.0	5.1	4.9	5.2	6.9	7.6	8.2	8.8	28.5
8	8.8	8.0	8.9	8.2	8.0	8.1	8.6	7.4	7.1	4.3	5.7	5.0	9.5	6.3	6.6	6.3	6.4	4.4	2.8	3.4	3.3	3.4	4.1	5.3	9.5
9	5.5	6.6	7.7	7.6	6.6	6.7	5.5	7.9	12.7	10.3	10.6	11.8	10.6	5.0	4.2	3.3	5.9	5.2	3.4	3.0	6.7	11.9	3.8	3.6	12.7
10	4.3	3.3	3.9	9.8	5.4	4.6	3.8	2.7	3.9	3.3	2.5	4.1	3.1	3.0	4.2	5.5	4.8	4.6	6.7	7.2	8.5	10.8	9.9	8.6	10.8
11	10.3	6.4	7.0	7.2	11.9	10.9	13.4	17.2	10.9	6.8	8.7	13.1	8.9	14.1	12.4	12.6	10.7	9.6	7.4	8.2	7.3	10.8	12.1	10.3	17.2
12	10.3	12.5	13.9	11.9	10.9	10.8	13.4	17.1	7.4	7.3	8.4	5.1	4.4	5.6	5.6	4.8	4.2	3.3	4.9	5.9	3.6	4.4	4.1	2.7	17.1
13	2.1	1.6	4.1	3.0	3.4	5.2	7.2	9.0	9.0	6.4	7.6	7.2	8.8	8.7	9.5	7.9	7.9	8.8	6.7	5.6	7.7	9.8	8.8	8.1	9.8
14	7.6	6.9	6.6	6.4	4.0	3.3	2.8	3.7	3.5	4.3	4.3	4.3	7.2	5.7	7.8	11.7	6.3	2.4	3.2	7.0	7.7	7.2	8.3	9.6	11.7
15	9.8	11.0	8.7	12.7	11.5	17.8	18.0	17.3	19.0	23.1	28.6	27.3	29.1	27.9	22.3	20.6	16.5	16.9	13.1	14.0	18.6	16.3	17.3	15.4	29.1
16	14.4	17.8	18.6	22.5	16.3	14.6	11.7	8.9	13.4	14.3	8.9	10.1	9.2	16.5	22.2	25.4	27.1	32.6	35.6	32.5	29.8	22.1	18.9	21.0	35.6
17	23.2	25.4	35.9	41.5	41.1	45.8	43.7	40.2	36.8	36.2	29.7	34.0	37.8	30.6	38.3	33.1	26.7	18.3	20.1	14.0	13.9	15.8	19.9	18.5	45.8
18	18.8	11.9	16.1	12.2	11.0	15.0	13.2	12.9	12.6	13.9	14.6	12.4	12.3	14.1	16.4	17.1	22.2	11.5	9.6	9.7	7.7	8.1	9.9	12.6	22.2
19	12.9	14.6	15.3	19.1	25.4	21.6	21.4	28.0	26.4	26.1	25.8	24.6	24.7	24.2	20.8	13.1	13.4	18.3	13.9	21.2	18.8	19.5	23.5	19.7	28.0
20	20.2	21.5	17.2	19.9	12.2	13.6	15.4	8.5	8.8	11.7	24.4	16.2	21.4	19.7	15.3	9.2	10.1	9.7	6.1	5.6	4.1	6.5	6.0	6.2	24.4
21	7.4	7.9	5.4	10.6	12.0	10.9	23.2	23.1	24.7	25.2	17.0	14.8	9.2	6.8	4.3	6.1	5.8	6.1	4.1	4.1	6.1	8.6	11.0	8.7	25.2
22	7.0	7.6	9.7	10.4	12.5	16.2	22.6	13.9	6.3	16.4	16.0	7.6	10.8	19.0	22.2	25.8	23.3	17.1	19.9	10.4	12.8	10.6	11.6	11.0	25.8
23	10.0	9.1	8.5	10.9	11.7	10.8	7.7	12.0	19.0	9.3	4.5	16.5	16.1	6.3	7.1	8.9	8.1	6.1	7.8	8.9	9.5	11.5	6.9	8.4	19.0
24	7.5	8.6	8.8	7.4	8.1	6.8	7.2	6.6	6.2	6.0	6.7	8.1	7.5	9.0	8.8	11.2	9.0	6.5	6.1	3.5	5.5	4.0	5.6	5.7	11.2
25	5.6	8.7	8.4	11.4	14.4	19.2	19.8	24.0	34.1	33.8	36.1	31.5	32.5	29.4	28.4	27.8	23.8	22.7	23.5	27.8	27.7	23.8	24.4	21.9	36.1
26	19.4	10.0	11.4	13.3	9.3	16.6	20.7	21.0	18.6	20.2	16.7	15.6	10.5	12.2	13.4	11.8	12.1	13.0	11.5	14.2	16.0	17.6	17.7	17.1	21.0
27	17.2	13.1	14.1	9.8	7.6	7.3	7.0	6.3	7.0	9.2	10.1	11.7	10.1	12.9	10.3	9.3	11.0	7.1	7.7	6.3	6.3	6.2	5.0	7.4	17.2
28	11.2	10.1	6.6	4.3	5.1	4.6	4.8	3.6	4.5	4.0	3.2	3.7	7.1	10.3	9.2	13.1	10.4	13.6	8.5	9.5	8.6	11.7	12.3	11.8	13.6
29	9.6	10.0	9.6	10.8	11.4	9.1	6.2	5.1	4.6	3.7	7.6	8.5	3.9	5.0	4.6	1.9	2.2	3.6	2.0	2.7	2.8	9.5	9.2	10.6	11.4
30	8.0	5.7	5.7	5.6	4.8	4.7	5.0	4.9	4.7	4.6	3.6	2.7	4.9	3.3	4.7	5.5	5.1	4.9	5.1	5.9	6.0	7.2	4.4	3.7	8.0
31	6.9	9.0	9.7	4.7	3.8	3.4	2.8	1.8	4.8	3.6	2.7	4.2	8.9	6.8	8.4	6.5	5.1	13.7	11.5	12.2	8.4	6.4	6.8	4.1	13.7

MONTHLY MAXIMUM = 45.83

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF DECEMBER , 2012

IN DEGREES C

	HOUR ENDING																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVG
1	8.6	9.0	8.4	8.6	8.3	7.8	7.5	7.3	7.2	7.9	8.9	10.4	11.3	11.4	11.0	10.8	10.4	10.0	9.9	9.8	9.3	7.7	8.0	8.3	9.1
2	8.3	7.4	7.0	6.7	6.5	6.8	6.5	6.4	6.5	6.7	6.8	6.1	5.8	6.1	5.9	5.5	5.6	6.3	7.1	7.3	7.0	7.0	6.7	6.3	6.6
3	6.5	6.7	7.1	7.2	7.1	6.4	6.0	6.1	6.2	6.2	6.5	6.8	7.0	7.4	7.5	7.5	7.7	7.9	8.2	8.4	8.5	8.2	8.6	9.1	7.3
4	8.5	7.7	7.3	7.7	9.5	11.4	11.5	10.7	10.3	9.8	9.6	9.6	9.9	9.6	8.7	8.2	8.3	8.1	8.4	7.3	6.6	6.5	6.5	6.4	8.7
5	5.7	5.3	5.1	4.4	3.9	3.7	3.2	3.2	3.9	5.1	6.4	6.7	6.8	7.0	6.9	6.5	6.0	4.4	4.2	4.6	5.0	5.1	5.0	5.3	5.1
6	5.3	5.0	4.9	4.3	4.6	5.1	5.4	5.5	5.2	5.3	5.0	4.8	4.9	4.9	5.1	5.1	5.3	5.3	5.2	5.1	5.2	5.3	5.3	5.1	5.1
7	5.2	5.5	5.2	5.1	5.3	5.4	5.3	5.5	5.8	6.0	6.2	6.3	6.3	5.3	3.4	3.0	2.9	2.6	2.1	2.3	2.5	2.3	2.4	2.3	4.4
8	2.4	2.3	2.4	2.4	2.6	2.7	2.7	2.8	3.0	3.3	4.1	4.5	4.0	4.3	4.0	3.5	2.9	2.6	2.7	2.4	2.3	2.1	2.3	2.2	2.9
9	2.2	2.7	2.8	2.6	2.5	2.6	2.6	3.0	2.9	3.4	3.5	3.5	3.9	4.3	4.3	4.7	4.5	4.5	4.9	5.4	5.3	4.7	5.1	4.9	3.8
10	5.1	5.0	4.8	4.8	4.7	4.7	4.9	4.7	4.8	5.0	5.3	5.7	5.4	5.5	5.6	5.8	5.6	5.4	5.3	5.4	5.4	5.5	5.3	5.2	5.2
11	4.9	4.5	3.9	3.8	3.6	3.9	3.9	4.1	4.4	4.9	5.3	5.5	6.0	6.1	5.6	5.3	4.9	4.9	5.3	5.2	5.0	5.1	4.9	4.9	4.8
12	5.1	4.9	4.8	4.6	4.5	4.3	4.1	3.4	3.0	3.0	3.2	3.2	3.5	3.8	3.8	3.9	3.7	3.6	3.4	3.4	3.4	2.9	2.9	3.1	3.7
13	3.3	3.1	3.1	3.0	3.1	3.0	2.9	2.9	3.0	3.1	4.1	4.7	5.1	5.2	5.3	4.9	4.6	4.2	4.2	4.3	3.5	3.4	3.0	2.8	3.7
14	2.8	2.8	2.8	2.6	1.9	1.5	1.5	1.5	1.7	2.0	2.6	3.2	3.4	3.5	3.3	3.1	2.7	2.2	1.7	1.0	0.8	0.1	0.6	0.7	2.1
15	0.9	1.1	1.0	1.1	1.5	2.0	2.4	2.4	1.7	2.0	2.5	1.6	2.3	2.7	1.4	1.2	1.4	1.5	1.5	1.9	2.7	2.8	2.8	2.8	1.9
16	2.7	2.9	2.9	2.3	2.4	2.5	2.4	2.6	2.8	2.2	1.7	1.9	2.4	3.0	3.2	3.1	3.1	4.0	4.4	4.1	4.5	5.0	5.4	5.5	3.2
17	5.4	6.4	6.8	6.2	5.5	5.7	5.7	5.6	4.9	4.5	4.2	4.3	4.3	3.9	4.4	3.1	1.9	1.5	1.3	0.9	0.9	1.1	1.0	0.8	3.8
18	0.6	0.4	0.4	-0.1	-0.1	0.0	0.1	0.1	-0.1	0.1	0.4	1.1	1.7	2.0	2.3	2.2	1.8	1.5	1.3	1.1	1.1	1.1	1.1	1.5	0.9
19	1.5	1.5	1.9	1.8	0.2	1.2	2.3	2.0	2.0	2.6	2.9	3.3	3.8	4.7	5.1	4.8	3.8	3.6	3.4	3.5	3.7	3.6	3.5	4.3	3.0
20	5.2	5.8	6.2	6.5	6.0	6.2	5.3	4.6	4.2	4.1	4.2	4.2	4.0	3.8	3.8	4.3	3.7	3.4	3.5	3.6	3.1	2.0	1.7	1.9	4.2
21	1.1	-0.3	0.9	1.1	2.3	1.7	3.3	4.5	4.7	5.4	5.7	6.1	6.8	7.8	8.2	7.0	5.7	5.0	4.2	4.3	3.5	4.4	4.9	4.0	4.3
22	4.1	2.9	3.5	4.7	5.5	6.5	7.2	6.6	6.5	6.5	5.6	5.5	7.2	7.6	7.8	7.4	6.8	6.2	5.7	5.3	5.3	5.3	4.9	5.1	5.8
23	4.7	4.4	4.5	4.4	4.8	5.1	4.6	4.8	4.8	4.9	6.3	7.3	7.4	7.4	6.3	5.3	5.0	4.4	3.4	2.5	1.4	0.7	0.4	1.2	4.4
24	1.9	2.2	2.6	2.7	2.7	2.8	2.8	2.8	2.9	3.2	3.6	3.7	4.0	4.3	4.4	4.1	3.9	3.5	3.3	3.2	2.5	2.3	2.2	2.3	3.1
25	1.9	3.2	3.5	4.2	4.9	5.2	5.4	5.4	4.8	2.6	2.8	3.0	2.5	2.9	3.3	3.4	4.1	4.3	3.9	4.0	4.0	4.3	4.2	4.3	3.8
26	4.2	4.3	4.1	3.8	2.9	2.1	2.5	3.2	3.5	3.5	4.2	4.9	4.6	5.1	4.5	4.2	4.2	4.2	4.1	4.0	4.0	4.2	4.3	4.4	4.0
27	4.2	4.1	4.1	3.9	3.6	3.4	3.4	3.6	3.7	3.9	4.1	4.2	4.5	4.6	5.1	5.0	4.5	3.9	4.0	4.1	3.9	4.0	4.0	3.9	4.1
28	3.9	3.9	4.2	3.9	3.2	3.2	2.5	2.8	3.2	4.4	5.5	6.1	7.0	7.4	7.2	6.4	5.7	5.3	5.1	4.7	4.2	4.1	3.8	3.5	4.6
29	3.2	3.0	3.1	2.8	2.7	2.8	2.8	2.6	2.5	2.6	2.7	2.9	3.0	3.1	2.9	2.8	2.7	2.5	2.3	2.4	2.4	2.4	2.7	2.4	2.7
30	2.0	1.3	1.1	0.6	-0.1	-0.2	0.0	-0.5	-0.3	0.8	0.1	2.6	3.3	2.0	2.5	1.9	1.4	1.3	0.6	-0.2	-0.4	-0.9	-1.7	-1.6	0.6
31	-1.3	-1.2	-0.6	-0.5	-0.2	-0.1	-0.3	0.0	0.1	-0.1	0.5	0.7	1.1	1.6	1.4	1.4	1.3	0.9	0.5	0.2	-0.5	-0.7	-0.8	-1.0	0.1

MONTHLY AVERAGE = 4.10

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF DECEMBER , 2012

IN INCHES

	HOUR ENDING																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOT
1	0.02	0.01	0.02	0.03	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.19
2	0.03	0.07	0.10	0.06	0.01	0.03	0.01	0.00	0.00	0.00	0.02	0.05	0.01	0.00	0.04	0.08	0.03	0.01	0.01	0.02	0.05	0.08	0.08	0.01	0.80
3	0.03	0.00	0.08	0.00	0.07	0.15	0.09	0.00	0.02	0.05	0.00	0.00	0.02	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.59
4	0.07	0.17	0.05	0.01	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.07	0.00	0.00	0.07	0.03	0.00	0.01	0.00	0.52
5	0.02	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.06
6	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
7	0.00	0.00	0.05	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.24
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.02	0.00	0.01	0.00	0.01	0.02	0.05	0.02	0.01	0.02	0.00	0.02	0.02	0.00	0.22
10	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.00	0.00	0.02	0.08	0.06	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.26
12	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.07	0.07	0.03	0.01	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
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	0.01	0.03	0.04	0.03	0.14
14	0.04	0.04	0.03	0.09	0.08	0.03	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
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	0.01	0.02	0.09	0.03	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.20
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.02	0.02	0.02	0.02	0.03	0.10	0.21	0.02	0.07	0.12	0.06	0.09	0.04	0.02	0.90
17	0.06	0.00	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
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	0.06	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
19	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.06	0.11	0.05	0.05	0.07	0.08	0.01	0.62
20	0.00	0.01	0.00	0.00	0.00	0.01	0.06	0.09	0.16	0.14	0.08	0.05	0.04	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
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	0.02	0.02	0.04
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	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	0.03
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	0.02	0.07	0.07	0.03	0.01	0.02	0.03	0.25
24	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.02	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.13
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.10	0.06	0.02	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.28
26	0.00	0.00	0.00	0.00	0.03	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.05	0.02	0.04	0.04	0.02	0.04	0.04	0.37
27	0.03	0.02	0.02	0.02	0.04	0.07	0.05	0.01	0.01	0.02	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.33
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

MONTHLY TOTAL = 8.04

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLGICAL MONITORING SYSTEM FOR
THE MONTH OF DECEMBER , 2012

IN MPH/DIR

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

APPENDIX D

Area 5 Top Deck Report

CEDAR HILLS REGIONAL LANDFILL
AREA 5 TOP DECK
MONITORING REPORT

Fourth Quarter 2012

Department of Natural Resources and Parks
Solid Waste Division

February 2013
Printed on recycled paper

Contents

Tables and Figures

Appendices

AREA 5 TOP DECK MONITORING
QUARTERLY REPORT

FOURTH QUARTER 2012

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

I. LEACHATE MONITORING

Overview of the Top Deck Monitoring Program

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

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

TABLE 1
SITEWIDE LEACHATE PRODUCTION

Year	Leachate	Surface Area of Refuse Areas	Refuse In Place	Precipi-tation	Flow	Flow	Flow	Flow
	(MG/yr)	(acres)	(lb)	(in/yr)	(gal/Acre/yr)	(gal/Acre/in)	(gal/lb/yr)	(gal/lb/in)
1986	163.03	138.5	11,328,841,100	54.79	1,177,112	21,484	0.0144	0.00026
1987	139.53	138.5	12,927,926,300	39.6	1,007,422	25,440	0.0108	0.00027
1988	169.67	161.9	14,525,504,000	48.63	1,048,009	21,551	0.0117	0.00024
1989	176	161.9	16,203,204,000	44.12	1,087,110	24,640	0.0109	0.00025
1990	294.75	161.9	17,965,254,000	71.6	1,820,594	25,427	0.0164	0.00023
1991	224.27	221.4	19,778,412,000	45.85	1,012,967	22,093	0.0113	0.00025
1992	156.46	221.4	21,454,600,000	38.64	706,694	18,289	0.0073	0.00019
1993	150.83	221.4	23,051,348,000	35.01	681,264	19,459	0.0065	0.00019
1994	159.8	221.4	24,657,528,000	38.55	721,764	18,723	0.0065	0.00017
1995	201.11	221.4	26,294,654,000	48.4	908,376	18,768	0.0076	0.00016
1996	243.03	221.4	27,946,704,000	57.08	1,097,714	19,231	0.0087	0.00015
1997	239.23	221.4	29,665,380,000	57.24	1,080,511	18,877	0.0081	0.00014
1998	202.8	221.4	31,432,828,000	42.82	916,006	21,392	0.0065	0.00015
1999	219.15	283.42	33,273,828,000	45.9	773,229	16,848	0.0066	0.00014
2000	148.82	283.42	35,167,828,000	33.15	525,102	15,840	0.0042	0.00013
2001	174.08	283.42	37,041,828,000	47.28	614,194	12,991	0.0047	0.0001
2002	133.4	283.42	38,919,828,000	35.13	470,690	13,399	0.0034	0.0001
2003	181.6	283.42	40,877,828,000	46.39	640,761	13,812	0.0044	0.0001
2004	185.72	328.72	42,889,828,000	34.08	564,983	16,578	0.0043	0.00013
2005	175.31	328.72	44,867,538,000	40.75	533,313	13,087	0.0039	0.0001
2006	264.95	328.72	46,820,938,000	52.94	806,009	15,225	0.0057	0.00011
2007	161.48	328.72	47,129,756,000	38.68	491,239	16,143	0.0034	0.000112
2008	126.02	328.72	48,990,990,000	42.32	383,366	9,059	0.0026	0.00006
2009	172.16	328.72	49,414,219,997	42.42	523,741	12,347	0.0035	0.00008
2010	199.4	335.72	51,076,043,997	49.25	593,959	12,060	0.0039	0.00008
2011	180.2	353.12*	52,701,411,694	51.05	510,308	9,996	0.0034	0.00007
2012	80.49	353.12*	54,315,239,773	58.16	572,972	9,852	0.0037	0.00006

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

II. SURFACE MONITORING

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

Landfill Gas Inspections
Serpentine walks are conducted across the Area 5 top deck and its side slopes on a quarterly basis (see Appendix B: *Plot of GPS Generated Track Lines*). This report contains the second quarter's Serpentine Surface Monitoring Data that was conducted from December 18th to December 31st.

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

Also, throughout the fourth quarter the Engineering Services Section (ESS) staff performed monthly Landfill Facility Site Inspections. The only landfill related issue that was noted was the need for clearing of excess sediment from asphalt-lined, stormwater ditches. The ESS Inspections are included in Appendix A.

Three Health Department Inspections were performed during the fourth quarter, on October 23rd, November 30th and December 18th. Neither the October or December reports indicated any issues with Area 5 or 6. The November report identified areas of standing water that were further investigated, but no violations or issues were recognized. All Health Department Inspection Reports are provided in Appendix A.

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

Settlement Monitoring
Settlement of Area 5 is evaluated both through visual inspections and through topographic surveys at control points on the top deck. A site map showing the settlement monitoring points is included as Figure 1. Visual inspections are completed by both operations and engineering staff. The most recent settlement levels were measured on Area 5 on July 12, 2012. The survey data is given in Table 2, and the settlement at each point is given in Table 3, which demonstrates that the refuse settlement (feet/month) continues to slowly decrease with time, as expected. No erosion has been observed.

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

TABLE 2
AREA 5 SURFACE SURVEY DATA

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

TABLE 3						
AREA 5 SETTLEMENT (FEET)						
Settlement Point	**DATE**					
	6/06 - 7/07	**7/07 - 7/08**	**7/08 - 7/09**	**7/09 - 8/10**	**8/10 - 8/11**	**8/11 - 7/12**
A5SM-1	3.17	2.08	1.49	1.17	1.14	0.77
A5SM-2	4.85	3.43	2.41	2.51	1.94	1.51
A5SM-3	N/A	1.37	1.26	1.27	1.12	0.97
PMX2007-4	N/A	2.43	2.14	1.7	1.1	0.93
Average Settlement	4.01	2.33	1.83	1.66	1.33	1.05
Average Settlement (Feet/Month)	0.31	0.19	0.15	0.13	0.11	0.1

III. STORMWATER MONITORING

Collection of Stormwater Samples

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

Stormwater Sample Evaluation

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

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

TABLE 4		
Water Quality Criteria/Benchmarks For Applicable Parameters		
Parameter	Numerical Criterion	Source
pH	6.5 to 8.5	WAC 173-201A-200
	5 to 9	Industrial Stormwater General Permit
Turbidity	Less than 10 NTU above background if background turbidity is 50 NTU or less, or a 10% increase in turbidity when the background is > 50 NTU.	WAC 173-201A-200
	25 NTU	Industrial Stormwater General Permit
Temperature	20°C	WAC 173-201A-200
Iron	1.0 mg/L	EPA 440/5-86-001 Quality Criteria for Water 1986

RESULTS

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

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

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

The top deck pH ranged from 7.23 to 7.53 standard pH units, which is within the benchmark range of 5.0 to 9.0. The pH at surface water station S-1 ranged from a low of 6.73 in November to a high of 7.47 in December. The pH of the three leachate aeration pond inflow (LAPI) samples averaged 7.7 standard pH units.

