

APPENDIX A

Potentiometric Surface Maps and Aquifer Flow Calculations



King County

Water and Land Resources Division
Department of Natural Resources and Parks
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ORIGINAL

Memorandum

To: Tom Theno
King County Solid Waste Division

From: Sevin Bilir
King County Water & Land Resources Division

Re: **Potentiometric Groundwater Surface Mapping & Groundwater Velocity Calculations**
First Quarter 2013 Results
Cedar Hills Landfill, King County, Washington
Project No. 1033379 – Task 02.14.137.20

Date: May 1, 2013

King County Water & Land Resources Division (KCWL RD) submits this letter report on groundwater conditions during the first quarter of 2013 for the Cedar Hills Landfill (landfill), in accordance with the *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations* (KCWL RD, 2013). King County Solid Waste Division (KCSWD) personnel measured groundwater elevations at the landfill on January 2 and 7, 2013. These measurements were received by KCWL RD on April 8, 2013 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 in the previous quarter, there have been no significant changes in the interpreted groundwater conditions since the report submitted for the fourth quarter of the 2012 monitoring event.

Groundwater Elevation Data

KCSWD attempted groundwater level measurements at 44 monitoring wells during the first quarter of 2013. These wells were completed in the regional aquifer as referred to in *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill* (Aspect, 2010).

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

Figure 1 shows well locations, groundwater elevations at the 26 selected wells, groundwater potentiometric surface contours, and interpreted groundwater flow direction in the regional aquifer for the January 2 and 7, 2013 measurement event.

Direction of Groundwater Flow

Figure 1 shows interpreted groundwater potentiometric surface contours and groundwater flow directions in the regional aquifer, based on the January 2 and 7, 2013 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.

Groundwater Parameters

Horizontal groundwater velocity was calculated using the following formula:

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

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 first quarter 2013 data. The hydraulic gradient was greatest under the southern portion of the landfill and smallest under the northern portion. On January 2 and 7, 2013, average horizontal groundwater velocity within the regional aquifer ranged from 0.014 feet per day (ft/d) under the southern portion of the landfill to 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). 2013. *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations*. Unpublished.

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

Sincerely,



Sevin Bilir

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

Attachments

- Table 1: Groundwater Elevations - First Quarter 2013
- Table 2: Groundwater Parameters - First Quarter 2013
- Figure 1: Groundwater Potentiometric Surface Map - First Quarter 2013 – Regional Aquifer

Table 1: Groundwater Elevations – First Quarter 2013

**Cedar Hills Landfill
King County, Washington**

							January 2 and 7, 2013	
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	226.77	340.38
	MW-64	1701980.27	168772.19	596.55	334.03	320.23	266.35	330.20
	MW-66	1699750.19	174250.32	531.28	294.39	280.59	238.52	292.76
	MW-67	1701776.69	172610.65	516.43	297.80	284.00	221.06	295.37
	MW-68	1701917.32	170609.35	647.07	311.29	292.29	333.03	314.04
	MW-69	1698061.86	172400.20	653.69	293.57	279.97	358.17	295.52
	MW-70	1698412.97	168699.89	530.57	322.75	309.05	205.77	324.80
	MW-72	1698229.92	170987.71	671.87	303.63	294.03	361.97	309.90
	MW-73	1698954.95	174995.59	485.70	288.11	278.81	191.03	294.67
	MW-74R	1700386.85	173813.79	531.26	289.90	280.40	240.48	290.78
	MW-76	1700376.23	167193.13	491.71	351.06	341.56	132.58	359.13
	MW-77	1700007.63	168999.71	552.67	320.47	310.97	227.55	325.12
	MW-78	1698881.94	169027.58	537.35	322.34	309.84	213.16	324.19
	MW-81	1702568.87	172113.99	493.66	309.19	300.19	184.26	309.40
	MW-82	1699553.72	167725.31	474.85	348.88	339.38	123.57	351.28
	MW-83	1697939.89	167212.27	496.81	350.19	340.69	144.72	352.09
	MW-84	1698602.89	173894.54	530.80	292.46	282.96	236.37	294.43
	MW-85	1701828.95	173694.52	531.76	282.56	273.06	246.20	285.56
	MW-86	1701331.25	174917.90	536.04	283.43	274.63	249.37	286.67
	MW-87	1700670.27	173493.76	537.31	283.68	274.38	248.62	288.69
	MW-88	1701807.87	174303.06	513.68	281.52	272.22	227.30	286.38
	MW-93	1702259.35	169851.24	632.15	319.87	310.07	307.35	324.8
	MW-94	1698674.21	167210.22	495.51	357.22	348.52	140.76	354.75
	MW-95	1697265.32	169426.92	571.54	314.60	305.90	251.90	319.64
	MW-100	1700791.72	169610.46	620.32	319.06	309.06	298.70	321.62
	MW-106	1702536.99	173461.69	475.47	280.04	270.04	190.88	284.59
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	125.32	295.34
	MW-22P	1701844.34	173088.17	517.09	236.02	231.22	233.24	283.85
	MW-24	1699582.39	167767.76	475.99	286.76	281.76	145.47	330.52
	MW-43	1701274.23	174327.14	547.06	245.63	235.63	263.38	283.68
	MW-54	1702154.28	168435.53	580.43	250.25	228.25	279.41	301.02
	MW-56	1698980.77	167214.82	480.33	323.15	313.15	125.71	354.62
	MW-57	1699993.32	167201.99	456.64	326.65	311.65	99.17	357.47
	MW-58A	1699006.59	167207.16	479.27	270.05	260.05	149.23	330.04
	MW-59	1699983.91	167193.44	457.13	285.08	275.08	123.65	333.48
	MW-65	1701602.10	167146.55	545.83	317.71	308.91	209.11	336.72
	MW-75	1701059.70	173432.42	532.40	271.10	261.00	245.87	286.53
	MW-80	1701309.78	172964.99	530.41	279.17	269.67	239.65	290.76
	MW-89	1701799.57	174319.44	512.82	229.20	219.90	231.99	280.83
	MW-90	1702203.13	174300.67	502.22	235.16	226.16	221.85	280.37
	MW-91	1701023.09	173423.94	532.02	260.81	240.71	247.14	284.88
	MW-99	1702556.06	172098.73	493.64	221.77	212.77	200.81	292.83
	NPW-1	1701906.96	171138.99	646.33	299.87	284.87	333.25	313.08
	NPW-3	1701922.88	170663.28	645.81	284.87	276.87	331.57	314.24

Notes

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

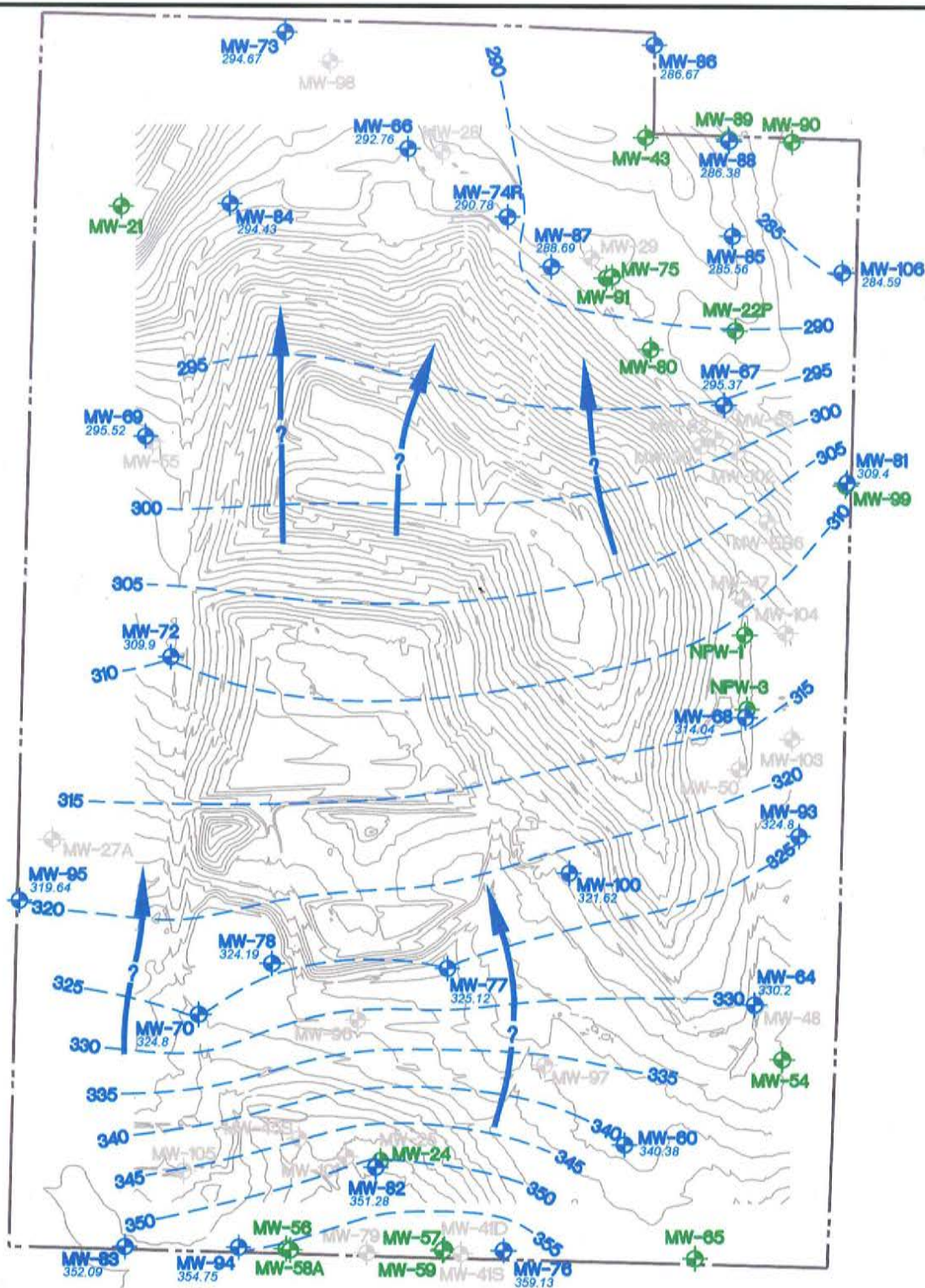
Table 2: Groundwater Parameters – First Quarter 2013

Cedar Hills Landfill
King County, Washington

	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/d)			
Regional Aquifer Zone Beneath the Landfill	Minimum	2.10E-03	6	0.007	24%	0.179	N, NE
	Maximum	4.20E-02	120	0.007	24%	3.58	
	Mean	2.10E-02	60	0.007	24%	1.79	
Central	Minimum	2.10E-03	6	0.008	24%	0.20	N, NNE, NNW
	Maximum	4.20E-02	120	0.008	24%	4.0	
	Mean	2.10E-02	60	0.008	24%	2.0	
Southern	Minimum	6.40E-06	0.018	0.020	26%	0.0014	N, NNE, NNW
	Maximum	6.40E-04	1.8	0.020	26%	0.14	
	Mean	6.40E-05	0.18	0.020	26%	0.014	

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** 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

0 1000 2000
Feet

Notes:

1. Groundwater measurements made on January 28, 2013.
2. Only wells completed in the Regional Aquifer within 10 feet of the water table were used for contouring.



Groundwater Potentiometric Surface Map First Quarter 2013 - Regional Aquifer Cedar Hills Landfill King County, Washington

DATE: April 2013
DESIGNED BY: SB
DRAWN BY: LT
REVISED BY: SB

PROJECT NO.
1033379
FIGURE NO.
1

CH_1Q2013.dwg

APPENDIX B

Field and Analytical Test Results

Groundwater Analytical Data

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Groundwater Elevation Data

Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Reference Elevation	Depth to Water	Ground- Water Elevation	Comment
		(msl)	(feet)	(msl)	
MW-21	1/8/2013	420.66	125.33	295.33	
MW-21	1/7/2013	420.66	125.32	295.34	
MW-22	1/7/2013	517.09	233.24	283.85	
MW-24	1/3/2013	475.99	145.27	330.72	
MW-24	1/2/2013	475.99	145.47	330.52	
MW-25	1/2/2013	474.41	5.4	469.01	
MW-27A	1/8/2013	584.23	54.7	529.53	
MW-27A	1/2/2013	584.23	54.71	529.52	
MW-28	1/14/2013	527.75	20.98	506.77	
MW-28	1/7/2013	527.75	22.43	505.32	
MW-29	1/10/2013	532.92	6.3	526.62	
MW-29	1/7/2013	532.92	9.7	523.22	
MW-30A	1/29/2013	568.43	29.44	538.99	
MW-30A	1/7/2013	568.43	29.58	538.85	
MW-41S	1/2/2013	462.44	4.45	457.99	
MW-41D	1/2/2013	462.32	25.32	437.00	
MW-43	1/15/2013	544.67	264.18	280.49	
MW-43	1/7/2013	547.06	263.38	283.68	
MW-45	1/2/2013	488.4	--	--	No Access
MW-47	1/10/2013	634.6	15.18	619.42	
MW-47	1/7/2013	634.6	15.33	619.27	
MW-48	1/2/2013	594.49	42.63	551.86	
MW-50	1/2/2013	637.02	29.58	607.44	
MW-54	1/2/2013	580.43	279.41	301.02	
MW-55	1/8/2013	652.29	27.62	624.67	
MW-55	1/7/2013	652.29	27.32	624.97	
MW-56	1/24/2013	480.33	124.82	355.51	
MW-56	1/2/2013	480.33	125.71	354.62	
MW-57	1/17/2013	456.64	99.19	357.45	
MW-57	1/2/2013	456.64	99.17	357.47	
MW-58A	1/18/2013	479.27	148.83	330.44	
MW-58A	1/2/2013	479.27	149.23	330.04	
MW-59	1/25/2013	457.13	123.02	334.11	
MW-59	1/2/2013	457.13	123.65	333.48	
MW-60	1/7/2013	567.15	226.78	340.37	
MW-60	1/2/2013	567.15	226.77	340.38	
MW-62	1/10/2013	556.21	49.65	506.56	
MW-62	1/7/2013	556.21	49.66	506.55	
MW-63	1/7/2013	515.88	11.88	504.00	
MW-64	1/16/2013	596.55	266.37	330.18	

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Groundwater Elevation Data

Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Reference Elevation	Depth to Water	Ground- Water Elevation	Comment
		(msl)	(feet)	(msl)	
MW-64	1/2/2013	596.55	266.35	330.20	
MW-65	1/18/2013	545.83	209.15	336.68	
MW-65	1/2/2013	545.83	209.11	336.72	
MW-66	1/10/2013	531.28	238.88	292.40	
MW-66	1/7/2013	531.28	238.52	292.76	
MW-67	1/7/2013	516.43	221.06	295.37	
MW-67	1/3/2013	516.43	221.45	294.98	
MW-68	1/15/2013	647.07	333.23	313.84	
MW-68	1/2/2013	647.07	333.03	314.04	
MW-69	1/8/2013	653.69	358.19	295.50	
MW-69	1/7/2013	653.69	358.17	295.52	
MW-70	1/25/2013	530.57	205.32	325.25	
MW-70	1/2/2013	530.57	205.77	324.80	
MW-72	1/28/2013	671.87	363.27	308.60	
MW-72	1/7/2013	671.87	361.97	309.90	
MW-73	1/22/2013	485.7	191	294.70	
MW-73	1/7/2013	485.7	191.03	294.67	
MW-74	2/19/2013	531.26	240.09	291.17	
MW-74	1/11/2013	531.26	240.92	290.34	
MW-74	1/7/2013	531.26	240.48	290.78	
MW-75	1/19/2013	491.71	245.28	246.43	
MW-75	1/11/2013	532.4	245.99	286.41	
MW-75	1/7/2013	532.4	245.87	286.53	
MW-76	1/25/2013	491.71	133.12	358.59	
MW-76	1/2/2013	491.71	132.58	359.13	
MW-77	1/25/2013	552.67	226.9	325.77	
MW-77	1/2/2013	552.67	227.55	325.12	
MW-78	1/25/2013	537.35	212.67	324.68	
MW-78	1/2/2013	537.35	213.16	324.19	
MW-79	1/2/2013	459.17	37.58	421.59	
MW-80	1/29/2013	530.41	239.9	290.51	
MW-80	1/7/2013	530.41	239.65	290.76	
MW-81	1/11/2013	493.66	184.74	308.92	
MW-81	1/7/2013	493.66	184.26	309.40	
MW-82	1/23/2013	474.85	121.79	353.06	
MW-82	1/2/2013	474.85	123.57	351.28	
MW-83	1/18/2013	496.81	144.73	352.08	
MW-83	1/2/2013	496.81	144.72	352.09	
MW-84	1/7/2013	530.8	236.37	294.43	
MW-85	1/24/2013	531.76	246.31	285.45	

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Groundwater Elevation Data

Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground- Water Elevation (msl)	Comment
MW-85	1/7/2013	531.76	246.2	285.56	
MW-86	1/24/2013	536.04	249.52	286.52	
MW-86	1/7/2013	536.04	249.37	286.67	
MW-87	2/14/2013	537.31	248.88	288.43	
MW-87	1/11/2013	537.31	249.03	288.28	
MW-87	1/7/2013	537.31	248.62	288.69	
MW-88	1/28/2013	513.68	227.31	286.37	
MW-88	1/7/2013	513.68	227.3	286.38	
MW-89	1/10/2013	512.82	233.02	279.80	
MW-89	1/7/2013	512.82	231.99	280.83	
MW-90	1/30/2013	502.22	221.38	280.84	
MW-90	1/7/2013	502.22	221.85	280.37	
MW-91	1/22/2013	532.02	247.12	284.90	
MW-91	1/7/2013	532.02	247.14	284.88	
MW-93	1/16/2013	632.15	309.35	322.80	
MW-93	1/2/2013	632.15	307.35	324.80	
MW-94	1/14/2013	495.51	140.72	354.79	
MW-94	1/2/2013	495.51	140.76	354.75	
MW-95	1/17/2013	571.54	251.72	319.82	
MW-95	1/2/2013	571.54	251.9	319.64	
MW-96	1/2/2013	547.74	99.26	448.48	
MW-97	1/2/2013	564.54	112.97	451.57	
MW-98	1/7/2013	503.73	15.67	488.06	
MW-99	2/14/2013	493.64	200.96	292.68	
MW-99	1/11/2013	493.64	201.07	292.57	
MW-99	1/7/2013	493.64	200.81	292.83	
MW-100	1/14/2013	620.32	298.71	321.61	
MW-100	1/2/2013	620.32	298.7	321.62	
MW-101	1/28/2013	474.72	33.26	441.46	
MW-101	1/2/2013	474.72	33.07	441.65	
MW-102	1/7/2013	552.48	44.63	507.85	
MW-103	1/2/2013	639.08	--	--	No Access
MW-104	1/7/2013	629.68	23.88	605.80	
MW-105	1/2/2013	521.23	19.18	502.05	
MW-106	1/7/2013	475.47	190.88	284.59	
MW-EB6	1/14/2013	589.61	25.94	563.67	
MW-EB6	1/7/2013	589.61	25.94	563.67	
WS-NPW-1	1/7/2013	646.33	333.25	313.08	from upper plug
WS-NPW-3	1/7/2013	645.81	331.57	314.24	from lower plug

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Groundwater Field Parameters

Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Purge Volume
			(std. Units)	(umho/cm)	(°C)	(gal)
MW-21	1/8/2013	W21-130108-	7.62	120	8.9	5.2
MW-24	1/3/2013	W24-130103-	7.08	185	9.5	12.4
MW-27A	1/8/2013	W27A130108-	7.83	150	9.7	11.3
MW-28	1/14/2013	W28-130114-	5.71	100	10	24
MW-29	1/10/2013	W29-130110-	6.29	75	11.2	23.2
MW-30A	1/29/2013	W30A130129-	6.3	250	12	3.6
MW-43	1/15/2013	W43-130115-	7.4	150	8.8	16
MW-47	1/10/2013	W47-130110-	7.09	750	10.8	28
MW-55	1/8/2013	W55-130108-	7.92	120	10.5	10.3
MW-56	1/24/2013	W56-130124-	7	140	9.4	
MW-57	1/17/2013	W57-130117-	6.81	215	10.2	
MW-58A	1/18/2013	W58A130118-	7.48	165	8.5	35
MW-59	1/24/2013	W59-130125-	7.09	170	10.4	
MW-60	1/7/2013	W60-130107-	6.94	175	10.9	11.4
MW-62	1/10/2013	W62-130110-	6.66	210	9.5	2.8
MW-64	1/16/2013	W64-130116-	7.08	190	10.3	
MW-65	1/18/2013	W65-130118-	7.1	155	9.4	
MW-66	1/10/2013	W66-130110-	7.13	230	9.8	9.3
MW-67	1/3/2013	W67-130103-	7.09	305	8.9	17.3
MW-68	1/15/2013	W68-130115-	7.12	240	9.6	16.5
MW-69	1/8/2013	W69-130108-	7.6	240	8.9	8.2
MW-70	1/25/2013	W70-130125-	7.3	180	9.4	12.6
MW-72	1/28/2013	W72-130128-	6.88	265	9.2	11.5
MW-73	1/22/2013	W73-130122-	6.19	100	9.2	
MW-74	1/11/2013	W74R130111-	7.25	370	9.3	7
MW-74	2/19/2013	W74R130219-	7.08	380	9.4	7
MW-74	3/25/2013	W74R130325-	6.99	360	9.3	7
MW-75	1/11/2013	W75-130111-	7.14	260	8.9	14
MW-75	2/19/2013	W75-130219-	6.88	250	9	7.5
MW-75	3/25/2013	W75-130325-	6.82	240	9.1	14
MW-76	1/25/2013	W76-130125-	6.27	200	9.4	7.5
MW-77	1/25/2013	W77-130125-	6.95	210	10.2	10
MW-78	1/24/2013	W78-130125-	6.69	165	10.6	
MW-80	1/29/2013	W80-130129-	6.92	230	9.2	11
MW-81	1/11/2013	W81-130111-	7.39	100	9.8	
MW-82	1/23/2013	W82-130123-	6.69	200	9.2	4.5
MW-83	1/18/2013	W83-130118-	6.91	260	10.3	
MW-84	1/17/2013	W84-130117-	7.09	150	8.9	7
MW-85	1/24/2013	W85-130124-	6.93	230	8.7	9
MW-86	1/24/2013	W86-130124-	6.79	160	8.7	1.8

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Groundwater Field Parameters

Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Purge Volume
			(std. Units)	(umho/cm)	(°C)	(gal)
MW-87	1/11/2013	W87-130111-	6.87	380	10.2	
MW-87	2/14/2013	W87-130214-	6.87	395	10.3	
MW-87	3/22/2013	W87-130322-	6.9	390	10.2	7.7
MW-88	1/28/2013	W88-130128-	6.64	110	8.8	7
MW-89	1/10/2013	W89-130110-	7.23	160	9.6	10.3
MW-90	1/30/2013	W90-130130-	6.92	175	9	11.5
MW-91	1/22/2013	W91-130122-	7.09	245	9.1	
MW-93	1/16/2013	W93-130116-	7.2	305	10.5	
MW-94	1/14/2013	W94-130114-	6.82	230	9.3	
MW-95	1/17/2013	W95-130117-	7.42	190	8.6	9
MW-99	1/11/2013	W99-130111-	7.96	100	9.9	
MW-99	2/14/2013	W99-130214-	7.97	125	10	
MW-99	3/22/2013	W99-130322-	7.89	130	10	9.5
MW-100	1/14/2013	W100130114-	6.85	250	10.3	
MW-101	1/28/2013	W101130128-	7.15	565	10.3	
MW-EB6	1/14/2013	WB6-130114-	5.93	150	8.7	
EQUIPMENT BLANK	1/17/2013	WU1H130117E	7.43	18	5.4	
EQUIPMENT BLANK	1/17/2013	WU1M130117E	7.43	18	5.4	
EQUIPMENT BLANK	1/17/2013	WU1S130117E	7.43	18	5.4	
FIELD BLANK	1/8/2013	W55-130108F	5.89	3.3	16.5	
FIELD BLANK	1/18/2013	W58A130118F	7.14	150	4.2	
FIELD BLANK	1/29/2013	WNPW130129F	5.67	5	14.8	
WS-NPW	1/29/2013	WNPW130129-	7.77	290	6.8	
WS-OS-1	3/28/2013	WOS1130328-	6.5	140	9.7	
WS-OS-2	2/5/2013	WOS2130205-	6.48	135	9.6	14
WS-OS-3	2/14/2013	WOS3130214-	8.66	225	9.7	
WS-OS-4	2/14/2013	WOS4130214-	7.23	145	10	

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Groundwater Conventional Analytical Data

Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	Alkalinity, Total (CaCO ₃)	Ammonia, (NH ₃)	Chloride	Nitrate- Nitrogen, (NO ₃ as N)	Nitrite+ Nitrate (NO ₂ +NO ₃ as N)	Specific Conductanc	Sulfate (SO ₄)	Total Dissolved Solids	Total Organic Carbon	Total Solids	Suspended Solids
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(umho/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-21	1/8/2013	W21-130108-	55.7	< 0.01 U	2.79	< 0.01 U		126	5.11	72.2	< 1 U	76.5	2.6
MW-24	1/3/2013	W24-130103-	63.5	0.0265	3.75	< 0.01 U		171	16.6	104	1.64	107	3.8
MW-27A	1/8/2013	W27A130108-	78.8	0.187	4.85	0.118		195	10.4	121	< 1 U	129	< 1 U
MW-28	1/14/2013	W28-130114-	24.7	< 0.01 U	3.69	0.516		108	13.5	73.5	< 1 U	83.7	< 1 U
MW-29	1/10/2013	W29-130110-	25.4	< 0.01 U	3.04	1.63		79.4	1.81	74.5	< 1 U	96.7	16.1
MW-30A	1/29/2013	W30A130129-	148	< 0.01 U	2.63	0.347		301	9.82	196	< 1 U	200	< 1 U
MW-43	1/15/2013	W43-130115-	69	0.0249	3.88	< 0.01 U		179	13.8	122	< 1 U	123	< 1 U
MW-47	1/10/2013	W47-130110-	672 H	0.0353	6.82	< 0.01 U		1120	6.51	690	3.93	716	2.3
MW-47 Duplicate	1/10/2013	W47-130110D	667	0.0412	6.93	< 0.01 U		1140	6.59	692	3.51	708	1.8
MW-55	1/8/2013	W55-130108-	62.9	0.0475	1.88	< 0.01 U		155	12.2	101	< 1 U	101	< 1 U
MW-56	1/24/2013	W56-130124-	51.6	< 0.01 U	3.95	0.314		159	18.3	97.9	< 1 U	248	94
MW-57	1/17/2013	W57-130117-	77.3	0.0306	5.83	0.0532		211	17.8	129	< 1 U	161	1.4
MW-58A	1/18/2013	W58A130118-	73.4	0.0671	4.08	< 0.01 U		191	15.4	115	1.38	123	< 1 U
MW-59	1/25/2013	W59-130125-	60.9	< 0.01 U	4.08	0.029 T		173	17	107	< 1 U	115	3.8
MW-60	1/7/2013	W60-130107-	68.5	< 0.01 U	2.68	1.15		164	6.52	92.7	< 1 U	109	< 1 U
MW-62	1/10/2013	W62-130110-	77.6	< 0.01 U	5.96	3.27		235	18.7	147	< 1 U	157	< 1 U
MW-64	1/16/2013	W64-130116-	91.1	0.0494	2.97	< 0.01 U		229	19.7	131	< 1 U	135	1.8
MW-64 Duplicate	1/16/2013	W64-130116D	90.9	0.0461	3.09	< 0.01 U		229	20	131	< 1 U	137	2.1
MW-65	1/18/2013	W65-130118-	52.8	0.017 T	4.11	< 0.01 U		160	17.3	105	< 1 U	111	6.6
MW-66	1/10/2013	W66-130110-	120	< 0.01 U	7.26	0.728		286	14.5	169	< 1 U	176	< 1 U
MW-67	1/3/2013	W67-130103-	123	< 0.01 U	5	0.505		337	40.9	201	1.9	209	< 1 U
MW-68	1/15/2013	W68-130115-	133	0.015 T	2.81	< 0.01 U		296	17.9	177	< 1 U	189	11
MW-69	1/8/2013	W69-130108-	129	0.01 T	4.26	< 0.01 U		286	14.1	112	< 1 U	224	27.9
MW-70	1/25/2013	W70-130125-	82.4	< 0.01 U	3.91	0.029 T		208	16.5	124	1.08	131	< 1 U
MW-72	1/28/2013	W72-130128-	115	0.011 T	6.72	0.013 T		316	36.2	194	< 1 U	204	3.7
MW-73	1/22/2013	W73-130122-	33.9	< 0.01 U	2.1	1.16		108	8.38	77.9	1.83	83	< 1 U
MW-74	1/11/2013	W74R130111-	198	< 0.01 U	23.1	0.437		485	21.3	276	< 1 U	285	< 1 U
MW-75	1/11/2013	W75-130111-	97.7	< 0.01 U	8.56	< 0.01 U		311	45.3	184	< 1 U	198	2.8
MW-76	1/25/2013	W76-130125-	61.5	< 0.01 U	14.2	0.752		227	21	131	1.81	149	< 1 U
MW-77	1/25/2013	W77-130125-	105	< 0.01 U	4.79	0.875		242	8.73	141	< 1 U	150	1.5
MW-78	1/25/2013	W78-130125-	66.7	< 0.01 U	6.56	1		178	6.98	114	< 1 U	110	< 1 U
MW-80	1/29/2013	W80-130129-	89.3	< 0.01 U	5.8	0.028 T		272	42.4	176	1.24	188	4.32
MW-80 Duplicate	1/29/2013	W80-130129D	86.4	< 0.01 U	6.59	0.028 T		271	45.2	176	< 1 U	182	3.6
MW-81	1/11/2013	W81-130111-	47.8	< 0.01 U	3.22	1.62		138	7.76	95	< 1 U	96.8	< 1 U
MW-82	1/23/2013	W82-130123-	97.3	< 0.01 U	6.32	0.659		243	16.5	137	2.06	159	< 1 U
MW-83	1/18/2013	W83-130118-	109	< 0.01 U	19.7	0.362		301	10.8	182	1.63	185	1.4 T
MW-84	1/17/2013	W84-130117-	59.2	< 0.01 U	4.22	0.589		164	13.1	103	< 1 U	110	< 1 U
MW-85	1/24/2013	W85-130124-	94.8	< 0.01 U	7.38	0.122		277	32.2	164	< 1 U	168	< 1 U
MW-86	1/24/2013	W86-130124-	62.2	< 0.01 U	4.26	0.268		178	17.1	109	< 1 U	109	1
MW-87	1/11/2013	W87-130111-	88.9	< 0.01 U	6	< 0.01 U		456	131	301	< 1 U	348	16.7

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Groundwater Conventional Analytical Data

Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	Alkalinity, Total (CaCO ₃)	Ammonia, (NH ₃)	Chloride	Nitrate- Nitrogen, (NO ₃ as N)	Nitrite+ Nitrate (NO ₂ +NO ₃ as N)	Specific Conductanc	Sulfate (SO ₄)	Total Dissolved Solids	Total Organic Carbon	Total Solids	Suspended Solids
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(umho/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-88	1/28/2013	W88-130128-	51.8	< 0.01 U	2.59	0.555		131	6.93	84.2	< 1 U	83.8	1.11
MW-89	1/10/2013	W89-130110-	74.6	0.012 T	4.05	< 0.01 U		192	16	120	< 1 U	135	5.9
MW-90	1/30/2013	W90-130130-	68.2	0.015 T	3.73	< 0.01 U		202	26.1	129	< 1 U	149	27.2
MW-91	1/22/2013	W91-130122-	86	0.0341	7.61	0.03 T		276	39.4	175	< 1 U	217	32
MW-93	1/16/2013	W93-130116-	117	0.0697	2.96	0.017 T		374	70.6	245	< 1 U	246	< 1 U
MW-94	1/14/2013	W94-130114-	99.9	< 0.01 U	19	1.44		282	6.13	163	1.73	182	< 1 U
MW-95	1/17/2013	W95-130117-	85.6	0.025	5.88	< 0.01 U		219	17	134	< 1 U	137	< 1 U
MW-99	1/11/2013	W99-130111-	53.2	0.0713	3.18	0.023 T		132	7.67	89.9	< 1 U	90.1	< 1 U
MW-100	1/14/2013	W100130114-	134	< 0.01 U	2.73	< 0.01 U		302	19.8	163	< 1 U	183	3.2
MW-101	1/28/2013	W101130128-	380	0.014 T	3.92	< 0.01 U		681	5.27	414	5.38	426	1.6
MW-EB6	1/14/2013	WB6-130114-	47.9	2.6	1.95	0.0596		128	8.24	71.8	6.27	138	40
EQUIPMENT BLANK	1/17/2013	WU1H130117E		0.0251			0.0899						
EQUIPMENT BLANK	1/17/2013	WU1S130117E		< 0.01 U			0.09						
EQUIPMENT BLANK	1/17/2013	WU1M130117E		0.0204			0.101						
FIELD BLANK	1/8/2013	W55-130108F	< 1 U	< 0.01 U	< 0.1 U	0.0968		3.8 T	< 0.1 U	< 5 U	< 1 U	< 5 U	< 1 U
FIELD BLANK	1/18/2013	W58A130118F	< 1 U	< 0.01 U	< 0.1 U	0.089		4.1 T	< 0.1 U	< 5 U	< 1 U	< 5 U	< 1 U
FIELD BLANK	1/29/2013	WNPW130129F	< 1 U	< 0.01 U	< 0.1 U	0.0929		3.3 T	< 0.1 U	< 5 U	< 1 U	< 5 U	1 T
WS-NPW	1/29/2013	WNPW130129-	157	< 0.01 U	3.44	0.015 T		332	16	194	< 1 U	202	3.1
WS-OS-1	3/28/2013	WOS1130328-	67	< 0.01 U	2.97 B	1.65		180	8.4	116	< 1 U	126	< 1 U
WS-OS-1 Duplicate	3/28/2013	WOS1130328D	66.9	< 0.01 U	2.87 B	1.67		178	8.45	114	< 1 U	125	< 1 U
WS-OS-2	2/5/2013	WOS2130205-	71	0.012 T	1.86	0.159		160	7.39	105	< 1 U	113	6.8
WS-OS-3	2/14/2013	WOS3130214-	116	< 0.01 U	7.01	< 0.01 U		245	3.42	156	< 1 U	156	< 1 U
WS-OS-4	2/14/2013	WOS4130214-	63.6	< 0.01 U	2.98	0.856		159	10.1	109	< 1 U	117	< 1 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: Sandy 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	1/8/2013	W21-130108-	< 0.001 U	< 0.001 U	0.00284	< 0.001 DU	< 0.002 U	10.1	< 0.005 U	< 0.003 U	< 0.002 U	1.87	< 0.001 U	6.31
MW-24	1/3/2013	W24-130103-	< 0.001 U	< 0.001 U	0.0019	< 0.001 DU	< 0.002 U	13.6	< 0.005 U	< 0.003 U	< 0.002 U	3.28	< 0.001 U	9.47
MW-27A	1/8/2013	W27A130108-	< 0.001 U	0.0155	0.00553	< 0.001 DU	< 0.002 U	20.1	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.34
MW-28	1/14/2013	W28-130114-	< 0.001 U	< 0.001 U	0.00544	< 0.001 U	< 0.002 U	8.85	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	2.43
MW-29	1/10/2013	W29-130110-	< 0.001 U	< 0.001 U	0.00151	< 0.001 DU	< 0.002 U	7.08	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	1.92
MW-30A	1/29/2013	W30A130129-	< 0.001 U	< 0.001 U	0.00482	< 0.001 DU	< 0.002 U	26.4 D	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	13.5 D
MW-43	1/15/2013	W43-130115-	< 0.001 U	< 0.001 U	0.00614	< 0.001 U	< 0.002 U	12.5	< 0.005 U	< 0.003 U	< 0.002 U	0.906	< 0.001 U	9.18
MW-47	1/10/2013	W47-130110-	< 0.001 U	< 0.001 U	0.0399	< 0.001 DU	< 0.002 U	154 D	< 0.005 U	< 0.003 U	< 0.002 U	0.675	< 0.001 U	68.6
MW-47 Duplicate	1/10/2013	W47-130110D	< 0.001 U	< 0.001 U	0.0389	< 0.001 DU	< 0.002 U	172 D	< 0.005 U	< 0.003 U	< 0.002 U	0.673	< 0.001 U	68.5
MW-55	1/8/2013	W55-130108-	< 0.001 U	< 0.001 U	0.00455	< 0.001 DU	< 0.002 U	12.6	< 0.005 U	< 0.003 U	< 0.002 U	0.284	< 0.001 U	7.17
MW-56	1/24/2013	W56-130124-	< 0.001 U	< 0.001 U	0.00361	< 0.001 U	< 0.002 U	15.3	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	5.82
MW-57	1/17/2013	W57-130117-	< 0.001 U	< 0.001 U	0.00164	< 0.001 U	< 0.002 U	16.7	< 0.005 U	< 0.003 U	< 0.002 U	8.67	< 0.001 U	9.97
MW-58A	1/18/2013	W58A130118-	< 0.001 U	< 0.001 U	0.00415	< 0.001 U	< 0.002 U	16.5	< 0.005 U	< 0.003 U	< 0.002 U	1.01	< 0.001 U	8.73
MW-59	1/25/2013	W59-130125-	< 0.001 U	< 0.001 U	0.00323	< 0.001 DU	< 0.002 U	14 D	< 0.005 U	< 0.003 U	< 0.002 U	4.41	< 0.001 U	8.07 D
MW-60	1/7/2013	W60-130107-	< 0.001 U	< 0.001 U	0.0027	< 0.001 DU	< 0.002 U	15.2	< 0.005 U	< 0.003 U	< 0.002 U	0.012 T	< 0.001 U	7.83
MW-62	1/10/2013	W62-130110-	< 0.001 U	< 0.001 U	0.00208	< 0.001 DU	< 0.002 U	19	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.71
MW-64	1/16/2013	W64-130116-	< 0.001 U	< 0.001 U	0.00753	< 0.001 U	< 0.002 U	17.2	< 0.005 U	< 0.003 U	< 0.002 U	0.0948	< 0.001 U	12.9
MW-64 Duplicate	1/16/2013	W64-130116D	< 0.001 U	< 0.001 U	0.00752	< 0.001 U	< 0.002 U	17	< 0.005 U	< 0.003 U	< 0.002 U	0.0965	< 0.001 U	12.6
MW-65	1/18/2013	W65-130118-	< 0.001 U	< 0.001 U	0.00695	< 0.001 U	< 0.002 U	12.2	< 0.005 U	< 0.003 U	< 0.002 U	4.41	< 0.001 U	7.59
MW-66	1/10/2013	W66-130110-	< 0.001 U	< 0.001 U	0.00583	< 0.001 DU	< 0.002 U	22.7	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	18.4
MW-67	1/3/2013	W67-130103-	< 0.001 U	< 0.001 U	0.00938	< 0.001 DU	< 0.002 U	31.1	< 0.005 U	< 0.003 U	< 0.002 U	0.132	< 0.001 U	18.5
MW-68	1/15/2013	W68-130115-	< 0.001 U	0.0018	0.0108	< 0.001 U	< 0.002 U	26	< 0.005 U	< 0.003 U	< 0.002 U	0.992	< 0.001 U	15.3
MW-69	1/8/2013	W69-130108-	< 0.001 U	0.00251	0.0117	< 0.001 DU	< 0.002 U	29.3	< 0.005 U	< 0.003 U	< 0.002 U	1.31	< 0.001 U	15.1
MW-70	1/25/2013	W70-130125-	< 0.001 U	< 0.001 U	0.00188	< 0.001 DU	< 0.002 U	19.7 D	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	10.1 D
MW-72	1/28/2013	W72-130128-	< 0.001 U	< 0.001 U	0.0105	< 0.001 DU	< 0.002 U	29.4 D	< 0.005 U	< 0.003 U	< 0.002 U	2.3	< 0.001 U	16.8 D
MW-73	1/22/2013	W73-130122-	< 0.001 U	< 0.001 U	0.00238	< 0.001 U	< 0.002 U	10.5	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	3.23
MW-74	1/11/2013	W74R130111-	< 0.001 U	< 0.001 U	0.0118	< 0.001 DU	< 0.002 U	39.7	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	31.5
MW-75	1/11/2013	W75-130111-	< 0.001 U	< 0.001 U	0.00971	< 0.001 DU	< 0.002 U	23.7	< 0.005 U	< 0.003 U	< 0.002 U	1.77	< 0.001 U	18.7
MW-76	1/25/2013	W76-130125-	< 0.001 U	< 0.001 U	0.00334	< 0.001 DU	< 0.002 U	19.7 D	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	8.89 D
MW-77	1/25/2013	W77-130125-	< 0.001 U	< 0.001 U	0.00275	< 0.001 DU	< 0.002 U	22.3 D	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	11.6 D
MW-78	1/25/2013	W78-130125-	< 0.001 U	< 0.001 U	0.0019	< 0.001 DU	< 0.002 U	15.6 D	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	7.24 D
MW-80	1/29/2013	W80-130129-	< 0.001 U	0.00334	0.0113	< 0.001 DU	< 0.002 U	26.8 D	< 0.005 U	< 0.003 U	< 0.002 U	1.26	< 0.001 U	12.9 D
MW-80 Duplicate	1/29/2013	W80-130129D	< 0.001 U	0.00336	0.0114	< 0.001 DU	< 0.002 U	26.7 D	< 0.005 U	< 0.003 U	< 0.002 U	1.26	< 0.001 U	13 D
MW-81	1/11/2013	W81-130111-	< 0.001 U	< 0.001 U	0.00267	< 0.001 DU	< 0.002 U	11.1	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.13
MW-82	1/23/2013	W82-130123-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	20.2	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	12.1
MW-83	1/18/2013	W83-130118-	< 0.001 U	< 0.001 U	0.00419	< 0.001 U	< 0.002 U	29	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	12.6
MW-84	1/17/2013	W84-130117-	< 0.001 U	< 0.001 U	0.00318	< 0.001 U	< 0.002 U	10.7	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	8.56
MW-85	1/24/2013	W85-130124-	< 0.001 U	< 0.001 U	0.00479	< 0.001 U	< 0.002 U	22.6	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	13.9
MW-86	1/24/2013	W86-130124-	< 0.001 U	< 0.001 U	0.00445	< 0.001 U	< 0.002 U	12.9	< 0.005 U	< 0.003 U	< 0.002 U	0.497	< 0.001 U	8.72
MW-87	1/11/2013	W87-130111-	< 0.001 U	< 0.001 U	0.0203	< 0.001 DU	< 0.002 U	36.7	< 0.005 U	< 0.003 U	< 0.002 U	3.31	< 0.001 U	26

* Total Metals

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 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-88	1/28/2013	W88-130128-	< 0.001 U	0.00103	0.0022	< 0.001 DU	< 0.002 U	9.58 D	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	6.73 D
MW-89	1/10/2013	W89-130110-	< 0.001 U	0.0012	0.0059	< 0.001 DU	< 0.002 U	14.1	< 0.005 U	< 0.003 U	< 0.002 U	0.856	< 0.001 U	10.6
MW-90	1/30/2013	W90-130130-	< 0.001 U	< 0.001 U	0.00553	< 0.001 DU	< 0.002 U	18 D	< 0.005 U	< 0.003 U	< 0.002 U	1.27	< 0.001 U	9.78 D
MW-91	1/22/2013	W91-130122-	< 0.001 U	0.00407	0.00976	< 0.001 U	< 0.002 U	21.4	< 0.005 U	< 0.003 U	< 0.002 U	3.77	< 0.001 U	14.2
MW-93	1/16/2013	W93-130116-	< 0.001 U	0.00139	0.00766	< 0.001 U	< 0.002 U	33.3	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	18.2
MW-94	1/14/2013	W94-130114-	< 0.001 U	< 0.001 U	0.00182	< 0.001 U	< 0.002 U	25.3	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	12.1
MW-95	1/17/2013	W95-130117-	< 0.001 U	< 0.001 U	0.00344	< 0.001 U	< 0.002 U	19	< 0.005 U	< 0.003 U	< 0.002 U	< 0.01 U	< 0.001 U	10.3
MW-99	1/11/2013	W99-130111-	< 0.001 U	0.00204	0.0027	< 0.001 DU	< 0.002 U	9.22	< 0.005 U	< 0.003 U	< 0.002 U	0.026 T	< 0.001 U	4.58
MW-100	1/14/2013	W100130114-	< 0.001 U	< 0.001 U	0.00665	< 0.001 U	< 0.002 U	26.2	< 0.005 U	< 0.003 U	< 0.002 U	1.29	< 0.001 U	16.1
MW-101	1/28/2013	W101130128-	< 0.001 U	0.0044	0.0303	< 0.001 DU	< 0.002 U	67 D	< 0.005 U	< 0.003 U	< 0.002 U	0.0529	< 0.001 U	39.1 D
MW-EB6	1/14/2013	WB6-130114-	< 0.001 U	0.00424	0.00683	< 0.001 U	< 0.002 U	6	< 0.005 U	< 0.003 U	0.00207	6.91	< 0.001 U	3.3
EQUIPMENT BLANK	1/17/2013	WU1H130117E	< 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	1/17/2013	WU1S130117E	< 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	1/8/2013	W55-130108F	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	< 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	1/18/2013	W58A130118F	< 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	1/29/2013	WNPW130129F	< 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 *	1/29/2013	WNPW130129-	< 0.001 U	< 0.001 U	0.00664	< 0.001 U	< 0.002 U	34.4	< 0.005 U	< 0.003 U	< 0.002 U	1.69	< 0.001 U	15.9
WS-OS-1	3/28/2013	WOS1130328-	< 0.001 U	< 0.001 U	0.00199	< 0.001 U	< 0.002 U	15.2	< 0.005 U	< 0.003 U	< 0.002 U	0.044 T	< 0.001 U	7.58
WS-OS-1 Duplicate *	3/28/2013	WOS1130328D	< 0.001 U	< 0.001 U	0.00196	< 0.001 U	< 0.002 U	15	< 0.005 U	< 0.003 U	< 0.002 U	0.022 T	< 0.001 U	7.45
WS-OS-2 *	2/5/2013	WOS2130205-	< 0.001 U	< 0.001 U	0.00329	< 0.001 DU	< 0.002 U	14.3	< 0.005 U	< 0.003 DU	0.00834	0.272	< 0.001 U	7.53
WS-OS-3 *	2/14/2013	WOS3130214-	< 0.001 U	0.00524	0.00454	< 0.001 U	< 0.002 U	18.4	< 0.005 U	< 0.003 U	0.00574	0.012 T	< 0.001 U	5.22
WS-OS-4 *	2/14/2013	WOS4130214-	< 0.001 U	< 0.001 U	0.00173	< 0.001 U	< 0.002 U	12.9	< 0.005 U	< 0.003 U	0.00979	0.011 T	< 0.001 U	8.35

* Total Metals

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: Sandy 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	1/8/2013	W21-130108-	0.0748	< 0.0001 U	< 0.01 U	1.04	< 0.001 U	< 0.003 U	6.1	< 0.001 U	< 0.002 U	< 0.004 U
MW-24	1/3/2013	W24-130103-	0.119	< 0.0001 U	< 0.01 U	0.9	< 0.001 U	< 0.003 U	6.11	< 0.001 U	< 0.002 U	< 0.004 U
MW-27A	1/8/2013	W27A130108-	0.0662	< 0.0001 U	< 0.01 U	3.51	< 0.001 U	< 0.003 U	7.76	< 0.001 U	< 0.002 U	< 0.004 U
MW-28	1/14/2013	W28-130114-	< 0.001 U	< 0.0001 U	< 0.01 U	0.884	< 0.001 U	< 0.003 U	6.25	< 0.001 U	< 0.002 U	< 0.004 U
MW-29	1/10/2013	W29-130110-	< 0.001 U	< 0.0001 U	< 0.01 U	0.505	< 0.001 U	< 0.003 U	5.13	< 0.001 U	< 0.002 U	< 0.004 U
MW-30A	1/29/2013	W30A130129-	< 0.001 DU	< 0.0001 U	< 0.01 U	1.72	< 0.001 U	< 0.003 U	14.8 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-43	1/15/2013	W43-130115-	0.214	< 0.0001 U	< 0.01 U	1.27	< 0.001 U	< 0.003 U	6.51	< 0.001 U	< 0.002 U	< 0.004 U
MW-47	1/10/2013	W47-130110-	1.66	< 0.0001 U	< 0.01 U	4.78	< 0.001 U	< 0.003 U	20	< 0.001 U	< 0.002 U	< 0.004 U
MW-47 Duplicate	1/10/2013	W47-130110D	1.67	< 0.0001 U	< 0.01 U	4.79	< 0.001 U	< 0.003 U	20.1	< 0.001 U	< 0.002 U	< 0.004 U
MW-55	1/8/2013	W55-130108-	0.154	< 0.0001 U	< 0.01 U	1.67	< 0.001 U	< 0.003 U	6.34	< 0.001 U	< 0.002 U	< 0.004 U
MW-56	1/24/2013	W56-130124-	0.064	< 0.0001 U	< 0.01 U	0.962	< 0.001 U	< 0.003 U	4.82	< 0.001 U	< 0.002 U	< 0.004 U
MW-57	1/17/2013	W57-130117-	0.248	< 0.0001 U	< 0.01 U	0.921	< 0.001 U	< 0.003 U	7.07	< 0.001 U	< 0.002 U	0.00617
MW-58A	1/18/2013	W58A130118-	0.337	< 0.0001 U	< 0.01 U	0.961	< 0.001 U	< 0.003 U	5.65	< 0.001 U	< 0.002 U	< 0.004 U
MW-59	1/25/2013	W59-130125-	0.0968 D	< 0.0001 U	< 0.01 U	1.19	< 0.001 U	< 0.003 U	5.12 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-60	1/7/2013	W60-130107-	< 0.001 U	< 0.0001 U	< 0.01 U	1.04	< 0.001 U	< 0.003 U	5.6	< 0.001 U	< 0.002 U	< 0.004 U
MW-62	1/10/2013	W62-130110-	< 0.001 U	< 0.0001 U	< 0.01 U	0.94	< 0.001 U	< 0.003 U	15.5	< 0.001 U	< 0.002 U	< 0.004 U
MW-64	1/16/2013	W64-130116-	0.061	< 0.0001 U	< 0.01 U	1.39	< 0.001 U	< 0.003 U	6.8	< 0.001 U	< 0.002 U	< 0.004 U
MW-64 Duplicate	1/16/2013	W64-130116D	0.0605	< 0.0001 U	< 0.01 U	1.39	< 0.001 U	< 0.003 U	6.79	< 0.001 U	< 0.002 U	< 0.004 U
MW-65	1/18/2013	W65-130118-	0.197	< 0.0001 U	< 0.01 U	0.885	< 0.001 U	< 0.003 U	5.65	< 0.001 U	< 0.002 U	< 0.004 U
MW-66	1/10/2013	W66-130110-	< 0.001 U	< 0.0001 U	< 0.01 U	1.24	< 0.001 U	< 0.003 U	9.12	< 0.001 U	< 0.002 U	< 0.004 U
MW-67	1/3/2013	W67-130103-	0.0795	< 0.0001 U	< 0.01 U	1.49	< 0.001 U	< 0.003 U	9.2	< 0.001 U	< 0.002 U	< 0.004 U
MW-68	1/15/2013	W68-130115-	0.227	< 0.0001 U	< 0.01 U	1.54	< 0.001 U	< 0.003 U	8.59	< 0.001 U	< 0.002 U	< 0.004 U
MW-69	1/8/2013	W69-130108-	0.201	< 0.0001 U	< 0.01 U	1.64	< 0.001 U	< 0.003 U	9.01	< 0.001 U	< 0.002 U	< 0.004 U
MW-70	1/25/2013	W70-130125-	< 0.001 DU	< 0.0001 U	< 0.01 U	1.52	< 0.001 U	< 0.003 U	5.8 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-72	1/28/2013	W72-130128-	0.302 D	< 0.0001 U	< 0.01 U	1.86	< 0.001 U	< 0.003 U	6.82 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-73	1/22/2013	W73-130122-	< 0.001 U	< 0.0001 U	< 0.01 U	0.724	< 0.001 U	< 0.003 U	3.43	< 0.001 U	< 0.002 U	< 0.004 U
MW-74	1/11/2013	W74R130111-	0.0296	< 0.0001 U	< 0.01 U	1.91	< 0.001 U	< 0.003 U	12.7	< 0.001 U	< 0.002 U	< 0.004 U
MW-75	1/11/2013	W75-130111-	0.134	< 0.0001 U	< 0.01 U	1.62	< 0.001 U	< 0.003 U	8.84	< 0.001 U	< 0.002 U	< 0.004 U
MW-76	1/25/2013	W76-130125-	< 0.001 DU	< 0.0001 U	< 0.01 U	1.38	< 0.001 U	< 0.003 U	7.43 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-77	1/25/2013	W77-130125-	0.00202 D	< 0.0001 U	< 0.01 U	1.51	< 0.001 U	< 0.003 U	6.97 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-78	1/25/2013	W78-130125-	< 0.001 DU	< 0.0001 U	< 0.01 U	2	< 0.001 U	< 0.003 U	5.61 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-80	1/29/2013	W80-130129-	0.22 D	< 0.0001 U	< 0.01 U	1.51	< 0.001 U	< 0.003 U	6.49 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-80 Duplicate	1/29/2013	W80-130129D	0.217 D	< 0.0001 U	< 0.01 U	1.56	< 0.001 U	< 0.003 U	6.51 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-81	1/11/2013	W81-130111-	< 0.001 U	< 0.0001 U	< 0.01 U	0.707	< 0.001 U	< 0.003 U	5.82	< 0.001 U	< 0.002 U	< 0.004 U
MW-82	1/23/2013	W82-130123-	< 0.001 U	< 0.0001 U	< 0.01 U	1.59	< 0.001 U	< 0.003 U	6.65	< 0.001 U	< 0.002 U	< 0.004 U
MW-83	1/18/2013	W83-130118-	< 0.001 U	< 0.0001 U	< 0.01 U	2.17	< 0.001 U	< 0.003 U	7.52	< 0.001 U	< 0.002 U	< 0.004 U
MW-84	1/17/2013	W84-130117-	0.00268	< 0.0001 U	< 0.01 U	0.928	< 0.001 U	< 0.003 U	6.09	< 0.001 U	< 0.002 U	< 0.004 U
MW-85	1/24/2013	W85-130124-	< 0.001 U	< 0.0001 U	< 0.01 U	1.41	0.00124	< 0.003 U	7.69	< 0.001 U	< 0.002 U	< 0.004 U
MW-86	1/24/2013	W86-130124-	0.0111	< 0.0001 U	< 0.01 U	1.15	< 0.001 U	< 0.003 U	6.1	< 0.001 U	< 0.002 U	< 0.004 U
MW-87	1/11/2013	W87-130111-	0.365	< 0.0001 U	< 0.01 U	1.97	< 0.001 U	< 0.003 U	9.78	< 0.001 U	< 0.002 U	< 0.004 U

