
CEDAR HILLS REGIONAL LANDFILL

QUARTERLY ENVIRONMENTAL

MONITORING REPORT

Second Quarter 2016



Department of Natural Resources and Parks
Solid Waste Division



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

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CHECKLIST FOR GROUNDWATER REPORTING
Municipal Solid Waste Landfills
WAC 173-351-415

Include a signed, completed copy of this checklist with each quarterly and annual report.

Quarterly groundwater reports shall be submitted to the jurisdictional health department and Ecology within 60 days of receipt of analytical data. Annual groundwater reports shall be submitted to the jurisdictional health department and Ecology by April 1 of each year.

1 st	2 nd	3 rd	4 th	YEAR	2016	Reference (section, subsection)	Included in this report	Location - page # or appendix #
<i>Quarterly Groundwater Reports: 173-351-415 (2) plus the referenced section</i>								
Statistical calculations and summaries								
	Descriptive statistics				420, (1)	<input checked="" type="checkbox"/>		
	Statistical tests				420, (2)	<input checked="" type="checkbox"/>		
	Notification of statistical increase (if applicable)				420, (4)	<input checked="" type="checkbox"/>		
	Notification of concentrations above Chapter 173-200 WAC criteria (if any)				430, (4)	<input checked="" type="checkbox"/>		
	Static water level readings				415, (2)	<input checked="" type="checkbox"/>		
	Potentiometric surface elevation maps depicting flow direction				415, (2)	<input checked="" type="checkbox"/>		
	Flow rate – calculated				415, (2)	<input checked="" type="checkbox"/>		
	Cation-anion balances				430, (5a)	<input checked="" type="checkbox"/>		
	Explanation of greater than 5% (or 10%) difference if needed				430, (5a)	<input type="checkbox"/>		
	Trilinear diagrams				430, (5b)	<input checked="" type="checkbox"/>		
	Leachate analyses (if sampled and tested)				415, (2)	<input checked="" type="checkbox"/>		
	Data entered into EIM database (date entered:)				415, (3)	<input type="checkbox"/>		
	Complete copy of the lab report with chain of custody record.					<input type="checkbox"/>		
<i>Annual Groundwater Reports: 173-351-415 (1) YEAR</i>								
	Summary of statistical results and trends				415, (1)	<input type="checkbox"/>		
	Summary of groundwater flow rate and direction for the year				415, (1)	<input type="checkbox"/>		
	Copy of all potentiometric maps for the year				415, (1)	<input type="checkbox"/>		
	Summary geochemical evaluation				415, (1)	<input type="checkbox"/>		
<i>For Quarterly and Annual Reports</i>								
	Stamped by a licensed professional				RCW 18.220	<input checked="" type="checkbox"/>		

Hannah Sheppard
Signature of Report Author

August 31, 2016

Date

Cedar Hills Regional Landfill

Landfill

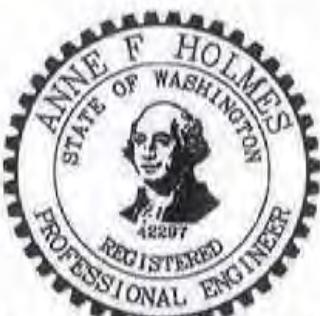
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CERTIFICATION

Quarterly Report Groundwater Evaluation Report Certification

I certify in accordance with the requirements of WAC 173-351-400(c) (3), that the contents of this Cedar Hills Landfill Quarterly Environmental Monitoring Report were prepared under my direction or supervision under a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Where applicable, some specific and related hydrogeologic portions have been duly certified by the responsible groundwater scientist. Based on my inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Name:	Title:	Date:
Anne Holmes, P.E.	Supervising Engineer, Facility, Engineering and Science Unit	8/30/16
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Signature: 		



EXP. 9/21/16

Cedar Hills Regional Landfill Summary of Quarterly Environmental Monitoring Second Quarter of 2016

This summary contains a discussion of quarterly environmental monitoring results for groundwater, storm water and landfill gas migration monitoring for Cedar Hills Regional Landfill (CHRLF).

Environmental samples were collected and analyzed in accordance with the *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill (Dec, 2013)*, (SAP); and the *Quality Assurance Project Plan for Environmental Monitoring at King County Solid Waste Facilities* (QAPP). These plans describe procedures and activities to obtain sufficient and representative quality data to adequately conduct environmental monitoring at the CHRLF and provide 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, locations and monitoring status are presented in Table 1 and Figure 1. Monitoring activities for the second quarter are listed in Table 2.

1.11 Regional Aquifer

A refined conceptual model was developed in the *Cedar Hills Regional Landfill Site Wide Hydrogeologic Report Addendum (May, 2004)*. The model fits the site into its regional context of recharge and discharge, provides a detailed look at flow paths within the Regional Aquifer, and defines specific detection zones for each monitoring well. The model provides a thorough evaluation of the monitoring well coverage from the facility waste placement areas and indicates that CHRLF has a sufficient and effective monitoring well network in place. In addition, an alternate groundwater sampling frequency has been implemented for detection groundwater monitoring consistent with WAC 173-351-450 (see SAP, Table 1 and Figure 1).

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

For discussion and graphical presentation, monitoring wells are grouped together according to the flow path analysis for the regional aquifer.

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

Groundwater samples were analyzed for both dissolved and total metal fractions per WAC 173-351-430(2)(b)(ii) as revised. However, only total metals results were

compared to the water quality standards listed in WAC 173-351-990 Appendix I. Implementation of the new SAP (as of January 1, 2016) resulted in a reduction in the number of wells that are monitored quarterly. This quarter, Semi-annually monitored wells are also included resulting in more exceedances overall as compared to last quarter due to more samples collected. This quarter to quarter increase does not indicate a change in water quality.

Exceedances of the Primary Ground Water Quality Criteria were observed for total arsenic as follows:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-93	MW-68, MW-69, MW-80, MW-87
Semi-Annually Sampled Wells	MW-64, MW-65, MW-95	MW-100, MW-86, MW-88, MW-89

Exceedances of the Secondary Ground Water Quality Criteria were observed for dissolved iron and/or dissolved manganese as follows:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-59, MW-93	MW-68, MW-69, MW-72, MW-75, MW-80, MW-87
Semi-Annually Sampled Wells	MW-21, MW-24, MW-56, MW-65, MW-95	MW-67, MW-86, MW-89, MW-100

These results are consistent with past analyses.

Primary and Secondary exceedances of regulatory standards are tabulated and presented in Table 3.

Trilinear Diagrams (Figures 5 and 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 upper prediction limits (UPLs) are calculated annually using data collected through the end of the previous calendar year (2015). Calculated prediction limits and analytical results for Appendix I parameters are presented in Table 5.

Result values greater than UPLs for Appendix I parameters this quarter include: total arsenic in MW-86; total barium in MW-100 and total zinc in MW-100, all sampled semi-annually.

These results will be evaluated per the re-testing protocol described in the *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill (Dec, 2013)*.

The uncertainty associated with the measurement of an analyte can be greater than the degree of confidence in a UPL exceedance because of noise intrinsic to the analytical methods performed. This is especially true for results that are both close to the UPL and have a low MDL. Arsenic exceedances are an example of such a case. Results that are very close to the UPL are subject to both uncertainty within the calculation of the UPL, and the analytical noise inherent to an analyte with a low target MDL.

Results greater than UPLs noted last quarter (total arsenic in MW-68; total barium in MW-59, MW-84 and MW-72; total copper in MW-68; total lead in MW-72; total vanadium in MW-68 and MW-87; and total zinc in MW-72) are below or within the analytical reproducibility of UPLs in this quarter's results. As such, these results have passed the re-testing protocol described in the *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill (Dec, 2013)*.

Volatile Organic Compound (VOC) detections in regional aquifer wells are presented in Table 6. Present are regularly occurring detections of chlorinated VOCs and their breakdown products from the upgradient Queen City Farms (QCF) Site. Detected in quarterly monitored wells were trichloroethene (TCE) in monitoring wells MW-83 and MW-94, and *cis*-1,2-dichloroethene detected in MW-59. In semi-annually monitored wells, TCE was detected in MW-82 and MW-76; *cis*-1,2-dichloroethene in MW-56 and MW-76; and, vinyl chloride in MW-65. These upgradient well detections are consistent with past data and continuing migration from QCF.

Acetone, a probable laboratory contaminant was detected in MW-68.

1.12 Perched Zones

The East Main Hill perched zones (EPZ) are localized areas of shallow subsurface saturation that appear laterally and vertically discontinuous, predominantly within till and lacustrine silts.

In the South Solid Waste Area perched zone (SSWA), perched groundwater occurs in pockets within variable surficial deposits comprised of local alluvium, recessional outwash, and/or weathered till (shallow perched zone) and within melt-out deposits in an overall predominately lodgment till sequence (deeper perched zone).

Groundwater elevations measured during the quarter in these zones are within historical ranges. Samples were collected from three EPZ wells (MW-30A, MW-47 and MW-62) and MW-101 near the former SSWA. Groundwater quality data for the regularly sampled perched zones wells collected during the second quarter of 2016 are consistent with previous samples.

Additionally, MW-105 was sampled to characterize water quality. MW-105 was installed on the south side of the east leachate lagoon to provide a monitoring well in the shallowest perched groundwater zone in the vicinity of the leachate lagoons that will provide early leak detection. Subsequent monitoring will consist of field specific conductance measurements only per the *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill (Dec, 2013)*. If specific conductance

shows a statistical increasing trend or exceeds 500 $\mu\text{mhos}/\text{cm}$ specific conductance (whichever condition is triggered first), then additional sampling for the Appendix I and II and selected parameter described above will be performed and results assessed with respect to potential leakage from the lagoon.

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 and 8). Cation/Anion balances indicate no potential analytical error (greater than 10% ion imbalance) in any perched wells.

As with the regional data, perched zone prediction limits are derived from cumulative data through the end of 2015. Calculated prediction limits for Appendix I parameters along with analytical results are presented in Table 9.

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

1.2 Storm Water

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.

Monitoring activities are listed in Table 11. Samples were obtained from designated compliance stations SW-GS1, SW-N4, and SW-SL3 this quarter. No effluent limits were exceeded, however a visible oil sheen was observed at SW-GS1 (Table 12). Presence of the oil sheen is attributed to a truck rollover accident that released fuel into the stormwater ditch upstream three months prior to sampling. Residual amounts of petroleum likely remain bound to sediment and/or vegetation near sampling location and have resulted in a persistent visible sheen.

ISWG Permit Discharge Monitoring Reports (DMRs) are included in Appendix B.

1.3 Landfill Gas

A network of compliance probes are monitored for landfill gas migration around the perimeter of the landfill. Probes are monitored by the landfill gas crew monthly to monitor system performance and quarterly for compliance. No compliance probes detected methane this quarter.

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

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

The plan resulted in installation of 13 borings targeting the potential zone of LFG migration in the native sediments. Eight borings serve as LFG extraction wells and five as monitoring probes. The extraction wells and interior probes are currently monitored bimonthly. No detections of methane occurred in any of the west perimeter migration probes this quarter.

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

Compliance Probes, On-Site Buildings and supplemental Monitoring Probe results are included in Appendix B.

2.0 Analytical Methods

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

2.1 Regulatory Standards

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

2.2 Trilinear Diagrams and Major Ion Balance

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

2.3 Prediction Limits

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

At CHRLF, intra-well comparisons present a more conservative approach to determining if a statistically significant release has occurred and is the recommended approach for evaluation of detection monitoring data. In the intra-well approach, a threshold background value is set by determining an UPL. Prediction limits set a comparison threshold for background data with compliance well data and are used to determine if a sample is statistically elevated above background conditions.

The calculated prediction limits are based entirely on intra-well comparisons. All of the prediction limits are one-sided upper prediction limits (UPLs).

UPLs for the subsequent year's detection monitoring are calculated at the end of each year and incorporate the previous year's analytical results.

UPLs are based on a 0.05 significance level, as approved by Ecology to be protective of human health and the environment. A 0.05 significance level indicates that at most there is a 5 percent chance that a Type I error (false positive) will occur in the results.

The method for calculating the UPLs depends on both the type of distribution and the number of non-detects present in the background data set.

UPLs for background data sets with 100 percent non-detects (NDs) are equal to the highest laboratory method detection limit (MDL).

UPLs for background data sets with greater than 50 percent, but less than 100 percent non-detects are calculated based on the highest detected concentration for the respective data set. Although there are alternative methods for calculating UPLs for background data sets with greater than 90 percent, but less than 100 percent non-detects (e.g., Poisson's Method), the use of the highest detected concentration is generally considered to be the most conservative.

UPLs for background data sets with less than 50 percent non-detects are evaluated for normality, as non-parametric data sets are based on the highest detected concentration for the respective data set.

UPLs for either normally distributed or transformed data sets with 0 percent non-detects are calculated based on the following equations used to calculate parametric prediction limits with retesting (*EPA Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance, 2009*):

Normal Distribution

$$\text{UPL} = x + \kappa s$$

or

Transformed Distribution:

$$\text{UPL} = y + \kappa s_y$$

where: x = mean of the baseline data

y = mean of the transformed data

κ = multiplier for intra-well prediction limits

s = standard deviation of baseline data

s_y = standard deviation of transformed data

Analytical results are compared to the respective UPLs on a quarterly/semi-annual basis, depending on the monitoring program, for Appendix I parameters. If there is an exceedance of the UPL, retesting of the respective analytical parameter at the respective location is required in order to determine if the exceedance is representative of a statistically significant increase over background.

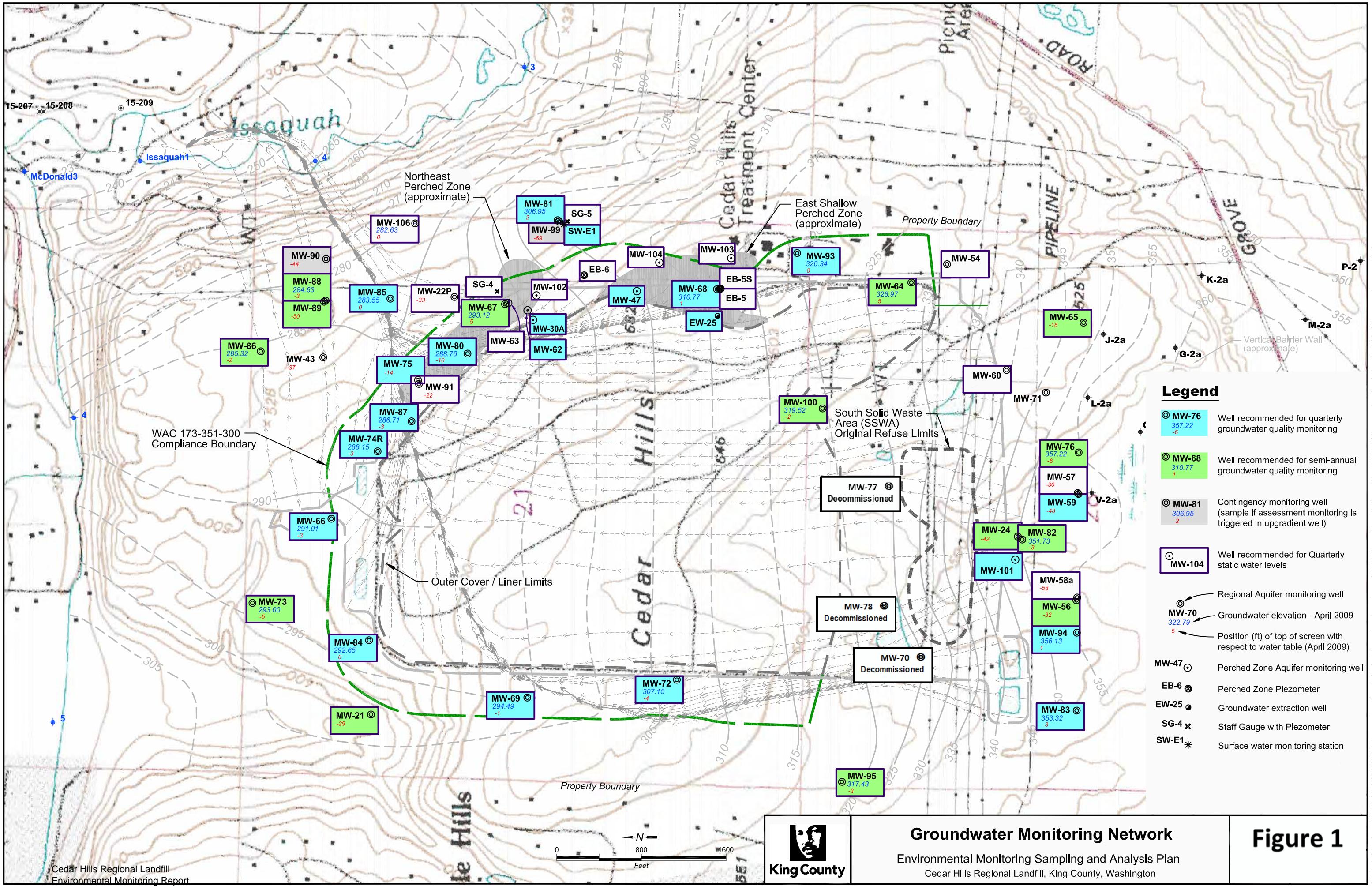
A 1-of-3 retesting plan will be used for any exceedances of the intra-well UPLs at the