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

Top deck samples ranged from 35 to 215 µmhos/cm. The average conductance at station SW-S1 was 57 µmhos/cm, and the leachate pond inflow averaged 4,467 µmhos/cm. There are no benchmarks or criteria for specific conductance.

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

Top deck sample temperatures ranged from 8.2 to 14ºC, all readings being below the WAC-173 criterion. Station SW-S1 averaged 8.3 ºC for the quarter. The leachate temperature is not comparable due to the fact that the sample is a composite, and therefore kept on ice until it is collected.

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

The top deck turbidity ranged from 2.06 to 35.4 NTU during the 4th quarter. The turbidity at Station SW-S1 ranged between 0.97 NTU in November to 1.3 NTU in December. Leachate turbidity is not measured.

The Industrial Stormwater General Permit has a benchmark of 25 NTU; which, was exceeded on two out of four top deck samples. These were SW-A5TD4 on October 25th, 2012 with a value of 31.1 NTU, and SW-A5TD6 also on October 25th, 2012 with a value of 35.4 NTU.

The water quality criteria established by WAC 173 states that turbidity must be less than 10 NTU above background, if the background turbidity is less than 50 NTU. The background samples taken at stations SW-W1 and SW-W2 in the second quarter averaged 15.2 NTU in October, 8.46 NTU in November and 1.11 NTU in December. Therefore, both of the above samples that exceeded the Industrial Stormwater General Permit also exceeded WAC 173.

On the field sheet for sample STD4121025- it was commented by the sampler that the increased turbidity was due to rain flowing through the dirt trench near the sampling location.

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

Top deck samples ranged from 39.4 to 51.1 mg/L, whereas at station SW-S1, COD was detected at levels <5 mg/L. The average COD level for the leachate aeration pond inflow was 4,050 mg/L. There are no benchmarks or criteria for COD.

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

Top deck samples ranged from 11.6 to 26.7 mg/L. Station SW-S1 TOC results averaged 4.58 mg/L and the TOC levels for the leachate aeration pond inflow averaged 1,470 mg/L. There are no benchmarks or criteria for TOC.

Alkalinity - Alkalinity is the measure of the capacity of water to neutralize acids, or its buffer capacity. The alkalinity of natural waters is controlled primarily by the equilibria of the carbonate system. It is produced by dissolved CO_2 acting upon alkaline materials in the soil to produce bicarbonate (HCO_3^-) and carbonate (CO_3^{2-}). Source CO_2 can be atmospheric, from respiration off water borne organisms or decay of organic matter, including a potential contribution from landfill gas (LFG).

Top deck samples ranged from 9.41 to 38.4 mg/L as $CaCO_3$. Station SW-S1 values averaged 12.9 mg/L as $CaCO_3$, and the average alkalinity level for the leachate aeration pond inflow was 3,933 mg/L as $CaCO_3$ for the quarter. There are no benchmarks or criteria for alkalinity.

Chloride - Chloride is a conservative anion; that is, processes of adsorption, ion exchange, or biological uptake do generally not retard transport of chloride. Chloride is the best indicator for determining impacts from

leachate. Chloride is one of the major anions to be found in water and sewage. Potable water should not exceed 250 mg/L of chloride.

Top deck samples ranged from 0.41 mg/L to 9.48 mg/L. Station SW-S1 had an average chloride concentration of 3.44 mg/L. The average chloride level for LAPI was 918.3 mg/L.

Sulfate - Sulfate (SO_4^{2-}) can be found in almost all natural water and is one of the major dissolved components of rain. It is formed by the oxidation of sulfite ores and is a component in industrial and domestic waste waters. There are few elements that will form insoluble salts with sulfate, thus; once in solution, it remains so unless it is anaerobically reduced to sulfide.

Top deck samples ranged in concentrations of 2.68 to 52.4 mg/L. Station SW-S1 had a sulfate concentration average of 3.57 mg/L. Sulfate concentrations at LAPI averaged 35.7 mg/L. There are no benchmarks or criteria for sulfate.

Iron - Iron is the fourth most abundant element in the earth's crust and the most abundant heavy metal. It is present in the environment mainly as Fe(II) or Fe(III). Iron is more soluble in the reduced state than it is in the oxidized state, where it often occurs as an iron oxide mineral (Fe_2O_3). At a pH above 7, iron exists mostly as insoluble salts which settle out or are adsorbed onto surfaces. The concentration of iron in well-aerated waters is seldom high. Under reducing conditions, which are most commonly caused by oxidation reactions involving organic matter, water will have higher concentrations of dissolved iron.

Top deck samples were analyzed for dissolved and total iron. Results for dissolved iron ranged from 0.036 to 0.0763 mg/L. Total iron ranged from 0.101 to 7.16 mg/L.

The average concentration of total iron at station SW-S1 was 0.033 mg/L, while the concentrations at the leachate aeration pond inflow averaged 17.1 mg/L.

The EPA surface water criterion for total iron is 1.0 mg/L; therefore, two out of the four top deck samples exceeded the surface water criterion for total iron this quarter. These were SW-A5TD4 on October 25th, 2012 with a concentration of 7.16 mg/L and SW-A5TD6 also on October 25th, 2012 with a concentration of 1.79 mg/L.

TABLE 5

Area 5 Top Deck Stormwater Monitoring Results

Location	Date	Sample ID	pH	Specific Conductance	Temp	Turbidity	Chemical Oxygen Demand	Total Organic Carbon	Alkalinity	Chloride	Sulfate	Dissolved Iron	Total Iron
			Units	µmhos/cm	C	NTU	mg/L	mg/L	mg/L as CaCO3	mg/L	mg/L	mg/L	mg/L
SW-A5TP1	10/23/2012	STD1121023-	7.43	155	8.2	2.06	39.4	14.4	38.4	4.71	22	0.036 T	0.101
SW-A5TP2	10/30/2012	STD2121030-	7.23	35	14	4.21	45.2	11.6	9.41	0.41	2.68	0.0763	0.254
SW-A5TP4	10/25/2012	STD4121025-	7.32	175	8.6	31.1	51.1	26.7	24.3	9.48	40.8	0.0663	7.16
SW-A5TP6	10/25/2012	STD6121025-	7.53	215	9.5	35.4	40.9	15.6	36.7	8.14	52.4	0.0683	1.79
SW-S1	10/23/2012	SS1-121023Q	No Flow at Station										
SW-S1	11/13/2012	SS1-121113Q	6.73	62	9.4	0.97	<5 U	5.16	13.7	4.48	4.77	0.02 T	0.044 T
SW-S1	12/13/2012	SS1-121213M	7.47	52	7.2	1.3	< 5	3.99	12.1	2.39	2.37	0.013 T	0.022
SW-S1	12/13/2012	SS1-121213D	7.47	52	7.2	1.3	5.8 T	3.8	12.1	2.38	2.36	0.012 T	0.022

U = UNDETECTED\ANALYTE CONCENTRATION < MDL. T = ESTIMATED. LESS THAN RDL BUT GREATER THAN MDL.

TABLE 6

Leachate Pond Inflow Monitoring Results

Location	Date	Sample ID	pH	Specific Conductance	Temp	Chemical Oxygen Demand	Total Organic Carbon	Alkalinity	Chloride	Sulfate	Total Iron
			Units	µmhos/cm	C	mg/L	mg/L	mg/L as CaCO3	mg/L	mg/L	mg/L
LS-API	10/3/2012	LAPI121003M	8.28	8300	7.5	8830	3290	8720	2110	31.8	25.6 S
LS-API	11/14/2012	LAPI121114M	7.33	2200	7.7	1590	577	1470	282	45.1	12.8
LS-API	12/12/2012	LAPI121212M	7.38	2900	6.2	1730	544	1610	363	30.2	12.8

S = SAMPLING HANDLING ERRORS

NOTE: LEACHATE IS NOT ANALYZED FOR DISSOLVED IRON.

IV. CONCLUSION

During the fourth quarter of 2012, there were exceedances of the surface water quality criterion for both turbidity and total iron. Turbidity levels exceeded the standards of the Industrial Stormwater General Permit in two samples: an exceedance above the standard by 6.1 NTU at station #4 on October 25th and an exceedance of 10.4 NTU at station #6 on October 25th. These samples also exceeded the WAC 173 limits for turbidity. The total iron exceedances also occurred on October 25th at station #4 and station #6, exceeding the EPA surface water criterion by 6.16 and 0.79 mg/L, respectively.

Although the 4th quarter's samples had elevated turbidity and iron levels on two occasions, these two indicators are more directly tied to sediment mixing rather than waste contamination, which is more likely to be signified by elevated chloride. Chloride levels in the top deck samples remain comparable to those in samples taken from SW-S1, suggesting that there is not waste contamination.

It should be noted that both exceedances occurred on the same day and locations of sampling. Also, field sheet comments indicate that on this day there was excess sediment build-up in the surface water trench near the sampling locations, which is likely the cause of increased sediment and turbidity loads and therefore a larger iron concentration.

It is concluded that the cause of these exceedances is the excess sediment within the dirt trenches that is picked up and carried in heavy sheet flow to the drainage channels where the samples were collected. These channels would then transport this runoff to stormwater ponds or other on-site surface water treatment devices that would allow the soil to settle out of the water before the water leaves the site. This problem may be alleviated by clearing and maintaining surface water channels as called for in the 4th quarter ESS Monthly Inspection reports.

These exceedance results are similar to the 2nd quarter results (no top deck surface water samples were able to be collected and analyzed in the 3rd quarter, due to low flows), indicating no major changes in surface flow quality due to contamination from the underlying waste and suggesting that the Area 5 top deck interim cover is functioning as designed.

FIGURES

LEGEND:

○ ACTIVE MONITORING STATION

Figure 1. Area 5 Settlement Monitoring Locations

DATE	REVISION	BY

KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS
SOLID WASTE DIVISION

CEDAR HILLS REGIONAL LANDFILL
SETTLEMENT MONITORING LOCATIONS

APPROVED VOO DATE JUNE 2010
RECOMMENDED – DATE –
DESIGNED XXX.XXXX DRAWN TDP
PROJECT NO. SURVEY NO. SHEET 1 OF 1

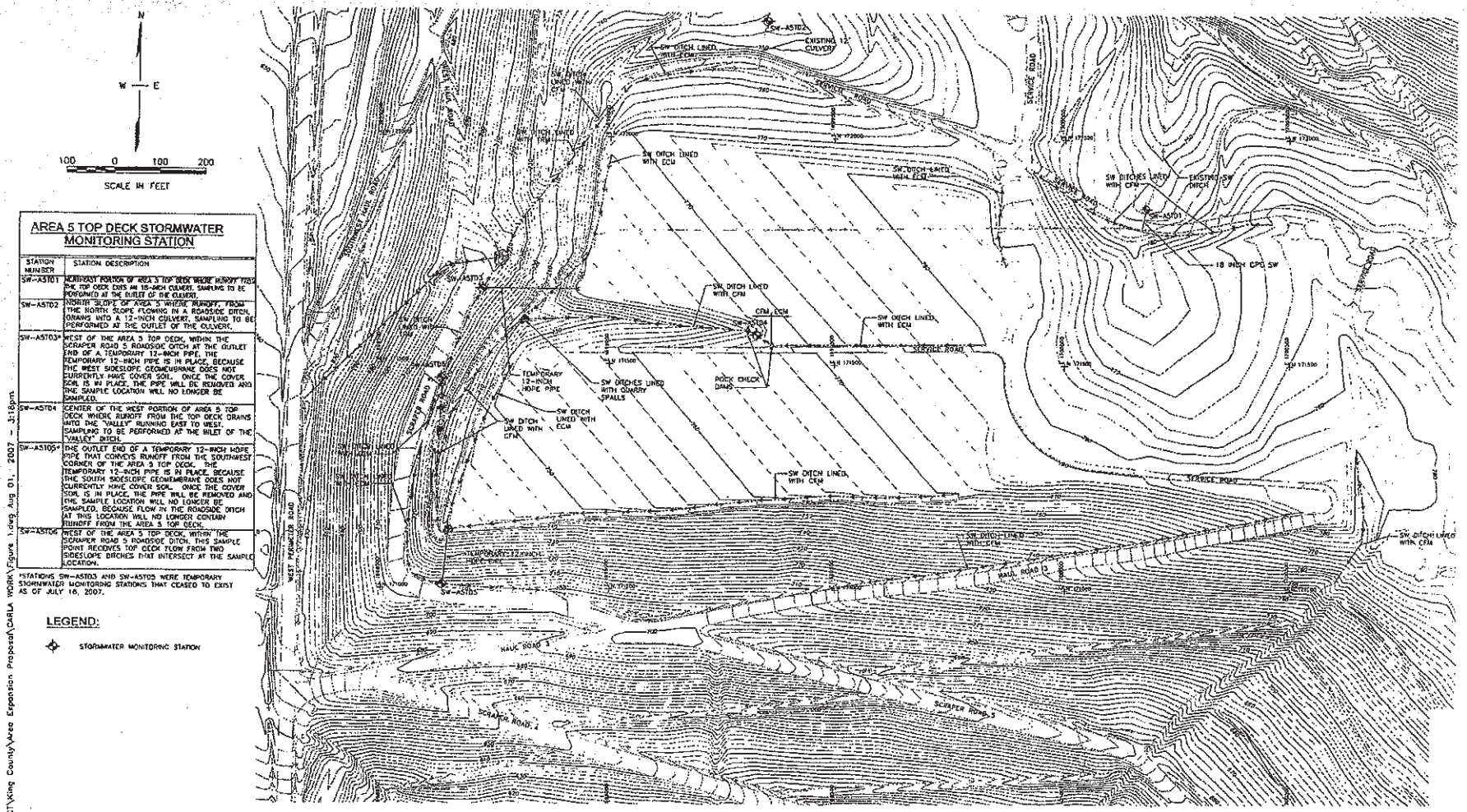


Figure 2. Top Deck Stormwater Monitoring Locations

Area 5 Top Deck
Stormwater Monitoring Stations

Cedar Hills Regional Landfill
Area 5 Stage 4 Final Closure
King County, Washington

FIGURE 2

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

APPENDIX A: INSPECTION REPORTS

Work Order Report - WO# 0000010579

11/30/2012 11:28:38 AM

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

TECHNICIAN COPY

WO#: 0000010579
Date In: 11/30/2012 11:28
Date Promised: 12/01/2012 11:28
Date Out: 00:00
WO Status: A Last WO#:0000010516
WO Priority: Last WO Date: 10/30/2012
Track DownTime: Y Operator: jd

Equipment: Cedar Hills License: na

Location: 20
Year: 2006
Make: UD
Model: UD
Class: ZZZZZZZZGS: Landfill Gas - not classified

Color:
Serial: na
Engine:

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
Cedar Hills

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
Q	0 - MONTHS	12/06/2012	Quarterly Inspection
X	0 - MONTHS	12/10/2012	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	764	JJB	0.00000	

NOTES

Work Order Task List

Repair Code: PMQ BS
Equipment: Cedar Hills
Work Order: 0000010579

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
12/31	1	Gas- Ck liner integrity- Serpentine walk	✓				

12/18/12 10 hrs.

12/19/12 10 hrs

12/20/12 10 hrs

12/26/12 9 hrs

12/27/12 10 hrs.

12/31/12 3 hrs.

Work Order Report - WO# 0000010349

9/27/2012 1:08:59 PM

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

TECHNICIAN COPY

WO#: 0000010349
Date In: 09/27/2012 13:08
Date Promised: 09/28/2012 13:08
Date Out: 00:00

WO Status: A | Last WO#:0000010329
WO Priority: | Last WO Date: 09/27/2012
Track DownTime: Y | Operator: jd

Equipment: charea5w License: na

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

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
Cedar Hills Area 5 West

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
S	0 - MONTHS	10/28/2012	Scheduled Inspection
W	W - WEEKS	10/13/2012	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MID		Est. Labor	Shop
PMS BS	PM Service | PMS per list | Billable | Scheduled, Target	0	764	JD	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMS BS
Equipment: charea5w
Work Order: 0000010349

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
10/3	1	Gas- Monthly Header PM Area 5 West	✓				
	2	Gas- Ck collection field pipe integrity	✓				
	3	Gas- Ck collection field pipe alignment	✓				
	4	Gas- Ck for damage @ possible stress pts	✓				
	5	Gas- Ck for damage at vertical pipes	✓				
	6	Gas- Ck for damage at flare stations	✓				
	7	Gas- Ck for damage at well heads	✓				
	8	Gas- Note any deficiencies					

45 min.

Work Order Report - WO# 0000010474

10/29/2012 10:12:02 AM

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

TECHNICIAN COPY

WO#: 0000010474
Date In: 10/29/2012 10:11
Date Promised: 10/30/2012 10:11
Date Out: 00:00
WO Status: A Last WO#:0000010414
WO Priority: Last WO Date: 10/09/2012
Track DownTime: Y Operator: jd

Equipment: charea5w License: na

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

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
Cedar Hills Area 5 West

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
S	0 - MONTHS	11/28/2012	Scheduled Inspection
W	W - WEEKS	10/27/2012	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

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

NOTES

Work Order Task List

Repair Code: PMS BS
Equipment: charea5w
Work Order: 0000010474

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Monthly Header PM Area 5 West	✓				
	2	Gas- Ck collection field pipe integrity	✓				
	3	Gas- Ck collection field pipe alignment	✓				
	4	Gas- Ck for damage @ possible stress pts	✓				
	5	Gas- Ck for damage at vertical pipes	✓				
	6	Gas- Ck for damage at flare stations	✓				
	7	Gas- Ck for damage at well heads	✓				
	8	Gas- Note any deficiencies					

11-26-12 30 MIN

Work Order Report - WO# 0000010625

11/30/2012 12:38:45 PM

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

TECHNICIAN COPY

WO#: 0000010625
Date In: 11/30/2012 12:38
Date Promised: 12/01/2012 12:38
Date Out: 00:00
WO Status: A Last WO#:0000010541
WO Priority: Last WO Date: 11/05/2012
Track DownTime: Y Operator: jd

Equipment: charea5w License: na

Location: 20
Year: 2006
Make: UD
Model: UD
Class: ZZZZZZZZGS: Landfill Gas - not classified

Color:
Serial: na
Engine:

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
Cedar Hills Area 5 West

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
S	0 - MONTHS	12/28/2012	Scheduled Inspection
W	W - WEEKS	12/08/2012	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

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

NOTES

Work Order Task List

Repair Code: PMS BS
Equipment: charea5w
Work Order: 0000010625

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Monthly Header PM Area 5 West	✓				
	2	Gas- Ck collection field pipe integrity	✓				
	3	Gas- Ck collection field pipe alignment	✓				
	4	Gas- Ck for damage @ possible stress pts	✓				
	5	Gas- Ck for damage at vertical pipes	✓				
	6	Gas- Ck for damage at flare stations	✓				
	7	Gas- Ck for damage at well heads	✓				
	8	Gas- Note any deficiencies	✓				

12-5-12 30min

Work Order Report - WO# 0000010350

9/27/2012 1:09:36 PM

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

TECHNICIAN COPY

WO#: 0000010350
Date In: 09/27/2012 13:09
Date Promised: 09/28/2012 13:09
Date Out: 00:00
WO Status: A Last WO#:0000010328
WO Priority: Last WO Date: 09/27/2012
Track DownTime: Y Operator: jd

Equipment: charea5e License: na

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

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
Cedar Hills Area 5 East

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
S	0 - MONTHS	10/28/2012	Scheduled Inspection
W	W - WEEKS	10/13/2012	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMS BS	PM Service | PMS per list | Billable | Scheduled, Target	0	764 JD	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMS BS
Equipment: charea5e
Work Order: 0000010350

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
10/3	1	Gas- Monthly Header PM Area 5 East	✓				
	2	Gas- Ck collection field pipe integrity	✓				
	3	Gas- Ck collection field pipe alignment	✓				
	4	Gas- Ck for damage @ possible stress pts	✓				
	5	Gas- Ck for damage at vertical pipes	✓				
	6	Gas- Ck for damage at flare stations	✓				
	7	Gas- Ck for damage at well heads	✓				
	8	Gas- Note any deficiencies					

1 hr.