* Total Metals

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: Sandy 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-88	1/28/2013	W88-130128-	< 0.001 DU	< 0.0001 U	< 0.01 U	0.837	< 0.001 U	< 0.003 U	5.07 D	< 0.001 U	0.00271	< 0.004 DU
MW-89	1/10/2013	W89-130110-	0.246	< 0.0001 U	< 0.01 U	1.42	< 0.001 U	< 0.003 U	9.01	< 0.001 U	< 0.002 U	< 0.004 U
MW-90	1/30/2013	W90-130130-	0.265 D	< 0.0001 U	< 0.01 U	1.28	< 0.001 U	< 0.003 U	5.76 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-91	1/22/2013	W91-130122-	0.305	< 0.0001 U	< 0.01 U	1.65	< 0.001 U	< 0.003 U	7.45	< 0.001 U	< 0.002 U	< 0.004 U
MW-93	1/16/2013	W93-130116-	0.249	< 0.0001 U	< 0.01 U	1.47	< 0.001 U	< 0.003 U	9.68	< 0.001 U	< 0.002 U	0.00878
MW-94	1/14/2013	W94-130114-	< 0.001 U	< 0.0001 U	< 0.01 U	1.98	< 0.001 U	< 0.003 U	7.17	< 0.001 U	< 0.002 U	< 0.004 U
MW-95	1/17/2013	W95-130117-	0.133	< 0.0001 U	< 0.01 U	1.11	< 0.001 U	< 0.003 U	6.12	< 0.001 U	< 0.002 U	< 0.004 U
MW-99	1/11/2013	W99-130111-	0.0815	< 0.0001 U	< 0.01 U	0.79	< 0.001 U	< 0.003 U	10.2	< 0.001 U	< 0.002 U	< 0.004 U
MW-100	1/14/2013	W100130114-	0.226	< 0.0001 U	< 0.01 U	1.82	< 0.001 U	< 0.003 U	9.36	< 0.001 U	< 0.002 U	< 0.004 U
MW-101	1/28/2013	W101130128-	1.31 D	< 0.0001 U	< 0.01 U	3.06	< 0.001 U	< 0.003 U	14.6 D	< 0.001 U	< 0.002 U	< 0.004 DU
MW-EB6	1/14/2013	WB6-130114-	0.416	< 0.0001 U	< 0.01 U	1.2	< 0.001 U	< 0.003 U	8.67	< 0.001 U	< 0.002 U	< 0.004 U
EQUIPMENT BLANK	1/17/2013	WU1H130117E	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.352	< 0.001 U	< 0.002 U	< 0.004 U
EQUIPMENT BLANK	1/17/2013	WU1S130117E	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.378	< 0.001 U	< 0.002 U	< 0.004 U
FIELD BLANK	1/8/2013	W55-130108F	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.458	< 0.001 U	< 0.002 U	< 0.004 U
FIELD BLANK	1/18/2013	W58A130118F	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.368	< 0.001 U	< 0.002 U	< 0.004 U
FIELD BLANK	1/29/2013	WNPW130129F	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	0.345	< 0.001 U	< 0.002 U	< 0.004 U
WS-NPW *	1/29/2013	WNPW130129-	0.0631	< 0.0001 U	< 0.01 U	1.61	< 0.001 U	< 0.003 U	8.42	< 0.001 U	< 0.002 U	0.00777
WS-OS-1	3/28/2013	WOS1130328-	< 0.001 U	< 0.0001 U	< 0.01 U	0.801	< 0.001 U	< 0.003 U	6.23	< 0.001 U	< 0.002 U	0.0149
WS-OS-1 Duplicate *	3/28/2013	WOS1130328D	< 0.001 U	< 0.0001 U	< 0.01 U	0.801	< 0.001 U	< 0.003 U	6.12	< 0.001 U	< 0.002 U	0.0128
WS-OS-2 *	2/5/2013	WOS2130205-	0.114	< 0.0001 U	< 0.01 U	0.904	< 0.001 U	< 0.003 U	6.07 D	< 0.001 U	0.0021	0.123
WS-OS-3 *	2/14/2013	WOS3130214-	0.0293	< 0.0001 U	< 0.01 U	1.56	< 0.001 U	< 0.003 U	28.2	< 0.001 U	< 0.002 U	0.0114
WS-OS-4 *	2/14/2013	WOS4130214-	0.0011	< 0.0001 U	< 0.01 U	0.867	0.00172	< 0.003 U	6.06	< 0.001 U	< 0.002 U	0.595 D

* Total Metals

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 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-21	1/8/2013	W21-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-24	1/3/2013	W24-130103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	1/8/2013	W27A130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-28	1/14/2013	W28-130114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-29	1/10/2013	W29-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	1/29/2013	W30A130129-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.57	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	1/15/2013	W43-130115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	1/10/2013	W47-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.539	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47 Duplicate	1/10/2013	W47-130110D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.544	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-55	1/8/2013	W55-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-56	1/24/2013	W56-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	1/17/2013	W57-130117-	< 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	1/18/2013	W58A130118-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-59	1/25/2013	W59-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	1/7/2013	W60-130107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-62	1/10/2013	W62-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.65	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64	1/16/2013	W64-130116-	< 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-64 Duplicate	1/16/2013	W64-130116D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-65	1/18/2013	W65-130118-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-66	1/10/2013	W66-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-67	1/3/2013	W67-130103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-68	1/15/2013	W68-130115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-69	1/8/2013	W69-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	1/25/2013	W70-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-72	1/28/2013	W72-130128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-73	1/22/2013	W73-130122-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	1/11/2013	W74R130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	2/19/2013	W74R130219-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	3/25/2013	W74R130325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	1/11/2013	W75-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	2/19/2013	W75-130219-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	3/25/2013	W75-130325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-76	1/25/2013	W76-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	1/25/2013	W77-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	1/29/2013	W80-130129-	< 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 Duplicate	1/29/2013	W80-130129D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-81	1/11/2013	W81-130111-	< 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	1/23/2013	W82-130123-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	1/18/2013	W83-130118-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-84	1/17/2013	W84-130117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 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-85	1/24/2013	W85-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-86	1/24/2013	W86-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	1/11/2013	W87-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	2/14/2013	W87-130214-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	3/22/2013	W87-130322-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-88	1/28/2013	W88-130128-	< 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	1/10/2013	W89-130110-	< 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-90	1/30/2013	W90-130130-	< 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	1/22/2013	W91-130122-	< 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	1/16/2013	W93-130116-	< 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	1/14/2013	W94-130114-	< 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	1/17/2013	W95-130117-	< 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	1/11/2013	W99-130111-	< 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	2/14/2013	W99-130214-	< 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	3/22/2013	W99-130322-	< 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	1/14/2013	W100130114-	< 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	1/28/2013	W101130128-	< 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-EB6	1/14/2013	WB6-130114-	< 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	1/8/2013	W55-130108F	< 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	1/18/2013	W58A130118F	< 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	1/29/2013	WNPW130129F	< 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	1/29/2013	WNPW130129-	< 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-OS-1	3/28/2013	WOS1130328-	< 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-OS-1 Duplicate	3/28/2013	WOS1130328D	< 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-OS-2	2/5/2013	WOS2130205-	< 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-OS-4	2/14/2013	WOS4130214-	< 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-OS-3	2/14/2013	WOS3130214-	< 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	2/13/2013	VTRP130214T	< 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	1/2/2013	VTRP130103C	< 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	1/3/2013	VTRP130107C	< 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	1/7/2013	VTRP130108B	< 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	1/7/2013	VTRP130108C	< 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	1/9/2013	VTRP130110B	< 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	1/9/2013	VTRP130110C	< 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	1/10/2013	VTRP130111B	< 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	1/10/2013	VTRP130111C	< 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	1/11/2013	VTRP130114B	< 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	1/11/2013	VTRP130114C	< 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	1/14/2013	VTRP130115B	< 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	1/14/2013	VTRP130116C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Groundwater 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)	1,2,3-Trichloro-propane 96-18-4 (ug/L)	1,2-Dibromo-3-Chloropropane 96-12-8 (ug/L)	1,2-Dibromo-ethane 106-93-4 (ug/L)	1,2-Dichloro-benzene 95-50-1 (ug/L)	1,2-Dichloro-ethane 107-06-2 (ug/L)	1,2-Dichloro-propane 78-87-5 (ug/L)
VOA TRIP BLANK	1/16/2013	VTRP130117B	< 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	1/16/2013	VTRP130117C	< 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	1/17/2013	VTRP130118B	< 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	1/17/2013	VTRP130118C	< 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	1/18/2013	VTRP130122C	< 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	1/22/2013	VTRP130123B	< 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	1/23/2013	VTRP130124B	< 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	1/23/2013	VTRP130124C	< 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	1/24/2013	VTRP130125B	< 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	1/24/2013	VTRP130125C	< 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	1/25/2013	VTRP130128B	< 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	1/25/2013	VTRP130128C	< 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	1/28/2013	VTRP130129B	< 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	1/28/2013	VTRP130129C	< 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	1/29/2013	VTRP130130B	< 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	2/4/2013	VTRP130205B	< 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	2/13/2013	VTRP130214C	< 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	2/13/2013	VTRP130214T	< 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	2/14/2013	VTRP130219B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/19/2013	VTRP130322C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/19/2013	VTRP130325B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/27/2013	VTRP130328B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 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	1/8/2013	W21-130108-	< 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	1/3/2013	W24-130103-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	1/8/2013	W27A130108-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-28	1/14/2013	W28-130114-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-29	1/10/2013	W29-130110-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	1/29/2013	W30A130129-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	1/15/2013	W43-130115-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	1/10/2013	W47-130110-	< 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 Duplicate	1/10/2013	W47-130110D	< 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	1/8/2013	W55-130108-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-56	1/24/2013	W56-130124-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	1/17/2013	W57-130117-	< 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	1/18/2013	W58A130118-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-59	1/25/2013	W59-130125-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	1/7/2013	W60-130107-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-62	1/10/2013	W62-130110-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64	1/16/2013	W64-130116-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64 Duplicate	1/16/2013	W64-130116D	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-65	1/18/2013	W65-130118-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-66	1/10/2013	W66-130110-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-67	1/3/2013	W67-130103-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-68	1/15/2013	W68-130115-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-69	1/8/2013	W69-130108-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	1/25/2013	W70-130125-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-72	1/28/2013	W72-130128-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-73	1/22/2013	W73-130122-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	1/11/2013	W74R130111-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	2/19/2013	W74R130219-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	3/25/2013	W74R130325-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	1/11/2013	W75-130111-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	2/19/2013	W75-130219-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	3/25/2013	W75-130325-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-76	1/25/2013	W76-130125-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	1/25/2013	W77-130125-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	1/29/2013	W80-130129-	< 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 Duplicate	1/29/2013	W80-130129D	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-81	1/11/2013	W81-130111-	< 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	1/23/2013	W82-130123-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	1/18/2013	W83-130118-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-84	1/17/2013	W84-130117-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Groundwater VOA Analytical Data
 Contact Person: Sindy 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-85	1/24/2013	W85-130124-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-86	1/24/2013	W86-130124-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	1/11/2013	W87-130111-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	2/14/2013	W87-130214-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	3/22/2013	W87-130322-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-88	1/28/2013	W88-130128-	< 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	1/10/2013	W89-130110-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-90	1/30/2013	W90-130130-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-91	1/22/2013	W91-130122-	< 0.2 U	< 4 U	< 4 U	< 4 U	4.48	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-93	1/16/2013	W93-130116-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-94	1/14/2013	W94-130114-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-95	1/17/2013	W95-130117-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-99	1/11/2013	W99-130111-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-99	2/14/2013	W99-130214-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-99	3/22/2013	W99-130322-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-100	1/14/2013	W100130114-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-101	1/28/2013	W101130128-	< 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-EB6	1/14/2013	WB6-130114-	< 0.2 U	< 4 U	< 4 U	< 4 U	8.16	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	1/8/2013	W55-130108F	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	1/18/2013	W58A130118F	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	1/29/2013	WNPW130129F	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
WS-NPW	1/29/2013	WNPW130129-	< 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-OS-1	3/28/2013	WOS1130328-	< 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-OS-1 Duplicate	3/28/2013	WOS1130328D	< 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-OS-2	2/5/2013	WOS2130205-	< 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-OS-4	2/14/2013	WOS4130214-	< 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-OS-3	2/14/2013	WOS3130214-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	1.43	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/13/2013	VTRP130214T	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/2/2013	VTRP130103C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/3/2013	VTRP130107C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/7/2013	VTRP130108B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/7/2013	VTRP130108C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/9/2013	VTRP130110B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/9/2013	VTRP130110C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/10/2013	VTRP130111B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/10/2013	VTRP130111C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/11/2013	VTRP130114B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/11/2013	VTRP130114C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/14/2013	VTRP130115B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/14/2013	VTRP130116C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Groundwater VOA Analytical Data
 Contact Person: Sindy 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)
VOA TRIP BLANK	1/16/2013	VTRP130117B	< 0.2 U	< 4 U	< 4 U	< 4 U	5	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/16/2013	VTRP130117C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/17/2013	VTRP130118B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/17/2013	VTRP130118C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/18/2013	VTRP130122C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/22/2013	VTRP130123B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/23/2013	VTRP130124B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/23/2013	VTRP130124C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/24/2013	VTRP130125B	< 0.2 U	< 4 U	< 4 U	< 4 U	4.41	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/24/2013	VTRP130125C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/25/2013	VTRP130128B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/25/2013	VTRP130128C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/28/2013	VTRP130129B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/28/2013	VTRP130129C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/29/2013	VTRP130130B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/4/2013	VTRP130205B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/13/2013	VTRP130214C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/13/2013	VTRP130214T	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/14/2013	VTRP130219B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/19/2013	VTRP130322C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/19/2013	VTRP130325B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/27/2013	VTRP130328B	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
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	1/8/2013	W21-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-24	1/3/2013	W24-130103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.34 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-27A	1/8/2013	W27A130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-28	1/14/2013	W28-130114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-29	1/10/2013	W29-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	1/29/2013	W30A130129-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.92	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-43	1/15/2013	W43-130115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	1/10/2013	W47-130110-	< 0.2 U	< 0.2 U	< 0.2 U	0.23 T	< 0.2 U	< 0.2 U	1.59	< 0.2 U	< 0.2 U	5.45	< 0.2 U	< 0.2 U
MW-47 Duplicate	1/10/2013	W47-130110D	< 0.2 U	< 0.2 U	< 0.2 U	0.21 T	< 0.2 U	< 0.2 U	1.5	< 0.2 U	< 0.2 U	4.26	< 0.2 U	< 0.2 U
MW-55	1/8/2013	W55-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-56	1/24/2013	W56-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.91	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-57	1/17/2013	W57-130117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/18/2013	W58A130118-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-59	1/25/2013	W59-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.674	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-60	1/7/2013	W60-130107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-62	1/10/2013	W62-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	4.05	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64	1/16/2013	W64-130116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-64 Duplicate	1/16/2013	W64-130116D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-65	1/18/2013	W65-130118-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-66	1/10/2013	W66-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-67	1/3/2013	W67-130103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-68	1/15/2013	W68-130115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-69	1/8/2013	W69-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-70	1/25/2013	W70-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-72	1/28/2013	W72-130128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-73	1/22/2013	W73-130122-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	1/11/2013	W74R130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	2/19/2013	W74R130219-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-74	3/25/2013	W74R130325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	1/11/2013	W75-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	2/19/2013	W75-130219-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-75	3/25/2013	W75-130325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-76	1/25/2013	W76-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.831	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-77	1/25/2013	W77-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	1/29/2013	W80-130129-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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 Duplicate	1/29/2013	W80-130129D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-81	1/11/2013	W81-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/23/2013	W82-130123-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-83	1/18/2013	W83-130118-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-84	1/17/2013	W84-130117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
Cedar Hills Landfill --- Groundwater VOA Analytical Data
Contact Person: Sindy 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-85	1/24/2013	W85-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-86	1/24/2013	W86-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	1/11/2013	W87-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	2/14/2013	W87-130214-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-87	3/22/2013	W87-130322-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-88	1/28/2013	W88-130128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/10/2013	W89-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-90	1/30/2013	W90-130130-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/22/2013	W91-130122-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/16/2013	W93-130116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/14/2013	W94-130114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/17/2013	W95-130117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/11/2013	W99-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	2/14/2013	W99-130214-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	3/22/2013	W99-130322-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/14/2013	W100130114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/28/2013	W101130128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-EB6	1/14/2013	WB6-130114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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	1/8/2013	W55-130108F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.555	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	1/18/2013	W58A130118F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.458	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
FIELD BLANK	1/29/2013	WNPW130129F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.38 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
WS-NPW	1/29/2013	WNPW130129-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-OS-1	3/28/2013	WOS1130328-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-OS-1 Duplicate	3/28/2013	WOS1130328D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-OS-2	2/5/2013	WOS2130205-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-OS-4	2/14/2013	WOS4130214-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 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-OS-3	2/14/2013	WOS3130214-	< 0.2 U	< 0.2 U	0.24 T	< 0.2 U	6.38	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/13/2013	VTRP130214T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/2/2013	VTRP130103C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/3/2013	VTRP130107C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/7/2013	VTRP130108B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/7/2013	VTRP130108C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/9/2013	VTRP130110B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/9/2013	VTRP130110C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/10/2013	VTRP130111B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/10/2013	VTRP130111C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/11/2013	VTRP130114B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/11/2013	VTRP130114C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/14/2013	VTRP130115B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/14/2013	VTRP130116C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Groundwater VOA Analytical Data
 Contact Person: Sindy 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)
VOA TRIP BLANK	1/16/2013	VTRP130117B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/16/2013	VTRP130117C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/17/2013	VTRP130118B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/17/2013	VTRP130118C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/18/2013	VTRP130122C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/22/2013	VTRP130123B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/23/2013	VTRP130124B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/23/2013	VTRP130124C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/24/2013	VTRP130125B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/24/2013	VTRP130125C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/25/2013	VTRP130128B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/25/2013	VTRP130128C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/28/2013	VTRP130129B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/28/2013	VTRP130129C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/29/2013	VTRP130130B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/4/2013	VTRP130205B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/13/2013	VTRP130214C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/13/2013	VTRP130214T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/14/2013	VTRP130219B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/19/2013	VTRP130322C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/19/2013	VTRP130325B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/27/2013	VTRP130328B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Groundwater VOA Analytical Data
 Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	Methyl Iodide	Methylene Chloride	o-Xylene	Styrene	Tetrachloro- ethene	Toluene	trans-1,2- Dichloro- ethene	trans-1,3- Dichloro- propene	trans-1,4- Dichloro-2- butene	Trichloro- ethene	Trichloro- fluoro- methane	Vinyl Acetate	Vinyl Chloride
			74-88-4 (ug/L)	75-09-2 (ug/L)	95-47-6 (ug/L)	100-42-5 (ug/L)	127-18-4 (ug/L)	108-88-3 (ug/L)	156-60-5 (ug/L)	10061-02-6 (ug/L)	110-57-6 (ug/L)	79-01-6 (ug/L)	75-69-4 (ug/L)	108-05-4 (ug/L)	75-01-4 (ug/L)
MW-21	1/8/2013	W21-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-24	1/3/2013	W24-130103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-27A	1/8/2013	W27A130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-28	1/14/2013	W28-130114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-29	1/10/2013	W29-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-30A	1/29/2013	W30A130129-	< 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	0.918	< 0.2 U	< 0.2 U	< 0.02 U
MW-43	1/15/2013	W43-130115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-47	1/10/2013	W47-130110-	< 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	5.86
MW-47 Duplicate	1/10/2013	W47-130110D	< 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	5.88
MW-55	1/8/2013	W55-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-56	1/24/2013	W56-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-57	1/17/2013	W57-130117-	< 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	1/18/2013	W58A130118-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-59	1/25/2013	W59-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-60	1/7/2013	W60-130107-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-62	1/10/2013	W62-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-64	1/16/2013	W64-130116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-64 Duplicate	1/16/2013	W64-130116D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-65	1/18/2013	W65-130118-	< 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	0.0432
MW-66	1/10/2013	W66-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-67	1/3/2013	W67-130103-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-68	1/15/2013	W68-130115-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-69	1/8/2013	W69-130108-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-70	1/25/2013	W70-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-72	1/28/2013	W72-130128-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-73	1/22/2013	W73-130122-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-74	1/11/2013	W74R130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-74	2/19/2013	W74R130219-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-74	3/25/2013	W74R130325-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-75	1/11/2013	W75-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-75	2/19/2013	W75-130219-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-75	3/25/2013	W75-130325-	< 0.2 U	0.22 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-76	1/25/2013	W76-130125-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.42	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	9.02	< 0.2 U	< 0.2 U	< 0.02 U
MW-77	1/25/2013	W77-130125-	< 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-80	1/29/2013	W80-130129-	< 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-80 Duplicate	1/29/2013	W80-130129D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-81	1/11/2013	W81-130111-	< 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	1/23/2013	W82-130123-	< 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	5.6	< 0.2 U	< 0.2 U	< 0.02 U
MW-83	1/18/2013	W83-130118-	< 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	1.38	< 0.2 U	< 0.2 U	< 0.02 U
MW-84	1/17/2013	W84-130117-	< 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 January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Groundwater VOA Analytical Data
 Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	Methyl Iodide	Methylene Chloride	o-Xylene	Styrene	Tetrachloro- ethene	Toluene	trans-1,2- Dichloro- ethene	trans-1,3- Dichloro- propene	trans-1,4- Dichloro-2- butene	Trichloro- ethene	Trichloro- fluoro- methane	Vinyl Acetate	Vinyl Chloride
			74-88-4 (ug/L)	75-09-2 (ug/L)	95-47-6 (ug/L)	100-42-5 (ug/L)	127-18-4 (ug/L)	108-88-3 (ug/L)	156-60-5 (ug/L)	10061-02-6 (ug/L)	110-57-6 (ug/L)	79-01-6 (ug/L)	75-69-4 (ug/L)	108-05-4 (ug/L)	75-01-4 (ug/L)
MW-85	1/24/2013	W85-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-86	1/24/2013	W86-130124-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-87	1/11/2013	W87-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-87	2/14/2013	W87-130214-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-87	3/22/2013	W87-130322-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-88	1/28/2013	W88-130128-	< 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	1/10/2013	W89-130110-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-90	1/30/2013	W90-130130-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-91	1/22/2013	W91-130122-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-93	1/16/2013	W93-130116-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-94	1/14/2013	W94-130114-	< 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	2.65	< 0.2 U	< 0.2 U	< 0.02 U
MW-95	1/17/2013	W95-130117-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-99	1/11/2013	W99-130111-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-99	2/14/2013	W99-130214-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-99	3/22/2013	W99-130322-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-100	1/14/2013	W100130114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-101	1/28/2013	W101130128-	< 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	0.282
MW-EB6	1/14/2013	WB6-130114-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
FIELD BLANK	1/8/2013	W55-130108F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
FIELD BLANK	1/18/2013	W58A130118F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
FIELD BLANK	1/29/2013	WNPW130129F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.36 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
WS-NPW	1/29/2013	WNPW130129-	< 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-OS-1	3/28/2013	WOS1130328-	< 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-OS-1 Duplicate	3/28/2013	WOS1130328D	< 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-OS-2	2/5/2013	WOS2130205-	< 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-OS-4	2/14/2013	WOS4130214-	< 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-OS-3	2/14/2013	WOS3130214-	< 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	2/13/2013	VTRP130214T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/2/2013	VTRP130103C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/3/2013	VTRP130107C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/7/2013	VTRP130108B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/7/2013	VTRP130108C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/9/2013	VTRP130110B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/9/2013	VTRP130110C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/10/2013	VTRP130111B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/10/2013	VTRP130111C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/11/2013	VTRP130114B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/11/2013	VTRP130114C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/14/2013	VTRP130115B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/14/2013	VTRP130116C	< 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 January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Groundwater VOA Analytical Data
 Contact Person: Sindy Jimenez (206) 296-4411

Site	Date	Sample ID	Methyl Iodide	Methylene Chloride	o-Xylene	Styrene	Tetrachloro- ethene	Toluene	trans-1,2- Dichloro- ethene	trans-1,3- Dichloro- propene	trans-1,4- Dichloro-2- butene	Trichloro- ethene	Trichloro- fluoro- methane	Vinyl Acetate	Vinyl Chloride
			74-88-4 (ug/L)	75-09-2 (ug/L)	95-47-6 (ug/L)	100-42-5 (ug/L)	127-18-4 (ug/L)	108-88-3 (ug/L)	156-60-5 (ug/L)	10061-02-6 (ug/L)	110-57-6 (ug/L)	79-01-6 (ug/L)	75-69-4 (ug/L)	108-05-4 (ug/L)	75-01-4 (ug/L)
VOA TRIP BLANK	1/16/2013	VTRP130117B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/16/2013	VTRP130117C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/17/2013	VTRP130118B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/17/2013	VTRP130118C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/18/2013	VTRP130122C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/22/2013	VTRP130123B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/23/2013	VTRP130124B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/23/2013	VTRP130124C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/24/2013	VTRP130125B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/24/2013	VTRP130125C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/25/2013	VTRP130128B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/25/2013	VTRP130128C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/28/2013	VTRP130129B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/28/2013	VTRP130129C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/29/2013	VTRP130130B	< 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	2/4/2013	VTRP130205B	< 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	2/13/2013	VTRP130214C	< 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	2/13/2013	VTRP130214T	< 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	2/14/2013	VTRP130219B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/19/2013	VTRP130322C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/19/2013	VTRP130325B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/27/2013	VTRP130328B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U

Surface Water Analytical Data

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

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

Contact Person: Sindy 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	1/22/2013	415.38	418.84		0.78	416.16	
SG-1	SW-W1	2/11/2013	415.38	418.84		0.85	416.23	
SG-1	SW-W1	3/18/2013	415.38	418.84		0.82	416.20	
SG-2	SW-N1	1/22/2013	355.68	358.21		0.54	356.22	
SG-2	SW-N1	2/11/2013	355.68	358.21		0.65	356.33	
SG-2	SW-N1	3/18/2013	355.68	358.21		0.59	356.27	
SG-3	SW -V	1/22/2013	466.46	469.88		0.07	466.53	
SG-3	SW -V	2/11/2013	466.46	469.88		0.18	466.64	
SG-3	SW -V	3/18/2013	466.46	469.88	3.84		466.04	
SG-4	Upstream of SW-E1	1/22/2013	502.41	505.85		0.26	502.67	
SG-4	Upstream of SW-E1	2/11/2013	502.41	505.85		0.30	502.71	
SG-4	Upstream of SW-E1	3/18/2013	502.41	505.85		0.27	502.68	
SG-5	SW-E1	1/22/2013	486.92	490.34		0.63	487.55	
SG-5	SW-E1	2/11/2013	486.92	490.34		0.66	487.58	
SG-5	SW-E1	3/18/2013	486.92	490.34		0.63	487.55	
SG-6	Upstream of SW-GS1	1/22/2013	490.72	494.12		0.45	491.17	
SG-6	Upstream of SW-GS1	2/11/2013	490.72	494.12		0.50	491.22	
SG-6	Upstream of SW-GS1	3/18/2013	490.72	494.12		0.48	491.20	
SG-7	SW-S2	1/22/2013	453.03	456.41		0.38	453.41	
SG-7	SW-S2	2/11/2013	453.03	456.41		0.45	453.48	
SG-7	SW-S2	3/18/2013	453.03	456.41		0.36	453.39	
SG-8	Upstream of SW-S1	1/22/2013	510.61	515.56		0.44	511.05	
SG-8	Upstream of SW-S1	2/11/2013	510.61	515.56		0.48	511.09	
SG-8	Upstream of SW-S1	3/18/2013	510.61	515.56		0.46	511.07	
SG-9	SW-S1	1/22/2013	490.93	494.35		0.74	491.67	
SG-9	SW-S1	2/11/2013	490.93	494.35		0.95	491.88	
SG-9	SW-S1	3/18/2013	490.93	494.35		0.84	491.77	

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Surface Water Field Parameters

Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Turbidity	Oxygen, Dissolved
			(std. Units)	(umho/cm)	(°C)	(NTU)	(mg/L)
SW-E1	1/22/2013	SE1-130122Q	7.57	44	1.8	1.83	12.58
SW-E1	2/11/2013	SE1-130211M	6.07	70	5.3	1.65	10.86
SW-E1	3/19/2013	SE1-130319M	6.96	39	5.6	2.75	10.58
SW-GS1	1/4/2013	SGS1130104P	6.86	100	6.3	13.2	11.78
SW-GS1	1/23/2013	SGS1130123Q	7.29	86	6.8	3.75	11.6
SW-GS1	2/12/2013	SGS1130212M	7.3	78	8.3	10.1	10.22
SW-GS1	3/19/2013	SGS1130319M	7.86	82	8.2	2.98	10.42
SW-MC	1/23/2013	SMC-130123Q	6.96	99	3.8	1.9	13.15
SW-MC	2/12/2013	SMC-130212M	6.49	86	7.4	2.26	11.26
SW-MC	3/18/2013	SMC-130318M	7.21	95	7.5	1.53	5.95
SW-N1	1/22/2013	SN1-130122Q	7.47	92	2	1.84	13.63
SW-N1	2/11/2013	SN1-130211M	6.42	87	7	2.44	11.31
SW-N1	3/19/2013	SN1-130319M	5.62	97	5.9	1.66	10.32
SW-N4	1/4/2013	SN4-130104P	7.2	185	7	3.1	13.69
SW-N4	1/22/2013	SN4-130122Q	7.44	93	4.6	3.2	13.22
SW-N4	2/12/2013	SN4-130212M	6.78	86	8.1	3.25	11.84
SW-N4	3/19/2013	SN4-130319M	5.65	88	8.5	3.3	11.82
SW-S1	1/23/2013	SS1-130123Q	6.76	52	4.3	0.62	
SW-S1	2/12/2013	SS1-130212M	6.84	50	7.7	0.27	9.34
SW-S1	3/19/2013	SS1-130319M	7.85	49	6.1	0.34	9.33
SW-S2	1/23/2013	SS2-130123Q	7.13	97	4	3.56	10.16
SW-S2	2/12/2013	SS2-130212M	7.13	81	7.2	7.96	13.14
SW-S2	3/19/2013	SS2-130319M	7.74	88	7.5	5.02	8.55
SW-SL3	1/4/2013	SSL3130104P	6.97	140	5.4	3.09	12.55
SW-SL3	1/23/2013	SSL3130123Q	7.22	105	5.3	1.84	9.15
SW-SL3	1/30/2013	SSL3130130P	6.09	100	6.8	20.7	10.86
SW-SL3	2/12/2013	SSL3130212M	7	105	8	2.07	9.29
SW-SL3	2/25/2013	SSL3130225P	6.98	90	6	9.68	11.93
SW-SL3	3/4/2013	SSL3130304P	7.07	120	4.7	2.37	9.51
SW-SL3	3/18/2013	SSL3130318M	8	120	7.6	2.68	12.21
SW-SLP1	1/30/2013	SLP1130130P	6.07	110	7.7	22.9	11.49
SW-SLP1	2/25/2013	SLP1130225P	6.99	60	7	45.8	11.12
SW-SLP1	3/4/2013	SLP1130304P	7.08	190	6.4	5.15	10.11
SW-SLP2	1/30/2013	SLP2130130P	6.17	110	6.8	11.3	11.71
SW-SLP2	2/25/2013	SLP2130225P	6.95	130	6.2	13.2	10.62
SW-SLP2	3/4/2013	SLP2130304P	7.12	135	3.5	4.44	10.06
SW-SLP3	1/30/2013	SLP3130130P	6.14	97	7.7	374	10.27
SW-TD1	1/30/2013	STD1130130-	7.59	43	7.9	16.3	10.97
SW-TD2	1/30/2013	STD2130130-	7.32	38	8.9	2.26	11.11
SW-TD4	1/30/2013	STD4130130-	7.06	49	7.2	2.66	11.2

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Surface Water Field Parameters

Contact Person: Sindy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Turbidity	Oxygen, Dissolved
			(std. Units)	(umho/cm)	(°C)	(NTU)	(mg/L)
SW-TD6	1/30/2013	STD6130130-	7.66	52	7.5	5.69	11.34
SW-V	1/22/2013	SV--130122Q	7.1	87	7.9	0.91	11.3
SW-V	2/11/2013	SV--130211M	6.04	83	9.6	1.37	10.36
SW-W	1/23/2013	SW--130123Q	6.93	97	6.5	4.54	10.03
SW-W	2/12/2013	SW--130212M	6.01	86	8.1	7.32	8.51
SW-W	3/18/2013	SW--130318M	6.54	88	8	2.42	6.09
SW-W1	1/22/2013	SW1-130122Q	7.34	100	3.1	1.71	14.33
SW-W1	2/11/2013	SW1-130211M	6.29	100	7.2	2.29	12.02
SW-W1	3/19/2013	SW1-130319M	5.67	104	6.4	2.48	7.42
SW-W2	1/23/2013	SW2-130123Q	6.82	54	4.4	0.27	10.4
SW-W2	2/12/2013	SW2-130212M	6.89	52	7.8	0.66	9.54
SW-W2	3/19/2013	SW2-130319M	7.83	51	5.7	0.25	9.69
FIELD BLANK	1/22/2013	SN1-130122F	7.31	9.1	7.2	1.47	12.86
FIELD BLANK	2/12/2013	SS1-130212F	5.65	3.8	13.7	0.15	8.85
FIELD BLANK	3/4/2013	SSL3130304F	6.6	4.7	8	0.5	6.43
FIELD BLANK	1/30/2013	STD1130130F	6.18	4.1	15	0.09	9.1

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Surface Water Conventional 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/100mL)	Coliforms, Total (CFU/100mL)	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	1/22/2013	SE1-130122Q	12.3	0.012 T	< 2 U	< 5 U	1.8	5	10	< 0.02 U	< 0.1 U	13.9	0.575	0.575
SW-E1	2/11/2013	SE1-130211M	12.4	< 0.01 U		5 T	1.48	2	19			14.6	0.454	0.454
SW-E1	3/19/2013	SE1-130319M	15.1	< 0.01 U		6.5 T	1.67	< 1 U	760			14.4	0.23	0.23
SW-GS1	1/4/2013	SGS1130104P		< 0.01 U	2.95									
SW-GS1	1/23/2013	SGS1130123Q	27.4	< 0.01 U	< 2 U	< 5 U	1.92	7	23	< 0.02 U	< 0.1 U	35	0.787	0.787
SW-GS1	2/12/2013	SGS1130212M	31.4	< 0.01 U		5 T	1.52	37	57			35.1	0.617	0.617
SW-GS1	3/19/2013	SGS1130319M	33.2	< 0.01 U		< 5 U	1.38	1	1000			32.6	0.389	0.389
SW-MC	1/23/2013	SMC-130123Q	32.4	< 0.01 U	< 2 U	5.6 T	2.85	5	14	< 0.02 U	< 0.1 U	36.5	1.14	1.14
SW-MC	2/12/2013	SMC-130212M	33.8	< 0.01 U		11 T	2.37	5	23			37.4	1.07	1.07
SW-MC	3/18/2013	SMC-130318M	37.9	< 0.01 U		< 5 U	2.39	3	99			39.2	0.878	0.878
SW-N1	1/22/2013	SN1-130122Q	32.1	< 0.01 U	< 2 U	< 5 U	2.76	5	6	< 0.02 U	< 0.1 U	35.5	1.16	1.16
SW-N1	2/11/2013	SN1-130211M	32.5	< 0.01 U		8 T	2.3	2	16			37.3	1.11	1.11
SW-N1	3/19/2013	SN1-130319M	37.8	< 0.01 U		9.5 T	2.53	6	340			37.7	0.874	0.874
SW-N4	1/4/2013	SN4-130104P		0.01 T	< 2 U									
SW-N4	1/22/2013	SN4-130122Q	29.5	0.019 T	< 2 U	5.6 T	1.11	1	3	< 0.02 U	< 0.1 U	37.3	0.864	0.864
SW-N4	2/12/2013	SN4-130212M	33.4	< 0.01 U		11 T	1.08	1	260			39.3	0.817	0.817
SW-N4 Duplicate	2/12/2013	SN4-130212D	33.4	< 0.01 U		10 T	1.06	1	460			39.4	0.809	0.809
SW-N4	3/19/2013	SN4-130319M	37.7	< 0.01 U		16 T	1.07	3	630			39.8	0.628	0.628
SW-S1	1/23/2013	SS1-130123Q	10.8	< 0.01 U	< 2 U	< 5 U	2.41	7	5	< 0.02 U	< 0.1 U	15.5	1.47	1.47
SW-S1	2/12/2013	SS1-130212M	11.8	< 0.01 U		< 5 U	2.07	2	37			16.6	1.32	1.32
SW-S1	3/19/2013	SS1-130319M	14.6	< 0.01 U		7.2 T	2.18	< 1 U	290			15.3	0.681	0.681
SW-S2	1/23/2013	SS2-130123Q	27.8	< 0.01 U	< 2 U	7.1 T	2.15	10	24	< 0.02 U	0.118	36.6	0.895	0.895
SW-S2	2/12/2013	SS2-130212M	30	< 0.01 U		12 T	1.49	5	40			36.1	0.886	0.886
SW-S2	3/19/2013	SS2-130319M	36.5	< 0.01 U		7.5 T	1.44	5	1800			36.3	0.384	0.384
SW-SL3	1/4/2013	SSL3130104P		0.0375	3.33									
SW-SL3	1/23/2013	SSL3130123Q	40.2	< 0.01 U	< 2 U	7.1 T	2.67	17	41	< 0.02 U	< 0.1 U	43.1	0.401	0.401
SW-SL3	1/30/2013	SSL3130130P		< 0.01 U	< 2 U			280	1500					
SW-SL3	2/12/2013	SSL3130212M	43.6	< 0.01 U		11 T	2.59	5	43			44.7	0.317	0.317
SW-SL3	2/25/2013	SSL3130225P		< 0.01 U	< 2 U			50	510					
SW-SL3	3/4/2013	SSL3130304P		< 0.01 HU	< 2 U			5	34					
SW-SL3	3/18/2013	SSL3130318M	52.6	< 0.01 U		26.7	2.53	9	210			49.9	0.155	0.155
SW-SLP1	1/30/2013	SLP1130130P		< 0.01 U	< 2 U			360	3300					
SW-SLP1	2/25/2013	SLP1130225P		0.0287	< 2 U			140	2100					
SW-SLP1	3/4/2013	SLP1130304P		0.0418 H	< 2 U			50	1500					
SW-SLP2	1/30/2013	SLP2130130P		< 0.01 U	< 2 U			280	1300					
SW-SLP2	2/25/2013	SLP2130225P		0.01 T	< 2 U			20	910					
SW-SLP2	3/4/2013	SLP2130304P		< 0.01 HU	< 2 U			25	43					
SW-SLP3	1/30/2013	SLP3130130P		< 0.01 U	< 2 U			480	6300					
SW-TD1	1/30/2013	STD1130130-	17.8			< 5 U	0.409							
SW-TD2	1/30/2013	STD2130130-	15.9			9.2 T	0.317							

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Surface Water Conventional 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/100mL)	Coliforms, Total (CFU/100mL)	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-TD4	1/30/2013	STD4130130-	21.6			5.4 T	0.588							
SW-TD6	1/30/2013	STD6130130-	21.7			8.4 T	0.665							
SW-V	1/22/2013	SV--130122Q	22	< 0.01 U	< 2 U	< 5 U	2.79	< 1 U	2	< 0.02 U	< 0.1 U	27.2	1.48	1.48
SW-V	2/11/2013	SV--130211M	24.1	< 0.01 U		< 5 U	2.58	3	2			30.4	1.4	1.4
SW-W	1/23/2013	SW--130123Q	26.9	0.0278	< 2 U	5.9 T	3.81	10	19	< 0.02 U	< 0.1 U	31.5	1.47	1.47
SW-W	2/12/2013	SW--130212M	28.8	0.0215		12 T	3.65	9	36			33	1.28	1.28
SW-W	3/18/2013	SW--130318M	33	0.016 T		9.5 T	3.71	4	1000			32.7	1.35	1.35
SW-W1	1/22/2013	SW1-130122Q	36.8	< 0.01 U	< 2 U	< 5 U	3.92	1	21	< 0.02 U	< 0.1 U	40.7	1.36	1.36
SW-W1	2/11/2013	SW1-130211M	36.3	< 0.01 U		< 5 U	3.65	1	14			41.1	1.38	1.38
SW-W1	3/19/2013	SW1-130319M	40.8	< 0.01 U		< 5 U	3.95	2	550			39.7	1.12	1.12
SW-W2	1/23/2013	SW2-130123Q	12.2	< 0.01 U	< 2 U	< 5 U	2.5	19	33	< 0.02 U	< 0.1 U	16.8	1.38	1.38
SW-W2	2/12/2013	SW2-130212M	12.7	< 0.01 U		< 5 U	2.35	4	15			17.3	1.28	1.28
SW-W2	3/19/2013	SW2-130319M	15.9	< 0.01 U		6.7 T	2.37	5	280			16.7	0.667	0.667
FIELD BLANK	1/30/2013	STD1130130F	< 1 U			< 5 U	< 0.1 U							
FIELD BLANK	2/12/2013	SS1-130212F	< 1 U	< 0.01 U		< 2 U	< 0.1 U	< 1 U	< 1 U			< 1 U	0.0991	0.0991
FIELD BLANK	1/22/2013	SN1-130122F	< 1 U	< 0.01 U	< 2 U	< 2 U	< 0.1 U	< 1 U	< 1 U			< 1 U	0.0982	0.0982
FIELD BLANK	3/4/2013	SSL3130304F		< 0.01 HU	< 2 U			< 1 U	< 1 U					

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Surface Water Conventional 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 (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
SW-E1	1/22/2013	SE1-130122Q	< 0.01 U	0.012	44.6	1.8	39.6	0.14 T	1.99	42.9	1.4	1.82
SW-E1	2/11/2013	SE1-130211M	0.015 T	0.0189	43.5	1.95	24 T	0.22	2.54	43.8	1.2	1.84 H
SW-E1	3/19/2013	SE1-130319M	< 0.01 U	0.015	44.9	1.73	42.5	0.18 T	2.52	43.4	5.3	1.31
SW-GS1	1/4/2013	SGS1130104P									12.8	14
SW-GS1	1/23/2013	SGS1130123Q	0.011 T	0.0288	88.9	6.74	67.9	0.15 T	2.09	73.4	3.4	6.48
SW-GS1	2/12/2013	SGS1130212M	< 0.01 U	0.0154	83.8	4.59	67.4	0.263	2.85	65.5	2.4	10.7 H
SW-GS1	3/19/2013	SGS1130319M	< 0.01 U	< 0.01 U	84.4	4.53	62.7	0.17 T	2.48	67.5	< 1 U	3.33
SW-MC	1/23/2013	SMC-130123Q	0.0469 J	0.0181 J	99.6	5.64	73.2	0.268	2.57	75.6	< 1 U	1.75
SW-MC	2/12/2013	SMC-130212M	0.018 T	0.0176	97.5	5.26	70.5	0.411	3.1	75.8	< 1 U	1.5 H
SW-MC	3/18/2013	SMC-130318M	0.012 T	0.0163	104	5.7	83.6	0.18 T	3.04	82.7	14.6	1.15
SW-N1	1/22/2013	SN1-130122Q	0.0323 J	0.0172 J	100	5.8	68.2	0.21	2.58	69.3	1.2	1.63
SW-N1	2/11/2013	SN1-130211M	0.0288 J	0.0205 J	94.8	5.33	71.3	0.299	3.47	72.6	1 T	1.83 H
SW-N1	3/19/2013	SN1-130319M	< 0.01 U	0.0166	105	5.77	77.8	0.19 T	3.29	79.3	1.5	1.76
SW-N4	1/4/2013	SN4-130104P									1.2 T	3.65
SW-N4	1/22/2013	SN4-130122Q	0.0424 J	0.031 J	94.2	7.43	76.9	0.334	4.52	75.9	1	3.09
SW-N4	2/12/2013	SN4-130212M	0.0278	0.0281	93	6.19	75.5	0.468	5.4	66.6	1	2.75 H
SW-N4 Duplicate	2/12/2013	SN4-130212D	0.0273	0.029	92.9	6.26	76.4	0.461	5.01	73.7	1.1	2.1 H
SW-N4	3/19/2013	SN4-130319M	< 0.01 U	0.0301	101	6.61	77.3	0.571	5.46	83.5	3	2.52
SW-S1	1/23/2013	SS1-130123Q	< 0.01 U	0.011	53.7	2.39	41.6	0.14 T	2.27	50.4	5.3	1.63
SW-S1	2/12/2013	SS1-130212M	< 0.01 U	< 0.01 U	52.4	2.03	46	0.2 T	2.53	46.4	< 1 U	0.44 HT
SW-S1	3/19/2013	SS1-130319M	< 0.01 U	< 0.01 U	51.2	2.24	45.1	0.12 T	2.13	44.6	< 1 U	0.61
SW-S2	1/23/2013	SS2-130123Q	0.011 T	0.0149	92.9	6.52	63.9	0.19 T	2.53	67.6	< 1 U	4.64
SW-S2	2/12/2013	SS2-130212M	< 0.01 U	0.0197	86.5	4.7	65.2	0.249	3.08	69.5	2.6	8.64 H
SW-S2	3/19/2013	SS2-130319M	< 0.01 U	0.0146	90.9	4.86	68.6	0.16 T	2.76	73.5	< 1 U	4.78
SW-SL3	1/4/2013	SSL3130104P									1.5	3.7
SW-SL3	1/23/2013	SSL3130123Q	0.024 T	0.0268	112	7.2	71.6	0.15 T	3.83	77.4	1.1	2.42
SW-SL3	1/30/2013	SSL3130130P									4.2	16.2
SW-SL3	2/12/2013	SSL3130212M	< 0.01 U	0.02	112	5.56	78.1	0.311	4.42	62.8	< 1 U	1.82 H
SW-SL3	2/25/2013	SSL3130225P									1.8	9
SW-SL3	3/4/2013	SSL3130304P									< 1 U	2.26
SW-SL3	3/18/2013	SSL3130318M	0.011 T	0.0256	127	6	84.2	0.465	4.88	92.3	1.2	2.39
SW-SLP1	1/30/2013	SLP1130130P									2.3	12.4
SW-SLP1	2/25/2013	SLP1130225P									12.6	37.2
SW-SLP1	3/4/2013	SLP1130304P									2.4	4.74
SW-SLP2	1/30/2013	SLP2130130P									3.4	9.92
SW-SLP2	2/25/2013	SLP2130225P									3.5	11.4
SW-SLP2	3/4/2013	SLP2130304P									1 T	5.39
SW-SLP3	1/30/2013	SLP3130130P									118	265
SW-TD1	1/30/2013	STD1130130-				1.25			1.83			
SW-TD2	1/30/2013	STD2130130-				0.837			3.57			

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Surface Water Conventional 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 (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)	Turbidity (NTU)
SW-TD4	1/30/2013	STD4130130-				0.771			2.28			
SW-TD6	1/30/2013	STD6130130-				1.99			2.39			
SW-V	1/22/2013	SV--130122Q	0.015 T	< 0.01 U	89.9	7.28	60.7	< 0.1 U	1.11	70.8	9.2	0.765
SW-V	2/11/2013	SV--130211M	< 0.01 U	0.0104	87.4	6.35	66.3	0.225	1.62	69.6	6.3	2.28 H
SW-W	1/23/2013	SW--130123Q	0.016 T	0.0294	99.9	5.08	75.9	0.221	2.52	80.9	6.6	1.8
SW-W	2/12/2013	SW--130212M	0.019 T	0.03	96.5	4.44	78.2	0.434	3.27	78	3.3	2.81 H
SW-W	3/18/2013	SW--130318M	0.014 T	0.0248	100	4.78	82.8	0.322	2.96	85.2	2.7	2.23
SW-W1	1/22/2013	SW1-130122Q	0.019 T	0.0359	114	5.69	67.3	0.12 T	2.1	78.3	3.7	10.9
SW-W1	2/11/2013	SW1-130211M	< 0.01 U	0.0189	109	5.53	74.5	0.282	2.79	115	1.9	7.18 H
SW-W1	3/19/2013	SW1-130319M	< 0.01 U	0.0228	119	6.32	82	0.19 T	2.49	87.8	2.4	1.72
SW-W2	1/23/2013	SW2-130123Q	< 0.01 U	< 0.01 U	56.4	2.56	48.1	0.15 T	2.37	47.3	1.1	0.619
SW-W2	2/12/2013	SW2-130212M	< 0.01 U	< 0.01 U	55	2.27	48.5	0.202	2.85	49.6	4.2	1.5 H
SW-W2	3/19/2013	SW2-130319M	< 0.01 U	0.0298	54.2	2.53	46.9	0.201	2.39	48.8	8.2	2.77
FIELD BLANK	1/30/2013	STD1130130F				< 0.1 U			< 1 U			
FIELD BLANK	2/12/2013	SS1-130212F	< 0.01 U	< 0.01 U	3.3 T	< 0.1 U	< 2 U	< 0.1 U	< 0.1 U	< 2 U	< 1 U	< 0.1 HU
FIELD BLANK	1/22/2013	SN1-130122F	< 0.01 U	< 0.01 U	3.8 T	< 0.1 U	< 2 U	< 0.1 U	< 0.1 U	< 2 U	< 1 U	< 0.1 U
FIELD BLANK	3/4/2013	SSL3130304F									< 1 U	< 0.1 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Aluminum, dissolved	Aluminum, total	Antimony, dissolved	Antimony, total	Arsenic, dissolved	Arsenic, total	Barium, dissolved	Barium, total	Beryllium, dissolved	Beryllium, total	Cadmium, dissolved	Cadmium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-E1	1/22/2013	SE1-130122Q	0.0512	0.144	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00233	0.00295	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-E1	2/11/2013	SE1-130211M	0.0601	0.253	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0025	0.00352	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-E1	3/19/2013	SE1-130319M	0.0617 D	0.272 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00245	0.00403	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	1/4/2013	SGS1130104P												
SW-GS1	1/23/2013	SGS1130123Q	< 0.02 U	0.274	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00393	0.00556	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	2/12/2013	SGS1130212M	0.0334	0.617	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00378	0.00698	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-GS1	3/19/2013	SGS1130319M	< 0.02 DU	0.196 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.0032	0.00459	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-MC	1/23/2013	SMC-130123Q	0.0218	0.0955	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0037	0.00437	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-MC	2/12/2013	SMC-130212M	0.0284 D	0.111	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00398	0.00455 D	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U
SW-MC	3/18/2013	SMC-130318M	0.0219 D	0.0623 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00372	0.0041	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	1/22/2013	SN1-130122Q	< 0.02 U	0.0811	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00371	0.00419	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	2/11/2013	SN1-130211M	0.0298	0.132	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00383	0.00448	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N1	3/19/2013	SN1-130319M	< 0.02 DU	0.0679 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00382	0.00414	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4	1/4/2013	SN4-130104P												
SW-N4	1/22/2013	SN4-130122Q	0.0403	0.171	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00322	0.0041	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4	2/12/2013	SN4-130212M	0.0588	0.192	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00323	0.00399	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4 Duplicate	2/12/2013	SN4-130212D	0.0663	0.177	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00328	0.00397	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-N4	3/19/2013	SN4-130319M	0.0299 D	0.0934 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00299	0.00373	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S1	1/23/2013	SS1-130123Q	0.0305	0.0737	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00541	0.00592	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S1	2/12/2013	SS1-130212M	0.0331	0.0437	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00619	0.00626	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S1	3/19/2013	SS1-130319M	0.033 D	0.041 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00563	0.00597	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	1/23/2013	SS2-130123Q	0.0557	0.23	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0052	0.00644	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	2/12/2013	SS2-130212M	0.0533	0.518	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00554	0.00753	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-S2	3/19/2013	SS2-130319M	0.0318 D	0.244 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00519	0.00684	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	1/4/2013	SSL3130104P												
SW-SL3	1/23/2013	SSL3130123Q	< 0.02 U	0.0872	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00704	0.0079	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	1/30/2013	SSL3130130P												
SW-SL3	2/12/2013	SSL3130212M	0.0258	0.113	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00825	0.00868	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SL3	2/25/2013	SSL3130225P												
SW-SL3	3/4/2013	SSL3130304P												
SW-SL3	3/18/2013	SSL3130318M	0.0309 D	0.132 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00843	0.00977	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-SLP1	1/30/2013	SLP1130130P												
SW-SLP1	2/25/2013	SLP1130225P												
SW-SLP1	3/4/2013	SLP1130304P												
SW-SLP2	1/30/2013	SLP2130130P												
SW-SLP2	2/25/2013	SLP2130225P												
SW-SLP2	3/4/2013	SLP2130304P												
SW-SLP3	1/30/2013	SLP3130130P												
SW-TD1	1/30/2013	STD1130130-												
SW-TD2	1/30/2013	STD2130130-												

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Aluminum, dissolved	Aluminum, total	Antimony, dissolved	Antimony, total	Arsenic, dissolved	Arsenic, total	Barium, dissolved	Barium, total	Beryllium, dissolved	Beryllium, total	Cadmium, dissolved	Cadmium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-TD4	1/30/2013	STD4130130-												
SW-TD6	1/30/2013	STD6130130-												
SW-V	1/22/2013	SV--130122Q	< 0.02 U	0.159	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00271	0.00427	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-V	2/11/2013	SV--130211M	< 0.02 U	0.564	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00281	0.00757	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W	1/23/2013	SW--130123Q	0.0365	0.178	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00412	0.0043	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W	2/12/2013	SW--130212M	0.0738 D	0.227	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0047	0.00514 D	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U
SW-W	3/18/2013	SW--130318M	0.0491 D	0.145 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.0039	0.00471	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W1	1/22/2013	SW1-130122Q	< 0.02 U	0.466	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00478	0.0102	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W1	2/11/2013	SW1-130211M	< 0.02 U	0.67	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00514	0.0117	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W1	3/19/2013	SW1-130319M	< 0.02 DU	0.0603 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00511	0.00562	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W2	1/23/2013	SW2-130123Q	0.0317	0.0382	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0059	0.00628	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W2	2/12/2013	SW2-130212M	0.0356	0.111	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00656	0.0069	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
SW-W2	3/19/2013	SW2-130319M	0.0338 D	0.17 D	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.001 U	0.00613	0.00722	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
FIELD BLANK	1/22/2013	SN1-130122F	< 0.02 U	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
FIELD BLANK	1/30/2013	STD1130130F												
FIELD BLANK	2/12/2013	SS1-130212F	< 0.02 U	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U
FIELD BLANK	3/4/2013	SSL3130304F												

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Calcium, dissolved	Calcium, total	Chromium, dissolved	Chromium, total	Cobalt, dissolved	Cobalt, total	Copper, dissolved	Copper, total	Iron, dissolved	Iron, total	Lead, dissolved	Lead, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-E1	1/22/2013	SE1-130122Q	3.97	3.98	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.024 T	0.0819	< 0.001 U	< 0.001 U
SW-E1	2/11/2013	SE1-130211M	4	4.22	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.03 T	0.133	< 0.001 U	< 0.001 U
SW-E1	3/19/2013	SE1-130319M	4.04	4.19	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.037 DT	0.184	< 0.001 U	< 0.001 U
SW-GS1	1/4/2013	SGS1130104P								0.0031				
SW-GS1	1/23/2013	SGS1130123Q	8.87	9.19	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.016 T	0.295	< 0.001 U	< 0.001 U
SW-GS1	2/12/2013	SGS1130212M	8.54	8.97	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00296	0.028 T	0.619	< 0.001 U	< 0.001 U
SW-GS1	3/19/2013	SGS1130319M	8.57	8.52	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00213	0.019 DT	0.211	< 0.001 U	< 0.001 U
SW-MC	1/23/2013	SMC-130123Q	9.08	9.43	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00223	0.035 T	0.105	< 0.001 U	< 0.001 U
SW-MC	2/12/2013	SMC-130212M	9.72	9.63	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	0.00317	0.00352	0.044 T	0.121	< 0.001 U	< 0.001 U
SW-MC	3/18/2013	SMC-130318M	9.44	9.85	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00309	0.00333	0.04 DT	0.0804	< 0.001 U	< 0.001 U
SW-N1	1/22/2013	SN1-130122Q	9.19	9.04	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.002 T	0.00243	0.036 T	0.101	< 0.001 U	< 0.001 U
SW-N1	2/11/2013	SN1-130211M	8.94	9.61	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00367	0.00415	0.047 T	0.143	< 0.001 U	< 0.001 U
SW-N1	3/19/2013	SN1-130319M	9.53	9.87	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00324	0.00334	0.037 DT	0.0899	< 0.001 U	< 0.001 U
SW-N4	1/4/2013	SN4-130104P								0.0103				
SW-N4	1/22/2013	SN4-130122Q	9.57	9.42	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00854	0.00915	0.0603	0.208	< 0.001 U	< 0.001 U
SW-N4	2/12/2013	SN4-130212M	9.56	10	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0102	0.0107	0.0695	0.214	< 0.001 U	< 0.001 U
SW-N4 Duplicate	2/12/2013	SN4-130212D	9.32	10	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00999	0.0107	0.0741	0.2	< 0.001 U	< 0.001 U
SW-N4	3/19/2013	SN4-130319M	9.86	10.2	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0082	0.00904	0.048 DT	0.138	< 0.001 U	< 0.001 U
SW-S1	1/23/2013	SS1-130123Q	4.4	4.43	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.035 T	< 0.001 U	< 0.001 U
SW-S1	2/12/2013	SS1-130212M	4.54	4.74	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.016 T	< 0.001 U	< 0.001 U
SW-S1	3/19/2013	SS1-130319M	4.24	4.37	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 DU	0.013 T	< 0.001 U	< 0.001 U
SW-S2	1/23/2013	SS2-130123Q	9.2	9.59	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.046 T	0.205	< 0.001 U	< 0.001 U
SW-S2	2/12/2013	SS2-130212M	8.76	9.27	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00241	0.045 T	0.473	< 0.001 U	< 0.001 U
SW-S2	3/19/2013	SS2-130319M	9.11	9.35	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.00212	0.03 DT	0.243	< 0.001 U	< 0.001 U
SW-SL3	1/4/2013	SSL3130104P								0.00425				
SW-SL3	1/23/2013	SSL3130123Q	11	11	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00264	0.00323	0.018 T	0.115	< 0.001 U	< 0.001 U
SW-SL3	1/30/2013	SSL3130130P								0.00683				
SW-SL3	2/12/2013	SSL3130212M	11.2	11.4	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00372	0.00411	0.041 T	0.143	< 0.001 U	< 0.001 U
SW-SL3	2/25/2013	SSL3130225P								0.00415				
SW-SL3	3/4/2013	SSL3130304P								0.00355				
SW-SL3	3/18/2013	SSL3130318M	12.4	13.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0035	0.00434	0.0901 D	0.224	< 0.001 U	< 0.001 U
SW-SLP1	1/30/2013	SLP1130130P								0.00366				
SW-SLP1	2/25/2013	SLP1130225P								0.006				
SW-SLP1	3/4/2013	SLP1130304P								< 0.002 U				
SW-SLP2	1/30/2013	SLP2130130P								0.00861				
SW-SLP2	2/25/2013	SLP2130225P								0.00691				
SW-SLP2	3/4/2013	SLP2130304P								0.00628				
SW-SLP3	1/30/2013	SLP3130130P								0.0451				
SW-TD1	1/30/2013	STD1130130-									0.0605	0.863		
SW-TD2	1/30/2013	STD2130130-									0.034 T	0.137		