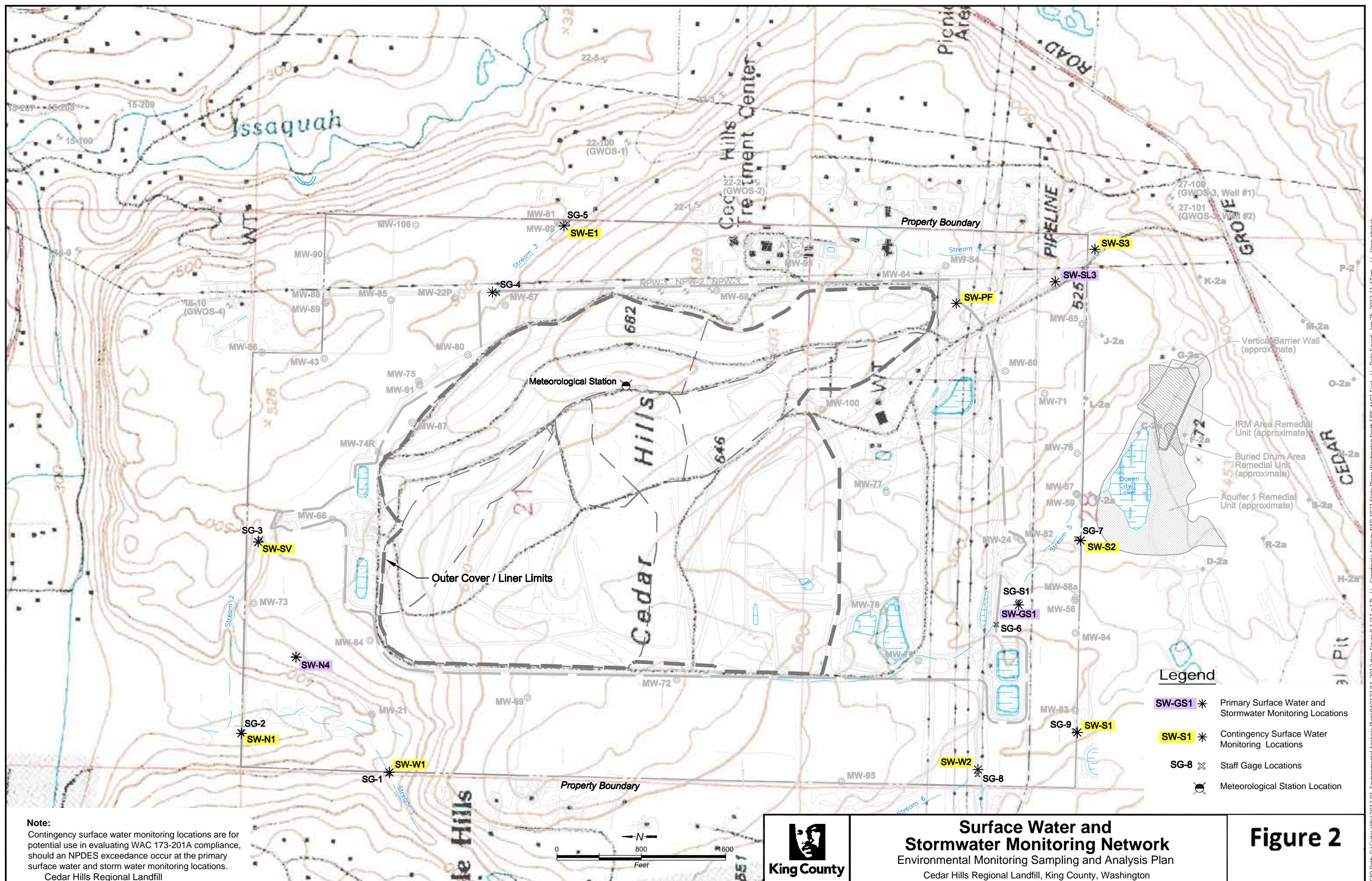
CHRLF. This retesting plan provides adequate statistical power and minimizes Type II (False Negative) errors, while providing retesting that accommodates lab turnaround time, data review, and scheduling.

This test is performed on parameters listed in WAC 173-351-990 Appendix I and is used to detect a change in the population distribution of the individual well.

2.4 Laboratory Data Quality

Laboratory analytical data is reviewed to verify meeting data quality objectives (DQOs) as defined in the QAPP. Occasionally, results identified during this process are deemed to be unsuitable for evaluation purposes. A summary of suspect results can be found in Table 16.





Note:

Contingency surface water monitoring locations are for potential use in evaluating WAC 173-201A compliance, should an NPDES exceedance occur at the primary surface water and storm water monitoring locations.

Cedar Hills Regional Landfill

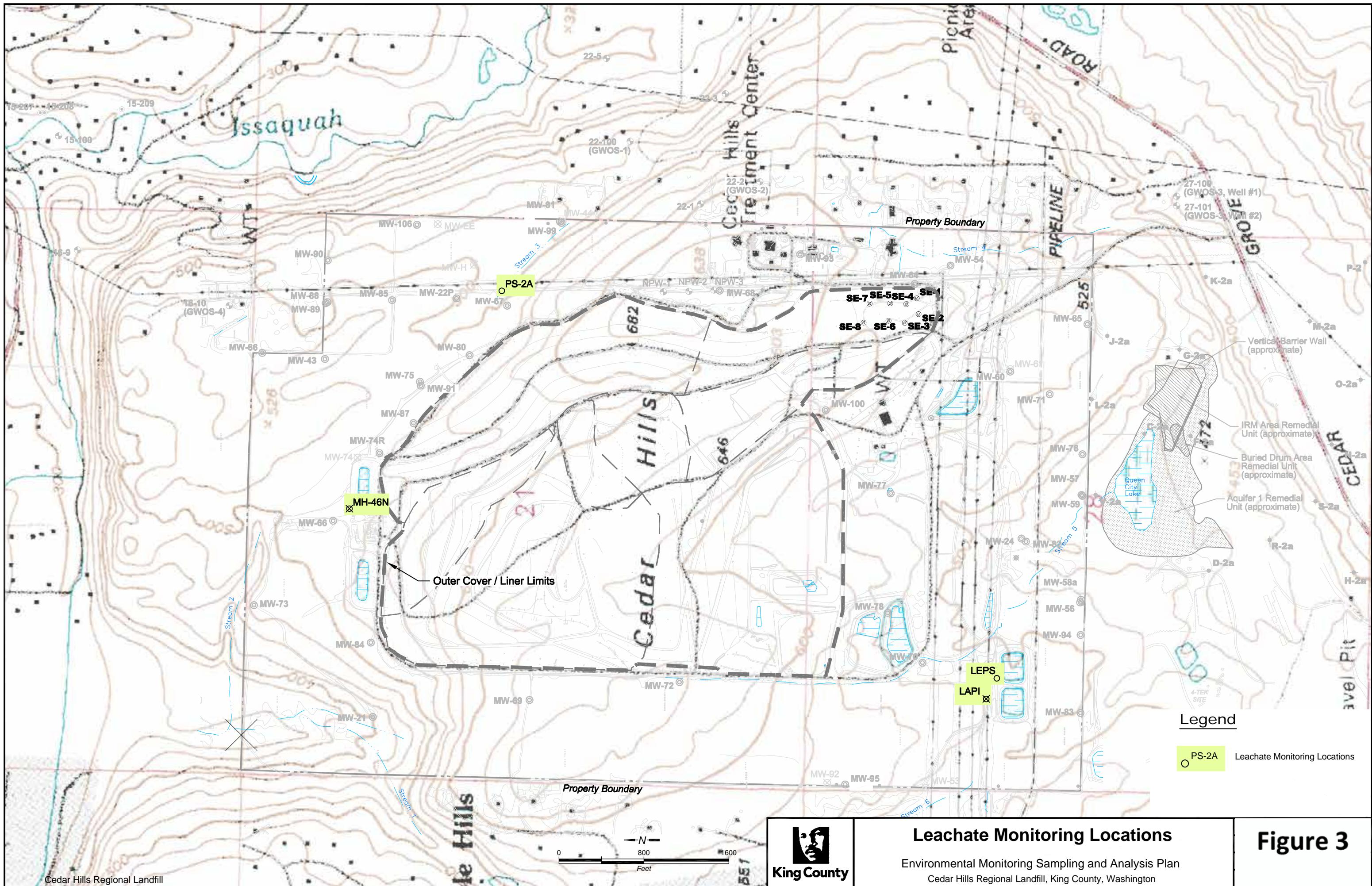


Surface Water and Stormwater Monitoring Network

Environmental Monitoring Sampling and Analysis Plan

Cedar Hills Regional Landfill, King County, Washington

Figure 2



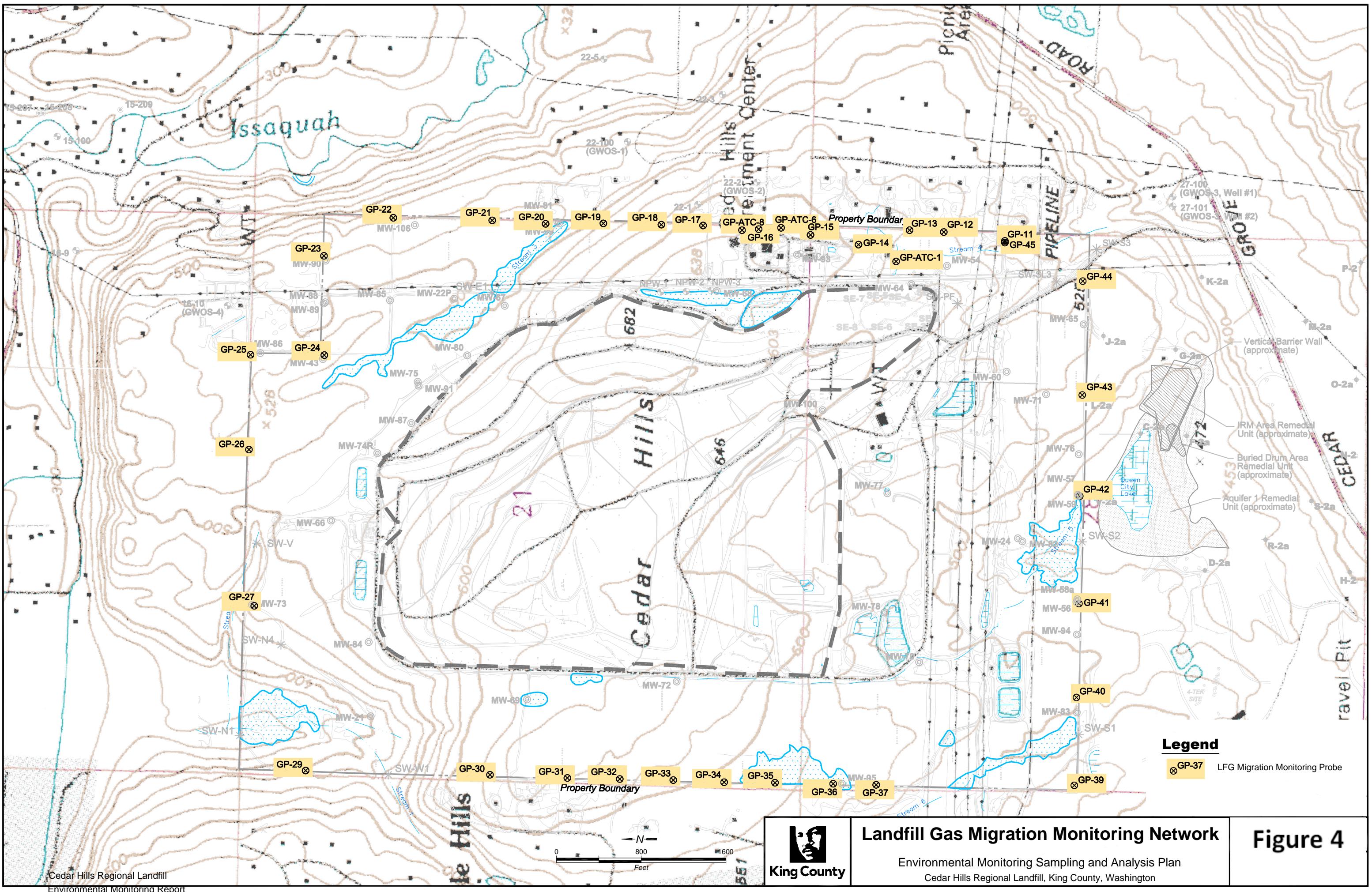


Table 1
CEDAR HILLS REGIONAL LANDFILL GROUNDWATER MONITORING WELLS

Well Name	General Condition				Recommendations				
	Casing Diameter (inches)	Well Depth (feet)	Installation Date	Water Table or Deep Zone	Well Monitoring Classification	Comments on Well Use	Static Water Level Monitoring Frequency	Water Quality Monitoring Frequency	Rationale
MW-21 (Upgradient)	6	163	5/17/83	Deep	Detection	Background	Quarterly	Semi-annual	Monitors background conditions of deep aquifer.
MW-22P (Downgradient)	2	284	5/25/83	Deep	Detection	WL only	Quarterly	None	Not effectively located for facilities or background monitoring.
MW-24 (Upgradient)	6	192	6/2/83	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in deep upgradient well. Monitor SWLs to define deeper Regional Aquifer flow paths.
MW-54 (Upgradient)	2	351	9/26/86	Deep	Detection	WL only	Quarterly	None	Not effectively located for facilities monitoring as it lies up gradient of the CHRLF facilities. Upgradient water quality monitored in other wells.
MW-56 (Upgradient)	2	166	10/12/88	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in upgradient well. Low groundwater velocities (0.014 ft/day) indicate slow movement of QCF contaminants through this area. Travel distance for 180 days
MW-57 (Upgradient)	2	144	8/22/88	Deep	Detection	WL only	Quarterly	None	Monitoring redundant with MW-59. Strong downward vertical gradients indicate impacts at MW-57 would also be detected at MW-59.
MW-58A (Upgradient)	2	219	9/26/88	Deep	Detection	WL only	Quarterly	None	Monitoring redundant with MW-56. Strong downward vertical gradients indicate impacts at MW-58A would also be detected at MW-56.
MW-59 (Upgradient)	2	180.5	8/16/88	Deep	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in upgradient well.
MW-60 (Upgradient)	2.5	240	9/13/91	Water Table	Detection	WL only	Quarterly	None	Upgradient flow from QCF in shallow Regional Aquifer characterized by MW-65 and MW-76. Downgradient area monitored by MW-100.
MW-64 (Upgradient)	2.5	274	3/22/93	Water Table	Detection		Quarterly	Semi-annual	Adjacent to SE Pit. Conversion from quarterly to semiannual sampling does not have significant effect on introwell statistics.
MW-65 (Upgradient)	2.5	234	3/29/93	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in upgradient well. Monitor SWLs to define deeper Regional Aquifer flow paths.
MW-66 (Upgradient)	2.5	248	4/5/93	Water Table	Detection		Quarterly	Quarterly	Monitor north end leachate detention facilities.
MW-67 (Downgradient)	2.5	230	4/28/93	Water Table	Detection		Quarterly	Semi-annual	Monitors potential EPZ contaminants infiltrating into Regional Aquifer.
MW-68 (Cross-Gradient/)	2.5	353	4/15/93	Water Table	Detection		Quarterly	Quarterly	Well is completed adjacent to unlined Main Hill where downward flow from Main Hill and impacted EPZ would be captured. Monitors Main Hill gas effected area.
MW-69 (Downgradient)	2.5	371	4/23/93	Water Table	Detection		Quarterly	Quarterly	West side flow converges in this area and well is upgradient of key downgradient wells.
MW-72 (Downgradient)	2.5	376	8/7/98	Water Table	Detection		Quarterly	Quarterly	Key water quality monitoring well for southwest landfill area.
MW-73 (Upgradient)	4	206	9/3/99	Water Table	Detection	Background	Quarterly	Semi-annual	Background water quality monitoring for northwest facility area. Downgradient flow paths from well largely by-pass facility so provides only general indication of background conditions.
MW-74R (Downgradient)	4	249	11/1/00	Water Table	Detection		Quarterly	Quarterly	Detection zone monitors north end facilities. Quarterly monitoring recommended due to elevated chloride.
MW-75 (Downgradient)	4	269	9/24/99	Deep	Detection		Quarterly	Quarterly	Key downgradient monitoring well.
MW-76 (Upgradient)	4	148	10/25/99	Water Table	Detection	Background	Quarterly	Semi-annual	Monitor QCF impacts effecting upgradient water quality in shallow portion of Regional Aquifer. Low groundwater velocities (0.014 ft/day) indicate slow movement of QCF contaminants through this
MW-80 (Downgradient)	4	259	2/27/01	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well for monitoring impacts from unlined Main Hill and EPZ.
MW-81 (Upgradient)	4	192	10/3/02	Water Table	Detection		Quarterly	Quarterly	Monitors ground water quality from off-site area east of facility. Retain as monitoring point to monitor for potential LFG impacts to groundwater. Key well for defining potentiometric divide on east
MW-82 (Upgradient)	4	133	11/2/00	Water Table	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in shallow Regional upgradient well. Low groundwater velocities (0.014 ft/day) indicate slow movement of QCF contaminants through this area.
MW-83 (Upgradient)	4	154	10/27/00	Water Table	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in shallow Regional upgradient well.
MW-84 (Upgradient)	4	246	10/20/00	Water Table	Detection	Background	Quarterly	Quarterly	Monitor background conditions in shallow regional aquifer
MW-85 (Downgradient)	4	257	12/1/00	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well with large detection zone underlying waste placement areas. Located in area of convergent groundwater flow and near center of high transmissivity channel.
MW-86 (Downgradient)	4	259	12/12/00	Water Table	Detection		Quarterly	Semi-annual	Provides monitoring of north end facilities. Conversion from quarterly to semiannual sampling does not have significant effect on introwell statistics.
MW-87 (Downgradient)	4	261	11/21/00	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well.