Work Order Report - WO# 0000010481

11/26/2012 4:25:55 PM

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

TECHNICIAN COPY

WO#: 0000010481
Date In: 10/29/2012 10:20
Date Promised: 10/30/2012 10:20
Date Out: 00:00
WO Status: A Last WO#:0000010540
WO Priority: Last WO Date: 11/05/2012
Track DownTime: Y Operator: jd

Equipment: CHAREA5E License: na

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

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:
Comments:
Cedar Hills Area 5 East

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
S	0 - MONTHS	11/28/2012	Scheduled Inspection
W	W - WEEKS	12/08/2012	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

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

NOTES

Work Order Task List

Repair Code: PMS BS
Equipment: CHAREA5E
Work Order: 0000010481

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Monthly Header PM Area 5 East	✓				
	2	Gas- Ck collection field pipe integrity	✓				
	3	Gas- Ck collection field pipe alignment	✓				
	4	Gas- Ck for damage @ possible stress pts	✓				
	5	Gas- Ck for damage at vertical pipes	✓				
	6	Gas- Ck for damage at flare stations	✓				
	7	Gas- Ck for damage at well heads	✓				
	8	Gas- Note any deficiencies					

11-29-12

1.5 HRS

Work Order Report - WO# 0000010626

11/30/2012 12:39:10 PM

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

TECHNICIAN COPY

WO#: 0000010626
Date In: 11/30/2012 12:38
Date Promised: 12/01/2012 12:38
Date Out: 00:00
WO Status: A Last WO#:0000010540
WO Priority: Last WO Date: 11/05/2012
Track DownTime: Y Operator: jd

Equipment: charea5e License: na

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

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
Cedar Hills Area 5 East

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
S	0 - MONTHS	12/28/2012	Scheduled Inspection
W	W - WEEKS	12/08/2012	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

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

NOTES

Work Order Task List

Repair Code: PMS BS
Equipment: charea5e
Work Order: 0000010626

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
	1	Gas- Monthly Header PM Area 5 East	✓				
	2	Gas- Ck collection field pipe integrity	✓				
	3	Gas- Ck collection field pipe alignment	✓				
	4	Gas- Ck for damage @ possible stress pts	✓				
	5	Gas- Ck for damage at vertical pipes	✓				
	6	Gas- Ck for damage at flare stations	✓				
	7	Gas- Ck for damage at well heads	✓				
	8	Gas- Note any deficiencies					

12-10-12 JHR

Work Order Report - WO# 0000010403

9/27/2012 2:44:20 PM

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

TECHNICIAN COPY

WO#: 0000010403
Date In: 09/27/2012 14:43
Date Promised: 09/28/2012 14:43
Date Out: 00:00

WO Status: A
WO Priority:
Track DownTime: Y
Last WO#:0000010268
Last WO Date: 08/30/2012
Operator: jd

Equipment: charea5 License: na

Location: 20
Year: 2006
Make: UD
Model: UD
Class: ZZZZZZZZGS: Landfill Gas - not classified

Color:
Serial: na
Engine:

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
CH Area 5

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	10/10/2012	Gas System
T	0 - MONTHS	10/10/2012	Stormwater
V	0 - MONTHS	10/10/2012	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	0.00000	Gas
PMT BS	PM Service | PM Stormwater | Billable | Scheduled, Target	0	761	0.00000	Gas
PMV BS	PM Service | PM Cover System | Billable | Scheduled, Target	0	761	0.00000	Gas

NOTES

For CHAREA4, CHAREA5, CHAREA6, CHAREAS23, CHCENTRALPIT, CHEMH, CHSEPA, CHSSWA, CHSWMH (9)

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: 10-15-12

Work Order Report - WO# 0000010529

10/30/2012 9:59:48 AM

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

TECHNICIAN COPY

WO#: 0000010529
Date In: 10/30/2012 09:59
Date Promised: 10/31/2012 09:59
Date Out: 00:00
WO Status: A Last WO#:0000010403
WO Priority: Last WO Date: 09/27/2012
Track DownTime: Y Operator: jd

Equipment: charea5 License: na

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

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
CH Area 5

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	11/10/2012	Gas System
T	0 - MONTHS	11/10/2012	Stormwater
V	0 - MONTHS	11/10/2012	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	763	0.00000	Gas
PMT BS	PM Service | PM Stormwater | Billable | Scheduled, Target	0	763	0.00000	Gas
PMV BS	PM Service | PM Cover System | Billable | Scheduled, Target	0	763	0.00000	Gas

NOTES

For CHAREA4, CHAREA5, CHAREA6, CHAREAS23, CHCENTRALPIT, CHEMH, CHSEPA, CHSSWA, CHSWMH (9)

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: 11/7/12

Work Order Report - WO# 0000010602

11/30/2012 11:47:42 AM

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

TECHNICIAN COPY

WO#: 0000010602
Date In: 11/30/2012 11:47
Date Promised: 12/01/2012 11:47
Date Out: 00:00
WO Status: A Last WO#:0000010529
WO Priority: Last WO Date: 10/30/2012
Track DownTime: Y Operator: jd

Equipment: CHAREA5 License: na

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

Tire Size 1:
Tire Size 2:
Transmission:
Fuel Type1:
Fuel Type2:
Fuel Type3:
Oil Capacity: 0.000
Fuel Cap1: 0.000
Fuel Cap2: 0.000

GVW: 0
EAC: 24
Department: 7572:Waste Water, LF Gas
Company: Gas King County Landfill Gas
Site: 20:20- Cedar Hills
Monitor Group:

Comments:
CH Area 5

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	12/10/2012	Gas System
T	0 - MONTHS	12/10/2012	Stormwater
V	0 - MONTHS	12/10/2012	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	764	0.00000	Gas
PMT BS	PM Service | PM Stormwater | Billable | Scheduled, Target	0	764 JB	0.00000	Gas
PMV BS	PM Service | PM Cover System | Billable | Scheduled, Target	0	764	0.00000	Gas

NOTES

For CHAREA4, CHAREA5, CHAREA6, CHAREAS23, CHCENTRALPIT, CHEMH, CHSEPA, CHSSWA, CHSWMH (9)

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: 12/12

ENGINEERING SERVICES SECTION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: S. Larry Telephone: 296-8453

Location: Cedar Hills Ambient Temperature (ºF) 40 Weather Condition: Cloudy

Inspector's Signature: Date: 10/17/2012

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. Asbestos Pit	X	
5. Odor	X		5. Collection System	X		5. Perimeter Fences	X	
6. Flare Stations	X		a. Collection Pipes	X		6. Vegetation	X	
7. Air Compressors	X		b. Forcemains	X		7. Landfill Cover	X	
8. H_2S Scrubbers	X		c. Manholes	X		8. Drain Rock	X	
			d. Cleanouts	X		9. Air Quality	X	
D. Stormwater System			6. Generators	X		10. Stockpiles	X	
1. Ponds	X		7. Extraction Wells	X		11. Vectors	X	
2. CB / Control Structures	X		8. Valve / Cleanout	X		12. Compaction	X	
3. Pipes / Culverts	X		9. Groundwater Extraction Wells	X		13. Litter	X	
4. Trash Racks	X					14. Dust Control	X	
5. Ditches	X		**E. Roadway System**					
6. Runoff Control Berms	X		1. Road Sweeping	X		**F. Cover System / ESC**		
7. General	X		2. Access Roads	X		1. Vegetation	X	
			3. Road Erosion	X		2. Refuse	X	
G. Operations			4. Road Pavement	X		3. Cover Erosion	X	
1. Records Obtain / Review			5. Striping	X		4. Hay Bales, Silt Fences, Filter Fabric, etc.	X	

Item No.	Action Code(s)	Area Code(s) (See below or over for map) Area	Map	Status G	F	P	State Reason if "Fair or Poor"	Date Corrective Action Implemented
1	D5	D5			X		The blockage should be cleared	
2							Overall the site looks clean, this inspection list items that may be address in this year's CAMP inspection. See photos listed in this directory	
3								
4								
5								
6								
7								
8								

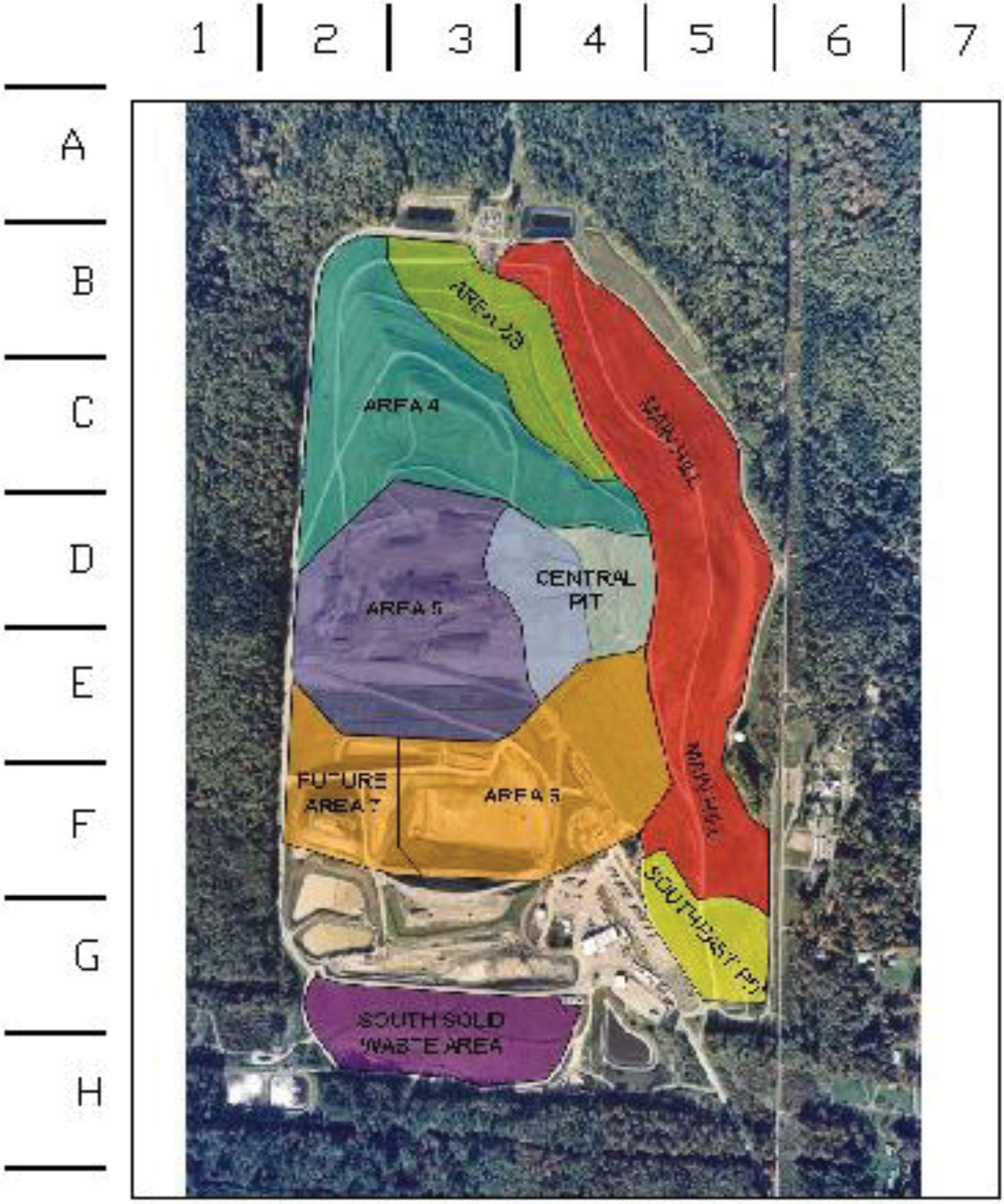
Item No.	Action Code(s)	Area Code(s) (See below or over for map) Area	Map	Status G	F	P	State Reason if "Fair or Poor"	Date Corrective Action Implemented
9								
10								
11								

AREA CODES (for Cedar Hills)

	G = Good	F = Fair	P = Poor
East Main Hill = EMH	Area 2/3 = A2/3	Aeration Ponds = AP	Area 5 = A5
Southwest Main Hill = SWMH	Area 4 = A4	So. Solid Waste Area = SSWA	Area 6 = A6
Southeast Pit Area = SEPA	Stockpile = SP	North Flare Station = NFS	Central Pit = CP

Action to be Completed:	Suggested Remedy:
Category number: D5	Suggested Remedy: Operations should use the vactor truck to remove sediment buildup that prevents proper drainage
Category number:	Suggested Remedy:
Category number:	Suggested Remedy:
Category number:	Suggested Remedy:
Category number:	Suggested Remedy:
Category number:	Suggested Remedy:
Category number:	Suggested Remedy:

Category number:	Suggested Remedy:



ENGINEERING SERVICES SECTION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: TERRY LARAY Telephone: 296-8453

Location: CEDAR HILLS Ambient Temperature (°F) _____ Weather Condition: SNOWY ~ 30°F

Inspector's Signature: Terry Laray Date: DEC. 18-2012

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. Asbestos Pit	X	
5. Odor		X	5. Collection System	X		5. Perimeter Fences	X	
6. Flare Stations	X		a. Collection Pipes	X		6. Vegetation	X	
7. Air Compressors	X		b. Forcemains	X		7. Landfill Cover	X	
8. H_2S Scrubbers	X		c. Manholes	X		8. Drain Rock	X	
			d. Cleanouts	X		9. Air Quality	X	
D. Stormwater System			6. Generators			10. Stockpiles	X	
1. Ponds	X		7. Extraction Wells	X		11. Vectors	X	
2. CB / Control Structures	X		8. Valve / Cleanout	X		12. Compaction	X	
3. Pipes / Culverts	X		9. Groundwater Extraction Wells	X		13. Litter	X	
4. Trash Racks	X					14. Dust Control	X	
5. Ditches		X	**E. Roadway System**					
6. Runoff Control Berms	X		1. Road Sweeping	X		**F. Cover System / ESC**		
7. General	X		2. Access Roads	X		1. Vegetation	X	
			3. Road Erosion	X		2. Refuse	X	
G. Operations			4. Road Pavement	X		3. Cover Erosion	X	
1. Records Obtain / Review			5. Striping	X		4. Hay Bales, Silt Fences, Filter Fabric, etc.		

Action Code	Area Code(s) Area	Map	Status F	P	State Reason	Date Corrective Action Implemented
A5	H4		/		CEDAR GROVE COMPOST SMELL IS STRONG AT	
					THE PROP. FENCE LINE	
D5			/		ASPHALT LINED DITCHES ALONG THE NORTH	
					PERIM ROAD NEED VACTOR CLEARING TO	
					REMOVE SED. BUILD UP	
C1					FUELING STATION SIDE IS CLOSED/NO OPERATIONAL	

Area Codes (for Cedar Hills)

East Main Hill = EMH
Southwest Main Hill = SWMH
Southeast Pit Area = SEPA
Area 2/3 = A2/3
Area 4 = A4
Stockpile = SP
Aeration Ponds = AP
So. Solid Waste Area = SSWA
North Flare Station = NFS
Area 5 = A5
Area 6 = A6
Central Pit = CP

Status Codes

F = Fair
P = Poor

Inspection Survey Report
Solid Waste Program

King County

Public Health – Seattle & King County
Environmental Hazards Section 206-205-4394
401 Fifth Avenue, Suite 1100 • Seattle, WA 98104

Business Name	Operator	Phone
Cedar Hills Regional Landfill	K.C.S.W.D.	(206) 296-4490

Address	City	ZIP	Time In
16645 228th Ave. SE	Maple Valley	98038	2100

EHS	Date		General Health Record ID	P/E	Activity Time	Travel Time
D A V	10 23 12	(PR) SR	0015736	1006	70 m	85 m

Violation Number	Violation Description	Correction Date
	No Violations	

Service
126 ☒ Fld Pl Rvw
127 ☐ Pre-Operat
128 ☐ Routine
129 ☐ Return
130 ☐ Complaint
131 ☐ Comp Rtn
☐ _____

Results
01 ☒ Satisfactory
02 ☐ Unsatisfactory
07 ☐ In Compliance
08 ☐ Not in Compliance
22 ☐ Not Access
☐ _____

Action
00 ☒ Not Applicable
04 ☐ Suspend
07 ☐ Approved
08 ☐ App w/ Cond
26 ☐ Return Visit
27 ☐ Phone Follow
☐ _____

Misc
☐ Photos Taken

Weather
☐ Sunny
☐ Cloudy
☐ Partially Cloudy
☒ Showers
☐ Rain
☐ Wind
☐ Snow

Comments / Observations

Person in Charge	Health Authority
Judy Heimer	Edward Davis

Based on an inspection this day, the above listed violations must be corrected by the next routine inspection or such period of time as may be specified in writing by the health officer. Failure to comply with this notice may result in immediate suspension of your permit and/or assessment of civil penalties. An opportunity for an appeal of the findings of an inspection report will be provided if a written request is filed with the health officer within ten (10) days of the date of the suspension or inspection. The complete list of inspection items is contained on the back of this form.

Inspection Survey Report
Solid Waste Program

King County

Public Health – Seattle & King County
Environmental Hazards Section 206-205-4394
401 Fifth Avenue, Suite 1100 • Seattle, WA 98104

Page 1 of 1

Business Name	Operator	Phone
Cedar Hills Regional Landfill	King County SWD	(206) 296-4490

Address	City	ZIP	Time In
16645 228th Ave. SE	Maple Valley	98038	10:43

EHS	Date	General Health Record ID	P/E	Activity Time	Travel Time
D A V	1 1 3 0 1 2 (PR) SR	0 0 1 5 7 3 6	1 0 0 6	87 m	75 m

Violation Number	Violation Description	Correction Date
	No violations - See Comments Below	

Service
126 ☐ Fld Pl Rvw
127 ☐ Pre-Operat
128 ☒ Routine
129 ☐ Return
130 ☐ Complaint
131 ☐ Comp Rtn
☐

Results
01 ☒ Satisfactory
02 ☐ Unsatisfactory
07 ☐ In Compliance
08 ☐ Not in Compliance
22 ☐ Not Access
☐

Action
00 ☒ Not Applicable
04 ☐ Suspend
07 ☐ Approved
08 ☐ App w/ Cond
26 ☐ Return Visit
27 ☐ Phone Follow
☐

Misc
☐ Photos Taken

Weather
☐ Sunny
☒ Cloudy
☐ Partially Cloudy
☐ Showers
☐ Rain
☐ Wind
☐ Snow

Comments / Observations

Area 7 – Exposed debris at surfaces south of active fill area designated for this day. Observed increase number in bird population scavenging the non-active fill area. It appeared preparations were being made to provide soil cover in Area 7. – Some garbage odor detected – Be certain proper adequate cover is applied at the end of the day (i.e. Friday evening)

Area 5 – Examined several areas containing standing rainwater. No evidence of escape of landfill gas was observed or detected. It appears less wind blown debris is present as compared with previous inspection.

Well casings not secured – (E.W. 26, 27, 28, 29)

GP sites not secured-(GP1, 2, 6, 4) – Pump station 3 not secured.

Person in Charge	Health Authority
X Arnelle M. Stevens	Edward Davis

Based on an inspection this day, the above listed violations must be corrected by the next routine inspection or such period of time as may be specified in writing by the health officer. Failure to comply with this notice may result in immediate suspension of your permit and/or assessment of civil penalties. An opportunity for an appeal of the findings of an inspection report will be provided if a written request is filed with the health officer within ten (10) days of the date of the suspension or inspection. The complete list of inspection items is contained on the back of this form.

Inspection Survey Report
Solid Waste Program

King County

Public Health – Seattle & King County
Environmental Hazards Section 206-205-4394
401 Fifth Avenue, Suite 1100 • Seattle, WA 98104

Business Name: Cedar Hills Regional Landfill | Operator: KCSWD | Phone: (206) 296-4490

Address: 16645 228th Ave. SE | City: Maple Valley | ZIP: 98038 | Time In: 1203

EHS: D A V | Date: 1/2/18/12 (PR/SR) | General Health Record ID: 0015736 | P/E: 1006 | Activity Time: 70 m | Travel Time: 99 m

Violation Number	Violation Description	Correction Date
	No Violations observed or detected	

Service
126 ☐ Fld Pl Rvw
127 ☐ Pre-Operat
128 ☒ Routine
129 ☐ Return
130 ☐ Complaint
131 ☐ Comp Rtn
☐ _____

Results
01 ☒ Satisfactory
02 ☐ Unsatisfactory
07 ☐ In Compliance
08 ☐ Not in Compliance
22 ☐ Not Access
☐ _____

Action
00 ☒ Not Applicable
04 ☐ Suspend
07 ☐ Approved
08 ☐ App w/ Cond
26 ☐ Return Visit
27 ☐ Phone Follow
☐ _____

Misc
☐ Photos Taken

Weather
☐ Sunny
☒ Cloudy
☐ Partially Cloudy
☐ Showers
☐ Rain
☐ Wind
☐ Snow – grooming

Comments / Observations

Results of Area drive through inspection
Note: previous observations of unlocked ~~electrical~~ pump panel building will be clarified ~~for~~ by the operator.
Good Line Parking – Excess vegetation in area has been removed
Leachate Lagoon – no problems noted
Area 7 – Active area appears to be ~~maintained~~ sized for encouraging adequate cover (i.e. Daily cover)
Areas 5 + 6 – ~~wind~~ Blown litter not observed.
Perimeter Road – No wild blown litter present.
Bird Population well under control

Person in Charge: [signature]

Health Authority: Ed Davis

Based on an inspection this day, the above listed violations must be corrected by the next routine inspection or such period of time as may be specified in writing by the health officer. Failure to comply with this notice may result in immediate suspension of your permit and/or assessment of civil penalties. An opportunity for an appeal of the findings of an inspection report will be provided if a written request is filed with the health officer within ten (10) days of the date of the suspension or inspection. The complete list of inspection items is contained on the back of this form.