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Calcium, dissolved	Calcium, total	Chromium, dissolved	Chromium, total	Cobalt, dissolved	Cobalt, total	Copper, dissolved	Copper, total	Iron, dissolved	Iron, total	Lead, dissolved	Lead, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-TD4	1/30/2013	STD4130130-									0.026 T	0.116		
SW-TD6	1/30/2013	STD6130130-									0.044 T	0.298		
SW-V	1/22/2013	SV--130122Q	7.7	7.75	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.202	< 0.001 U	< 0.001 U
SW-V	2/11/2013	SV--130211M	7.67	8.65	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	0.002 T	< 0.01 U	0.605	< 0.001 U	< 0.001 U
SW-W	1/23/2013	SW--130123Q	8.28	8.64	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00748	0.0103	0.117	0.224	< 0.001 U	< 0.001 U
SW-W	2/12/2013	SW--130212M	9.09	8.93	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	0.00527	0.00327	0.162	0.307	< 0.001 U	< 0.001 U
SW-W	3/18/2013	SW--130318M	8.52	8.7	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.0076	0.00431	0.157 D	0.289	< 0.001 U	< 0.001 U
SW-W1	1/22/2013	SW1-130122Q	10.2	10.6	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.046 T	0.682	< 0.001 U	< 0.001 U
SW-W1	2/11/2013	SW1-130211M	9.9	10.9	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.045 T	0.85	< 0.001 U	< 0.001 U
SW-W1	3/19/2013	SW1-130319M	10.6	10.7	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.039 DT	0.118	< 0.001 U	< 0.001 U
SW-W2	1/23/2013	SW2-130123Q	4.69	4.82	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	0.00319
SW-W2	2/12/2013	SW2-130212M	4.7	4.95	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.0662	< 0.001 U	< 0.001 U
SW-W2	3/19/2013	SW2-130319M	4.49	4.72	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 DU	0.112	< 0.001 U	< 0.001 U
FIELD BLANK	1/22/2013	SN1-130122F	< 0.01 U	< 0.01 U	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U
FIELD BLANK	1/30/2013	STD1130130F									< 0.01 SU	< 0.01 U		
FIELD BLANK	2/12/2013	SS1-130212F	< 0.01 U	< 0.01 U	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U
FIELD BLANK	3/4/2013	SSL3130304F								< 0.002 U				

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Magnesium, dissolved	Magnesium, total	Manganese, dissolved	Manganese, total	Mercury, total	Nickel, dissolved	Nickel, total	Potassium, dissolved	Potassium, total	Selenium, dissolved	Selenium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-E1	1/22/2013	SE1-130122Q	0.938	0.964	0.00621	0.0113	< 0.0001 U	< 0.01 U	< 0.01 U	0.33 T	0.32 T	< 0.001 U	< 0.001 U
SW-E1	2/11/2013	SE1-130211M	0.943	0.977	0.00699	0.0179	< 0.0001 U	< 0.01 U	< 0.01 U	0.35 T	0.36 T	< 0.001 U	< 0.001 U
SW-E1	3/19/2013	SE1-130319M	0.861	0.961	0.0165	0.0735	< 0.0001 U	< 0.01 U	< 0.01 U	0.35 T	0.38 T	< 0.001 U	< 0.001 U
SW-GS1	1/4/2013	SGS1130104P											
SW-GS1	1/23/2013	SGS1130123Q	2.74	2.93	0.00436	0.016	< 0.0001 U	< 0.01 U	< 0.01 U	0.721	0.646	< 0.001 U	< 0.001 U
SW-GS1	2/12/2013	SGS1130212M	2.82	3.08	0.00378	0.0142	< 0.0001 U	< 0.01 U	< 0.01 U	0.731	0.735	< 0.001 U	< 0.001 U
SW-GS1	3/19/2013	SGS1130319M	2.66	2.76	0.00616	0.0152	< 0.0001 U	< 0.01 U	< 0.01 U	0.655	0.682	< 0.001 U	< 0.001 U
SW-MC	1/23/2013	SMC-130123Q	3.06	3.14	0.00497	0.00899	< 0.0001 U	< 0.01 U	< 0.01 U	0.853	0.796	< 0.001 U	< 0.001 U
SW-MC	2/12/2013	SMC-130212M	3.19 D	3.25	0.0044 D	0.00774	< 0.0001 U	< 0.01 U	< 0.01 U	1.06	0.934	< 0.001 U	< 0.001 U
SW-MC	3/18/2013	SMC-130318M	3.31	3.56	0.00342	0.00628	< 0.0001 U	< 0.01 U	< 0.01 U	0.99	1.02	< 0.001 U	< 0.001 U
SW-N1	1/22/2013	SN1-130122Q	3.12	3.14	0.00808	0.0119	< 0.0001 U	< 0.01 U	< 0.01 U	0.869	0.817	< 0.001 U	< 0.001 U
SW-N1	2/11/2013	SN1-130211M	3.1	3.23	0.00601	0.0131	< 0.0001 U	< 0.01 U	< 0.01 U	0.889	0.934	< 0.001 U	< 0.001 U
SW-N1	3/19/2013	SN1-130319M	3	3.16	0.0063	0.0114	< 0.0001 U	< 0.01 U	< 0.01 U	8.37	0.979	< 0.001 U	< 0.001 U
SW-N4	1/4/2013	SN4-130104P											
SW-N4	1/22/2013	SN4-130122Q	3.34	3.34	0.0113	0.0177	< 0.0001 U	< 0.01 U	< 0.01 U	1.33	1.27	< 0.001 U	< 0.001 U
SW-N4	2/12/2013	SN4-130212M	3.37	3.46	0.0105	0.0185	< 0.0001 U	< 0.01 U	< 0.01 U	1.25	1.31	< 0.001 U	< 0.001 U
SW-N4 Duplicate	2/12/2013	SN4-130212D	3.29	3.48	0.0106	0.02	< 0.0001 U	< 0.01 U	< 0.01 U	1.24	1.29	< 0.001 U	< 0.001 U
SW-N4	3/19/2013	SN4-130319M	3.21	3.47	0.00638	0.0263	< 0.0001 U	< 0.01 U	< 0.01 U	1.35	1.43	< 0.001 U	< 0.001 U
SW-S1	1/23/2013	SS1-130123Q	1.11	1.08	0.00134	0.0101	< 0.0001 U	< 0.01 U	< 0.01 U	0.47 T	0.43 T	< 0.001 U	< 0.001 U
SW-S1	2/12/2013	SS1-130212M	1.12	1.15	0.00128	0.00216	< 0.0001 U	< 0.01 U	< 0.01 U	0.5 T	0.49 T	< 0.001 U	< 0.001 U
SW-S1	3/19/2013	SS1-130319M	0.989	1.07	0.00214	0.003	< 0.0001 U	< 0.01 U	< 0.01 U	0.47 T	0.536	< 0.001 U	< 0.001 U
SW-S2	1/23/2013	SS2-130123Q	3.09	3.06	0.00411	0.00651	< 0.0001 U	< 0.01 U	< 0.01 U	0.818	0.771	< 0.001 U	< 0.001 U
SW-S2	2/12/2013	SS2-130212M	2.89	3.13	0.00381	0.0104	< 0.0001 U	< 0.01 U	< 0.01 U	0.734	0.788	< 0.001 U	< 0.001 U
SW-S2	3/19/2013	SS2-130319M	2.85	3.15	0.00688	0.0119	< 0.0001 U	< 0.01 U	< 0.01 U	0.827	0.825	< 0.001 U	< 0.001 U
SW-SL3	1/4/2013	SSL3130104P											
SW-SL3	1/23/2013	SSL3130123Q	3.77	3.78	0.00117	0.0054	< 0.0001 U	< 0.01 U	< 0.01 U	1.71	1.53	< 0.001 U	< 0.001 U
SW-SL3	1/30/2013	SSL3130130P											
SW-SL3	2/12/2013	SSL3130212M	3.77	3.94	0.00261	0.00647	< 0.0001 U	< 0.01 U	< 0.01 U	1.77	1.86	< 0.001 U	< 0.001 U
SW-SL3	2/25/2013	SSL3130225P											
SW-SL3	3/4/2013	SSL3130304P											
SW-SL3	3/18/2013	SSL3130318M	3.88	4.19	0.00794	0.0139	< 0.0001 U	< 0.01 U	< 0.01 U	2.29	2.32	< 0.001 U	< 0.001 U
SW-SLP1	1/30/2013	SLP1130130P											
SW-SLP1	2/25/2013	SLP1130225P											
SW-SLP1	3/4/2013	SLP1130304P											
SW-SLP2	1/30/2013	SLP2130130P											
SW-SLP2	2/25/2013	SLP2130225P											
SW-SLP2	3/4/2013	SLP2130304P											
SW-SLP3	1/30/2013	SLP3130130P											
SW-TD1	1/30/2013	STD1130130-											
SW-TD2	1/30/2013	STD2130130-											

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Magnesium, dissolved	Magnesium, total	Manganese, dissolved	Manganese, total	Mercury, total	Nickel, dissolved	Nickel, total	Potassium, dissolved	Potassium, total	Selenium, dissolved	Selenium, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-TD4	1/30/2013	STD4130130-											
SW-TD6	1/30/2013	STD6130130-											
SW-V	1/22/2013	SV--130122Q	1.84	1.91	< 0.001 U	0.048	< 0.0001 U	< 0.01 U	< 0.01 U	0.946	0.897	< 0.001 U	< 0.001 U
SW-V	2/11/2013	SV--130211M	1.89	2.13	< 0.001 U	0.152	< 0.0001 U	< 0.01 U	< 0.01 U	0.951	0.954	< 0.001 U	< 0.001 U
SW-W	1/23/2013	SW--130123Q	2.44	2.42	0.0239	0.0227	< 0.0001 U	< 0.01 U	< 0.01 U	0.996	1.04	< 0.001 U	< 0.001 U
SW-W	2/12/2013	SW--130212M	2.49 D	2.6	0.0274 D	0.0293	< 0.0001 U	< 0.01 U	< 0.01 U	0.995	0.986	< 0.001 U	< 0.001 U
SW-W	3/18/2013	SW--130318M	2.48	2.68	0.0211	0.027	< 0.0001 U	< 0.01 U	< 0.01 U	0.986	0.948	< 0.001 U	< 0.001 U
SW-W1	1/22/2013	SW1-130122Q	3.31	3.46	0.00491	0.129	< 0.0001 U	< 0.01 U	< 0.01 U	0.805	0.789	< 0.001 U	< 0.001 U
SW-W1	2/11/2013	SW1-130211M	3.13	3.35	0.00306	0.168	< 0.0001 U	< 0.01 U	< 0.01 U	0.796	0.846	< 0.001 U	< 0.001 U
SW-W1	3/19/2013	SW1-130319M	3.14	3.17	0.00226	0.0137	< 0.0001 U	< 0.01 U	< 0.01 U	9.15	0.872	< 0.001 U	< 0.001 U
SW-W2	1/23/2013	SW2-130123Q	1.15	1.15	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.506	0.47 T	< 0.001 U	< 0.001 U
SW-W2	2/12/2013	SW2-130212M	1.15	1.2	< 0.001 U	0.00428	< 0.0001 U	< 0.01 U	< 0.01 U	0.513	0.52	< 0.001 U	< 0.001 U
SW-W2	3/19/2013	SW2-130319M	1.08	1.18	< 0.001 U	0.00911	< 0.0001 U	< 0.01 U	< 0.01 U	0.516	0.526	< 0.001 U	< 0.001 U
FIELD BLANK	1/22/2013	SN1-130122F	< 0.015 U	< 0.015 U	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.3 U	< 0.001 U	< 0.001 U
FIELD BLANK	1/30/2013	STD1130130F											
FIELD BLANK	2/12/2013	SS1-130212F	< 0.015 U	< 0.015 U	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.3 U	< 0.001 U	< 0.001 U
FIELD BLANK	3/4/2013	SSL3130304F											

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sandy Jimenez (206) 296-4411

Site	Date	Sample ID	Silver, dissolved	Silver, total	Sodium, dissolved	Sodium, total	Thallium, dissolved	Thallium, total	Tin, dissolved	Tin, total	Vanadium, dissolved	Vanadium, total	Zinc, dissolved	Zinc, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-E1	1/22/2013	SE1-130122Q	< 0.003 U	< 0.003 U	2.3	2.31	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-E1	2/11/2013	SE1-130211M	< 0.003 U	< 0.003 U	2.42	2.39	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 DU	< 0.004 U
SW-E1	3/19/2013	SE1-130319M	< 0.003 DU	< 0.003 U	2.48	2.49 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-GS1	1/4/2013	SGS1130104P												0.00412
SW-GS1	1/23/2013	SGS1130123Q	< 0.003 U	< 0.003 U	2.64	2.79	< 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-GS1	2/12/2013	SGS1130212M	< 0.003 U	< 0.003 U	2.29	2.63	< 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-GS1	3/19/2013	SGS1130319M	< 0.003 DU	< 0.003 U	2.7	2.64 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-MC	1/23/2013	SMC-130123Q	< 0.003 U	< 0.003 U	4.18	4.29	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00637	0.00653
SW-MC	2/12/2013	SMC-130212M	< 0.003 U	< 0.003 U	4.09 D	4.06	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00685	0.00752
SW-MC	3/18/2013	SMC-130318M	< 0.003 DU	< 0.003 U	4.01	4.02 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	0.00508	0.0054
SW-N1	1/22/2013	SN1-130122Q	< 0.003 U	< 0.003 U	4.19	4.16	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00706	0.00762
SW-N1	2/11/2013	SN1-130211M	< 0.003 U	< 0.003 U	3.5	3.89	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.00795	0.00928
SW-N1	3/19/2013	SN1-130319M	< 0.003 DU	< 0.003 U	4.04	4.16 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	0.00592	0.00645
SW-N4	1/4/2013	SN4-130104P												0.0219
SW-N4	1/22/2013	SN4-130122Q	< 0.003 U	< 0.003 U	2.14	2.05	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0187	0.0216
SW-N4	2/12/2013	SN4-130212M	< 0.003 U	< 0.003 U	1.95	2.15	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0182	0.0436
SW-N4 Duplicate	2/12/2013	SN4-130212D	< 0.003 U	< 0.003 U	1.93	2.11	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0184	0.0215
SW-N4	3/19/2013	SN4-130319M	< 0.003 DU	< 0.003 U	2.26	2.24 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	0.0118	0.0179
SW-S1	1/23/2013	SS1-130123Q	< 0.003 U	< 0.003 U	2.88	2.81	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S1	2/12/2013	SS1-130212M	< 0.003 U	< 0.003 U	2.76	3.03	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S1	3/19/2013	SS1-130319M	< 0.003 DU	< 0.003 U	2.96	2.88 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-S2	1/23/2013	SS2-130123Q	< 0.003 U	< 0.003 U	2.58	2.57	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0046	< 0.004 U
SW-S2	2/12/2013	SS2-130212M	< 0.003 U	< 0.003 U	2.32	2.58	< 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	3/19/2013	SS2-130319M	< 0.003 DU	< 0.003 U	2.71	2.62 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-SL3	1/4/2013	SSL3130104P												0.00687
SW-SL3	1/23/2013	SSL3130123Q	< 0.003 U	< 0.003 U	3.69	3.72	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.007	0.00655
SW-SL3	1/30/2013	SSL3130130P												0.0144
SW-SL3	2/12/2013	SSL3130212M	< 0.003 U	< 0.003 U	3.4	3.81	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	0.0069	0.00735
SW-SL3	2/25/2013	SSL3130225P												0.00852
SW-SL3	3/4/2013	SSL3130304P												0.00522
SW-SL3	3/18/2013	SSL3130318M	< 0.003 DU	< 0.003 U	4.06	4.18 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	0.00569	0.00797
SW-SLP1	1/30/2013	SLP1130130P												0.0235
SW-SLP1	2/25/2013	SLP1130225P												0.0668
SW-SLP1	3/4/2013	SLP1130304P												0.0107
SW-SLP2	1/30/2013	SLP2130130P												0.0212
SW-SLP2	2/25/2013	SLP2130225P												0.0213
SW-SLP2	3/4/2013	SLP2130304P												0.0148
SW-SLP3	1/30/2013	SLP3130130P												0.219
SW-TD1	1/30/2013	STD1130130-												
SW-TD2	1/30/2013	STD2130130-												

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Surface Water Metal Analytical Data
 Contact Person: Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Silver, dissolved	Silver, total	Sodium, dissolved	Sodium, total	Thallium, dissolved	Thallium, total	Tin, dissolved	Tin, total	Vanadium, dissolved	Vanadium, total	Zinc, dissolved	Zinc, total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
SW-TD4	1/30/2013	STD4130130-												
SW-TD6	1/30/2013	STD6130130-												
SW-V	1/22/2013	SV--130122Q	< 0.003 U	< 0.003 U	4.98	5.04	< 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-V	2/11/2013	SV--130211M	< 0.003 U	< 0.003 U	4.89	5.05	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 DU	0.00621
SW-W	1/23/2013	SW--130123Q	< 0.003 U	< 0.003 U	5.15	5.25	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W	2/12/2013	SW--130212M	< 0.003 U	< 0.003 U	5.15 D	5.37	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W	3/18/2013	SW--130318M	< 0.003 DU	< 0.003 U	5.19	5.11 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W1	1/22/2013	SW1-130122Q	< 0.003 U	< 0.003 U	5.44	5.66	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	0.0105
SW-W1	2/11/2013	SW1-130211M	< 0.003 U	< 0.003 U	5.05	5.66	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	0.0119
SW-W1	3/19/2013	SW1-130319M	< 0.003 DU	< 0.003 U	5.9	5.81 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W2	1/23/2013	SW2-130123Q	< 0.003 U	< 0.003 U	3.12	3.14	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W2	2/12/2013	SW2-130212M	< 0.003 U	< 0.003 U	2.92	3.16	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
SW-W2	3/19/2013	SW2-130319M	< 0.003 DU	< 0.003 U	3.26	3.17 D	< 0.001 DU	< 0.001 U	< 0.01 DU	< 0.01 DU	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
FIELD BLANK	1/22/2013	SN1-130122F	< 0.003 U	< 0.003 U	0.375	0.368	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
FIELD BLANK	1/30/2013	STD1130130F												
FIELD BLANK	2/12/2013	SS1-130212F	< 0.003 U	< 0.003 U	0.33	0.37	< 0.001 U	< 0.001 U	< 0.01 U	< 0.01 U	< 0.002 U	< 0.002 U	< 0.004 U	< 0.004 U
FIELD BLANK	3/4/2013	SSL3130304F												< 0.004 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

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	1/22/2013	SE1-130122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-E1	2/11/2013	SE1-130211M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-E1	3/19/2013	SE1-130319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	1/4/2013	SGS1130104P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-GS1	1/23/2013	SGS1130123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	2/12/2013	SGS1130212M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-GS1	3/19/2013	SGS1130319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-MC	1/23/2013	SMC-130123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-MC	2/12/2013	SMC-130212M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-MC	3/18/2013	SMC-130318M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	1/22/2013	SN1-130122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	2/11/2013	SN1-130211M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N1	3/19/2013	SN1-130319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	1/4/2013	SN4-130104P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-N4	1/22/2013	SN4-130122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	2/12/2013	SN4-130212M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4 Duplicate	2/12/2013	SN4-130212D	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-N4	3/19/2013	SN4-130319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S1	1/23/2013	SS1-130123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S1	2/12/2013	SS1-130212M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S1	3/19/2013	SS1-130319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	1/23/2013	SS2-130123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	2/12/2013	SS2-130212M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-S2	3/19/2013	SS2-130319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	1/4/2013	SSL3130104P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SL3	1/23/2013	SSL3130123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	1/30/2013	SSL3130130P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SL3	2/12/2013	SSL3130212M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SL3	2/25/2013	SSL3130225P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SL3	3/4/2013	SSL3130304P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SL3	3/18/2013	SSL3130318M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-SLP1	1/30/2013	SLP1130130P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SLP1	2/25/2013	SLP1130225P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP1	3/4/2013	SLP1130304P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP2	1/30/2013	SLP2130130P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-SLP2	2/25/2013	SLP2130225P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP2	3/4/2013	SLP2130304P									< 10 U	< 5 U	< 50 U	< 4 U
SW-SLP3	1/30/2013	SLP3130130P									< 10 U	< 5 U	< 50 GU	< 4 U
SW-TD1	1/30/2013	STD1130130-												
SW-TD2	1/30/2013	STD2130130-												

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Surface Water 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)	Dinoseb 88-85-7 (ug/L)	Endrin 72-20-8 (ug/L)	Lindane 58-89-9 (ug/L)	Methoxy- chlor 72-43-5 (ug/L)	Toxaphene 8001-35-2 (ug/L)	4-Methyl- phenol 106-44-5 (ug/L)	alpha Terpineol 98-55-5 (ug/L)	Benzoic Acid 65-85-0 (ug/L)	Phenol 108-95-2 (ug/L)
SW-TD4	1/30/2013	STD4130130-												
SW-TD6	1/30/2013	STD6130130-												
SW-V	1/22/2013	SV--130122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-V	2/11/2013	SV--130211M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W	1/23/2013	SW--130123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W	2/12/2013	SW--130212M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W	3/18/2013	SW--130318M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W1	1/22/2013	SW1-130122Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W1	2/11/2013	SW1-130211M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W1	3/19/2013	SW1-130319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	1/23/2013	SW2-130123Q	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	2/12/2013	SW2-130212M	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
SW-W2	3/19/2013	SW2-130319M	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
FIELD BLANK	1/30/2013	STD1130130F												
FIELD BLANK	2/12/2013	SS1-130212F	< 2 U	< 1 U	< 5 U	< 1 DHU	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
FIELD BLANK	1/22/2013	SN1-130122F	< 2 U	< 1 U	< 5 U	< 1 U	< 0.1 U	< 0.025 U	< 2 U	< 2.5 U				
FIELD BLANK	3/4/2013	SSL3130304F									< 10 U	< 5 U	< 50 U	< 4 U

Leachate Analytical Data

Leachate Monitoring Activities 1st Quarter 2013

Station ID	Date	Activity	Sample ID	Comment
API	1/9/13	Monthly Characterization Sample	LAPI130109M	
API	2/7/13	Monthly Characterization Sample	LAPI130207M	
API	3/6/13	Monthly Characterization Sample	LAPI130306M	
LEPS	1/9/13	Monthly Characterization Sample	LEPS130109M	
LEPS	1/9/13	Permit Sample	LEPS130109P	
LEPS	1/23/13	Permit Sample	LEPS130123P	
LEPS	2/6/13	Monthly Characterization Sample	LEPS130206M	
LEPS	2/6/13	Permit Sample	LEPS130206P	
LEPS	2/20/13	Permit Sample	LEPS130220P	
LEPS	3/7/13	Monthly Characterization Sample	LEPS130307M	
LEPS	3/7/13	Permit Sample	LEPS130307P	
LEPS	3/7/13	QA/QC Sample	LEPS130307D	Field Duplicate
LEPS	3/19/13	Permit Sample	LEPS130319P	
MH-46N	1/9/13	Monthly Characterization Sample	L46N130109M	
MH-46N	2/6/13	Monthly Characterization Sample	L46N130206M	
MH-46N	3/6/13	Monthly Characterization Sample	L46N130306M	
PS2A	1/9/13	Monthly Characterization Sample	LP2A130109M	
PS2A	2/6/13	Monthly Characterization Sample	LP2A130206M	
PS2A	3/6/13	Monthly Characterization Sample	LP2A130306M	
Field Blank	1/9/13	QA/QC Sample	L46N130109F	

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Leachate Field Parameters

Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature
			(std. Units)	(umho/cm)	(o C)
LS-API	1/9/2013	LAPI130109M	7.26	1350	8.6
LS-API	2/7/2013	LAPI130207M	7.49	2500	5.3
LS-API	3/6/2013	LAPI130306M	7.72	4200	11.9
LS-LEPS	1/9/2013	LEPS130109M	8.01	2900	10.6
LS-LEPS	1/9/2013	LEPS130109P	8.01	2900	10.6
LS-LEPS	1/23/2013	LEPS130123P	8.4	3600	5.4
LS-LEPS	2/6/2013	LEPS130206M	8.24	3050	7.8
LS-LEPS	2/6/2013	LEPS130206P	8.24	3050	7.8
LS-LEPS	2/20/2013	LEPS130220P	8.36	3500	4.3
LS-LEPS	3/7/2013	LEPS130307M	8.17	3900	9.9
LS-LEPS	3/7/2013	LEPS130307P	8.17	3900	9.9
LS-LEPS	3/19/2013	LEPS130319P	8.33	3500	5.1
LS-MH46N	1/9/2013	L46N130109M	7.41	5700	26.1
LS-MH46N	2/6/2013	L46N130206M	7.22	7100	21.3
LS-MH46N	3/6/2013	L46N130306M	7.21	6600	25.4
LS-PS2A	1/9/2013	LP2A130109M	6.38	220	8.7
LS-PS2A	2/6/2013	LP2A130206M	6.86	240	9.2
LS-PS2A	3/6/2013	LP2A130306M	6.39	360	8.6
FIELD BLANK	1/9/2013	L46N130109F	6.65	80	14.1

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Leachate Conventonals Analytical Data
 Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Alkalinity, Total (CaCO3)	Ammonia, (NH3 as N)	Biological Oxygen Demand	Chemical Oxygen Demand	Chloride	Coliforms, Fecal	Coliforms, Total	Cyanide	Fluoride	Nitrate+Nitrite (NO3+NO2 as N)	Phosphorus, Total (as P)	Specific Conductance
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(CFU/100mL)	(CFU/100mL)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(umho/cm)
LS-API	1/9/2013	LAPI130109M	756	71.6	596	1090	179	16000	270000	< 0.02 U	< 0.1 U	0.351	0.155	2050
LS-API	2/7/2013	LAPI130207M	1350	205	743	1450	274	6200	280000	< 0.02 SU	< 0.1 U	0.204	0.537	3510
LS-API	3/6/2013	LAPI130306M	2630	343	1380	2920	593	38000	420000	< 0.02 SU	< 0.1 U	0.17 T	1.14	6880
LS-LEPS	1/9/2013	LEPS130109M	1300	129	235	803	273	16000	150000	< 0.02 SU	< 0.1 U	0.03 T	0.0548	3330
LS-LEPS	2/6/2013	LEPS130206M	1290	174	225	816	276	1100	44000	< 0.02 U	< 0.1 U	0.017 T	0.0608	3240
LS-LEPS	3/7/2013	LEPS130307M	1700	273	119	892	384	3600	32000	< 0.02 SU	1.22	0.03 T	0.0443	4390
LS-MH46N	1/9/2013	L46N130109M	2440	348	78.8	1200	1110	< 1 U	< 1 CU	< 0.02 SU	3.15	0.182	2.77	8060
LS-MH46N	2/6/2013	L46N130206M	2660	437	86.2	1380	1380	< 1 U	< 1 U	< 0.02 SU	< 0.1 U	0.094 T	2.47	8500
LS-MH46N	3/6/2013	L46N130306M	2560	184	97	1410	1330	< 1 U	< 1 U	< 0.02 SU	3.73	0.239	2.75	8910
LS-PS2A	1/9/2013	LP2A130109M	79.8	6.76	3.7	42.5	12.6	< 1 U	3400	< 0.02 U	< 0.1 U	1.79	0.02 T	252
LS-PS2A	2/6/2013	LP2A130206M	75	7.35	3.53	42.2	16.2	< 1 U	1600	< 0.02 U	< 0.1 U	1.93	0.017 T	257
LS-PS2A	3/6/2013	LP2A130306M	112	12	5.24	51.6	32.7	< 1 U	280	< 0.02 U	0.17 T	2.05	0.0258	417
FIELD BLANK	1/9/2013	L46N130109F	1 T	< 0.01 U	< 2 U	< 5 U	< 0.1 U	< 1 U	< 1 U	< 0.02 U	< 0.1 U	0.0937	< 0.01 U	3.8 T

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 Cedar Hills Landfill --- Leachate Conventonals Analytical Data
 Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Sulfate (SO4)	Sulfide Total	Total Fats, Oils and Grease	Total Kjeldahl Nitrogen (TKN as N)	Total Organic Carbon	Total Suspended Solids	Total Volatile Solids	Volatile Suspended Solids
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LS-API	1/9/2013	LAPI130109M	24.4	1.85	< 2 U	148	227	56.7	473	53.3
LS-API	2/7/2013	LAPI130207M	25.1	0.13 T	3 T	259	437	88	870	48
LS-API	3/6/2013	LAPI130306M	26.6	0.685	3.4 BT	489	818 S	49.3	1550	38
LS-LEPS	1/9/2013	LEPS130109M	25.4	0.16 T	< 2 U	213	187	117	533	107
LS-LEPS	2/6/2013	LEPS130206M	36.5	0.062 T	2.4 T	208	152	352	610	284
LS-LEPS	3/7/2013	LEPS130307M	20.7	0.092 T	2.3 BT	293	167 S	81	737	34
LS-MH46N	1/9/2013	L46N130109M	5.47	0.079 T	< 2 U	489	345	22	698	20
LS-MH46N	2/6/2013	L46N130206M	4.78	0.251	2.9 T	548	353 S	3.6	990	3.2
LS-MH46N	3/6/2013	L46N130306M	2.82	0.425	4.3 BT	536	327 S	15.3	932	27.3
LS-PS2A	1/9/2013	LP2A130109M	8.42	< 0.01 U	< 2 U	8.76	15.7	3.6	57.1	2.2
LS-PS2A	2/6/2013	LP2A130206M	10.1	< 0.01 U	< 2 U	8.89	12.8	2.3	58.3	1.5
LS-PS2A	3/6/2013	LP2A130306M	14.1	< 0.01 U	< 2 U	15	28	< 1 U	73.9	< 1 U
FIELD BLANK	1/9/2013	L46N130109F	< 0.1 U	< 0.01 U	< 2 U	< 0.1 U	< 1 U	< 1 U	< 5 U	< 1 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 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	1/9/2013	LAPI130109M	4.92	< 0.001 U	0.028 T	0.0909	< 0.001 U	< 0.002 U	86.1	0.0297	0.016	0.0303	19.4	< 0.001 U
LS-API	2/7/2013	LAPI130207M	2.42	< 0.001 U	0.038 T	0.0877	< 0.001 U	< 0.002 U	102	0.0365	0.014 T	0.013 T	12.1	< 0.001 U
LS-API	3/6/2013	LAPI130306M	0.738	< 0.001 U	0.085 T	0.118	< 0.001 U	< 0.002 U	144	0.0638	0.0193	0.0085 T	13.7	< 0.001 U
LS-LEPS	1/9/2013	LEPS130109M	1.02	< 0.001 U	0.034 T	0.0766	< 0.001 U	< 0.002 U	92.7	0.0294	0.0097 T	0.0063 T	7.68	< 0.001 U
LS-LEPS	1/9/2013	LEPS130109P			0.033 T			< 0.002 U		0.0278		0.0063 T		< 0.001 U
LS-LEPS	1/23/2013	LEPS130123P			0.047 T			< 0.002 U		0.0344		0.0051 T		< 0.001 U
LS-LEPS	2/6/2013	LEPS130206M	0.536	< 0.001 U	0.035 T	0.0641	< 0.001 U	< 0.002 U	94.2	0.0308	0.012 T	0.0057 T	6.77	< 0.001 U
LS-LEPS	2/6/2013	LEPS130206P			0.037 T			< 0.002 U		0.0315		0.0066 T		< 0.001 U
LS-LEPS	2/20/2013	LEPS130220P			0.051 T			< 0.002 U		0.0369		0.0073 T		< 0.001 U
LS-LEPS	3/7/2013	LEPS130307D			0.047 T			< 0.002 U		0.0374		0.0055 T		< 0.001 U
LS-LEPS	3/7/2013	LEPS130307M	0.627	< 0.001 U	0.048 T	0.0722	< 0.001 U	< 0.002 U	86.4	0.0374	0.013 T	0.0064 T	6.51	< 0.001 U
LS-LEPS	3/7/2013	LEPS130307P			0.048 T			< 0.002 U		0.037		0.0052 T		< 0.001 U
LS-LEPS	3/19/2013	LEPS130319P			0.043 T			< 0.002 U		0.0337		0.0084 T		< 0.001 U
LS-MH46N	1/9/2013	L46N130109M	0.14 T	< 0.001 U	0.059 T	0.252	< 0.001 U	< 0.002 U	72.5	0.0672	0.0247	< 0.002 U	2.1	< 0.001 U
LS-MH46N	2/6/2013	L46N130206M	< 0.02 U	< 0.001 U	0.073 T	0.298	< 0.001 U	< 0.002 U	81.4	0.0754	0.0268	< 0.002 U	2.4	< 0.001 U
LS-MH46N	3/6/2013	L46N130306M	< 0.02 U	< 0.001 U	0.069 T	0.297	< 0.001 U	< 0.002 U	79.7	0.0733	0.0254	< 0.002 U	2.29	< 0.001 U
LS-PS2A	1/9/2013	LP2A130109M	0.16 T	< 0.001 U	< 0.001 U	0.0142	< 0.001 U	< 0.002 U	14.8	< 0.005 U	< 0.003 U	0.0215	2.14	< 0.001 U
LS-PS2A	2/6/2013	LP2A130206M	< 0.02 U	< 0.001 U	< 0.001 U	0.013	< 0.001 U	< 0.002 U	13.3	< 0.005 U	< 0.003 U	0.02 T	2.14	< 0.001 U
LS-PS2A	3/6/2013	LP2A130306M	< 0.02 U	< 0.001 U	< 0.001 U	0.0181	< 0.001 U	< 0.002 U	14.8	< 0.005 U	< 0.003 U	0.012 T	0.601	< 0.001 U
FIELD BLANK	1/9/2013	L46N130109F	< 0.02 U	< 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

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013
 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	1/9/2013	LAPI130109M	25.6	1.2	< 0.0001 U	0.0527	73.1	< 0.001 U	< 0.003 U	191	< 0.001 U	< 0.01 U	0.022 T	0.502
LS-API	2/7/2013	LAPI130207M	31.6	1.45	< 0.0001 U	0.0586	112	< 0.001 U	< 0.003 U	276	< 0.001 U	< 0.01 U	0.019 T	0.43
LS-API	3/6/2013	LAPI130306M	58.4	1.87	< 0.0001 U	0.114	231	< 0.001 U	< 0.003 U	621	< 0.001 U	0.022 T	0.027 T	0.582
LS-LEPS	1/9/2013	LEPS130109M	30	1.16	< 0.0001 U	0.0541	101	< 0.001 U	< 0.003 U	274	< 0.001 U	< 0.01 U	0.015 T	0.229
LS-LEPS	1/9/2013	LEPS130109P				0.051			< 0.003 U					0.218
LS-LEPS	1/23/2013	LEPS130123P				0.0672			< 0.003 U					0.273
LS-LEPS	2/6/2013	LEPS130206M	29.5	1.03	< 0.0001 U	0.0527	108	< 0.001 U	< 0.003 U	273	< 0.001 U	< 0.01 U	0.016 T	0.319
LS-LEPS	2/6/2013	LEPS130206P				0.0537			< 0.003 U					0.321
LS-LEPS	2/20/2013	LEPS130220P				0.0669			< 0.003 U					0.182
LS-LEPS	3/7/2013	LEPS130307D				0.0698			< 0.003 U					0.189
LS-LEPS	3/7/2013	LEPS130307M	37.5	0.892	< 0.0001 U	0.0704	145	< 0.001 U	< 0.003 U	384	< 0.001 U	< 0.01 U	0.019 T	0.191
LS-LEPS	3/7/2013	LEPS130307P				0.0686			< 0.003 U					0.189
LS-LEPS	3/19/2013	LEPS130319P				0.0651			< 0.003 U					0.213
LS-MH46N	1/9/2013	L46N130109M	42.6	0.46	< 0.0001 U	0.102	247	< 0.001 U	< 0.003 U	828	< 0.001 U	< 0.01 U	0.0853	0.027
LS-MH46N	2/6/2013	L46N130206M	49.6	0.513	< 0.0001 U	0.119	289	< 0.001 U	< 0.003 U	933	< 0.001 U	< 0.01 U	0.0952	0.0787
LS-MH46N	3/6/2013	L46N130306M	47.8	0.527	< 0.0001 U	0.118	301	< 0.001 U	< 0.003 U	941	< 0.001 U	< 0.01 U	0.0921	0.027
LS-PS2A	1/9/2013	LP2A130109M	5.13	0.129	< 0.0001 U	< 0.01 U	5.1	< 0.001 U	< 0.003 U	10.9	< 0.001 U	< 0.01 U	< 0.002 U	0.009 T
LS-PS2A	2/6/2013	LP2A130206M	5.08	0.172	< 0.0001 U	< 0.01 U	5.55	< 0.001 U	< 0.003 U	13.9	< 0.001 U	< 0.01 U	< 0.002 U	0.0089 T
LS-PS2A	3/6/2013	LP2A130306M	6.12	0.162	< 0.0001 U	0.01 T	8.26	< 0.001 U	< 0.003 U	28.2	< 0.001 U	< 0.01 U	< 0.002 U	0.009 T
FIELD BLANK	1/9/2013	L46N130109F	< 0.015 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.003 U	< 0.05 U	< 0.001 U	< 0.01 U	< 0.002 U	< 0.004 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

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	1/9/2013	LAPI130109M	< 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-API	2/7/2013	LAPI130207M	< 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-API	3/6/2013	LAPI130306M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	1/9/2013	LEPS130109M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	2/6/2013	LEPS130206M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	3/7/2013	LEPS130307M	< 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	1/9/2013	L46N130109M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	2/6/2013	L46N130206M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	3/6/2013	L46N130306M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	1/9/2013	LP2A130109M	< 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	2/6/2013	LP2A130206M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	3/6/2013	LP2A130306M	< 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
FIELD BLANK	1/9/2013	L46N130109F	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/8/2013	VTRP130109C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/5/2013	VTRP130206C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/5/2013	VTRP130207B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/5/2013	VTRP130306B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/6/2013	VTRP130307C	< 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 January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Leachate VOA Analytical Data

Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	1,2-Dichloro- propane	1,3 Dichloro- benzene	1,3-Dichloro- propane	1,4-Dichloro- benzene	2,2-Dichloro- propane	2-Butanone	2-Hexanone	2-Methyl-1- propanol	3-Chloro- propene	4-Methyl-2- Pentanone	Acetone	Acetonitrile
			78-87-5 (ug/L)	541-73-1 (ug/L)	142-28-9 (ug/L)	106-46-7 (ug/L)	594-20-7 (ug/L)	78-93-3 (ug/L)	591-78-6 (ug/L)	78-83-1 (ug/L)	107-05-1 (ug/L)	108-10-1 (ug/L)	67-64-1 (ug/L)	75-05-8 (ug/L)
LS-API	1/9/2013	LAPI130109M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1300	< 4 U	< 100 U	< 10 U	< 4 U	1110	< 100 U
LS-API	2/7/2013	LAPI130207M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2300	< 4 U	< 100 U	< 10 U	< 4 U	1510	< 100 U
LS-API	3/6/2013	LAPI130306M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	9320 D	< 4 U	160 T	< 10 U	64 T	8280 D	< 100 U
LS-LEPS	1/9/2013	LEPS130109M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	679	< 4 U	< 100 U	< 10 U	< 4 U	1230	< 100 U
LS-LEPS	2/6/2013	LEPS130206M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	556	< 4 U	< 100 U	< 10 U	< 4 U	731	< 100 U
LS-LEPS	3/7/2013	LEPS130307M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	274	< 4 U	< 100 U	< 10 U	< 4 U	511	< 100 U
LS-MH46N	1/9/2013	L46N130109M	< 0.2 U	< 0.2 U	< 0.2 U	12.1	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-MH46N	2/6/2013	L46N130206M	< 0.2 U	< 0.2 U	< 0.2 U	8.8 T	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-MH46N	3/6/2013	L46N130306M	< 0.2 U	< 0.2 U	< 0.2 U	11.2	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-PS2A	1/9/2013	LP2A130109M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	76 T	< 4 U	< 100 U	< 10 U	< 4 U	186	< 100 U
LS-PS2A	2/6/2013	LP2A130206M	< 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	84 T	< 100 U
LS-PS2A	3/6/2013	LP2A130306M	< 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	74 T	< 100 U
FIELD BLANK	1/9/2013	L46N130109F	< 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	1/8/2013	VTRP130109C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	2/5/2013	VTRP130206C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	2/5/2013	VTRP130207B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	3/5/2013	VTRP130306B	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
VOA TRIP BLANK	3/6/2013	VTRP130307C	< 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 January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Leachate VOA Analytical Data

Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Acrolein	Acrylonitrile	Benzene	Bromochloro- methane	Bromodichlor o-methane	Bromoform	Bromo- methane	Carbon Disulfide	Carbon Tetrachloride	Chloro- benzene	Chloro- dibromo- methane	Chloroethane
			107-02-8 (ug/L)	107-13-1 (ug/L)	71-43-2 (ug/L)	74-97-5 (ug/L)	75-27-4 (ug/L)	75-25-2 (ug/L)	74-83-9 (ug/L)	75-15-0 (ug/L)	56-23-5 (ug/L)	108-90-7 (ug/L)	124-48-1 (ug/L)	75-00-3 (ug/L)
LS-API	1/9/2013	LAPI130109M	< 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	2/7/2013	LAPI130207M	< 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	3/6/2013	LAPI130306M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	1/9/2013	LEPS130109M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	2/6/2013	LEPS130206M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-LEPS	3/7/2013	LEPS130307M	< 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	1/9/2013	L46N130109M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	2/6/2013	L46N130206M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-MH46N	3/6/2013	L46N130306M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	1/9/2013	LP2A130109M	< 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	2/6/2013	LP2A130206M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	3/6/2013	LP2A130306M	< 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
FIELD BLANK	1/9/2013	L46N130109F	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	1/8/2013	VTRP130109C	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/5/2013	VTRP130206C	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	2/5/2013	VTRP130207B	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/5/2013	VTRP130306B	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VOA TRIP BLANK	3/6/2013	VTRP130307C	< 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 January 1, 2013 to March 31, 2013
 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	1/9/2013	LAPI130109M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	5.1 T	11.7	< 0.2 U	< 2 U	< 5 U
LS-API	2/7/2013	LAPI130207M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	5.4 T	13.4	< 0.2 U	< 2 U	< 5 U
LS-API	3/6/2013	LAPI130306M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	6 T	14.7	< 0.2 U	< 2 U	< 5 U
LS-LEPS	1/9/2013	LEPS130109M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-LEPS	2/6/2013	LEPS130206M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-LEPS	3/7/2013	LEPS130307M	< 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	1/9/2013	L46N130109M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	51.8	70.6	< 0.2 U	< 2 U	< 5 U
LS-MH46N	2/6/2013	L46N130206M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	32.2	44.5	< 0.2 U	< 2 U	< 5 U
LS-MH46N	3/6/2013	L46N130306M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	39.5	51.4	< 0.2 U	< 2 U	< 5 U
LS-PS2A	1/9/2013	LP2A130109M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	6.2 T	< 0.2 U	< 2 U	< 5 U
LS-PS2A	2/6/2013	LP2A130206M	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
LS-PS2A	3/6/2013	LP2A130306M	< 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
FIELD BLANK	1/9/2013	L46N130109F	0.665	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	1/8/2013	VTRP130109C	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	2/5/2013	VTRP130206C	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	2/5/2013	VTRP130207B	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	3/5/2013	VTRP130306B	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 5 U
VOA TRIP BLANK	3/6/2013	VTRP130307C	< 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 January 1, 2013 to March 31, 2013

Cedar Hills Landfill --- Leachate VOA Analytical Data

Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Methylene Chloride	o-Xylene	Propionitrile	Styrene	Tetrachloro- ethene	Toluene	trans-1,2- Dichloro- ethene	trans-1,3- Dichloro- propene	trans-1,4- Dichloro-2- butene	Trichloro- ethene	Trichloro- fluoro- methane	Vinyl Acetate	Vinyl Chloride
			75-09-2 (ug/L)	95-47-6 (ug/L)	107-12-0 (ug/L)	100-42-5 (ug/L)	127-18-4 (ug/L)	108-88-3 (ug/L)	156-60-5 (ug/L)	10061-02-6 (ug/L)	110-57-6 (ug/L)	79-01-6 (ug/L)	75-69-4 (ug/L)	108-05-4 (ug/L)	75-01-4 (ug/L)
LS-API	1/9/2013	LAPI130109M	10.5	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	32.8	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.631
LS-API	2/7/2013	LAPI130207M	< 0.2 U	5.4 T	< 60 U	< 0.2 U	< 0.2 U	31.1	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.506
LS-API	3/6/2013	LAPI130306M	5.5 T	6.5 T	< 60 U	< 0.2 U	< 0.2 U	32.8	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.39 T
LS-LEPS	1/9/2013	LEPS130109M	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	5.6 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-LEPS	2/6/2013	LEPS130206M	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-LEPS	3/7/2013	LEPS130307M	< 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	1/9/2013	L46N130109M	< 0.2 U	6.5 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	4.52
LS-MH46N	2/6/2013	L46N130206M	< 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	2.61
LS-MH46N	3/6/2013	L46N130306M	< 0.2 U	5.5 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	2.25
LS-PS2A	1/9/2013	LP2A130109M	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-PS2A	2/6/2013	LP2A130206M	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
LS-PS2A	3/6/2013	LP2A130306M	< 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
FIELD BLANK	1/9/2013	L46N130109F	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	1/8/2013	VTRP130109C	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	2/5/2013	VTRP130206C	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	2/5/2013	VTRP130207B	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/5/2013	VTRP130306B	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	3/6/2013	VTRP130307C	< 0.2 U	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U

Environmental Monitoring Data

Data Collected from January 1, 2013 to March 31, 2013

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	1/9/2013	LAPI130109M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-API	2/7/2013	LAPI130207M	< 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	3/6/2013	LAPI130306M	< 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 GU	< 0.01 GU	< 0.01 GU
LS-LEPS	1/9/2013	LEPS130109M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-LEPS	2/6/2013	LEPS130206M	< 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 GU	< 0.01 GU	< 0.01 GU
LS-LEPS	3/7/2013	LEPS130307M	< 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 GU	< 0.01 GU	< 0.01 GU
LS-MH46N	1/9/2013	L46N130109M	< 2 U	< 1 U	< 5 U	< 0.1 GU	< 0.1 GU	< 0.1 GU	< 0.025 GU	< 0.025 U	< 0.025 GU	< 0.01 U	< 0.01 U	< 0.01 U
LS-MH46N	2/6/2013	L46N130206M	< 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	3/6/2013	L46N130306M	< 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 GU	< 0.01 GU	< 0.01 GU
LS-PS2A	1/9/2013	LP2A130109M	< 2 U	< 1 U	< 5 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.025 U	< 0.025 U	< 0.025 U	< 0.01 U	< 0.01 U	< 0.01 U
LS-PS2A	2/6/2013	LP2A130206M	< 2 U	< 1 U	< 5 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.025 U	< 0.025 U	< 0.025 U	< 0.01 U	< 0.01 U	< 0.01 U
LS-PS2A	3/6/2013	LP2A130306M	< 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
FIELD BLANK	1/9/2013	L46N130109F	< 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 January 1, 2013 to March 31, 2013

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

Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Beta BHC	Delta BHC	Dieldrin	Dinoseb	Endo- sulfan I	Endo- sulfan II	Endo- sulfan Sulfate	Endrin
			53469-21-9 (ug/L)	12672-29-6 (ug/L)	11097-69-1 (ug/L)	11096-82-5 (ug/L)	319-85-7 (ug/L)	319-86-8 (ug/L)	60-57-1 (ug/L)	88-85-7 (ug/L)	959-98-8 (ug/L)	33213-65-9 (ug/L)	1031-07-8 (ug/L)	72-20-8 (ug/L)
LS-API	1/9/2013	LAPI130109M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 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	2/7/2013	LAPI130207M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 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	3/6/2013	LAPI130306M	< 0.01 GU	< 0.01 GU	< 0.01 GU	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 GU	< 1 U	< 0.1 GU	< 0.1 U	< 0.5 U	< 0.1 GU
LS-LEPS	1/9/2013	LEPS130109M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 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	2/6/2013	LEPS130206M	< 0.01 GU	< 0.01 GU	< 0.01 GU	< 0.01 GU	< 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	3/7/2013	LEPS130307M	< 0.01 GU	< 0.01 GU	< 0.01 GU	< 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	1/9/2013	L46N130109M	0.42	< 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	2/6/2013	L46N130206M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 GU	< 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	3/6/2013	L46N130306M	0.23 GT	< 0.01 GU	< 0.01 GU	< 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-PS2A	1/9/2013	LP2A130109M	0.037 T	< 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	2/6/2013	LP2A130206M	< 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	3/6/2013	LP2A130306M	0.039 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
FIELD BLANK	1/9/2013	L46N130109F	< 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

Environmental Monitoring Data

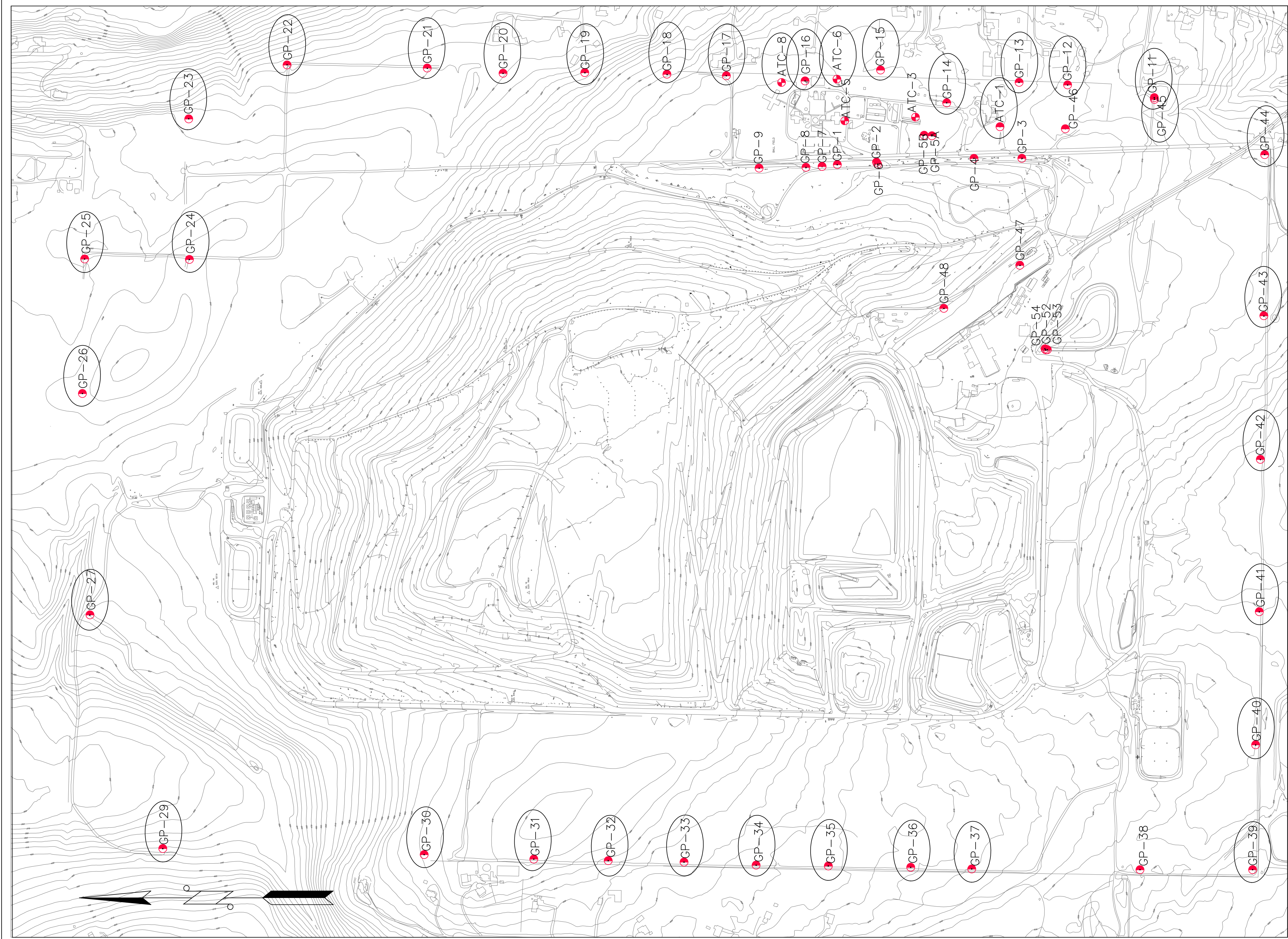
Data Collected from January 1, 2013 to March 31, 2013

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

Contact Person --- Sendy Jimenez (206) 296-4411

Site	Date	Sample ID	Endrin Aldehyde	Heptachlor	Heptachlor Epoxide	Isodrin	Lindane	Methoxy- chlor	Toxaphene
			7421-93-4 (ug/L)	76-44-8 (ug/L)	1024-57-3 (ug/L)	465-73-6 (ug/L)	58-89-9 (ug/L)	72-43-5 (ug/L)	8001-35-2 (ug/L)
LS-API	1/9/2013	LAPI130109M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-API	2/7/2013	LAPI130207M	< 0.2 U	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-API	3/6/2013	LAPI130306M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	< 2.5 U
LS-LEPS	1/9/2013	LEPS130109M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-LEPS	2/6/2013	LEPS130206M	< 0.2 U	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-LEPS	3/7/2013	LEPS130307M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	< 2.5 U
LS-MH46N	1/9/2013	L46N130109M	< 0.2 GU	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-MH46N	2/6/2013	L46N130206M	< 0.2 U	< 0.025 GU	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-MH46N	3/6/2013	L46N130306M	< 0.2 GU	< 0.025 GU	< 0.025 GU	< 10 U	< 0.025 U	< 2 GU	< 2.5 U
LS-PS2A	1/9/2013	LP2A130109M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-PS2A	2/6/2013	LP2A130206M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-PS2A	3/6/2013	LP2A130306M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
FIELD BLANK	1/9/2013	L46N130109F	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U

Landfill Gas Monitoring Data



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



KING COUNTY DEPARTMENT OF
NATURAL RESOURCES AND PARKS
SOLID WASTE DIVISION

CEDAR HILLS REGIONAL LANDFILL
LANDFILL GAS MIGRATION MONITORING PLAN

APPROVED VICTOR O. OKEREKE DATE 03-19-07
RECOMMENDED TOM THENO DATE 09-28-07
DESIGNED N/A DRAWN PHAM / McEWEN
PROJECT NO. SURVEY NO. SHEET 1 OF 1
\\c:\data\cewpm\lgas-prob-loc\alt-llg-loc\096-geom\probonly.dwg