Table 1
CEDAR HILLS REGIONAL LANDFILL GROUNDWATER MONITORING WELLS

Well Name	General Condition				Recommendations					
	Casing Diameter (inches)	Well Depth (feet)	Installation Date	Water Table or Deep Zone	Well Monitoring Classification	Comments on Well Use	Static Water Level Monitoring Frequency	Water Quality Monitoring Frequency	Rationale	
MW-88 (Downgradient)	4	239	9/13/01	Water Table	Detection		Quarterly	Semi-annual	Provides limited monitoring of north end facilities. Conversion from quarterly to semiannual sampling does not have significant effect on introwell statistics.	
MW-89 (Downgradient)	4	291	11/12/01	Deep	Detection		Quarterly	Semi-annual	Provides limited monitoring of north end facilities in deep Regional Aquifer. Continue monitoring in place of MW-43. Conversion from quarterly to semiannual sampling does not have	
MW-90 (Downgradient)	4	274	8/14/02	Deep	Assessment		Quarterly	Contingent	Water quality monitoring redundant with MW-89. Reserve as contingency well in event assessment monitoring is triggered in MW-88,89 or 85.	
MW-91 (Downgradient)	6	289	10/26/01	Deep	Detection	WL only	Quarterly	None	Large diameter well used for testing. Redundant with well MW-75. Additional demonstration for reduction in water quality sampling frequency is presented in Appendix F.	
MW-93 (Cross Gradient)	4	320	6/24/02	Water Table	Detection		Quarterly	Quarterly	Well monitors the Main Hill gas affected area	
MW-94 (Upgradient)	4	145	7/2/02	Water Table	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in shallow Regional upgradient well.	
MW-95 (Cross Gradient)	4	263	7/22/02	Water Table	Detection		Quarterly	Semi-annual	Monitor off-site water quality at south end of facility. Downgradient flow paths poorly defined and may by-pass facility. Additional demonstration for reduction in water quality sampling frequency	
MW-99 (Upgradient)	4	279	8/30/02	Deep	Assessment		Quarterly	Contingent	Monitors easterly upgradient water quality from offsite. Reserve as contingency well in event assessment monitoring is triggered in MW-81. Additional demonstration for reduction in water quality	
MW-100 (Downgradient)	4	300	8/26/02	Water Table	Detection		Quarterly	Semi-annual	Well useful for flowpath and geochemical modeling. Assists in tracking QCF contaminant migration through facility. Additional demonstration for reduction in water quality sampling	
MW-106 (Cross gradient)	4	203	2/19/09	Water Table	Detection	WL only	Quarterly	None	Defines east side flow paths.	
East Main Hill Perched Zones										
EB-5	2	60	5/06/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.	
EB-5S	2	20	6/06/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.	
EB-6	2	30	11/28/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down. Well has limited water yield limiting ability to collect samples.	
EW-25	6	36	6/10/92	EPZ	Assessment		Quarterly	Quarterly	Key EPZ compliance well. Temporary monitoring point sampled with passive diffusion sampler.	
MW-30A	3	35	6/09/89	EPZ	Assessment		Quarterly	Quarterly	Monitor attenuating VOCs	
MW-47	2	44	5/31/85	EPZ	Assessment		Quarterly	Quarterly	Key EPZ compliance well	
MW-62	2	54	1/02/90	EPZ	Assessment		Quarterly	Quarterly	Monitor attenuating VOCs	
MW-63	2	17	12/02/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.	
MW-102	2	50	1/27/09	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.	
MW-103	2	35	1/28/09	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.	
MW-104	2	32	1/29/09	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.	
South Solid Waste Area Perched Zone										
MW-101	2	54	6/2/06	SSWA	Assessment		Quarterly	Quarterly	Key SSWA perched zone compliance well	

Notes:

(1) The following wells were decommissioned: MW-70, MW-77, MW-78, MW-96 and MW-97 as of 2016.

(2) Shallow wells are wells completed in the Regional Aquifer with the top screen slot within 10 ft of the water table. Deep wells are completed in the Regional Aquifer with the top screen slot greater than 10 ft below the water table.

(3) Water quality monitoring shading relates to Figure 2.

Abbreviations:

WL = Water Level

NA = Not Applicable

DZ = Detection Zone EPZ = East Perched Zone

SSWA = South Solid Waste Area QCF = Queen City Farms

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 2nd QUARTER 2016

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
EW-25	Perched	4/1/16	Groundwater Elevation Measurement	NA	
EW-25	Perched	4/22/16	Quarterly Groundwater Sampling	EW25160422-	
MW-21	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-21	Regional	4/13/16	Semi-annual Groundwater Sampling	W21-160413-	
MW-22	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-24	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-24	Regional	4/6/16	Semi-annual Groundwater Sampling	W24-160406-	
MW-25	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-27A	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-28	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-29	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-30A	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-30A	Perched	4/1/16	QA/QC Sample	W30A160415D	Field Duplicate
MW-30A	Perched	4/15/16	Quarterly Groundwater Sampling	W30A160415-	
MW-41D	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-41S	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-43	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-45	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-47	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-47	Perched	4/6/16	Quarterly Groundwater Sampling	W47-160406-	
MW-50	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-55	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-56	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-56	Regional	4/20/16	Semi-annual Groundwater Sampling	W56-160420-	
MW-57	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-58A	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-59	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-59	Regional	4/20/16	Quarterly Groundwater Sampling	W59-160420-	
MW-60	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-62	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-62	Perched	4/21/16	Quarterly Groundwater Sampling	W62-160421-	
MW-63	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-64	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-64	Regional	4/6/16	Semi-annual Groundwater Sampling	W64-160406-	
MW-65	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-65	Regional	4/5/16	Semi-annual Groundwater Sampling	W65-160405-	
MW-66	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-66	Regional	4/4/16	Quarterly Groundwater Sampling	W66-160404-	
MW-67	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-67	Regional	4/25/16	Semi-annual Groundwater Sampling	W67-160425-	
MW-68	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-68	Regional	4/4/16	Quarterly Groundwater Sampling	W68-160404-	
MW-69	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-69	Regional	4/25/16	Quarterly Groundwater Sampling	W69-160425-	
MW-72	Regional	4/7/16	Quarterly Groundwater Sampling	W72-160407-	
MW-73	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-73	Regional	4/22/16	Semi-annual Groundwater Sampling	W73-160422-	
MW-74	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-74	Regional	4/19/16	Quarterly Groundwater Sampling	W74R160419-	
MW-75	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-75	Regional	4/19/16	Quarterly Groundwater Sampling	W75-160419-	
MW-76	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-76	Regional	4/5/16	Semi-annual Groundwater Sampling	W76-160405-	
MW-76	Regional	4/15/16	QA/QC Sample	W76-160405D	Field Duplicate
MW-79	Regional	4/1/16	Groundwater Elevation Measurement	NA	Damaged

TABLE 2
GROUNDWATER MONITORING ACTIVITIES 2nd QUARTER 2016

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-80	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-80	Regional	4/11/16	Quarterly Groundwater Sampling	W80-160411-	
MW-81	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-81	Regional	4/7/16	Quarterly Groundwater Sampling	W81-160407-	
MW-82	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-82	Regional	4/6/16	Semi-annual Groundwater Sampling	W82-160406-	
MW-83	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-83	Regional	4/15/16	Quarterly Groundwater Sampling	W83-160415-	
MW-84	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-84	Regional	4/22/16	Quarterly Groundwater Sampling	W84-160422-	
MW-85	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-85	Regional	4/7/16	Quarterly Groundwater Sampling	W85-160407-	
MW-86	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-86	Regional	4/14/16	Semi-annual Groundwater Sampling	W86-160414-	
MW-87	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-87	Regional	4/19/16	Quarterly Groundwater Sampling	W87-160419-	
MW-88	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-88	Regional	4/8/16	Semi-annual Groundwater Sampling	W88-160408-	
MW-89	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-89	Regional	4/8/16	Semi-annual Groundwater Sampling	W89-160408-	
MW-90	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-91	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-93	Regional	4/19/16	Quarterly Groundwater Sampling	W93-160419-	
MW-94	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-94	Regional	4/22/16	Quarterly Groundwater Sampling	W94-160422-	
MW-95	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-95	Regional	4/14/16	Semi-annual Groundwater Sampling	W95-160414-	
MW-98	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-99	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-100	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-100	Regional	4/14/16	Semi-annual Groundwater Sampling	W100-160414-	
MW-101	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-101	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-101	Perched	5/10/16	Quarterly Groundwater Sampling	W101-160510-	
MW-102	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-102	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-103	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-104	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-105	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-105	Perched	6/3/16	Leachate Lagoon Monitoring	W105-160603-	
MW-106	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-106	Regional	4/1/16	Groundwater Elevation Measurement	NA	
MW-EB5	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-EB5S	Perched	4/1/16	Groundwater Elevation Measurement	NA	
MW-EB6	Perched	4/1/16	Groundwater Elevation Measurement	NA	
WS-NPW-1	Regional	4/1/16	Groundwater Elevation Measurement	NA	
WS-NPW-3	Regional	4/1/16	Groundwater Elevation Measurement	NA	
Equipment Blank	NA	4/8/16	QA/QC Sample	WU1M160408E	
Equipment Blank	NA	4/8/16	QA/QC Sample	WU1S160408E	
Equipment Blank	NA	4/8/16	QA/QC Sample	WU1H160408E	
Field Blank	NA	4/7/16	QA/QC Sample	W85-160407F	
Field Blank	NA	4/22/16	QA/QC Sample	W84-160422F	

NA = No sample ID assigned, No sample collected.

Table 3
GROUNDWATER CONCENTRATIONS ABOVE WAC 173-200-040 CRITERIA
WATER QUALITY STANDARDS FOR GROUND WATERS OF THE STATE OF WASHINGTON

CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER
(Data Collected from April 1, 2016 to June 30, 2016)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Upgradient and Crossgradient Wells					
Arsenic (Total)	(mg/L)	MW-64	4/6/2016	W64-160406-	0.007
		MW-65	4/6/2016	W65-160405-	0.0010
		MW-93	4/19/2016	W93-160419-	0.0012
		MW-95	4/14/2016	W95-160414-	0.0011
Iron (Dissolved)	(mg/L)	MW-21	4/13/2016	W21-160413-	2.2
		MW-24	4/6/2016	W24-160406-	3.1
		MW-59	4/20/2016	W59-160420-	3.93
		MW-65	4/6/2016	W65-160405-	3.83
Manganese (Dissolved)	(mg/L)	MW-21	4/13/2016	W21-160413-	0.0761
		MW-24	4/6/2016	W24-160406-	0.0914
		MW-56	4/20/2016	W56-160420-	0.256
		MW-59	4/20/2016	W59-160420-	0.111
		MW-65	4/6/2016	W65-160405-	0.158
		MW-93	4/19/2016	W93-160419-	0.176
		MW-95	4/14/2016	W95-160414-	0.165
Trichloroethene	(µg/L)	MW-76	4/5/2016	W76-160405-	9.51
		MW-82	4/6/2016	W82-160406-	5.19
Vinyl Chloride	(mg/L)	MW-65	4/6/2016	W65-160405-	0.0437
Wells Downgradient to Waste Cells and North end Facilities					
Arsenic (Total)	(mg/L)	MW-100	4/14/2016	W100-160414-	0.0183
		MW-68	4/4/2016	W68-160404-	0.139
		MW-69	4/25/2016	W69-160425-	0.00219
		MW-80	4/11/2016	W80-160411-	0.0058
		MW-86	4/14/2016	W86-160414-	0.00969
		MW-87	4/19/2016	W87-160419-	0.0117
		MW-88	4/8/2016	W88-160408-	0.001
		MW-89	4/8/2016	W89-160408-	0.0103
Iron (Dissolved)	(mg/L)	MW-68	4/4/2016	W68-160404-	0.621
		MW-69	4/25/2016	W69-160425-	0.936
		MW-72	4/7/2016	W72-160407-	1.91
		MW-75	4/19/2016	W75-160419-	2.08
		MW-80	4/11/2016	W80-160411-	2.01
		MW-86	4/14/2016	W86-160414-	0.618
		MW-87	4/19/2016	W87-160419-	4.28
		MW-89	4/8/2016	W89-160408-	0.648
		MW-100	4/14/2016	W100-160414-	0.938
Wells Downgradient to Waste Cells and North end Facilities cont.					
Manganese (Dissolved)	(mg/L)	MW-67	4/25/2016	W67-160425-	0.157
		MW-68	4/4/2016	W68-160404-	0.258
		MW-69	4/25/2016	W69-160425-	0.235
		MW-72	4/7/2016	W72-160407-	0.263
		MW-75	4/19/2016	W75-160419-	0.163
		MW-80	4/11/2016	W80-160411-	0.303
		MW-87	4/19/2016	W87-160419-	0.528
		MW-89	4/8/2016	W89-160408-	0.188
		MW-100	4/14/2016	W100-160414-	0.164

Table 4
Ion Balance Calculations
Cedar Hills Regional Landfill Quarterly and Semi-annual Regional Aquifer
Groundwater Monitoring