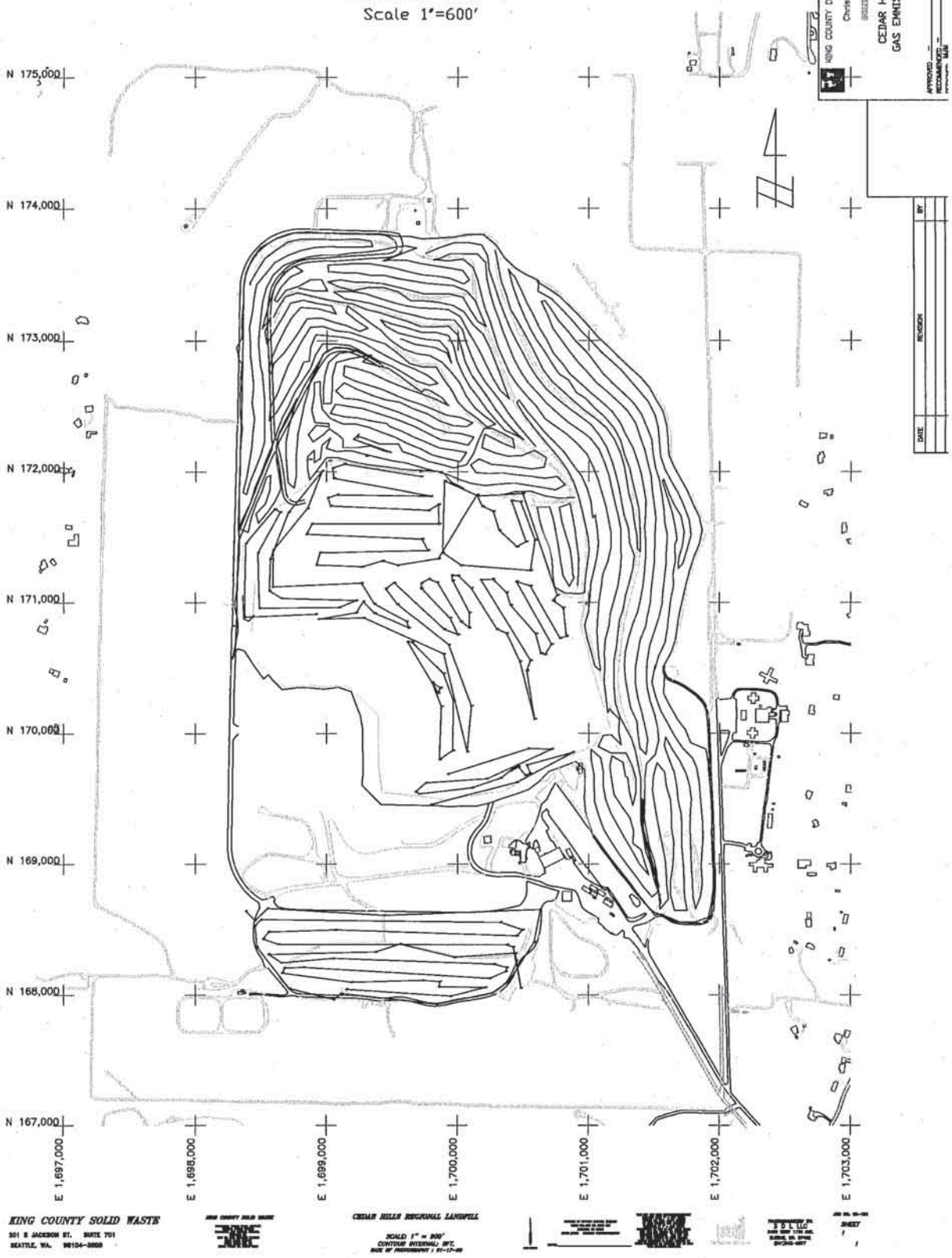
APPENDIX B: GAS MONITORING REPORTS

Cedar Hills Regional Landfill

Quarterly Surface Emission Monitoring
Plot of GPS Generated Track Lines

DECEMBER 2012

Scale 1"=600'



KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS
Christie True, Director

CEDAR HILLS QUARTERLY GAS EMMISSIONS MONITORING

APPROVED _____ DATE _____
RECOMMENDED _____ DATE _____

DATE	REVISION	BY

KING COUNTY SOLID WASTE
201 S JACKSON ST. SUITE 701
SEATTLE, WA. 98104-3855

CEDAR HILLS REGIONAL LANDFILL

SCALE 1" = 600'
CONTOUR INTERVAL 10FT.
DATE OF PHOTOGRAPHY : 01-17-06

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-18-12

Cal. Time: 7:00 Am

Calibration :

Technician: JB

Test Instrument used: TVA. 1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm

O_2 Am B.

Barometric Pressure	Time
Start 29.92	7:00 am
Stop	

90% response time in seconds:

1 6 seconds

2 7 seconds

3 6 seconds

avg. 6 seconds

Weather Conditions: Mostly Cloudy

Wind Speed &

Direction (out of): 7 mph SW

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-18-12

Cal. Time: 12:00 pm

Calibration :

Technician: JB

Test Instrument used: T.V.A. 1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm

O_2 Amb.

Barometric Pressure	Time
Start	
Stop 29.96	4:30 pm

90% response time in seconds:

1 7 seconds

2 6 seconds

3 6 seconds

avg. 6 seconds

Weather Conditions: Mostly Cloudy

Wind Speed &

Direction (out of): 10 mph SW

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-19-12

Cal. Time: 7:00 Am

Calibration :

Technician: JB

Test Instrument used: TVA. 1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm

O_2 Amb.

Barometric Pressure	Time
Start 29.74	7:00 Am
Stop	

90% response time in seconds:

1 7 seconds

2 6 seconds

3 6 seconds

avg. 6 seconds

Weather Conditions: mostly Cloudy

Wind Speed &

Direction (out of): 15 mph SE

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-19-12

Cal. Time: 12:00 pm

Technician: JB

Calibration :

Test Instrument used: TVA. 1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm

O_2 Amb.

Barometric Pressure	Time
Start	
Stop 29.69	4:00 pm

90% response time in seconds:

1 6 seconds

2 6 seconds

3 6 seconds

avg. 6 seconds

Weather Conditions: Overcast, Rain

Wind Speed &

Direction (out of): 8 mph SE

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-20-12

Cal. Time: 7:00 Am

Calibration :

Technician: JB

Test Instrument used: TVA. 1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm CH4

O_2 Amb.

Barometric Pressure	Time
Start 29.62	7:00 Am
Stop	

90% response time in seconds:

1 5 seconds

2 5 seconds

3 6 seconds

avg. 5 seconds

Weather Conditions: Overcast, Rain

Wind Speed &

Direction (out of): 6 mph SE

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-20-12

Cal. Time: 12:00 pm

Calibration :

Technician: JB

Test Instrument used: TVA 1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm CH4

O_2 Amb.

Barometric Pressure	Time
Start	
Stop 29.78	4:30 pm

90% response time in seconds:

1 6 seconds

2 5 seconds

3 6 seconds

avg. 6 seconds

Weather Conditions: mostly Cloudy

Wind Speed &

Direction (out of): 5 mph, SE

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-26-12

Cal. Time: 7:00 am

Technician: JB

Surveyor _____

Calibration :

Test Instrument used: T.V.A. 1000

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm

O_2 Amb

Barometric Pressure	Time
Start 29.77	7:00 am
Stop	

90% response time in seconds:

1 5 seconds

2 6 seconds

3 6 seconds

avg. 6 seconds

Weather Conditions: Over Cast / Rain

Wind Speed &

Direction (out of): 7 mph SE

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-26-12

Cal. Time: 12:00pm

Calibration :

Technician: TB

Test Instrument used: T.V.A. 1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm

O_2 Amb.

Barometric Pressure	Time
Start	
Stop 29.82	4:30pm

90% response time in seconds:

1 5 seconds

2 5 seconds

3 6 seconds

avg. 5 seconds

Weather Conditions: Over Cast / Drizzle

Wind Speed &

Direction (out of): 5 mph SE

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-27-12

Cal. Time: 7:00 Am

Calibration :

Technician: JB

Test Instrument used: TVA.1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm CH4

O_2 Amb

Barometric Pressure	Time
Start 30.03	7:00 Am
Stop	

90% response time in seconds:

1 5 seconds

2 6 seconds

3 5 seconds

avg. 5 seconds

Weather Conditions: Overcast / Drizzle

Wind Speed &

Direction (out of): 1-2 mph SE

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-27-12

Cal. Time: 12:00 pm

Technician: JB

Surveyor _____

Calibration :

Test Instrument used: T.V.A. 1000

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm CH4

O_2 Amb.

Barométric Pressure	Time
Start	
Stop	4:00 pm

90% response time in seconds:

1 6 seconds

2 6 seconds

3 5 seconds

avg. 6 seconds

Weather Conditions: Mostly Cloudy / Drizzle

Wind Speed & Direction (out of): 6 mph SE

Northing (UTM #)	Easting (10 T #)	Time	Comments

DNRP / King County Solid Waste
Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 12-31-12

Cal. Time: 7:00 Am

Calibration :

Technician: JB

Test Instrument used: TVA 1000

Surveyor _____

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm CH4

O_2 Amb.

Barometric Pressure	Time
Start 30.20	7:00 Am
Stop 30.20	8:40 Am

90% response time in seconds:

1 5 seconds

2 6 seconds

3 5 seconds

avg. 5 seconds

Weather Conditions: Overcast

Wind Speed &

Direction (out of): Calm

Northing (UTM #)	Easting (10 T #)	Time	Comments

CEDAR HILLS REGIONAL LANDFILL QUARTERLY ENVIRONMENTAL MONITORING REPORT

Fourth Quarter 2012

Department of Natural Resources and Parks
Solid Waste Division

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

CONTENTS

Cedar Hills Regional Landfill Summary of Quarterly Environmental Monitoring Fourth Quarter of 2012

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 fourth quarter are listed in Table 2.

1.11 Regional Aquifer

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

For discussion and graphical presentation, monitoring wells are grouped together according to the flow path analysis for the regional aquifer, which was developed in the *Cedar Hills Regional Landfill Technical Memorandum Phase I Investigations Groundwater Monitoring Well System Enhancements*, 2007, and refined in the *Cedar Hills Regional Landfill Regional Aquifer Technical Memorandum*, 2011. Groundwater elevations and potentiometric surfaces are within historical ranges and reflect seasonal responses to precipitation. Potentiometric Surface Map and Groundwater Flow Analysis can be found in Appendix A. Elevations measured this quarter conform to the current hydrogeologic model.

Exceedances of regulatory standards are tabulated and presented in Table 3. Primary Ground Water Quality Criteria were exceeded in upgradient wells for arsenic (wells MW-93 and MW-99), trichloroethylene (wells MW-76 and MW-82) and vinyl chloride (MW-65). In downgradient wells, arsenic exceeded the criteria in four wells (MW-69, MW-80, MW-89 and MW-91). Secondary standards (pH, iron and 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 slight analytical error in regional aquifer well MW-70 (11.1%). No other samples are

greater than 10% ion imbalance.

Intra-well prediction limits are calculated annually using data collected through the end of the previous calendar year (2011). Comparison to calculated prediction limits provides an indication of whether a change in concentration represents normal variability or a change in water quality. The only prediction limit exceedance this quarter in the regional aquifer was *cis* 1,2-dichloroethene in upgradient well MW-59 (Table 5).

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

Acetone was detected in several QC blanks, all probable laboratory artifacts; chloroform was detected in one field blank, probable disinfection by-product. Quality Assurance /Quality Control (QA/QC) samples (trip blanks, and method blanks) detections appear in Table 13.

1.12 Perched Zones

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

Groundwater elevations measured during the quarter are within historical ranges. Samples were collected from 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. Groundwater quality data for the regularly sampled Perched Zone samples collected during the fourth quarter of 2012 are consistent with previous samples.

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

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

As with the regional data, perched zone prediction limits are derived from cumulative data through the end of 2011 and any exceedances of these limits by current results are tabulated (Table 9). There were no prediction limits exceedances in the perched zone.

Volatile Organic Compound detections in the perched zones are presented in Table 10.

All are consistent with previous analyses.

1.2 Surface Water

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

Cedar Hills Regional Landfill is covered by an Industrial Stormwater General Permit issued by the Washington State Department of Ecology. The permit defines discharge Benchmarks, applicable to all facilities and Effluent Limits, applicable specifically to landfills. These values are reproduced in Table 15. Stations SW-N4, SW-SL3 and SW-GS1 are the designated points for comparison to permit benchmarks and effluent limits. Samples were obtained from each designated compliance station monthly this quarter. Compliance sample exceedances are presented in Table 12. Surface water quality is highly correlated with precipitation events that can mobilize sediments. These fluctuations are often limited to the duration of the events.

1.3 Landfill Gas

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

Detections above the regulatory limit in landfill gas probe GP-33C 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 initiated installation of extraction wells targeting the potential zone of LFG migration in the native sediments with seven LFG extraction wells. These seven original extraction wells continue under active extraction, are currently monitored daily for methane, carbon dioxide, oxygen, pressure and flow.

Four additional borings (MGPW1703, MGPW17010S, MGPW17010D and MGPW17014) targeting highly transmissive sediments were completed in September 2012. These wells were constructed to function as gas extraction wells, however due to low gas levels encountered (maximum methane concentration 0.6% by volume) are functioning as probes and are not connected to the active extraction system. They have been monitored daily during the fourth quarter for methane, carbon dioxide, oxygen and static pressure.

Daily monitoring of LFG migration probes GP-30B and GP-33C, located along the western property, continued through the fourth quarter.

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

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

2.0 Analytical Methods

Groundwater quality is evaluated by comparison of analysis results to regulatory standards, geochemical analysis and statistical evaluation. Water quality analytical results for surface water runoff discharged from the landfill site are compared to State and Federal Surface Water Criteria. 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 also on selected analytes that are common groundwater constituents and have high detection frequencies. It 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 15.

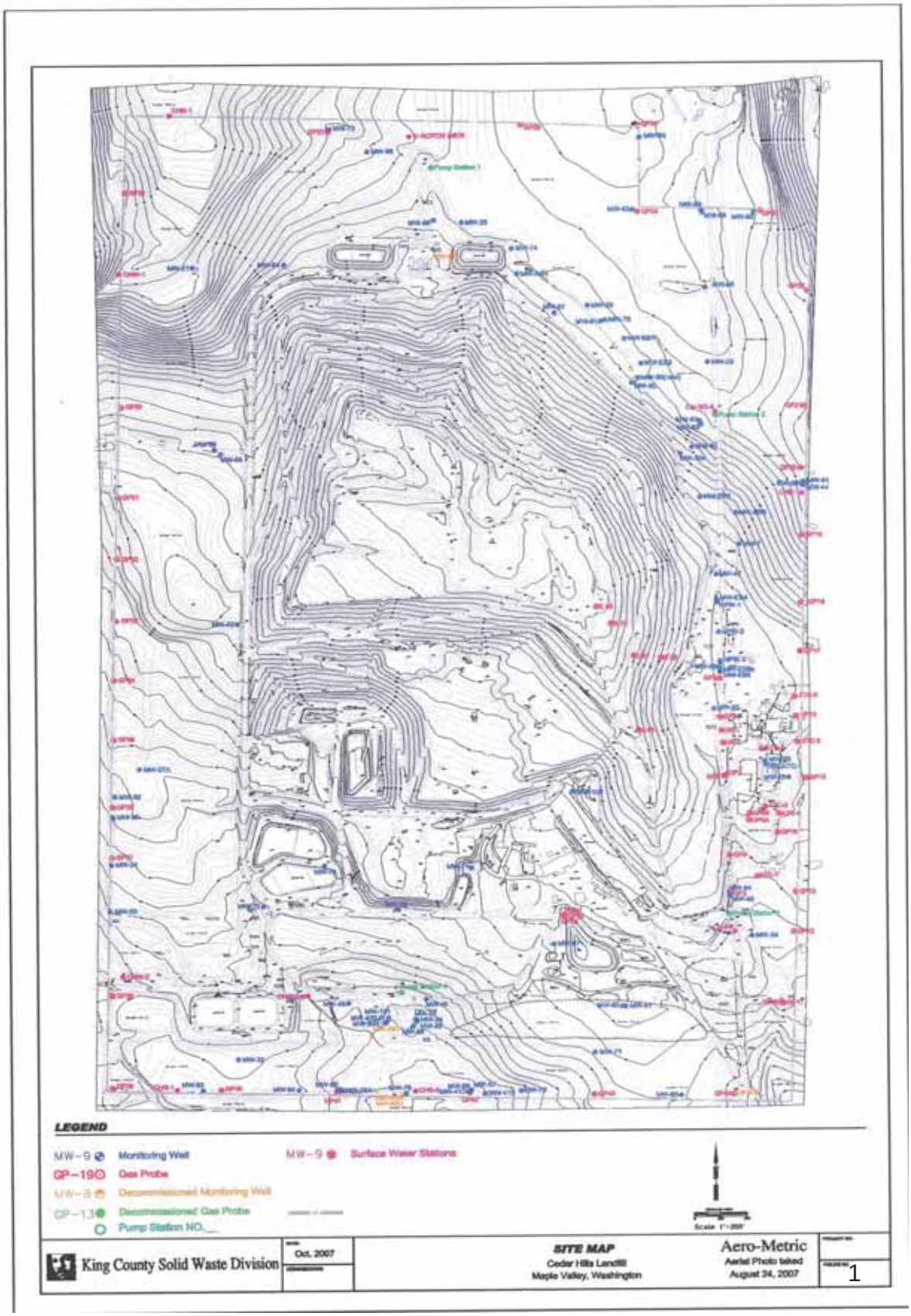

LEGEND
MW-9 Monitoring Well
GP-19 Gas Probe
MW-8 Decommissioned Monitoring Well
GP-13 Decommissioned Gas Probe
Pump Station NO.__
MW-9 Surface Water Stations
King County Solid Waste Division
Oct. 2007
SITE MAP
Cedar Hills Landfill
Maple Valley, Washington
Aero-Metric
Aerial Photo taked
August 24, 2007
1

TABLE 1
SUMMARY OF CEDAR HILLS REGIONAL LANDFILL GROUNDWATER WELLS

Well Number	Date Constructed	Aquifer	Zone[1]	Purpose[2]	Ground Surface Elevation	Top of Well Casing Elevation	Total Well Depth	Screened Interval Depth		Screened Interval Elevation		Coordinates Northing	Coordinates Easting
MW-24	6/1/1983	Regional	US	WL/WQ	473.8	475.99	193.0	187	192	286.8	281.8	167767.76	1702441.65
MW-54	9/26/1986	Regional	US	WL	579.3	580.43	360.0	329	351	250.3	228.3	168435.53	1702154.28
MW-56	10/12/1988	Regional	US	WL/WQ	479.2	480.33	170.5	156	166	323.2	313.2	167214.82	1698980.77
MW-57	8/22/1988	Regional	US	WL/WQ	455.7	456.64	145.5	129	144	326.7	311.7	167201.99	1699993.32
MW-58A	9/26/1988	Regional	US	WL/WQ	478.6	479.27	220.5	208.5	218.5	270.1	260.1	167207.16	1699006.59
MW-59	8/16/1988	Regional	US	WL/WQ	455.6	457.13	185.5	170.5	180.5	285.1	275.1	167193.44	1699983.91
MW-60	9/13/1991	Regional	US	WL/WQ	564.8	567.15	266.4	230	239	334.8	325.8	167873.2	1701154.47
MW-65	3/29/1993	Regional	US	WL/WQ	543.2	545.83	236.9	225.5	234.3	317.7	308.9	167146.55	1701602.10
MW-76	10/25/1999	Regional	US	WL/WQ	489.8	491.71	155.9	138.7	148.2	351.1	341.6	167193.13	1700376.23
MW-82	11/2/2000	Regional	US	WL/WQ	472.8	474.85	139.5	123.9	133.4	348.9	339.4	167725.31	1699553.72
MW-83	10/27/2000	Regional	US	WL/WQ	494.5	496.81	160.0	144.3	153.8	350.2	340.7	167212.27	1697939.89
MW-94	7/2/2002	Regional	US	WL/WQ	493.2	495.51	168.0	136	144.7	357.2	348.5	167210.22	1698674.21
MW-21	5/17/1983	Regional	UNW	WL/WQ	418.2	420.66	180.0	155	163	263.2	255.2	173876.38	1697901.86
MW-73	7/3/1999	Regional	UNW	WL/WQ	484.3	485.70	218.0	196.2	205.5	288.1	278.8	174995.59	1698954.95
MW-84	10/20/2000	Regional	UNW	WL/WQ	528.7	530.80	250.5	236.2	245.7	292.5	283.0	173894.54	1698602.89
MW-81	10/3/2002	Regional	UNE	WL/WQ	492.2	493.66	199.0	183	192	309.2	300.2	172113.99	1702568.87
MW-99	8/30/2002	Regional	UNE	WL/WQ	491.8	493.64	287.0	270	279	221.8	212.8	172098.73	1702556.06
MW-93	6/24/2002	Regional	CG	WL/WQ	630.2	632.15	350.0	310.3	320.1	319.9	310.1	169851.24	1702259.35
MW-95	7/22/2002	Regional	CG	WL/WQ	568.6	571.54	311.0	254	262.7	314.6	305.9	169426.92	1697265.32
MW-106	2/19/2009	Regional	CG	WL	473.0	475.47	270.0	193	203	280.0	270.0	173461.69	1702536.99
MW-70	5/11/1993	Regional	I	WL/WQ	527.9	530.57	221.5	205.1	218.8	322.8	309.1	168699.89	1698412.97
MW-77	10/12/1999	Regional	I	WL/WQ	550.5	552.67	251.5	230	239.5	320.5	311.0	168999.71	1700007.63
MW-78	10/8/1999	Regional	I	WL/WQ	535.3	537.35	229.5	213	225.5	322.3	309.8	169027.58	1698881.94
MW-100	8/26/2002	Regional	I	WL/WQ	618.4	620.32	124.7	299.3	309.3	319.1	309.1	169610.46	1700791.72
MW-22	5/25/1983	Regional	V	WL	515.0	517.09	284.0	279	283.8	236.0	231.2	173088.17	1701844.34
MW-64	3/22/1993	Regional	V	WL/WQ	594.3	596.55	276.3	260.3	274.1	334.0	320.2	168772.19	1701980.27
MW-66	4/5/1993	Regional	V	WL/WQ	528.6	531.28	250.7	234.2	248	294.4	280.6	174250.32	1699750.19
MW-67	4/28/1993	Regional	V	WL/WQ	514.1	516.43	232.4	216.3	230.1	297.8	284.0	172610.65	1701776.69
MW-68	4/15/1993	Regional	V	WL/WQ	644.8	647.07	354.6	333.5	352.5	311.3	292.3	170609.35	1701917.32
MW-69	4/23/1993	Regional	DW	WL/WQ	651.0	653.69	368.8	357.4	371	293.6	280.0	172400.20	1698061.86
MW-72	8/7/1998	Regional	DW	WL/WQ	669.8	671.87	389.0	366.2	375.8	303.6	294.0	170987.71	1698229.92
MW-74	11/1/2000	Regional	DG	WL/WQ	529.2	531.26	270.0	239.3	248.8	289.9	280.4	173813.79	1700386.85
MW-75	9/24/1999	Regional	DG	WL/WQ	529.8	532.40	287.0	258.7	268.8	271.1	261.0	173432.42	1701059.70
MW-80	2/27/2001	Regional	DG	WL/WQ	528.5	530.41	270.0	249.3	258.8	279.2	269.7	172964.99	1701309.78
MW-85	12/1/2000	Regional	DG	WL/WQ	529.8	531.76	270.0	247.2	256.7	282.6	273.1	173694.52	1701828.95
MW-86	12/12/2000	Regional	DG	WL/WQ	533.9	536.04	282.0	250.5	259.3	283.4	274.6	174917.90	1701331.25
MW-87	11/21/2000	Regional	DG	WL/WQ	535.2	537.31	272.5	251.5	260.8	283.7	274.4	173493.76	1700670.27
MW-88	9/13/2001	Regional	DG	WL/WQ	511.2	513.68	248.5	229.7	239	281.5	272.2	174303.06	1701807.87
MW-89	11/12/2001	Regional	DG	WL/WQ	510.7	512.82	328.0	281.5	290.8	229.2	219.9	174319.44	1701799.57
MW-90	8/14/2002	Regional	DG	WL/WQ	500.2	502.22	300.0	265	274	235.2	226.2	174300.67	1702203.13
MW-91	10/26/2001	Regional	DG	WL/WQ	529.7	532.02	331.0	268.9	289	260.8	240.7	173423.94	1701023.09
MW-43	4/30/1985	Regional	DNF	WL/WQ	544.6	547.06	325.0	299	309	245.6	235.6	174327.14	1701274.23
WS-ATC-1	2/7/1972	Regional	--	WL	624.9	625.51	535.0	325	340	299.9	284.9	169823.34	1702268.95
WS-NPW-1	8/221990	Regional	--	WL	644.6	646.33	382.0	365.7	375.7	278.9	268.9	171138.99	1701906.96
WS-NPW-3	6/51990	Regional	--	WL	644.3	645.81	376.0	359.4	367.4	284.9	276.9	170663.28	1701922.88