LEGEND

INTERIOR LFG MONITORING PROBES

LFG MIGRATION MONITORING PROBES

DATE	REVISION	BY

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

January 2013 Monitoring

Beginning Barometer: 30.16

Ending Barometer: 30.25

Ambient Temp: 42F

Tech: JB

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	1/29/2013 9:43	0.0	0.1	20.8	0	0	
ATC-01S	1/29/2013 9:40	0.0	0.0	0.0	0	0.89	No Reading -Water
ATC-06D	1/29/2013 10:31	0.0	1.0	3.1	0	-0.17	
ATC-06S	1/29/2013 10:30	0.0	0.2	20.8	0	3.7	
ATC-08D	1/29/2013 10:36	0.0	0.3	17.6	0	-1.36	
ATC-08S	1/29/2013 10:34	0.0	0.0	0.0	0	-1.93	No Reading -Water
GP-11A	1/29/2013 12:12	0.0	1.9	14.5	0	0.01	
GP-11B	1/29/2013 12:15	0.0	1.3	18.5	0	-0.36	
GP-11C	1/29/2013 12:18	0.0	6.3	10.1	0	-0.06	
GP-11D	1/29/2013 12:32	0.0	1.1	18.0	0	0.21	
GP-12A	1/29/2013 12:35	0.0	0.1	18.5	0	-3.29	
GP-12B	1/29/2013 9:30	0.0	0.4	20.6	0	0.21	
GP-12C	1/29/2013 9:32	0.0	0.1	20.9	0	-1.71	
GP-12D	1/29/2013 9:33	0.0	0.1	20.8	0	-1.36	
GP-13A	1/29/2013 9:35	0.0	0.1	20.8	0	0.09	
GP-13B	1/29/2013 9:48	0.0	0.1	20.8	0	1.07	
GP-13C	1/29/2013 9:50	0.0	0.1	20.8	0	0.11	
GP-13D	1/29/2013 9:51	0.0	0.2	17.7	0	-13.35	
GP-14A	1/29/2013 9:53	0.0	0.6	7.2	0	-2.04	
GP-14B	1/29/2013 9:57	0.0	0.0	0.0	0	3.74	No Reading -Water
GP-15A	1/29/2013 10:00	0.0	0.2	20.7	0	-0.34	
GP-15C	1/29/2013 10:02	0.0	0.1	20.8	0	-0.01	
GP-15D	1/29/2013 10:04	0.0	0.1	20.8	0	-3.09	
GP-16A	1/29/2013 10:09	0.0	0.2	20.4	0	-2.74	
GP-16B	1/29/2013 10:11	0.0	0.1	20.8	0	-2.85	
GP-16C	1/29/2013 10:15	0.0	0.0	0.0	0	9.31	No Reading -Water
GP-17A	1/29/2013 10:17	0.0	0.3	20.7	0	-0.02	
GP-17B	1/29/2013 10:19	0.0	2.9	4.5	0	-5.9	
GP-17C	1/29/2013 10:39	0.0	0.4	20.6	0	4.83	
GP-18A	1/29/2013 10:41	0.0	0.2	20.7	0	-1.05	
GP-18B	1/29/2013 10:42	0.0	0.1	20.9	0	-3.11	
GP-18C	1/29/2013 11:28	0.0	0.0	0.0	0	-12.14	No Reading -Water
GP-19A	1/29/2013 11:29	0.0	1.1	14.5	0	-2.59	
GP-19B	1/29/2013 11:31	0.0	0.2	20.7	0	-3.28	
GP-19C	1/29/2013 11:33	0.0	0.0	0.0	0	7.59	No Reading -Water
GP-20A	1/29/2013 11:34	0.0	0.5	12.0	0	0	
GP-20B	1/29/2013 11:36	0.0	0.7	15.2	0	-3.2	
GP-20C	1/29/2013 11:39	0.0	0.1	20.8	0	0	
GP-21A	1/29/2013 11:40	0.0	0.8	15.1	0	0.2	
GP-21B	1/29/2013 11:42	0.0	0.1	20.8	0	-0.18	
GP-21C	1/29/2013 11:45	0.0	0.1	20.8	0	2.21	
GP-22A	1/29/2013 11:47	0.0	0.3	15.1	0	0	
GP-22B	1/29/2013 11:49	0.0	0.6	15.1	0	-2.07	
GP-22C	1/29/2013 11:51	0.0	0.1	20.8	0	0	
GP-23A	1/29/2013 11:53	0.0	0.2	8.7	0	0	
GP-23B	1/29/2013 11:54	0.0	0.0	0.0	0	-0.39	No Reading -Water
GP-23C	1/29/2013 11:54	0.0	0.0	0.0	0	0	No Reading -Const.
GP-24A	1/29/2013 11:55	0.0	0.0	0.0	0	0	No Reading -Const.
GP-24B	1/29/2013 11:55	0.0	0.0	0.0	0	0	No Reading -Const.
GP-025	1/29/2013 12:00	0.0	0.1	20.7	0	0	
GP-026	1/29/2013 12:02	0.0	0.1	20.8	0	2.58	
GP-027	1/29/2013 12:04	0.0	0.1	20.7	0	1.29	
GP-29A	1/29/2013 12:08	0.0	4.5	8.5	0	0.03	
GP-29B	1/29/2013 12:10	0.0	0.9	18.5	0	0.01	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

January 2013 Monitoring

Beginning Barometer: 30.16

Ending Barometer: 30.25

Ambient Temp: 42F

Tech: JB

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-30A	1/29/2013 12:22	0.0	0.5	20.3	0	0.01	
GP-30B	1/29/2013 12:23	0.0	0.8	20.2	0	-4.81	
GP-31A	1/29/2013 7:17	0.0	1.9	18.6	0	0.9	
GP-31B	1/29/2013 7:19	0.0	1.8	18.2	0	-2.65	
GP-31C	1/29/2013 7:21	0.0	0.0	0.0	0	12.9	No Reading -Water
GP-32A	1/29/2013 7:23	0.0	0.3	14.7	0	-1.3	
GP-32B	1/29/2013 7:24	0.0	2.1	9.3	0	1.83	
GP-32C	1/29/2013 7:27	0.0	0.2	21.0	0	-0.01	
GP-33A	1/29/2013 7:29	0.0	0.4	20.7	0	0	
GP-33B	1/29/2013 7:31	0.0	0.4	20.7	0	0.02	
GP-33C	1/29/2013 7:34	0.0	0.4	20.5	0	7.51	
GP-34A	1/29/2013 7:36	0.0	0.1	21.0	0	-3.84	
GP-34B	1/29/2013 7:38	0.0	4.4	0.6	0	-3.33	
GP-34C	1/29/2013 7:40	0.0	0.0	0.0	0	-3.06	No Reading -Water
GP-35A	1/29/2013 7:42	0.0	0.1	20.9	0	-0.17	
GP-35B	1/29/2013 7:43	0.0	0.2	5.9	0	-2.76	
GP-35C	1/29/2013 7:46	0.0	0.1	20.8	0	0	
GP-36A	1/29/2013 7:47	0.0	0.1	20.9	0	0	
GP-36B	1/29/2013 7:49	0.0	0.1	20.8	0	-0.12	
GP-36C	1/29/2013 7:51	0.0	0.1	20.9	0	-0.3	
GP-37A	1/29/2013 7:53	0.0	0.0	0.0	0	-4.03	No Reading -Water
GP-37B	1/29/2013 7:55	0.0	0.4	8.7	0	-2.4	
GP-37C	1/29/2013 7:57	0.0	0.0	0.0	0	-10.72	No Reading -Water
GP-039	1/29/2013 7:59	0.0	0.2	17.8	0	-1.18	
GP-040	1/29/2013 8:01	0.0	0.6	3.1	0	-2.07	
GP-41A	1/29/2013 12:38	0.0	0.1	20.7	0	0	
GP-41B	1/29/2013 12:40	0.0	0.1	20.7	0	0	
GP-41C	1/29/2013 12:42	0.0	0.1	20.7	0	0	
GP-42A	1/29/2013 12:44	0.0	0.0	0.0	0	1.03	No Reading -Water
GP-42B	1/29/2013 12:46	0.0	0.1	20.5	0	-1.6	
GP-43A	1/29/2013 12:48	0.0	0.2	20.5	0	-0.01	
GP-43B	1/29/2013 12:50	0.0	0.1	20.7	0	-0.03	
GP-43C	1/29/2013 12:51	0.0	0.1	20.4	0	-0.35	
GP-44A	1/29/2013 12:54	0.0	0.0	0.0	0	2.64	No Reading -Water
GP-44B	1/29/2013 12:56	0.0	1.0	9.3	0	-12.85	
GP-44C	1/29/2013 12:58	0.0	0.1	20.6	0	0	
GP-45D	1/29/2013 9:28	0.0	0.1	20.9	0	-1.3	
GP-45I	1/29/2013 9:26	0.0	0.1	20.8	0	-0.04	
GP-45S	1/29/2013 9:25	0.0	0.1	20.8	0	0	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

February 2013 Monitoring

Beginning Barometer: 30.43

Ending Barometer: 30.45

Ambient Temp: 50F

Tech: Dye

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	2/14/2013 14:36	0.0	0.0	21.0	0	0	
ATC-01S	2/14/2013 14:34	0.0	0.0	0.0	0	0	No Reading -Water
ATC-06D	2/14/2013 13:50	0.0	0.7	7.9	0	-0.29	
ATC-06S	2/14/2013 13:48	0.0	0.1	20.8	0	-7.83	
ATC-08D	2/14/2013 13:38	0.0	0.2	20.1	0	-0.08	
ATC-08S	2/14/2013 13:36	0.0	1.2	15.7	0	0	
GP-11A	2/14/2013 10:40	0.0	2.4	13.8	0	0	
GP-11B	2/14/2013 10:43	0.0	1.0	18.9	0	-0.09	
GP-11C	2/14/2013 10:47	0.0	6.6	9.5	0	-0.04	
GP-11D	2/14/2013 8:33	0.0	1.1	18.0	0	-0.28	
GP-12A	2/14/2013 8:37	0.0	0.0	18.4	0	-0.21	
GP-12B	2/14/2013 14:48	0.0	0.3	20.6	0	0.06	
GP-12C	2/14/2013 14:50	0.0	0.0	20.9	0	-0.97	
GP-12D	2/14/2013 14:52	0.0	0.0	20.9	0	-0.64	
GP-13A	2/14/2013 14:54	0.0	0.1	20.9	0	0.1	
GP-13B	2/14/2013 14:15	0.0	0.0	20.9	0	-0.4	
GP-13C	2/14/2013 14:17	0.0	0.0	20.9	0	-0.66	
GP-13D	2/14/2013 14:18	0.0	0.1	18.9	0	-18.13	
GP-14A	2/14/2013 14:20	0.0	0.5	7.1	0	-3.83	
GP-14B	2/14/2013 14:24	0.0	0.1	20.8	0	-0.52	
GP-15A	2/14/2013 14:26	0.0	0.1	21.0	0	0	
GP-15C	2/14/2013 14:28	0.0	0.0	20.9	0	-0.01	
GP-15D	2/14/2013 14:30	0.0	0.0	21.0	0	-2.65	
GP-16A	2/14/2013 14:07	0.0	0.1	20.8	0	-2.71	
GP-16B	2/14/2013 14:09	0.0	0.0	20.9	0	-2.82	
GP-16C	2/14/2013 13:28	0.0	0.0	0.0	0	-24.33	No Reading -Water
GP-17A	2/14/2013 13:26	0.0	2.1	8.4	0	-3.35	
GP-17B	2/14/2013 13:27	0.0	0.2	20.4	0	-4.42	
GP-17C	2/14/2013 13:44	0.0	0.2	20.7	0	-11.65	
GP-18A	2/14/2013 13:41	0.0	0.1	20.7	0	-3.21	
GP-18B	2/14/2013 13:43	0.0	0.0	20.7	0	-3.12	
GP-18C	2/14/2013 9:52	0.0	0.0	0.0	0	-12.82	No Reading -Water
GP-19A	2/14/2013 9:49	0.0	0.9	14.9	0	0	
GP-19B	2/14/2013 9:51	0.0	0.1	20.7	0	-3.11	
GP-19C	2/14/2013 9:56	0.0	0.0	20.7	0	-1.18	
GP-20A	2/14/2013 9:58	0.0	0.3	13.7	0	0	
GP-20B	2/14/2013 10:00	0.0	0.4	18.8	0	-2.67	
GP-20C	2/14/2013 10:03	0.0	0.0	20.7	0	-0.03	
GP-21A	2/14/2013 10:05	0.0	0.6	15.5	0	0	
GP-21B	2/14/2013 10:06	0.0	0.0	20.7	0	-0.21	
GP-21C	2/14/2013 10:11	0.0	0.1	20.8	0	-0.04	
GP-22A	2/14/2013 10:12	0.0	0.2	19.3	0	-0.08	
GP-22B	2/14/2013 10:14	0.0	0.2	6.5	0	-3.13	
GP-22C	2/14/2013 10:17	0.0	0.1	20.7	0	-0.16	
GP-23A	2/14/2013 10:19	0.0	0.1	9.3	0	0	
GP-23B	2/14/2013 10:21	0.0	0.1	20.7	0	-0.09	
GP-23C	2/14/2013 10:24	0.0	0.0	0.0	0	0	No Reading -Const.
GP-24A	2/14/2013 10:24	0.0	0.0	0.0	0	0	No Reading -Const.
GP-24B	2/14/2013 10:24	0.0	0.1	20.5	0	0	
GP-025	2/14/2013 10:28	0.0	0.0	20.9	0	-1.68	
GP-026	2/14/2013 10:30	0.0	0.0	20.8	0	-1.65	
GP-027	2/14/2013 10:32	0.0	0.0	21.0	0	-1.62	
GP-29A	2/14/2013 10:35	0.0	3.7	12.2	0	0	
GP-29B	2/14/2013 10:37	0.0	0.5	19.7	0	0	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

February 2013 Monitoring

Beginning Barometer: 30.43

Ending Barometer: 30.45

Ambient Temp: 50F

Tech: Dye

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-30A	2/14/2013 10:53	0.0	0.5	20.5	0	0	
GP-30B	2/14/2013 10:55	0.0	0.8	20.2	0	-5.07	
GP-31A	2/14/2013 7:40	0.0	1.8	17.9	0	0.26	
GP-31B	2/14/2013 7:41	0.0	1.8	17.7	0	-2.48	
GP-31C	2/14/2013 7:44	0.0	0.0	0.0	0	0.13	No Reading -Water
GP-32A	2/14/2013 7:46	0.0	0.3	14.4	0	-0.47	
GP-32B	2/14/2013 7:48	0.0	0.1	19.8	0	-0.2	
GP-32C	2/14/2013 7:51	0.0	0.5	19.2	0	0	
GP-33A	2/14/2013 7:52	0.0	0.1	20.5	0	0	
GP-33B	2/14/2013 7:54	0.0	0.2	20.6	0	-0.01	
GP-33C	2/14/2013 7:57	0.0	0.5	20.0	0	-7.68	
GP-34A	2/14/2013 7:59	0.0	0.1	20.8	0	-2.84	
GP-34B	2/14/2013 8:00	0.0	0.1	20.8	0	-3.03	
GP-34C	2/14/2013 8:05	0.0	0.0	0.0	0	-19.49	No Reading -Water
GP-35A	2/14/2013 8:03	0.0	0.0	20.8	0	-0.64	
GP-35B	2/14/2013 8:04	0.0	0.1	6.4	0	-4.03	
GP-35C	2/14/2013 8:08	0.0	0.1	20.7	0	-6.93	
GP-36A	2/14/2013 8:10	0.0	0.0	20.9	0	0	
GP-36B	2/14/2013 8:12	0.0	0.0	20.8	0	-0.12	
GP-36C	2/14/2013 8:15	0.0	0.1	20.6	0	-0.23	
GP-37A	2/14/2013 8:17	0.0	0.0	0.0	0	-5.32	No Reading -Water
GP-37B	2/14/2013 8:19	0.0	0.3	8.4	0	-3.14	
GP-37C	2/14/2013 8:25	0.0	0.0	0.0	0	-0.08	No Reading -Water
GP-039	2/14/2013 8:22	0.0	0.1	20.7	0	-0.05	
GP-040	2/14/2013 8:24	0.0	0.5	4.9	0	-2.47	
GP-41A	2/14/2013 8:40	0.0	0.1	20.8	0	0	
GP-41B	2/14/2013 8:42	0.0	0.1	20.7	0	0	
GP-41C	2/14/2013 8:44	0.0	0.0	20.9	0	0	
GP-42A	2/14/2013 8:49	0.0	0.0	0.0	0	-9.09	No Reading -Water
GP-42B	2/14/2013 8:48	0.0	0.1	20.9	0	-1.21	
GP-43A	2/14/2013 8:54	0.0	0.0	20.8	0	-0.05	
GP-43B	2/14/2013 8:56	0.0	0.0	20.7	0	-0.01	
GP-43C	2/14/2013 8:58	0.0	0.0	20.9	0	-0.08	
GP-44A	2/14/2013 9:05	0.0	0.1	20.7	0	-0.15	
GP-44B	2/14/2013 9:02	0.0	0.9	9.2	0	-15.99	
GP-44C	2/14/2013 9:03	0.0	0.0	20.9	0	0	
GP-45D	2/14/2013 15:00	0.0	0.0	20.9	0	-0.7	
GP-45I	2/14/2013 14:58	0.0	0.0	21.0	0	-0.03	
GP-45S	2/14/2013 14:56	0.0	0.0	21.0	0	0	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

March 2013 Monitoring

Beginning Barometer: 30.10
Ending Barometer: 30.10
Ambient Temp: 53 F
Tech: DB

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	3/12/2013 7:43	0.0	0.1	20.9	0	0.05	
ATC-01S	3/12/2013 7:41	0.0	0.0	0.0	0	-1.21	No Reading -Water
ATC-06D	3/12/2013 8:42	0.0	0.7	6.7	0	-0.8	
ATC-06S	3/12/2013 8:41	0.0	0.1	20.8	0	-2.84	
ATC-08D	3/12/2013 8:47	0.0	0.2	19.0	0	0.02	
ATC-08S	3/12/2013 8:46	0.0	1.5	15.2	0	0.12	
GP-11A	3/12/2013 7:23	0.0	0.6	21.0	0	-0.16	
GP-11B	3/12/2013 7:25	0.0	0.1	21.0	0	1.31	
GP-11C	3/12/2013 7:26	0.0	0.1	21.0	0	0.25	
GP-11D	3/12/2013 7:28	0.0	0.1	21.0	0	0.23	
GP-12A	3/12/2013 7:49	0.0	0.0	21.0	0	0	
GP-12B	3/12/2013 7:51	0.0	0.0	21.0	0	1.01	
GP-12C	3/12/2013 7:52	0.0	0.1	18.7	0	-11.48	
GP-12D	3/12/2013 7:54	0.0	0.6	5.9	0	0.77	
GP-13A	3/12/2013 7:58	0.0	0.1	20.8	0	0.13	
GP-13B	3/12/2013 7:59	0.0	0.1	20.9	0	0.01	
GP-13C	3/12/2013 8:01	0.0	0.2	15.3	0	0	
GP-13D	3/12/2013 8:02	0.0	0.2	19.6	0	0.19	
GP-14A	3/12/2013 8:09	0.0	0.1	21.0	0	0.85	
GP-14B	3/12/2013 8:11	0.0	0.2	20.8	0	0.57	
GP-15A	3/12/2013 8:22	0.0	0.0	0.0	0	-13.04	No Reading -Water
GP-15C	3/12/2013 8:24	0.0	1.4	13.6	0	1.38	
GP-15D	3/12/2013 8:25	0.0	0.2	20.7	0	-4.95	
GP-16A	3/12/2013 8:50	0.0	0.2	20.8	0	0.1	
GP-16B	3/12/2013 8:52	0.0	0.1	20.8	0	0.08	
GP-16C	3/12/2013 8:53	0.0	0.1	20.8	0	1.12	
GP-17A	3/12/2013 11:36	0.0	0.0	0.0	0	-8.28	No Reading -Water
GP-17B	3/12/2013 11:39	0.0	1.0	15.3	0	0.01	
GP-17C	3/12/2013 11:40	0.0	0.1	20.4	0	0.97	
GP-18A	3/12/2013 11:43	0.0	0.0	0.0	0	0.25	No Reading -Water
GP-18B	3/12/2013 11:44	0.0	0.4	12.5	0	0.13	
GP-18C	3/12/2013 11:46	0.0	0.4	18.0	0	1.09	
GP-19A	3/12/2013 11:49	0.0	0.1	20.5	0	0.01	
GP-19B	3/12/2013 11:51	0.0	0.7	14.8	0	0.03	
GP-19C	3/12/2013 11:52	0.0	0.1	20.4	0	0.08	
GP-20A	3/12/2013 11:56	0.0	0.1	20.6	0	0.05	
GP-20B	3/12/2013 11:57	0.0	0.3	18.0	0	0.11	
GP-20C	3/12/2013 11:59	0.0	0.5	17.5	0	-1.45	
GP-21A	3/12/2013 12:18	0.0	0.1	20.5	0	-1.17	
GP-21B	3/12/2013 12:20	0.0	0.1	8.7	0	0	
GP-21C	3/12/2013 12:21	0.0	0.0	0.0	0	0.52	No Reading -Water
GP-22A	3/12/2013 12:23	0.0	0.0	0.0	0	0	No Reading -Const.
GP-22B	3/12/2013 12:24	0.0	0.0	0.0	0	0	No Reading -Const.
GP-22C	3/12/2013 12:24	0.0	0.0	0.0	0	0	No Reading -Const.
GP-23A	3/12/2013 12:29	0.0	0.0	20.5	0	0	
GP-23B	3/12/2013 12:30	0.0	0.0	20.5	0	-1.11	
GP-23C	3/12/2013 12:32	0.0	0.0	20.5	0	1.16	
GP-24A	3/12/2013 12:36	0.0	3.6	10.1	0	0.13	
GP-24B	3/12/2013 12:37	0.0	2.0	14.9	0	0	
GP-025	3/12/2013 12:41	0.0	3.0	12.8	0	0	
GP-026	3/12/2013 12:45	0.0	1.1	19.1	0	0.01	
GP-027	3/12/2013 12:49	0.0	6.8	8.9	0	0	
GP-29A	3/12/2013 12:55	0.0	0.6	20.2	0	0	
GP-29B	3/12/2013 12:57	0.0	0.9	20.0	0	-3.27	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Migration Probes

March 2013 Monitoring

Beginning Barometer: 30.10

Ending Barometer: 30.10

Ambient Temp: 53 F

Tech: DB

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-30A	3/12/2013 6:51	0.0	2.2	18.5	0	1.01	
GP-30B	3/12/2013 6:49	0.0	1.6	18.7	0	0.42	
GP-31A	3/12/2013 13:28	0.0	0.0	0.0	0	0.17	No Reading -Water
GP-31B	3/12/2013 13:30	0.0	0.3	14.5	0	1.03	
GP-31C	3/12/2013 13:31	0.0	0.5	17.8	0	1.17	
GP-32A	3/12/2013 13:34	0.0	0.7	19.1	0	0	
GP-32B	3/12/2013 13:36	0.0	0.3	20.3	0	0	
GP-32C	3/12/2013 13:37	0.0	0.3	20.4	0	0.01	
GP-33A	3/12/2013 6:58	0.0	0.7	20.3	0	-0.87	
GP-33B	3/12/2013 6:59	0.0	0.1	21.0	0	1.6	
GP-33C	3/12/2013 6:56	0.0	0.1	21.0	0	-0.22	
GP-34A	3/12/2013 13:42	0.0	0.0	0.0	0	-11.35	No Reading -Water
GP-34B	3/12/2013 13:43	0.0	0.2	20.2	0	0.11	
GP-34C	3/12/2013 13:45	0.0	0.1	20.1	0	0.53	
GP-35A	3/12/2013 13:47	0.0	0.1	20.7	0	0.05	
GP-35B	3/12/2013 13:49	0.0	0.0	20.7	0	0	
GP-35C	3/12/2013 13:50	0.0	0.1	20.7	0	0.09	
GP-36A	3/12/2013 13:53	0.0	0.3	9.8	0	0.52	
GP-36B	3/12/2013 13:54	0.0	0.0	0.0	0	0.51	No Reading -Water
GP-36C	3/12/2013 13:56	0.0	0.4	7.9	0	1.16	
GP-37A	3/12/2013 14:00	0.0	0.0	0.0	0	-4.35	No Reading -Water
GP-37B	3/12/2013 14:01	0.0	0.6	12.7	0	0.55	
GP-37C	3/12/2013 14:03	0.0	0.6	1.4	0	1.78	
GP-039	3/12/2013 14:07	0.0	1.2	17.9	0	0.09	
GP-040	3/12/2013 14:11	0.0	0.0	17.5	0	0.51	
GP-41A	3/12/2013 14:15	0.0	0.0	20.8	0	0.13	
GP-41B	3/12/2013 14:16	0.0	0.1	20.7	0	0.25	
GP-41C	3/12/2013 14:18	0.0	0.0	20.8	0	0	
GP-42A	3/12/2013 14:21	0.0	0.0	0.0	0	0.17	No Reading -Water
GP-42B	3/12/2013 14:22	0.0	0.3	19.3	0	0.75	
GP-43A	3/12/2013 14:26	0.0	0.1	20.7	0	0.06	
GP-43B	3/12/2013 14:28	0.0	0.0	20.8	0	-0.02	
GP-43C	3/12/2013 14:29	0.0	0.1	20.6	0	0.04	
GP-44A	3/12/2013 14:33	0.0	0.0	20.8	0	0.1	
GP-44B	3/12/2013 14:36	0.0	0.2	19.3	0	0.78	
GP-44C	3/12/2013 14:37	0.0	0.0	20.6	0	0	
GP-45D	3/12/2013 7:35	0.0	0.1	20.7	0	0.7	
GP-45I	3/12/2013 7:33	0.0	0.1	19.6	0	0.02	
GP-45S	3/12/2013 7:32	0.0	0.1	20.8	0	0.18	

FIRST QUARTER BUILDING MONITORING

	INSTRUMENT: Place check by instrument used :				WEATHER:		DATE: 01/25/13 TECH: Dye
	HEATH DetectoPak III (sn:8746-4)					Partly to	
	Foxboro TVA 1000 FID/PID (sn: 7785301)				X	Mostly Cloudy	
ENVIS ID	BLDG #	DESCRIPTION	CH ₄ (ppm)	BAR PRESS (in. Hg)	TIME	REMARKS	
GOC- 01/25/13	1	FRONT OFFICE	0	30.00	1:30pm		
GCR- 01/25/13	2	CONF ROOM	0		1:33pm		
GAO- 01/25/13	3	PAYROLL OFFICE	0		1:35pm		
GEO- 01/25/13	4	ENGR. OFFICE	0		1:42pm		
GLRC- 01/25/13	5	LUNCHROOM	0		1:40pm		
GSPC 01/25/13		SPOC	0		2:14pm		
GELO- 01/25/13 A	6A	DRY STORAGE	0		2:00pm		
GELO- 01/25/13 B	6B	ELECTRICIAN OFFICE	0		2:03pm		
GAP- 01/25/13		ACCOUNT PAYABLE	0		2:06pm		
GSO- 01/25/13 A	7A	SHOP OFFICE	0		2:23pm		
GPR- 01/25/13 B	7B	PARTS ROOM	0		2:20pm		
GMS- 01/25/13 C	7C	SHOP PIT AREA/BAY	0		2:22pm		
GTB- 01/25/13 D	7D	SHOP TIRE BAY	0		2:25pm		
GEW- 01/25/13 E	7E	EAST WELD SHOP	0		2:28pm		
GWW- 01/25/13 F	7F	WEST WELD SHOP	0		2:30pm		
GCS- 01/25/13	8	CARPENTER'S	0		2:35pm		
GSS- 01/25/13	9	WASTEWATER	0		2:37pm		
GSS- 01/25/13 B	9B	CARPENTER/STORAGE	0		2:40pm		
GSH- 01/25/13	10	SCALEHOUSE	0		1:38pm		
GB13- 01/25/13	13	WW COMPRESSOR	0		3:08pm		
GB16- 01/25/13	16	GENERATOR	0		3:10pm		
GB19- 01/25/13	19	LEPS (P.S.# 5)	0		3:13pm		
GB19- 01/25/13 B	19B	LEPS/H ₂ O ₂ ROOM	0		3:14pm		
GB20- 01/25/13	20	LEPS ELEC PANALS	0		3:15pm		
GB21- 01/25/13	21	STORAGE(OLD PS 1)	0		3:25pm		
GB22- 01/25/13	22	STORAGE/N FLARE	0		3:31pm		
GB23- 01/25/13	23	LFGAS	0		3:32pm		
GB24- 01/25/13	24	NE GENERATOR BLDG	0		3:29pm		
GBWW- 01/25/13	30	WOMEN BRK RM	0		2:10pm		
GPWT- 01/25/13	PW	PRESSURE WASH RM	0		2:48pm		
GBRR- 01/25/13	RR	TRUCKWASH RR W	0		2:50pm		
GBSS- 01/25/13	SS	TRUCKWASH RR E	0		2:53pm		
GBZZ- 01/25/13	29	MANAGERS TRAILER	0		1:46pm		
GBPT- 01/25/13		CCG FASTER	0		1:50pm		
GCLS- 01/25/13		CHLORINE SHED	0		3:00pm		

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
First Quarter 2013 Monitoring

Probe ID	Date	Time	Barometric			O2 %vol	Static Pressure in INWC
			Pressure in Hg	CH4 %vol	CO2 %vol		
MGPW1700	3/5/2013	3:10pm	29.81	0.0	0.1	17.4	0.21
MGPW1700	3/12/2013	9:54am	30.10	0.0	0.2	21.0	-0.02
MGPW1700	3/19/2013	8:24am	30.08	0.0	0.1	21.0	0.02
MGPW1700	3/26/2013	8:40am	30.00	0.0	0.1	16.7	0.04
MGPW1703	1/1/2013	7:49am	30.36	0.0	0.3	21.0	-4.89
MGPW1703	1/8/2013	9:19am	30.03	0.0	0.1	20.1	18
MGPW1703	1/15/2013	8:56am	30.54	0.0	0.1	20.8	-5.42
MGPW1703	1/22/2013	8:47am	30.06	0.0	0.5	3.5	2.08
MGPW1703	1/29/2013	9:06am	30.18	0.0	0.1	21.0	-3
MGPW1703	2/5/2013	8:36am	29.88	0.0	0.6	3.3	2.8
MGPW1703	2/12/2013	8:52am	30.30	0.0	0.2	21.0	-2.9
MGPW1703	2/19/2013	8:50am	29.80	0.0	0.6	3.5	3.4
MGPW1703	2/26/2013	8:58am	30.28	0.0	0.4	21.0	-3.9
MGPW1703	3/5/2013	8:58am	29.87	0.0	0.6	3.4	3.01
MGPW1703	3/12/2013	9:56am	30.10	0.0	0.5	6.5	0.23
MGPW1703	3/19/2013	8:27am	30.08	0.0	0.1	18.2	0.4
MGPW1703	3/26/2013	8:43am	30.00	0.0	0.4	3.4	0.45
MGPW1708	3/5/2013	3:07pm	29.81	0.0	0.0	20.9	-1.04
MGPW1708	3/12/2013	9:58am	30.10	0.0	0.1	21.0	-1.7
MGPW1708	3/19/2013	8:30am	30.08	0.0	0.1	21.0	-1.29
MGPW1708	3/26/2013	8:47am	30.00	0.0	0.0	20.6	-2.55
MGPW1710S	1/1/2013	7:59am	30.36	0.0	0.2	21.0	-2.26
MGPW1710S	1/8/2013	9:22am	30.03	0.0	0.1	21.0	-1.34
MGPW1710S	1/15/2013	8:59am	30.54	0.0	0.1	20.8	-2.41
MGPW1710S	1/22/2013	8:51am	30.06	0.0	0.1	21.0	-1.12
MGPW1710S	1/29/2013	9:02am	30.18	0.0	0.1	21.0	-3.00
MGPW1710S	2/5/2013	8:39am	29.88	0.0	0.1	20.9	-0.70
MGPW1710S	2/12/2013	8:56am	30.30	0.0	0.1	21.0	-2.70
MGPW1710S	2/19/2013	8:53am	29.80	0.0	0.1	20.9	-1.30
MGPW1710S	2/26/2013	9:12am	30.28	0.0	0.3	21.0	-2.90
MGPW1710S	3/5/2013	9:03am	29.87	0.0	0.1	20.9	-0.85
MGPW1710S	3/12/2013	10:00am	30.10	0.0	0.1	21.0	-1.04
MGPW1710S	3/19/2013	8:33am	30.08	0.0	0.0	21.0	-0.81
MGPW1710S	3/26/2013	8:51am	30.00	0.0	0.0	20.7	-1.70

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
First Quarter 2013 Monitoring

Probe ID	Date	Time	Barometric			O2 %vol	Static Pressure in INWC
			Pressure in Hg	CH4 %vol	CO2 %vol		
MGPW1710D	1/1/2013	7:57am	30.36	0.0	0.3	21.0	-3.56
MGPW1710D	1/8/2013	9:24am	30.03	0.0	0.1	21.0	-1.97
MGPW1710D	1/15/2013	9:01am	30.54	0.0	0.1	21.0	-3.93
MGPW1710D	1/22/2013	8:53am	30.06	0.0	0.1	21.0	-1.15
MGPW1710D	1/29/2013	9:04am	30.18	0.0	0.1	21.0	-4.3
MGPW1710D	2/5/2013	8:41am	29.88	0.0	0.1	21.0	-1.1
MGPW1710D	2/12/2013	8:54am	30.30	0.0	0.1	21.0	-3.5
MGPW1710D	2/19/2013	8:55am	29.80	0.0	0.1	21.0	-2
MGPW1710D	2/26/2013	9:14am	30.28	0.0	0.2	21.0	-4
MGPW1710D	3/5/2013	9:01am	29.87	0.0	0.1	20.8	-1.19
MGPW1710D	3/12/2013	10:02am	30.10	0.0	0.1	21.0	-1.54
MGPW1710D	3/19/2013	8:35am	30.08	0.0	0.0	21.0	-1.1
MGPW1710D	3/26/2013	8:53am	30.00	0.0	0.0	20.7	-2.4
MGPW1714	1/1/2013	8:07am	30.36	0.0	0.2	21.0	-3.22
MGPW1714	1/8/2013	9:27am	30.03	0.0	0.1	21.0	-1.58
MGPW1714	1/15/2013	9:04am	30.54	0.0	0.1	21.0	-3.61
MGPW1714	1/22/2013	8:57am	30.06	0.0	0.1	21.0	-0.84
MGPW1714	1/29/2013	9:00am	30.18	0.0	0.2	21.0	-3.8
MGPW1714	2/5/2013	8:43am	29.88	0.0	0.1	21.0	-0.8
MGPW1714	2/12/2013	8:58am	30.30	0.0	0.1	21.0	-3
MGPW1714	2/19/2013	8:57am	29.80	0.0	0.1	21.0	-1.6

CEDAR HILLS REGIONAL LANDFILL
Supplemental Gas Migration Monitoring
Compliance Probes GP-30B and GP-33C
First Quarter 2013

Probe ID	Date	Time	Barometric	CH ₄	CO ₂	O ₂	Static
			Pressure in. Hg				Pressure in. WC
GP-30B	1/1/13	8:18am	30.36	0.0	1.8	19.9	-4.32
GP-30B	1/8/13	9:10am	30.03	0.0	1.8	19.5	-1.68
GP-30B	1/15/13	8:45am	30.54	0.0	1.5	19.3	-3.90
GP-30B	1/22/13	8:37am	30.06	0.0	2.0	18.4	-1.50
GP-30B	1/29/13	7:17am	30.16	0.0	1.8	18.2	-2.65
GP-30B	2/5/13	8:24am	29.88	0.0	2.3	18.0	-0.9
GP-30B	2/12/13	8:42am	30.30	0.0	2.3	18.2	-2.2
GP-30B	2/19/13	8:38am	29.80	0.0	2.2	18.3	-0.5
GP-30B	2/26/13	8:40am	30.28	0.0	0.5	21.0	-1.6
GP-30B	3/5/13	9:12am	29.87	0.0	1.5	18.4	-0.07
GP-30B	3/12/13	7:52am	30.10	0.0	1.6	18.6	0.4
GP-30B	3/19/13	8:16am	30.08	0.0	1.3	19.4	0.55
GP-30B	3/26/13	8:30am	30.00	0.0	1.5	18.5	-0.68
GP-33C	1/1/13	8:23am	30.36	0.0	0.1	21.0	-2.89
GP-33C	1/8/13	9:14am	30.03	0.0	0.1	21.0	-0.97
GP-33C	1/15/13	8:50am	30.54	0.0	2.5	4.4	-3.48
GP-33C	1/22/13	8:41am	30.06	0.0	4.0	2.6	-0.58
GP-33C	1/29/13	7:38am	30.16	0.0	4.4	0.6	-3.33
GP-33C	2/5/13	8:29am	29.88	0.0	5.5	1.3	-0.5
GP-33C	2/12/13	8:47am	30.30	0.0	3.7	8.4	-2.7
GP-33C	2/19/13	8:44am	29.80	0.0	0.3	21.0	-1.1
GP-33C	2/26/13	8:46am	30.28	0.0	0.3	21.0	-2.3
GP-33C	3/5/13	9:18am	29.87	0.0	0.2	20.9	-0.41
GP-33C	3/12/13	7:58am	30.10	0.0	0.1	21.0	-0.2
GP-33C	3/19/13	8:20am	30.08	0.0	0.1	21.0	-0.34
GP-33C	3/26/13	8:34am	30.00	0.0	0.1	20.8	-1.34

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

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

APPENDIX C

Meteorological Data

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY, 2013

IN MILES PER HOUR

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	3.3	2.9	2.5	2.1	1.4	4.1	1.9	6.3	4.9	2.9	2.7	3.1	2.3	2.4	5.7	7.1	4.5	6.1	4.6	1.9	4.0	5.1	8.2	8.6	4.1
2	5.2	7.8	12.0	7.3	5.3	3.1	5.9	6.3	8.8	5.8	7.8	10.6	14.1	12.0	12.0	13.6	14.3	12.2	13.7	12.6	13.1	12.9	14.4	10.9	10.1
3	12.2	7.8	8.5	9.2	9.6	8.7	13.4	13.6	18.8	18.2	19.7	13.1	14.1	13.8	10.7	14.2	13.9	12.1	11.3	11.2	9.9	15.1	12.8	11.7	12.6
4	10.4	8.9	7.8	8.2	8.9	6.3	5.5	5.4	5.4	5.8	6.0	6.4	4.9	3.5	3.1	3.1	1.9	5.4	5.7	3.8	5.6	4.8	6.1	5.5	5.8
5	8.4	10.1	10.3	8.7	8.0	9.9	8.4	9.5	11.3	13.2	7.1	9.8	17.4	14.9	10.9	10.3	6.4	8.6	7.7	7.4	7.3	5.2	4.2	6.4	9.2
6	6.0	7.9	6.6	6.8	5.9	5.7	5.6	6.0	4.6	6.6	6.4	5.7	7.1	4.9	3.8	5.8	4.7	4.6	5.6	4.6	7.1	7.8	5.8	4.8	5.9
7	6.7	9.1	10.1	10.0	9.2	9.2	9.1	8.0	14.6	16.5	18.4	19.8	22.0	20.4	17.5	13.3	13.8	13.8	14.2	13.6	12.1	11.6	11.7	10.6	13.1
8	9.1	8.7	5.6	4.0	4.1	2.3	5.8	5.4	2.9	5.6	11.0	11.6	11.8	8.6	9.2	11.6	12.5	13.8	23.2	20.0	19.0	19.2	14.9	12.2	10.5
9	11.0	12.4	7.0	7.9	7.1	5.1	8.6	9.5	6.1	6.2	7.0	6.9	7.3	7.3	10.9	11.8	10.2	7.8	7.5	8.5	5.1	4.9	4.6	5.9	7.8
10	5.0	3.2	5.9	3.4	2.8	1.6	1.5	3.1	3.4	3.7	4.1	2.3	2.2	0.8	1.6	1.0	0.7	2.0	2.2	1.3	2.5	2.5	2.6	3.1	2.6
11	2.8	1.9	1.9	1.6	1.3	2.4	3.5	2.1	1.4	1.9	0.9	3.2	2.9	2.5	4.1	4.5	1.6	2.8	3.2	2.3	1.4	0.9	0.9	2.3	2.3
12	1.8	0.3	0.5	0.9	2.5	2.0	0.3	0.6	0.2	0.1	1.0	1.5	1.8	5.8	6.8	5.2	7.1	5.6	4.0	2.2	2.2	2.4	1.2	1.4	2.4
13	2.8	2.9	1.8	1.3	1.7	0.6	0.9	1.2	2.3	2.3	1.0	3.0	1.7	2.6	3.6	2.8	1.9	1.9	2.1	1.6	2.0	2.6	1.2	1.8	2.0
14	1.8	2.5	4.2	2.5	2.0	2.6	3.5	2.8	2.1	2.1	2.3	3.3	1.2	1.4	1.0	0.5	1.6	1.5	1.4	1.3	1.3	1.5	3.0	1.3	2.0
15	3.0	3.2	3.1	3.0	1.2	1.1	1.8	0.7	1.2	0.7	1.5	3.0	7.2	4.8	5.5	6.2	6.1	5.7	5.9	6.6	7.6	4.4	5.4	2.6	3.8
16	3.1	2.9	3.5	1.9	2.8	1.2	1.1	2.9	1.4	0.3	1.2	1.4	2.2	0.0	3.1	2.5	2.4	3.3	4.6	4.5	3.9	3.6	3.5	4.8	2.6
17	3.0	2.9	2.4	1.5	1.6	2.3	1.1	0.2	0.4	1.2	0.8	1.8	1.9	2.9	3.1	1.5	3.3	2.6	3.5	3.2	0.9	1.9	0.7	0.7	1.9
18	1.5	1.8	2.4	1.5	1.7	1.3	3.1	2.5	2.7	2.3	1.9	1.4	2.6	1.8	1.9	1.6	2.1	1.0	1.7	0.9	0.4	0.5	1.4	0.6	1.7
19	1.0	0.7	1.4	0.8	0.7	0.9	0.8	2.3	1.2	0.6	1.1	0.9	1.0	0.9	0.9	1.9	1.5	1.7	1.0	0.7	0.5	1.0	0.8	1.0	1.0
20	0.8	0.9	0.5	0.4	1.6	0.8	0.3	0.3	0.9	1.0	0.8	0.8	0.8	0.9	1.5	0.9	1.7	2.5	1.4	2.1	0.4	1.0	0.6	3.0	1.1
21	2.4	1.5	1.1	1.0	1.0	1.5	1.0	1.3	2.0	2.3	1.4	2.2	2.3	1.5	1.2	1.1	1.6	2.0	1.0	2.5	3.9	3.6	4.6	3.7	2.0
22	2.6	2.5	3.7	3.6	4.0	4.8	3.9	1.6	2.2	2.7	1.4	1.8	1.9	2.0	2.6	2.6	3.2	4.3	2.7	4.3	5.0	2.9	5.8	8.9	3.4
23	7.8	8.6	7.2	8.2	5.6	6.7	5.4	7.7	6.1	3.3	7.0	5.9	3.3	6.0	8.4	6.5	5.6	8.8	7.3	9.3	6.5	5.8	5.3	8.1	6.7
24	10.2	9.0	5.4	5.4	6.1	6.8	6.1	7.3	5.7	4.7	4.5	3.4	2.7	3.2	2.6	5.0	6.5	5.7	3.1	6.3	8.3	5.5	5.9	8.9	5.8
25	5.8	7.1	5.5	4.8	4.8	3.6	3.2	4.7	2.5	1.3	1.1	1.0	2.9	2.3	1.0	1.5	1.2	1.2	4.2	4.6	2.7	3.3	3.2	3.3	3.2
26	4.7	4.3	4.6	4.3	6.2	6.1	6.9	6.8	8.6	10.8	13.1	14.4	15.9	13.9	13.5	13.3	11.1	10.5	9.5	8.5	6.7	4.7	4.6	4.2	8.6
27	4.2	3.9	4.9	5.6	5.1	6.2	7.1	7.0	7.5	7.6	9.0	12.1	10.3	10.6	10.0	10.9	8.6	6.9	6.1	3.6	3.7	5.3	4.4	4.6	6.9
28	4.5	3.4	2.3	3.2	2.6	3.6	2.7	3.5	2.3	3.5	5.4	5.9	6.8	6.3	8.9	7.9	6.7	5.6	5.2	6.5	7.0	6.8	6.3	4.1	5.0
29	3.4	3.5	3.6	2.2	3.8	3.2	3.0	1.6	2.2	2.5	4.1	6.2	6.6	7.0	8.2	10.2	11.3	11.6	12.6	12.4	12.9	12.6	11.0	8.8	6.9
30	8.0	8.4	6.7	6.1	6.9	6.3	6.2	6.1	7.3	7.8	7.6	8.5	8.0	7.9	7.1	6.2	5.6	5.2	5.0	5.2	5.4	6.7	5.8	5.2	6.6
31	4.9	4.3	4.2	2.0	3.8	3.4	6.4	4.7	4.4	6.9	7.1	5.6	6.8	7.4	6.6	7.2	4.1	5.2	3.4	4.4	3.3	4.9	6.4	5.9	5.1

MONTHLY AVERAGE = 5.25

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY, 2013

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	135.	26.	95.	74.	122.	151.	105.	40.	29.	33.	13.	347.	29.	23.	28.	30.	25.	34.	30.	64.	16.	33.	107.	117.	71.
2	114.	118.	127.	105.	103.	91.	115.	120.	123.	116.	119.	124.	130.	131.	134.	132.	123.	126.	122.	124.	126.	123.	118.	117.	120.
3	124.	116.	125.	114.	121.	119.	123.	130.	123.	126.	134.	139.	136.	136.	137.	144.	140.	131.	131.	117.	108.	132.	135.	140.	128.
4	150.	145.	142.	139.	152.	147.	150.	149.	145.	157.	150.	146.	130.	113.	221.	186.	112.	60.	49.	66.	170.	154.	142.	117.	137.
5	135.	149.	149.	142.	146.	148.	157.	159.	129.	119.	106.	126.	128.	128.	128.	136.	119.	175.	174.	150.	175.	214.	142.	137.	145.
6	163.	131.	133.	136.	139.	147.	158.	154.	175.	137.	140.	143.	162.	150.	130.	135.	137.	145.	182.	165.	135.	122.	132.	137.	145.
7	143.	139.	126.	120.	145.	134.	148.	155.	184.	176.	185.	191.	200.	211.	209.	198.	208.	212.	210.	195.	183.	179.	170.	179.	175.
8	181.	188.	177.	147.	164.	117.	121.	108.	74.	87.	134.	149.	150.	132.	141.	158.	156.	180.	198.	192.	190.	194.	201.	229.	157.
9	259.	230.	236.	266.	233.	164.	195.	175.	118.	115.	112.	126.	134.	167.	182.	178.	176.	164.	170.	175.	175.	158.	182.	184.	178.
10	185.	177.	192.	186.	182.	133.	154.	172.	189.	189.	193.	169.	186.	57.	270.	139.	246.	260.	276.	357.	191.	182.	128.	146.	190.
11	201.	264.	167.	160.	109.	137.	127.	112.	354.	92.	20.	320.	296.	93.	133.	157.	176.	38.	42.	51.	93.	118.	102.	64.	143.
12	132.	90.	32.	94.	45.	52.	94.	186.	324.	64.	193.	214.	10.	335.	0.	10.	4.	16.	28.	70.	44.	31.	83.	75.	93.
13	133.	194.	161.	102.	78.	115.	73.	159.	176.	145.	147.	197.	238.	288.	272.	279.	51.	16.	39.	45.	129.	159.	149.	162.	146.
14	135.	349.	45.	299.	177.	219.	177.	167.	114.	145.	188.	188.	106.	177.	160.	116.	120.	31.	31.	350.	350.	18.	20.	325.	167.
15	18.	33.	37.	61.	55.	322.	51.	187.	193.	116.	10.	18.	33.	23.	25.	19.	17.	19.	26.	31.	39.	39.	42.	18.	60.
16	32.	46.	38.	52.	56.	65.	58.	31.	311.	109.	172.	255.	29.	0.	29.	17.	13.	21.	31.	52.	31.	39.	24.	30.	64.
17	23.	46.	31.	148.	336.	16.	84.	9.	59.	178.	212.	253.	9.	308.	25.	312.	332.	6.	124.	187.	221.	303.	224.	150.	150.
18	184.	144.	157.	220.	332.	353.	352.	179.	233.	7.	136.	234.	337.	43.	71.	242.	355.	18.	11.	6.	141.	80.	37.	308.	174.
19	321.	62.	346.	34.	324.	335.	37.	59.	29.	22.	78.	35.	140.	66.	41.	1.	37.	19.	17.	293.	338.	22.	21.	69.	114.
20	101.	35.	205.	119.	57.	105.	79.	69.	60.	201.	192.	238.	82.	91.	189.	226.	210.	194.	200.	351.	288.	85.	223.	209.	159.
21	182.	155.	123.	124.	242.	198.	218.	134.	284.	193.	211.	239.	290.	343.	7.	264.	285.	124.	278.	256.	151.	86.	122.	303.	200.
22	352.	306.	1.	355.	19.	341.	346.	67.	148.	327.	71.	274.	308.	35.	269.	103.	205.	123.	269.	112.	124.	123.	166.	180.	193.
23	178.	145.	137.	161.	135.	124.	176.	128.	157.	177.	134.	164.	139.	151.	146.	166.	164.	154.	174.	181.	177.	181.	170.	172.	158.
24	184.	175.	150.	137.	147.	152.	140.	130.	132.	146.	145.	140.	192.	235.	135.	151.	266.	10.	42.	126.	127.	128.	113.	147.	144.
25	144.	138.	139.	142.	147.	140.	168.	210.	206.	170.	140.	186.	112.	46.	24.	205.	224.	213.	122.	218.	204.	182.	159.	190.	159.
26	191.	139.	137.	151.	160.	125.	152.	170.	167.	189.	200.	199.	212.	221.	228.	216.	219.	213.	194.	192.	180.	169.	157.	140.	180.
27	138.	145.	157.	151.	149.	176.	180.	168.	162.	162.	187.	190.	193.	188.	184.	181.	170.	148.	171.	162.	149.	132.	130.	133.	163.
28	150.	150.	119.	129.	114.	120.	131.	156.	140.	140.	177.	190.	203.	205.	196.	198.	187.	195.	208.	195.	190.	186.	178.	179.	168.
29	152.	139.	156.	107.	126.	146.	139.	136.	148.	159.	162.	173.	183.	188.	190.	184.	187.	174.	178.	188.	192.	186.	178.	158.	164.
30	146.	150.	148.	140.	141.	137.	146.	166.	168.	178.	176.	182.	182.	182.	172.	154.	150.	161.	175.	177.	188.	197.	196.	189.	167.
31	189.	178.	161.	147.	195.	159.	182.	190.	160.	153.	167.	149.	141.	143.	147.	145.	152.	176.	180.	190.	178.	180.	191.	212.	169.