Data Collected from April 1, 2016 to June 30, 2016

Site ID	MW	n	Upgradient and Crossgradient																	
			MW-21 4/13/16			MW-24 4/6/16			MW-56 4/20/16			MW-59 4/20/16			MW-64 4/6/16			MW-65 4/6/16		
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)	mg/L	meq/L	%(meq)		
Calcium	40.1	2	9.6	0.480539	38.1	13.8	0.688623	41.0	15.5	0.773453	44.4	15.5	0.773453	39.5	17.3	0.863273	40.0	12.1	0.603792	41.0
Magnesium	24.3	2	5.5	0.45505	36.1	7.8	0.645135	38.4	8.5	0.698622	40.1	9.2	0.759515	38.8	11.7	0.962765	44.7	6.2	0.506892	34.4
Potassium	39.1	1	1.0	0.024937	2.0	0.8	0.021561	1.3	1.1	0.027111	1.6	1.0	0.0266	1.4	1.5	0.038621	1.8	0.9	0.022073	1.5
Sodium	23.0	1	5.0	0.217923	17.3	4.8	0.209223	12.4	5.3	0.232277	13.3	5.8	0.254026	13.0	6.6	0.286649	13.3	4.6	0.197914	13.4
Iron	55.8	2	2.20	0.078787	6.3	3.10	0.111018	6.6	0.06	0.002056	0.1	3.93	0.140742	7.2	0.04	0.001504	0.1	3.83	0.13716	9.3
Manganese	54.9	2	0.08	0.00277	0.2	0.09	0.003327	0.2	0.26	0.00932	0.5	0.11	0.004041	0.2	0.04	0.00162	0.1	0.16	0.005752	0.4
Ammonia-N	14.0	1	0.01	0.000357	0.0	0.04	0.00267	0.2	0.01	0.000357	0.0	0.02	0.001171	0.1	0.02	0.001328	0.1	0.01	0.000357	0.0
Total Cations (meq/L)			1.3			1.7			1.7			2.0			2.2			1.5		
Anions																				
Alkalinity, Total			54		67		55		65		104		55							
Carbonate	60.0	2	0.10181	0.003394	0.3	0.06081	0.002027	0.1	0.02863	0.000954	0.1	0.03822	0.001274	0.1	0.07686	0.002562	0.1	0.03173	0.001058	0.1
Bicarbonate	61.0	1	65.31	1.070445	81.6	81.49	1.335772	74.0	66.68	1.092881	64.2	79.34	1.30053	70.8	126.72	2.077125	85.1	67.40	1.104776	73.6
Chloride	35.5	1	2.8	0.078696	6.0	4.1	0.115646	6.4	11.6	0.327194	19.2	4.5	0.126647	6.9	3.2	0.090824	3.7	3.8	0.106338	7.1
Nitrate-N	14.0	1	0.01	0.000357	0.0	0.01	0.001	0.1	0.14	0.010209	0.6	0.02	0.001499	0.1	0.01	0.001	0.0	0.01	0.000357	0.0
Sulfate	96.1	2	7.7	0.159696	12.2	16.8	0.34979	19.4	13.0	0.270671	15.9	19.6	0.408088	22.2	12.9	0.268589	11.0	13.9	0.28941	19.3
Total Anions (meq/L)			1.3			1.8			1.7			1.8			2.4			1.5		
Total Ions (meq/L)			2.6			3.5			3.4			3.8			4.6			3.0		
Cation/Anion Ratio			0.96			0.93			1.02			1.07			0.88			0.98		
Percent Difference			-2.0			-3.5			1.2			3.2			-6.2			-0.9		
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)			1.18			1.56			1.73			1.81			2.15			1.33		
Calcium				40.78			44.01			44.67			42.65			40.13			45.38	
Magnesium				38.61			41.23			40.35			41.88			44.75			38.09	
Sodium + Potassium				20.61			14.75			14.98			15.47			15.12			16.53	
													100.0							
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.31			1.80			1.69			1.84			2.44			1.50		
Sulfate				12.170			19.398			16.000			22.221			11.012			19.274	
Chloride				5.997			6.413			19.341			6.896			3.724			7.082	
Bicarbonate + Carbonate				81.833			74.189			64.659			70.884			85.265			73.645	
													100.0							

Table 4
Ion Balance Calculations
Cedar Hills Regional Landfill Quarterly and Semi-annual Regional Aquifer
Groundwater Monitoring

Data Collected from April 1, 2016 to June 30, 2016

Site ID	MW	n	Upgradient and Crossgradient															
			MW-76 4/5/16			MW-82 4/6/16			MW-83 4/15/16			MW-94 4/22/16			MW-73 4/22/16			
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)	mg/L	meq/L	%(meq)
Calcium	40.1	2	19.2	0.958084	49.2	29.6	1.477046	49.3	42.6	2.125749	51.7	22.8	1.137725	48.9	12.4	0.618762	44.2	11.8
Magnesium	24.3	2	7.7	0.636906	32.7	14.4	1.184941	39.5	18.6	1.530549	37.2	9.3	0.765275	32.9	6.3	0.515943	36.8	5.3
Potassium	39.1	1	1.3	0.03325	1.7	1.7	0.044503	1.5	2.7	0.069568	1.7	1.8	0.046549	2.0	0.8	0.019361	1.4	0.8
Sodium	23.0	1	7.3	0.317968	16.3	6.7	0.289259	9.7	8.8	0.384519	9.4	8.6	0.375819	16.2	5.7	0.245761	17.5	5.0
Iron	55.8	2	0.01	0.000179	0.0	0.01	0.000179	0.0	0.01	0.000179	0.0	0.01	0.000179	0.0	0.01	0.000179	0.0	0.01
Manganese	54.9	2	0.00	1.82E-05	0.0	0.00	1.82E-05	0.0	0.00	7.83E-05	0.0	0.00	1.82E-05	0.0	0.00	1.82E-05	0.0	0.00
Ammonia-N	14.0	1	0.01	0.000357	0.0	0.01	0.000357	0.0	0.01	0.000357	0.0	0.01	0.000357	0.0	0.01	0.000357	0.0	0.01
Total Cations (meq/L)			1.9			3.0			4.1	100.0		2.3			1.4		1.3	
Anions																		
Alkalinity, Total			59			133			135			80			53			50
Carbonate	60.0	2	0.01169	0.00039	0.0	0.07632	0.002544	0.1	0.05744	0.001915	0.0	0.03732	0.001244	0.1	0.02972	0.000991	0.1	0.04035
Bicarbonate	61.0	1	71.59	1.173433	51.4	162.10	2.657055	78.1	164.58	2.697679	63.6	97.52	1.598515	69.8	64.60	1.05885	75.8	60.67
Chloride	35.5	1	14.8	0.417454	18.3	12.0	0.338476	10.0	42.1	1.187488	28.0	17.7	0.499253	21.8	2.5	0.07108	5.1	5.6
Nitrate-N	14.0	1	1.88	0.134219	5.9	0.60	0.042693	1.3	2.28	0.162776	3.8	0.76	0.054544	2.4	1.02	0.072821	5.2	1.55
Sulfate	96.1	2	26.7	0.555916	24.4	17.3	0.360201	10.6	9.2	0.191968	4.5	6.6	0.137418	6.0	9.3	0.193842	13.9	8.0
Total Anions (meq/L)			2.3			3.4			4.2	100.0		2.3			1.4		1.4	
Total Ions (meq/L)			4.2			6.4			8.4			4.6			2.8		2.7	
Cation/Anion Ratio			0.85			0.88			0.97			1.02			1.00		0.88	
Percent Difference			-7.9			-6.3			-1.6			0.8			0.1		-6.4	
Trilinear Diagram Data																		
sum (Ca, Mg, Na+K)			1.95			3.00			4.11			2.33			1.40			1.26
Calcium				49.23			49.30			51.72			48.93			44.20		46.84
Magnesium				32.73			39.55			37.24			32.91			36.86		34.43
Sodium + Potassium				18.05			11.14			11.05			18.16			18.94		18.72
										100.0								100.0
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			2.15			3.36			4.08			2.24			1.32			1.32
Sulfate				25.890			10.726			4.706			6.145			14.632		12.576
Chloride				19.442			10.079			29.112			22.324			5.365		11.950
Bicarbonate + Carbonate				54.668			79.195			66.182			71.532			80.002		75.474
										100.0								

Table 4
Ion Balance Calculations
Cedar Hills Regional Landfill Quarterly and Semi-annual Regional Aquifer
Groundwater Monitoring

Data Collected from April 1, 2016 to June 30, 2016

Site ID	Upgradient and Crossgradient												Downgradient to Waste Cells and North End Facilities												
	MW-84 4/22/16			MW-66 4/4/16			MW-93 4/19/16			MW-68 4/4/16			MW-67 4/25/16			MW-69 4/25/16									
	MW	n	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)		
Cations																									
Calcium	40.1	2	11.6	0.578842	36.6	18.6	0.928144	40.5	33.9	1.691617	47.1	27.2	1.357285	48.2	34.3	1.711577	45.4	29.3	1.462076	48.6					
Magnesium	24.3	2	8.8	0.720839	45.6	12.7	1.045052	45.6	17.5	1.440033	40.1	13.0	1.069739	38.0	19.7	1.621066	43.0	13.7	1.12734	37.5					
Potassium	39.1	1	0.9	0.023582	1.5	1.1	0.027878	1.2	1.5	0.038109	1.1	1.5	0.039132	1.4	1.7	0.042201	1.1	1.6	0.04169	1.4					
Sodium	23.0	1	5.9	0.258376	16.3	6.6	0.288389	12.6	9.4	0.408878	11.4	7.4	0.319707	11.3	8.7	0.378429	10.0	7.6	0.331452	11.0					
Iron	55.8	2	0.01	0.000179	0.0	0.01	0.000179	0.0	0.01	0.000179	0.0	0.02	0.022239	0.8	0.22	0.007843	0.2	0.04	0.03352	1.1					
Manganese	54.9	2	0.00	1.82E-05	0.0	0.00	1.82E-05	0.0	0.018	0.006407	0.2	0.26	0.009392	0.3	0.16	0.005716	0.2	0.24	0.008555	0.3					
Ammonia-N	14.0	1	0.01	0.000357	0.0	0.01	0.000357	0.0	0.05	0.003548	0.1	0.02	0.001235	0.0	0.01	0.000357	0.0	0.01	0.001028	0.0					
Total Cations (meq/L)					1.6			2.3			3.6			2.8			3.8			3.0					
Anions																									
Alkalinity, Total			59			102			120			131			143			125							
Carbonate	60.0	2	0.02964	0.000988	0.1	0.07713	0.002571	0.1	0.09949	0.003316	0.1	0.09246	0.003082	0.1	0.09863	0.003288	0.1	0.18836	0.006279	0.2					
Bicarbonate	61.0	1	72.29	1.184833	75.7	124.28	2.037122	78.4	146.20	2.396322	65.2	159.63	2.616523	85.6	174.26	2.856281	76.4	152.12	2.493345	83.5					
Chloride	35.5	1	3.7	0.104646	6.7	6.8	0.191803	7.4	3.2	0.091389	2.5	3.1	0.086029	2.8	5.0	0.141032	3.8	3.8	0.107466	3.6					
Nitrate-N	14.0	1	0.32	0.022917	1.5	0.59	0.042193	1.6	0.02	0.001499	0.0	0.01	0.000357	0.0	0.020	0.014207	0.4	0.01	0.000357	0.0					
Sulfate	96.1	2	12.1	0.251932	16.1	15.6	0.324805	12.5	56.9	1.184706	32.2	16.8	0.34979	11.4	34.8	0.724565	19.4	18.2	0.378939	12.7					
Total Anions (meq/L)					1.6			2.6			3.7			3.1			3.7			3.0					
Total Ions (meq/L)					3.1			4.9			7.3			5.9			7.5			6.0					
Cation/Anion Ratio					1.01			0.88			0.98			0.92			1.01			1.01					
Percent Difference					0.5			-6.3			-1.2			-4.0			0.4			0.3					
Trilinear Diagram Data																									
sum (Ca, Mg, Na+K)			1.58			2.29			3.58			2.79			3.75			2.96							
Calcium				36.60			40.54			47.27			48.72			45.60			49.35						
Magnesium				45.58			45.65			40.24			38.40			43.19			38.05						
Sodium + Potassium				17.83			13.81			12.49			12.88			11.21			12.60						
100.0				100.0			100.0																		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			1.54			2.56			3.68			3.06			3.73			2.99							
Sulfate				16.334			12.706			32.230			11.448			19.451			12.690						
Chloride				6.785			7.503			2.486			2.816			3.786			3.599						
Bicarbonate + Carbonate				76.882			79.791			65.283			85.736			76.764			83.711						

Table 4
Ion Balance Calculations
Cedar Hills Regional Landfill Quarterly and Semi-annual Regional Aquifer
Groundwater Monitoring

Data Collected from April 1, 2016 to June 30, 2016

Downgradient to Waste Cells and North End Facilities																					
Site ID	MW-72 4/7/16			MW-74 4/19/16			MW-75 4/19/16			MW-80 4/11/16			MW-85 4/7/16			MW-86 4/14/16					
	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	30.5	1.521956	47.3	48.6	2.42515	39.8	26.8	1.337325	39.1	27.6	1.377246	45.8	28.8	1.437126	47.8	13.7	0.683633	37.4	
Magnesium	24.3	2	15.6	1.283686	39.9	37.3	3.069327	50.3	19.4	1.596379	46.7	14.5	1.19317	39.7	14.8	1.217856	40.5	9.8	0.805596	44.1	
Potassium	39.1	1	1.7	0.044247	1.4	2.0	0.050642	0.8	1.7	0.042713	1.2	1.6	0.04169	1.4	1.5	0.037086	1.2	1.2	0.030436	1.7	
Sodium	23.0	1	6.6	0.288389	9.0	12.7	0.55242	9.1	8.3	0.36016	10.5	7.2	0.312313	10.4	7.3	0.315358	10.5	6.5	0.283604	15.5	
Iron	55.8	2	1.91	0.068401	2.1	0.01	0.000179	0.0	2.08	0.074489	2.2	2.01	0.071982	2.4	0.01	0.000179	0.0	0.62	0.022132	1.2	
Manganese	54.9	2	0.26	0.009574	0.3	0.00	1.82E-05	0.0	0.16	0.005934	0.2	0.30	0.011031	0.4	0.00	1.82E-05	0.0	0.01	0.000393	0.0	
Ammonia-N	14.0	1	0.01	0.000978	0.0	0.01	0.000357	0.0	0.01	0.000357	0.0	0.01	0.000814	0.0	0.01	0.000357	0.0	0.01	0.000357	0.0	
Total Cations (meq/L)					3.2		6.1		3.4		3.0	100.0		3.0		3.0		1.8			
Anions																					
Alkalinity, Total			124		233			101		108			114		66						
Carbonate	60.0	2	0.08358	0.002786	0.1	0.14999	0.005	0.1	0.06808	0.002269	0.1	0.08551	0.00285	0.1	0.10126	0.003375	0.1	0.04133	0.001378	0.1	
Bicarbonate	61.0	1	151.11	2.47684	69.3	283.96	4.654298	74.3	123.08	2.017426	57.9	131.59	2.156824	68.1	138.87	2.276281	66.7	80.07	1.312424	71.2	
Chloride	35.5	1	6.2	0.173751	4.9	30.4	0.857473	13.7	10.7	0.301808	8.7	6.0	0.169238	5.3	10.5	0.296167	8.7	5.0	0.139621	7.6	
Nitrate-N	14.0	1	0.01	0.000785	0.0	0.29	0.020847	0.3	0.01	0.000357	0.0	0.01	0.000357	0.0	0.11	0.00771	0.2	0.19	0.013707	0.7	
Sulfate	96.1	2	44.3	0.922363	25.8	34.8	0.724565	11.6	55.7	1.159721	33.3	40.3	0.83908	26.5	39.9	0.830752	24.3	18.1	0.376857	20.4	
Total Anions (meq/L)					3.6		6.3		3.5		3.2	100.0		3.4		3.4		1.8			
Total Ions (meq/L)					6.8		12.4		6.9		6.2			6.4				3.7			
Cation/Anion Ratio					0.90		0.97		0.98		0.95			0.88			0.99				
Percent Difference					-5.3		-1.3		-0.9		-2.6			-6.3			-0.5				
Trilinear Diagram Data																					
sum (Ca, Mg, Na+K)			3.14			6.10			3.34			2.92			3.01			1.80			
Calcium					48.50			39.77			40.08			47.09			47.79			37.91	
Magnesium						40.90			50.34			47.84			40.80			40.49			44.67
Sodium + Potassium						10.60			9.89			12.07			12.11			11.72			17.42
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			3.58			6.24			3.48			3.17			3.41			1.83			20.590
Sulfate						25.795			11.609			33.314			26.486			24.387			7.628
Chloride						4.859			13.739			8.670			5.342			8.694			
Bicarbonate + Carbonate						69.346			74.652			58.017			68.172			66.919			71.781
															100.0						