TABLE 1
SUMMARY OF CEDAR HILLS REGIONAL LANDFILL GROUNDWATER WELLS

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

Notes

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

Zone Designations
US = Upgradient South Site Wells
UNW = Upgradient Northwest
UNE = Upgradient Northeast
CG = Cross Gradient
DW = Westside Downgradient
V = Vertical Key Facilites
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 4th QUARTER 2012

Well ID	Zone	Date	Planned Acitvity	Sample ID	Comment
MW-21	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-21	Regional	10/2/12	Groundwater Sampling	W21-121002-	
MW-22	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-24	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-24	Regional	10/10/12	Groundwater Sampling	W24-121010-	
MW-25	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-27A	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-27A	Perched	10/11/12	Groundwater Sampling	W27A121011-	
MW-28	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-28	Perched	10/19/12	Groundwater Sampling	NA	No sample collected, well pumped dry.
MW-29	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-29	Perched	10/15/12	Groundwater Sampling	W29-121015-	
MW-30A	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-30A	Perched	10/12/12	Groundwater Sampling	W30A121012-	
MW-41D	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-41S	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-43	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-43	Regional	10/4/12	Groundwater Sampling	W43-121004-	
MW-43	Regional	10/4/12	QA/QC Sample	W43-121012D	Field Duplicate
MW-45	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-47	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-47	Perched	10/8/12	Groundwater Sampling	W47-121008-	
MW-47	Perched	10/8/12	QA/QC Sample	W47-121008D	Field Duplicate
MW-48	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-50	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-54	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-55	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-55	Perched	10/19/12	Groundwater Sampling	W55-121019-	
MW-56	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-56	Regional	10/2/12	Groundwater Sampling	W56-121002-	
MW-57	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-57	Regional	10/8/12	Groundwater Sampling	W57-121008-	
MW-58A	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-58A	Regional	10/9/12	Groundwater Sampling	W58A121009-	
MW-59	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-59	Regional	10/8/12	Groundwater Sampling	W59-121008-	
MW-60	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-60	Regional	10/9/12	Groundwater Sampling	W60-121009-	
MW-62	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-62	Perched	10/23/12	Groundwater Sampling	NA	No sample collected, well pumped dry.
MW-63	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-64	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-64	Regional	10/17/12	Groundwater Sampling	NA	No Sample, Pump Failed
MW-65	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-65	Regional	10/12/12	Groundwater Sampling	W65-121012-	
MW-66	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-66	Regional	10/12/12	Groundwater Sampling	W66-121012-	
MW-67	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-67	Regional	10/15/12	Groundwater Sampling	W67-121015-	
MW-68	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-68	Regional	10/16/12	Groundwater Sampling	W68-121016-	
MW-69	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-69	Regional	10/19/12	Groundwater Sampling	W69-121019-	
MW-70	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-70	Regional	10/15/12	Groundwater Sampling	W70-121015-	

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 4th QUARTER 2012

Well ID	Zone	Date	Planned Acitvity	Sample ID	Comment
MW-72	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-72	Regional	10/4/12	Groundwater Sampling	W72-121004-	
MW-73	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-73	Regional	10/22/12	Groundwater Sampling	W73-121022-	
MW-74	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-74	Regional	10/10/12	Groundwater Sampling	W74R121012-	
MW-74	Regional	11/7/12	Groundwater Sampling	W74R121107-	
MW-74	Regional	12/7/12	Groundwater Sampling	W74R121207-	
MW-75	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-75	Regional	10/10/12	Groundwater Sampling	W75121012-	
MW-75	Regional	11/7/12	Groundwater Sampling	W75121107-	
MW-75	Regional	12/7/12	Groundwater Sampling	W75121207-	
MW-76	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-76	Regional	10/26/12	Groundwater Sampling	W76-121026-	
MW-77	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-77	Regional	10/25/12	Groundwater Sampling	W77-121025-	
MW-78	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-78	Regional	10/26/12	Groundwater Sampling	W78-121026-	
MW-79	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-80	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-80	Regional	10/19/12	Groundwater Sampling	W80-121019-	
MW-81	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-81	Regional	10/22/12	Groundwater Sampling	W81-121022-	
MW-82	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-82	Regional	10/2/12	Groundwater Sampling	W82-121002-	
MW-83	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-83	Regional	10/18/12	Groundwater Sampling	W83-121018-	
MW-84	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-84	Regional	10/22/12	Groundwater Sampling	W84-121022-	
MW-84	Regional	10/22/12	QA/QC Sample	W84-121022D	Field Duplicate
MW-85	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-85	Regional	10/19/13	Groundwater Sampling	W85-121019-	
MW-86	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-86	Regional	10/18/12	Groundwater Sampling	W86-121018-	
MW-87	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-87	Regional	10/5/12	Groundwater Sampling	W87-121005-	
MW-87	Regional	11/7/12	Groundwater Sampling	W87-121107-	
MW-87	Regional	12/7/12	Groundwater Sampling	W87-121207-	
MW-88	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-88	Regional	10/24/12	Groundwater Sampling	W88-121024-	
MW-89	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-89	Regional	10/12/12	Groundwater Sampling	W89-121012-	
MW-90	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-90	Regional	10/22/12	Groundwater Sampling	W90-120409-	
MW-91	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-91	Regional	10/31/12	Groundwater Sampling	W91-120410-	
MW-91	Regional	10/31/12	QA/QC Sample	W91-120410D	Field Duplicate
MW-93	Regional	10/10/12	Groundwater Sampling	W93-120424-	
MW-94	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-94	Regional	10/18/12	Groundwater Sampling	W94-120424-	
MW-95	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-95	Regional	10/25/12	Groundwater Sampling	W95-120430-	
MW-96	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-97	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-98	Perched	10/1/12	Groundwater Elevation Measurement	NA	

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 4th QUARTER 2012

Well ID	Zone	Date	Planned Acitvity	Sample ID	Comment
MW-99	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-99	Regional	10/5/12	Groundwater Sampling	W99-120420-	
MW-99	Regional	11/7/12	Groundwater Sampling	W99-120518-	
MW-99	Regional	12/7/12	Groundwater Sampling	W99-120622-	
MW-100	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-100	Regional	10/4/12	Groundwater Sampling	W100120417-	
MW-101	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-101	Perched	10/26/12	Groundwater Sampling	W101120409-	
MW-102	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-103	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-104	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-105	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-106	Regional	10/1/12	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	10/1/12	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	10/29/12	Groundwater Sampling	NA	No sample collected, well pumped dry.
WS-NPW-1	Regional	10/1/12	Groundwater Elevation Measurement	NA	
WS-NPW-3	Regional	10/1/12	Groundwater Elevation Measurement	NA	
Equipment Blank	NA	10/11/12	QA/QC Sample	WU1M121011E	
Equipment Blank	NA	10/11/12	QA/QC Sample	WU1S121011E	
Equipment Blank	NA	10/11/12	QA/QC Sample	WU1H121011E	
Field Blank	NA	10/19/12	QA/QC Sample	W55-121019F	
Field Blank	NA	12/7/12	QA/QC Sample	W87-121207F	
Field Blank	NA	10/10/12	QA/QC Sample	W93-121010F	
WS-NPW	Regional	10/5/12	Water Supply Characteization	WNPW121005-	

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 October 1, 2012 to December 31, 2012)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Upgradient Wells					
pH (field)	(pH units)	MW-76	10/26/2012	W76-121026-	6.29
		MW-78	10/26/2012	W78-121026-	6.47
Arsenic	(mg/L)	MW-93	10/10/2012	W93-121010-	0.0013
		MW-99	10/5/2012	W99-121005-	0.00206
Iron	(mg/L)	MW-21	10/2/2012	W21-121002-	1.66
		MW-24	10/10/2012	W24-121010-	3.08
		MW-57	10/8/2012	W57-121008-	8.83
		MW-58A	10/9/2012	W58A121009-	0.969
		MW-59	10/8/2012	W59-121008-	3.98
		MW-65	10/12/2012	W65-121012-	4.74
		MW-100	10/4/2012	W100121004-	1.37
Manganese	(mg/L)	MW-21	10/2/2012	W21-121002-	0.0669
		MW-24	10/10/2012	W24-121010-	0.106
		MW-56	10/2/2012	W56-121002-	0.0824
		MW-57	10/8/2012	W57-121008-	0.239
		MW-58A	10/9/2012	W58A121009-	0.313
		MW-59	10/8/2012	W59-121008-	0.0957
		MW-65	10/12/2012	W65-121012-	0.195
		MW-93	10/10/2012	W93-121010-	0.238
		MW-95	10/25/2012	W95-121025-	0.129
		MW-99	10/5/2012	W99-121005-	0.0553
		MW-100	10/4/2012	W100121004-	0.225
Trichloroethene	(ug/L)	MW-76	10/26/2012	W76-121026-	10.1
		MW-82	10/2/2012	W82-121002-	5.06
Vinyl Chloride	(ug/L)	MW-65	10/12/2012	W65-121012-	0.0381

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 October 1, 2012 to December 31, 2012)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Downgradient Wells					
Arsenic	(mg/L)	MW-69	10/19/2012	W69-121019-	0.00237
		MW-80	10/19/2012	W80-121019-	0.00416
		MW-89	10/12/2012	W89-121012-	0.00138
		MW-91	10/31/2012	W91-121031-	0.00168 D
Iron	(mg/L)	MW-43	10/4/2012	W43-121004-	0.965
		MW-68	10/16/2012	W68-121016-	1.13
		MW-69	10/19/2012	W69-121019-	1.23
		MW-72	10/4/2012	W72-121004-	2.03
		MW-75	10/10/2012	W75-121010-	1.43
		MW-80	10/19/2012	W80-121019-	1.55
		MW-86	10/18/2012	W86-121018-	0.306
		MW-87	10/5/2012	W87-121005-	3.21
		MW-89	10/12/2012	W89-121012-	0.825
		MW-90	10/22/2012	W90-121022-	1.08
		MW-91	10/31/2012	W91-121031-	2.45 D
Manganese	(mg/L)	MW-43	10/4/2012	W43-121004-	0.197
		MW-67	10/15/2012	W67-121015-	0.0918
		MW-68	10/16/2012	W68-121016-	0.227
		MW-69	10/19/2012	W69-121019-	0.206
		MW-72	10/4/2012	W72-121004-	0.258
		MW-75	10/10/2012	W75-121010-	0.111
		MW-80	10/19/2012	W80-121019-	0.245
		MW-87	10/5/2012	W87-121005-	0.34
		MW-89	10/12/2012	W89-121012-	0.23
		MW-90	10/22/2012	W90-120716-	0.244 D
		MW-91	10/31/2012	W91-121031-	0.405 D

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

Data Collected from October 1, 2012 December 31, 2012

			Upgradient South																	
Site ID			**MW-56**			**MW-57**			**MW-76**			**MW-83**			**MW-60**			**MW-94**		
			10/2/12			10/8/12			10/26/12			10/18/12			10/9/12			10/18/12		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	15.1	0.75349	50.0	16.0	0.7984	37.6	16.6	0.82834	46.7	41.4	2.06587	51.7	16.0	0.7984	48.2	30.9	1.54192	48.4
Magnesium	24.3	2	6.3	0.5217	34.6	8.7	0.7159	33.7	7.3	0.60235	33.9	18.1	1.48941	37.3	7.4	0.61222	36.9	15.2	1.25077	39.3
Potassium	39.1	1	1.0	0.02481	1.6	0.9	0.02235	1.1	1.2	0.02992	1.7	2.8	0.07213	1.8	1.0	0.02634	1.6	2.3	0.05934	1.9
Sodium	23.0	1	4.7	0.20487	13.6	6.0	0.26142	12.3	7.2	0.31318	17.7	8.4	0.36625	9.2	5.1	0.2201	13.3	7.6	0.33145	10.4
Iron	55.8	2	0.01	0.00018	0.0	8.83	0.31622	14.9	0.01	0.00018	0.0	0.01	0.00018	0.0	0.01	0.00036	0.0	0.01	0.00018	0.0
Manganese	54.9	2	0.08	0.003	0.2	0.24	0.0087	0.4	0.00	1.8E-05	0.0	0.00	1.8E-05	0.0	0.00	1.8E-05	0.0	0.00	1.8E-05	0.0
Ammonia-N	14.0	1	0.01	0.00036	0.0	0.02	0.00144	0.1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0
Total Cations (meq/L)				**1.5**			**2.1**			**1.8**			**4.0**			**1.7**			**3.2**	
Anions																				
Alkalinity, Total			57			88			56			145			83			120		
Carbonate	60.0	2	0.0342	0.00114	0.1	0.0357	0.00119	0.1	0.0066	0.00022	0.0	0.0891	0.00297	0.1	0.0314	0.00105	0.1	0.0887	0.00296	0.1
Bicarbonate	61.0	1	69.47	1.13869	66.8	107.17	1.75654	76.3	68.67	1.12561	57.7	176.72	2.89659	73.4	101.07	1.6567	85.3	146.22	2.39668	75.4
Chloride	35.5	1	4.2	0.11903	7.0	5.5	0.15598	6.8	11.7	0.33001	16.9	30.2	0.85183	21.6	1.5	0.04118	2.1	21.3	0.6008	18.9
Nitrate-N	14.0	1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.65	0.04619	2.4	0.75	0.05319	1.3	1.17	0.08353	4.3	0.95	0.06754	2.1
Sulfate	96.1	2	21.4	0.44557	26.1	18.6	0.38727	16.8	21.6	0.44973	23.0	6.9	0.14325	3.6	7.7	0.16032	8.3	5.4	0.11264	3.5
Total Anions (meq/L)				**1.7**			**2.3**			**2.0**			**3.9**			**1.9**			**3.2**	
Total Ions (meq/L)				**3.2**			**4.4**			**3.7**			**7.9**			**3.6**			**6.4**	
Cation/Anion Ratio				**0.88**			**0.92**			**0.91**			**1.01**			**0.85**			**1.00**	
Percent Difference				**-6.1**			**-4.0**			**-4.8**			**0.6**			**-7.9**			**0.1**	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				1.50			1.80			1.77			3.99			1.66			3.18	
Calcium					50.07			44.40			46.70			51.73			48.18			48.43
Magnesium					34.67			39.81			33.96			37.29			36.95			39.29
Sodium + Potassium					15.26			15.78			19.34			10.98			14.87			12.28
sum (SO_4, Cl, HCO_3+CO_3)				1.70			2.30			1.91			3.89			1.86			3.11	
Sulfate					26.142			16.831			23.601			3.678			8.623			3.618
Chloride					6.984			6.779			17.318			21.872			2.215			19.299
Bicarbonate + Carbonate					66.875			76.391			59.081			74.450			89.162			77.083

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

Data Collected from October 1, 2012 December 31, 2012

			Upgradient South													
Site ID			**MW-82**			**MW-65**			**MW-58A**			**MW-59**			**MW-24**		
			10/2/12			10/12/12			10/9/12			10/8/12			10/10/12		
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	21.5	1.07285	44.3	12.2	0.60878	35.5	15.4	0.76846	45.2	12.8	0.63872	38.2	12.3	0.61377	37.3
Magnesium	24.3	2	12.6	1.03682	42.8	8.0	0.66077	38.6	7.8	0.64102	37.7	7.8	0.6402	38.3	8.2	0.67311	40.9
Potassium	39.1	1	1.6	0.0399	1.6	1.0	0.02512	1.5	0.9	0.02335	1.4	1.0	0.02453	1.5	0.8	0.02049	1.2
Sodium	23.0	1	6.3	0.27316	11.3	5.5	0.2388	13.9	5.0	0.21618	12.7	5.1	0.22358	13.4	5.1	0.22227	13.5
Iron	55.8	2	0.01	0.00018	0.0	4.74	0.16975	9.9	0.97	0.0347	2.0	3.98	0.14253	8.5	3.08	0.1103	6.7
Manganese	54.9	2	0.00	1.8E-05	0.0	0.20	0.0071	0.4	0.31	0.01139	0.7	0.10	0.00348	0.2	0.11	0.00386	0.2
Ammonia-N	14.0	1	0.01	0.00036	0.0	0.03	0.00217	0.1	0.07	0.00473	0.3	0.01	0.00036	0.0	0.04	0.00292	0.2
Total Cations (meq/L)				**2.4**			**1.7**			**1.7**			**1.7**			**1.6**	
Anions																	
Alkalinity, Total			113			53			74			65			65		
Carbonate	60.0	2	0.0565	0.00188	0.1	0.0188	0.00063	0.0	0.161	0.00537	0.3	0.0504	0.00168	0.1	0.0643	0.00214	0.1
Bicarbonate	61.0	1	137.75	2.25778	79.1	64.87	1.06321	68.7	89.95	1.47441	76.9	79.32	1.30012	71.8	78.56	1.28766	74.0
Chloride	35.5	1	6.3	0.1777	6.2	4.6	0.1289	8.3	4.0	0.11142	5.8	4.2	0.11903	6.6	4.0	0.11311	6.5
Nitrate-N	14.0	1	0.64	0.04548	1.6	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0
Sulfate	96.1	2	17.9	0.37269	13.1	17.0	0.35395	22.9	15.7	0.32689	17.0	18.7	0.38935	21.5	16.2	0.3373	19.4
Total Anions (meq/L)				**2.9**			**1.5**			**1.9**			**1.8**			**1.7**	
Total Ions (meq/L)				**5.3**			**3.3**			**3.6**			**3.5**			**3.4**	
Cation/Anion Ratio				**0.85**			**1.11**			**0.89**			**0.92**			**0.95**	
Percent Difference				**-8.2**			**5.1**			**-6.0**			**-3.9**			**-2.8**	
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)				2.42			1.53			1.65			1.53			1.53	
Calcium					44.28			39.70			46.60			41.83			40.13
Magnesium					42.80			43.09			38.87			41.92			44.00
Sodium + Potassium					12.92			17.21			14.53			16.25			15.87
sum (SO_4, Cl, HCO_3+CO_3)				2.81			1.55			1.92			1.81			1.74	
Sulfate					13.263			22.885			17.042			21.509			19.383
Chloride					6.324			8.334			5.809			6.576			6.500
Bicarbonate + Carbonate					80.413			68.781			77.149			71.916			74.118

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

Data Collected from October 1, 2012 December 31, 2012

			Upgradient Northwest									Upgradient Northeast					
Site ID			**MW-84**			**MW-21**			**MW-73**			**MW-81**			**MW-99**		
			10/22/12			10/2/12			10/22/12			10/22/12			10/5/12		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	10.9	0.54391	34.8	9.0	0.4496	38.7	11.8	0.58882	42.8	10.7	0.53393	41.4	8.3	0.41617	36.5
Magnesium	24.3	2	9.0	0.73812	47.3	5.1	0.41802	36.0	6.4	0.52993	38.5	6.1	0.49949	38.7	3.9	0.32339	28.4
Potassium	39.1	1	1.0	0.02583	1.7	0.9	0.02422	2.1	0.8	0.02128	1.5	0.7	0.01885	1.5	0.8	0.01975	1.7
Sodium	23.0	1	5.8	0.25316	16.2	4.8	0.20705	17.8	5.4	0.23532	17.1	5.5	0.23793	18.4	8.6	0.37408	32.8
Iron	55.8	2	0.01	0.00018	0.0	1.66	0.05945	5.1	0.01	0.00018	0.0	0.01	0.00018	0.0	0.03	0.00122	0.1
Manganese	54.9	2	0.01	0.00022	0.0	0.07	0.00244	0.2	0.00	1.8E-05	0.0	0.00	1.8E-05	0.0	0.06	0.00201	0.2
Ammonia-N	14.0	1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.05	0.00368	0.3
Total Cations (meq/L)				**1.6**			**1.2**			**1.4**			**1.3**			**1.1**	
Anions																	
Alkalinity, Total			60			53			55			49			52		
Carbonate	60.0	2	0.0362	0.00121	0.1	0.2675	0.00892	0.7	0.0394	0.00131	0.1	0.0391	0.0013	0.1	0.2531	0.00844	0.6
Bicarbonate	61.0	1	73.49	1.20461	74.0	63.75	1.04493	84.0	66.53	1.09052	73.5	60.19	0.98655	71.8	63.17	1.03541	79.0
Chloride	35.5	1	3.9	0.10944	6.7	2.8	0.07898	6.4	3.2	0.09082	6.1	3.5	0.09985	7.3	3.4	0.09534	7.3
Nitrate-N	14.0	1	0.54	0.03862	2.4	0.01	0.00036	0.0	1.69	0.12065	8.1	1.63	0.11637	8.5	0.04	0.00286	0.2
Sulfate	96.1	2	13.2	0.27484	16.9	5.3	0.11014	8.9	8.7	0.18072	12.2	8.2	0.1699	12.4	8.1	0.16865	12.9
Total Anions (meq/L)				**1.6**			**1.2**			**1.5**			**1.4**			**1.3**	
Total Ions (meq/L)				**3.2**			**2.4**			**2.9**			**2.7**			**2.5**	
Cation/Anion Ratio				**0.96**			**0.93**			**0.93**			**0.94**			**0.87**	
Percent Difference				**-2.1**			**-3.4**			**-3.8**			**-3.1**			**-7.0**	
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)				1.56			1.10			1.38			1.29			1.13	
Calcium					34.84			40.91			42.81			41.38			36.72
Magnesium					47.28			38.04			38.53			38.71			28.53
Sodium + Potassium					17.87			21.05			18.66			19.90			34.75
					100.0			100.0			100.0						
sum (SO_4, Cl, HCO_3+CO_3)				1.59			1.24			1.36			1.26			1.31	
Sulfate					17.284			8.861			13.256			13.510			12.895
Chloride					6.883			6.354			6.662			7.940			7.290
Bicarbonate + Carbonate					75.833			84.785			80.083			78.551			79.815