MONTHLY AVERAGE = 147.79

SIGMA THETA FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY, 2013

IN DEGREES

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	33.8	13.1	31.3	29.8	25.9	11.6	8.1	8.9	9.8	14.8	17.9	17.0	11.3	12.6	9.3	8.6	10.7	14.3	24.4	34.2	14.1	17.8	12.0	11.5	16.8
2	13.3	14.9	10.4	11.0	13.7	37.6	11.4	9.3	11.0	11.1	13.0	12.1	12.2	13.8	12.5	12.2	11.8	12.0	11.5	11.8	11.0	11.5	11.2	13.5	13.1
3	13.6	17.6	14.6	12.6	11.1	15.1	12.3	13.4	11.6	12.1	12.1	14.6	12.6	13.0	14.8	15.0	11.9	11.4	18.5	14.6	25.8	11.6	13.3	10.1	13.9
4	15.5	11.5	17.7	10.9	8.4	9.5	13.4	17.2	22.3	16.1	14.1	14.4	13.9	20.1	34.5	12.4	13.3	10.7	17.2	22.9	17.8	15.3	15.5	19.1	16.0
5	10.0	12.6	16.0	16.1	15.8	14.3	11.6	12.8	12.0	13.7	26.3	19.0	9.7	11.1	13.2	17.0	24.3	15.4	16.3	11.7	22.9	15.9	34.3	10.8	15.9
6	16.4	9.0	10.6	7.2	9.2	8.6	11.1	11.5	14.6	9.8	10.3	9.4	12.2	10.2	11.4	7.8	10.2	10.9	15.9	11.1	10.4	9.8	14.2	12.1	11.0
7	11.5	11.1	10.0	9.3	10.7	8.6	9.6	13.8	11.7	9.4	9.4	7.8	7.4	9.3	11.0	15.3	10.7	9.6	10.6	8.9	8.4	8.8	9.1	10.4	10.1
8	9.2	7.5	10.2	10.9	34.1	43.0	11.9	10.6	19.3	19.2	9.9	8.6	7.8	9.9	8.3	10.1	7.0	9.7	7.9	7.6	7.7	8.2	7.4	9.8	12.3
9	6.8	8.4	15.9	20.0	16.3	15.4	13.7	10.9	10.9	9.3	8.0	11.3	9.5	12.1	11.3	10.8	11.8	11.9	13.9	8.4	10.8	25.0	18.7	9.5	12.5
10	8.4	17.8	9.4	7.6	14.3	22.7	18.0	13.6	13.1	10.1	10.4	13.0	45.0	18.0	20.4	27.7	12.5	23.8	19.3	32.7	35.1	25.4	13.5	20.0	18.8
11	45.8	32.4	27.4	31.6	24.4	19.2	10.1	9.7	7.1	34.8	16.5	17.2	33.5	41.5	12.3	15.0	15.4	17.9	4.0	6.4	17.1	8.9	7.8	14.1	19.6
12	13.5	9.4	5.5	17.7	5.5	14.4	18.4	7.2	2.9	11.6	21.6	25.4	35.8	17.2	17.5	12.7	9.0	8.8	9.5	15.5	10.3	10.0	9.4	12.7	13.4
13	20.6	19.5	11.9	7.0	8.9	20.1	14.4	14.1	13.9	15.5	37.8	18.1	28.3	28.6	12.9	14.6	11.6	10.1	39.8	24.0	23.5	15.5	37.4	18.9	19.5
14	28.2	14.2	12.0	14.0	13.6	15.6	15.2	15.3	16.5	12.6	18.3	12.9	22.2	32.6	35.7	11.5	10.8	19.1	6.0	12.8	25.2	9.6	20.7	24.7	17.5
15	11.5	13.0	7.5	9.0	11.4	15.8	16.1	16.4	7.7	32.0	43.3	23.4	8.4	15.0	10.4	9.7	9.1	7.5	7.6	7.0	6.5	8.1	7.7	19.6	13.5
16	17.8	9.2	11.5	17.2	16.9	33.8	15.6	13.7	7.5	11.4	25.1	28.5	18.9	0.0	9.6	11.9	19.8	8.6	8.5	6.4	8.1	7.0	9.3	9.3	13.6
17	13.2	13.9	17.1	24.2	32.9	31.9	32.6	2.4	21.2	27.9	37.1	38.8	33.9	46.1	13.7	29.7	13.0	9.8	16.7	9.1	18.0	27.1	25.7	7.2	22.6
18	11.5	24.4	12.6	35.5	14.7	29.8	12.9	30.3	14.7	13.7	16.4	26.3	29.1	22.2	41.2	25.5	36.2	36.9	20.3	24.1	13.1	22.2	31.2	21.4	23.6
19	38.3	17.9	19.8	19.9	37.5	36.4	22.2	22.1	25.6	34.2	31.7	31.3	25.9	20.5	25.4	20.4	16.6	24.7	21.9	29.0	24.3	23.6	20.6	42.0	26.3
20	52.1	22.8	26.8	35.9	16.4	14.9	12.0	16.1	20.7	13.0	14.3	43.2	33.4	31.0	24.7	34.4	17.1	10.1	8.7	15.9	21.8	28.3	21.5	8.0	22.6
21	21.6	34.9	18.8	23.6	25.7	31.9	47.4	28.0	47.0	19.5	12.4	12.0	21.4	36.1	51.2	44.6	25.0	20.9	34.9	16.5	23.6	25.0	21.1	26.9	27.9
22	34.6	22.0	14.6	17.3	10.7	14.7	13.1	39.8	21.5	28.3	46.8	32.8	59.6	45.7	58.0	40.5	29.0	12.2	31.8	24.3	12.4	20.7	14.6	8.5	27.2
23	18.0	23.5	38.3	27.0	26.1	18.1	24.3	29.0	36.4	25.7	15.7	21.0	21.3	23.8	13.4	14.4	20.2	9.0	11.8	7.5	11.2	16.2	13.8	16.9	20.1
24	7.9	7.6	8.8	7.5	7.5	4.6	6.1	8.9	8.9	10.4	18.1	15.4	23.9	12.7	21.1	18.8	13.0	19.9	13.6	12.9	17.4	16.3	15.6	11.5	12.8
25	15.0	9.0	12.4	16.6	10.7	9.0	15.6	10.6	23.1	41.8	30.3	32.5	55.8	17.3	15.0	34.8	14.3	24.9	14.2	33.6	39.3	20.0	15.0	15.9	21.9
26	13.5	12.4	8.3	17.2	13.0	13.5	16.8	18.9	9.1	7.6	8.7	8.9	9.9	10.4	10.1	8.3	9.2	8.5	7.9	6.6	7.4	8.9	11.3	8.6	10.6
27	9.3	9.3	12.2	6.6	8.9	9.6	7.9	8.7	8.6	10.9	10.1	8.9	9.4	9.5	9.4	9.3	10.5	9.8	10.8	10.1	9.8	9.6	8.4	8.0	9.4
28	11.8	16.5	12.2	9.1	14.2	7.9	12.1	15.0	16.7	11.3	8.4	8.7	9.6	10.9	10.2	10.5	12.4	11.2	12.6	11.2	11.2	10.1	10.8	31.0	12.3
29	19.3	14.4	38.8	20.8	22.0	18.2	13.9	11.7	10.5	14.1	13.5	9.8	9.9	8.6	8.5	8.9	7.6	9.1	8.9	9.3	8.0	8.4	8.9	9.5	13.0
30	10.6	9.0	9.2	8.6	8.6	9.9	9.7	11.0	11.9	9.3	10.1	9.1	8.1	7.6	9.2	8.9	7.9	10.1	10.9	9.8	8.9	8.9	7.7	7.4	9.3
31	8.2	7.2	14.3	20.1	20.3	15.8	8.6	11.4	12.1	8.0	11.6	9.2	8.5	10.5	9.5	8.9	12.1	14.4	17.7	6.0	10.2	6.3	7.3	7.3	11.1

MONTHLY AVERAGE = 16.40

MAX. 10 SEC GUST FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY, 2013

IN MILES PER HOUR

DAY	HOUR ENDING																								MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	5.5	4.8	5.8	4.2	3.4	8.1	9.4	9.6	9.0	5.4	5.2	5.1	3.9	3.9	11.7	12.7	8.5	11.3	8.1	5.6	6.4	10.5	16.2	16.3	16.3
2	10.2	16.5	19.0	15.4	11.7	6.9	14.4	10.1	15.7	10.2	13.5	20.1	22.7	18.7	21.7	21.9	24.2	19.8	24.2	20.4	21.9	24.4	22.2	18.8	24.4
3	21.5	19.4	18.6	18.3	15.6	15.1	21.1	27.4	29.4	31.1	29.6	24.2	23.9	22.6	20.6	25.2	20.5	20.4	23.8	20.7	22.7	22.4	22.1	17.8	31.1
4	14.8	14.4	12.9	12.7	12.2	10.3	8.5	9.1	10.0	9.6	11.4	10.9	8.1	7.5	5.7	4.9	5.3	11.6	11.0	7.1	8.6	9.2	10.4	12.6	14.8
5	16.2	19.5	18.8	17.6	15.0	21.2	14.1	15.9	19.9	20.6	22.0	20.4	23.7	22.0	17.1	18.5	12.9	14.6	11.5	11.4	11.6	10.2	9.4	10.1	23.7
6	9.9	11.9	9.9	9.5	8.4	9.4	8.6	8.4	7.7	10.8	10.4	8.5	10.9	11.0	7.4	8.6	7.2	7.0	13.5	8.9	14.3	13.2	10.7	8.0	14.3
7	12.6	13.9	14.3	13.6	13.2	12.6	14.8	13.0	22.6	27.1	31.0	27.6	31.1	32.7	30.5	23.9	24.6	21.5	22.2	22.1	17.8	17.0	17.7	16.1	32.7
8	14.3	15.2	9.5	7.2	9.8	10.6	11.2	11.2	7.5	19.5	19.2	17.7	16.7	12.6	14.6	18.6	16.6	28.4	37.0	29.5	26.2	29.9	22.6	19.6	37.0
9	16.9	19.8	13.3	19.8	15.1	12.7	17.0	13.9	10.4	10.7	10.8	11.8	12.7	12.2	16.1	19.2	18.1	14.6	11.6	12.2	9.0	10.1	10.0	9.2	19.8
10	9.5	6.7	9.0	5.7	7.5	3.9	3.3	5.4	5.7	6.0	6.3	4.7	4.1	2.8	4.4	3.1	2.6	4.4	6.4	4.8	4.2	5.4	4.8	5.0	9.5
11	5.5	4.5	3.7	3.5	3.5	5.1	6.2	5.2	3.2	3.7	4.0	5.0	6.0	6.3	7.9	7.0	4.0	4.3	4.5	3.7	3.9	2.7	2.0	4.1	7.9
12	3.0	2.0	2.2	2.0	3.6	3.0	1.7	2.0	1.6	1.2	3.0	3.5	5.2	9.7	11.7	8.5	10.2	9.3	6.9	4.1	3.7	4.1	2.9	2.6	11.7
13	3.9	4.1	3.7	3.0	4.2	1.9	2.6	2.7	4.2	4.7	3.3	4.9	6.2	5.7	5.5	5.3	3.4	3.2	3.6	3.4	3.9	5.1	3.8	4.0	6.2
14	7.7	4.5	6.5	4.4	3.5	4.3	5.5	5.3	3.9	3.7	4.9	5.4	4.6	3.2	3.3	2.0	2.9	3.2	3.4	3.6	3.2	2.7	4.7	3.2	7.7
15	4.8	6.5	5.8	5.3	4.7	2.2	5.3	5.1	2.5	2.6	3.6	7.8	12.8	8.4	10.4	10.8	10.8	8.5	9.3	10.7	11.0	8.0	9.4	4.9	12.8
16	6.5	5.6	5.2	4.8	4.7	4.3	2.5	4.4	3.6	1.9	3.5	9.9	4.3	0.0	5.1	5.3	4.3	5.5	8.4	6.5	5.7	6.5	5.2	9.7	9.9
17	5.7	6.0	5.6	3.4	3.7	4.6	3.0	1.6	2.5	2.9	3.8	3.5	3.9	6.6	5.8	2.4	5.4	6.1	4.8	5.9	3.3	3.9	2.6	2.2	6.6
18	3.3	4.5	4.8	5.8	3.9	3.7	4.9	5.0	5.6	4.8	4.8	4.3	5.2	4.9	5.2	3.9	5.9	3.9	3.7	3.3	3.4	2.3	3.8	2.9	5.9
19	3.4	2.7	3.2	3.3	2.5	2.9	3.7	5.0	3.6	2.3	3.0	3.0	3.8	2.5	2.5	3.5	4.2	4.7	2.7	2.9	2.1	2.8	4.1	4.0	5.0
20	3.2	2.6	2.9	1.8	4.4	3.6	2.1	1.4	2.8	3.3	3.0	2.5	3.4	3.0	3.4	2.9	2.8	3.8	4.4	4.6	2.0	3.4	3.1	4.4	4.6
21	4.3	4.0	2.2	2.3	3.8	3.1	3.0	3.2	4.4	4.1	4.3	4.2	4.2	3.9	3.4	3.2	4.0	4.3	3.6	7.7	6.5	8.0	8.2	7.8	8.2
22	6.2	5.3	6.1	6.7	8.4	8.6	7.8	4.3	4.3	4.7	4.1	4.6	4.0	3.6	6.3	9.8	7.3	8.1	6.0	9.3	9.2	4.9	12.4	12.2	12.4
23	14.0	14.5	14.1	16.5	13.3	13.4	9.3	15.9	16.5	7.7	10.8	11.4	8.2	10.4	13.0	10.3	11.4	15.0	12.7	14.2	9.9	10.5	9.9	12.6	16.5
24	15.1	13.0	9.5	8.5	8.8	8.4	9.7	11.3	9.5	7.7	8.2	7.1	4.5	5.9	5.3	9.0	12.9	9.4	6.1	11.8	15.1	12.7	12.8	14.6	15.1
25	9.2	10.4	8.8	8.7	7.5	6.5	6.1	9.9	6.9	4.7	3.2	3.6	5.3	5.0	3.7	5.4	3.1	2.6	8.1	8.2	6.0	4.8	5.4	6.0	10.4
26	6.8	6.5	6.9	9.1	12.0	10.4	12.3	11.4	16.6	16.0	21.7	26.0	26.3	23.6	22.4	20.4	15.9	15.8	14.6	12.9	9.2	7.4	7.7	6.8	26.3
27	6.6	5.8	7.5	7.6	7.3	11.2	9.6	10.2	11.7	10.6	17.0	17.8	16.1	18.4	16.0	16.0	14.3	11.6	9.0	7.2	7.6	8.3	6.5	7.7	18.4
28	7.4	6.3	4.4	5.0	4.9	5.1	5.3	8.6	6.0	5.9	9.4	8.6	11.0	10.6	14.9	12.4	10.2	9.6	7.4	11.0	10.1	10.8	10.2	8.6	14.9
29	7.4	5.6	8.8	5.7	6.2	6.0	6.7	4.3	5.2	5.6	8.1	8.9	11.0	9.7	13.6	15.4	16.2	17.7	20.2	19.0	21.2	17.6	17.8	12.7	21.2
30	12.4	11.9	11.6	9.6	11.6	10.1	9.8	11.5	11.7	12.2	11.8	11.9	10.8	10.6	10.5	9.0	9.5	8.0	9.1	8.2	8.6	9.2	9.9	7.4	12.4
31	7.8	6.3	7.1	5.8	8.4	9.1	9.3	9.2	7.5	10.1	12.1	8.4	11.1	12.7	11.5	11.5	8.7	10.5	7.3	6.5	5.8	6.9	9.1	10.4	12.7

MONTHLY MAXIMUM = 37.04

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY, 2013

IN DEGREES C

DAY	HOUR ENDING																								AVG
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	-0.7	-1.3	-1.8	-1.7	-2.0	-1.5	-1.6	-2.9	-2.1	-1.0	0.5	2.2	2.5	3.3	3.0	2.3	1.6	1.1	0.8	0.8	0.0	0.1	2.2	3.0	0.3
2	2.1	2.3	2.7	1.9	2.1	2.4	2.1	1.6	2.0	2.9	4.2	4.9	5.2	5.8	5.5	4.7	3.7	2.5	2.2	2.0	1.9	1.4	1.7	1.4	2.9
3	1.7	1.2	1.3	0.9	0.9	0.7	0.8	0.9	1.4	2.4	3.5	4.5	4.9	5.3	5.0	3.8	3.1	2.9	2.6	1.5	1.8	3.0	2.5	2.6	2.5
4	2.6	2.6	2.9	3.4	3.6	4.0	4.4	4.1	4.8	5.3	5.8	6.3	7.0	7.8	8.1	7.2	6.4	5.7	5.1	4.4	4.6	4.8	5.6	5.8	5.1
5	5.9	6.1	6.0	5.9	5.9	5.7	5.6	5.2	5.2	5.1	4.7	3.8	4.3	4.3	5.4	5.8	5.8	5.1	4.9	5.2	5.4	4.0	3.2	2.9	5.1
6	2.5	2.9	3.2	3.6	3.8	4.0	3.7	3.4	3.2	4.5	5.0	5.5	6.0	6.2	6.2	6.2	6.1	5.9	5.4	4.7	4.2	3.5	3.9	4.2	4.5
7	4.5	4.8	5.6	6.0	6.0	6.1	6.6	6.7	7.6	7.8	7.9	8.0	8.2	8.5	8.5	8.4	8.1	7.8	7.6	7.3	7.1	7.0	6.9	6.8	7.1
8	6.8	6.7	6.5	6.6	6.6	5.7	4.7	4.3	4.0	4.2	4.8	6.0	7.4	8.2	8.5	9.3	9.5	9.9	11.0	11.1	11.3	11.1	11.1	10.9	7.8
9	9.1	8.8	8.5	6.3	5.4	4.4	3.6	1.8	0.1	0.1	0.2	0.4	1.6	2.5	3.4	3.5	3.3	2.8	2.7	2.5	2.2	2.1	2.0	2.0	3.3
10	1.8	1.7	1.4	1.2	1.0	0.8	0.8	0.6	0.8	1.0	1.4	0.8	0.8	0.5	0.3	0.2	0.3	0.5	0.5	0.5	-0.7	-1.1	-0.7	-0.9	0.6
11	-1.1	-1.4	-2.0	-2.2	-2.4	-2.7	-2.7	-2.7	-2.6	-1.9	-1.1	-0.8	-0.2	0.8	0.8	0.6	0.0	-1.4	-2.0	-2.1	-2.3	-2.6	-2.3	-2.6	-1.5
12	-2.6	-2.7	-3.3	-3.1	-3.5	-3.8	-3.7	-3.4	-3.5	-2.0	-1.0	-0.1	0.6	0.8	0.4	0.0	-1.1	-1.8	-2.3	-3.0	-3.2	-3.2	-3.3	-3.3	-2.2
13	-3.4	-4.1	-4.4	-3.7	-4.3	-4.4	-4.8	-4.8	-5.0	-3.0	-1.8	-1.1	0.3	0.3	0.1	0.0	-0.6	-1.1	-1.7	-2.2	-1.6	-2.1	-1.9	-1.7	-2.4
14	-1.5	-1.5	-1.6	-1.6	-1.8	-1.8	-2.0	-2.0	-1.8	-1.4	-0.9	-0.5	0.2	0.8	1.2	1.3	1.1	0.9	0.5	0.6	0.6	0.4	0.0	0.2	-0.4
15	0.1	0.0	-0.3	-0.3	0.1	0.0	0.0	-0.3	-0.1	1.7	2.8	3.6	4.0	4.6	4.6	4.1	3.3	2.4	1.3	0.3	0.0	-0.3	-0.6	-0.7	1.3
16	-0.8	-1.7	-1.9	-1.2	-1.7	-1.8	-1.3	-1.9	-1.2	0.0	1.5	6.6	25.7*****	4.3	3.8	3.0	2.0	1.2	0.4	0.1	-0.1	0.1	-0.9	*****	
17	-1.1	-1.3	-0.6	-0.4	-0.1	-0.7	-1.5	-1.6	0.1	1.1	3.1	3.2	4.1	5.3	3.6	3.9	2.2	0.5	1.0	1.4	1.6	1.3	0.1	-0.6	1.0
18	-1.0	0.4	2.5	1.8	0.4	-0.1	-1.6	-2.8	-2.2	-0.4	0.0	1.6	2.7	1.8	0.7	0.6	-0.1	-0.8	-0.9	-1.0	-1.1	-1.7	-1.9	-2.1	-0.2
19	-2.3	-2.4	-2.5	-2.8	-2.9	-3.2	-3.0	-2.9	-3.0	-2.8	-2.2	-1.6	-1.0	-0.7	-0.6	-0.9	-1.3	-1.8	-1.9	-2.1	-2.2	-2.4	-2.4	-2.5	-2.1
20	-2.7	-2.9	-3.1	-3.5	-3.5	-3.7	-3.7	-3.8	-3.6	-3.0	-2.5	-1.6	-0.8	-0.4	-0.2	-0.4	-0.7	-1.1	-1.5	-1.8	-2.1	-1.9	-2.2	-2.8	-2.2
21	-3.0	-3.1	-3.4	-3.3	-3.8	-4.6	-5.0	-4.9	-4.9	-4.2	-2.7	-2.5	-1.2	-0.5	-0.2	-0.3	-0.9	-1.4	-2.0	-2.3	-2.4	-2.6	-1.5	-2.0	-2.6
22	-2.1	-1.5	-1.9	-3.0	-3.5	-2.7	-3.0	-3.2	-2.6	-0.7	-0.6	0.8	1.3	1.6	2.1	2.7	3.2	4.0	4.1	4.6	6.6	5.2	6.3	6.2	1.0
23	4.5	5.8	5.6	5.7	6.3	6.2	5.6	5.5	5.4	5.5	6.7	6.4	6.7	6.2	5.1	3.8	3.2	3.9	4.3	4.6	4.6	4.7	4.9	4.8	5.3
24	4.4	3.8	3.2	3.1	2.9	3.0	3.2	3.2	3.3	4.7	5.2	5.8	6.3	6.3	6.4	7.0	6.1	4.7	4.1	4.3	4.6	4.8	5.1	5.5	4.6
25	5.5	5.6	6.0	6.2	6.2	6.6	7.1	6.9	6.9	7.2	7.4	7.8	8.1	8.2	8.5	9.0	9.0	7.9	7.1	6.5	6.0	5.4	5.1	4.7	6.9
26	3.9	3.7	3.7	3.4	3.3	3.7	3.9	3.4	4.0	4.5	5.2	6.0	6.8	6.8	6.6	6.4	6.0	5.2	4.5	4.1	3.7	3.5	3.4	3.4	4.5
27	3.3	3.1	3.1	3.1	3.0	3.0	3.0	3.0	3.1	3.4	3.9	3.4	3.2	2.9	2.9	2.7	2.6	2.5	2.6	2.6	2.5	2.5	2.4	2.3	2.9
28	2.4	2.5	2.6	2.6	2.4	2.5	2.7	2.9	2.8	3.0	3.4	3.6	3.8	4.0	4.0	4.0	4.1	4.1	4.2	4.1	4.0	4.0	4.0	3.9	3.4
29	3.9	4.0	4.2	4.2	4.5	4.8	5.0	5.1	5.3	5.7	6.0	6.2	6.4	6.5	6.5	6.5	6.5	6.5	6.5	6.6	6.4	6.0	5.8	5.6	5.6
30	5.8	5.8	6.0	6.1	6.2	6.4	6.5	6.7	6.8	7.0	7.1	7.3	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.5	7.4	7.3	7.1	7.0
31	7.1	7.1	7.1	7.0	6.9	6.9	7.0	7.0	7.0	7.6	7.7	7.3	7.4	7.7	7.8	7.6	7.6	7.6	7.5	7.3	7.1	7.1	7.1	7.0	7.3

MONTHLY AVERAGE = -6.91

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY, 2013

IN INCHES

DAY	HOUR ENDING																								TOT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	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
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	0.01	0.05	0.00	0.01	0.01	0.01	0.09
4	0.01	0.01	0.02	0.02	0.02	0.01	0.04	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	0.14
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.08
6	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.05	0.01	0.03	0.05	0.21
7	0.06	0.09	0.06	0.01	0.00	0.01	0.04	0.00	0.00	0.02	0.03	0.02	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
8	0.00	0.00	0.00	0.00	0.02	0.03	0.02	0.01	0.04	0.03	0.01	0.03	0.06	0.07	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.42
9	0.04	0.05	0.07	0.03	0.09	0.12	0.15	0.11	0.00	0.01	0.00	0.00	0.01	0.00	0.09	0.11	0.06	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.98
10	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	0.02	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.07
11	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	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
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	0.01	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
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
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	0.02	0.06	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.04	0.01	0.00	0.01	0.00	0.14
25	0.05	0.06	0.05	0.06	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.25
26	0.00	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.06
27	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.04	0.05	0.04	0.05	0.04	0.03	0.01	0.00	0.00	0.02	0.02	0.03	0.00	0.37
28	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.04	0.03	0.04	0.07	0.08	0.04	0.07	0.03	0.04	0.04	0.06	0.08	0.68
29	0.05	0.05	0.03	0.01	0.02	0.01	0.01	0.01	0.00	0.01	0.01	0.03	0.03	0.04	0.05	0.03	0.01	0.02	0.01	0.00	0.06	0.06	0.10	0.11	0.76
30	0.02	0.02	0.07	0.06	0.02	0.01	0.02	0.00	0.01	0.02	0.03	0.01	0.03	0.02	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.00	0.02	0.02	0.47
31	0.02	0.03	0.07	0.04	0.06	0.01	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01	0.01	0.33
MONTHLY TOTAL =					6.26																				

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF JANUARY, 2013

IN MPH/DIR

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

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY, 2013

IN MILES PER HOUR

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	4.7	3.1	4.9	2.9	1.9	1.8	1.0	1.7	3.6	4.2	2.7	4.0	4.2	5.4	6.8	8.2	9.6	8.3	8.2	9.2	10.4	11.1	8.2	5.9	5.5
2	5.7	4.0	2.7	1.4	1.4	1.7	2.1	4.1	0.9	1.5	2.0	1.4	1.6	2.2	3.6	4.6	4.1	3.7	3.8	2.6	3.4	4.1	3.8	4.4	2.9
3	2.9	6.3	3.3	3.1	4.3	5.4	5.7	6.0	4.2	3.0	4.3	3.5	3.7	3.0	4.8	5.0	4.6	4.5	5.4	3.4	4.9	5.4	4.3	5.3	4.4
4	4.6	4.8	5.9	5.4	6.0	5.2	5.0	5.1	4.0	3.6	4.2	1.6	1.3	2.7	2.9	3.4	5.7	3.8	6.1	4.1	5.5	7.0	2.8	6.3	4.5
5	6.1	4.5	7.7	4.9	5.7	6.5	9.4	9.2	9.8	8.4	11.3	12.0	9.9	10.1	4.9	10.6	5.0	6.6	10.2	11.0	11.1	10.8	10.8	10.6	8.6
6	10.7	9.1	10.8	11.2	8.1	8.4	6.6	8.2	6.5	6.0	6.0	7.7	8.5	10.0	7.7	9.2	8.4	9.2	6.6	4.1	9.7	13.4	13.6	8.9	8.7
7	9.3	17.1	10.0	9.7	9.9	9.9	6.3	6.2	5.0	4.2	5.2	6.5	5.3	3.4	4.4	3.9	4.4	4.0	3.2	2.8	3.0	1.8	2.7	2.5	5.9
8	3.8	3.7	2.8	3.1	0.5	1.0	1.6	3.8	1.7	1.3	1.6	1.9	2.0	3.6	5.2	3.4	4.0	3.2	3.2	2.0	1.8	1.5	0.7	1.1	2.4
9	0.6	1.5	2.1	0.8	0.0	0.2	1.1	2.9	1.5	2.2	1.8	2.7	3.6	3.3	3.5	3.0	3.6	2.5	0.9	1.0	1.0	1.3	3.0	5.1	2.1
10	3.2	1.6	3.6	6.2	4.0	3.1	3.1	2.9	2.4	1.6	1.4	2.0	5.4	5.5	5.7	3.2	2.5	2.7	5.0	3.9	1.8	0.7	2.3	2.8	3.2
11	3.1	1.9	1.3	1.8	1.3	1.3	1.9	3.0	3.4	2.9	3.6	3.8	5.3	4.3	4.6	3.0	4.5	3.6	4.2	3.0	3.8	3.8	2.6	2.9	3.1
12	3.5	5.6	6.0	5.0	5.0	5.9	6.3	6.8	7.6	7.1	7.6	6.3	7.1	7.3	8.4	10.9	12.6	12.9	15.0	13.9	13.6	13.9	16.4	15.4	9.2
13	14.4	13.6	12.4	8.2	8.5	10.6	6.9	7.3	8.8	8.4	9.6	8.8	7.6	5.1	2.5	3.1	3.2	1.4	2.7	3.4	5.4	6.6	5.4	5.1	7.0
14	5.3	3.9	5.7	4.7	4.8	2.9	2.8	4.7	5.1	6.1	6.5	5.4	4.4	3.3	4.0	3.6	1.7	1.9	2.9	2.9	4.3	4.1	4.5	4.7	4.2
15	3.8	3.7	4.9	3.7	3.5	2.2	2.9	4.3	3.9	1.7	2.5	1.8	2.4	3.0	2.3	1.9	2.0	2.6	3.3	3.0	6.0	3.7	3.9	6.0	3.3
16	3.8	7.1	7.3	6.8	8.3	7.5	9.1	8.7	9.1	11.0	12.8	15.2	16.8	18.6	17.0	18.7	18.5	9.7	10.6	13.0	10.8	9.6	7.7	7.9	11.1
17	7.8	7.5	8.5	6.5	6.7	6.8	7.4	7.4	7.6	7.4	9.4	8.6	9.2	8.5	4.2	3.0	4.5	2.7	1.6	3.0	2.6	1.3	1.7	2.7	5.7
18	5.1	3.8	0.9	2.2	2.7	3.3	2.2	2.9	3.9	4.0	3.1	3.1	4.3	5.8	6.8	6.8	4.4	3.0	3.6	3.8	3.5	3.8	3.1	4.0	3.8
19	2.8	4.1	3.0	2.8	3.3	2.7	3.0	3.7	2.9	2.0	2.5	5.8	9.7	7.0	9.3	8.5	8.5	8.1	6.1	3.5	2.5	0.6	0.9	1.0	4.3
20	2.6	3.1	2.2	3.6	5.5	4.1	3.9	3.3	3.4	2.1	3.1	6.2	8.7	7.7	4.8	3.4	3.2	3.2	3.8	2.8	1.3	1.4	2.0	1.9	3.6
21	3.5	4.1	4.1	5.6	9.4	11.1	13.9	13.5	12.4	11.9	15.0	13.0	9.0	8.3	6.0	9.7	6.6	8.8	12.6	12.3	12.3	10.7	10.0	11.1	9.8
22	10.4	11.3	11.9	10.5	10.7	10.0	10.4	8.6	11.4	15.7	16.1	17.2	18.4	20.5	18.4	19.5	18.4	17.1	16.5	15.3	13.7	11.0	10.8	12.9	14.0
23	13.3	13.9	10.3	8.6	6.5	6.5	6.8	5.9	8.5	8.2	6.5	3.8	5.1	6.2	4.0	3.2	8.3	6.9	4.6	4.7	2.3	6.0	6.9	7.5	6.9
24	7.2	9.1	9.4	9.2	8.6	7.2	7.3	8.1	6.3	7.9	8.7	11.5	10.6	8.5	6.5	4.3	6.0	6.8	8.2	6.8	8.0	7.2	7.7	9.6	7.9
25	8.6	7.1	10.3	19.1	18.5	16.7	19.3	18.9	19.2	14.7	14.4	12.6	16.1	18.1	20.1	21.0	19.8	13.6	9.4	8.3	8.1	7.8	7.4	6.7	14.0
26	7.4	7.0	7.2	4.9	4.6	4.4	2.9	5.0	6.6	7.3	8.3	7.5	7.7	9.5	9.5	7.4	7.3	7.2	6.7	7.2	6.9	4.8	7.3	7.8	6.8
27	6.1	5.2	1.8	5.0	4.6	3.7	3.7	3.4	3.9	4.8	4.6	4.7	4.8	4.1	2.6	2.1	3.9	3.0	4.1	5.2	4.0	4.9	5.9	5.1	4.2
28	3.6	2.8	4.6	6.5	6.4	5.1	5.1	4.6	10.1	10.7	11.3	9.0	10.0	7.8	6.7	6.3	6.2	6.8	6.8	6.0	6.5	7.1	8.6	7.0	6.9

MONTHLY AVERAGE = 6.21

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY, 2013

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	220.	190.	214.	192.	158.	168.	175.	36.	36.	46.	318.	9.	40.	28.	21.	10.	13.	35.	28.	25.	27.	30.	39.	25.	87.
2	31.	342.	148.	321.	4.	21.	2.	343.	103.	216.	216.	212.	284.	299.	178.	158.	140.	130.	97.	349.	30.	199.	145.	126.	171.
3	67.	188.	352.	130.	152.	128.	147.	156.	133.	168.	148.	171.	162.	180.	162.	168.	145.	170.	186.	163.	155.	171.	176.	173.	165.
4	177.	178.	146.	143.	134.	133.	131.	150.	155.	142.	138.	88.	6.	36.	30.	37.	310.	253.	126.	84.	40.	267.	128.	148.	132.
5	161.	165.	144.	156.	187.	144.	134.	128.	163.	184.	191.	198.	220.	228.	143.	181.	168.	188.	170.	172.	179.	173.	157.	175.	171.
6	180.	183.	183.	189.	169.	176.	154.	154.	143.	128.	148.	169.	187.	193.	196.	195.	129.	125.	114.	97.	130.	130.	134.	142.	156.
7	157.	196.	174.	163.	180.	175.	162.	160.	156.	170.	176.	196.	198.	197.	297.	262.	284.	330.	42.	29.	49.	32.	27.	35.	160.
8	23.	58.	203.	170.	160.	296.	198.	213.	165.	175.	196.	193.	184.	320.	9.	19.	6.	0.	2.	289.	288.	115.	319.	132.	155.
9	124.	145.	172.	144.	248.	31.	89.	121.	141.	103.	52.	333.	314.	1.	39.	32.	311.	318.	292.	235.	89.	325.	350.	27.	168.
10	346.	10.	36.	33.	32.	42.	24.	45.	92.	155.	359.	67.	21.	8.	27.	11.	27.	291.	282.	314.	317.	74.	60.	345.	126.
11	15.	35.	254.	158.	240.	102.	123.	182.	176.	187.	196.	192.	186.	186.	184.	175.	170.	137.	132.	134.	123.	119.	156.	135.	154.
12	161.	178.	181.	178.	168.	153.	166.	159.	176.	186.	163.	178.	173.	183.	181.	182.	200.	212.	195.	184.	188.	193.	193.	184.	180.
13	188.	208.	198.	226.	256.	222.	186.	189.	192.	194.	196.	207.	206.	214.	223.	153.	119.	111.	135.	174.	187.	188.	188.	177.	189.
14	136.	140.	141.	149.	135.	138.	147.	123.	106.	109.	123.	130.	135.	139.	159.	149.	159.	23.	16.	26.	33.	31.	29.	34.	105.
15	39.	38.	25.	31.	46.	30.	41.	42.	35.	58.	308.	333.	219.	264.	320.	30.	41.	283.	55.	4.	51.	119.	136.	166.	113.
16	165.	194.	167.	154.	191.	160.	148.	165.	181.	187.	204.	201.	211.	213.	221.	233.	228.	240.	228.	220.	218.	202.	193.	174.	196.
17	166.	168.	166.	180.	182.	186.	189.	177.	176.	162.	200.	194.	198.	200.	168.	329.	205.	170.	166.	191.	158.	150.	150.	142.	182.
18	115.	120.	166.	159.	145.	150.	155.	180.	176.	119.	170.	210.	213.	203.	217.	197.	204.	128.	117.	157.	99.	100.	119.	179.	158.
19	13.	51.	27.	49.	36.	275.	318.	36.	36.	60.	19.	29.	17.	10.	326.	336.	340.	323.	300.	312.	44.	35.	18.	235.	135.
20	173.	180.	123.	215.	194.	157.	198.	182.	199.	172.	132.	185.	191.	192.	119.	97.	146.	109.	105.	99.	137.	18.	44.	45.	142.
21	198.	175.	143.	151.	172.	183.	188.	190.	184.	175.	181.	186.	166.	149.	154.	176.	155.	184.	200.	198.	196.	199.	185.	186.	178.
22	190.	193.	192.	159.	159.	147.	148.	147.	175.	187.	184.	187.	187.	189.	196.	197.	210.	218.	220.	211.	202.	182.	180.	190.	185.
23	199.	206.	186.	188.	158.	154.	146.	154.	182.	184.	190.	188.	188.	208.	121.	112.	243.	24.	59.	43.	70.	166.	173.	175.	155.
24	168.	185.	187.	183.	152.	143.	152.	162.	137.	138.	142.	192.	202.	180.	147.	122.	124.	150.	155.	139.	140.	143.	145.	151.	156.
25	145.	140.	182.	189.	196.	194.	199.	202.	211.	208.	188.	177.	219.	229.	239.	231.	226.	223.	200.	193.	179.	175.	178.	183.	196.
26	185.	191.	186.	173.	149.	167.	138.	139.	158.	162.	160.	203.	177.	160.	188.	207.	190.	170.	150.	150.	163.	146.	142.	129.	166.
27	164.	135.	220.	150.	144.	128.	115.	124.	118.	124.	154.	188.	140.	114.	144.	207.	111.	146.	0.	354.	87.	12.	33.	38.	131.
28	60.	90.	146.	120.	118.	97.	79.	83.	132.	134.	132.	133.	136.	135.	128.	138.	140.	140.	141.	153.	152.	158.	176.	151.	128.

MONTHLY AVERAGE = 155.06

SIGMA THETA FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY, 2013

IN DEGREES

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	9.2	10.1	10.6	12.4	13.1	24.4	6.4	7.0	9.1	11.2	29.1	16.1	12.4	13.5	12.1	11.2	11.1	13.3	11.0	9.0	9.6	8.7	9.4	10.2	12.1
2	9.4	30.9	17.4	34.4	34.0	40.1	38.6	25.6	40.1	30.8	27.5	53.6	27.3	22.4	25.2	18.1	17.4	17.5	17.4	28.4	10.0	18.5	15.1	9.8	25.4
3	32.6	10.2	19.0	14.9	12.3	10.6	10.3	12.6	8.2	22.5	7.7	14.1	12.6	14.7	14.4	13.2	11.9	11.4	9.2	11.3	10.4	11.9	10.2	11.6	13.2
4	14.6	9.1	10.3	7.8	8.2	7.9	7.1	8.3	9.2	10.6	10.9	25.5	37.2	17.8	19.3	10.1	11.2	15.0	11.6	12.6	38.8	41.4	21.1	10.8	15.7
5	10.1	13.2	11.7	22.4	21.7	16.1	8.7	8.6	9.6	8.4	9.7	10.4	11.4	8.6	13.3	11.8	17.6	13.5	9.0	8.9	8.1	11.8	8.7	9.6	11.8
6	9.9	12.9	9.1	8.9	9.6	9.3	12.6	12.7	9.2	8.6	11.3	15.0	12.8	11.2	9.5	16.0	12.1	11.7	13.4	15.6	13.3	10.0	10.4	17.4	11.8
7	19.3	27.0	11.1	11.7	10.8	9.2	10.5	9.2	9.4	12.5	13.7	16.9	21.0	44.1	13.6	28.4	19.5	19.9	7.1	9.9	11.2	22.9	11.9	29.9	16.7
8	9.6	14.4	21.1	16.3	15.0	63.0	33.0	17.4	14.2	14.9	30.2	14.2	51.7	27.3	14.9	14.7	14.4	17.9	21.7	13.5	44.4	25.4	31.2	17.4	23.2
9	24.9	8.4	18.4	11.3	0.3	6.5	9.4	7.5	17.2	13.4	21.9	23.3	21.2	17.5	10.1	10.5	14.0	8.5	10.4	25.9	8.7	11.8	11.0	12.5	13.5
10	23.5	23.3	11.1	8.2	7.5	9.0	11.1	13.4	15.3	27.9	19.0	34.3	22.5	22.2	8.5	14.4	10.9	18.4	5.1	13.5	14.5	4.0	14.2	14.1	15.2
11	24.8	27.6	34.3	12.4	14.1	7.0	9.6	9.4	13.8	9.8	13.0	26.6	14.7	25.7	19.5	19.3	26.0	15.1	8.2	9.0	6.3	11.0	29.1	16.1	16.8
12	10.7	8.3	7.1	7.8	9.0	8.4	12.8	9.3	10.9	8.9	10.1	9.8	8.8	9.3	10.2	11.0	8.3	9.7	8.3	10.2	9.5	10.2	8.9	10.6	9.5
13	10.9	10.7	7.9	12.4	8.7	10.3	9.1	7.5	7.7	9.8	9.0	10.6	11.7	10.5	18.5	16.1	9.0	15.0	11.6	12.6	7.5	6.6	7.5	10.5	10.5
14	8.7	11.2	7.3	11.4	8.6	11.0	16.8	8.0	10.8	10.2	10.8	10.5	14.4	16.2	19.1	13.3	29.6	7.1	15.5	11.8	8.4	8.2	10.0	9.1	12.0
15	8.3	9.3	11.7	12.1	13.8	13.2	12.1	13.7	10.4	47.1	31.2	43.0	43.9	26.8	29.7	22.7	13.1	21.5	27.1	29.4	9.6	17.3	13.2	13.1	20.6
16	18.8	9.1	9.8	8.2	10.2	13.9	8.6	9.5	8.8	12.1	10.0	10.6	13.3	12.6	12.4	9.9	8.2	52.3	30.3	7.6	10.9	9.2	10.5	12.2	13.3
17	10.5	10.4	11.0	14.8	9.4	9.9	16.7	11.0	11.0	11.2	10.3	12.2	12.1	14.4	24.6	23.9	23.0	13.3	17.1	7.3	23.4	17.7	19.7	33.8	15.4
18	8.5	14.7	27.2	11.5	11.6	9.1	16.5	14.5	9.7	12.8	23.1	23.0	16.3	22.3	16.5	13.2	13.7	8.2	7.6	23.9	11.9	11.5	21.9	25.6	15.6
19	32.4	9.4	16.0	10.4	10.8	27.3	23.1	11.9	16.5	43.2	29.0	25.9	13.9	26.7	22.3	12.1	12.1	8.6	6.7	25.6	19.4	11.5	10.1	33.7	19.1
20	23.2	15.7	12.8	28.6	10.2	16.7	27.3	17.1	23.5	39.7	14.5	14.5	11.7	12.2	12.2	13.4	15.4	10.4	7.6	6.9	8.3	13.4	23.3	22.9	16.7
21	18.1	16.7	14.4	12.6	9.9	10.7	8.9	8.6	8.5	9.8	8.8	8.9	10.6	9.8	13.2	10.1	12.6	10.6	10.0	8.1	7.7	8.2	11.3	8.2	10.7
22	13.4	12.3	9.0	9.5	7.6	8.9	8.4	9.2	7.7	9.3	9.2	9.1	9.8	9.6	10.1	8.4	9.4	10.4	11.4	11.2	11.8	10.0	13.4	11.6	10.0
23	11.6	11.4	12.7	11.0	13.7	10.9	9.6	12.1	9.0	10.8	12.8	21.3	18.7	13.7	16.4	31.4	9.9	34.9	26.3	21.6	32.8	19.0	10.3	9.5	16.3
24	10.4	9.2	8.9	8.8	11.6	9.0	10.2	9.5	9.7	10.3	12.3	12.3	13.4	15.2	21.6	15.4	9.9	12.1	9.0	11.8	8.3	7.9	8.4	11.4	11.1
25	11.0	10.7	11.8	8.0	9.2	9.3	10.6	9.8	9.5	14.4	14.9	15.5	13.3	12.9	12.8	10.8	9.6	10.5	12.7	11.3	9.4	11.8	10.9	10.3	11.3
26	7.9	8.1	7.7	10.9	9.7	11.9	10.7	7.8	10.4	13.0	13.0	17.7	17.8	16.8	14.3	11.6	11.0	7.1	6.6	17.6	13.6	16.1	14.7	11.5	12.0
27	21.0	44.9	51.4	13.8	9.1	9.1	9.7	26.2	10.1	18.6	18.3	21.7	20.9	26.3	22.4	45.0	15.0	26.8	27.1	25.9	38.8	19.7	8.8	9.7	22.5
28	14.7	25.4	7.3	9.8	11.2	13.1	19.0	19.8	11.2	9.4	9.6	11.6	11.7	13.8	12.4	10.2	9.4	8.9	8.6	8.6	7.5	10.0	8.0	11.2	11.8

MONTHLY AVERAGE = 14.78

MAX. 10 SEC GUST FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY, 2013

IN MILES PER HOUR

DAY	HOUR ENDING																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MAX
1	11.1	7.8	8.1	6.1	3.9	4.0	2.7	3.4	6.4	6.6	6.9	6.8	7.0	10.3	12.5	12.6	15.5	16.5	14.2	15.2	16.2	18.0	12.1	9.6	18.0
2	9.5	11.2	4.9	4.1	4.0	4.6	6.3	8.4	3.5	4.8	4.2	4.9	4.8	7.3	6.8	7.7	7.6	6.2	8.2	5.8	5.8	6.8	6.1	6.6	11.2
3	5.9	10.4	8.8	4.8	6.9	8.5	8.0	9.1	6.8	5.1	6.5	6.3	6.1	5.0	7.8	7.5	7.5	8.2	8.2	7.2	7.7	9.2	7.1	9.0	10.4
4	7.3	7.5	9.1	8.1	8.8	8.4	7.5	7.3	6.4	6.1	7.3	3.7	3.0	5.5	5.1	6.7	10.4	6.2	8.7	8.2	9.2	13.6	6.8	9.9	13.6
5	11.8	7.5	13.1	9.3	16.4	10.9	15.2	13.2	14.6	12.8	20.4	17.5	19.7	18.0	9.9	20.9	10.7	17.6	16.7	19.3	16.2	18.4	16.6	16.8	20.9
6	16.5	15.7	17.2	17.1	14.8	15.5	10.0	12.3	10.7	8.9	9.4	12.9	18.4	15.4	12.6	16.8	15.0	16.6	16.5	10.6	16.9	19.7	21.2	14.8	21.2
7	15.1	37.8	19.1	15.3	16.2	15.5	11.1	10.3	8.0	6.6	10.4	10.9	10.4	7.9	8.9	6.7	7.4	10.6	4.4	3.9	5.0	5.7	5.2	5.2	37.8
8	8.0	8.1	5.5	4.5	2.0	5.0	3.8	6.0	4.2	3.3	3.7	4.1	4.3	7.8	8.3	7.0	8.7	7.6	5.1	3.1	4.7	3.6	1.9	2.0	8.7
9	2.1	3.2	3.5	2.7	0.8	1.3	2.3	4.6	3.9	4.5	4.3	5.5	5.9	5.6	5.3	5.9	6.3	5.4	2.0	2.5	2.8	3.4	4.5	10.7	10.7
10	6.8	4.2	7.3	9.2	6.2	4.8	4.6	5.1	3.8	3.4	3.9	5.6	11.1	9.8	9.9	6.2	4.0	5.3	6.8	6.1	4.0	3.8	5.0	6.0	11.1
11	5.7	4.3	3.3	3.8	3.1	2.7	2.7	4.5	5.0	4.6	6.6	7.3	8.8	7.7	9.6	5.9	8.8	6.1	6.4	4.4	5.7	5.9	5.9	4.2	9.6
12	7.3	8.7	8.8	7.4	7.4	7.9	9.2	9.6	10.9	9.9	11.5	9.9	10.4	11.1	15.7	17.1	17.8	22.2	24.3	20.0	18.8	21.3	24.1	22.8	24.3
13	24.1	19.8	22.8	13.6	14.8	19.4	10.4	11.8	13.4	14.0	15.0	12.8	13.4	8.1	4.8	6.2	5.8	4.0	4.8	6.6	7.5	9.5	8.6	8.1	24.1
14	8.4	6.8	9.7	7.1	7.1	6.7	5.5	7.8	7.7	8.9	9.6	8.6	6.9	6.8	6.8	6.9	3.1	3.8	5.7	4.5	7.2	7.2	8.9	8.0	9.7
15	5.8	5.8	7.9	6.0	6.6	4.8	5.6	7.7	8.3	5.1	5.0	3.9	5.8	6.7	4.8	3.9	4.8	4.9	7.2	5.9	9.9	6.6	5.5	10.0	10.0
16	6.2	9.8	10.9	10.6	13.9	11.3	12.9	12.6	13.9	18.4	20.5	24.8	25.9	29.8	26.8	28.3	26.8	24.2	18.2	18.7	15.2	14.5	13.1	12.9	29.8
17	11.5	10.9	12.4	12.8	9.5	9.3	12.5	12.0	12.2	14.7	13.9	13.8	14.1	13.6	9.6	6.3	8.5	5.8	4.3	4.6	7.3	4.0	3.6	4.9	14.7
18	8.1	6.4	2.8	3.4	5.0	5.7	3.6	4.7	6.4	6.3	6.5	6.5	9.0	11.1	10.7	11.6	8.9	4.5	6.1	10.2	5.6	6.8	9.0	8.4	11.6
19	5.8	5.5	5.4	5.2	4.5	5.3	6.1	6.4	7.1	4.1	5.7	10.4	14.1	12.5	15.8	13.1	14.4	11.4	8.9	7.6	4.8	2.9	2.0	2.8	15.8
20	4.4	4.9	3.9	6.2	7.1	7.4	7.0	5.4	6.7	3.8	6.1	11.0	13.8	13.2	7.8	5.9	6.6	5.5	5.9	4.3	3.2	2.9	3.8	4.0	13.8
21	6.3	6.8	9.9	10.0	14.4	18.1	23.3	22.0	20.1	19.5	24.3	20.5	15.1	13.7	9.6	14.7	12.2	14.1	19.8	18.8	18.9	16.4	15.0	15.1	24.3
22	15.6	17.2	16.6	14.8	15.7	16.6	16.8	13.9	20.4	26.9	25.7	27.2	28.3	31.7	29.2	30.0	30.8	29.2	27.4	28.6	23.6	18.7	19.9	20.6	31.7
23	18.8	23.5	18.1	15.3	12.6	10.9	10.6	9.5	13.6	12.4	13.9	6.3	11.2	9.9	8.7	12.2	12.2	13.3	9.4	9.3	6.3	10.5	12.2	12.2	23.5
24	11.2	13.7	16.3	12.7	14.0	10.4	10.3	13.3	10.6	10.8	13.1	18.6	18.1	17.3	12.0	6.7	9.4	13.0	13.1	11.7	10.9	10.0	10.5	19.9	19.9
25	13.7	10.7	26.0	29.0	30.4	24.6	29.8	28.4	35.8	28.9	25.9	20.4	28.7	31.0	31.4	31.3	31.3	24.0	18.5	15.1	12.6	12.9	12.4	10.1	35.8
26	10.5	12.5	10.2	8.6	8.6	9.0	5.2	7.6	9.8	13.1	13.5	13.1	11.8	14.2	14.5	11.2	10.9	11.3	9.8	16.4	12.7	8.1	12.3	13.9	16.4
27	11.6	10.2	4.1	9.9	7.2	5.6	6.8	7.6	5.7	7.1	7.7	9.3	8.7	8.4	6.7	9.1	6.3	5.9	7.8	13.2	7.1	8.1	9.2	7.8	13.2
28	6.3	4.9	6.8	10.8	11.0	9.5	10.0	9.3	16.1	16.2	16.4	13.8	15.6	12.4	12.6	9.7	9.8	10.5	10.3	8.8	10.4	12.2	15.0	15.5	16.4

MONTHLY MAXIMUM = 37.79

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY, 2013

IN DEGREES C

DAY	HOUR ENDING																								AVG
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	6.9	6.9	6.8	6.6	6.5	6.5	6.4	6.1	5.4	5.6	6.1	6.5	7.3	8.3	8.7	8.4	7.8	7.2	7.1	6.5	6.6	6.3	5.4	4.8	6.7
2	4.6	4.0	3.3	3.4	3.4	3.2	2.8	2.5	2.2	2.4	2.7	3.4	3.7	3.8	3.8	3.8	3.3	3.2	2.7	2.1	2.4	1.7	1.1	2.3	3.0
3	2.4	3.0	2.5	4.3	4.6	4.5	4.9	5.2	5.5	5.7	6.0	6.5	6.7	6.9	7.1	7.0	6.6	6.6	6.1	5.6	5.5	5.5	5.5	5.5	5.4
4	5.4	5.5	5.3	5.3	5.2	5.1	5.2	5.3	5.5	5.7	6.4	7.3	8.2	8.8	9.3	9.0	8.5	7.8	7.3	7.5	7.1	7.4	6.7	6.3	6.7
5	6.6	6.5	6.7	6.8	6.8	5.9	5.8	6.0	6.9	7.2	8.4	8.8	7.7	7.2	7.1	7.0	6.5	6.2	6.1	5.6	5.4	5.3	5.2	5.4	6.5
6	5.3	5.4	5.6	5.3	4.8	4.8	4.6	4.4	4.6	5.2	6.5	7.8	8.8	8.9	8.9	7.5	6.2	6.1	6.3	6.0	6.8	7.5	7.8	7.5	6.4
7	7.6	6.2	4.5	4.3	4.5	4.3	3.6	3.5	3.5	4.0	4.9	6.2	6.8	7.7	7.3	8.1	7.7	6.1	5.0	4.2	3.1	2.3	1.9	1.5	5.0
8	1.5	1.1	1.1	0.5	0.5	1.2	0.8	0.3	1.1	1.9	2.4	3.1	4.5	5.3	5.2	5.0	4.8	4.4	3.8	4.0	4.0	3.2	3.4	3.0	2.8
9	3.2	3.1	3.0	2.9	2.9	2.6	2.3	2.2	2.4	2.9	4.0	4.7	5.0	4.9	4.6	4.7	4.4	4.1	4.0	3.9	3.8	3.8	3.7	3.7	3.6
10	3.8	3.8	3.5	2.7	2.0	1.4	0.5	0.6	0.9	1.8	3.0	4.6	6.0	6.2	5.6	5.7	5.3	5.3	4.8	4.5	4.5	4.1	3.7	3.7	3.7
11	3.5	3.5	3.6	3.3	3.2	3.0	3.0	2.7	3.1	3.8	4.6	5.3	6.0	6.6	6.6	6.7	6.5	5.9	5.2	5.3	5.5	5.7	5.7	5.2	4.7
12	5.4	5.5	5.7	5.7	5.7	5.7	5.7	5.8	6.0	6.3	6.4	6.7	6.9	7.3	7.8	8.5	8.7	8.5	7.7	7.8	7.8	7.8	7.7	7.8	6.9
13	7.9	7.8	7.2	7.0	6.5	6.1	5.6	5.5	5.7	6.1	6.2	6.4	6.6	6.7	6.9	6.9	6.5	6.4	6.2	5.9	5.8	5.6	5.5	5.3	6.4
14	5.2	5.1	5.0	4.9	4.9	5.0	4.9	4.7	4.7	5.0	6.0	6.8	7.4	7.6	8.1	8.3	8.2	7.7	7.5	7.1	6.9	6.9	6.5	5.9	6.3
15	5.5	5.2	4.8	4.4	4.0	3.3	3.1	2.9	3.0	4.0	5.1	5.8	6.6	8.8	10.8	11.5	11.4	10.4	9.2	7.5	6.6	6.4	6.2	6.4	6.4
16	6.0	6.0	5.9	7.1	6.9	6.0	6.0	6.1	6.6	6.9	7.0	7.6	8.5	8.9	8.9	8.2	7.2	6.1	6.2	5.8	5.5	4.9	4.6	4.4	6.6
17	4.2	4.2	4.1	4.0	3.9	3.8	3.7	3.6	3.7	3.9	4.4	4.8	5.8	6.2	6.0	6.1	6.1	5.6	5.4	5.1	4.6	4.2	4.0	3.5	4.6
18	3.1	2.8	2.6	2.6	2.3	2.2	2.0	2.2	2.4	3.1	4.2	5.1	5.5	6.1	6.2	6.0	5.6	5.3	5.0	4.9	4.2	4.5	4.2	3.4	4.0
19	3.1	3.3	2.7	2.5	2.5	2.6	2.2	2.0	3.4	5.7	6.4	7.4	7.9	8.2	8.4	7.3	7.4	6.0	4.8	4.6	3.8	3.2	3.2	3.0	4.6
20	2.8	2.5	2.1	1.1	0.5	0.8	1.4	1.6	1.8	2.6	3.6	4.3	4.6	5.0	5.1	5.0	4.5	3.8	3.5	3.2	2.9	2.6	2.7	2.8	2.9
21	2.4	2.4	2.3	2.5	2.7	2.9	3.4	3.5	3.6	3.5	3.5	3.3	3.3	3.6	4.0	4.2	4.3	4.9	5.0	4.7	4.7	4.8	4.8	4.7	3.7
22	4.7	4.8	4.4	3.6	3.5	3.5	4.0	4.5	4.9	4.7	5.0	5.2	5.3	5.5	5.8	5.3	5.5	5.1	4.2	3.6	3.1	2.6	2.5	2.6	4.3
23	2.7	2.6	2.6	2.5	2.3	2.6	2.9	3.1	3.5	3.9	4.3	4.9	6.0	6.5	6.6	6.5	7.1	5.2	4.6	3.6	3.4	3.7	3.6	3.6	4.1
24	3.5	3.7	3.7	3.7	2.9	2.7	2.9	3.0	3.2	4.1	5.7	6.4	6.2	6.2	6.3	5.6	6.0	6.0	5.9	6.0	5.9	5.6	6.0	6.4	4.9
25	5.2	4.5	4.8	4.7	4.6	4.5	4.3	4.0	3.9	4.3	4.6	5.1	6.3	7.1	8.1	8.0	6.8	5.4	4.7	4.6	4.2	3.9	3.8	3.8	5.0
26	3.6	3.5	3.5	3.4	3.3	3.2	2.8	3.1	4.2	4.8	5.8	6.4	6.6	7.1	7.1	7.1	6.8	6.3	5.9	5.6	5.3	5.3	5.5	5.3	5.1
27	4.5	4.1	4.0	3.6	3.1	3.3	3.5	4.0	4.7	5.7	6.4	7.0	7.1	7.9	8.5	8.5	7.3	7.0	6.3	5.9	5.8	5.7	5.4	5.2	5.6
28	5.1	5.0	5.1	5.3	5.2	5.3	5.5	5.6	6.5	6.5	6.8	7.0	6.9	7.6	8.3	8.9	9.1	9.1	9.4	9.6	9.6	10.1	10.2	10.2	7.4

MONTHLY AVERAGE = 5.11

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY, 2013

IN INCHES

DAY	HOUR ENDING																								TOT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
2	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
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	0.03	0.04	0.02	0.00	0.00	0.01	0.10
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	0.02	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.08	0.03	0.02	0.04	0.00	0.06	0.02	0.01	0.01	0.01	0.00	0.00	0.38
6	0.01	0.00	0.00	0.00	0.01	0.03	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.23
7	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
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	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.03
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	0.01	0.01	0.00	0.01	0.00	0.01	0.02	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	0.09
13	0.00	0.01	0.01	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	0.05
14	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
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	0.01	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.06
21	0.00	0.00	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
22	0.00	0.00	0.05	0.04	0.01	0.01	0.00	0.00	0.05	0.08	0.05	0.05	0.03	0.04	0.01	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.08	0.08	0.07	0.00	0.00	0.00	0.29
28	0.01	0.04	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.06	0.06	0.02	0.01	0.01	0.01	0.02	0.02	0.01	0.00	0.00	0.01	0.00	0.02	0.02	0.44

MONTHLY TOTAL = 2.65

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF FEBRUARY, 2013

IN MPH/DIR

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

WIND SPEED FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH, 2013

IN MILES PER HOUR
(THE TIME IS PACIFIC STANDARD TIME FOR THE ENTIRE MONTH)