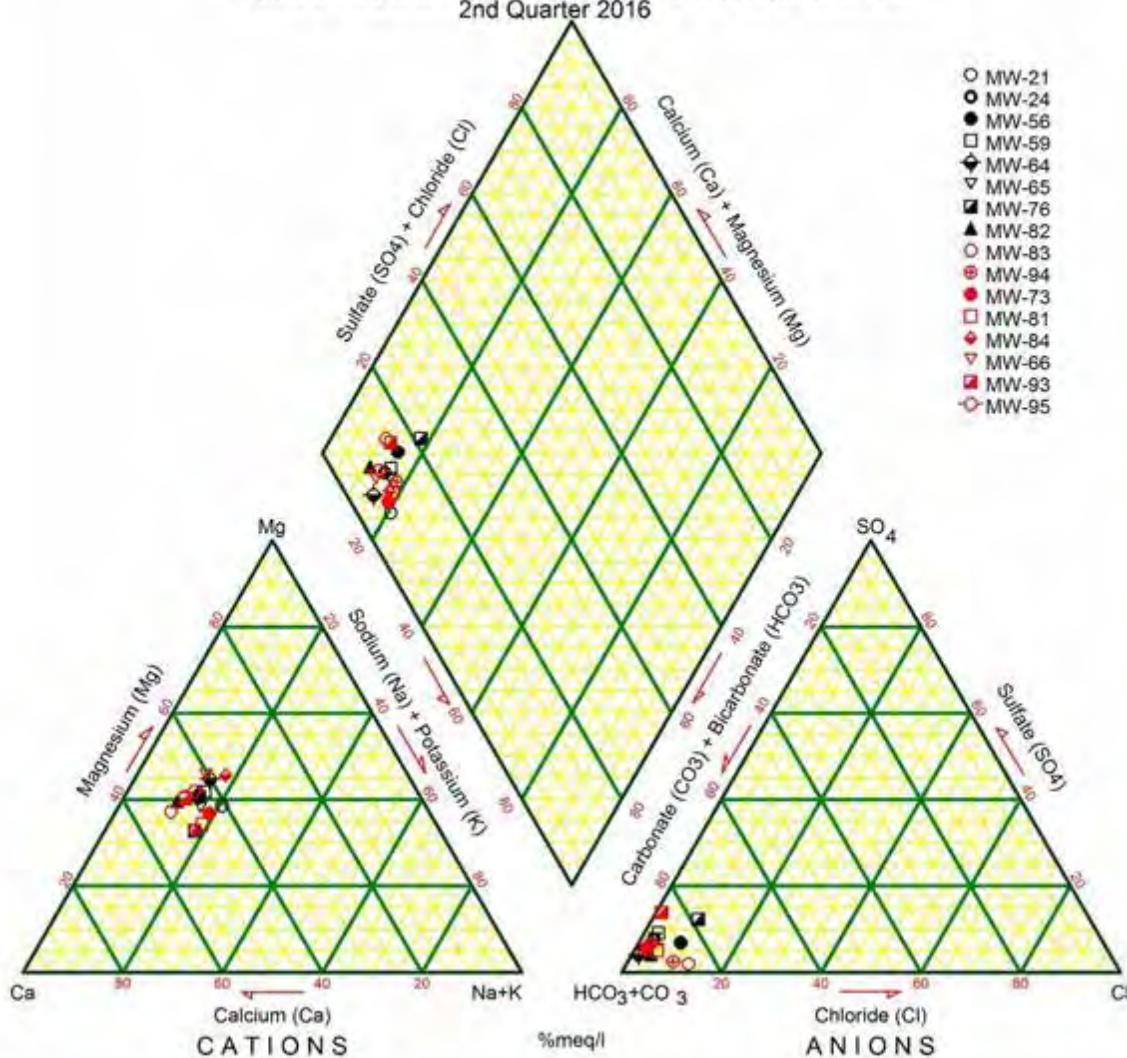
Table 4
Ion Balance Calculations
Cedar Hills Regional Landfill Quarterly and Semi-annual Regional Aquifer
Groundwater Monitoring

Data Collected from April 1, 2016 to June 30, 2016

Downgradient to Waste Cells and North End Facilities											
Site ID	MW	n	MW-87 4/19/16			MW-88 4/8/16			MW-89 4/8/16		
			mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
Cations											
Calcium	40.1	2	43.4	2.165669	41.4	8.5	0.425649	35.1	12.8	0.638723	32.8
Magnesium	24.3	2	29.1	2.394569	45.8	6.4	0.525818	43.4	9.9	0.813824	41.8
Potassium	39.1	1	12.2	0.056013	1.1	0.9	0.022098	1.8	1.5	0.038621	2.0
Sodium	23.0	1	10.2	0.443676	8.5	5.5	0.237062	19.6	9.7	0.422362	21.7
Iron	55.8	2	4.28	0.153276	2.9	0.01	0.000179	0.0	0.65	0.023206	1.2
Manganese	54.9	2	0.53	0.019222	0.4	0.00	1.82E-05	0.0	0.19	0.006844	0.4
Ammonia-N	14.0	1	0.02	0.001214	0.0	0.01	0.000357	0.0	0.02	0.001221	0.1
Total Cations (meq/L)				5.2			1.2			1.9	
Anions											
Alkalinity, Total			91		53		75		132		
Carbonate	60.0	2	0.03358	0.001119	0.0	0.06108	0.002036	0.2	0.11302	0.003767	0.2
Bicarbonate	61.0	1	110.46	1.810608	35.2	65.02	1.065803	81.1	91.27	1.496007	73.0
Chloride	35.5	1	9.4	0.264012	5.1	2.1	0.060362	4.6	7.5	0.212676	10.4
Nitrate-N	14.0	1	0.01	0.000357	0.0	0.58	0.041051	3.1	0.01	0.000357	0.0
Sulfate	96.1	2	147.0	3.060664	59.6	7.0	0.145538	11.1	16.2	0.337298	16.5
Total Anions (meq/L)				5.1			1.3			2.1	
Total Ions (meq/L)				10.4			2.5			4.0	
Cation/Anion Ratio				1.02			0.92			0.95	
Percent Difference				0.9			-4.1			-2.6	
Trilinear Diagram Data											
sum (Ca, Mg, Na+K)			5.06		1.21		1.91		2.86		
Calcium				42.80		35.16		33.38		43.91	
Magnesium				47.32		43.43		42.53		41.95	
Sodium + Potassium				9.88		21.41		24.09		14.13	
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			5.14		1.27		2.05		3.07		
Sulfate				59.588		11.426		16.456		10.937	
Chloride				5.140		4.739		10.376		2.945	
Bicarbonate + Carbonate				35.272		83.835		73.169		86.119	

Cedar Hills Regional Landfill

Figure 5. Regional Aquifer Upgradient and Crossgradient Wells
2nd Quarter 2016



Cedar Hills Regional Landfill
 Figure 6. Regional Aquifer Downgradient Wells
 2nd Quarter 2016

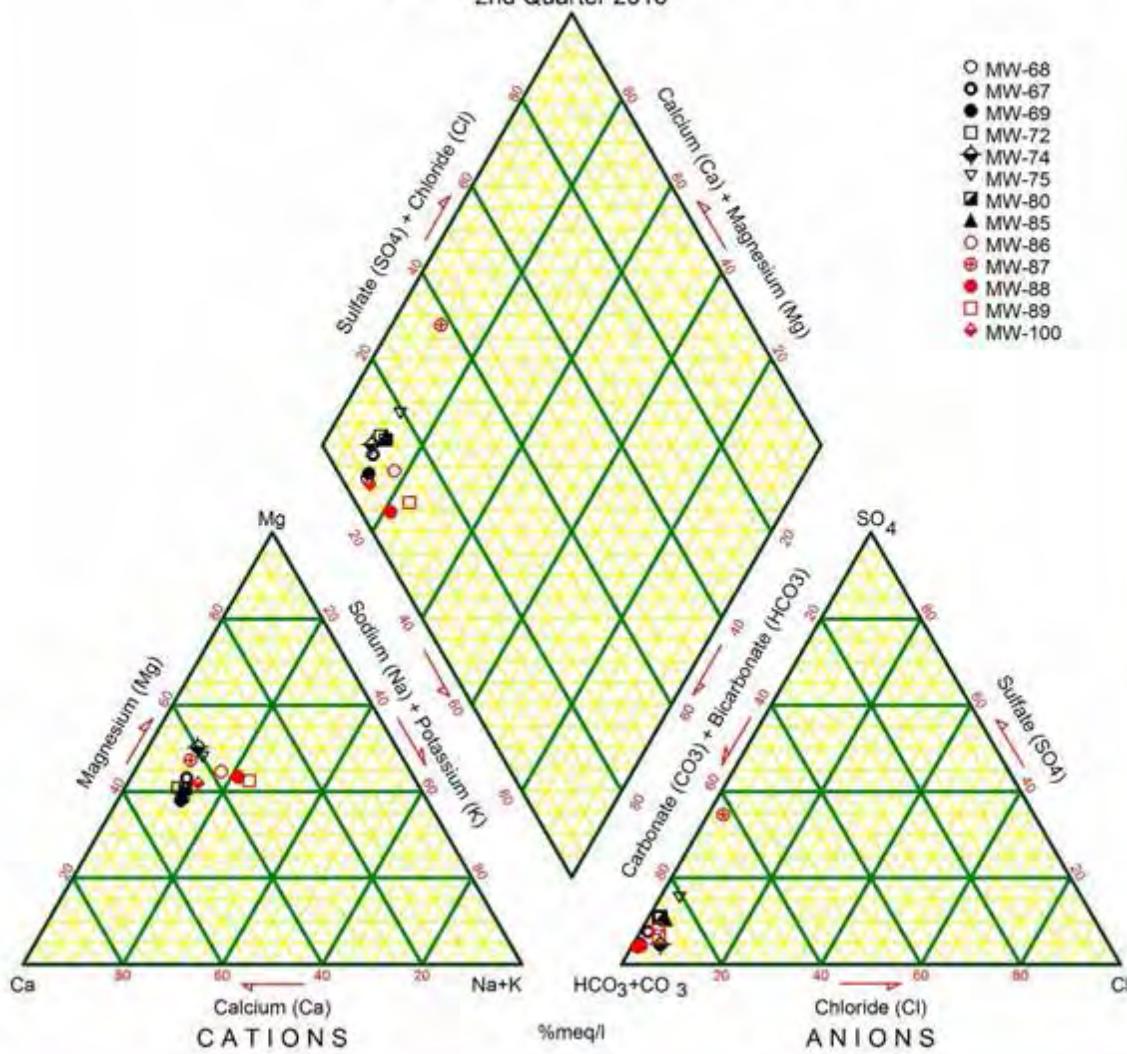


TABLE 5
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER QUARTERLY MONITORING WELLS
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT VALUES
(Data Collected from April 1, 2016 to June 30, 2016)

Parameter	Well	Units	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Cobalt	Total Copper	Total Lead	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc	Nitrate- _{as} -N	c ₆ -1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	
Upgradient and Crossgradient Wells																					
MW-21	Limit	0.001	0.001	0.0052	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.019	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.00453	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	< 0.01	< 0.2	< 0.2	< 0.2	< 0.02
MW-24	Limit	0.001	0.001	0.0021	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.18	0.39	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.00205	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.014	< 0.2	< 0.2	< 0.2	< 0.02
MW-56	Limit	0.001	0.003	0.0478	0.001	0.002	0.0076	0.0039	0.0154	0.0033	0.01	0.001	0.003	0.001	0.018	0.0235	1.57	1.86	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.0035	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.143	1.35	< 0.2	< 0.2	< 0.02
MW-59	Limit	0.001	0.001	0.0038	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.29	1.19	0.2	0.45	0.02
	Result	< 0.001	< 0.001	0.0043	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.027	1.08	< 0.2	< 0.2	< 0.02
MW-64	Limit	0.001	0.010	0.0184	0.001	0.002	0.005	0.0039	0.0051	0.001	0.0153	0.001	0.003	0.001	0.006	0.0385	2.0	0.2	0.2	0.2	0.02
	Result	< 0.001	0.00736	0.0141	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.014	< 0.2	< 0.2	< 0.2	< 0.02
MW-65	Limit	0.001	0.001	0.0081	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.009	0.2	0.2	0.2	0.17
	Result	< 0.001	0.00101	0.00736	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	< 0.01	< 0.2	< 0.2	< 0.2	0.0437
MW-66	Limit	0.001	0.001	0.0074	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00101	0.003	0.001	0.002	0.004	0.765	0.2	0.2	0.32	0.02
	Result	< 0.001	< 0.001	0.00518	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.6	< 0.2	< 0.2	< 0.2	< 0.02
MW-68	Limit	0.001	0.132	0.0205	0.001	0.002	0.005	0.003	0.0048	0.001	0.01	0.001	0.003	0.001	0.0036	0.004	0.13	0.2	0.2	0.2	0.02
	Result	< 0.001	0.139	0.0152	< 0.001	< 0.002	< 0.005	< 0.003	0.0036	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	0.00215	< 0.004	< 0.01	< 0.2	< 0.2	< 0.2	< 0.02
MW-73	Limit	0.001	0.001	0.0098	0.001	0.002	0.005	0.003	0.0036	0.001	0.01	0.001	0.003	0.001	0.002	0.004	2.1	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.0035	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	1.02	< 0.2	< 0.2	< 0.2	< 0.02
MW-76	Limit	0.001	0.001	0.0052	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	2.45	3.47	0.2	16.0	0.02
	Result	< 0.001	< 0.001	0.0036	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	1.88	0.607	0.38	9.51	< 0.02
MW-81	Limit	0.001	0.001	0.0030	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.00425	1.8	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.0028	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	1.51	< 0.2	< 0.2	< 0.2	< 0.02
MW-82	Limit	0.001	0.001	0.0095	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	1.56	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.0019	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.598	< 0.2	< 0.2	< 0.2	< 0.02
MW-83	Limit	0.001	0.001	0.0095	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	2.22	0.2	0.2	3.17	0.02
	Result	< 0.001	< 0.001	0.0059	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.876	< 0.2	< 0.2	2.36	< 0.02
MW-84	Limit	0.001	0.001	0.0037	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.68	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.0036	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.211	< 0.2	< 0.2	< 0.2	< 0.02
MW-93	Limit	0.001	0.0015	0.0098	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.0137	0.21	0.2	0.2	0.2	0.02
	Result	< 0.001	0.0012	0.0084	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	0.0021	< 0.004	0.028	< 0.2	< 0.2	< 0.2	< 0.02
MW-94	Limit	0.001	0.001	0.0041	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	2.13	0.2	0.2	5.16	0.02
	Result	< 0.001	< 0.001	0.0021	< 0.001	< 0.002	< 0.005	< 0.003	0.00231	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	1.96	< 0.2	< 0.2	1.95	< 0.02
MW-95	Limit	0.001	0.001	0.0041	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	2.13	0.2	0.2	0.2	0.02
	Result	< 0.001	0.0011	0.0039	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	1.96	< 0.2	< 0.2	1.95	< 0.02

TABLE 5
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER QUARTERLY MONITORING WELLS
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT VALUES
(Data Collected from April 1, 2016 to June 30, 2016)

Parameter	Well	Units	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Cobalt	Total Copper	Total Lead	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc	Nitrate- <i>as N</i>	c ₆ -1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Downgradient Wells																					
MW-100	Limit	0.001	0.005	0.0093	0.001	0.002	0.005	0.003	0.0023	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.26	0.2	0.2	0.2	0.02
	Result	< 0.001	0.0183	0.0121	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	0.00509	< 0.01	< 0.2	0.2	0.2	0.02
MW-67	Limit	0.001	0.001	0.0117	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	3.4	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.0131	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.199	< 0.2	< 0.2	< 0.2	< 0.02
MW-69	Limit	0.001	0.005	0.0153	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.0112	0.076	0.2	0.2	0.2	0.02
	Result	< 0.001	0.00219	0.0113	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	< 0.01	< 0.2	< 0.2	< 0.2	< 0.02
MW-72	Limit	0.001	0.001	0.0131	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.0177	0.089	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.0143	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	0.00813	0.012	< 0.2	< 0.2	< 0.2	< 0.02
MW-74	Limit	0.001	0.001	0.0131	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.0177	0.089	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.0171	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	0.00104	< 0.003	< 0.001	< 0.002	< 0.004	0.37	< 0.2	< 0.2	< 0.2	< 0.02
MW-75	Limit	0.001	0.001	0.0131	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.11	0.26	0.2	0.2	0.07
	Result	< 0.001	< 0.001	0.011	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	< 0.01	< 0.2	< 0.2	< 0.2	< 0.02
MW-80	Limit	0.001	0.009	0.0158	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.00457	0.028	0.2	0.2	0.2	0.02
	Result	< 0.001	0.0058	0.0148	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	< 0.01	< 0.2	< 0.2	< 0.2	< 0.02
MW-85	Limit	0.001	0.001	0.0068	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00137	0.003	0.001	0.002	0.004	0.193	0.2	0.2	0.2	0.02
	Result	< 0.001	< 0.001	0.00614	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	0.0011	< 0.003	< 0.001	< 0.002	< 0.004	0.105	< 0.2	< 0.2	< 0.2	< 0.02
MW-86	Limit	0.001	0.003	0.0062	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.002	0.003	0.001	0.002	0.004	2.6	0.2	0.2	0.2	0.02
	Result	< 0.001	0.0097	0.00598	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.1992	< 0.2	< 0.2	< 0.2	< 0.02
MW-87	Limit	0.001	0.078	0.0369	0.001	0.002	0.005	0.003	0.00347	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.24	0.2	0.2	0.2	0.08
	Result	< 0.001	0.0117	0.0309	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	0.00242	< 0.004	0.011	< 0.2	< 0.2	< 0.2	< 0.02
MW-88	Limit	0.001	0.001	0.0025	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.002	0.003	0.001	0.003	0.004	1.7	0.2	0.2	0.2	0.02
	Result	< 0.001	0.001	0.00225	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	0.0027	< 0.004	0.575	< 0.2	< 0.2	< 0.2	< 0.2
MW-89	Limit	0.001	0.014	0.0142	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.002	0.003	0.001	0.003	0.0147	0.16	0.2	0.2	0.2	0.02
	Result	< 0.001	0.0103	0.0116	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	0.0303	< 0.01	< 0.2	< 0.2	< 0.2	< 0.02