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

Data Collected from October 1, 2012 December 31, 2012

			Cross Gradient						Interior											
Site ID			**MW-93**			**MW-95**			**MW-70**			**MW-77**			**MW-78**			**MW-100**		
			10/10/12			10/25/12			10/15/12			10/25/12			10/26/12			10/4/12		
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	32.3	1.61178	47.7	18.2	0.90818	45.7	18.0	0.8982	42.7	20.8	1.03792	44.8	14.2	0.70858	44.9	25.8	1.28743	42.2
Magnesium	24.3	2	16.5	1.35775	40.2	9.8	0.8023	40.4	10.8	0.88871	42.3	11.3	0.92985	40.1	6.9	0.56532	35.9	15.5	1.27546	41.8
Potassium	39.1	1	1.4	0.03581	1.1	1.1	0.02762	1.4	1.5	0.03888	1.9	1.3	0.03351	1.4	1.9	0.04885	3.1	1.8	0.04553	1.5
Sodium	23.0	1	8.3	0.36103	10.7	5.6	0.24272	12.2	6.3	0.2749	13.1	7.3	0.31623	13.6	5.8	0.25316	16.1	8.9	0.38626	12.7
Iron	55.8	2	0.01	0.00018	0.0	0.01	0.00018	0.0	0.01	0.00018	0.0	0.01	0.00018	0.0	0.01	0.00018	0.0	1.37	0.04906	1.6
Manganese	54.9	2	0.24	0.00866	0.3	0.13	0.0047	0.2	0.00	1.8E-05	0.0	0.01	0.00039	0.0	0.00	1.8E-05	0.0	0.23	0.00819	0.3
Ammonia-N	14.0	1	0.05	0.00371	0.1	0.03	0.00184	0.1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0
Total Cations (meq/L)				**3.4**			**2.0**			**2.1**			**2.3**			**1.6**			**3.1**	
Anions																				
Alkalinity, Total			114			85			81			109			70			135		
Carbonate	60.0	2	0.1217	0.00406	0.1	0.1258	0.00419	0.2	0.0942	0.00314	0.1	0.0702	0.00234	0.1	0.0125	0.00042	0.0	0.0588	0.00196	0.1
Bicarbonate	61.0	1	138.83	2.2756	57.0	103.93	1.70355	76.2	98.02	1.60662	61.2	132.84	2.17733	85.2	85.86	1.40737	79.3	164.58	2.69763	84.0
Chloride	35.5	1	3.0	0.0849	2.1	5.6	0.15796	7.1	7.7	0.21691	8.3	4.8	0.13624	5.3	4.9	0.13821	7.8	2.5	0.0708	2.2
Nitrate-N	14.0	1	0.01	0.00086	0.0	0.01	0.00036	0.0	0.03	0.002	0.1	0.86	0.06154	2.4	0.94	0.06682	3.8	0.01	0.00036	0.0
Sulfate	96.1	2	78.3	1.63027	40.8	17.7	0.36853	16.5	38.2	0.79536	30.3	8.6	0.17906	7.0	7.8	0.16199	9.1	21.2	0.4414	13.7
Total Anions (meq/L)				**4.0**			**2.2**			**2.6**			**2.6**			**1.8**			**3.2**	
Total Ions (meq/L)				**7.4**			**4.2**			**4.7**			**4.9**			**3.4**			**6.3**	
Cation/Anion Ratio				**0.85**			**0.89**			**0.80**			**0.91**			**0.89**			**0.95**	
Percent Difference				**-8.4**			**-5.9**			**-11.1**			**-4.9**			**-5.9**			**-2.6**	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				3.37			1.98			2.10			2.32			1.58			2.99	
Calcium					47.88			45.85			42.76			44.79			44.96			42.99
Magnesium					40.33			40.50			42.31			40.12			35.87			42.59
Sodium + Potassium					11.79			13.65			14.94			15.09			19.16			14.42
sum (SO_4, Cl, HCO_3+CO_3)				3.99			2.23			2.62			2.49			1.71			3.21	
Sulfate					40.810			16.495			30.334			7.177			9.484			13.743
Chloride					2.125			7.070			8.273			5.460			8.092			2.204
Bicarbonate + Carbonate					57.065			76.436			61.394			87.363			82.424			84.053

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

Data Collected from October 1, 2012 December 31, 2012

			Vertical to Facilites												Downgradient Northwest					
Site ID			**MW-64**			**MW-66**			**MW-68**			**MW-67**			**MW-72**			**MW-69**		
			No Sample			10/12/12			10/16/12			12/15/12			10/4/12			10/19/12		
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				21.8	1.08782	35.9	27.3	1.36228	42.7	30.0	1.49701	43.1	24.5	1.22255	43.0	28.1	1.4022	46.4
Magnesium	24.3	2				18.8	1.54701	51.0	16.7	1.3742	43.0	18.8	1.54701	44.5	14.7	1.20963	42.5	14.4	1.18494	39.2
Potassium	39.1	1				1.3	0.03376	1.1	1.7	0.04399	1.4	1.6	0.04195	1.2	1.6	0.04143	1.5	1.7	0.04348	1.4
Sodium	23.0	1				8.3	0.3619	11.9	8.4	0.36321	11.4	8.8	0.38147	11.0	6.6	0.28752	10.1	7.8	0.33711	11.2
Iron	55.8	2				0.01	0.00018	0.0	1.13	0.04047	1.3	0.13	0.00476	0.1	2.03	0.0727	2.6	1.23	0.04405	1.5
Manganese	54.9	2				0.00	1.8E-05	0.0	0.23	0.00826	0.3	0.09	0.00334	0.1	0.26	0.00939	0.3	0.21	0.0075	0.2
Ammonia-N	14.0	1				0.01	0.00036	0.0	0.01	0.00086	0.0	0.01	0.00036	0.0	0.01	0.001	0.0	0.02	0.00107	0.0
Total Cations (meq/L)							**3.0**			**3.2**			**3.5**			**2.8**			**3.0**	
Anions																				
Alkalinity, Total						119			131			119			115			126		
Carbonate	60.0	2				0.0921	0.00307	0.1	0.1218	0.00406	0.1	0.0942	0.00314	0.1	0.0831	0.00277	0.1	0.2335	0.00778	0.3
Bicarbonate	61.0	1				144.99	2.37657	81.4	159.57	2.61554	86.5	144.99	2.3765	82.1	140.13	2.29689	71.2	153.25	2.51184	85.2
Chloride	35.5	1				6.9	0.19491	6.7	2.8	0.07757	2.6	4.4	0.1227	4.2	4.5	0.12608	3.9	4.8	0.13398	4.5
Nitrate-N	14.0	1				0.76	0.05404	1.9	0.01	0.00036	0.0	0.50	0.0357	1.2	0.01	0.00036	0.0	0.01	0.00036	0.0
Sulfate	96.1	2				14.0	0.29149	10.0	15.7	0.32689	10.8	17.1	0.35604	12.3	38.5	0.8016	24.8	14.1	0.29357	10.0
Total Anions (meq/L)							**2.9**			**3.0**			**2.9**			**3.2**			**2.9**	
Total Ions (meq/L)							**6.0**			**6.2**			**6.4**			**6.1**			**6.0**	
Cation/Anion Ratio							**1.04**			**1.06**			**1.20**			**0.88**			**1.02**	
Percent Difference							**1.9**			**2.7**			**9.1**			**-6.3**			**1.2**	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)							3.03			3.14			3.47			2.76			2.97	
Calcium								35.90			43.33			43.17			44.28			47.25
Magnesium								51.05			43.71			44.62			43.81			39.93
Sodium + Potassium								13.06			12.95			12.21			11.91			12.82
sum (SO_4, Cl, HCO_3+CO_3)							2.87			3.02			2.86			3.23			2.95	
Sulfate								10.171			10.810			12.456			24.838			9.961
Chloride								6.801			2.565			4.293			3.907			4.546
Bicarbonate + Carbonate								83.029			86.625			83.252			71.255			85.493

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

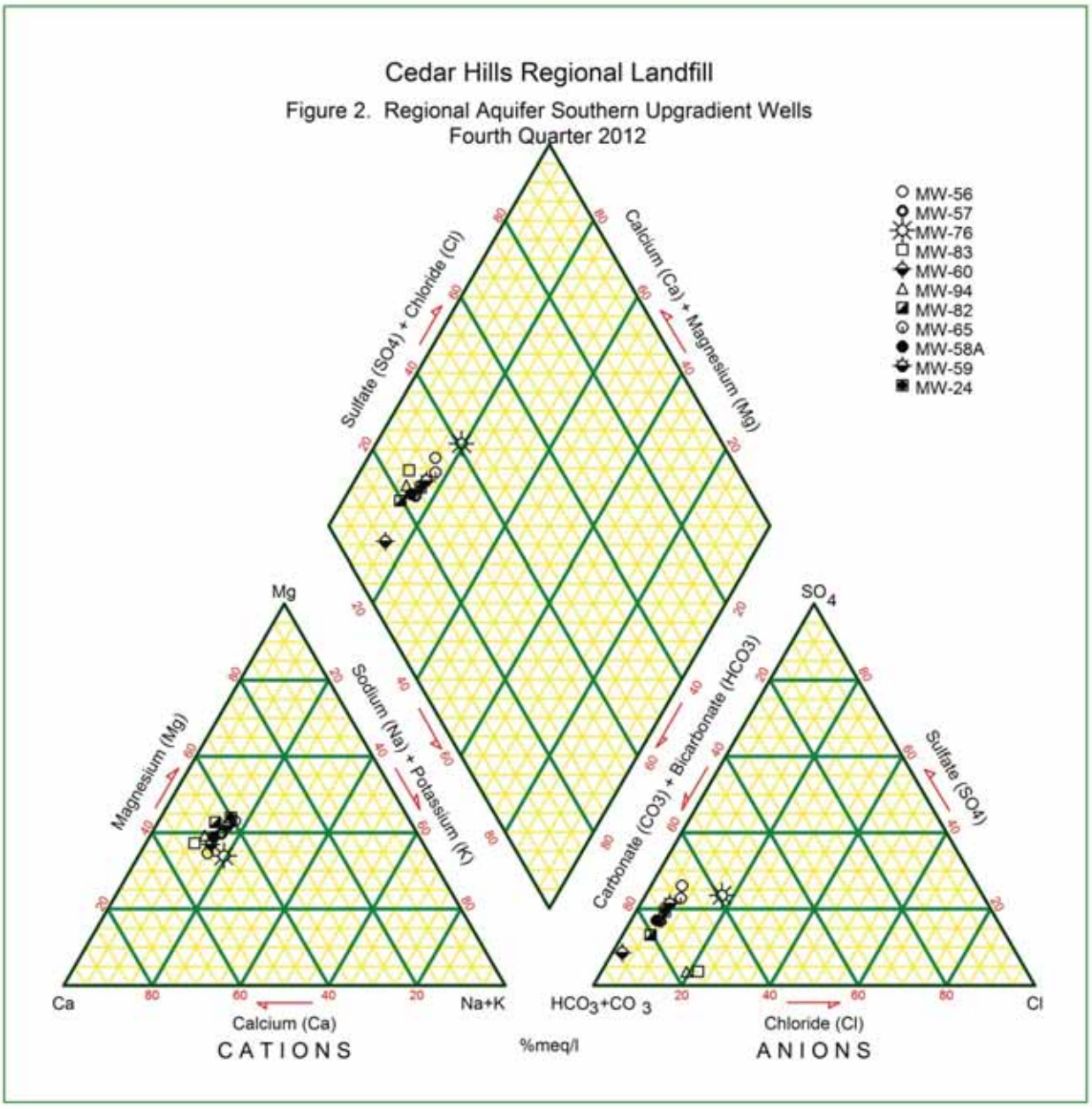
Data Collected from October 1, 2012 December 31, 2012

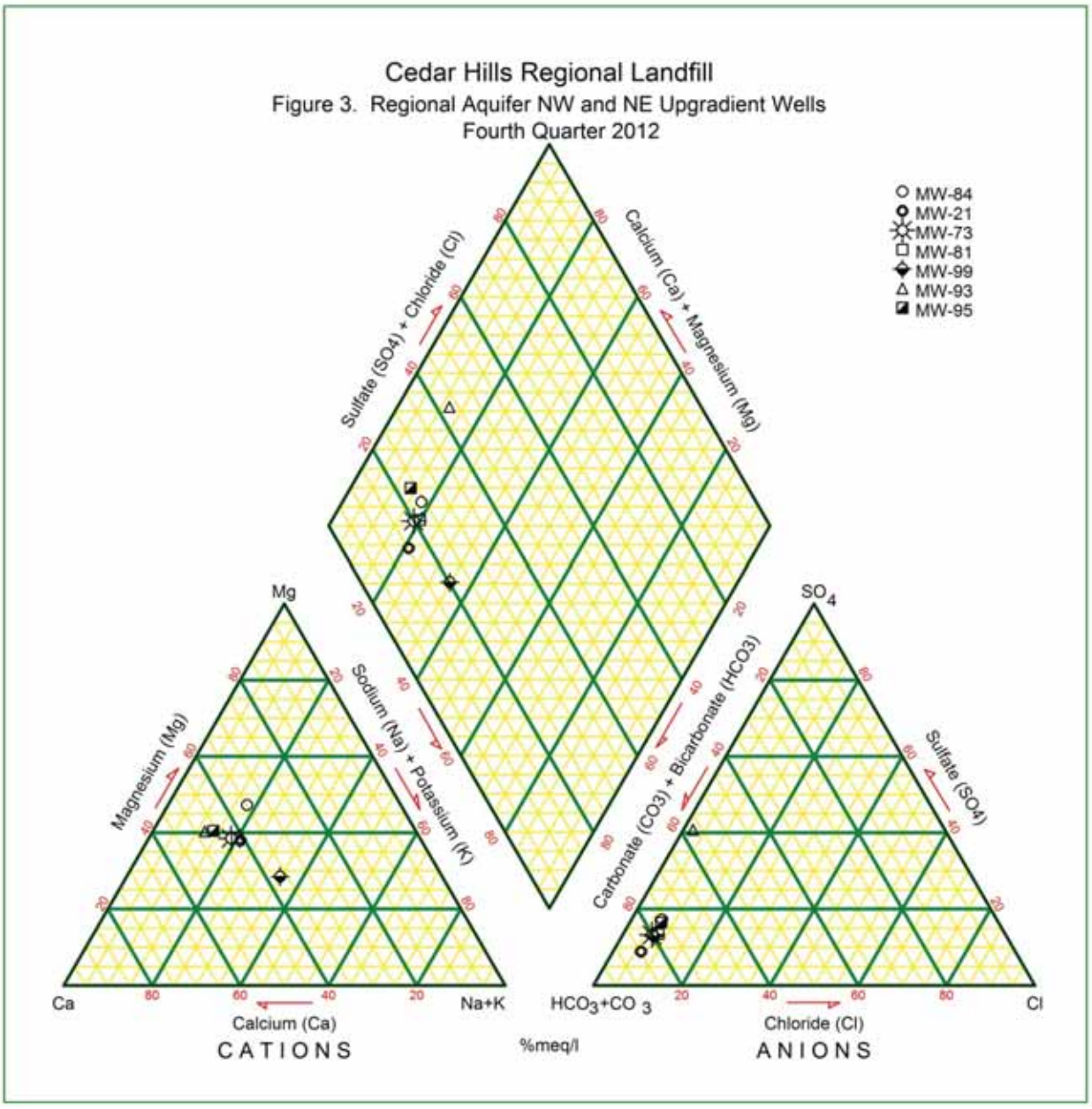
			Downgradient															
Site ID			**MW-75**			**MW-80**			**MW-87**			**MW-85**			**MW-91**			**MW-74**		
			10/10/12			10/19/12			10/5/12			10/19/12			10/31/12			10/10/12		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	21.0	1.0479	37.7	25.4	1.26747	45.2	33.6	1.67665	40.4	22.9	1.14271	40.8	20.2	1.00798	40.3	36.8	1.83633	39.1
Magnesium	24.3	2	15.9	1.30837	47.0	13.8	1.13557	40.5	23.4	1.92553	46.3	15.5	1.27546	45.5	12.8	1.05328	42.1	28.6	2.35343	50.1
Potassium	39.1	1	1.5	0.03913	1.4	1.6	0.0399	1.4	1.9	0.04936	1.2	1.5	0.03862	1.4	1.7	0.04271	1.7	1.8	0.04578	1.0
Sodium	23.0	1	7.4	0.32145	11.6	6.8	0.29752	10.6	8.6	0.37538	9.0	8.0	0.34624	12.3	6.7	0.291	11.6	10.6	0.46107	9.8
Iron	55.8	2	1.43	0.05121	1.8	1.55	0.05551	2.0	3.21	0.11496	2.8	0.01	0.00018	0.0	2.45	0.08774	3.5	0.01	0.00018	0.0
Manganese	54.9	2	0.11	0.00404	0.1	0.25	0.00892	0.3	0.34	0.01238	0.3	0.00	1.8E-05	0.0	0.41	0.01474	0.6	0.00	1.8E-05	0.0
Ammonia-N	14.0	1	0.13	0.00914	0.3	0.01	0.00036	0.0	0.01	0.00086	0.0	0.01	0.00036	0.0	0.03	0.00249	0.1	0.01	0.00036	0.0
Total Cations (meq/L)				**2.8**			**2.8**			**4.2**			**2.8**			**2.5**			**4.7**	
Anions																				
Alkalinity, Total			96			90			87			98			86			205		
Carbonate	60.0	2	0.054	0.0018	0.1	0.1072	0.00357	0.1	0.0435	0.00145	0.0	0.0907	0.00302	0.1	0.0636	0.00212	0.1	0.1481	0.00494	0.1
Bicarbonate	61.0	1	117.38	1.92391	60.4	108.97	1.78616	62.8	106.17	1.74029	37.1	118.77	1.94668	68.7	104.91	1.71962	62.6	249.80	4.09445	76.6
Chloride	35.5	1	8.9	0.25132	7.9	4.8	0.13595	4.8	5.5	0.15372	3.3	7.3	0.2045	7.2	7.7	0.21606	7.9	24.8	0.69952	13.1
Nitrate-N	14.0	1	0.01	0.00086	0.0	0.01	0.00036	0.0	0.01	0.00093	0.0	0.13	0.00921	0.3	0.02	0.00143	0.1	0.44	0.03113	0.6
Sulfate	96.1	2	48.4	1.00773	31.6	44.2	0.92028	32.3	134.0	2.78999	59.5	32.1	0.66835	23.6	38.7	0.80577	29.4	24.8	0.51636	9.7
Total Anions (meq/L)				**3.2**			**2.8**			**4.7**			**2.8**			**2.7**			**5.3**	
Total Ions (meq/L)				**6.0**			**5.7**			**8.8**			**5.6**			**5.2**			**10.0**	
Cation/Anion Ratio				**0.87**			**0.99**			**0.89**			**0.99**			**0.91**			**0.88**	
Percent Difference				**-6.8**			**-0.7**			**-6.0**			**-0.5**			**-4.7**			**-6.5**	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				2.72			2.74			4.03			2.80			2.39			4.70	
Calcium					38.57			46.25			41.64			40.77			42.09			39.10
Magnesium					48.16			41.44			47.82			45.50			43.98			50.11
Sodium + Potassium					13.27			12.31			10.55			13.73			13.93			10.79
sum (SO_4, Cl, HCO_3+CO_3)				3.18			2.85			4.69			2.82			2.74			5.32	
Sulfate					31.642			32.336			59.546			23.679			29.369			9.715
Chloride					7.891			4.777			3.281			7.245			7.875			13.161
Bicarbonate + Carbonate					60.466			62.887			37.173			69.076			62.756			77.125