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	8.0	13.4	12.9	12.3	10.5	10.2	13.4	13.5	12.8	12.6	10.7	14.1	12.2	14.5	14.2	16.2	11.9	10.6	8.2	3.6	4.5	8.2	7.2	6.9	10.9
2	5.7	4.2	4.8	6.0	5.8	5.3	5.9	6.8	7.0	7.1	9.4	11.0	15.5	15.1	15.2	13.8	12.9	10.8	8.1	8.4	4.8	4.9	4.7	4.9	8.3
3	3.6	4.0	5.0	5.4	3.5	4.3	4.3	3.2	3.0	3.0	2.2	4.1	6.3	5.8	5.7	5.6	6.4	3.3	4.3	3.7	2.6	2.7	1.1	2.1	4.0
4	3.6	2.5	2.0	3.5	4.5	3.4	3.0	4.6	2.9	3.2	3.3	4.6	9.5	11.7	9.6	9.6	7.7	6.8	8.2	12.0	11.4	11.8	10.5	11.3	6.7
5	11.7	13.1	9.9	6.4	8.1	6.3	9.6	6.5	4.4	3.7	4.5	5.7	8.8	7.0	6.3	4.1	6.8	5.6	3.2	2.6	2.8	5.6	6.6	5.6	6.4
6	4.9	5.6	6.5	7.1	7.4	9.9	9.8	10.8	8.8	6.9	4.2	4.3	4.1	2.5	7.1	5.2	3.8	3.8	10.3	12.3	11.4	11.0	6.8	5.7	7.1
7	6.3	5.7	4.0	3.4	4.4	3.7	3.2	2.9	2.7	4.2	5.1	4.1	2.3	2.7	4.6	5.0	5.5	3.5	3.1	3.0	1.7	1.7	1.1	2.2	3.6
8	3.0	2.3	1.8	2.6	1.0	0.9	1.5	1.1	1.6	1.5	2.0	4.1	6.1	5.2	6.6	5.9	9.1	7.8	5.8	3.8	6.9	8.5	4.9	3.5	4.1
9	1.8	0.7	1.4	1.0	1.6	1.5	1.0	2.1	2.9	3.0	3.3	5.7	4.7	4.8	5.2	4.6	7.6	4.9	2.4	3.0	1.2	5.0	3.6	4.1	3.2
10	3.9	3.5	3.9	2.2	4.2	2.4	4.0	4.5	5.3	2.7	3.0	2.6	3.0	3.3	4.6	4.4	3.5	1.7	1.6	1.3	1.1	1.6	0.2	1.0	2.9
11	0.9	0.5	1.6	1.6	2.8	3.2	3.7	3.6	2.6	1.1	1.2	1.5	2.5	1.6	1.1	2.1	2.4	2.2	1.7	3.8	8.4	7.3	6.8	6.7	2.9
12	7.4	9.2	10.6	9.6	11.0	8.4	8.9	10.0	10.6	13.4	13.1	16.6	13.5	10.6	11.0	10.5	11.9	15.4	14.1	12.7	10.9	8.9	8.2	8.0	11.0
13	11.4	10.1	8.2	7.1	7.4	6.6	10.6	8.1	7.3	3.1	5.7	6.7	6.0	3.3	3.5	2.2	5.0	4.7	2.5	4.3	1.5	1.8	4.3	3.1	5.6
14	3.3	3.8	4.8	4.1	4.2	4.2	3.5	2.4	4.3	4.3	6.9	3.8	3.4	6.3	11.5	9.6	5.4	5.1	5.4	5.4	7.9	5.5	5.1	5.2	5.2
15	6.7	6.9	5.9	5.0	6.5	6.3	6.5	5.0	5.4	6.4	6.6	6.3	9.1	8.3	6.7	6.0	6.8	7.9	7.0	5.8	7.7	6.2	4.1	6.4	6.5
16	7.7	7.6	6.1	6.4	8.2	9.5	9.3	10.6	13.9	11.7	14.4	14.3	15.6	15.8	16.8	19.1	21.0	17.5	11.2	11.3	13.3	13.0	11.2	11.2	12.4
17	7.9	6.1	8.5	8.6	7.7	10.0	10.2	11.2	11.1	12.1	14.1	13.8	12.8	18.6	13.5	15.8	12.8	15.9	14.2	13.6	14.8	13.0	11.3	10.0	12.0
18	11.2	13.4	14.5	13.0	14.1	16.6	16.0	12.2	10.7	8.1	7.9	8.8	10.8	11.9	12.1	10.7	10.6	3.4	4.5	5.6	4.5	3.1	2.8	2.8	9.6
19	3.4	5.1	3.6	4.3	5.4	2.8	2.7	6.0	5.2	4.4	13.2	16.6	17.3	16.0	13.8	14.2	16.8	17.0	17.8	18.0	19.0	18.9	19.1	17.1	11.6
20	15.3	14.3	14.7	8.3	9.3	12.8	11.3	9.3	16.9	21.4	20.4	20.8	20.4	22.6	25.8	24.2	21.8	25.1	25.5	19.2	15.9	16.8	11.7	10.5	17.3
21	9.9	10.3	10.4	9.2	7.5	9.4	10.3	8.9	9.0	10.4	9.7	12.9	15.3	16.6	10.8	5.2	3.6	8.6	5.2	6.9	3.2	2.9	3.6	2.6	8.4
22	1.0	4.2	2.9	4.3	1.9	3.5	3.7	2.6	2.2	2.1	2.2	2.4	3.0	4.6	5.0	5.8	7.7	5.3	3.8	3.8	2.5	3.0	3.6	3.4	3.5
23	3.2	3.0	2.9	2.6	2.6	3.4	2.3	3.2	2.8	1.8	2.4	2.0	3.0	6.3	3.7	5.3	2.9	6.4	4.6	2.6	1.5	3.2	3.7	2.6	3.3
24	2.4	2.4	2.0	1.2	1.8	1.9	2.3	3.7	3.9	5.0	8.7	12.4	10.9	8.2	8.6	8.0	5.9	2.8	3.8	3.0	4.8	5.8	5.3	4.9	5.0
25	5.8	4.8	4.1	5.0	5.4	7.2	5.0	4.4	3.3	3.3	2.8	4.3	4.1	4.2	3.6	5.8	7.6	3.1	3.2	1.7	3.8	3.3	1.6	1.6	4.1
26	0.5	1.6	4.3	5.1	4.0	3.0	4.8	4.8	3.9	4.2	3.7	3.8	3.2	4.1	5.8	6.5	8.3	7.8	6.1	5.5	4.6	6.1	3.9	2.8	4.5
27	2.3	4.1	4.1	5.5	2.2	1.7	2.2	1.2	2.6	3.6	2.7	2.9	3.6	1.6	4.5	4.7	7.5	8.2	6.7	3.9	2.0	2.3	2.1	3.0	3.5
28	3.4	3.7	2.6	4.3	5.0	4.6	3.5	2.5	1.7	1.7	1.4	4.4	8.3	6.5	4.9	8.2	6.5	5.2	5.0	1.7	1.3	1.7	3.4	3.2	3.9
29	3.3	3.2	3.5	2.9	3.9	3.1	3.1	2.4	1.9	3.1	3.5	4.0	7.2	6.0	6.0	5.3	4.1	4.4	6.0	7.0	6.8	7.5	8.3	5.8	4.7
30	3.4	1.3	3.9	4.7	4.6	4.9	4.9	4.3	2.3	4.9	10.7	12.2	10.1	9.9	10.9	12.4	11.2	8.9	8.9	11.0	11.7	11.2	10.5	7.6	7.8
31	8.2	5.7	4.9	6.4	3.7	5.6	5.2	4.1	1.6	1.2	3.1	4.6	6.4	7.2	7.7	7.1	7.5	6.6	5.0	2.4	3.3	4.8	4.8	5.1	5.1

MONTHLY AVERAGE = 6.62

WIND DIRECTION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH, 2013

IN DEGREES
(MEASURED CLOCKWISE FROM NORTH)

(THE TIME IS PACIFIC STANDARD TIME FOR THE ENTIRE MONTH)

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	158.	182.	184.	174.	172.	182.	185.	181.	181.	199.	193.	196.	202.	210.	207.	211.	213.	218.	218.	199.	141.	145.	169.	150.	186.
2	146.	161.	146.	159.	162.	160.	160.	159.	155.	168.	183.	202.	214.	201.	206.	218.	210.	250.	2.	49.	46.	32.	52.	36.	145.
3	29.	177.	182.	176.	150.	153.	138.	83.	93.	135.	188.	347.	5.	318.	360.	13.	13.	51.	66.	88.	77.	110.	138.	52.	131.
4	41.	50.	100.	55.	30.	35.	45.	17.	28.	21.	10.	38.	101.	78.	84.	92.	98.	99.	98.	116.	116.	120.	115.	120.	71.
5	116.	121.	109.	100.	111.	98.	106.	91.	142.	49.	26.	58.	128.	263.	276.	300.	295.	340.	290.	309.	303.	21.	24.	24.	154.
6	29.	27.	19.	28.	26.	27.	27.	27.	37.	30.	38.	34.	43.	55.	182.	215.	239.	168.	179.	196.	196.	189.	149.	150.	96.
7	159.	171.	162.	142.	139.	112.	107.	104.	110.	130.	148.	166.	157.	250.	311.	25.	31.	40.	44.	80.	96.	115.	77.	43.	122.
8	61.	171.	200.	7.	79.	349.	264.	359.	323.	41.	20.	37.	31.	38.	360.	356.	328.	333.	338.	24.	29.	36.	59.	94.	164.
9	92.	56.	149.	119.	65.	151.	108.	220.	154.	173.	228.	275.	274.	219.	241.	249.	271.	271.	40.	95.	167.	201.	126.	152.	171.
10	165.	142.	163.	151.	185.	154.	173.	109.	223.	229.	99.	137.	100.	98.	138.	133.	157.	164.	142.	153.	103.	122.	73.	5.	138.
11	59.	68.	118.	36.	25.	27.	34.	26.	38.	116.	120.	124.	234.	176.	257.	5.	342.	354.	229.	141.	165.	152.	160.	160.	132.
12	162.	181.	183.	177.	184.	173.	169.	192.	188.	188.	188.	191.	178.	164.	160.	182.	170.	185.	179.	179.	170.	151.	151.	158.	175.
13	188.	170.	165.	171.	158.	144.	163.	159.	182.	141.	206.	168.	177.	181.	209.	122.	118.	195.	122.	269.	298.	168.	200.	272.	181.
14	302.	279.	148.	172.	175.	144.	151.	182.	129.	198.	192.	212.	195.	152.	242.	242.	202.	200.	185.	136.	164.	133.	122.	121.	182.
15	136.	153.	184.	180.	189.	191.	186.	174.	182.	186.	173.	180.	223.	229.	229.	248.	279.	252.	238.	219.	228.	234.	190.	191.	203.
16	206.	213.	191.	174.	187.	199.	190.	184.	200.	200.	208.	205.	221.	219.	225.	229.	211.	205.	197.	211.	228.	216.	197.	203.	205.
17	189.	167.	183.	184.	171.	180.	186.	189.	190.	201.	216.	218.	230.	228.	220.	222.	209.	221.	220.	213.	215.	208.	203.	194.	202.
18	180.	184.	182.	180.	191.	201.	200.	194.	211.	225.	207.	223.	222.	210.	234.	237.	243.	300.	38.	41.	66.	80.	73.	107.	176.
19	61.	36.	9.	31.	40.	47.	114.	134.	100.	96.	125.	127.	125.	119.	125.	133.	129.	120.	124.	122.	125.	128.	130.	129.	101.
20	129.	130.	132.	142.	142.	133.	144.	142.	194.	210.	223.	206.	214.	215.	222.	223.	216.	213.	216.	206.	203.	210.	200.	202.	186.
21	204.	213.	207.	191.	197.	205.	212.	209.	200.	203.	202.	232.	222.	218.	308.	55.	38.	28.	36.	183.	125.	111.	113.	123.	168.
22	114.	137.	128.	135.	153.	156.	102.	57.	100.	178.	234.	126.	311.	39.	43.	21.	22.	39.	79.	88.	95.	132.	178.	129.	117.
23	128.	129.	160.	162.	166.	189.	153.	146.	148.	187.	230.	145.	234.	331.	331.	337.	9.	306.	340.	34.	79.	158.	132.	154.	183.
24	97.	111.	126.	66.	341.	172.	15.	18.	45.	101.	110.	125.	126.	118.	122.	111.	116.	93.	73.	122.	128.	123.	133.	129.	113.
25	126.	105.	118.	122.	115.	114.	94.	87.	81.	54.	310.	142.	142.	3.	261.	311.	27.	83.	170.	307.	34.	52.	76.	140.	128.
26	63.	100.	131.	176.	166.	150.	141.	196.	176.	203.	212.	221.	213.	287.	279.	289.	292.	304.	325.	25.	39.	38.	40.	117.	174.
27	77.	31.	24.	27.	35.	35.	105.	170.	198.	197.	219.	221.	208.	205.	278.	2.	28.	28.	37.	31.	31.	22.	61.	175.	102.
28	119.	150.	127.	170.	141.	133.	120.	105.	77.	78.	280.	264.	272.	265.	252.	268.	157.	130.	151.	78.	132.	159.	138.	168.	164.
29	110.	110.	152.	148.	183.	138.	113.	23.	131.	230.	270.	269.	296.	307.	326.	323.	349.	352.	344.	25.	31.	38.	40.	52.	182.
30	54.	67.	40.	28.	36.	27.	28.	25.	36.	27.	28.	26.	28.	27.	18.	11.	12.	9.	24.	23.	22.	26.	32.	33.	29.
31	35.	31.	33.	32.	31.	29.	22.	34.	64.	97.	54.	299.	273.	276.	271.	271.	270.	272.	269.	354.	78.	185.	177.	166.	151.

MONTHLY AVERAGE = 149.45

SIGMA THETA FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH, 2013

IN DEGREES
(THE TIME IS PACIFIC STANDARD TIME FOR THE ENTIRE MONTH)

DAY	HOUR ENDING																								AVG.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	10.4	9.1	7.7	7.4	6.8	7.0	6.6	7.3	7.4	6.8	7.7	9.7	11.0	10.8	9.4	9.3	10.1	9.1	7.8	11.1	16.1	8.8	32.3	5.6	9.8
2	8.9	12.8	11.0	15.7	17.5	16.7	6.8	6.8	7.9	13.0	10.8	12.3	8.5	10.6	9.8	8.7	12.6	14.6	27.7	16.5	23.5	13.3	23.1	16.5	13.6
3	21.2	19.7	13.0	11.3	11.3	11.7	29.4	34.8	17.7	35.1	58.2	31.8	33.9	37.2	15.5	21.0	12.1	13.3	7.0	7.9	9.5	11.4	27.3	7.5	20.8
4	5.1	10.6	35.6	10.4	10.8	6.7	20.5	12.6	27.0	14.2	23.5	26.6	19.9	17.7	17.6	16.5	17.6	17.2	15.8	11.9	11.5	11.7	12.1	11.4	16.0
5	12.6	12.3	13.9	14.6	15.4	17.2	12.5	29.0	40.2	14.8	16.8	22.8	22.0	36.4	10.7	13.4	7.2	10.5	28.8	35.4	36.2	11.3	12.5	10.5	19.0
6	9.9	15.6	11.9	9.5	10.0	10.7	10.1	7.8	12.8	9.4	13.9	13.7	12.9	14.7	14.3	21.7	17.2	16.7	12.3	8.4	9.4	11.4	9.9	10.7	12.3
7	11.1	13.9	16.1	11.1	10.6	9.2	8.5	10.1	9.9	10.4	16.0	21.0	34.2	56.6	22.9	16.3	8.8	6.6	6.8	15.2	17.6	33.2	28.5	6.8	16.7
8	13.7	19.5	19.8	17.4	26.9	18.1	13.7	34.3	45.0	39.6	37.4	19.9	11.8	15.8	20.5	25.4	7.8	13.2	19.2	23.1	13.5	7.5	9.6	5.9	19.9
9	8.0	9.1	8.3	7.9	7.4	24.2	15.4	23.3	15.6	27.3	24.2	29.9	37.6	42.0	34.9	31.7	15.2	11.9	10.2	10.9	29.2	18.3	13.5	6.7	19.3
10	10.0	10.6	13.6	17.4	13.0	14.2	22.0	12.6	13.3	30.6	19.8	16.5	22.5	11.2	8.6	7.9	20.7	12.5	14.9	8.3	7.8	8.4	5.3	20.9	14.3
11	4.9	5.4	8.9	29.0	9.1	9.4	6.0	10.3	7.5	30.0	19.8	33.5	31.7	38.3	48.0	25.9	11.8	10.3	44.8	20.1	10.6	9.6	9.6	11.5	18.6
12	9.4	6.7	6.6	8.2	8.5	8.9	9.3	9.0	8.5	9.3	9.2	9.4	10.5	9.1	8.6	9.1	8.9	8.9	8.7	8.4	8.4	8.6	6.9	8.6	8.7
13	8.5	10.3	10.8	10.1	9.7	9.8	7.6	9.3	11.0	21.4	12.2	12.6	14.1	17.9	12.9	17.0	9.0	15.5	33.5	21.4	22.5	8.7	35.1	26.1	15.3
14	11.6	10.2	23.2	15.4	14.9	35.0	17.9	19.8	12.0	14.2	11.0	29.5	24.7	17.5	13.8	12.3	14.1	20.3	15.5	11.6	11.0	8.2	9.2	8.5	15.9
15	12.3	11.1	11.5	14.6	9.2	9.6	9.6	12.7	12.4	10.1	13.0	18.0	16.5	12.9	14.8	16.0	9.6	9.9	8.7	10.1	10.9	10.5	17.8	11.3	12.2
16	10.1	10.5	13.0	12.1	8.9	7.9	7.8	9.5	9.0	8.3	9.8	9.5	10.2	15.1	11.6	12.5	11.5	10.4	12.2	11.0	9.6	9.1	10.3	7.7	10.3
17	12.1	10.7	7.9	8.9	10.1	9.1	9.1	9.5	10.5	12.7	10.2	13.1	12.1	9.2	12.5	10.5	9.0	9.8	9.5	9.2	9.4	9.6	10.1	11.1	10.3
18	10.8	8.7	9.1	9.6	10.2	9.7	9.1	11.8	13.7	12.7	16.1	13.8	15.4	15.6	13.8	16.2	15.0	27.9	17.6	7.6	12.2	16.1	12.0	12.5	13.2
19	13.2	13.5	12.3	10.3	11.6	39.4	32.7	19.8	20.9	24.1	13.6	12.7	12.1	11.6	13.4	11.1	10.4	11.4	11.0	10.8	11.6	10.3	10.1	9.5	14.9
20	8.9	9.5	8.1	14.2	15.7	11.6	15.2	8.1	11.2	8.9	9.8	11.0	11.0	9.6	10.6	11.0	9.5	9.1	9.1	9.8	12.3	9.2	11.8	11.4	10.7
21	17.5	15.3	11.2	13.9	17.3	11.8	11.1	10.4	10.2	10.1	11.3	12.4	11.5	12.4	32.9	15.4	54.8	16.6	29.8	10.2	17.7	10.8	10.8	16.8	16.3
22	7.4	8.8	12.6	15.3	19.4	16.5	12.3	21.9	23.7	14.8	17.4	49.8	27.6	27.5	22.6	12.2	9.7	9.9	11.4	7.6	11.6	19.5	11.1	14.1	16.9
23	12.8	15.0	21.5	13.6	8.0	8.1	12.2	7.3	11.9	28.0	27.2	55.2	44.9	21.4	19.4	13.9	29.6	11.7	9.5	8.8	22.8	10.4	8.1	10.9	18.0
24	14.5	8.6	13.4	24.0	30.2	12.0	19.0	19.0	21.2	18.1	14.8	15.2	12.1	17.8	18.8	14.2	11.8	15.0	9.6	14.2	10.9	11.6	12.0	12.3	15.4
25	12.8	13.6	15.5	12.8	13.3	11.3	14.9	14.7	19.9	25.1	48.0	46.1	42.5	66.3	28.9	32.2	14.6	20.0	25.6	21.1	9.6	30.3	20.0	13.4	23.9
26	13.0	35.7	13.3	11.7	12.1	12.3	5.8	11.8	13.3	12.6	20.0	25.5	47.8	37.1	35.7	15.6	11.4	6.3	13.6	12.6	15.4	10.6	6.4	12.6	17.2
27	16.0	8.9	7.9	10.1	23.5	11.1	26.5	21.2	14.9	9.5	19.8	19.2	22.7	38.6	13.2	19.9	9.5	8.6	8.4	8.1	21.3	18.1	26.7	20.9	16.9
28	36.1	28.3	53.0	34.3	9.1	6.9	15.5	17.1	57.3	20.3	55.6	30.5	14.1	22.2	28.6	18.2	14.5	13.3	9.1	17.2	12.3	18.6	21.2	10.0	23.5
29	16.0	30.8	25.2	19.0	40.7	19.9	36.6	21.5	48.4	23.5	34.5	31.7	21.7	32.6	31.1	33.8	25.4	14.9	13.2	14.0	14.6	10.4	8.3	11.8	24.1
30	11.7	18.7	9.8	6.9	7.8	7.8	7.8	12.0	38.0	41.4	10.3	9.2	9.9	12.0	12.7	10.8	11.0	14.0	11.6	8.2	9.1	8.8	9.1	9.1	12.8
31	8.1	8.1	8.6	7.3	8.2	6.8	7.7	10.8	41.9	60.4	36.4	27.6	15.7	15.5	10.9	10.2	9.6	6.8	6.2	24.5	9.2	21.1	15.1	8.8	16.1

MONTHLY AVERAGE = 15.90

MAX. 10 SEC GUST FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH, 2013

IN MILES PER HOUR

(THE TIME IS PACIFIC STANDARD TIME FOR THE ENTIRE MONTH)

DAY	HOUR ENDING																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MAX
1	13.5	19.9	18.7	17.3	15.3	15.6	18.8	17.0	18.0	19.9	16.0	21.9	19.4	23.3	21.6	26.7	22.5	19.0	13.4	9.8	8.2	11.8	12.4	9.9	26.7
2	9.4	7.7	8.6	8.1	11.2	8.2	8.0	9.1	11.3	11.9	13.9	17.6	24.6	24.0	23.6	24.6	27.7	19.6	16.2	14.4	10.9	9.0	8.8	11.4	27.7
3	10.8	8.5	7.9	9.6	5.9	9.2	9.2	7.9	5.7	6.9	6.3	8.6	12.3	12.4	11.5	10.5	10.1	8.0	7.3	7.2	4.9	4.5	3.7	3.5	12.4
4	5.7	4.0	5.3	6.1	7.3	5.6	7.6	8.0	7.0	6.6	5.8	14.2	16.8	19.9	16.4	17.7	13.6	14.6	18.6	19.9	20.1	18.9	17.6	17.8	20.1
5	18.1	21.0	18.6	10.7	15.6	11.8	16.0	13.9	12.4	6.5	10.3	12.2	15.2	10.8	10.0	7.2	8.8	9.3	6.4	5.3	5.3	8.9	12.2	10.8	21.0
6	8.5	11.0	11.5	11.5	12.7	15.7	15.9	15.9	16.0	12.8	10.2	7.6	7.0	5.2	10.8	8.6	6.5	7.3	18.7	19.9	17.5	19.2	10.9	9.6	19.9
7	10.2	8.8	8.9	6.6	7.8	5.8	5.2	4.9	4.8	6.6	8.2	8.5	6.0	7.8	7.8	7.9	8.4	6.0	4.7	4.7	3.4	3.6	2.9	4.5	10.2
8	5.8	5.0	4.0	4.1	2.3	2.6	2.4	2.7	4.1	3.5	4.5	9.2	11.0	9.5	10.6	10.7	13.8	12.3	10.8	7.9	12.1	14.4	9.0	5.0	14.4
9	3.1	2.4	2.2	2.0	2.6	3.5	2.1	4.6	4.9	5.1	9.5	10.9	9.2	11.2	11.9	9.7	12.4	9.8	3.9	4.3	2.5	7.4	5.2	5.3	12.4
10	5.3	5.1	6.1	3.2	6.6	6.0	6.2	7.0	7.3	7.6	6.4	5.6	6.0	5.0	6.2	6.4	7.1	2.8	2.7	2.4	2.5	3.0	1.4	2.2	7.6
11	2.2	2.4	2.8	2.9	4.2	4.9	5.8	6.1	4.1	2.7	3.2	4.7	5.8	3.8	3.6	4.8	3.7	3.6	4.7	8.9	12.0	11.2	9.4	9.6	12.0
12	10.7	12.2	14.2	14.0	15.9	14.0	13.6	15.1	15.7	23.7	20.5	25.9	22.8	16.8	16.5	16.9	19.1	22.0	21.0	17.7	17.9	15.2	12.5	11.3	25.9
13	17.8	17.2	12.8	11.1	12.3	10.4	15.5	12.6	13.0	5.9	9.4	9.9	12.1	5.4	6.8	6.8	10.6	7.8	5.6	7.4	3.8	6.0	6.9	7.5	17.8
14	6.6	7.8	8.3	8.6	11.5	11.7	5.8	4.4	6.4	7.5	11.9	8.9	6.9	16.3	20.6	17.8	10.0	12.1	9.4	12.6	12.2	8.0	7.8	8.3	20.6
15	10.4	11.3	10.8	9.0	11.0	9.9	9.9	8.5	10.3	10.5	11.4	12.3	16.8	13.3	11.4	11.0	10.7	11.4	13.1	8.6	11.8	11.2	8.1	10.6	16.8
16	11.0	12.2	9.9	10.9	11.4	14.4	12.4	15.8	21.4	21.1	25.7	24.8	27.4	27.4	28.9	33.0	32.0	33.2	24.4	20.7	22.9	21.7	19.2	17.1	33.2
17	12.8	10.8	12.0	13.3	11.2	14.1	14.5	17.7	17.4	19.5	21.5	21.3	22.1	26.1	23.9	24.0	20.2	26.1	22.6	22.2	22.0	20.0	17.6	18.4	26.1
18	17.4	20.9	22.3	21.9	21.9	28.2	23.7	21.0	20.0	13.0	12.2	17.2	17.5	19.4	19.6	16.4	16.3	7.4	8.0	8.4	8.1	5.8	5.0	4.4	28.2
19	6.8	8.7	5.3	8.0	9.8	6.8	10.3	13.0	12.1	10.6	21.9	29.2	26.4	26.9	22.4	24.2	25.9	29.1	30.7	27.2	29.4	26.7	26.5	26.3	30.7
20	23.6	20.6	22.8	14.5	16.1	17.8	17.2	13.0	36.0	31.3	34.8	42.7	31.6	34.9	37.7	36.6	33.9	38.5	35.6	30.5	26.3	24.7	22.2	18.6	42.7
21	18.5	17.4	21.2	15.6	14.8	16.3	15.4	13.9	13.8	16.1	14.9	21.4	22.2	24.4	23.3	9.2	8.1	18.9	12.7	12.4	5.7	6.5	6.7	5.6	24.4
22	6.4	6.2	6.1	8.8	4.9	6.6	6.7	5.3	3.5	3.7	4.2	6.2	8.0	13.6	10.0	11.2	12.2	9.3	7.2	5.9	4.4	4.7	6.4	6.2	13.6
23	4.7	4.9	4.9	3.7	4.0	4.6	3.5	5.0	4.9	4.2	5.1	6.0	7.7	11.7	8.9	10.5	7.8	10.6	7.3	4.3	4.9	5.6	5.2	4.4	11.7
24	4.1	3.8	3.9	4.6	3.8	4.6	4.9	8.1	8.0	12.1	15.3	21.8	16.3	14.9	15.0	13.6	12.1	5.0	6.1	5.8	8.6	8.8	9.1	8.3	21.8
25	9.9	9.2	7.4	8.5	9.0	11.6	8.7	7.8	6.3	6.1	6.5	9.7	9.8	11.6	8.5	11.3	12.1	8.1	5.4	3.9	6.9	7.2	3.5	3.9	12.1
26	3.4	4.2	6.8	7.8	7.5	6.6	6.8	6.1	6.5	6.2	7.2	7.7	8.1	8.8	12.2	11.3	12.6	10.5	9.6	10.6	10.2	11.6	8.1	4.2	12.6
27	4.1	7.7	6.6	8.6	4.8	4.1	3.9	3.7	4.8	5.8	5.4	5.4	6.8	5.5	5.9	11.0	11.4	12.1	11.0	5.9	3.5	4.7	3.8	5.1	12.1
28	6.4	7.6	5.6	9.5	8.1	6.2	5.2	4.4	4.2	3.6	4.3	9.8	12.9	11.4	9.2	20.0	21.1	11.7	7.7	5.2	3.4	4.1	6.9	5.7	21.1
29	5.6	5.6	6.0	6.1	7.4	5.7	6.6	4.2	4.1	6.5	6.8	8.9	13.8	13.7	12.7	9.9	10.1	8.9	10.4	12.0	12.1	11.5	12.5	10.9	13.8
30	6.0	3.2	6.4	6.6	7.4	7.7	7.2	7.8	7.5	12.2	15.6	18.0	16.4	16.1	15.6	18.9	17.5	14.6	16.5	16.0	17.0	16.9	17.5	10.7	18.9
31	11.2	10.1	9.4	9.0	7.8	7.8	8.2	6.3	3.6	4.4	6.1	8.3	10.2	10.6	10.6	10.0	11.0	9.2	7.9	5.8	4.7	8.2	7.5	7.0	11.2

MONTHLY MAXIMUM = 42.72

2 M TEMPERATURE FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH, 2013

IN DEGREES C

(THE TIME IS PACIFIC STANDARD TIME FOR THE ENTIRE MONTH)

DAY	HOUR ENDING																								AVG
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	10.1	10.1	10.1	10.3	10.3	10.4	10.8	11.1	11.4	11.5	11.5	12.3	13.0	13.5	13.4	13.4	13.3	12.6	12.1	11.8	11.6	11.5	11.1	10.4	11.6
2	10.0	10.0	9.6	9.3	8.5	8.7	8.6	9.1	9.7	10.2	11.0	11.6	11.8	12.1	11.6	10.5	9.2	7.5	4.7	3.8	3.6	3.5	3.2	2.2	8.3
3	1.9	2.7	2.9	2.6	2.3	2.1	1.8	1.7	3.0	4.5	5.4	6.1	7.0	7.5	6.8	7.1	6.1	5.3	4.3	3.9	3.1	2.4	1.7	1.3	3.9
4	0.6	0.4	0.1	-0.1	-1.5	-1.3	-1.2	-1.3	-0.5	1.4	3.9	7.8	9.9	10.1	10.7	10.8	10.2	9.2	8.2	8.0	7.8	7.4	7.2	7.2	4.8
5	7.2	7.3	7.0	6.8	7.3	7.4	7.8	7.9	8.0	6.7	7.4	8.3	10.1	8.8	8.2	8.1	7.6	6.9	6.6	6.0	5.4	5.4	5.1	4.9	7.2
6	4.4	4.2	3.9	3.5	3.3	3.5	3.8	3.9	4.3	4.3	4.8	5.5	5.4	4.8	5.0	4.6	4.4	4.0	4.1	3.7	3.5	3.3	2.8	3.1	4.1
7	3.5	3.8	3.7	3.7	3.8	3.9	4.1	4.2	4.8	5.8	6.3	7.1	7.9	8.7	9.1	8.6	8.0	7.2	5.9	5.3	5.1	4.5	3.7	3.1	5.5
8	1.9	1.9	1.7	0.3	0.3	1.4	1.2	1.0	2.8	4.0	5.7	6.8	7.8	9.3	10.0	10.2	9.4	8.4	7.2	6.2	5.4	4.8	4.2	3.5	4.8
9	3.9	2.8	3.0	2.9	2.5	2.3	2.2	1.7	3.7	5.5	7.4	8.9	9.8	11.0	11.3	11.6	11.1	10.0	8.9	7.7	7.0	5.1	4.6	4.9	6.2
10	4.1	3.5	3.8	3.6	3.3	3.2	2.9	3.4	3.9	4.4	4.2	5.3	5.7	5.6	5.7	5.6	5.4	5.3	5.0	4.8	4.7	4.6	4.6	4.6	4.5
11	4.5	4.5	4.6	4.5	4.2	3.7	3.3	3.4	4.0	4.9	6.3	8.0	8.7	9.2	9.7	9.4	8.6	7.7	7.3	7.0	7.3	7.4	8.0	8.3	6.4
12	8.9	9.1	9.6	9.7	9.6	9.6	9.8	10.0	10.3	10.6	10.9	11.3	10.8	10.4	10.6	10.4	10.5	10.9	10.4	10.0	9.4	9.3	9.4	9.4	10.0
13	9.3	9.2	9.2	9.0	8.8	8.7	8.9	9.2	9.7	10.2	10.2	9.9	9.8	10.1	10.2	10.2	10.1	10.2	10.0	9.9	9.7	9.7	9.3	9.2	9.6
14	9.3	9.2	9.0	8.9	8.8	8.8	8.7	8.9	9.3	9.9	10.0	9.9	10.4	11.5	10.6	9.6	9.5	9.3	8.4	8.2	8.1	7.8	7.8	8.2	9.2
15	8.8	9.3	9.5	9.2	9.0	8.8	8.8	9.0	9.5	10.1	10.5	11.4	12.0	12.6	13.0	13.0	12.3	11.4	10.5	10.0	9.7	9.1	8.6	8.5	10.2
16	8.2	8.0	7.6	7.5	7.5	7.4	7.3	7.3	7.6	7.6	8.5	8.2	7.1	7.1	7.8	6.5	5.9	5.2	4.6	4.3	3.9	3.5	3.0	2.9	6.4
17	3.0	2.9	3.1	3.1	3.0	2.9	2.7	2.6	2.9	3.6	4.7	5.6	5.7	6.1	6.0	5.8	5.1	4.8	4.3	4.0	3.6	3.4	3.1	3.0	3.9
18	3.0	3.0	3.0	3.3	3.4	3.4	3.3	3.4	3.7	4.3	5.3	6.1	7.7	8.6	9.1	9.5	9.0	8.4	6.0	4.7	4.1	3.3	2.8	2.9	5.0
19	2.1	0.9	1.5	0.7	0.5	1.9	3.1	4.6	5.3	7.1	10.5	11.2	11.4	11.0	9.9	9.0	6.5	5.1	4.9	4.8	5.5	6.4	6.7	6.4	5.7
20	6.6	7.3	7.8	7.8	7.4	7.3	7.4	7.7	8.8	8.7	8.0	7.8	6.5	7.2	7.1	7.3	6.5	5.9	4.7	3.9	3.5	3.3	2.8	2.6	6.4
21	2.6	2.3	2.1	2.1	2.0	2.1	2.1	2.1	2.4	3.0	3.8	4.9	6.2	6.0	3.4	0.9	1.7	1.2	0.7	0.1	0.1	0.0	0.0	0.0	2.2
22	-0.1	-0.2	-0.2	-0.3	-0.1	-0.1	-0.2	0.0	0.7	1.4	1.9	3.2	2.7	3.6	4.6	4.6	4.0	3.9	3.3	2.4	1.5	0.8	-0.2	-0.6	1.5
23	-0.4	-0.2	0.0	-0.2	-0.2	-0.6	-0.3	0.3	1.5	3.4	4.6	5.8	6.9	7.2	6.9	7.0	8.1	7.2	5.9	4.5	4.1	3.1	2.2	1.6	3.3
24	1.6	1.6	1.3	1.8	0.9	1.7	1.5	1.2	3.2	6.0	7.3	8.9	9.4	10.2	10.7	10.7	10.2	9.9	8.7	7.9	7.5	7.2	7.2	7.1	6.0
25	6.6	5.9	5.7	5.5	5.5	5.4	4.9	6.4	8.4	9.9	11.6	13.1	14.1	14.9	15.2	15.3	14.8	14.1	13.2	12.4	11.2	10.2	9.8	9.7	10.2
26	9.5	8.8	8.8	8.5	8.1	7.5	7.9	7.6	8.5	9.3	10.5	11.6	13.0	13.9	14.4	14.6	13.9	12.9	11.7	11.2	10.3	9.9	9.1	9.1	10.4
27	8.5	7.5	7.5	7.2	6.6	6.4	6.6	7.2	8.2	8.8	9.9	10.9	11.9	12.2	11.0	10.5	10.6	10.7	10.1	9.4	9.1	8.5	7.3	7.8	8.9
28	6.7	7.1	7.0	6.6	6.7	7.2	7.7	7.7	9.0	10.4	11.9	13.2	13.3	13.8	14.4	14.0	11.5	11.5	11.1	10.2	9.7	8.9	8.1	8.1	9.8
29	7.3	7.3	6.8	6.8	6.1	6.5	6.7	7.2	9.8	10.3	12.8	14.4	15.2	16.0	16.4	16.9	16.7	15.8	14.0	12.9	11.9	11.0	10.3	9.1	11.2
30	8.4	7.5	6.3	5.7	5.0	4.5	4.1	5.4	8.4	12.7	13.9	15.1	17.0	18.1	18.8	18.8	18.6	18.0	16.2	14.5	13.0	11.7	10.9	9.6	11.8
31	8.9	8.2	7.4	6.8	6.2	5.7	6.4	8.2	11.1	14.1	15.7	17.1	18.3	19.5	20.3	20.5	20.2	19.2	17.4	15.7	14.7	13.4	12.2	11.6	13.3

MONTHLY AVERAGE = 7.17

PRECIPITATION FOR CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH, 2013

IN INCHES

(THE TIME IS PACIFIC STANDARD TIME FOR THE ENTIRE MONTH)

DAY	HOUR ENDING																								TOT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0.11	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
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	0.03	0.01	0.01	0.06	0.01	0.01	0.00	0.00	0.04	0.17
3	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
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	0.01	0.06	0.05	0.07	0.09	0.07	0.07	0.05	0.03	0.04	0.04	0.06	0.64
7	0.06	0.07	0.06	0.04	0.03	0.04	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	0.00	0.00	0.00	0.00	0.00	0.35
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	0.01	0.02	0.01	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.07
12	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.05
13	0.02	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.05	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.24
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.07
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.09	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.06	0.08	0.00	0.01	0.02	0.08	0.34
20	0.06	0.04	0.00	0.04	0.06	0.07	0.08	0.04	0.06	0.00	0.01	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
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	0.05	0.02	0.02	0.00	0.00	0.00	0.01	0.10
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.29	0.07	0.11	0.11	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.70
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
28	0.00	0.00	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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 = 3.76

WIND SPEED/DIRECTION CEDAR HILLS LANDFILL
METEOROLOGICAL MONITORING SYSTEM FOR
THE MONTH OF MARCH, 2013

IN MPH/DIR

(THE TIME IS PACIFIC STANDARD TIME FOR THE ENTIRE MONTH)

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

APPENDIX D

Area 5 Top Deck Report

CEDAR HILLS REGIONAL LANDFILL AREA 5 TOP DECK MONITORING REPORT

First Quarter 2013



Department of Natural Resources and Parks
Solid Waste Division

May 2013
Printed on recycled paper

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AREA 5 TOP DECK MONITORING QUARTERLY REPORT

FIRST QUARTER 2013

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

I. LEACHATE MONITORING

Overview of the Top Deck Monitoring Program

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

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

TABLE 1
SITEWIDE LEACHATE PRODUCTION

Year	Leachate	Surface Area of Refuse Areas	Refuse In Place	Precipitation	Flow	Flow	Flow	Flow
	(MG/yr)	(acres)	(lb)	(in/yr)	(gal/Acre/yr)	(gal/Acre/in)	(gal/lb/yr)	(gal/lb/in)
1986	163.03	138.5	11,328,841,100	54.79	1,177,112	21,484	0.0144	0.00026
1987	139.53	138.5	12,927,926,300	39.6	1,007,422	25,440	0.0108	0.00027
1988	169.67	161.9	14,525,504,000	48.63	1,048,009	21,551	0.0117	0.00024
1989	176	161.9	16,203,204,000	44.12	1,087,110	24,640	0.0109	0.00025
1990	294.75	161.9	17,965,254,000	71.6	1,820,594	25,427	0.0164	0.00023
1991	224.27	221.4	19,778,412,000	45.85	1,012,967	22,093	0.0113	0.00025
1992	156.46	221.4	21,454,600,000	38.64	706,694	18,289	0.0073	0.00019
1993	150.83	221.4	23,051,348,000	35.01	681,264	19,459	0.0065	0.00019
1994	159.8	221.4	24,657,528,000	38.55	721,764	18,723	0.0065	0.00017
1995	201.11	221.4	26,294,654,000	48.4	908,376	18,768	0.0076	0.00016
1996	243.03	221.4	27,946,704,000	57.08	1,097,714	19,231	0.0087	0.00015
1997	239.23	221.4	29,665,380,000	57.24	1,080,511	18,877	0.0081	0.00014
1998	202.8	221.4	31,432,828,000	42.82	916,006	21,392	0.0065	0.00015
1999	219.15	283.42	33,273,828,000	45.9	773,229	16,848	0.0066	0.00014
2000	148.82	283.42	35,167,828,000	33.15	525,102	15,840	0.0042	0.00013
2001	174.08	283.42	37,041,828,000	47.28	614,194	12,991	0.0047	0.0001
2002	133.4	283.42	38,919,828,000	35.13	470,690	13,399	0.0034	0.0001
2003	181.6	283.42	40,877,828,000	46.39	640,761	13,812	0.0044	0.0001
2004	185.72	328.72	42,889,828,000	34.08	564,983	16,578	0.0043	0.00013
2005	175.31	328.72	44,867,538,000	40.75	533,313	13,087	0.0039	0.0001
2006	264.95	328.72	46,820,938,000	52.94	806,009	15,225	0.0057	0.00011
2007	161.48	328.72	47,129,756,000	38.68	491,239	16,143	0.0034	0.000112
2008	126.02	328.72	48,990,990,000	42.32	383,366	9,059	0.0026	0.00006
2009	172.16	328.72	49,414,219,997	42.42	523,741	12,347	0.0035	0.00008
2010	199.4	335.72	51,076,043,997	49.25	593,959	12,060	0.0039	0.00008
2011	180.2	353.12*	52,701,411,694	51.05	510,308	9,996	0.0034	0.00007
2012	202.3	353.12*	54,315,239,773	58.16	572,972	9,852	0.0037	0.00006
2013	45.5	377.08*	54,691,821,773	12.67	482,656	9,523	0.0033	0.00007
2013: Precipitation, leachate and refuse in place through 3/31/13								

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

II. SURFACE MONITORING

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

Landfill Gas Inspections

Serpentine walks are conducted across the Area 5 top deck and its side slopes on a quarterly basis (see Appendix B: *Plot of GPS Generated Track Lines*). This report contains the second quarter's Serpentine Surface Monitoring Data that was conducted from March 20th to March 27th.

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

Also, throughout the first quarter the Engineering Services Section (ESS) staff performed monthly Landfill Facility Site Inspections. The January inspection report noted ponding in the ditch on the north side of the Area 5 control road. No other issues were noted pertaining to Area 5. The ESS Inspections are included in Appendix A.

Four Health Department Inspections were performed during the first quarter, on January 10th, January 29th, March 1st, and March 29th. No violations or issues were recognized in Area 5, the reports noted satisfactory clean-up of previously noted debris and litter. 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 November 2nd, 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		11/6/2012	763.35
	7/24/2007	693.34	A5SM3 NEW 2/14/2007	2/14/2007	786.4
	2/29/2008	691.77		4/20/2007	786.25
	7/29/2008	691.26		7/24/2007	785.68
	11/24/2008	690.61		2/29/2008	784.87
	4/6/2009	690.16		7/29/2008	784.31
	7/9/2009	689.77		11/24/2008	783.76
	12/22/2009	689.13		4/6/2009	783.35
	3/1/2010	688.77		7/9/2009	783.05
	8/2/2010	688.6		12/22/2009	782.44
	12/21/2010	688.1		3/1/2010	782.08
	4/6/2011	687.83		8/2/2010	781.78
	8/8/2011	687.46		12/21/2010	781.25
	1/23/2012	687.19		4/6/2011	780.94
	5/18/2012	686.78		8/8/2011	780.66
	7/12/2012	686.69		1/23/2012	780.26
	11/2/2012	686.55		5/18/2012	779.9
A5SM-2	10/4/2005	785.17		7/12/2012	779.69
	2/1/2006	782.52	PMX20074 NEW 8/16/2007 (Destroyed original during Phase 3 of Area 6)	11/2/2012	779.56
	6/27/2006	780.48		8/16/2007	781.56
	4/20/2007	776.95		2/29/2008	780.1
	7/24/2007	775.63		7/29/2008	779.13
	2/29/2008	773.44		11/24/2008	778.21
	7/29/2008	772.2		4/6/2009	777.41
	11/24/2008	771.29		7/9/2009	776.99
	4/6/2009	770.35		12/22/2009	776.1
	7/9/2009	769.79		3/1/2010	775.81
	12/22/2009	768.6		8/2/2010	775.29
	3/1/2010	768.05		12/21/2010	774.79
	8/2/2010	767.28		4/6/2011	774.42
	12/21/2010	766.53		8/8/2011	774.19
	4/6/2011	765.86		1/23/2012	773.79
	8/8/2011	765.34		5/18/2012	773.41
				7/12/2012	773.26

III. STORMWATER MONITORING

Collection of Stormwater Samples

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

Stormwater Sample Evaluation

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

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

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

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

RESULTS

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

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

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

The top deck pH ranged from 7.06 to 7.66 standard pH units, which is within the benchmark range of 6.5 to 8.5. The pH at surface water station S-1 ranged from a low of 6.76 in January to a high of 7.85 in March. The pH of the three leachate aeration pond inflow (LAPI) samples averaged 7.5 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 38 to 52 µmhos/cm. The average conductance at station SW-S1 was 50.3 µmhos/cm, and the leachate pond inflow averaged 2,683.3 µmhos/cm. There are no benchmarks or criteria for specific conductance.

During previous quarters, increasing conductance measurements in the top deck samples raised concern about the water quality and possible waste contamination. However, this does not appear to be an issue during the first quarter, as conductance measurements are approximately the same as surface water location SW-S1, with readings both lower and slightly higher.

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

Top deck sample temperatures ranged from 7.2 to 8.9°C, all readings being below the WAC-173 criterion. Station SW-S1 averaged 6.0 °C for the quarter. The leachate temperature is not comparable due to the fact that the sample is a composite, and therefore kept on ice until it is collected.

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

The top deck turbidity ranged from 2.26 to 16.3 NTU during the 4th quarter. The turbidity at Station SW-S1 ranged between 0.27 NTU in February to 0.62 NTU in January. Leachate turbidity is not measured.

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

The water quality criteria established by WAC 173 states that turbidity must be less than 10 NTU above background, if the background turbidity is less than 50 NTU. The background samples taken at stations SW-W1 and SW-W2 in the second quarter averaged 0.99 NTU in January, 1.48 NTU in February and 1.37 NTU in March. Therefore, the sample taken on January 30th at SW-TD1 exceeds the WAC 173 criteria limit.

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

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

Top deck samples ranged from less than the method detection limit of 5 mg/L to 9.2 mg/L. At station SW-S1 COD ranged from less than the method detection limit to 7.2 mg/L. The average COD level for the leachate aeration pond inflow was 1,820 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 1.83 to 3.57 mg/L. Station SW-S1 TOC results averaged 2.31 mg/L and the TOC levels for the leachate aeration pond inflow averaged 494 mg/L. There are no benchmarks or criteria for TOC.

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

Top deck samples ranged from 15.9 to 21.7 mg/L as CaCO₃. Station SW-S1 values averaged 12.4 mg/L as CaCO₃, and the average alkalinity level for the leachate aeration pond

inflow was 1,579 mg/L as CaCO₃ for the quarter. There are no benchmarks or criteria for alkalinity.

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

Top deck samples ranged from 0.317 mg/L to 0.665 mg/L. Station SW-S1 had an average chloride concentration of 2.22 mg/L. The average chloride level for LAPI was 348.7 mg/L.

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

Top deck samples ranged in concentrations of 0.771 to 1.99 mg/L. Station SW-S1 had a sulfate concentration average of 2.22 mg/L. Sulfate concentrations at LAPI averaged 25.4 mg/L. There are no benchmarks or criteria for sulfate.

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

Top deck samples were analyzed for dissolved and total iron. Results for dissolved iron ranged from 0.026 to 0.06 mg/L. Total iron ranged from 0.116 to 0.863 mg/L.

All dissolved iron measurements at SW-S1 were below the method detection limit of 0.01 mg/L. The average concentration of total iron at station SW-S1 was 0.021 mg/L. The total iron concentration at the leachate aeration pond inflow averaged 15.1 mg/L.

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

TABLE 5													
Area 5 Top Deck Stormwater Monitoring Results													
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	1/30/2013	STD1130130-	7.59	43	7.9	16.3	< 5 U	1.83	17.8	0.409	1.25	0.0605	0.863
SW-A5TP2	1/30/2013	STD2130130-	7.32	38	8.9	2.26	9.2 T	3.57	15.9	0.317	0.837	0.034 T	0.137
SW-A5TP4	1/30/2013	STD4130130-	7.06	49	7.2	2.66	5.4 T	2.28	21.6	0.588	0.771	0.026 T	0.116
SW-A5TP6	1/30/2013	STD6130130-	7.66	52	7.5	5.69	8.4 T	2.39	21.7	0.665	1.99	0.044 T	0.298
SW-S1	1/23/2013	SS1-130123Q	6.76	52	4.3	0.62	< 5 U	2.27	10.8	2.41	2.39	< 0.01 U	0.035 T
SW-S1	2/12/2013	SS1-130212M	6.84	50	7.7	0.27	< 5 U	2.53	11.8	2.07	2.03	< 0.01 U	0.016 T
SW-S1	3/19/2013	SS1-130319M	7.85	49	6.1	0.34	7.2 T	2.13	14.6	2.18	2.24	< 0.01 DU	0.013 T
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	1/9/2013	LAPI130109M	7.26	1350	8.6	1090	227	756	179	24.4	19.4
LS-API	2/7/2013	LAPI130207M	7.49	2500	5.3	1450	437	1350	274	25.1	12.1
LS-API	3/6/2013	LAPI130306M	7.72	4200	11.9	2920	818 S	2630	593	26.6	13.7
S = SAMPLING HANDLING ERRORS											
NOTE: LEACHATE IS NOT ANALYZED FOR DISSOLVED IRON.											

IV. CONCLUSION

During the first quarter of 2013 there was only one exceedance of the water quality criteria, which was for turbidity. The turbidity level of the sample taken on January 30th at SW-TD1 exceeded the WAC 173 criteria limit of 10 NTU over background. The background level of 0.99 NTU (the average of the samples taken at SW-W1 and SW-W2 in January) results in a limit of 10.99 NTU, which was exceeded at SW-TD1 with a measurement of 16.3 NTU.

In general this quarter, the measurements of most lab sample parameters as well as specific conductance and turbidity were considerably lower at all sampling locations of interest than during the previous three quarters. This may indicate an overall improvement in water quality possibly due to the temperature of the ground surface limiting soil related impacts and reduced decomposition of waste limiting waste impacts.

From these results, it can be concluded that the Area 5 top deck interim cover system is functioning as designed and there is no interaction of waste and surface water runoff from the Area 5 top deck.



LEGEND:

○ ACTIVE MONITORING STATION

Figure 1. Area 5 Settlement Monitoring Locations

DATE	REVISION	BY



**KING COUNTY DEPARTMENT OF
NATURAL RESOURCES AND PARKS**
SOLID WASTE DIVISION

CEDAR HILLS REGIONAL LANDFILL
SETTLEMENT MONITORING LOCATIONS

APPROVED JDO **DATE** JUN 2010
RECOMMENDED JDO **DATE** JUN 2010
PROJECT NO. **SHEET NO.** 1 **OF** 1

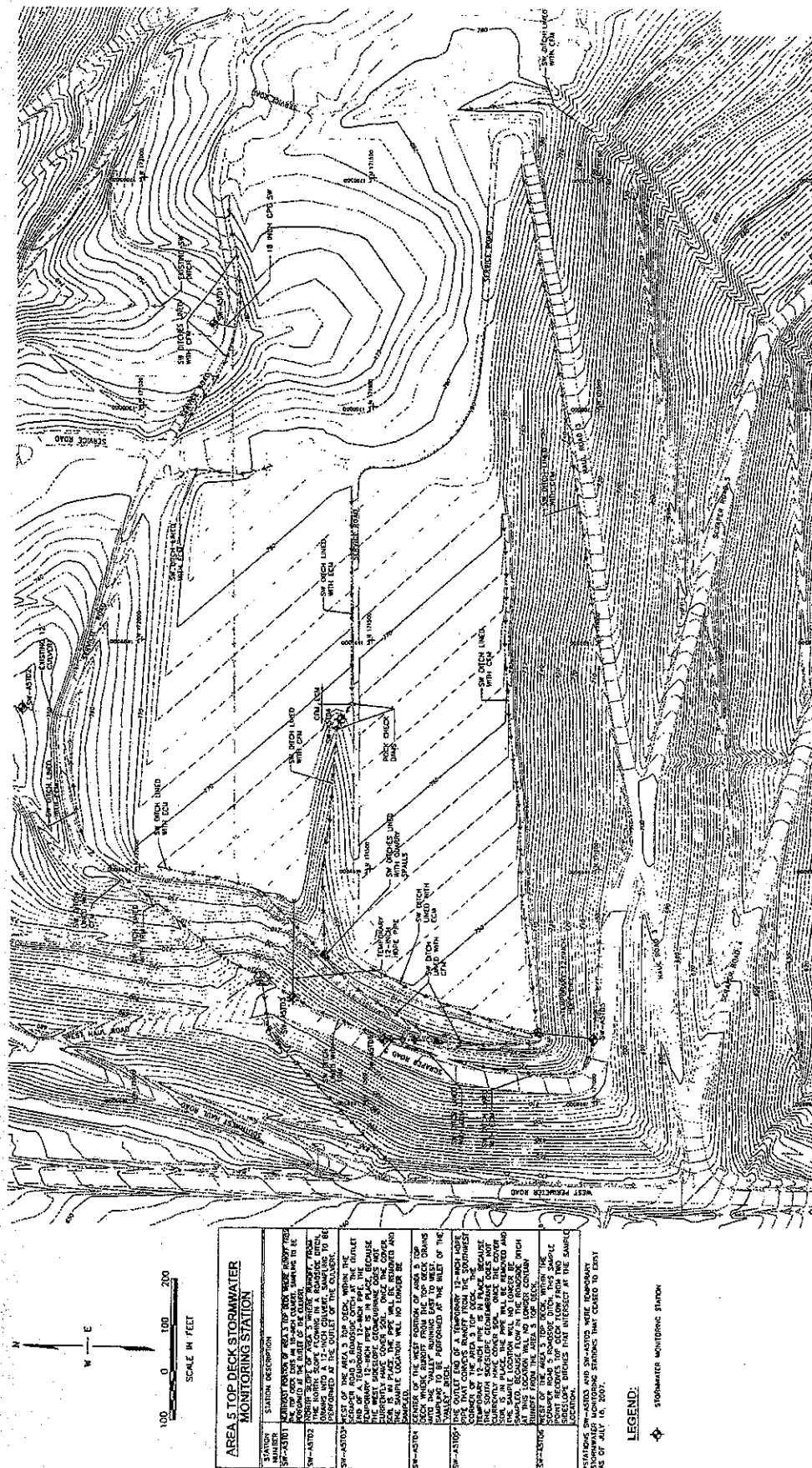


Figure 2. Top Deck Stormwater Monitoring Locations

Area 5 Top Deck Stormwater Monitoring Stations

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

FIGURE 2

APPENDIX A: INSPECTION REPORTS

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA5 License: na

Location: 20

Color:

Year: 2006

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY

**WO#: 0000010822**

Date In: 01/14/2013 10:02

Date Promised: 01/15/2013 10:02

Date Out: 00:00

WO Status: A Last WO#: 0000010602

WO Priority: Last WO Date: 11/30/2012

Track DownTime: Y Operator: WG

Tire Size 1:

GVW: 0

Tire Size 2:

EAC: 24

Transmission:

Department: 7572:Waste Water, LF Gas

Fuel Type1:

Company: Gas King County Landfill Gas

Fuel Type2:

Site: 20:20- Cedar Hills

Fuel Type3:

Monitor Group:

Oil Capacity: 0.000

Comments:

Fuel Cap1: 0.000

CH Area 5

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	01/10/2013	Gas System
T	0 - MONTHS	01/10/2013	Stormwater
V	0 - MONTHS	01/10/2013	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	762 SD	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	762 SD	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	762 SD	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: 1-18-03

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

Equipment: CHAREAS License: na

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

TECHNICIAN COPY



WO#: 0000010907

Date In: 01/30/2013 11:00
 Date Promised: 01/31/2013 11:00
 Date Out: 00:00

WO Status: A Last WO#: 0000010822
 WO Priority: Last WO Date: 01/14/2013
 Track DownTime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	02/10/2013	Gas System
T	0 - MONTHS	02/10/2013	Stormwater
V	0 - MONTHS	02/10/2013	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	0	761 <i>2013</i>	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	761 <i>2013</i>	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	761 <i>2013</i>	0.00000	Gas

NOTES

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

PMG BS

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

PMT BS

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

PMV BS

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

DATE: 2-11-13

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

Equipment: CHAREAS License: na

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

TECHNICIAN COPY



WO#: 0000011044

Date In: 03/07/2013 14:13

Date Promised: 03/08/2013 14:13

Date Out: 00:00

WO Status: A Last WO#: 0000010907

WO Priority: Last WO Date: 01/30/2013

Track DownTime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	03/10/2013	Gas System
T	0 - MONTHS	03/10/2013	Stormwater
V	0 - MONTHS	03/10/2013	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	0	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 (10)

PMG BS

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

PMT BS

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

PMV BS

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

DATE: 3/12/13

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

Equipment: CHAREASE License: na

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

TECHNICIAN COPY



WO#: 0000010728

Date In: 01/04/2013 12:05

Date Promised: 01/05/2013 12:05

Date Out: 00:00

WO Status: A Last WO#: 0000010692

WO Priority: Last WO Date: 11/30/2012

Track DownTime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
S	0 - MONTHS	01/28/2013	Scheduled Inspection
W	W - WEEKS	01/05/2013	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMS BS	PM Service PMS per list Billable Scheduled, Target	0	763	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMS BS

Equipment: CHAREASE

Work Order: 0000010728

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
1/17	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					

45m

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA5W License: na

Location: 20

Color:

Year: 2006

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000010729

Date In: 01/04/2013 12:06

Date Promised: 01/05/2013 12:06

Date Out: 00:00

WO Status: A Last WO#: 0000010693

WO Priority: Last WO Date: 11/30/2012

Track DownTime: Y Operator: WG

Tire Size 1:

GVW: 0

Tire Size 2:

EAC: 24

Transmission:

Department: 7572:Waste Water, LF Gas

Fuel Type1:

Company: Gas King County Landfill Gas

Fuel Type2:

Site: 20:20- Cedar Hills

Fuel Type3:

Monitor Group:

Oil Capacity: 0.000

Comments:

Fuel Cap1: 0.000

Cedar Hills Area 5 West

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
S	0 - MONTHS	01/28/2013	Scheduled Inspection
W	W - WEEKS	01/05/2013	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMS BS	PM Service PMS per list Billable Scheduled, Target	0	763	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMS BS

Equipment: CHAREA5W

Work Order: 0000010729

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
1/16	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	/				

35 m

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

Equipment: CHAREASTD License: na

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

TECHNICIAN COPY



WO#: 0000010919

Date In: 02/07/2013 07:56

Date Promised: 02/08/2013 07:56

Date Out: 00:00

WO Status: A Last WO#:

WO Priority: Last WO Date:

Track DownTime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
V	10 - MONTHS	02/10/2013	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	764	0.00000	

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA5TD

Work Order: 0000010919

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
2/2	1	Gas- Visually inspect vegetation	/				
	2	Gas- Visually inspect refuse	/				
	3	Gas- Visually inspect cover	/				
	4	Gas- Visually inspect erosion	/				
	5	Gas- Visually inspect settlement/ponding	/				
	6	Gas- Note any deficiencies					

1 hr.