Results greater than Limit Value in **Bold**

TABLE 6
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN REGIONAL AQUIFER WELLS
(Data Collected from April 1, 2016 to June 30, 2016)

Analyte	Site ID	Date	Sample ID	ug/L
Upgradient and Crossgradient Wells				
<i>cis</i> -1,2-Dichloroethene	MW-56	4/20/2016	W56-160420-	1.35
	MW-59	04/20/16	W59-160420-	0.99
	MW-76	04/05/16	W76-160405-	0.607
Tetrachloroethene	MW-76	4/5/2016	W76-160405-	0.38
Trichloroethene	MW-76	4/5/2016	W76-160405-	9.51
	MW-82	4/6/2016	W82-160406-	5.19
	MW-83	4/15/2016	W83-160415-	2.06
	MW-94	4/22/2016	W94-160422-	0.921
Vinyl Chloride	MW-65	4/6/2016	W65-160405-	0.0437
Wells Downgradient to Waste Cells and North end Facilities				
Acetone	MW-68	4/4/2016	W68-160404-	5.2 T

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 April 1, 2016 to June 30, 2016)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
East Perched Zone Wells					
pH (Field)	pH Units	MW-30A	4/15/2016	W30A160415-	6.45
1,1-Dichloroethane	(ug/L)	MW-30A	4/15/2016	W30A160415-	2.15
		MW-62	4/21/2016	W62-160421-	2.38
Iron (Dissolved)	(mg/L)	MW-47	4/6/2016	W47-160406-	2.01
Manganese (Dissolved)	(mg/L)	MW-47	4/6/2016	W47-160406-	2.14
Total Dissolved Solids	(mg/L)	MW-47	4/6/2016	W47-160406-	673
Vinyl Chloride	(ug/L)	MW-47	4/6/2016	W47-160406-	6.44
South Solid Waste Area Perched Wells					
pH (Field)	pH Units	MW-105	6/3/2016	W105160603-	6.17
Arsenic (Total)	(mg/L)	MW-101	5/10/2016	W101160510-	0.0103
Iron (Dissolved)	(mg/L)	MW-101	5/10/2016	W101160510-	1.85
Manganese (Dissolved)	(mg/L)	MW-101	5/10/2016	W101160510-	1.06
Vinyl Chloride	(ug/L)	MW-101	5/10/2016	W101160510-	0.665

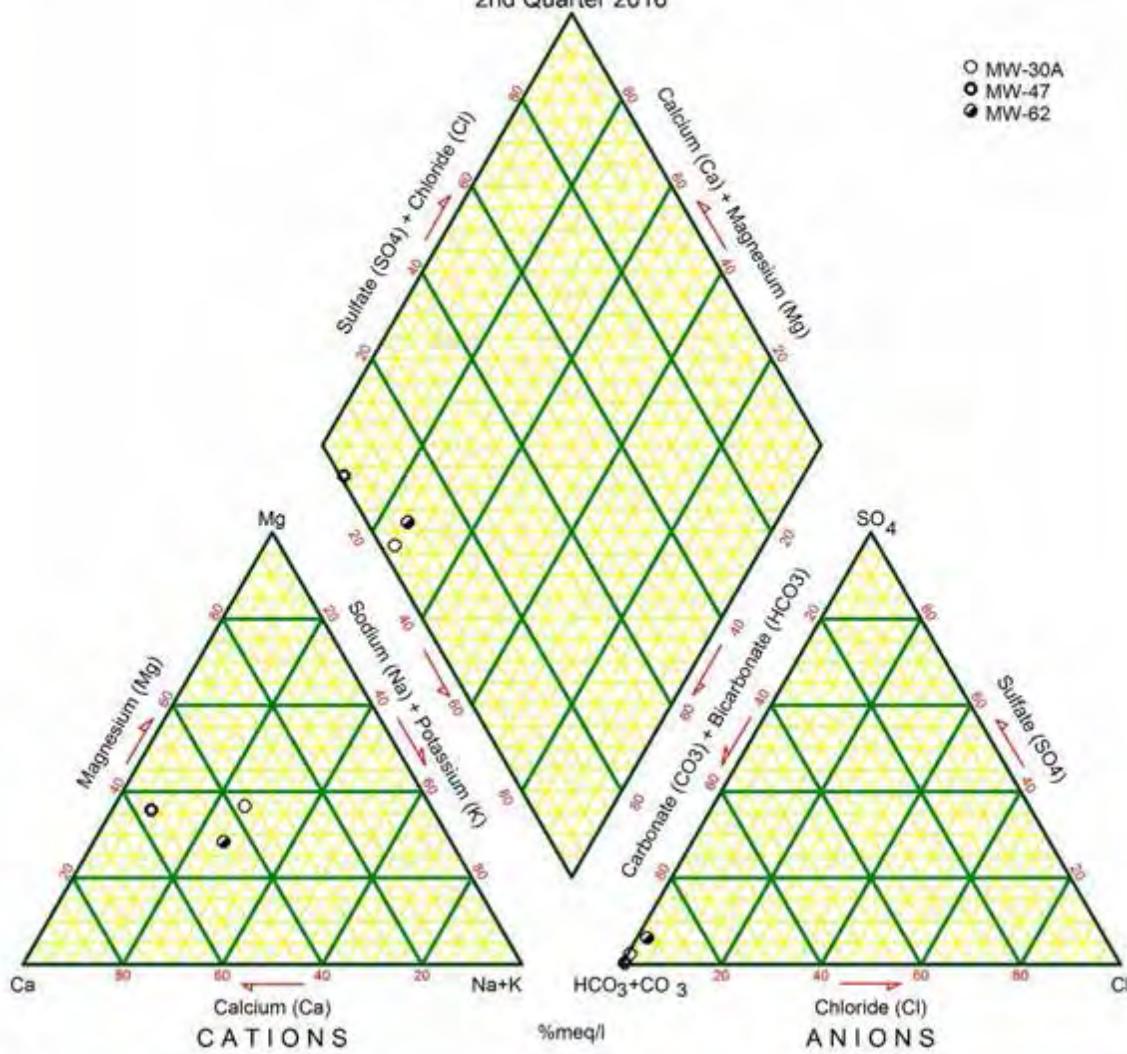
See Data Qualifier List for Qualifier Information.

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

Data Collected from April 1, 2016 to June 30, 2016

Site ID Date	MW	n	East Perched Zone						SSWA								
			MW-30A 4/15/16			MW-47 4/6/16			MW-62 4/21/16			MW-101 5/10/16			MW-105 6/3/16		
			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	20.4	1.01796	37.2	117.0	5.83832	55.7	25.3	1.26248	45.6	54.9	2.73952	43.8	15.3	0.76347	45.8
Magnesium	24.3	2	12.2	1.00391	36.7	45.0	3.70294	35.3	9.6	0.78749	28.4	32.7	2.6908	43.1	5.3	0.43612	26.2
Potassium	39.1	1	1.6	0.03964	1.4	3.9	0.09924	0.9	1.1	0.0289	1.0	2.7	0.06829	1.1	1.09	0.02788	1.7
Sodium	23.0	1	15.5	0.67421	24.6	16.4	0.71336	6.8	15.9	0.69161	25.0	15.3	0.66551	10.7	10.1	0.43933	26.3
Iron	55.8	2	0.0	0.00036	0.0	1.4	0.05121	0.5	0.0	0.00036	0.0	1.1	0.03868	0.6	0.0	0.00018	0.0
Manganese	54.9	2	0.0	3.6E-05	0.0	2.1	0.07463	0.7	0.0	3.6E-05	0.0	1.2	0.04441	0.7	0.0	1.8E-05	0.0
Ammonia-N	14.0	1	0.0	0.00071	0.0	0.1	0.0038	0.0	0.0	0.00071	0.0	0.0	0.00107	0.0	0.0	0.00071	0.0
Total Cations (meq/L)				2.7			10.5			2.8			6.2			1.7	
Anions																	
Alkalinity, Total			102			610			98.7			302			45.3		
Carbonate	60.0	2	0.01728	0.00058	0.0	0.22607	0.00754	0.1	0.1182	0.00394	0.1	0.24468	0.00816	0.1	0.00403	0.00013	0.0
Bicarbonate	61.0	1	124.40	2.03912	69.9	743.74	12.1906	97.5	120.17	1.96976	70.7	367.94	6.03093	96.9	55.26	0.90573	54.3
Chloride	35.5	1	1.0	0.02821	1.0	6.4	0.17939	1.4	4.7	0.13342	4.8	3.3	0.09336	1.5	1.2	0.03413	2.0
Nitrate-N	14.0	1	9.7	0.69322	23.7	0.0	0.001	0.0	3.9	0.277	9.9	0.0	0.00114	0.0	8.5	0.60898	36.5
Sulfate	96.1	2	7.6	0.15803	5.4	5.8	0.12034	1.0	19.3	0.40184	14.4	4.3	0.0889	1.4	5.7	0.11805	7.1
Total Anions (meq/L)				2.9			12.5			2.8			6.2			1.7	
Total Ions (meq/L)				5.7			23.0			5.6			12.5			3.3	
Cation/Anion Ratio				0.94			0.84			0.99			1.00			1.00	
Percent Difference				-3.2			-8.8			-0.3			0			0.0	
TRILINEAR DIAGRAM DATA																	
sum (Ca, Mg, Na+K)			2.74			10.35			2.77			6.16			1.67		
Calcium				37.2		56.4			45.57			44.44			45.80		
Magnesium				36.7		35.8			28.42			43.65			26.17		
Sodium + Potassium				26.1		7.8			26.01			11.90			28.03		
									100.0								
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			2.23			12.50			2.51			6.22			1.06		
Sulfate				7.1		1.0			16.0			1.4			11.2		
Chloride				1.3		1.4			5.3			1.5			3.2		
Bicarbonate + Carbonate				91.6		97.6			78.7			97.1			85.6		
									100.0								

Cedar Hills Regional Landfill
 Figure 7. East Perched Zone Wells
 2nd Quarter 2016



Cedar Hills Regional Landfill
 Figure 8. South Perched Wells
 2nd Quarter 2016

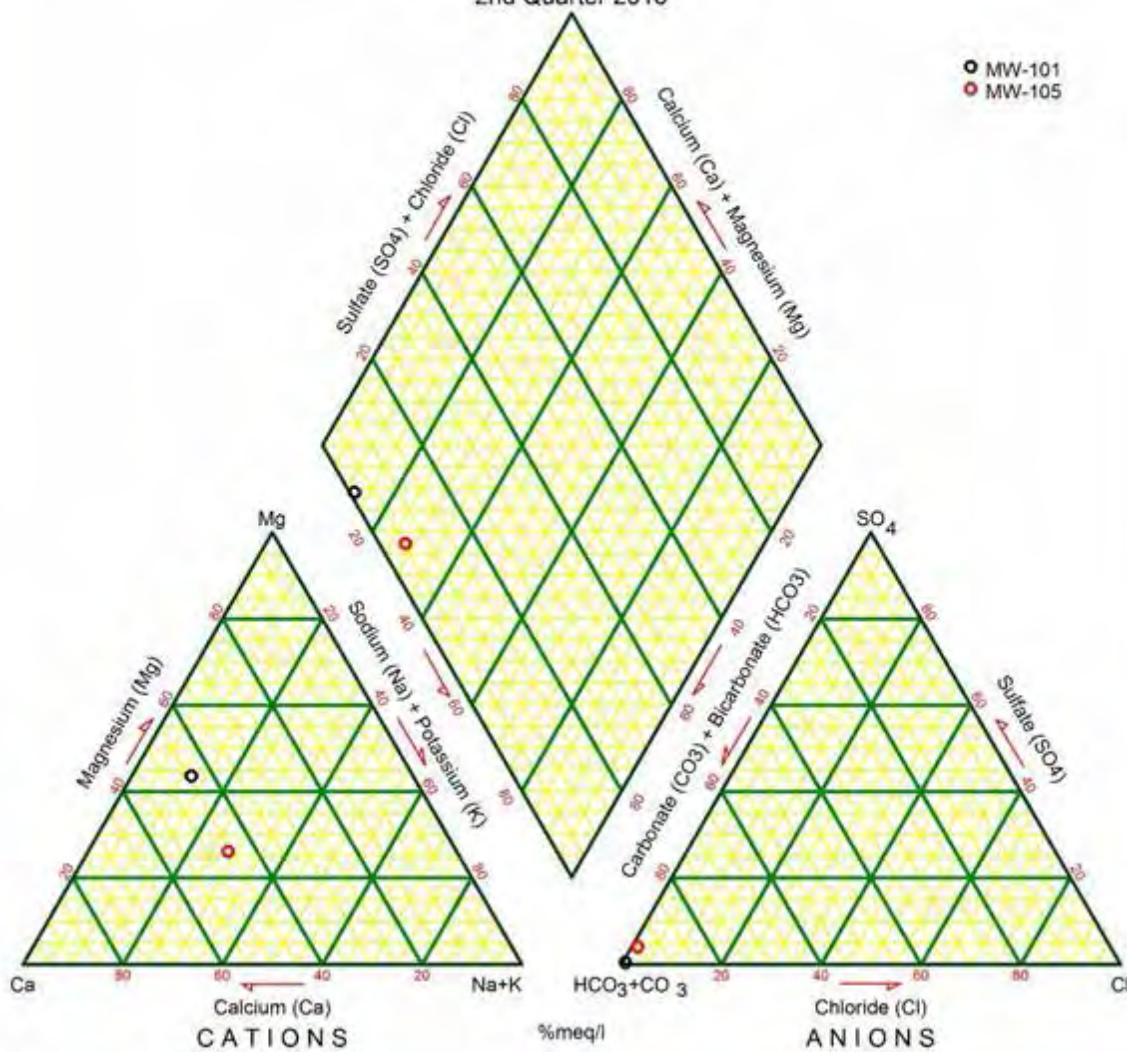


TABLE 9
CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES MONITORING WELLS
SUMMARY OF WAC 173-351 APPENDIX I INTRAWELL PREDICTION LIMIT VALUES
(Data Collected from April 1, 2016 to June 30, 2016)

Parameter	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Cobalt	Total Copper	Total Lead	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc	Nitrate as N	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Trichloroethylene	Vinyl Chloride	
	Well	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L		
East Perched Zone																								
MW-30A	Limit	0.001	0.001	0.0077	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.00233	0.00572	15	8.2	0.2	0.34	19.84	0.45	1.73802	0.25
	Result	< 0.001	< 0.001	0.0043	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	0.00206	< 0.004	9.71	2.15	< 0.2	< 0.2	2.42	< 0.2	1.07	< 0.02
MW-47	Limit	0.001	0.00202	0.0470	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.013	0.73679	0.2	0.2	4.1	0.2	0.2	7.96
	Result	< 0.001	< 0.001	0.0391	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.014	0.936	< 0.2	< 0.2	4.22	< 0.2	< 0.2	6.44
MW-62	Limit	0.001	0.001	0.0034	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	8.4	14.1126	6.1	0.2	17.7	0.21	0.47	0.23
	Result	< 0.001	< 0.001	0.0023	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	3.88	2.38	< 0.2	< 0.2	6.63	< 0.2	< 0.2	< 0.02
South Solid Waste Area Wells																								
MW-101	Limit	0.001	0.021	0.0439	0.001	0.002	0.005	0.003	0.00416	0.00109	0.01	0.001	0.003	0.001	0.0039	0.00729	0.0593	0.21	0.2	0.22	0.21	0.2	0.2	1.00
	Result	< 0.001	0.0103	0.021	< 0.001	< 0.002	< 0.005	< 0.003	< 0.002	< 0.001	< 0.01	< 0.001	< 0.003	< 0.001	< 0.002	< 0.004	0.016	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.665

Results greater than Limit Value in **Bold**

TABLE 10
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN PERCHED ZONE WELLS
(Data Collected from April 1, 2016 to June 30, 2016)

Analyte	Site ID	Date	Sample ID	ug/L
East Perched Zone Wells				
1,1-Dichloroethane	MW-30A	4/15/2016	W30A160415-	2.15
	MW-47	4/6/2016	W47-160406-	0.936
	MW-62	4/21/2016	W62-160421-	2.38
Acetone	EW-25	4/22/2016	EW25160422-	65.9
Chloroethane	MW-47	5/10/2016	W101160510-	0.22
cis-1,2-Dichloroethene	EW-25	4/22/2016	EW25160422-	1.25
	MW-30A	4/15/2016	W30A160415-	2.42
	MW-47	4/6/2016	W47-160406-	4.22
	MW-62	4/21/2016	W62-160421-	6.63
Dichlorodifluoromethane	MW-47	4/6/2016	W47-160406-	5.12
Tetrachloroethene	EW-25	4/22/2016	EW25160422-	0.36
Trichloroethene	EW-25	4/22/2016	EW25160422-	1.16
	MW-30A	4/15/2016	W30A160415-	1.07
Vinyl Chloride	MW-47	4/6/2016	W47-160406-	6.44
South Solid Waste Area Perched Wells				
Chloroethane	MW-101	5/10/2016	W101160129-	0.23
Vinyl Chloride	MW-101	5/10/2016	W101160510-	0.665

See Data Qualifier List for Qualifier Information.