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

Data Collected from October 1, 2012 December 31, 2012

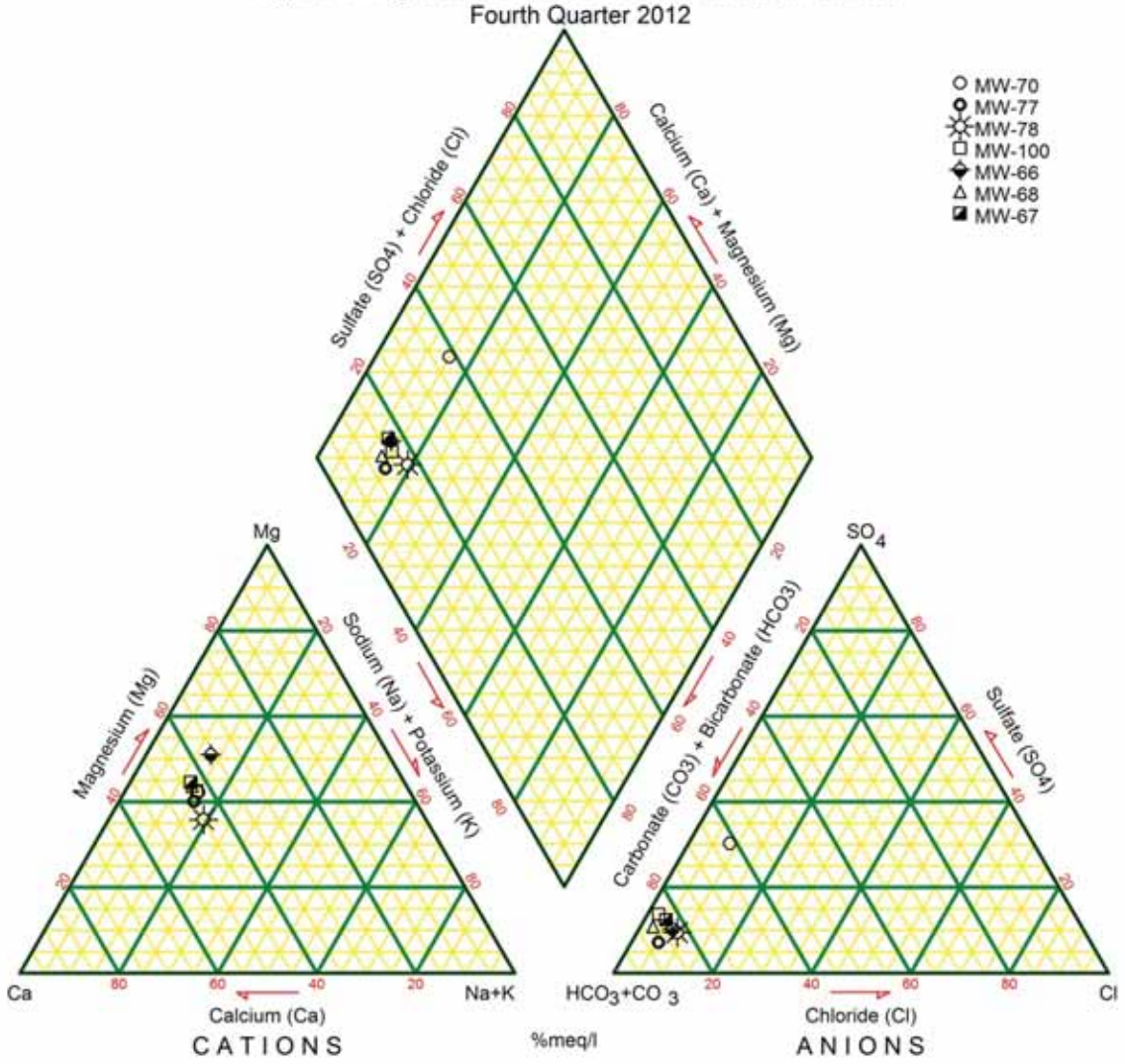
			Downgradient													
Site ID			**MW-86**			**MW-88**			**MW-89**			**MW-90**			**MW-43**		
			10/18/12			10/24/12			10/12/12			10/22/12			10/4/12		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	13.1	0.65369	36.5	8.3	0.41417	35.5	13.1	0.65369	32.7	16.1	0.80339	40.9	11.8	0.58882	37.3
Magnesium	24.3	2	9.9	0.81547	45.6	6.1	0.50525	43.3	10.9	0.89693	44.8	10.0	0.81958	41.8	8.2	0.67229	42.6
Potassium	39.1	1	1.2	0.02967	1.7	0.8	0.01957	1.7	1.5	0.03811	1.9	1.4	0.03453	1.8	1.2	0.03044	1.9
Sodium	23.0	1	6.4	0.27882	15.6	5.2	0.22662	19.4	8.6	0.37277	18.6	5.9	0.25577	13.0	5.6	0.24402	15.5
Iron	55.8	2	0.31	0.01096	0.6	0.01	0.00018	0.0	0.83	0.02955	1.5	1.08	0.03868	2.0	0.97	0.03456	2.2
Manganese	54.9	2	0.01	0.00025	0.0	0.00	4.1E-05	0.0	0.23	0.00837	0.4	0.24	0.00888	0.5	0.20	0.00717	0.5
Ammonia-N	14.0	1	0.01	0.00036	0.0	0.01	0.00036	0.0	0.02	0.00136	0.1	0.02	0.00114	0.1	0.02	0.00153	0.1
Total Cations (meq/L)				**1.8**			**1.2**			**2.0**			**2.0**			**1.6**	
Anions																	
Alkalinity, Total			65			53			75			69			70		
Carbonate	60.0	2	0.02405	0.0008	0.0	0.04911	0.00164	0.1	0.10255	0.00342	0.2	0.08111	0.0027	0.1	0.12694	0.00423	0.2
Bicarbonate	61.0	1	79.13	1.297	72.0	64.32	1.0542	80.9	90.80	1.48836	77.5	84.38	1.38309	67.5	85.26	1.39756	77.6
Chloride	35.5	1	4.7	0.13144	7.3	2.4	0.06826	5.2	3.8	0.10662	5.6	4.2	0.11762	5.7	3.7	0.10493	5.8
Nitrate-N	14.0	1	0.33	0.02327	1.3	0.56	0.03969	3.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0
Sulfate	96.1	2	16.7	0.34771	19.3	6.7	0.13908	10.7	15.4	0.32064	16.7	26.2	0.54551	26.6	14.1	0.29357	16.3
Total Anions (meq/L)				**1.8**			**1.3**			**1.9**			**2.0**			**1.8**	
Total Ions (meq/L)				**3.6**			**2.5**			**3.9**			**4.0**			**3.4**	
Cation/Anion Ratio				**0.99**			**0.90**			**1.04**			**0.96**			**0.88**	
Percent Difference				**-0.3**			**-5.5**			**2.1**			**-2.2**			**-6.6**	
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)				1.78			1.17			1.96			1.91			1.54	
Calcium					36.77			35.53			33.33			41.99			38.35
Magnesium					45.87			43.35			45.73			42.84			43.78
Sodium + Potassium					17.35			21.12			20.95			15.17			17.87
sum (SO_4, Cl, HCO_3+CO_3)				1.78			1.26			1.92			2.05			1.80	
Sulfate					19.568			11.011			16.708			26.624			16.307
Chloride					7.397			5.404			5.556			5.741			5.828
Bicarbonate + Carbonate					73.035			83.586			77.736			67.635			77.865

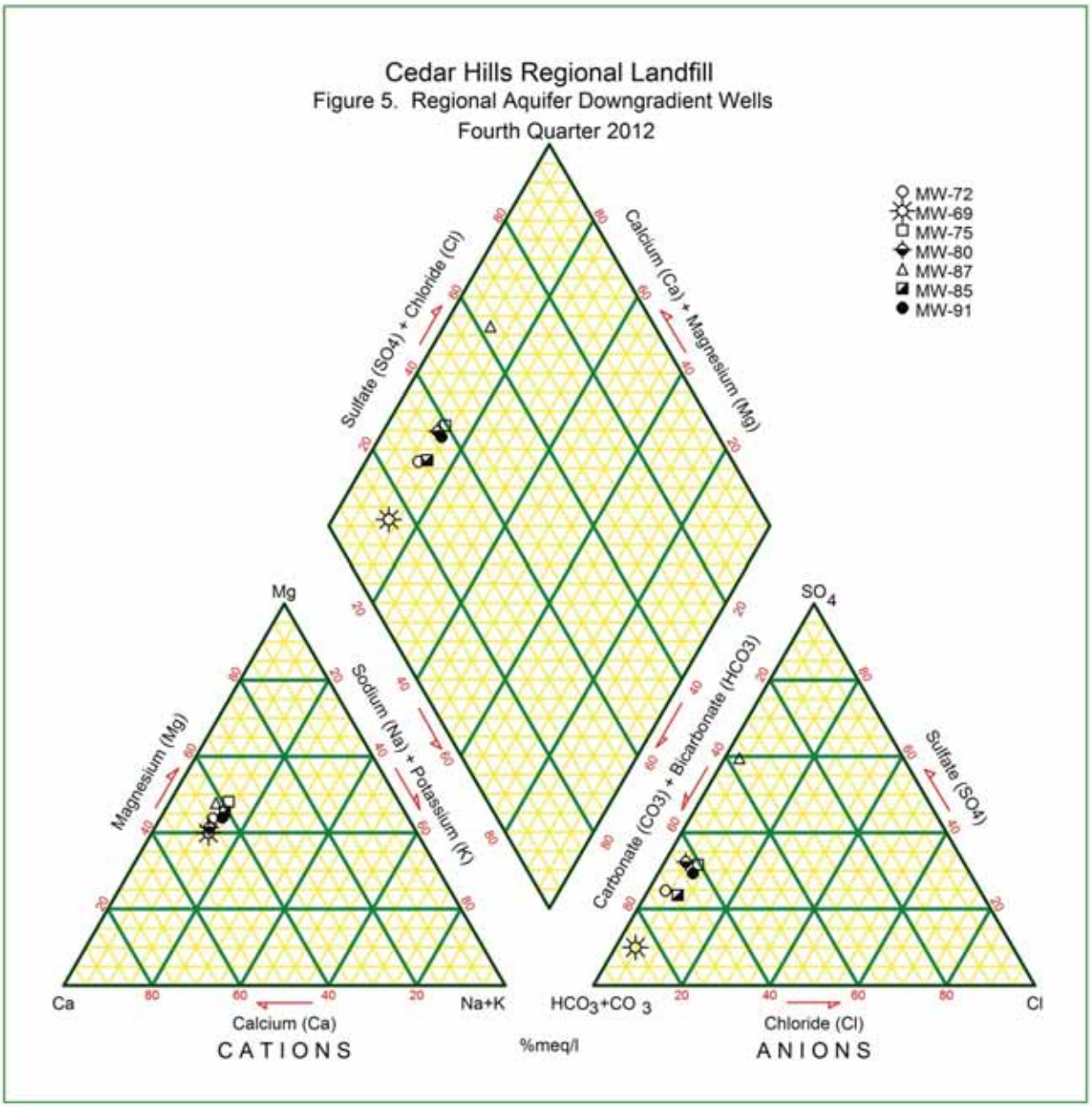

Cedar Hills Regional Landfill
Figure 2. Regional Aquifer Southern Upgradient Wells
Fourth Quarter 2012
MW-56
MW-57
MW-76
MW-83
MW-60
MW-94
MW-82
MW-65
MW-58A
MW-59
MW-24
Sulfate (SO4) + Chloride (Cl)
Calcium (Ca) + Magnesium (Mg)
Sodium (Na) + Potassium (K)
Carbonate (CO3) + Bicarbonate (HCO3)
Mg
Magnesium (Mg)
Ca
Calcium (Ca)
Na+K
CATIONS
SO4
Sulfate (SO4)
HCO3+CO 3
Chloride (Cl)
Cl
ANIONS
%meq/l


Cedar Hills Regional Landfill
Figure 3. Regional Aquifer NW and NE Upgradient Wells
Fourth Quarter 2012
MW-84
MW-21
MW-73
MW-81
MW-99
MW-93
MW-95
Sulfate (SO4) + Chloride (Cl)
Calcium (Ca) + Magnesium (Mg)
Mg
Magnesium (Mg)
Sodium (Na) + Potassium (K)
Ca
Na+K
Calcium (Ca)
CATIONS
SO4
Carbonate (CO3) + Bicarbonate (HCO3)
Sulfate (SO4)
HCO3+CO 3
Cl
Chloride (Cl)
ANIONS
%meq/l

Cedar Hills Regional Landfill

Figure 4. Regional Aquifer Internal and Vertical to Facilities
Fourth Quarter 2012




Cedar Hills Regional Landfill
Figure 5. Regional Aquifer Downgradient Wells
Fourth Quarter 2012
MW-72
MW-69
MW-75
MW-80
MW-87
MW-85
MW-91
Sulfate (SO4) + Chloride (Cl)
Calcium (Ca) + Magnesium (Mg)
Sodium (Na) + Potassium (K)
Carbonate (CO3) + Bicarbonate (HCO3)
Mg
Magnesium (Mg)
Ca
Calcium (Ca)
Na+K
CATIONS
SO4
Sulfate (SO4)
HCO3+CO 3
Chloride (Cl)
Cl
ANIONS
%meq/l

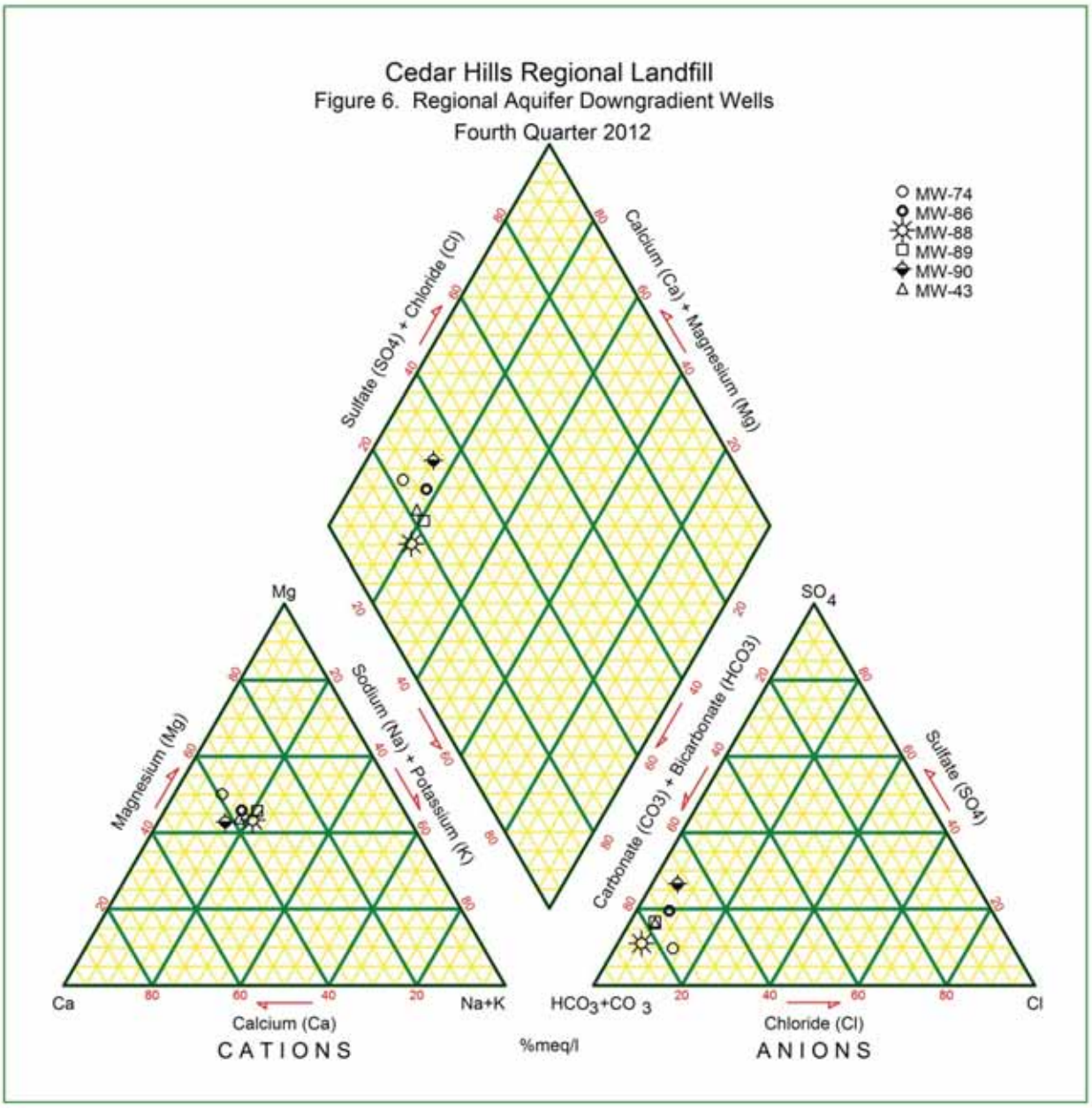

Cedar Hills Regional Landfill
Figure 6. Regional Aquifer Downgradient Wells
Fourth Quarter 2012
MW-74
MW-86
MW-88
MW-89
MW-90
MW-43
Sulfate (SO4) + Chloride (Cl)
Calcium (Ca) + Magnesium (Mg)
Mg
Magnesium (Mg)
Sodium (Na) + Potassium (K)
Ca
Na+K
Calcium (Ca)
CATIONS
SO4
Carbonate (CO3) + Bicarbonate (HCO3)
Sulfate (SO4)
HCO3+CO 3
Cl
Chloride (Cl)
ANIONS
%meq/l

TABLE 5
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT EXCEEDANCES
(Data Collected from October 1, 2012 to December 31, 2012)

Parameter	Units	Well ID	Sample Date	Sample Value	Intrawell Limit Value
Upgradient Wells					
cis-1,2-Dichloroethene	ug/L	MW-59	10/8/2012	0.679	0.666
Downgradient Wells					
NO PREDICTION LIMIT EXCEEDANCES THIS QUARTER					

TABLE 6

CEDAR HILLS REGIONAL LANDFILL

VOLATILE ORGANIC COMPOUND DETECTIONS IN REGIONAL AQUIFER WELLS

(Data Collected from October 1, 2012 to December 31, 2012)

Analyte	Site ID	Date	Sample ID	ug/L
Upgradient Wells				
cis-1,2-Dichloroethene	MW-24	10/10/2012	W24-121010-	0.24 T
	MW-56	10/2/2012	W56-121002-	0.93
	MW-59	10/8/2012	W59-121008-	0.679
	MW-76	10/26/2012	W76-121026-	0.49
Tetrachloroethene	MW-76	10/26/2012	W76-121026-	0.457
Trichloroethene	MW-76	10/26/2012	W76-121026-	10.1
	MW-78	10/26/2012	W78-121026-	0.405
	MW-82	10/2/2012	W82-121002-	5.06
	MW-83	10/18/2012	W83-121018-	1.62
	MW-94	10/18/2012	W94-121018-	2.61
Vinyl Chloride	MW-65	10/12/2012	W65-121012-	0.0381
Downgradient Wells				
NO VOA DETECTIONS				

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 October 1, 2012 to December 31, 2012)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Perched Wells					
pH (field)	(pH units)	MW-30A	10/12/12	W30A121012-	6.25
1,1-Dichloroethane	(ug/L)	MW-30A	10/12/12	W30A121012-	2.43
Arsenic	(mg/L)	MW-27A	10/11/2012	W27A121011-	0.016
		MW-101	10/26/2012	W101121026-	0.00411
Iron	(mg/L)	MW-55	10/19/12	W55-121019-	0.332
Manganese	(mg/L)	MW-27A	10/11/2012	W27A121011-	0.0671
		MW-47	10/8/2012	W47-121008-	1.38 D
		MW-55	10/19/2012	W55-121019-	0.158 D
		MW-101	10/26/2012	W101121026-	1.15
Total Dissolved Solids	(mg/L)	MW-47	10/8/12	W47-121008-	702
Vinyl Chloride	(ug/L)	MW-47	10/8/2012	W47-121008-	5.04
		MW-101	10/26/2012	W101121026-	0.219

See Data Qualifier List for Qualifier Information.

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

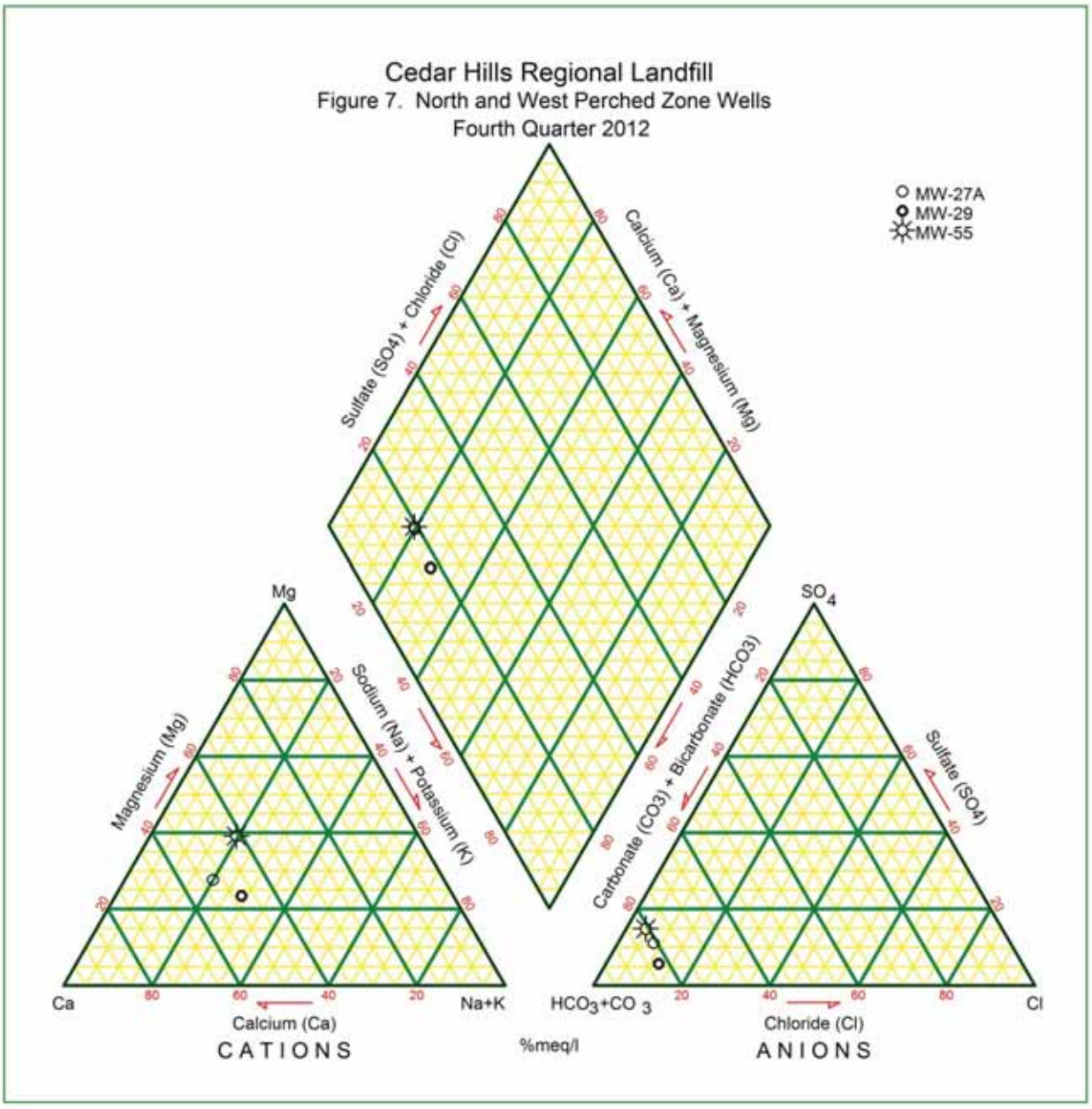
Data Collected from October 1, 2012 to December 31, 2012