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

Equipment: CHAREA6TD License: na

Location: 20 Color:
 Year: 2010 Serial: na
 Make: UD Engine:
 Model: UD
 Class: ZZZZZZZG6S: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000010920

Date In: 02/07/2013 07:58

Date Promised: 02/08/2013 07:58

Date Out: 00:00

WO Status: A Last WO#:

WO Priority: Last WO Date:

Track DownTime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	02/10/2013	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

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

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000010920

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
2/13	1	Gas- Visually inspect vegetation	/				used TVA
	2	Gas- Visually inspect refuse	/				
	3	Gas- Visually inspect cover	/				
	4	Gas- Visually inspect erosion	/				
	5	Gas- Visually inspect settlement/ponding	/				
	6	Gas- Note any deficiencies					

45 m

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

Equipment: CHAREASTD License: na

Location: 20 Color:
 Year: 2010 Serial: na
 Make: UD Engine:
 Model: UD
 Class: ZZZZZZZG6S: Landfill Gas - not classified

TECHNICIAN COPY



WO#: 0000010989

Date In: 03/07/2013 10:03

Date Promised: 03/08/2013 10:03

Date Out: 00:00

WO Status: A Last WO#: 0000010919

WO Priority: Last WO Date: 02/07/2013

Track DownTime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	03/10/2013	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description

REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	762 JD	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA5TD

Work Order: 0000010989

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
3-15	1	Gas- Visually inspect vegetation	✓				
	2	Gas- Visually inspect refuse	✓				
	3	Gas- Visually inspect cover	✓				
	4	Gas- Visually inspect erosion	✓				
	5	Gas- Visually inspect settlement/ponding	✓				
	6	Gas- Note any deficiencies	✓				

1 1/4 hr

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

Equipment: CHAREA6TD License: na

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

TECHNICIAN COPY



WO#: 0000011016

Date In: 03/07/2013 11:43

Date Promised: 03/08/2013 11:43

Date Out: 00:00

WO Status: A Last WO#:0000010920

WO Priority: Last WO Date: 02/07/2013

Track DownTime: Y Operator: WG

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

METERS

WO Meter:	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	03/10/2013	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	764 JB	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000011016

Complete?	Step	Tasks	OK	Adjust	Repair	Replace	Comments
3/11	1	Gas- Visually inspect vegetation	☒				
	2	Gas- Visually inspect refuse	☒				
	3	Gas- Visually inspect cover	☒				
	4	Gas- Visually inspect erosion	☒				
	5	Gas- Visually inspect settlement/ponding	☒				
	6	Gas- Note any deficiencies					

1 hr.

ENGINEERING SERVICES SECTION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: MICHAEL M. FENNELL

Telephone: 204-226-0485

Location: CEH Ambient Temperature (°F) 34

Weather Condition: CLEAR, CALM

Inspector's Signature: [Signature]

Date: 1/16/13

ACTION CODES

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

Item No.	Action Code(s)	Area Code(s) (See below or over for map)	Status	State Reason if "Fair or Poor"	Date Corrective Action Implemented
		Area Map	G F P		
1	D-5	A5 D-3		A5 STRL RD @ N. SIDE - DIJKA POWDER @ W. SIDE RD	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

AREA CODES (for Cedar Hills)

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

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

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

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

ENGINEERING SERVICES SECTION

Landfill Facility Site Inspections

Type - Permit Compliance

Inspected By: STAN LARAY Telephone: 296-8453
 Location: C-HILLS Ambient Temperature (°F) 45°F Weather Condition: RAIN - HEAVY!
 Inspector's Signature: [Signature] Date: 2-22-2013

ACTION CODES

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

Action Code	Area Code(s)		Status		State Reason	Date Corrective Action Implemented
	Area	Map	F	P		
					REALLY HEAVY RAINS	
	D1	H2		✓	PONDS ARE SILTY & OUTFLOW SILTY INTO THE WETLANDS	
	D5	E2		✓	CRANE STAINING & ALGAE GROWTH ALONG WEST HAUL ROAD. MATT HAS VACUUMED CHANNEL & OPEN BASIN AND WILL MONITOR FOR FUTURE STAINING OR WEEPS	✓ YES
	(B5)	(E2)			SAME AS ABOVE, THE STAINING MAY BE FROM A WEEP.	
	(B5C)	(E2)			MATT WILL MONITOR	
	C13	H6	✓		LITTER PRESENT @ S.W. COMPLIANCE POINT IN THE FLOW	
	F4	FEG 2			GENERAL MUD TRACKING FROM FILL AREA	

Area Codes (for Cedar Hills)

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

Area 2/3 = A2/3
 Area 4 = A4
 Stockpile = SP
 F = Fair

Aeration Ponds = AP
 So. Solid Waste Area = SSWA
 North Flare Station = NFS
 P = Poor

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

ENGINEERING SERVICES SECTION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: MIKE McEWEN

Telephone: 202-296-0435

Location: C.A.

Ambient Temperature (°F) 40°

Weather Condition: Clear

Inspector's Signature: [Signature]

Date: 3/26/13

ACTION CODES

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

Item No.	Action Code(s)	Area Code(s) (See below or over for map)	Status	State Reason if "Fair or Poor"	Date Corrective Action Implemented
		Area Map	G F P		
1	E-2	H-3		✓	TREE OVER RD. S. PROP LINE
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

AREA CODES (for Cedar Hills)

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

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

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

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

Inspection Survey Report

Solid Waste Program



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: Cedar Hills Regional Landfill Operator: K.C.S.W.D Phone: (206) 296-4490
Address: 16645 - 228th AVE. SE City: Maple Valley ZIP: 98038 Time In: 14:34
EHS: DAV Date: 01/01/13 General Health Record ID: PR/SR 0015730 P/E: 1006 Activity Time: 72 m Travel Time: 100 m

Violation Number	Violation Description	Correction Date	Service
<u>0126</u>	<u>Litter present south of vector waste drying pad. See [WAC 173-135 220(2)]</u>		126 ☐ Fld PI 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 <u>Note: suggest at addressing litter problem with crew as needed.</u> <u>No major issues/at problems observed at various areas including peachate lagoons Area 6, Areas.</u> <u>No major bird population observed</u>			

Person in Charge: Judy Heimer Health Authority: 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 Cedar Hills Regional Landfill KCSWD Operator (206) 296-4490 Phone
Address 16645 - 228th Ave. SE Maple Valley City 78038 ZIP 11:54 Time In 11:54 AM

EHS DAV Date 01/29/13 General Health Record ID 0015736 P/E 1006 Activity Time 36 m Travel Time 79 m

Violation Number	Violation Description	Correction Date	Service
0126	Wind blown debris/litter present on ground south of the vector drying waste drying pad WAC 173-351-220(2)	2/10/13	126 ☐ Fld PI Rvw 127 ☐ Pre-Operat 128 ☒ Routine 129 ☐ Return 130 ☐ Complaint 131 ☐ Comp Rtn Results <u>Note*</u> 01 ☒ Satisfactory 02 ☐ Unsatisfactory 07 ☐ In Compliance 08 ☐ Not in Compliance 22 ☐ Not Access <u>Conductual</u> Action 00 ☒ Not Applicable 04 ☐ Suspend 07 ☐ Approved 08 ☐ App w/ Cond 26 ☐ Return Visit 27 ☐ Phone Follow

Comments / Observations

* Note:

Please direct clean-up crew toward ~~the~~ vector waste drying pad areas to correct ~~the~~ blown litter violation

All other areas appeared to be properly maintained.
- Some debris present on side slope of Area 7.

Person in Charge

Judy Heimer

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.

Inspection Survey Report

Solid Waste Program



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 Cedar Hills Regional Landfill Operator KCSWD Phone (206) 296-4490

Address 16645 228th AVE SE City Maple Valley ZIP 98038 Time In 13:19

EHS DAV Date 030113 General Health Record ID 0015736 P/E 1006 Activity Time 45 m Travel Time 110 m

Violation Number	Violation Description	Correction Date	Service
	<i>No Violations Observed.</i>		126 ☐ Fld PI 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 ☐

Comments / Observations

Note: Litter ~~was~~ no longer present as previously observed at vector waste drying pad.

Area 5 - Litter cleanup taking place and appears to be satisfactory

Good Line Parking area - no problems observed

Misc
☐ Photos Taken

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

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.

Solid Waste Program



Environmental Hazards Section 206-205-4394
401 Fifth Avenue, Suite 1100 • Seattle, WA 98104

Cedar Hills Regional Landfill KCSWD (206) 296-4490

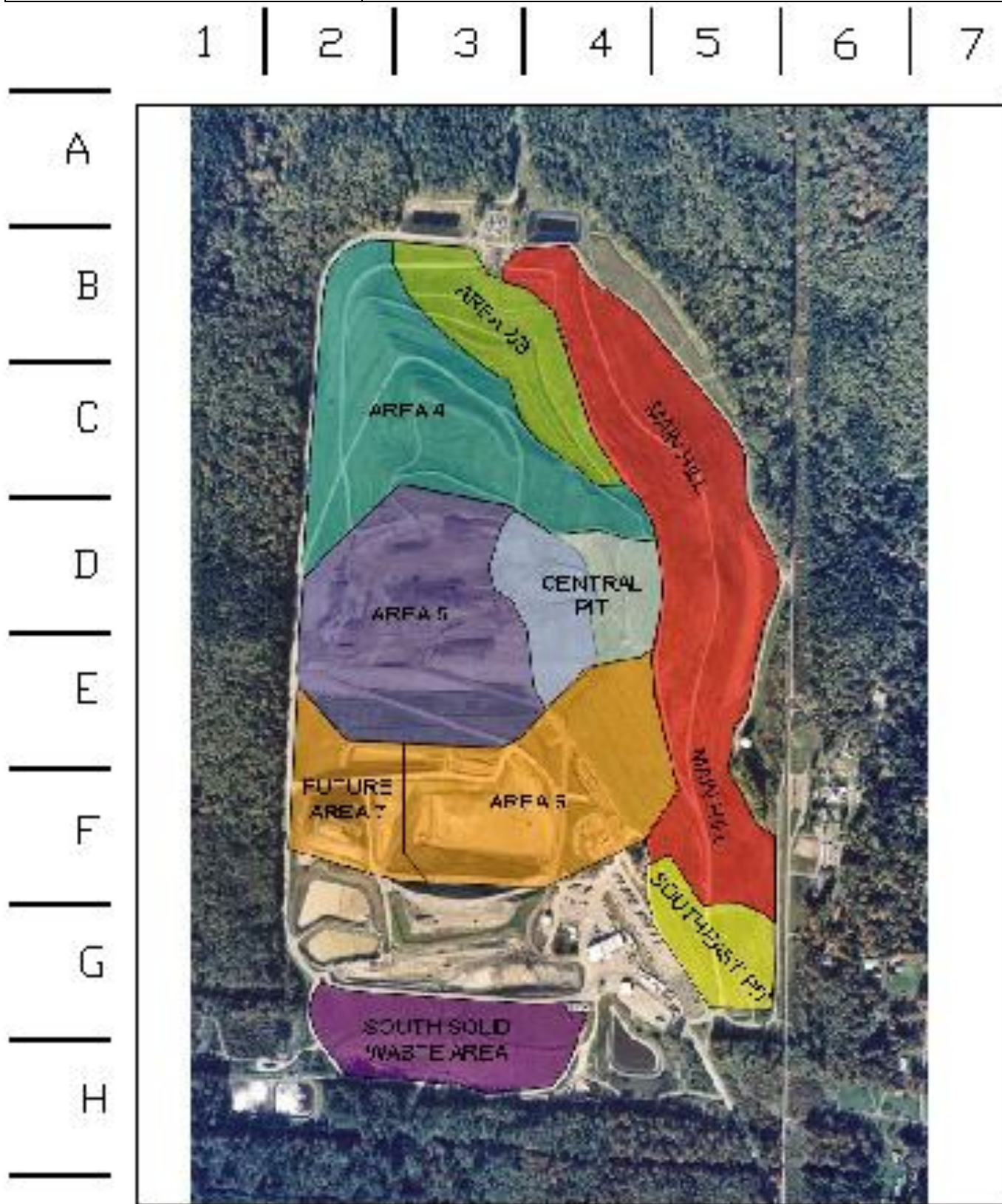
16645 228th Ave. SE Maple Valley 98038 12:10

50 m 95 m

[illegible]

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.

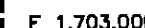
Category number:	Suggested Remedy:
------------------	-------------------



APPENDIX B: GAS MONITORING REPORTS

MARCH 2013
Scale 1"=600'

MARCH 2013
Scale 1"=600'



DATE	REVISION	BY

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

~~FIELD DATA SYSTEM~~

CEDAR HILLS QUARTERLY
GAS EMISSIONS MONITORING

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

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CEDAR HILLS License: na

Location: 20

Color:

Year: 2006

Serial: na

Make: UD

Engine:

Model: UD

Class: ZZZZZZZGS: Landfill Gas - not classified

TECHNICIAN COPY

**WO#: 0000011030**

Date In: 03/07/2013 13:55

Date Promised: 03/08/2013 13:55

Date Out: 00:00

WO Status: A Last WO#: 0000010894

WO Priority: Last WO Date: 01/30/2013

Track DownTime: Y Operator: WG

Tire Size 1:

GVW: 0

Tire Size 2:

EAC: 24

Transmission:

Department: 7572:Waste Water, LF Gas

Fuel Type1:

Company: Gas King County Landfill Gas

Fuel Type2:

Site: 20:20- Cedar Hills

Fuel Type3:

Monitor Group:

Oil Capacity: 0.000

Comments:

Fuel Cap1: 0.000

Cedar Hills

Fuel Cap2: 0.000

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD

PM SERVICE

Type	Cycle	Next Due	Description
Q	0 - MONTHS	03/06/2013	Quarterly Inspection
X	0 - MONTHS	03/10/2013	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	763 <i>ND</i>	0.00000	

NOTES

Work Order Task List

Repair Code: PMQ BS

Equipment: CEDAR HILLS

Work Order: 0000011030

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

3/20 - 10hrs

3/21 - 10hrs

3/22 - 10hrs

3/26 - 10hrs

3/27 - 10hrs

Landfill Site: Cedar Hills

Date: 3/20/13

Cal. Time: 12 30 pm

Technician: J. Parker

Surveyor M. McEwen

Test Instrument used: TVa 1000

Cal. Gas Lot No: 20328

CH₄ 496 ppm
O₂ Ambient

Barometric Pressure	Time
Start 29.52	1230pm
Stop 29.74	445pm

1	4	seconds
2	4	seconds
3	4	seconds
avg.	4	seconds

Weather Conditions: mostly cloudy

Wind Speed &

Direction (out of): 16 mph S.W

Easting (10 T #)

Time

Comments

A hand-drawn graph on lined paper. A straight line is drawn from the bottom left towards the top right. The text "NO Evidence" is written across the line in a cursive, handwritten style.

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hill

Date: 3/21/13

Cal. Time: 1230pm

Calibration :

Test Instrument used: TVA 1000

Technician: J. Parker

Surveyor: McEwen

Cal. Gas Lot No: 20320

Cal Gas Used:

CH₄ 496 ppm

O₂ Ambient

Barometric Pressure		Time
Start	30.10	1230pm
Stop	30.11	430pm

90% response time in seconds:

1 4 seconds

2 4 seconds

3 4 seconds

avg. 4 seconds

Weather Conditions: overcast, snow

Wind Speed &

Direction (out of): 6mph S.W

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

NO exceedance

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 3/22/13

Cal. Time: 700 am

Calibration :

Test Instrument used: TVA 1000

Technician: J Parker

Cal. Gas Lot No: 20328

Surveyor M. McEwen

Cal Gas Used:

CH₄ 496 ppm

O₂ Ambient

Barometric Pressure		Time
Start	<u>30.23</u>	<u>700 am</u>
Stop	<u>30.23</u>	<u>1230 pm</u>

90% response time in seconds:

1 3 seconds

2 3 seconds

3 3 seconds

avg. 3 seconds

Weather Conditions: Overcast

Wind Speed &

Direction (out of): 2 mph S.E

Northing (UTM #)

Easting (10 T #)

Time

Comments

No excelsior

No evidence

No evidence

A hand-drawn graph on lined paper. The graph shows a straight line starting from the origin (0,0) and extending upwards and to the right. The line is labeled "No Inflection" written across it in a cursive-like font.

APPENDIX C: ANALYTICAL TEST RESULTS

ANALYTICAL TEST RESULTS

Location	Date	Sample ID	ALK. TOT'L	COD	CHLORIDE	IRON	IRON	SULFATE	TOC	FIELD TESTS			
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	COND (F)	PH (F)	TURB	TEMP
			N	N	N	D	T	N	N	umhos/cm	pH units	ntu	deg. C
SW-S1	1/23/2013	SS1-130123Q	10.8	< 5 U	2.41	< 0.01 U	0.035 T	2.39	2.27	52	6.76	0.62	4.3
SW-S1	2/12/2013	SS1-130212M	11.8	< 5 U	2.07	< 0.01 U	0.016 T	2.03	2.53	50	6.84	0.27	7.7
SW-S1	3/19/2013	SS1-130319M	14.6	7.2 T	2.18	< 0.01 DU	0.013 T	2.24	2.13	49	7.85	0.34	6.1
SW-TD1	1/30/2013	STD1130130-	17.8	< 5 U	0.409	0.0605	0.863	1.25	1.83	43	7.59	16.3	7.9
SW-TD2	1/30/2013	STD2130130-	15.9	9.2 T	0.317	0.034 T	0.137	0.837	3.57	38	7.32	2.26	8.9
SW-TD4	1/30/2013	STD4130130-	21.6	5.4 T	0.588	0.026 T	0.116	0.771	2.28	49	7.06	2.66	7.2
SW-TD6	1/30/2013	STD6130130-	21.7	8.4 T	0.665	0.044 T	0.298	1.99	2.39	52	7.66	5.69	7.5

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

Location	Date	Sample ID	ALK. TOT'L mg/L	COD mg/L	CHLORIDE mg/L	IRON DISS. mg/L	IRON TOT'L mg/L	SULFATE mg/L	TOC mg/L	COND (F) umhos/cm	PH (F) pH units	TURB ntu	TEMP deg c
LS-API	1/9/2013	LAPI130109M	756	1090	179	N/A	19.4	24.4	227	1350	7.26	N/A	8.6
LS-API	2/7/2013	LAPI130207M	1350	1450	274	N/A	12.1	25.1	437	2500	7.49	N/A	5.3
LS-API	3/6/2013	LAPI130306M	2630	2920	593	N/A	13.7	26.6	818 S	4200	7.72	N/A	11.9
LS-API	MATHEMATICAL AVERAGE		1578.7	1820.0	348.7	N/A	15.1	25.4	494.0	2683.3	7.5	N/A	8.6

CEDAR HILLS REGIONAL LANDFILL QUARTERLY ENVIRONMENTAL MONITORING REPORT

First Quarter 2013



Department of Natural Resources and Parks
Solid Waste Division

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

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Cedar Hills Regional Landfill Summary of Quarterly Environmental Monitoring First Quarter of 2013

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 first 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 for arsenic in upgradient and crossgradient wells MW-93 and MW-99; wells vertical to facilities and downgradient MW-68, MW-69, MW-80, MW-88, MW-89 and MW-91. Trichloroethylene exceeded the groundwater criterion in upgradient wells MW-76 and MW-82; and vinyl chloride exceeded criteria in MW-65. Secondary standards (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

no analytical error in regional aquifer samples as all samples are within 10% on the ion balance.

Intra-well prediction limits are calculated annually using data collected through the end of the previous calendar year (2012). 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 on well samples and several QC blanks, all probable laboratory artifacts; chloroform was detected in three field blanks and is a 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 nine perched wells, four in the north and west areas of the landfill (MW-27A, MW-28, MW-29 and MW-55), four in the east perched zone (MW-30A, MW-47 MW-62 and MW-EB6), and MW-101 in the South Solid Waste Area. Groundwater quality data for the regularly sampled Perched Zone samples collected during the first quarter of 2013 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 2012 and any exceedances of these limits by current results are tabulated (Table 9). There were no prediction limits exceedances in the perched zone.

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

1.2 Surface Water

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

Cedar Hills Regional Landfill is covered by an Industrial Stormwater General Permit issued by the Washington State Department of Ecology. The permit defines discharge Benchmarks, applicable to all facilities and Effluent Limits, applicable specifically to landfills. These values are reproduced in Table 15. Stations SW-N4, SW-SL3 and SW-GS1 are the designated points for comparison to permit benchmarks and effluent limits. Samples were obtained from each designated compliance station monthly this quarter. Compliance sample exceedances are presented in Table 12. Surface water quality is highly correlated with precipitation events that can mobilize sediments. These fluctuations are often limited to the duration of the events. No Benchmarks or Effluent Limits were exceeded at permit discharge points this quarter.

1.3 Landfill Gas

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

Detections above the regulatory limit in landfill gas probe GP-33C 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 be able to function as gas extraction wells, however due to low gas levels encountered (no methane was detected in the first quarter of 2013) they are functioning as probes and are not connected to the active extraction system. They have been monitored weekly during the first quarter for methane, carbon dioxide, oxygen and static pressure.

Weekly monitoring of LFG migration probes GP-30B and GP-33C, located along the

western property, continued through the first quarter with no methane detections.

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

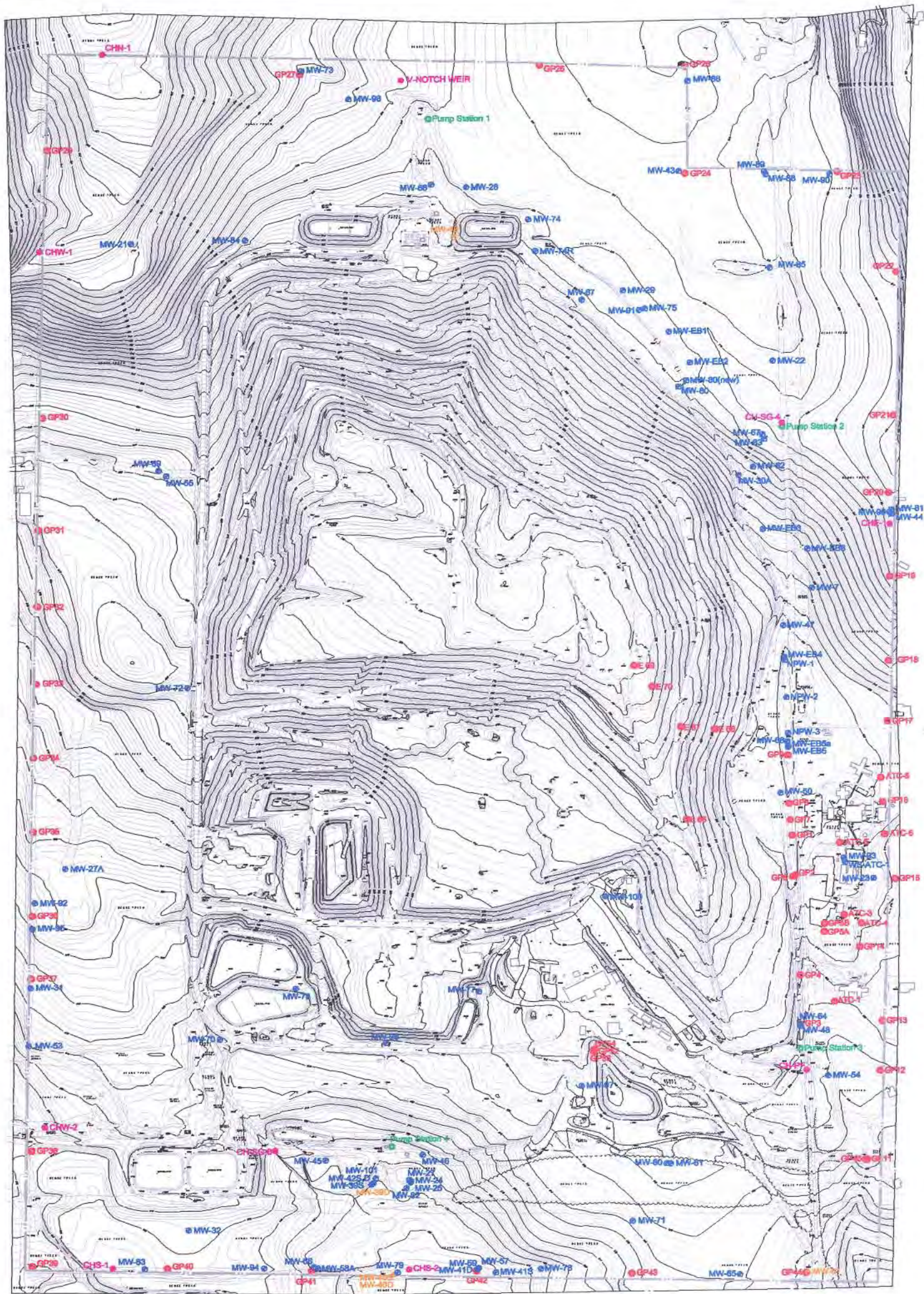
The Prediction Limit is an intra-well statistical test that compares an analytical result to a computed limit value. The limit value is derived from past analytical results from the same well, considered representative historical well data. A value outside of this limiting value is considered evidence 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. 1
- MW-9 Surface Water Stations



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

TABLE 1
SUMMARY OF CEDAR HILLS REGIONAL LANDFILL GROUNDWATER WELLS

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

TABLE 1
SUMMARY OF CEDAR HILLS REGIONAL LANDFILL GROUNDWATER WELLS

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

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

Zone Designations

US = Upgradient South Site Wells

UNW = Upgradient Northwest

UNE = Upgradient Northeast

CG = Cross Gradient

DW = Westside Downgradient

V = Vertical Key Facilities

I = Interior

DNF = Downgradient of North End Facilities outside Refuse Cells

DG = Downgradient Groundwater Flow

²WL = Water Level WQ = Water Quality

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 1ST QUARTER 2013

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-21	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-21	Regional	1/8/13	Groundwater Sampling	W21-130108-	
MW-22	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-24	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-24	Regional	1/3/13	Groundwater Sampling	W24-130103-	
MW-25	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-27A	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-27A	Perched	1/8/13	Groundwater Sampling	W27A130108-	
MW-28	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-28	Perched	1/14/13	Groundwater Sampling	W28-130114-	
MW-29	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-29	Perched	1/10/13	Groundwater Sampling	W29-130110-	
MW-30A	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-30A	Perched	1/29/13	Groundwater Sampling	W30A130129-	
MW-41D	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-41S	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-43	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-43	Regional	1/15/13	Groundwater Sampling	W43-130115-	
MW-45	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-47	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-47	Perched	1/10/13	Groundwater Sampling	W47-130110-	
MW-48	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-50	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-54	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-55	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-55	Perched	1/8/13	Groundwater Sampling	W55-130108-	
MW-56	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-56	Regional	1/24/13	Groundwater Sampling	W56-130124-	
MW-57	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-57	Regional	1/17/13	Groundwater Sampling	W57-130117-	
MW-58A	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-58A	Regional	1/18/13	Groundwater Sampling	W58A130118-	
MW-59	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-59	Regional	1/25/13	Groundwater Sampling	W59-130125-	
MW-60	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-60	Regional	1/7/13	Groundwater Sampling	W60-130107-	
MW-62	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-62	Perched	1/10/13	Groundwater Sampling	W62-130110-	
MW-63	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-64	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-64	Regional	1/16/13	Groundwater Sampling	W64-130116-	
MW-65	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-65	Regional	1/18/13	Groundwater Sampling	W65-130118-	
MW-66	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-66	Regional	1/10/13	Groundwater Sampling	W66-130110-	
MW-67	Regional	1/3/13	Groundwater Sampling	W67-130103-	
MW-67	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-68	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-68	Regional	1/15/13	Groundwater Sampling	W68-130115-	
MW-69	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-69	Regional	1/8/13	Groundwater Sampling	W69-130108-	
MW-70	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-70	Regional	1/25/13	Groundwater Sampling	W70-130125-	
MW-72	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-72	Regional	1/28/13	Groundwater Sampling	W72-130128-	

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 1ST QUARTER 2013

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-73	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-73	Regional	1/22/13	Groundwater Sampling	W73-130122-	
MW-74	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-74	Regional	1/11/13	Groundwater Sampling	W74R130111-	
MW-74	Regional	2/19/13	Groundwater Sampling	W74R130219-	
MW-74	Regional	3/25/13	Groundwater Sampling	W74R130325-	
MW-75	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-75	Regional	1/11/13	Groundwater Sampling	W75-130111-	
MW-75	Regional	2/19/13	Groundwater Sampling	W75-130219-	
MW-75	Regional	3/25/13	Groundwater Sampling	W75-130325-	
MW-76	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-76	Regional	1/25/13	Groundwater Sampling	W76-130125-	
MW-77	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-77	Regional	1/25/13	Groundwater Sampling	W77-130125-	
MW-78	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-78	Regional	1/25/13	Groundwater Sampling	W78-130125-	
MW-79	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-80	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-80	Regional	1/29/13	Groundwater Sampling	W80-130129-	
MW-81	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-81	Regional	1/11/13	Groundwater Sampling	W81-130111-	
MW-82	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-82	Regional	1/23/13	Groundwater Sampling	W82-130123-	
MW-83	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-83	Regional	1/18/13	Groundwater Sampling	W83-130118-	
MW-84	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-84	Regional	1/17/13	Groundwater Sampling	W84-130117-	
MW-85	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-85	Regional	1/24/13	Groundwater Sampling	W85-130124-	
MW-86	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-86	Regional	1/24/13	Groundwater Sampling	W86-130124-	
MW-87	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-87	Regional	1/11/13	Groundwater Sampling	W87-130111-	
MW-87	Regional	2/14/13	Groundwater Sampling	W87-130214-	
MW-87	Regional	3/22/13	Groundwater Sampling	W87-130322-	
MW-88	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-88	Regional	1/28/13	Groundwater Sampling	W88-130128-	
MW-89	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-89	Regional	1/10/13	Groundwater Sampling	W89-130110-	
MW-90	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-90	Regional	1/30/13	Groundwater Sampling	W90-130130-	
MW-91	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-91	Regional	1/22/13	Groundwater Sampling	W91-130122-	
MW-93	Regional	1/16/13	Groundwater Sampling	W93-130116-	
MW-94	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-94	Regional	1/14/13	Groundwater Sampling	W94-130114-	
MW-95	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-95	Regional	1/17/13	Groundwater Sampling	W95-130117-	
MW-96	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-97	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-98	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-99	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-99	Regional	1/11/13	Groundwater Sampling	W99-130111-	
MW-99	Regional	2/14/13	Groundwater Sampling	W99-130214-	
MW-99	Regional	3/22/13	Groundwater Sampling	W99-130322-	

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 1ST QUARTER 2013

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-100	Regional	1/2/13	Groundwater Elevation Measurement	NA	
MW-100	Regional	1/14/13	Groundwater Sampling	W100130114-	
MW-101	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-101	Perched	1/28/13	Groundwater Sampling	W101130128-	
MW-102	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-103	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-104	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-105	Perched	1/2/13	Groundwater Elevation Measurement	NA	
MW-106	Regional	1/7/13	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	1/7/13	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	1/14/13	Groundwater Sampling	WB6-130114-	
Equipment Blank	NA	1/17/13	QA/QC Sample	WU1H130117E	
Equipment Blank	NA	1/17/13	QA/QC Sample	WU1M130117E	
Equipment Blank	NA	1/17/13	QA/QC Sample	WU1S130117E	
Field Blank	NA	1/11/13	QA/QC Sample	W55-130108F	
Field Blank	NA	3/28/13	QA/QC Sample	W58A130118F	
Field Blank	NA	2/5/13	QA/QC Sample	WNPW130129F	
MW-47	Regional	1/10/13	QA/QC Sample	W47-130110D	Field Duplicate
MW-64	Perched	1/16/13	QA/QC Sample	W64-130116D	Field Duplicate
MW-80	Regional	1/29/13	QA/QC Sample	W80-130129D	Field Duplicate
WS-NPW-1	Regional	1/7/13	Groundwater Elevation Measurement	NA	
WS-NPW-3	Regional	1/7/13	Groundwater Elevation Measurement	NA	
WS-NPW	Regional	1/29/13	Water Supply Characterization	WNPW130129-	
WS-OS1	Regional	3/28/13	Water Supply Characterization	WOS1130328-	
WS-OS2	Regional	2/5/13	Water Supply Characterization	WOS2130205-	
WS-OS3	Regional	2/14/13	Water Supply Characterization	WOS3130214-	
WS-OS4	Regional	2/14/13	Water Supply Characterization	WOS4130214-	
WS-OS1	Regional	3/1/13	QA/QC Sample	WOS1130328D	Field Duplicate

NA = No sample ID assigned, No sample collected.

TABLE 3
SUMMARY OF EXCEEDANCES OF WAC 173-200-040
WATER QUALITY STANDARDS FOR GROUND WATERS OF THE STATE OF WASHINGTON
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
(Data Collected from January 1, 2013 to March 31, 2013)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
South, Northeast and Northwest Upgradient Wells					
pH (field)	(pH units)	MW-76	1/25/2013	W76-130125-	6.27
		MW-73	1/22/2013	W73-130122-	6.19
Arsenic	(mg/L)	MW-99	1/11/2013	W99-130111-	0.00204
		MW-93	1/16/2013	W93-130116-	0.00139
Iron	(mg/L)	MW-24	1/3/2013	W24-130103-	3.28
		MW-57	1/17/2013	W57-130117-	8.67
		MW-58A	1/18/2013	W58A130118-	1.01
		MW-59	1/25/2013	W59-130125-	4.41
		MW-65	1/18/2013	W65-130118-	4.41
		MW-21	1/8/2013	W21-130108-	1.87
Manganese	(mg/L)	MW-24	1/3/2013	W24-130103-	0.119
		MW-56	1/24/2013	W56-130124-	0.064
		MW-57	1/17/2013	W57-130117-	0.248
		MW-58A	1/18/2013	W58A130118-	0.337
		MW-59	1/25/2013	W59-130125-	0.0968 D
		MW-65	1/18/2013	W65-130118-	0.197
		MW-21	1/8/2013	W21-130108-	0.0748
		MW-99	1/11/2013	W99-130111-	0.0815
		MW-93	1/16/2013	W93-130116-	0.249
		MW-95	1/17/2013	W95-130117-	0.133
Trichloroethene	(ug/L)	MW-76	1/25/2013	W76-130125-	9.02
		MW-82	1/23/2013	W82-130123-	5.6
Vinyl Chloride	(ug/L)	MW-65	1/18/2013	W65-130118-	0.0432
Interior and Vertical to Facilities Wells					
Arsenic	(mg/L)	MW-68	1/15/2013	W68-130115-	0.0018
Iron	(mg/L)	MW-100	1/14/2013	W100130114-	1.29
		MW-68	1/15/2013	W68-130115-	0.992
Manganese	(mg/L)	MW-100	1/14/2013	W100130114-	0.226
		MW-64	1/16/2013	W64-130116-	0.061
		MW-67	1/3/2013	W67-130103-	0.0795
		MW-68	1/15/2013	W68-130115-	0.227

TABLE 3
SUMMARY OF EXCEEDANCES OF WAC 173-200-040
WATER QUALITY STANDARDS FOR GROUND WATERS OF THE STATE OF WASHINGTON
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
(Data Collected from January 1, 2013 to March 31, 2013)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Wells Downgradient to Waste Cells and North end Facilities					
Arsenic	(mg/L)	MW-69	1/8/2013	W69-130108-	0.00251
		MW-80	1/29/2013	W80-130129-	0.00334
		MW-91	1/22/2013	W91-130122-	0.00407
		MW-88	1/28/2013	W88-130128-	0.00103
		MW-89	1/10/2013	W89-130110-	0.0012
Iron	(mg/L)	MW-69	1/8/2013	W69-130108-	1.31
		MW-72	1/28/2013	W72-130128-	2.3
		MW-75	1/11/2013	W75-130111-	1.77
		MW-80	1/29/2013	W80-130129-	1.26
		MW-87	1/11/2013	W87-130111-	3.31
		MW-91	1/22/2013	W91-130122-	3.77
		MW-43	1/15/2013	W43-130115-	0.906
		MW-86	1/24/2013	W86-130124-	0.497
		MW-89	1/10/2013	W89-130110-	0.856
		MW-90	1/30/2013	W90-130130-	1.27
Manganese	(mg/L)	MW-69	1/8/2013	W69-130108-	0.201
		MW-72	1/28/2013	W72-130128-	0.302
		MW-75	1/11/2013	W75-130111-	0.134
		MW-80	1/29/2013	W80-130129-	0.22 D
		MW-87	1/11/2013	W87-130111-	0.365
		MW-91	1/22/2013	W91-130122-	0.305
		MW-43	1/15/2013	W43-130115-	0.214
		MW-89	1/10/2013	W89-130110-	0.246
		MW-90	1/30/2013	W90-130130-	0.265 D

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

Data Collected from January 1, 2013 to March 31, 2013

Site ID			Upgradient South																	
			MW-94			MW-76			MW-83			MW-82			MW-60			MW-57		
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	25.3	1.26248	48.2	19.7	0.98303	47.4	29.0	1.44711	50.5	20.2	1.00798	43.2	15.2	0.75848	45.3	16.7	0.83333	36.1
Magnesium	24.3	2	12.1	0.99568	38.0	8.9	0.73154	35.3	12.6	1.03682	36.2	12.1	0.99568	42.6	7.8	0.64431	38.5	10.0	0.82041	35.6
Potassium	39.1	1	2.0	0.05064	1.9	1.4	0.0353	1.7	2.2	0.0555	1.9	1.6	0.04067	1.7	1.0	0.0266	1.6	0.9	0.02356	1.0
Sodium	23.0	1	7.2	0.31188	11.9	7.4	0.32319	15.6	7.5	0.3271	11.4	6.7	0.28926	12.4	5.6	0.24359	14.5	7.1	0.30753	13.3
Iron	55.8	2	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00043	0.0	8.67	0.31049	13.5
Manganese	54.9	2	0.00	3.6E-05	0.0	0.00	3.6E-05	0.0	0.00	3.6E-05	0.0	0.00	3.6E-05	0.0	0.00	3.6E-05	0.0	0.25	0.00903	0.4
Ammonia-N	14.0	1	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0	0.03	0.00218	0.1
Total Cations (meq/L)			2.6			2.1			2.9			2.3			1.7			2.3		
Anions																				
Alkalinity, Total			100			62			109			97			69			77		
Carbonate	60.0	2	0.0397	0.00132	0.0	0.0069	0.00023	0.0	0.0532	0.00177	0.1	0.0286	0.00095	0.0	0.0359	0.0012	0.1	0.03	0.001	0.0
Bicarbonate	61.0	1	121.80	1.99638	72.2	75.02	1.22959	58.0	132.87	2.1779	72.9	118.65	1.94475	77.3	83.50	1.3686	82.3	94.25	1.54477	74.1
Chloride	35.5	1	19.0	0.53592	19.4	14.2	0.40053	18.9	19.7	0.55567	18.6	6.3	0.17826	7.1	2.7	0.07559	4.5	5.8	0.16444	7.9
Nitrate-N	14.0	1	1.44	0.10281	3.7	0.75	0.05369	2.5	0.36	0.02584	0.9	0.66	0.04705	1.9	1.15	0.0821	4.9	0.05	0.0038	0.2
Sulfate	96.1	2	6.1	0.12763	4.6	21.0	0.43724	20.6	10.8	0.22487	7.5	16.5	0.34354	13.7	6.5	0.13575	8.2	17.8	0.37061	17.8
Total Anions (meq/L)			2.8			2.1			3.0			2.5			1.7			2.1		
Total Ions (meq/L)			5.4			4.2			5.9			4.8			3.3			4.4		
Cation/Anion Ratio			0.95			0.98			0.96			0.93			1.01			1.11		
Percent Difference			-2.6			-1.1			-2.0			-3.7			0.3			5.1		
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)			2.62			2.07			2.87			2.33			1.67			1.98		
Calcium			48.17			47.42			50.48			43.19			45.34			41.99		
Magnesium			37.99			35.29			36.17			42.67			38.51			41.33		
Sodium + Potassium			13.83			17.29			13.35			14.14			16.15			16.68		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			2.66			2.07			2.96			2.47			1.58			2.08		
Sulfate			4.796			21.147			7.596			13.923			8.586			17.811		
Chloride			20.138			19.372			18.771			7.224			4.781			7.903		
Bicarbonate + Carbonate			75.066			59.481			73.633			78.853			86.633			74.286		

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

Data Collected from January 1, 2013 to March 31, 2013

Site ID			Upgradient South														
			MW-56			MW-65			MW-24			MW-59			MW-58A		
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	15.3	0.76347	51.6	12.2	0.60878	36.5	13.6	0.67864	36.3	14.0	0.6986	39.3	16.5	0.82335	44.1
Magnesium	24.3	2	5.8	0.47891	32.4	7.6	0.62456	37.4	9.5	0.77926	41.7	8.1	0.66406	37.3	8.7	0.71837	38.5
Potassium	39.1	1	1.0	0.0246	1.7	0.9	0.02264	1.4	0.9	0.02302	1.2	1.2	0.03044	1.7	1.0	0.02458	1.3
Sodium	23.0	1	4.8	0.20966	14.2	5.7	0.24576	14.7	6.1	0.26577	14.2	5.1	0.22271	12.5	5.7	0.24576	13.2
Iron	55.8	2	0.01	0.00036	0.0	4.41	0.15793	9.5	3.28	0.11746	6.3	4.41	0.15793	8.9	1.01	0.03617	1.9
Manganese	54.9	2	0.06	0.00233	0.2	0.20	0.00717	0.4	0.12	0.00433	0.2	0.10	0.00352	0.2	0.34	0.01227	0.7
Ammonia-N	14.0	1	0.01	0.00071	0.0	0.02	0.00121	0.1	0.03	0.00189	0.1	0.01	0.00071	0.0	0.07	0.00479	0.3
Total Cations (meq/L)			1.5			1.7			1.9			1.8			1.9		
Anions																	
Alkalinity, Total			52			53			64			61			73		
Carbonate	60.0	2	0.031	0.00103	0.1	0.0399	0.00133	0.1	0.0459	0.00153	0.1	0.045	0.0015	0.1	0.1329	0.00443	0.2
Bicarbonate	61.0	1	62.89	1.03081	66.6	64.33	1.05451	68.8	77.38	1.26828	73.7	74.21	1.21632	72.0	89.28	1.46335	76.8
Chloride	35.5	1	4.0	0.11142	7.2	4.1	0.11593	7.6	3.8	0.10577	6.1	4.1	0.11508	6.8	4.1	0.11508	6.0
Nitrate-N	14.0	1	0.31	0.02242	1.4	0.01	0.00071	0.0	0.01	0.00071	0.0	0.03	0.00207	0.1	0.01	0.00071	0.0
Sulfate	96.1	2	18.3	0.38102	24.6	17.3	0.3602	23.5	16.6	0.34563	20.1	17.0	0.35395	21.0	15.4	0.32064	16.8
Total Anions (meq/L)			1.5			1.5			1.7			1.7			1.9		
Total Ions (meq/L)			3.0			3.2			3.6			3.5			3.8		
Cation/Anion Ratio			0.96			1.09			1.09			1.05			0.98		
Percent Difference			-2.2			4.2			4.1			2.6			-1.0		
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)			1.48			1.50			1.75			1.62			1.81		
Calcium			51.70			40.54			38.85			43.24			45.44		
Magnesium			32.43			41.59			44.61			41.10			39.64		
Sodium + Potassium			15.86			17.87			16.53			15.67			14.92		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.52			1.53			1.72			1.69			1.90		
Sulfate			24.997			23.512			20.080			20.983			16.845		
Chloride			7.309			7.567			6.145			6.822			6.046		
Bicarbonate + Carbonate			67.694			68.920			73.774			72.195			77.109		

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

Data Collected from January 1, 2013 to March 31, 2013

Site ID			Upgradient Northwest									Upgradient Northeast					
			MW-73			MW-21			MW-84			MW-81			MW-99		
	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)
Cations																	
Calcium	40.1	2	10.5	0.52395	54.7	10.1	0.50399	36.4	10.7	0.53393	34.9	11.1	0.55389	41.6	9.2	0.46008	35.1
Magnesium	24.3	2	3.2	0.26579	27.7	6.3	0.51923	37.5	8.6	0.70438	46.1	6.1	0.50442	37.9	4.6	0.37688	28.8
Potassium	39.1	1	0.7	0.01852	1.9	1.0	0.0266	1.9	0.9	0.02374	1.6	0.7	0.01808	1.4	0.8	0.02021	1.5
Sodium	23.0	1	3.4	0.1492	15.6	6.1	0.26534	19.1	6.1	0.2649	17.3	5.8	0.25316	19.0	10.2	0.44368	33.9
Iron	55.8	2	0.01	0.00036	0.0	1.87	0.06697	4.8	0.01	0.00036	0.0	0.01	0.00036	0.0	0.03	0.00093	0.1
Manganese	54.9	2	0.00	3.6E-05	0.0	0.07	0.00272	0.2	0.00	9.8E-05	0.0	0.00	3.6E-05	0.0	0.08	0.00297	0.2
Ammonia-N	14.0	1	0.01	0.00071	0.1	0.01	0.00071	0.1	0.01	0.00071	0.0	0.01	0.00071	0.1	0.07	0.00509	0.4
Total Cations (meq/L)				1.0			1.4			1.5			1.3			1.3	
Anions																	
Alkalinity, Total			34			56			59			48			53		
Carbonate	60.0	2	0.0032	0.00011	0.0	0.1391	0.00464	0.4	0.0437	0.00146	0.1	0.0704	0.00235	0.2	0.2892	0.00964	0.7
Bicarbonate	61.0	1	41.35	0.67779	68.2	67.67	1.1092	85.3	72.14	1.18236	73.1	58.17	0.95351	72.0	64.32	1.0542	80.2
Chloride	35.5	1	2.1	0.05923	6.0	2.8	0.0787	6.1	4.2	0.11903	7.4	3.2	0.09082	6.9	3.2	0.0897	6.8
Nitrate-N	14.0	1	1.16	0.08282	8.3	0.01	0.00071	0.1	0.59	0.04205	2.6	1.62	0.11566	8.7	0.02	0.00164	0.1
Sulfate	96.1	2	8.4	0.17448	17.5	5.1	0.10639	8.2	13.1	0.27275	16.9	7.8	0.16157	12.2	7.7	0.1597	12.1
Total Anions (meq/L)				1.0			1.3			1.6			1.3			1.3	
Total Ions (meq/L)				2.0			2.7			3.1			2.7			2.6	
Cation/Anion Ratio				0.96			1.07			0.94			1.01			1.00	
Percent Difference				-1.8			3.2			-2.8			0.3			-0.2	
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)				0.96			1.32			1.53			1.33			1.30	
Calcium					54.72			38.32			34.97			41.66			35.37
Magnesium					27.76			39.48			46.13			37.94			28.97
Sodium + Potassium					17.52			22.20			18.90			20.40			35.66
					100.0			100.0			100.0						
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				0.91			1.30			1.58			1.21			1.31	
Sulfate					19.140			8.191			17.311			13.372			12.161
Chloride					6.498			6.059			7.555			7.517			6.830
Bicarbonate + Carbonate					74.363			85.750			75.134			79.111			81.009

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

Data Collected from January 1, 2013 to March 31, 2013

Site ID			Cross Gradient						Interior											
			MW-93			MW-95			MW-70			MW-78			MW-77			MW-100		
	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)
Cations																				
Calcium	40.1	2	33.3	1.66168	45.7	19.0	0.9481	45.2	19.7	0.98303	46.7	15.6	0.77844	46.6	22.3	1.11277	46.2	26.2	1.30739	41.6
Magnesium	24.3	2	18.2	1.49763	41.2	10.3	0.84756	40.4	10.1	0.8311	39.5	7.2	0.59576	35.7	11.6	0.95454	39.6	16.1	1.32483	42.2
Potassium	39.1	1	1.5	0.0376	1.0	1.1	0.02839	1.4	1.5	0.03888	1.8	2.0	0.05115	3.1	1.5	0.03862	1.6	1.8	0.04655	1.5
Sodium	23.0	1	9.7	0.42106	11.6	6.1	0.26621	12.7	5.8	0.25229	12.0	5.6	0.24402	14.6	7.0	0.30318	12.6	9.4	0.40714	13.0
Iron	55.8	2	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	0.01	0.00036	0.0	1.29	0.0462	1.5
Manganese	54.9	2	0.25	0.00906	0.2	0.13	0.00484	0.2	0.00	3.6E-05	0.0	0.00	3.6E-05	0.0	0.00	7.4E-05	0.0	0.23	0.00823	0.3
Ammonia-N	14.0	1	0.07	0.00498	0.1	0.03	0.00178	0.1	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0
Total Cations (meq/L)				3.6			2.1			2.1			1.7			2.4			3.1	
Anions																				
Alkalinity, Total			117			86			82			67			105			134		
Carbonate	60.0	2	0.1113	0.00371	0.1	0.1351	0.0045	0.2	0.0987	0.00329	0.2	0.0196	0.00065	0.0	0.0562	0.00187	0.1	0.057	0.0019	0.1
Bicarbonate	61.0	1	142.51	2.33594	60.0	104.16	1.70724	76.5	100.33	1.64446	78.2	81.33	1.33314	76.8	127.99	2.09781	84.6	163.36	2.6777	84.5
Chloride	35.5	1	3.0	0.08349	2.1	5.9	0.16585	7.4	3.9	0.11029	5.2	6.6	0.18503	10.7	4.8	0.13511	5.5	2.7	0.077	2.4
Nitrate-N	14.0	1	0.02	0.00121	0.0	0.01	0.00071	0.0	0.03	0.00207	0.1	1.00	0.07139	4.1	0.88	0.06247	2.5	0.01	0.00071	0.0
Sulfate	96.1	2	70.6	1.46995	37.7	17.0	0.35395	15.9	16.5	0.34354	16.3	7.0	0.14533	8.4	8.7	0.18177	7.3	19.8	0.41225	13.0
Total Anions (meq/L)				3.9			2.2			2.1			1.7			2.5			3.2	
Total Ions (meq/L)				7.5			4.3			4.2			3.4			4.9			6.3	
Cation/Anion Ratio				0.93			0.94			1.00			0.96			0.97			0.99	
Percent Difference				-3.5			-3.1			0.1			-1.9			-1.4			-0.5	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				3.62			2.09			2.11			1.67			2.41			3.09	
Calcium					45.93			45.36			46.69			46.63			46.19			42.37
Magnesium					41.39			40.55			39.48			35.69			39.62			42.93
Sodium + Potassium					12.68			14.09			13.83			17.68			14.19			14.70
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				3.89			2.23			2.10			1.66			2.42			3.17	
Sulfate					37.758			15.861			16.347			8.733			7.522			13.010
Chloride					2.145			7.432			5.248			11.119			5.591			2.430
Bicarbonate + Carbonate					60.097			76.706			78.405			80.148			86.887			84.560

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

Data Collected from January 1, 2013 to March 31, 2013

Site ID			Vertical to Facilities												Downgradient Northwest					
			MW-64			MW-68			MW-67			MW-66			MW-72			MW-69		
	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)
Cations																				
Calcium	40.1	2	17.2	0.85828	38.0	26.0	1.29741	43.0	31.1	1.5519	44.1	22.7	1.13273	36.8	29.4	1.46707	44.6	29.3	1.46208	45.8
Magnesium	24.3	2	12.9	1.06151	47.0	15.3	1.259	41.8	18.5	1.52232	43.2	18.4	1.51409	49.2	16.8	1.38243	42.0	15.1	1.24254	38.9
Potassium	39.1	1	1.4	0.03555	1.6	1.5	0.03939	1.3	1.5	0.03811	1.1	1.2	0.03171	1.0	1.9	0.04757	1.4	1.6	0.04195	1.3
Sodium	23.0	1	6.8	0.29578	13.1	8.6	0.37364	12.4	9.2	0.40018	11.4	9.1	0.3967	12.9	6.8	0.29665	9.0	9.0	0.39191	12.3
Iron	55.8	2	0.09	0.00339	0.2	0.99	0.03553	1.2	0.13	0.00473	0.1	0.01	0.00036	0.0	2.30	0.08237	2.5	1.31	0.04691	1.5
Manganese	54.9	2	0.06	0.00222	0.1	0.23	0.00826	0.3	0.08	0.00289	0.1	0.00	3.6E-05	0.0	0.30	0.01099	0.3	0.20	0.00732	0.2
Ammonia-N	14.0	1	0.05	0.00353	0.2	0.02	0.00107	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00079	0.0	0.01	0.00071	0.0
Total Cations (meq/L)				2.3	99.8		3.0			3.5			3.1			3.3			3.2	
Anions																				
Alkalinity, Total			91			133			123			120			115			129		
Carbonate	60.0	2	0.0658	0.00219	0.1	0.1053	0.00351	0.1	0.0909	0.00303	0.1	0.0972	0.00324	0.1	0.0524	0.00175	0.1	0.3076	0.01025	0.3
Bicarbonate	61.0	1	111.01	1.81953	78.6	162.05	2.65609	85.3	149.88	2.4566	70.4	146.20	2.3964	81.0	140.19	2.29791	70.8	156.75	2.56936	85.8
Chloride	35.5	1	3.0	0.08377	3.6	2.8	0.07926	2.5	5.0	0.14103	4.0	7.3	0.20478	6.9	6.7	0.18955	5.8	4.3	0.12016	4.0
Nitrate-N	14.0	1	0.01	0.00071	0.0	0.01	0.00071	0.0	0.51	0.03605	1.0	0.73	0.05197	1.8	0.01	0.00093	0.0	0.01	0.00071	0.0
Sulfate	96.1	2	19.7	0.41017	17.7	17.9	0.37269	12.0	40.9	0.85157	24.4	14.5	0.3019	10.2	36.2	0.75371	23.2	14.1	0.29357	9.8
Total Anions (meq/L)				2.3	100.0		3.1			3.5			3.0			3.2			3.0	
Total Ions (meq/L)				4.6			6.1			7.0			6.0			6.5			6.2	
Cation/Anion Ratio				0.98			0.97			1.01			1.04			1.01			1.07	
Percent Difference				-1.2			-1.6			0.5			2.0			0.7			3.2	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				2.25			2.97			3.51			3.08			3.19			3.14	
Calcium					38.13			43.69			44.18			36.83			45.94			46.59
Magnesium					47.15			42.40			43.34			49.23			43.29			39.59
Sodium + Potassium					14.72			13.91			12.48			13.93			10.78			13.82
					100.0															
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				2.32			3.11			3.45			2.91			3.24			2.99	
Sulfate					17.713			11.978			24.667			10.388			23.242			9.808
Chloride					3.618			2.547			4.085			7.046			5.845			4.014
Bicarbonate + Carbonate					78.670			85.475			71.247			82.566			70.913			86.178
					100.0															