Table 11
Surface Water Monitoring Activities 2nd Quarter 2016

Station ID	Date	Planned Acitivity	Sample ID	Comment
SW-N4	4/5/2016	NPDES Permit Sample	SN4-160405P	
SW-GS1	4/5/2016	NPDES Permit Sample	SGS1160405P	
SW-SL3	4/5/2016	NPDES Permit Sample	SSL3160405P	
SW-TD1	4/5/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD2	4/5/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD4	4/5/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD6	4/5/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD1	4/29/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD2	4/29/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD4	4/29/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD6	4/29/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD1	6/15/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD2	6/15/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD4	6/15/2016	Area 5 Top Deck Monitoring	NA	No Flow
SW-TD6	6/15/2016	Area 5 Top Deck Monitoring	NA	No Flow
Staff Gages	4/5/2016	Monthly Stream Gage Levels	NA	
Staff Gages	5/26/2016	Monthly Stream Gage Levels	NA	
Staff Gages	6/23/2016	Monthly Stream Gage Levels	NA	

¹ No sample ID assigned, No sample collected.

TABLE 12
CEDAR HILLS LANDFILL
SUMMARY OF ISGP^{*} STORMWATER PERMIT EXCEEDANCES
(Data Collected from April 1, 2016 to June 30, 2016)

Parameter	Units	Sampling Location	Date	Value	Regulatory Limit	Type
Oil Sheen	Visibility	SW-GS1	4/5/16	Yes	None Visible	Benchmark

^{*}ISGP - Industrial General Stormwater Permit

TABLE 13
CEDAR HILLS REGIONAL LANDFILL
VOLATILE ORGANIC COMPOUND DETECTIONS IN BLANKS
(Data Collected from April 1, 2016 to June 30, 2016)

Analyte	Site ID	Date	Sample ID	Sample Value (ug/L)
Methylene Chloride	VOA TRIP BLANK	04/04/16	VTRP160405C	0.35 T
	VOA TRIP BLANK	04/06/16	VTRP160407C	0.34 T
	VOA TRIP BLANK	04/07/16	VTRP160408-	0.31 T
	VOA TRIP BLANK	04/07/16	VTRP160411C	0.32 T
	VOA TRIP BLANK	04/11/16	VTRP160414C	0.28 T
	VOA TRIP BLANK	04/14/16	VTRP160415C	0.27 T
	VOA TRIP BLANK	04/15/16	VTRP160419C	0.26 T
	VOA TRIP BLANK	04/15/16	VTRP160420-	0.26 T
	VOA TRIP BLANK	04/19/16	VTRP160420C	0.25 T
	VOA TRIP BLANK	04/20/16	VTRP160421C	0.543
	VOA TRIP BLANK	04/21/16	VTRP160422C	0.617
	VOA TRIP BLANK	04/22/16	VTRP160425C	0.35 T
	VOA TRIP BLANK	04/21/16	VTRP160422-	0.45
	VOA TRIP BLANK	06/03/16	VTRP160603-	0.22 T
	FIELD BLANK	04/07/16	W85-160407F	0.581
	FIELD BLANK	04/22/16	W84-160422F	0.551
Toluene	FIELD BLANK	4/22/2016	W84-160422F	0.29 T

See Data Qualifier List for Qualifier Information.

Table 14
Groundwater Quality Criteria

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

Table 14
Groundwater Quality Criteria

Analyte	CAS No.	Ground Water Quality Criteria Criterion*	
Benzidine	92-87-5	0.0004	ug/L
Benzo(a)pyrene	50-32-8	0.008	ug/L
Benzotrichloride	98-07-7	0.007	ug/L
Benzyl chloride	100-44-7	0.5	ug/L
Bis(2-ethylhexyl)phthalate	117-81-7	6	ug/L
Bis(chloroethyl)ether	111-44-4	0.07	ug/L
Bis(chloromethyl)ether	542-88-1	0.0004	ug/L
Bromodichloromethane	75-27-4	0.3	ug/L
Bromoform	75-25-2	5	ug/L
Carbazole	86-74-8	5	ug/L
Carbon Tetrachloride	56-23-5	0.3	ug/L
Chlordane	5103-71-9	0.06	ug/L
Chlorodibromomethane	124-48-1	0.5	ug/L
Chloroform	67-66-3	7	ug/L
Chlorthalanol	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	0.000001	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=picuries 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 April 1, 2016 to June 30, 2016)

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

APPENDIX A

Potentiometric Surface Maps and Aquifer Flow Calculations



King County

Water and Land Resources Division

Department of Natural Resources and Parks

King Street Center

201 South Jackson Street, Suite 600

Seattle, WA 98104-3855

206-477-4800 Fax 206-296-0192

TTY Relay: 711

Memorandum

June 25, 2016

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

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

RE: Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations
Second Quarter 2016 Results
Cedar Hills Landfill, King County, Washington
Project No. 1033379 – Task 02.14.137.20

The King County Water and Land Resources Division (KCWLR Division) submits this memorandum report on groundwater conditions during the second quarter of 2016 for the Cedar Hills Landfill (landfill), in accordance with the *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations* (KCWLR Division, 2015). King County Solid Waste Division (KCSWD) personnel measured groundwater elevations at the landfill on April 4 and 7, 2016. These measurements were received by KCWLR Division on May 23, 2016 and were used to:

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

There have been no significant changes in the interpreted groundwater conditions since the report submitted for the first quarter of the 2016 monitoring event.

Groundwater Elevation Data

KCSWD attempted groundwater level measurements at 41 monitoring wells during the second quarter of 2016. 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 23 wells with water levels within ten feet of the top of screen were selected.

Figure 1 shows well locations, groundwater elevations at the 23 selected wells, groundwater potentiometric surface contours, and interpreted groundwater flow direction in the regional aquifer for the April 4 and 7, 2016 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 April 4 and 7, 2016 measurements. Groundwater elevations indicate that groundwater in the regional aquifer generally flowed north beneath the southern and central portions of the landfill with minor components of flow to the north-northwest and north-northeast. At the northern end of the landfill, groundwater generally flowed to the north and north-northeast.

Groundwater Parameters

Horizontal groundwater velocity was calculated using the following formula:

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

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 second quarter 2016 data. The hydraulic gradient was greatest under the southern portion of the landfill and smallest under the northern portion. On April 4 and 7, 2016, average horizontal groundwater velocity within the regional aquifer ranged from 0.012 feet per day (ft/d) under the southern portion of the landfill to 2.9 ft/d under the central portion of the landfill.

References

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

King County Water and Land Resources Division (KCWLR Division). 2015. *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations*. Unpublished. December.

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

Sincerely,



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

Enclosures:

Table 1: Groundwater Elevations - Second Quarter 2016

Table 2: Groundwater Parameters - Second Quarter 2016

Figure 1: Groundwater Potentiometric Surface Map – Second Quarter 2016 – Regional Aquifer

Table 1: Groundwater Elevations – Second Quarter 2016

Cedar Hills Regional Landfill
King County, Washington

		April 1 and 4, 2016						
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-64	1701980.27	168772.19	596.55	334.03	320.23	265.05	331.5
	MW-66	1699750.19	174250.32	531.28	294.39	280.59	238.19	293.09
	MW-67	1701776.69	172610.65	516.43	297.80	284.00	220.33	296.1
	MW-68	1701917.32	170609.35	647.07	311.29	292.29	332.12	314.95
	MW-69	1698061.86	172400.20	653.69	293.57	279.97	356.07	297.62
	MW-72	1698229.92	170987.71	671.87	303.63	294.03	361.54	310.33
	MW-73	1698954.95	174995.59	485.70	288.11	278.81	190.49	295.21
	MW-74R	1700386.85	173813.79	531.26	289.90	280.40	239.87	291.39
	MW-76	1700376.23	167193.13	491.71	351.06	341.56	131	360.71
	MW-81	1702568.87	172113.99	493.66	309.19	300.19	183.96	309.7
	MW-82	1699553.72	167725.31	474.85	348.88	339.38	117.84	357.01
	MW-83	1697939.89	167212.27	496.81	350.19	340.69	140.61	356.2
	MW-84	1698602.89	173894.54	530.80	292.46	282.96	235.91	294.89
	MW-85	1701828.95	173694.52	531.76	282.56	273.06	245.03	286.73
	MW-86	1701331.25	174917.90	536.04	283.43	274.63	248.76	287.28
	MW-87	1700670.27	173493.76	537.31	283.68	274.38	247.9	289.41
	MW-88	1701807.87	174303.06	513.68	281.52	272.22	226.43	287.25
	MW-93	1702259.35	169851.24	632.15	319.87	310.07	308.87	323.28
	MW-94	1698674.21	167210.22	495.51	357.22	348.52	135.7	359.81
	MW-95	1697265.32	169426.92	571.54	314.60	305.90	251.21	320.33
	NPW-1	1701906.96	171138.99	646.33	299.87	284.87	345.05	301.28
	MW-100	1700791.72	169610.46	620.32	319.06	309.06	297.47	322.85
	MW-106	1702536.99	173461.69	475.47	280.04	270.04	189.42	286.05
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	124.94	295.72
	MW-22P	1701844.34	173088.17	517.09	236.02	231.22	231.64	285.45
	MW-24	1699582.39	167767.76	475.99	286.76	281.76	143.15	332.84
	MW-43	1701274.23	174327.14	547.06	245.63	235.63	262.54	284.52
	MW-54	1702154.28	168435.53	580.43	250.25	228.25	277.8	302.63
	MW-56	1698980.77	167214.82	480.33	323.15	313.15	121	359.33
	MW-57	1699993.32	167201.99	456.64	326.65	311.65	96	360.64
	MW-58A	1699006.59	167207.16	479.27	270.05	260.05	147.31	331.96
	MW-59	1699983.91	167193.44	457.13	285.08	275.08	121.2	335.93
	MW-60	1701154.47	167873.20	567.15	334.81	325.81	219.36	347.79
	MW-65	1701602.10	167146.55	545.83	317.71	308.91	206.73	339.1
	MW-75	1701059.70	173432.42	532.40	271.10	261.00	244.64	287.76
	MW-80	1701309.78	172964.99	530.41	279.17	269.67	238.72	291.69
	MW-89	1701799.57	174319.44	512.82	229.20	219.90	230.88	281.94
	MW-90	1702203.13	174300.67	502.22	235.16	226.16	220.14	282.08
	MW-91	1701023.09	173423.94	532.02	260.81	240.71	246.16	285.86
	MW-99	1702556.06	172098.73	493.64	221.77	212.77	199.95	293.69
	NPW-3	1701922.88	170663.28	645.81	284.87	276.87	331.28	314.53

Notes

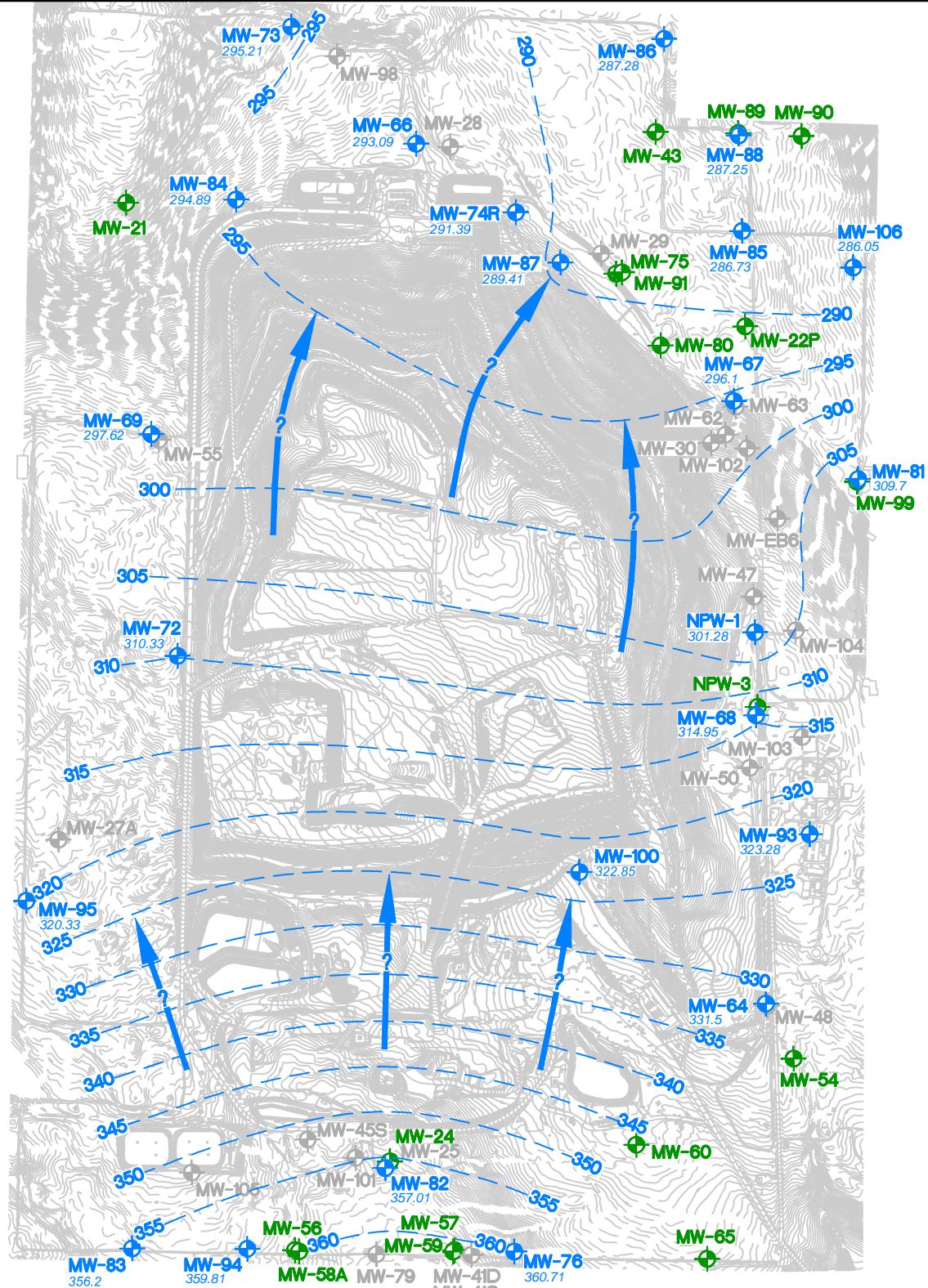
1. Water level measurements made by KCSWD personnel.
2. Reference datum for XY coordinates is the North American Datum of 1927 (NAD27)
3. Elevations reported in feet above Mean Sea Level based on the National Geodetic Vertical Datum, 1929.

Table 2: Groundwater Parameters – Second Quarter 2016
 Cedar Hills Regional Landfill
 King County, Washington

Regional Aquifer Zone Beneath the Landfill	Horizontal Hydraulic Conductivity (<i>K</i>)			Horizontal Hydraulic Gradient (DH/DL)	Effective Porosity (<i>n</i> _{eff})	Horizontal Groundwater Velocity (<i>v</i>)	General Groundwater Flow Direction
	Range	(cm/s)	(ft/d)				
Northern	Minimum	2.10E-03	6	0.006	24%	0.139	NNE, NE
	Maximum	4.20E-02	120	0.006	24%	2.78	
	Mean	2.10E-02	60	0.006	24%	1.39	
Central	Minimum	2.10E-03	6	0.01	24%	0.29	N, NNW
	Maximum	4.20E-02	120	0.01	24%	5.7	
	Mean	2.10E-02	60	0.01	24%	2.9	
Southern	Minimum	6.40E-06	0.018	0.0167	26%	0.0012	N, NNE, NNW
	Maximum	6.40E-04	1.8	0.0167	26%	0.12	
	Mean	6.40E-05	0.18	0.0167	26%	0.012	

Notes

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



Legend

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

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

MW-X Wells screened in discontinuous Perched Zones

300 — Regional Aquifer Groundwater Elevation Contour (feet MSL)

← ? Inferred Horizontal Groundwater Flow Path

Notes:

1. Groundwater measurements made on April 1 and 7, 2016.
2. Only wells completed in the Regional Aquifer within 10 feet of the water table were used for contouring.