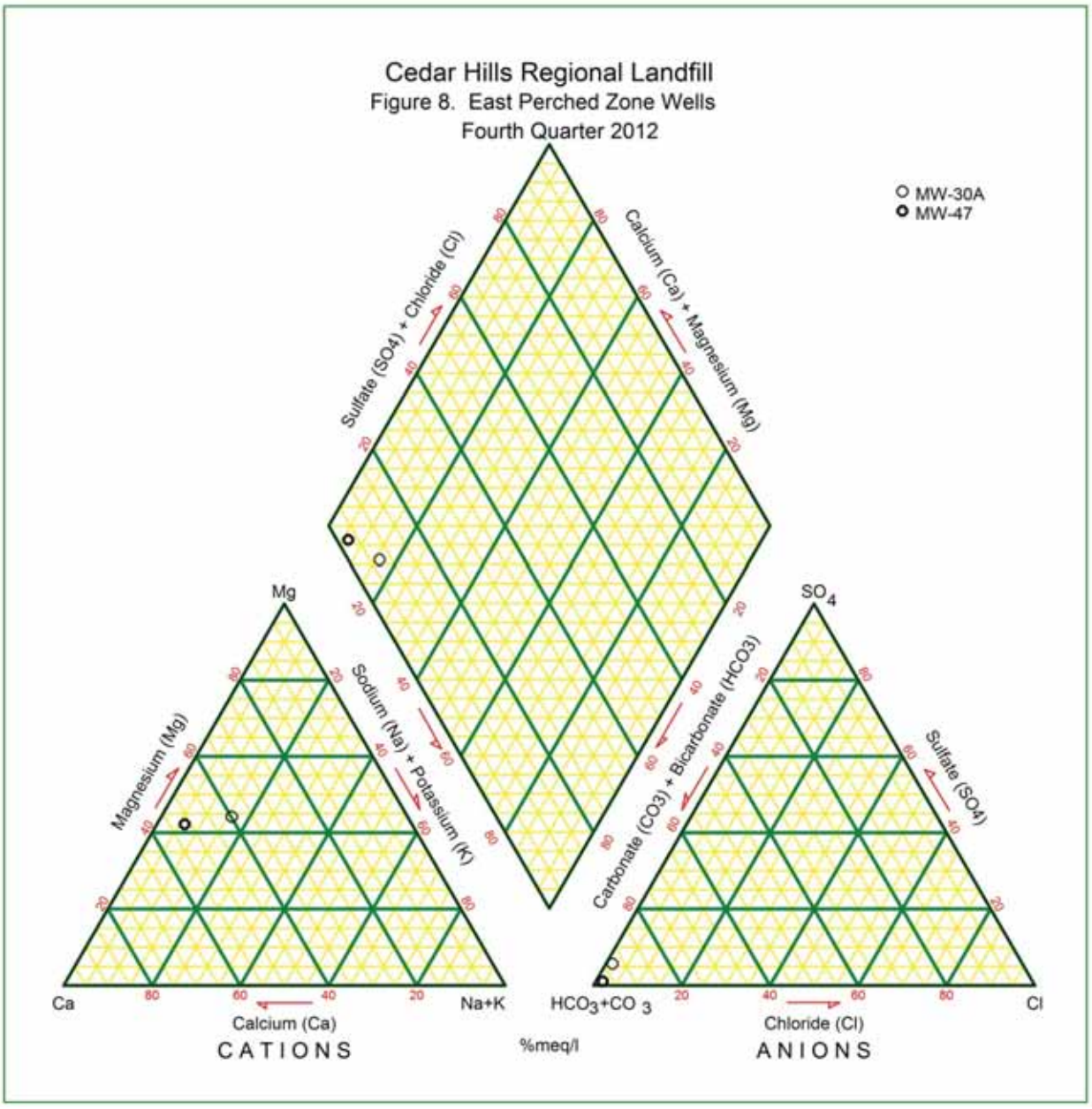
			North and West Perched Wells											
Site ID			**MW-27A**			**MW-28**			**MW-29**			**MW-55**		
Date			**10/11/12**			**No Sample**			**10/15/12**			**10/19/12**		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	20.7	1.03293	52.0				7.5	0.37226	48.0	12.4	0.61876	40.7
Magnesium	24.3	2	6.6	0.54639	27.5				2.2	0.18186	23.4	7.1	0.58671	38.6
Potassium	39.1	1	3.8	0.09642	4.8				0.6	0.01509	1.9	1.7	0.04374	2.9
Sodium	23.0	1	6.9	0.29796	15.0				4.7	0.20618	26.6	5.7	0.24881	16.4
Iron	55.8	2	0.0	0.00018	0.0				0.0	0.00018	0.0	0.3	0.01189	0.8
Manganese	54.9	2	0.1	0.00244	0.1				0.0	1.8E-05	0.0	0.2	0.00575	0.4
Ammonia-N	14.0	1	0.2	0.01199	0.6				0.0	0.00036	0.0	0.1	0.00367	0.2
Total Cations (meq/L)				**2.0**						**0.8**			**1.5**	
Anions														
Alkalinity, Total			80						27.9			66.8		
Carbonate	60.0	2	0.25797	0.0086	0.4				0.00568	0.00019	0.0	0.12664	0.00422	0.3
Bicarbonate	61.0	1	97.44	1.59716	80.2				34.03	0.55773	67.1	81.24	1.33158	80.4
Chloride	35.5	1	5.7	0.16049	8.1				2.9	0.08095	9.7	2.6	0.07362	4.4
Nitrate-N	14.0	1	0.1	0.00373	0.2				2.2	0.15421	18.5	0.0	0.00107	0.1
Sulfate	96.1	2	10.6	0.2207	11.1				1.9	0.03852	4.6	11.8	0.24569	14.8
Total Anions (meq/L)				**2.0**						**0.8**			**1.7**	
Total Ions (meq/L)				**4.0**						**1.6**			**3.2**	
Cation/Anion Ratio				**1.00**						**0.93**			**0.92**	
Percent Difference				**-0.1**						**-3.5**			**-4.3**	
TRILINEAR DIAGRAM DATA														
sum (Ca, Mg, Na+K)				1.97						0.78			1.50	
Calcium					52.3						48.0			41.3
Magnesium					27.7						23.5			39.2
Sodium + Potassium					20.0						28.5			19.5
sum (SO_4, Cl, HCO_3+CO_3)				1.99						0.68			1.66	
Sulfate					11.1						5.7			14.8
Chloride					8.1						12.0			4.4
Bicarbonate + Carbonate					80.8						82.4			80.7

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

Data Collected from October 1, 2012 to December 31, 2012

			East Perched Zone												SSWA		
Site ID			**MW-30A**			**MW-47**			**MW-62**			**MW-EB6**			**MW-101**		
Date			**10/12/12**			**10/8/12**			**No Sample**			**No Sample**			**10/26/12**		
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	31.9	1.59182	39.8	123.0	6.13772	51.2							60.4	3.01397	42.7
Magnesium	24.3	2	21.5	1.76918	44.2	61.2	5.036	42.0							39.2	3.22567	45.7
Potassium	39.1	1	1.8	0.04655	1.2	4.5	0.11612	1.0							3.0	0.07673	1.1
Sodium	23.0	1	13.6	0.59157	14.8	14.5	0.63072	5.3							15.9	0.69161	9.8
Iron	55.8	2	0.0	0.00018	0.0	0.2	0.00777	0.1							0.2	0.00688	0.1
Manganese	54.9	2	0.0	1.8E-05	0.0	1.4	0.05024	0.4							1.2	0.04187	0.6
Ammonia-N	14.0	1	0.0	0.00036	0.0	0.1	0.00402	0.0							0.0	0.00114	0.0
Total Cations (meq/L)				**4.0**			**12.0**									**7.1**	
Anions																	
Alkalinity, Total			193			676									381		
Carbonate	60.0	2	0.02064	0.00069	0.0	0.30818	0.01027	0.1							0.35435	0.01181	0.2
Bicarbonate	61.0	1	235.42	3.85873	92.3	824.09	13.5077	97.3							464.10	7.60704	96.9
Chloride	35.5	1	2.1	0.06036	1.4	7.7	0.21606	1.6							4.5	0.12749	1.6
Nitrate-N	14.0	1	0.3	0.02342	0.6	0.0	0.00036	0.0							0.0	0.00036	0.0
Sulfate	96.1	2	11.4	0.23736	5.7	7.2	0.1497	1.1							5.0	0.10452	1.3
Total Anions (meq/L)				**4.2**			**13.9**									**7.9**	
Total Ions (meq/L)				**8.2**			**25.9**									**14.9**	
Cation/Anion Ratio				**0.96**			**0.86**									**0.90**	
Percent Difference				**-2.2**			**-7.4**									**-5**	
TRILINEAR DIAGRAM DATA																	
sum (Ca, Mg, Na+K)				4.00			11.92									7.01	
Calcium					39.8			51.5									43.01
Magnesium					44.2			42.2									46.03
Sodium + Potassium					16.0			6.3									10.96
sum (SO_4, Cl, HCO_3+CO_3)				4.16			13.88									7.85	
Sulfate					5.7			1.1									1.3
Chloride					1.5			1.6									1.6
Bicarbonate + Carbonate					92.8			97.4									97.0


Cedar Hills Regional Landfill
Figure 7. North and West Perched Zone Wells
Fourth Quarter 2012
MW-27A
MW-29
MW-55
Sulfate (SO4) + Chloride (Cl)
Calcium (Ca) + Magnesium (Mg)
Mg
Magnesium (Mg)
Sodium (Na) + Potassium (K)
Ca
Na+K
Calcium (Ca)
CATIONS
SO4
Carbonate (CO3) + Bicarbonate (HCO3)
Sulfate (SO4)
HCO3+CO 3
Cl
Chloride (Cl)
ANIONS
%meq/l


Cedar Hills Regional Landfill
Figure 8. East Perched Zone Wells
Fourth Quarter 2012
MW-30A
MW-47
Sulfate (SO4) + Chloride (Cl)
Calcium (Ca) + Magnesium (Mg)
Carbonate (CO3) + Bicarbonate (HCO3)
Sodium (Na) + Potassium (K)
Mg
Magnesium (Mg)
Ca
Calcium (Ca)
Na+K
CATIONS
SO4
Sulfate (SO4)
HCO3+CO 3
Chloride (Cl)
Cl
ANIONS
%meq/l

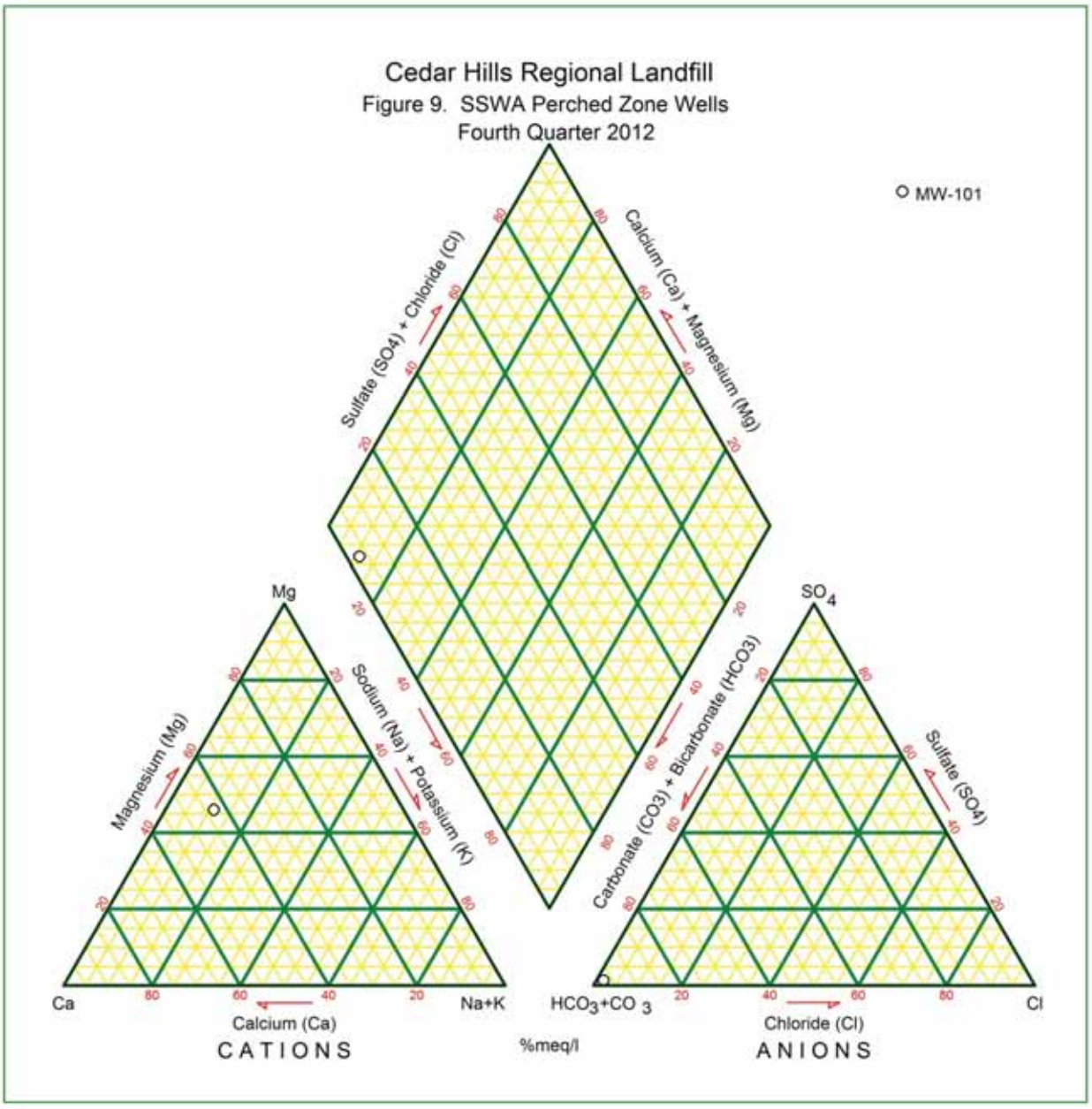

Cedar Hills Regional Landfill
Figure 9. SSWA Perched Zone Wells
Fourth Quarter 2012
MW-101
Sulfate (SO4) + Chloride (Cl)
Calcium (Ca) + Magnesium (Mg)
Mg
Magnesium (Mg)
Sodium (Na) + Potassium (K)
Ca
Na+K
Calcium (Ca)
CATIONS
SO4
Carbonate (CO3) + Bicarbonate (HCO3)
Sulfate (SO4)
HCO3+CO 3
Cl
Chloride (Cl)
ANIONS
%meq/l

TABLE 9
CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT EXCEEDANCES
(Data Collected from October 1, 2012 to December 31, 2012)

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 October 1, 2012 to December 31, 2012)

Analyte	Site ID	Date	Sample ID	ug/L
Perched Wells				
Acetone	MW-101	10/26/2012	W101121026-	6.37
Chloroethane	MW-47	10/8/2012	W47-121008-	0.2 T
1,1-Dichloroethane	MW-30A	10/12/2012	W30A121012-	2.43
	MW-47	10/8/2012	W47-121008-	0.534
cis-1,2-Dichloroethene	MW-30A	10/12/2012	W30A121012-	4.56
	MW-47	10/8/2012	W47-121008-	1.35
Dichlorodifluoromethane	MW-47	10/8/2012	W47-121008-	5.81
Trichloroethene	MW-30A	10/12/2012	W30A121012-	0.86
Vinyl Chloride	MW-47	10/8/2012	W47-121008-	5.04
	MW-101	10/26/2012	W101121026-	0.219

See Data Qualifier List for Qualifier Information.

Table 11
Surface Water Monitoring Activities 4th Quarter 2012

Station ID	Date	Planned Acitvity	Sample ID	Comment
SW-E1	10/24/12	Quarterly Characterization Sample	NA	No Flow; No Sample
SW-E1	11/13/12	Monthly Characterization Sample	NA	No Flow; No Sample
SW-E1	12/10/12	Monthly Characterization Sample	SE1-121210M	
SW-GS1	10/23/12	Quarterly Characterization Sample	SGS1121023Q	
SW-GS1	10/30/12	NPDES Permit Sample	SGS1121030P	
SW-GS1	11/13/12	Monthly Characterization Sample	SGS1121113M	
SW-GS1	12/6/12	NPDES Permit Sample	SGS1121206P	
SW-GS1	12/13/12	Monthly Characterization Sample	SGS1121213M	
SW-LP1	10/29/12	South Lagoon Inlet Characterization	SLP1121029P	
SW-LP1	11/5/12	South Lagoon Inlet Characterization	SLP1121105P	
SW-LP1	12/11/12	South Lagoon Inlet Characterization	SLP1121211P	
SW-LP2	10/29/12	South Lagoon Inlet Characterization	SLP2121029P	
SW-LP2	11/5/12	South Lagoon Inlet Characterization	SLP2121105P	
SW-LP2	12/11/12	South Lagoon Inlet Characterization	SLP2121211P	
SW-LP3	10/29/12	South Lagoon Outlet Characterization	SLP3121029P	
SW-LP3 Dup	10/29/12	QA/QC Sample	SLP3121029D	Field Duplicate
SW-LP3	11/5/12	South Lagoon Outlet Characterization	NA	No Flow; No Sample
SW-MC	10/25/12	Quarterly Characterization Sample	SMC-121025Q	
SW-MC	11/13/12	Monthly Characterization Sample	SMC-121113M	
SW-MC	12/11/12	Monthly Characterization Sample	SMC-121211M	
SW-N1	10/24/12	Quarterly Characterization Sample	SN1-121024Q	
SW-N1	11/13/12	Monthly Characterization Sample	SN1-121113M	
SW-N1	12/10/12	Monthly Characterization Sample	SN1-121210M	
SW-N4	10/24/12	Quarterly Characterization Sample	SN4-121024Q	
SW-N4	11/13/12	Monthly Characterization Sample	SN4-121113M	
SW-N4	12/6/12	NPDES Permit Sample	SN4-121206P	
SW-N4	12/10/12	Monthly Characterization Sample	SN4-121210M	
SW-S1	10/23/12	Monthly Characterization Sample	NA	No Flow; No Sample
SW-S1	11/13/12	Quarterly Characterization Sample	SS1-121113Q	
SW-S1	12/13/12	Monthly Characterization Sample	SS1-121213M	
SW-S1 Dup	12/13/12	QA/QC Sample	SS1-121213D	
SW-S2	10/23/12	Quarterly Characterization Sample	SS2-121023Q	
SW-S2	11/13/12	Monthly Characterization Sample	SS2-121113M	
SW-S2	12/13/12	Monthly Characterization Sample	SS2-121213M	
SW-S3	10/23/12	Monthly Characterization Sample	NA	No Flow; No Sample
SW-S3	11/13/12	QA/QC Sample	NA	No Flow; No Sample
SW-SL3	10/23/12	Quarterly Characterization Sample	SSL3121023Q	
SW-SL3	10/30/12	NPDES Permit Sample	SSL3121030P	
SW-SL3	11/5/12	NPDES Permit Sample	SSL3121105P	
SW-SL3	11/13/12	Monthly Characterization Sample	SSL3121113M	
SW-SL3	12/6/12	NPDES Permit Sample	SSL3121206P	
SW-SL3	12/11/12	NPDES Permit Sample	SSL3121211P	
SW-SL3	12/13/12	Monthly Characterization Sample	SSL3121213M	
SW-SL3 Dup	12/13/12	QA/QC Sample	SSL3121213D	Field Duplicate
SW-TD1	10/23/12	Area 5 Top Deck Monitoring	STD1121023-	
SW-TD2	10/30/12	Area 5 Top Deck Monitoring	STD2121030-	
SW-TD4	10/25/12	Area 5 Top Deck Monitoring	STD4121025-	
SW-TD6	10/25/12	Area 5 Top Deck Monitoring	STD6121025-	
SW-V	10/24/12	Area 5 Top Deck Monitoring	NA	No Flow; No Sample
SW-V	11/13/12	Area 5 Top Deck Monitoring	NA	No Flow; No Sample

Table 11
Surface Water Monitoring Activities 4th Quarter 2012

Station ID	Date	Planned Acitvity	Sample ID	Comment
SW-V	12/10/12	Monthly Characterization Sample	SV--121210M	
SW-W	10/25/12	Area 5 Top Deck Monitoring	NA	No Flow; No Sample
SW-W	11/13/12	Quarterly Characterization Sample	SW--121113Q	
SW-W	12/11/12	Monthly Characterization Sample	SW--121211M	
SW-W1	10/24/12	Quarterly Characterization Sample	SW1-121024Q	
SW-W1	11/13/12	Monthly Characterization Sample	SW1-121113M	
SW-W1	12/10/12	Monthly Characterization Sample	SW1-121210M	
SW-W2	10/23/12	Quarterly Characterization Sample	NA	No Flow; No Sample
SW-W2	10/30/12	Quarterly Characterization Sample	SW2-121030Q	
SW-W2	11/13/12	Monthly Characterization Sample	SW2-121113M	
SW-W2	12/13/12	Monthly Characterization Sample	SW2-121213M	
Field Blank	10/24/12	QA/QC Sample	SS2-121024F	
Field Blank	11/13/12	QA/QC Sample	SW--121113F	

[1] No sample ID assigned, No sample collected.

TABLE 12
CEDAR HILLS LANDFILL
SUMMARY OF STORMWATER PERMIT EXCEEDANCES
(October 1, 2012 to December 31, 2012)

Parameter		Sampling Location	Day/Month	Value	Regulatory Limit	Regulation
Turbidity	NTU	SW-GS1*	12/13/12	25.5	25	ISGP
Copper, Total	ug/L	SW-N4*	12/6/12	14.6	14	ISGP

ISGP - Industrial General Stormwater Permit
* Grab Sample, not averaged

TABLE 13
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN BLANKS
(Data Collected from October 1, 2012 to December 31, 2012)

Analyte	Site ID	Date	Sample ID	ug/L
Acetone	Field Blank	10/19/2012	W55-121019F	4.98
	VOA Trip Blank	10/23/2012	VTRP121024C	4.36
	VOA Trip Blank	10/2/2012	VTRP121003C	4.39
Chloroform	Field Blank	12/7/2012	W87-121207F	0.662

See Data Qualifier List for Qualifier Information.

Table 14
Groundwater Quality Criteria

	Analyte	CAS No.	Ground Water Quality Criteria 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-nitroanaline	99-59-2	2.0	ug/L
	2-Methylanaline	95-53-4	0.2	ug/L
	2-Methylanaline 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 analine	95-69-2	0.1	ug/L
	4-Chloro-2-methyl analine 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
Benzotrichloride	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 sufate	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-methylethylylamine	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 October 1, 2012 to December 31, 2012)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value	Cause of Unuseability
NO UNUSABLE DATA IDENTIFIED THIS QUARTER						