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

Data Collected from January 1, 2013 to March 31, 2013

Site ID			Downgradient																	
			MW-74			MW-87			MW-85			MW-80			MW-75			MW-91		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	39.7	1.98104	38.3	36.7	1.83134	40.0	22.6	1.12774	42.7	26.8	1.33733	48.2	23.7	1.18263	36.8	21.4	1.06786	38.8
Magnesium	24.3	2	31.5	2.59206	50.1	26.0	2.13948	46.7	13.9	1.1438	43.3	12.9	1.06151	38.3	18.7	1.53878	47.8	14.2	1.16848	42.5
Potassium	39.1	1	1.9	0.04885	0.9	2.0	0.05039	1.1	1.4	0.03606	1.4	1.5	0.03862	1.4	1.6	0.04143	1.3	1.7	0.0422	1.5
Sodium	23.0	1	12.7	0.55242	10.7	9.8	0.42541	9.3	7.7	0.3345	12.7	6.5	0.2823	10.2	8.8	0.38452	12.0	7.5	0.32406	11.8
Iron	55.8	2	0.01	0.00036	0.0	3.31	0.11854	2.6	0.01	0.00036	0.0	1.26	0.04512	1.6	1.77	0.06339	2.0	3.77	0.13501	4.9
Manganese	54.9	2	0.03	0.00108	0.0	0.37	0.01329	0.3	0.00	3.6E-05	0.0	0.22	0.00801	0.3	0.13	0.00488	0.2	0.31	0.0111	0.4
Ammonia-N	14.0	1	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0	0.03	0.00243	0.1
Total Cations (meq/L)				5.2			4.6			2.6			2.8			3.2			2.8	
Anions																				
Alkalinity, Total			198			89			95			89			98			86		
Carbonate	60.0	2	0.2114	0.00705	0.1	0.0396	0.00132	0.0	0.0485	0.00162	0.1	0.0446	0.00149	0.1	0.081	0.0027	0.1	0.0636	0.00212	0.1
Bicarbonate	61.0	1	241.13	3.95236	77.7	108.38	1.77641	38.0	115.56	1.8941	68.1	108.86	1.78424	63.0	119.03	1.95101	62.2	104.79	1.71762	62.3
Chloride	35.5	1	23.1	0.65157	12.8	6.0	0.16924	3.6	7.4	0.20816	7.5	5.8	0.1636	5.8	8.6	0.24145	7.7	7.6	0.21465	7.8
Nitrate-N	14.0	1	0.44	0.0312	0.6	0.01	0.00071	0.0	0.12	0.00871	0.3	0.03	0.002	0.1	0.01	0.00071	0.0	0.03	0.00214	0.1
Sulfate	96.1	2	21.3	0.44348	8.7	131.0	2.72753	58.3	32.2	0.67043	24.1	42.4	0.8828	31.1	45.3	0.94318	30.0	39.4	0.82034	29.8
Total Anions (meq/L)				5.1			4.7			2.8			2.8			3.1			2.8	
Total Ions (meq/L)				10.3			9.3			5.4			5.6			6.4			5.5	
Cation/Anion Ratio				1.02			0.98			0.95			0.98			1.02			1.00	
Percent Difference				0.9			-1.0			-2.6			-1.1			1.2			-0.1	
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)				5.17			4.45			2.64			2.72			3.15			2.60	
Calcium					38.29			41.19			42.68			49.17			37.58			41.03
Magnesium					50.09			48.11			43.29			39.03			48.89			44.90
Sodium + Potassium					11.62			10.70			14.03			11.80			13.53			14.07
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				5.05			4.67			2.77			2.83			3.14			2.75	
Sulfate					8.774			58.349			24.166			31.171			30.054			29.779
Chloride					12.891			3.620			7.503			5.776			7.693			7.792
Bicarbonate + Carbonate					78.335			38.030			68.331			63.053			62.253			62.429

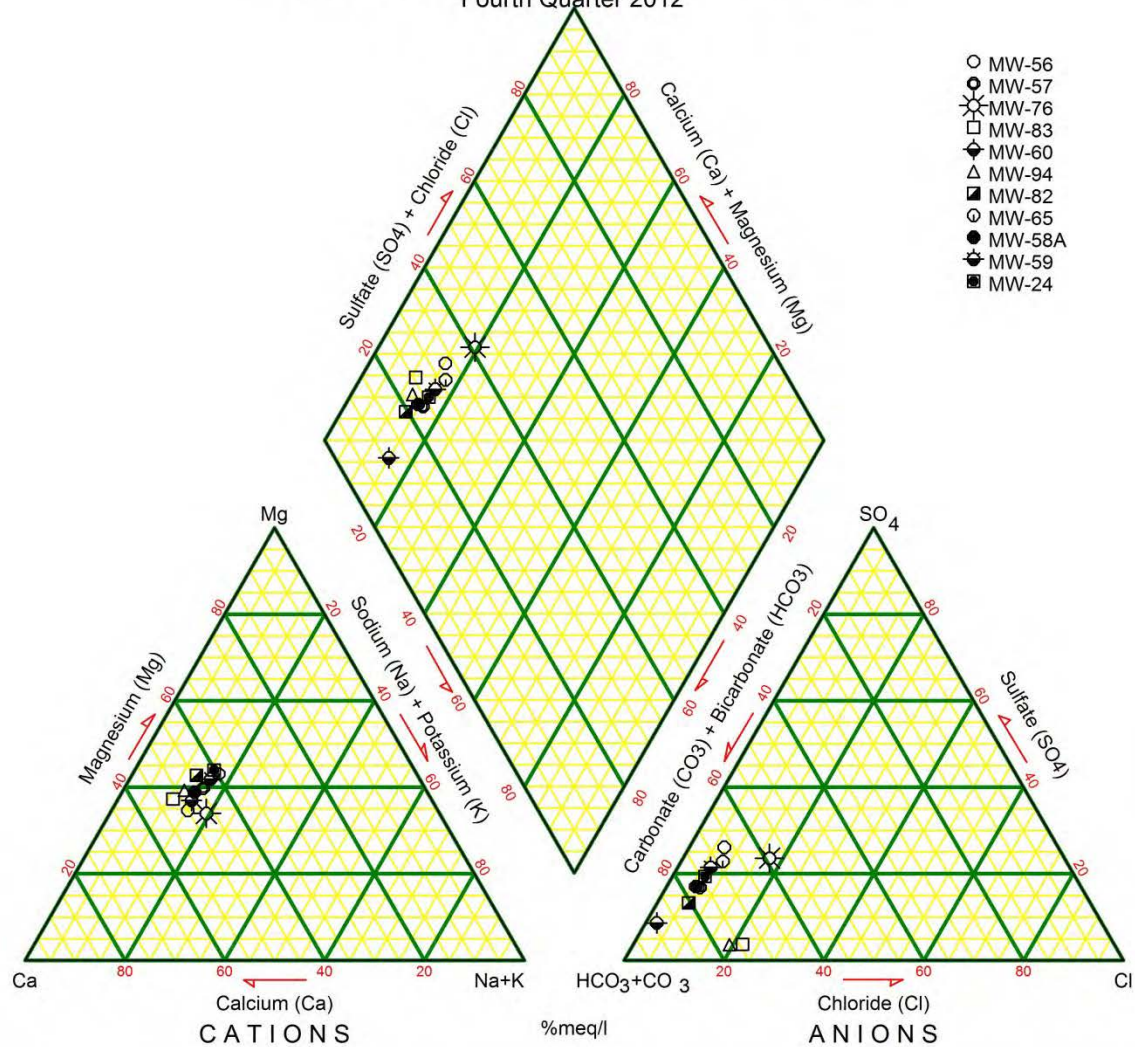
Table 4
Ion Balance Calculations
Cedar Hills Landfill Regional Aquifer Groundwater Monitoring Wells

Data Collected from January 1, 2013 to March 31, 2013

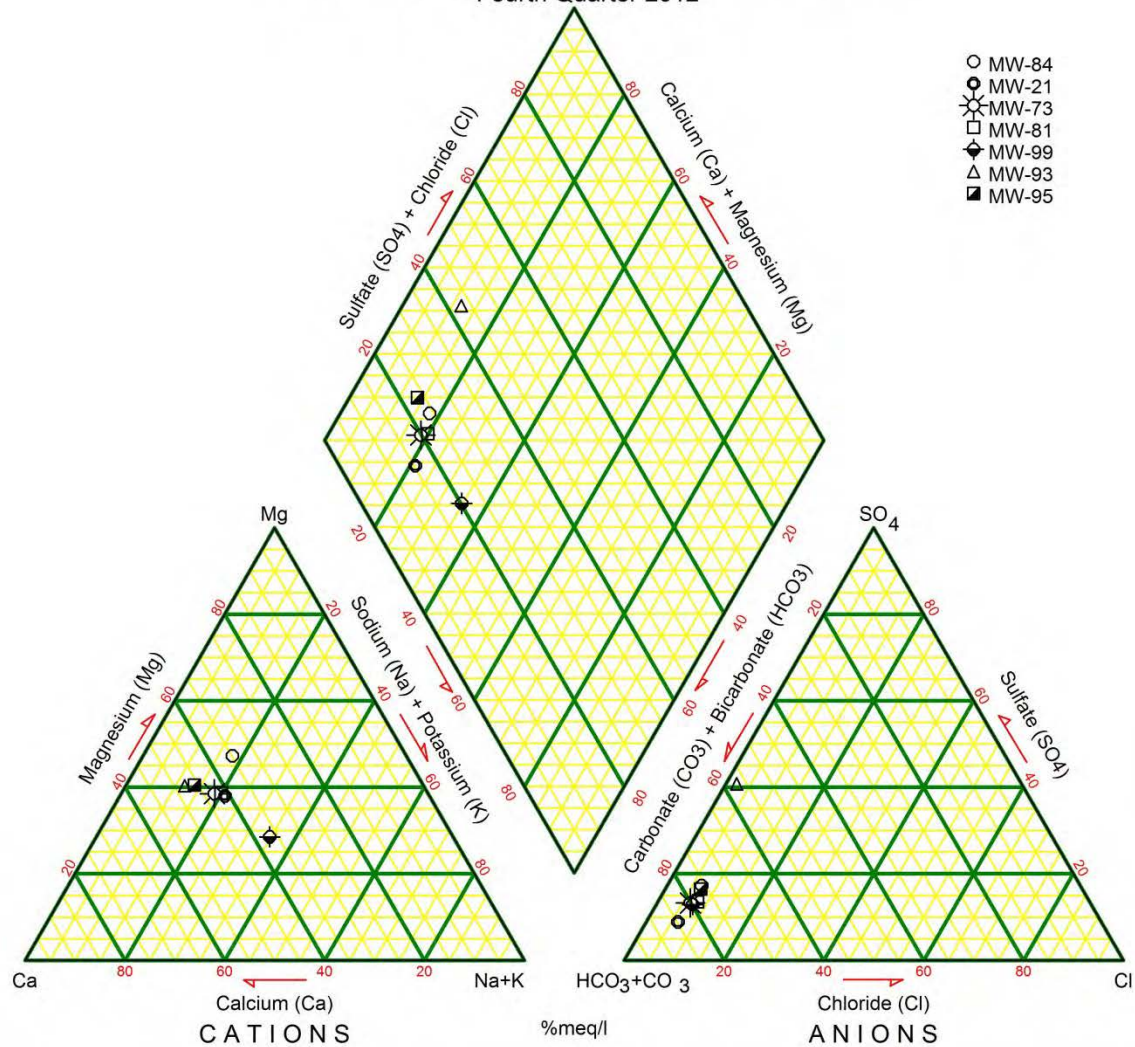
Site ID			Downgradient of North End Facilities														
			MW-86			MW-88			MW-43			MW-90			MW-89		
Cations	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	12.9	0.64371	38.4	9.6	0.47804	37.5	12.5	0.62375	35.9	18.0	0.8982	44.0	14.1	0.70359	34.4
Magnesium	24.3	2	8.7	0.71755	42.8	6.7	0.5538	43.4	9.2	0.7554	43.5	9.8	0.80477	39.4	10.6	0.87225	42.7
Potassium	39.1	1	1.2	0.02941	1.8	0.8	0.02141	1.7	1.3	0.03248	1.9	1.3	0.03274	1.6	1.4	0.03632	1.8
Sodium	23.0	1	6.1	0.26534	15.8	5.1	0.22053	17.3	6.5	0.28317	16.3	5.8	0.25055	12.3	9.0	0.39191	19.2
Iron	55.8	2	0.50	0.0178	1.1	0.01	0.00036	0.0	0.91	0.03245	1.9	1.27	0.04548	2.2	0.86	0.03066	1.5
Manganese	54.9	2	0.01	0.0004	0.0	0.00	3.6E-05	0.0	0.21	0.00779	0.4	0.27	0.00965	0.5	0.25	0.00896	0.4
Ammonia-N	14.0	1	0.01	0.00071	0.0	0.01	0.00071	0.1	0.02	0.00178	0.1	0.02	0.00107	0.1	0.01	0.00086	0.0
Total Cations (meq/L)			1.7			1.3			1.7			2.0			2.0		
Anions																	
Alkalinity, Total			62			52			69			68			75		
Carbonate	60.0	2	0.02305	0.00077	0.0	0.01359	0.00045	0.0	0.10398	0.00347	0.2	0.03409	0.00114	0.1	0.07606	0.00254	0.1
Bicarbonate	61.0	1	75.84	1.24304	71.5	63.17	1.03539	80.1	83.97	1.37633	77.4	83.13	1.36266	67.7	90.86	1.48924	76.8
Chloride	35.5	1	4.3	0.12016	6.9	2.6	0.07305	5.7	3.9	0.10944	6.2	3.7	0.10521	5.2	4.1	0.11424	5.9
Nitrate-N	14.0	1	0.27	0.01913	1.1	0.56	0.03962	3.1	0.01	0.00071	0.0	0.01	0.00071	0.0	0.01	0.00071	0.0
Sulfate	96.1	2	17.1	0.35604	20.5	6.9	0.14429	11.2	13.8	0.28733	16.2	26.1	0.54342	27.0	16.0	0.33313	17.2
Total Anions (meq/L)			1.7			1.3			1.8			2.0			1.9		
Total Ions (meq/L)			3.4			2.6			3.5			4.1			4.0		
Cation/Anion Ratio			0.96			0.99			0.98			1.01			1.05		
Percent Difference			-1.9			-0.7			-1.2			0.7			2.6		
Trilinear Diagram Data																	
sum (Ca, Mg, Na+K)			1.66			1.27			1.69			1.99			2.00		
Calcium			38.87			37.53			36.80			45.22			35.11		
Magnesium			43.33			43.48			44.57			40.52			43.52		
Sodium + Potassium			17.80			18.99			18.62			14.26			21.37		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.72			1.25			1.78			2.01			1.94		
Sulfate			20.700			11.514			16.173			27.003			17.179		
Chloride			6.986			5.829			6.160			5.228			5.891		
Bicarbonate + Carbonate			72.314			82.657			77.666			67.769			76.930		

Cedar Hills Regional Landfill

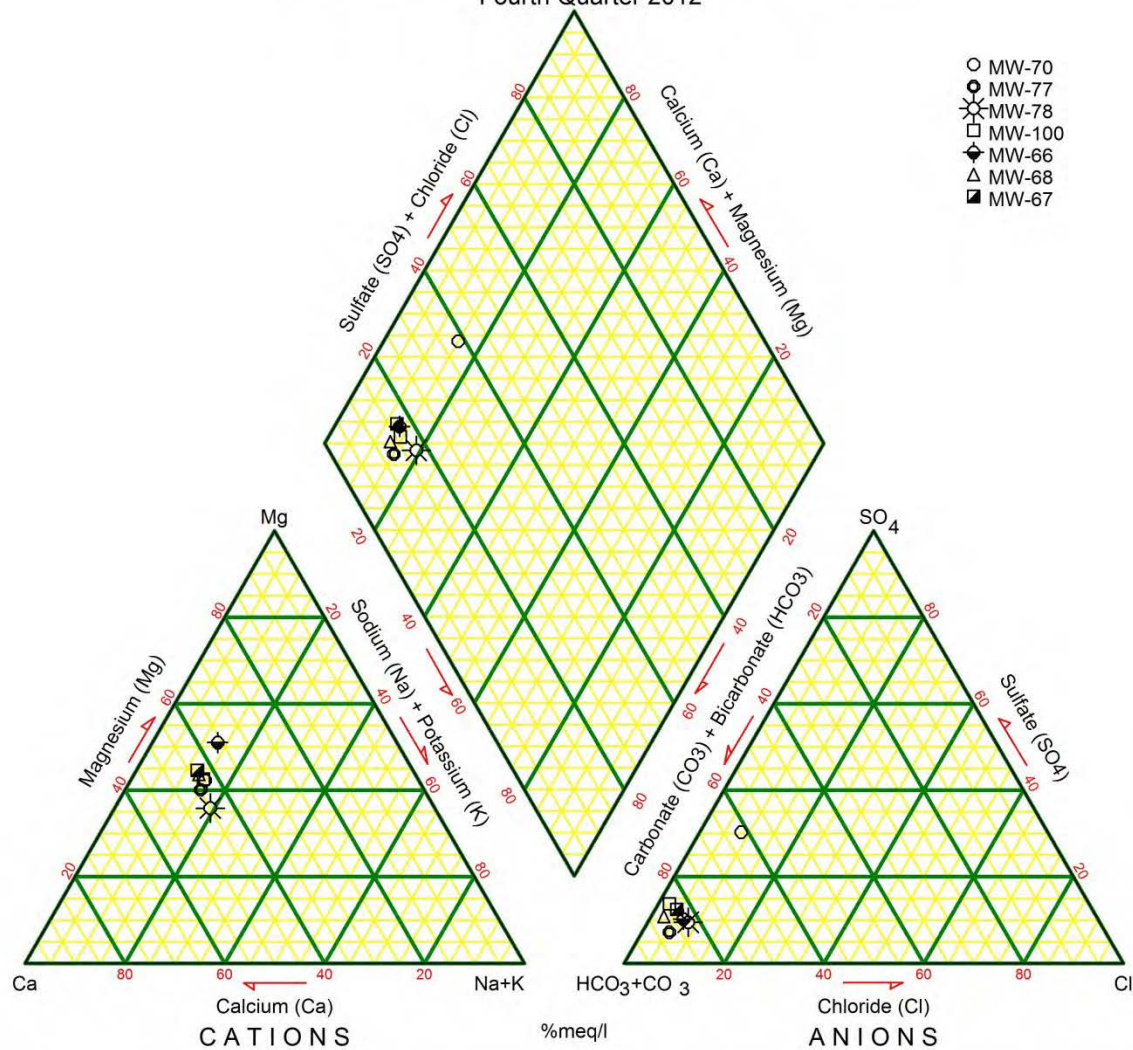
Figure 2. Regional Aquifer Southern Upgradient Wells
Fourth Quarter 2012



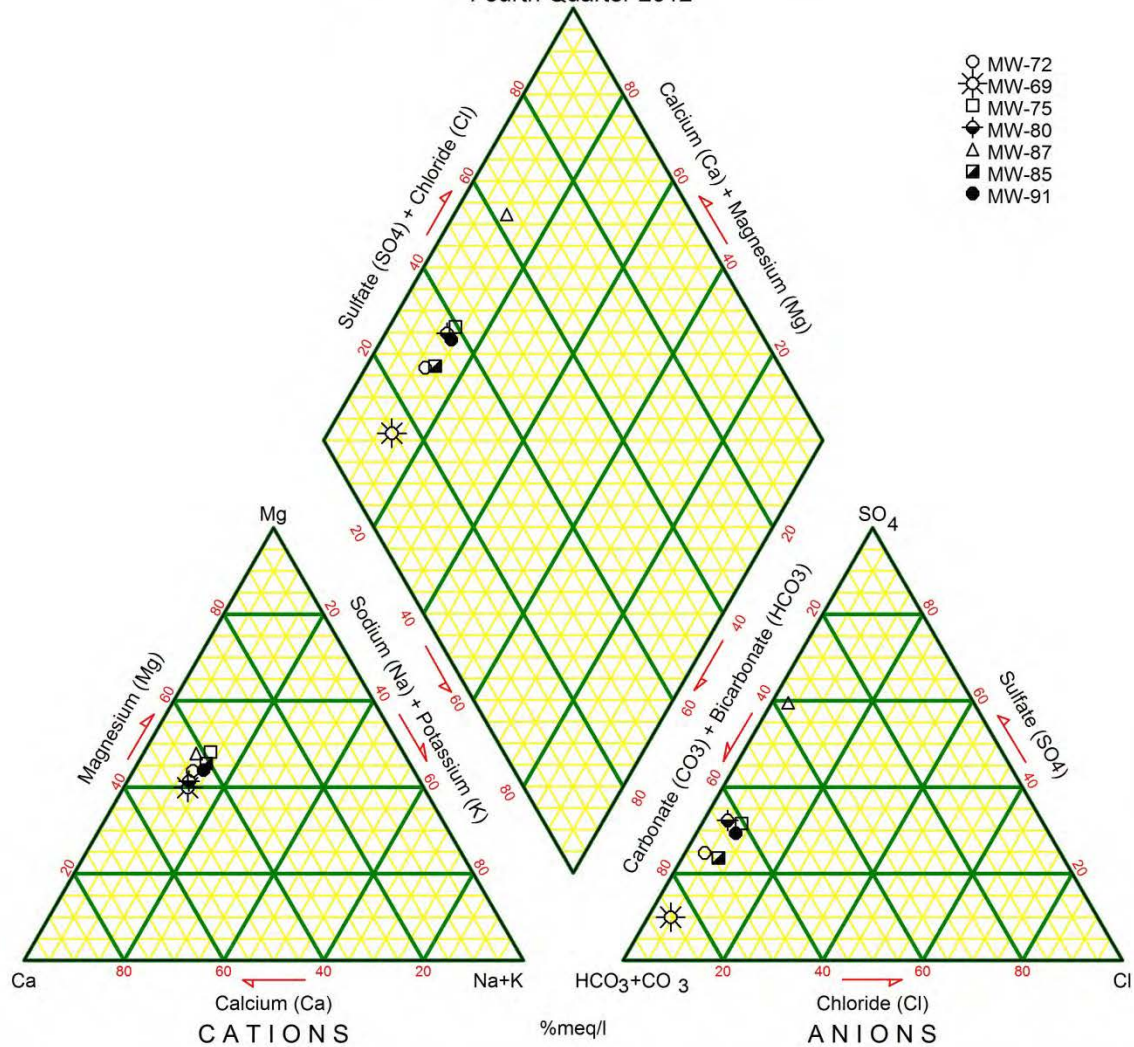
Cedar Hills Regional Landfill
Figure 3. Regional Aquifer NW and NE Upgradient Wells
Fourth Quarter 2012



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



Cedar Hills Regional Landfill
 Figure 6. Regional Aquifer Downgradient Wells
 Fourth Quarter 2012

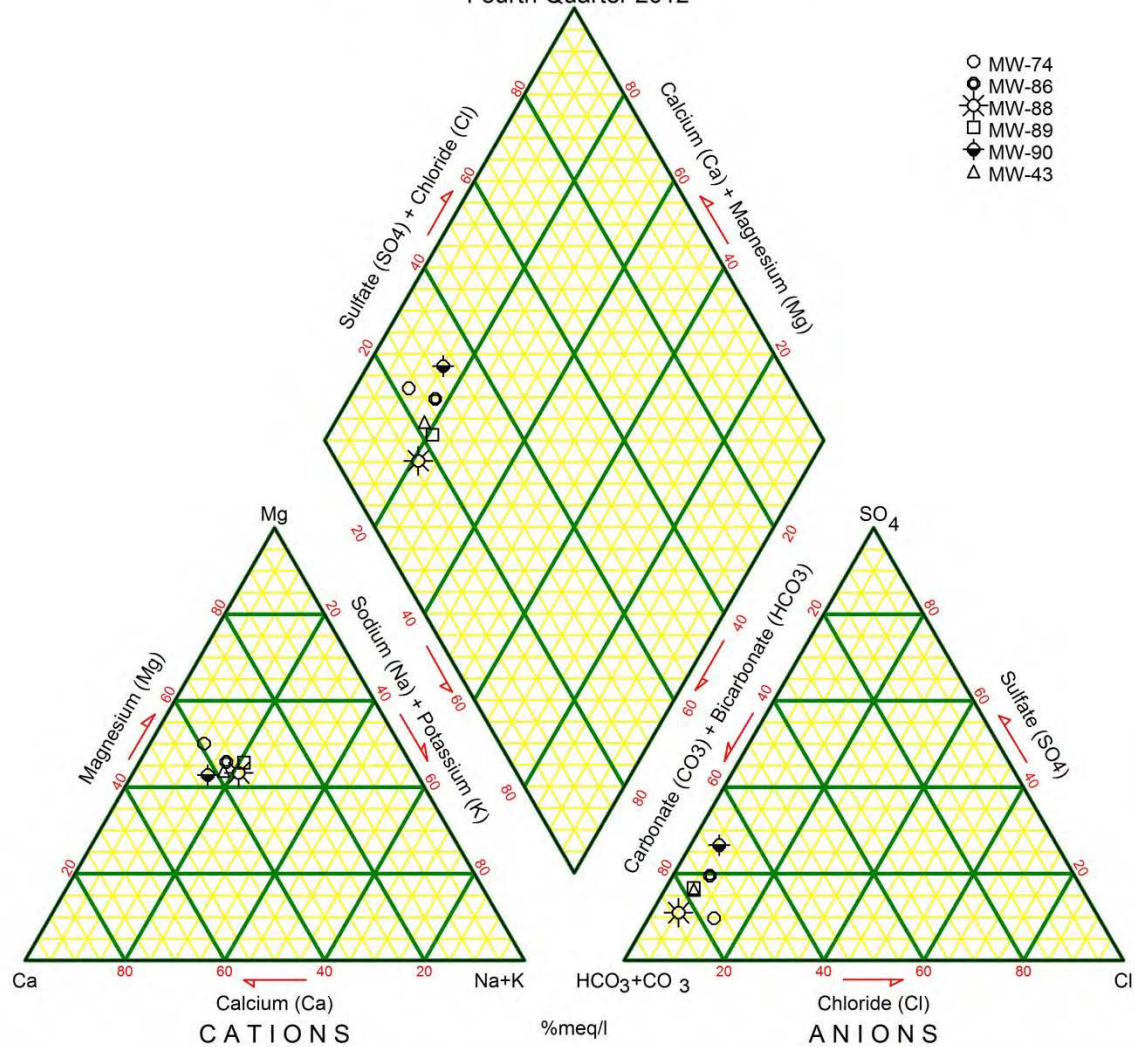


TABLE 5
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT EXCEEDANCES
(Data Collected from January 1, 2013 to March 31, 2013)

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

TABLE 6
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN REGIONAL AQUIFER WELLS
(Data Collected from January 1, 2013 to March 31, 2013)

Analyte	Site ID	Date	Sample ID	ug/L
South Upgradient Wells				
cis-1,2-Dichloroethene	MW-24	1/3/2013	W24-130103-	0.34 T
	MW-56	1/24/2013	W56-130124-	0.91
	MW-59	1/25/2013	W59-130125-	0.674
	MW-76	1/25/2013	W76-130125-	0.831
Tetrachloroethene	MW-76	1/25/2013	W76-130125-	0.42
Trichloroethene	MW-76	1/25/2013	W76-130125-	9.02
	MW-82	1/23/2013	W82-130123-	5.6
	MW-83	1/18/2013	W83-130118-	1.38
	MW-94	1/14/2013	W94-130114-	2.65
Vinyl Chloride	MW-65	1/18/2013	W65-130118-	0.0432
Downgradient Wells				
Acetone	MW-91	1/22/2013	W91-130122-	4.48

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

CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES
(Data Collected from January 1, 2013 to March 31, 2013)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
North and West Perched Wells					
pH (field)	(pH units)	MW-28	1/14/13	W28-130114-	5.71
		MW-29	1/10/13	W29-130110-	6.29
		MW-30A	1/29/13	W30A130129-	6.3
Arsenic	(mg/L)	MW-27A	1/8/2013	W27A130108-	0.0155
Manganese	(mg/L)	MW-27A	1/8/2013	W27A130108-	0.0662
		MW-55	1/8/2013	W55-130108-	0.154
East Perched Zone Wells					
pH (field)	(pH units)	MW-EB6	1/14/13	WB6-130114-	5.93
Arsenic	(mg/L)	MW-EB6	1/14/2013	WB6-130114-	0.00424
Iron	(mg/L)	MW-47	1/10/13	W47-130110-	0.675
		MW-EB6	1/14/13	WB6-130114-	6.91
Manganese	(mg/L)	MW-47	1/10/2013	W47-130110-	1.66
		MW-EB6	1/14/13	WB6-130114-	0.416
1,1-Dichloroethane	(ug/L)	MW-30A	1/29/13	W30A130129-	1.57
		MW-62	1/10/13	W62-130110-	1.65
Total Dissolved Solids	(mg/L)	MW-47	1/10/2013	W47-130110-	690
Vinyl Chloride	(ug/L)	MW-47	1/10/2013	W47-130110-	5.86
South Solid Waste Area Perched Wells					
Arsenic	(mg/L)	MW-101	1/28/2013	W101130128-	0.0044
Manganese	(mg/L)	MW-101	1/28/2013	W101130128-	1.31 D
Vinyl Chloride	(ug/L)	MW-101	1/28/2013	W101130128-	0.282

See Data Qualifier List for Qualifier Information.

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

Data Collected from January 1, 2013 to March 31, 2013

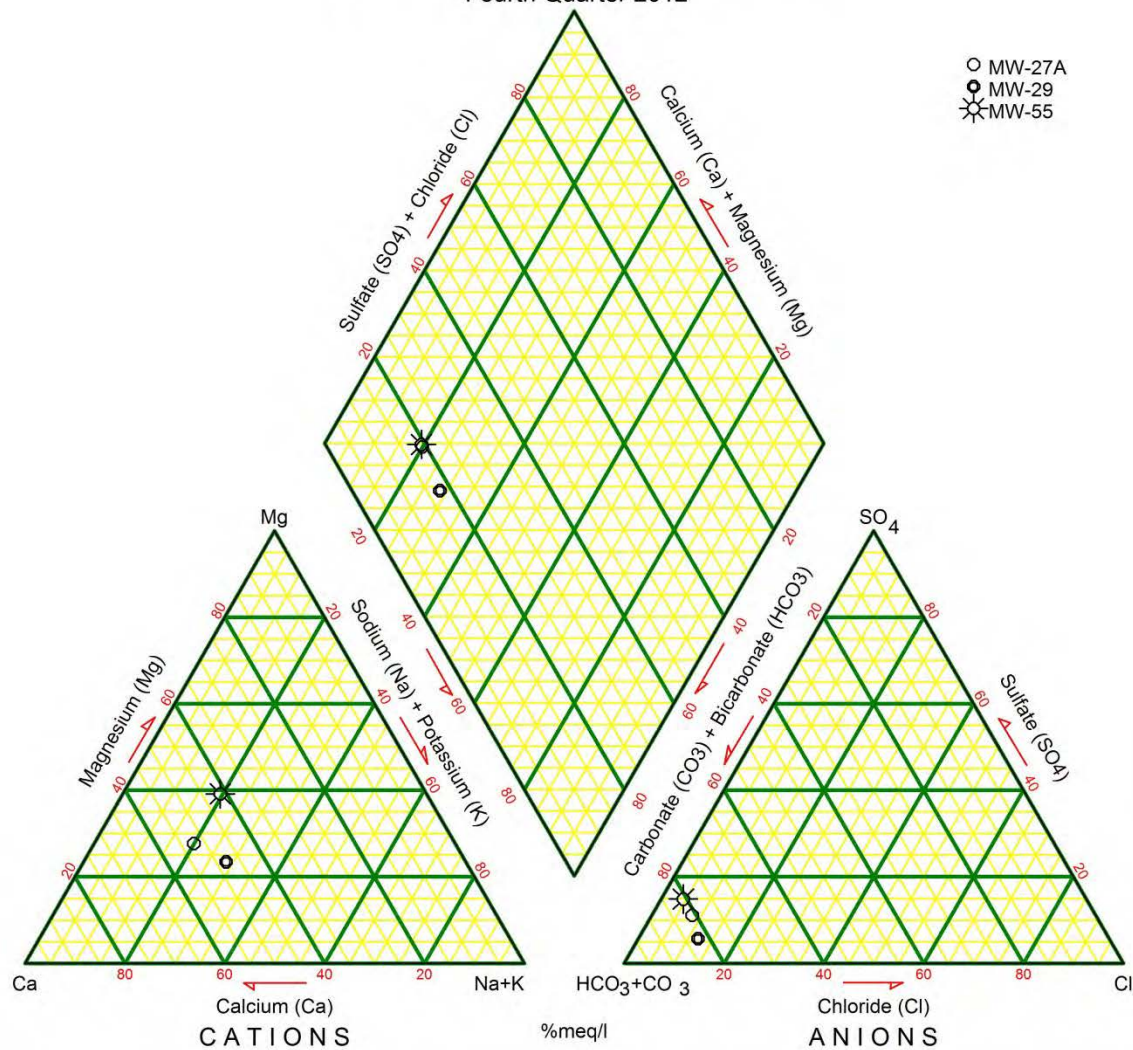
Site ID Date	MW	n	North and West Perched Wells											
			MW-27A			MW-28			MW-29			MW-55		
Cations			mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	20.1	1.00299	51.0	8.9	0.44162	47.1	7.1	0.35329	47.2	12.6	0.62874	40.4
Magnesium	24.3	2	6.3	0.5217	26.5	2.4	0.19996	21.3	1.9	0.15799	21.1	7.2	0.59	37.9
Potassium	39.1	1	3.5	0.08977	4.6	0.9	0.02261	2.4	0.5	0.01292	1.7	1.7	0.04271	2.7
Sodium	23.0	1	7.8	0.33754	17.2	6.3	0.27186	29.0	5.1	0.22314	29.8	6.3	0.27577	17.7
Iron	55.8	2	0.0	0.00036	0.0	0.0	0.00036	0.0	0.0	0.00036	0.0	0.3	0.01017	0.7
Manganese	54.9	2	0.1	0.00241	0.1	0.0	3.6E-05	0.0	0.0	3.6E-05	0.0	0.2	0.00561	0.4
Ammonia-N	14.0	1	0.2	0.01335	0.7	0.0	0.00071	0.1	0.0	0.00071	0.1	0.0	0.00339	0.2
Total Cations (meq/L)			2.0			0.9	99.9		0.7			1.6		
Anions														
Alkalinity, Total			79			24.7			25.4			62.9		
Carbonate	60.0	2	0.31825	0.01061	0.5	0.00076	2.5E-05	0.0	0.00298	9.9E-05	0.0	0.31205	0.0104	0.7
Bicarbonate	61.0	1	95.49	1.56516	80.8	30.13	0.4939	53.9	30.98	0.50782	67.9	76.10	1.24741	79.7
Chloride	35.5	1	4.9	0.1368	7.1	3.7	0.10408	11.4	3.0	0.08575	11.5	1.9	0.05303	3.4
Nitrate-N	14.0	1	0.1	0.00842	0.4	0.5	0.03684	4.0	1.6	0.11637	15.6	0.0	0.00071	0.0
Sulfate	96.1	2	10.4	0.21654	11.2	13.5	0.28108	30.7	1.8	0.03769	5.0	12.2	0.25401	16.2
Total Anions (meq/L)			1.9			0.9	100.0		0.7			1.6		
Total Ions (meq/L)			3.9			1.9			1.5			3.1		
Cation/Anion Ratio			1.02			1.02			1.00			0.99		
Percent Difference			0.8			1.1			0.0			-0.3		
TRILINEAR DIAGRAM DATA														
sum (Ca, Mg, Na+K)			1.95			0.94			0.75			1.54		
Calcium				51.4			47.2			47.3			40.9	
Magnesium				26.7			21.4			21.1			38.4	
Sodium + Potassium				21.9			31.5			31.6			20.7	
							100.0							
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.93			0.88			0.63			1.56		
Sulfate				11.2			32.0			6.0			16.2	
Chloride				7.1			11.8			13.6			3.4	
Bicarbonate + Carbonate				81.7			56.2			80.4			80.4	

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

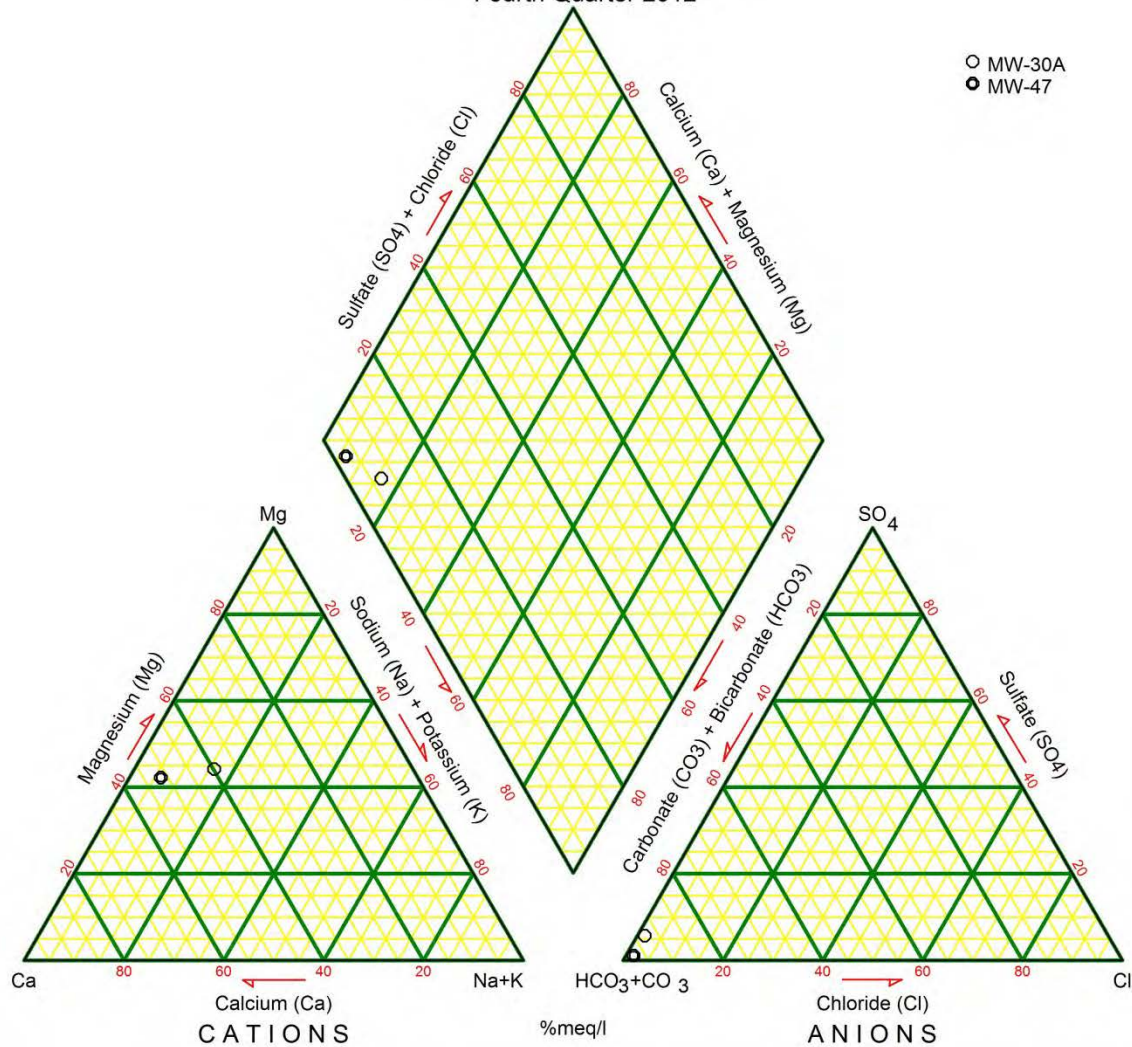
Data Collected from January 1, 2013 to March 31, 2013

Site ID Date	MW	n	East Perched Zone												SSWA		
			MW-30A			MW-47			MW-62			MW-EB6			MW-101		
Cations			mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Calcium	40.1	2	26.4	1.31737	42.3	154.0	7.68463	53.3	19.0	0.9481	43.1	6.0	0.2994	21.0	67.0	3.34331	45.6
Magnesium	24.3	2	13.5	1.11088	35.6	68.6	5.64493	39.2	6.7	0.55215	25.1	3.3	0.27155	19.0	39.1	3.21744	43.9
Potassium	39.1	1	1.7	0.04399	1.4	4.8	0.12226	0.8	0.9	0.02404	1.1	1.2	0.03069	2.2	3.1	0.07826	1.1
Sodium	23.0	1	14.8	0.64376	20.7	20.0	0.86995	6.0	15.5	0.67421	30.7	8.7	0.37712	26.4	14.6	0.63507	8.7
Iron	55.8	2	0.0	0.00036	0.0	0.7	0.02417	0.2	0.0	0.00036	0.0	6.9	0.24746	17.3	0.1	0.00189	0.0
Manganese	54.9	2	0.0	3.6E-05	0.0	1.7	0.06043	0.4	0.0	3.6E-05	0.0	0.4	0.01514	1.1	1.3	0.04769	0.7
Ammonia-N	14.0	1	0.0	0.00071	0.0	0.0	0.00252	0.0	0.0	0.00071	0.0	2.6	0.18562	13.0	0.0	0.001	0.0
Total Cations (meq/L)				3.1			14.4			2.2	100.0		1.4	87.0		7.3	
Anions																	
Alkalinity, Total			148			672			77.6			47.9			380		
Carbonate	60.0	2	0.01776	0.00059	0.0	0.49661	0.01655	0.1	0.02132	0.00071	0.0	0.00245	8.2E-05	0.0	0.32237	0.01075	0.1
Bicarbonate	61.0	1	180.52	2.95896	90.7	818.83	13.4214	97.5	94.63	1.55106	66.2	58.43	0.95777	80.6	462.94	7.58811	97.0
Chloride	35.5	1	2.6	0.07418	2.3	6.8	0.19237	1.4	6.0	0.16811	7.2	2.0	0.055	4.6	3.9	0.11057	1.4
Nitrate-N	14.0	1	0.3	0.02477	0.8	0.0	0.00071	0.0	3.3	0.23345	10.0	0.1	0.00426	0.4	0.0	0.00071	0.0
Sulfate	96.1	2	9.8	0.20446	6.3	6.5	0.13554	1.0	18.7	0.38935	16.6	8.2	0.17156	14.4	5.3	0.10973	1.4
Total Anions (meq/L)				3.3			13.8			2.3	100.0		1.2	100.0		7.8	
Total Ions (meq/L)				6.4			28.2			4.5			2.6			15.1	
Cation/Anion Ratio				0.96			1.05			0.94			1.20			0.94	
Percent Difference				-2.3			2.3			-3.1			9.1			-3	
TRILINEAR DIAGRAM DATA																	
sum (Ca, Mg, Na+K)				3.12			14.32			2.20			0.98			7.27	
Calcium					42.3			53.7			43.12			30.59			45.96
Magnesium					35.7			39.4			25.11			27.74			44.23
Sodium + Potassium					22.1			6.9			31.76			41.67			9.81
											100.0			100.0			
sum (SO ₄ , Cl, HCO ₃ +CO ₃)				3.24			13.77			2.11			1.18			7.82	
Sulfate					6.3			1.0			18.5			14.5			1.4
Chloride					2.3			1.4			8.0			4.6			1.4
Bicarbonate + Carbonate					91.4			97.6			73.6			80.9			97.2

Cedar Hills Regional Landfill
 Figure 7. North and West Perched Zone Wells
 Fourth Quarter 2012



Cedar Hills Regional Landfill
 Figure 8. East Perched Zone Wells
 Fourth Quarter 2012



Cedar Hills Regional Landfill
 Figure 9. SSWA Perched Zone Wells
 Fourth Quarter 2012

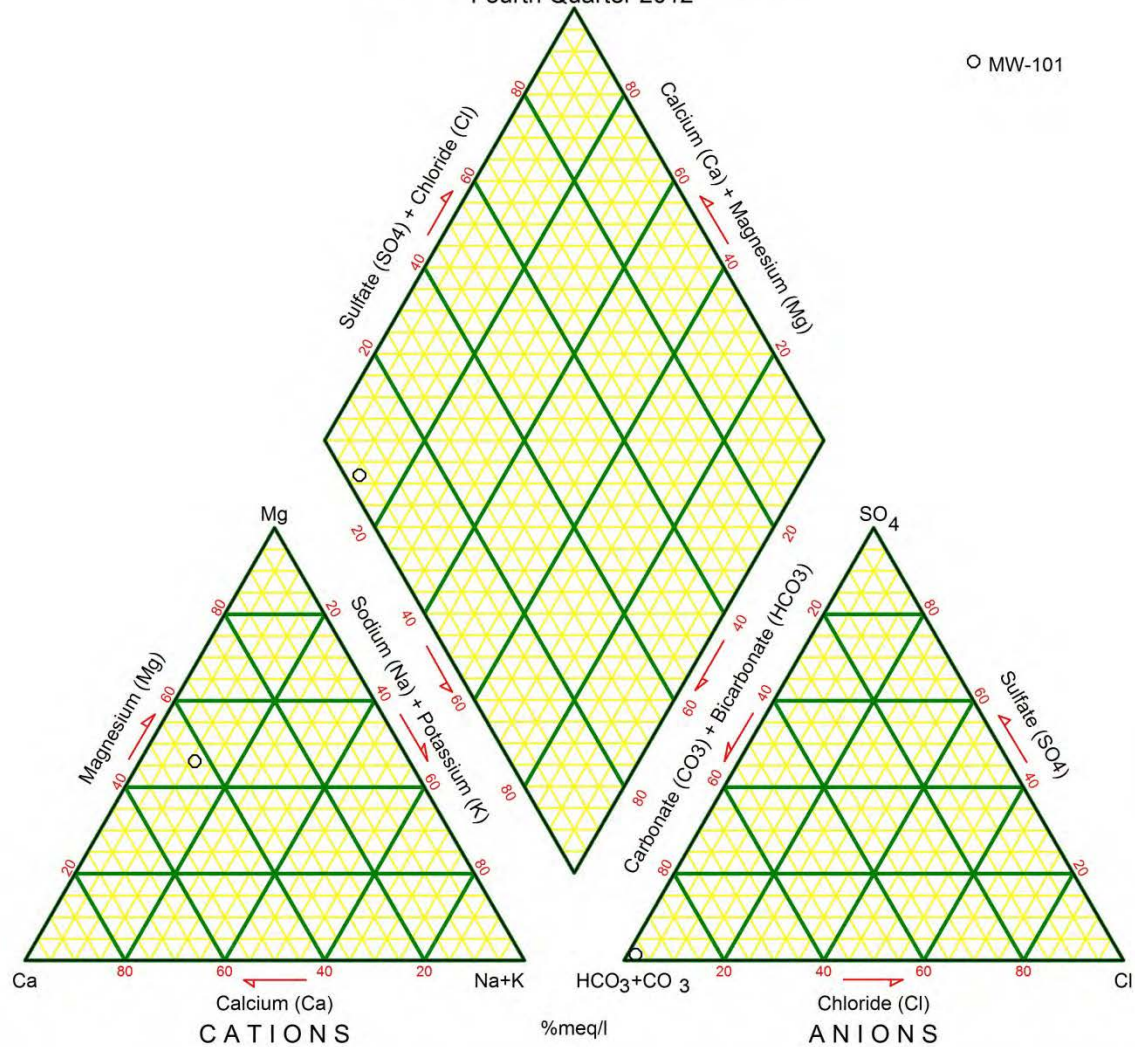


TABLE 9
CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT EXCEEDANCES
(Data Collected from January 1, 2013 to March 31, 2013)

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 January 1, 2013 to March 31, 2013)

Analyte	Site ID	Date	Sample ID	ug/L
East Perched Zone Wells				
Acetone	MW-EB6	1/14/2013	WB6-130114-	8.16
1,1-Dichloroethane	MW-30A	1/29/2013	W30A130129-	1.57
	MW-47	1/10/2013	W47-130110-	0.539
	MW-62	1/10/2013	W62-130110-	1.65
Chloroethane	MW-47	1/10/2013	W47-130110-	0.23 T
cis-1,2-Dichloroethene	MW-30A	1/29/2013	W30A130129-	1.92
	MW-47	1/10/2013	W47-130110-	1.59
	MW-62	1/10/2013	W62-130110-	4.05
Dichlorodifluoromethane	MW-47	1/10/2013	W47-130110-	5.45
Trichloroethene	MW-30A	1/29/2013	W30A130129-	0.918
Vinyl Chloride	MW-47	1/10/2013	W47-130110-	5.86
South Solid Waste Area Perched Wells				
Vinyl Chloride	MW-101	1/28/2013	W101130128-	0.282

See Data Qualifier List for Qualifier Information.

Table 11
Surface Water Monitoring Activities 1st Quarter 2013

Station ID	Date	Planned Activity	Sample ID	Comment
SW-E1	1/22/13	Quarterly Characterization Sample	SE1-130122Q	
SW-E1	2/11/13	Monthly Characterization Sample	SE1-130211M	
SW-E1	3/19/13	Monthly Characterization Sample	SE1-130319M	
SW-GS1	1/4/13	NPDES Permit Sample	SGS1130104P	
SW-GS1	1/23/13	Quarterly Characterization Sample	SGS1130123Q	
SW-GS1	2/12/13	Monthly Characterization Sample	SGS1130212M	
SW-GS1	3/19/13	Monthly Characterization Sample	SGS1130319M	
SW-LP1	1/30/13	South Lagoon Inlet Characterization	SLP1130130P	
SW-LP1	2/25/13	South Lagoon Inlet Characterization	SLP1130225P	
SW-LP1	3/4/13	South Lagoon Inlet Characterization	SLP1130304P	
SW-LP2	1/30/13	South Lagoon Inlet Characterization	SLP2130130P	
SW-LP2	2/25/13	South Lagoon Inlet Characterization	SLP2130225P	
SW-LP2	3/4/13	South Lagoon Inlet Characterization	SLP2130304P	
SW-LP3	1/30/13	South Lagoon Outlet Characterization	SLP3130130P	
SW-MC	1/23/13	Quarterly Characterization Sample	SMC-130123Q	
SW-MC	2/12/13	Monthly Characterization Sample	SMC-130212M	
SW-MC	3/18/13	Monthly Characterization Sample	SMC-130318M	
SW-N1	1/22/13	Quarterly Characterization Sample	SN1-130122Q	
SW-N1	2/11/13	Monthly Characterization Sample	SN1-130211M	
SW-N1	3/19/13	Monthly Characterization Sample	SN1-130319M	
SW-N4	1/4/13	NPDES Permit Sample	SN4-130104P	
SW-N4	1/22/13	Quarterly Characterization Sample	SN4-130122Q	
SW-N4	2/12/13	Monthly Characterization Sample	SN4-130212M	
SW-N4	2/12/13	QA/QC Sample	SN4-130212D	Field Duplicate
SW-N4	3/19/13	Monthly Characterization Sample	SN4-130319M	
SW-S1	1/23/13	Quarterly Characterization Sample	SS1-130123Q	
SW-S1	2/12/13	Monthly Characterization Sample	SS1-130212M	
SW-S1	3/19/13	Monthly Characterization Sample	SS1-130319M	
SW-S2	1/23/13	Quarterly Characterization Sample	SS2-130123Q	
SW-S2	2/12/13	Monthly Characterization Sample	SS2-130212M	
SW-S2	3/19/13	Monthly Characterization Sample	SS2-130319M	
SW-SL3	1/4/13	NPDES Permit Sample	SSL3130104P	
SW-SL3	1/23/13	Quarterly Characterization Sample	SSL3130123Q	
SW-SL3	1/30/13	NPDES Permit Sample	SSL3130130P	
SW-SL3	2/12/13	Monthly Characterization Sample	SSL3130212M	
SW-SL3	2/25/13	NPDES Permit Sample	SSL3130225P	
SW-SL3	3/4/13	NPDES Permit Sample	SSL3130304F	
SW-SL3	3/4/13	NPDES Permit Sample	SSL3130304P	
SW-SL3	3/18/13	Monthly Characterization Sample	SSL3130318M	
SW-TD1	1/30/13	Area 5 Top Deck Monitoring	STD1130130-	
SW-TD2	1/30/13	Area 5 Top Deck Monitoring	STD2130130-	
SW-TD4	1/30/13	Area 5 Top Deck Monitoring	STD4130130-	
SW-TD6	1/30/13	Area 5 Top Deck Monitoring	STD6130130-	
SW-V	1/22/13	Quarterly Characterization Sample	SV--130122Q	
SW-V	2/11/13	Monthly Characterization Sample	SV--130211M	
SW-W	1/23/13	Quarterly Characterization Sample	SW--130123Q	
SW-W	2/12/13	Monthly Characterization Sample	SW--130212M	
SW-W	3/18/13	Monthly Characterization Sample	SW--130318M	
SW-W1	10/24/12	Quarterly Characterization Sample	SW1-130122Q	
SW-W1	11/13/12	Monthly Characterization Sample	SW1-130211M	
SW-W1	12/10/12	Monthly Characterization Sample	SW1-130319M	

Table 11
Surface Water Monitoring Activities 1st Quarter 2013

Station ID	Date	Planned Activity	Sample ID	Comment
SW-W2	10/23/12	Quarterly Characterization Sample	SW2-130123Q	
SW-W2	10/30/12	Monthly Characterization Sample	SW2-130212M	
SW-W2	11/13/12	Monthly Characterization Sample	SW2-130319M	
Field Blank	1/22/13	QA/QC Sample	SN1-130122F	
Field Blank	1/30/13	QA/QC Sample	STD1130130F	
Field Blank	2/12/13	QA/QC Sample	SS1-130212F	
Staff Gages	1/22/13	Monthly Stream Gage Levels	NA	
Staff Gages	2/11/13	Monthly Stream Gage Levels	NA	
Staff Gages	3/18/13	Monthly Stream Gage Levels	NA	

¹ No sample ID assigned, No sample collected.

TABLE 12
CEDAR HILLS LANDFILL
SUMMARY OF STORMWATER PERMIT EXCEEDANCES
(January 1, 2013 to March 31, 2013)

Parameter	Location	Day/Month	Value	Regulatory Limit	Regulation
No Permit Exceedances This Quarter					

TABLE 13
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN BLANKS
(Data Collected from January 1, 2013 to March 31, 2013)

Analyte	Site ID	Date	Sample ID	ug/L
Acetone	VOA Trip Blank	1/16/2013	VTRP130117B	5
	VOA Trip Blank	1/24/2013	VTRP130125B	4.41
Chloroform	Field Blank	1/8/2013	W55-130108F	0.555
	Field Blank	1/18/2013	W58A130118F	0.458
	Field Blank	1/29/2013	WNPW130129F	0.38 T

See Data Qualifier List for Qualifier Information.

Table 14
Groundwater Quality Criteria

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

Table 14
Groundwater Quality Criteria

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

TABLE 15
CEDAR HILLS LANDFILL
INDUSTRIAL STORMWATER GENERAL PERMIT

BENCHMARKS and EFFLUENT LIMITS

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

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

TABLE 16
CEDAR HILLS REGIONAL LANDFILL
LABORATORY DATA REVIEW - SUSPECT DATA ALL MATRICES
(Data Collected from January 1, 2013 to March 31, 2013)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value	Cause of Unuseability
Acetone	ug/L	MW-91	1/22/13	W91-130122-	4.48	Blank Contamination