0 1000 2000
Feet

N



Groundwater Potentiometric Surface Map Second Quarter 2016 - Regional Aquifer

Cedar Hills Landfill
King County, Washington

DATE: June 2016	PROJECT NO. 1033379
DESIGNED BY: SB	
DRAWN BY: LT	
REVISED BY: SB	FIGURE NO. 1

APPENDIX B

Field and Analytical Test Results

Groundwater Analytical Data

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater Elevation Data

Contact Person: Sendy Jimenez (206) 477-5224

MW-21	4/1/2016	420.66	124.94	295.72
MW-22	4/1/2016	517.09	231.64	285.45
MW-24	4/1/2016	475.99	143.15	332.84
MW-25	4/1/2016	474.41	5.72	468.69
MW-27A	4/1/2016	584.23	53.44	530.79
MW-28	4/1/2016	527.75	23.24	504.51
MW-29	4/1/2016	532.92	10.61	522.31
MW-30A	4/1/2016	568.43	29.25	539.18
MW-41D	4/1/2016	462.32	25.67	436.65
MW-41S	4/1/2016	462.44	4.6	457.84
MW-43	4/1/2016	547.06	262.54	284.52
MW-45	4/1/2016	488.4	13.99	474.41
MW-47	4/1/2016	634.6	15.73	618.87
MW-50	4/1/2016	637.02	30.83	606.19
MW-55	4/1/2016	652.29	29.88	622.41
MW-56	4/1/2016	480.33	121	359.33
MW-57	4/1/2016	456.64	96	360.64
MW-58A	4/1/2016	479.27	147.31	331.96
MW-59	4/1/2016	457.13	121.2	335.93
MW-60	4/1/2016	567.15	219.36	347.79
MW-62	4/1/2016	556.21	50.28	505.93
MW-63	4/1/2016	515.88	13.47	502.41
MW-64	4/1/2016	596.55	265.05	331.50
MW-65	4/1/2016	545.83	206.73	339.10
MW-66	4/1/2016	531.28	238.19	293.09
MW-67	4/1/2016	516.43	220.33	296.10
MW-68	4/1/2016	647.07	332.12	314.95
MW-69	4/1/2016	653.69	356.07	297.62
MW-73	4/1/2016	485.7	190.49	295.21
MW-74	4/1/2016	531.26	239.87	291.39
MW-75	4/1/2016	532.4	244.64	287.76
MW-76	4/1/2016	491.71	131	360.71
MW-79	4/1/2016	459.17	--	--
MW-80	4/1/2016	530.41	238.72	291.69
MW-81	4/1/2016	493.66	183.96	309.70
MW-82	4/1/2016	474.85	117.84	357.01
MW-83	4/1/2016	496.81	140.61	356.20
MW-84	4/1/2016	530.8	235.91	294.89
MW-85	4/1/2016	531.76	245.03	286.73
MW-86	4/1/2016	536.04	248.76	287.28
MW-87	4/1/2016	537.31	247.9	289.41
MW-88	4/1/2016	513.68	226.43	287.25
MW-89	4/1/2016	512.82	230.88	281.94
MW-90	4/1/2016	502.22	220.14	282.08
MW-91	4/1/2016	532.02	246.16	285.86
MW-94	4/1/2016	495.51	135.7	359.81
MW-95	4/1/2016	571.54	251.21	320.33
MW-98	4/1/2016	503.73	16.01	487.72
MW-99	4/1/2016	493.64	199.95	293.69
MW-100	4/1/2016	620.32	297.47	322.85
MW-101	4/1/2016	474.72	32.35	442.37
MW-102	4/1/2016	552.48	44.88	507.60
MW-105	4/1/2016	521.23	17.75	503.48
MW-106	4/1/2016	475.47	189.42	286.05
MW-EB5	4/1/2016	645.53	35.53	610.00
MW-EB5S	4/1/2016	645.91	8	637.91
MW-EB6	4/1/2016	589.61	25.7	563.91
EW-25	4/1/2016	643.61	7.86	635.75

Damaged

New to this list.
New to this list.

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater Field Parameters

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature	Purge Volume	Dissolved Oxygen	ORP	Turbidity
			(std. Units)	(umhos/cm)	(°C)	(gal)	(mg/L)	mV	NTU
MW-21	4/13/2016	W21-160413-	7.5	137.2	9.66		1.55	-168	4.08
MW-24	4/6/2016	W24-160406-	7.18	184.9	9.35	4	0.59	-87	0.49
MW-30A	4/15/2016	W30A160415-	6.45	290.1	11.2	0.75	9.43	315	1.21
MW-30A	4/15/2016	W30A160415D	6.45	290.1	11.2	0.75	9.43	315	1.21
MW-47	4/6/2016	W47-160406-	6.79	1141	11.83	1.75	0.63	85	0.33
MW-56	4/20/2016	W56-160420-	6.94	150	10.1	29			1.89
MW-59	4/20/2016	W59-160420-	6.99	136.9	10.68	5	0.53	-84	3.1
MW-62	4/21/2016	W62-160421-	7.3	230	10.5	1.6			2.91
MW-64	4/6/2016	W64-160406-	7.09	232	11.33	3	2.07	243	44.1
MW-65	4/5/2016	W65-160405-	6.98	161.1	9.44		0.59	108	7.06
MW-66	4/4/2016	W66-160404-	7.1	252.6	9.91	3.75	6.11	225	0.47
MW-67	4/25/2016	W67-160425-	7.06	363.9	9.47	1.5	2.74	62	11.7
MW-68	4/4/2016	W68-160404-	7.07	296.2	10.76	4+	0.48	-12	37.1
MW-69	4/25/2016	W69-160425-	7.4	300.9	9.28	5.5	0.52	-59	0.66
MW-72	4/7/2016	W72-160407-	7.05	347.7	10.01	5	0.93	38	29.1
MW-73	4/22/2016	W73-160422-	6.97	143.6	9.79	3	9.79	250	1.35
MW-74	4/19/2016	W74R160419-	7.03	570.3	10.45	2.5	5.3	203	0.64
MW-75	4/19/2016	W75-160419-	7.05	336.2	9.82	3.75	0.53	-64	0.89
MW-76	4/5/2016	W76-160405-	6.52	235.1	9.88		7.88	256	0.48
MW-76	4/5/2016	W76-160405D	6.52	235.1	9.88		7.88	256	0.48
MW-80	4/11/2016	W80-160411-	7.12	313.2	9.77	7	0.54	-56	30.2
MW-81	4/7/2016	W81-160407-	7.13	146.6	10.48	2.5	6.21	364	0.34
MW-82	4/6/2016	W82-160406-	6.98	320.5	10.06	2	8.53	201	1.25
MW-83	4/15/2016	W83-160415-	6.85	436	10.58	3	4.2	261	0.37
MW-84	4/22/2016	W84-160422-	6.92	158.4	9.87	3	1.64	236	1.87
MW-85	4/7/2016	W85-160407-	7.17	324	9.53	3	3.33	204	0.21
MW-86	4/14/2016	W86-160414-	7.02	184.9	9.25	3.5	1.62	5	170
MW-87	4/19/2016	W87-160419-	6.79	515.1	12.19	3	1.12	40	80
MW-88	4/8/2016	W88-160408-	7.28	125.8	9.43	3.5	5.3	253	0.36
MW-89	4/8/2016	W89-160408-	7.4	196.5	9.51	3.5	1.7	-35	29.3
MW-93	4/19/2016	W93-160419-	7.14	353.2	11.92	3.5	1.33	194	0.51
MW-94	4/22/2016	W94-160422-	6.89	168	9.87	2.5	4.5	212	0.27
MW-95	4/14/2016	W95-160414-	7.48	220.4	9.31	3.5	0.92	157	0.14
MW-100	4/14/2016	W100160414-	6.85	300.8	11.15	3.5	1.32	115	140
MW-101	5/10/2016	W101160510-	7.13	560	11.7	3			5.45
MW-105	6/3/2016	W105160603-	6.17	190.2	14.52	1.75	4.54	271	27.3
EQUIPMENT BLANK	4/8/2016	WU1H160408E	9.17	2.4	16.9				
EQUIPMENT BLANK	4/8/2016	WU1M160408E	8.3	20	18.7				
EQUIPMENT BLANK	4/8/2016	WU1S160408E	8.22	1.7	17.5				
FIELD BLANK	4/22/2016	W84-160422F	7.94	3	16				0.37
FIELD BLANK	4/7/2016	W85-160407F	9.87	2.2	13.6				

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater Conventional Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Alkalinity,	Ammonia,	Chloride	Nitrate-	Specific	Sulfate	Total	Total	Total
			Total (CaCO ₃)	(NH ₃)	(mg/L)	Nitrogen, (NO ₃ as N)	Conductanc (umho/cm)	(SO ₄)	Dissolved Solids	Organic Carbon	Solids
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-100	4/14/2016	W100160414-	132	0.01 U	3.2	0.01 U	312	16.1	158	1 U	221
MW-101	5/10/2016	W101160510-	302	0.015	3.31	0.016 T	572	4.27	353	4.06	391
MW-105	6/3/2016	W105160603-	45.3	0.01 U	1.21	8.53	183	5.67	155	1.54	185
MW-21	4/13/2016	W21-160413-	53.7	0.01 U	2.79	0.01 U	138	7.67	68.7	1 U	82.7
MW-24	4/6/2016	W24-160406-	66.9	0.0374	4.1	0.014 T	184	16.8	116	1 U	121
MW-30A	4/15/2016	W30A160415-	102	0.01 U	1	9.71	310	7.59	207	1.05	199
MW-47	4/6/2016	W47-160406-	610	0.0532	6.36	0.014 T	1180	5.78	673	3.97	698
MW-56	4/20/2016	W56-160420-	54.7	0.01 U	11.6	0.143	183	13	109	1 U	103
MW-59	4/20/2016	W59-160420-	65.1	0.0164	4.49	0.021 T	187	19.6	110	1 U	119
MW-62	4/21/2016	W62-160421-	98.7	0.01 U	4.73	3.88	285	19.3	180	1 U	177
MW-64	4/6/2016	W64-160406-	104	0.0186	3.22	0.014 T	240	12.9	131	1 U	147
MW-65	4/6/2016	W65-160405-	55.3	0.01 U	3.77	0.01 U	158	13.9	98.7	1 U	104
MW-66	4/4/2016	W66-160404-	102	0.01 U	6.8	0.591	263	15.6	155	1 U	151
MW-67	4/25/2016	W67-160425-	143	0.01 U	5	0.199	368	34.8	233	1 U	235
MW-68	4/4/2016	W68-160404-	131	0.0173	3.05	0.01 U	309	16.8	173	1 U	189
MW-69	4/25/2016	W69-160425-	125	0.0144	3.81	0.01 U	298	18.2	176	1 U	185
MW-72	4/7/2016	W72-160407-	124	0.0137	6.16	0.011 T	359	44.3	213	1 U	227
MW-73	4/22/2016	W73-160422-	53	0.01 U	2.52	1.02	145	9.31	82	1 U	110
MW-74	4/19/2016	W74R160419-	233	0.01 U	30.4	0.292	585	34.8	329	1 U	340
MW-75	4/19/2016	W75-160419-	101	0.01 U	10.7	0.01 U	339	55.7	206	1 U	213
MW-76	4/5/2016	W76-160405-	58.7	0.01 U	14.8	1.88	248	26.7	147	2.12	155
MW-80	4/11/2016	W80-160411-	108	0.0114	6	0.01 U	322	40.3	183	1 U	192
MW-81	4/7/2016	W81-160407-	49.8	0.01 U	5.59	1.55	154	7.97	94.7	1 U	93.3
MW-82	4/6/2016	W82-160406-	133	0.01 U	12	0.598	343	17.3	197	1 U	205
MW-83	4/15/2016	W83-160415-	135	0.01 U	42.1	2.28	458	9.22	265	3.93	264
MW-84	4/22/2016	W84-160422-	59.3	0.01 U	3.71	0.321	162	12.1	93.3	1 U	96.7
MW-85	4/7/2016	W85-160407-	114	0.01 U	10.5	0.108	346	39.9	202	1 U	204
MW-86	4/14/2016	W86-160414-	65.7	0.01 U	4.95	0.192	196	18.1	108	1 U	125
MW-87	4/19/2016	W87-160419-	90.6	0.017	9.36	0.01 U	511	147	341	1 U	382
MW-88	4/8/2016	W88-160408-	53.4	0.01 U	2.14	0.575	137	6.99	74	1 U	82.7
MW-89	4/8/2016	W89-160408-	75	0.0171	7.54	0.01 U	208	16.2	115	1 U	139
MW-93	4/19/2016	W93-160419-	120	0.0497	3.24	0.021 T	357	56.9	222	1 U	222
MW-94	4/22/2016	W94-160422-	80	0.01 U	17.7	0.764	244	6.6	159	3.57	157
MW-95	4/14/2016	W95-160414-	87.9	0.0258	5.43	0.01 U	236	18.9	131	1 U	133
FIELD BLANK	4/7/2016	W85-160407F	1 T	0.01 U	0.1 U	0.01 U	4.2 T	0.1 U	5 U	1 U	5 U
FIELD BLANK	4/22/2016	W84-160422F	1 U	0.01 U	0.1 U	0.01 U	1.2 T	0.1 U	5 U	1 U	1 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Aluminum, dissolved (mg/L)	Antimony, dissolved (mg/L)	Antimony, total (mg/L)	Arsenic, dissolved (mg/L)	Arsenic, total (mg/L)	Barium, dissolved (mg/L)	Barium, total (mg/L)	Bervillium, dissolved (mg/L)	Bervillium, total (mg/L)	Cadmium, dissolved (mg/L)	Cadmium, total (mg/L)	Calcium, dissolved (mg/L)
MW-21	4/13/2016	W21-160413-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00453	0.00453	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	9.63	
MW-24	4/6/2016	W24-160406-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00183	0.00205	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	13.8	
MW-30A	4/15/2016	W30A160415-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00445	0.00443	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	20.4	
MW-30A	4/15/2016	W30A160415D	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00436	0.00429	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	20.5	
MW-47	4/6/2016	W47-160406-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0314	0.0391	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	117	
MW-56	4/20/2016	W56-160420-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00319	0.0035	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	15.5	
MW-59	4/20/2016	W59-160420-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00385	0.00431	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	15.5	
MW-62	4/21/2016	W62-160421-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00182	0.00226	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	25.3	
MW-64	4/6/2016	W64-160406-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00736	0.00729	0.0141	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	17.3
MW-65	4/6/2016	W65-160405-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00101	0.00631	0.00736	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	12.1
MW-66	4/4/2016	W66-160404-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00469	0.00518	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	18.6	
MW-67	4/25/2016	W67-160425-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0106 D	0.0131	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	34.3	
MW-68	4/4/2016	W68-160404-	< 0.001 U	< 0.001 U	0.0124	0.139	0.0108	0.0152	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	27.2	
MW-69	4/25/2016	W69-160425-	< 0.001 U	< 0.001 U	0.00218	0.00219	0.0104 D	0.0113	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	29.3	
MW-72	4/7/2016	W72-160407-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0104	0.0143	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	30.5	
MW-73	4/22/2016	W73-160422-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00253	0.00354	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	12.4	
MW-74	4/19/2016	W74R160419-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0135	0.0171	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	48.6	
MW-75	4/19/2016	W75-160419-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0112	0.011	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	26.8	
MW-76	4/5/2016	W76-160405-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00321	0.00364	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	19.2	
MW-76	4/5/2016	W76-160405D	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00327	0.00359	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	19.6	
MW-80	4/11/2016	W80-160411-	< 0.001 U	< 0.001 U	0.00434	0.0058	0.0146	0.0148	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	27.6	
MW-81	4/7/2016	W81-160407-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00254	0.00275	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	11.8	
MW-82	4/6/2016	W82-160406-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00114	0.00185	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	29.6	
MW-83	4/15/2016	W83-160415-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00631	0.00594	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	42.6	
MW-84	4/22/2016	W84-160422-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00362	0.0036	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	11.6	
MW-85	4/7/2016	W85-160407-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00556	0.00614	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	28.8	
MW-86	4/14/2016	W86-160414-	< 0.001 U	< 0.001 U	< 0.001 U	0.00969	0.00526	0.00598	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	13.7	
MW-87	4/19/2016	W87-160419-	< 0.001 U	< 0.001 U	< 0.001 U	0.0117	0.0247	0.0309	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	43.4	
MW-88	4/8/2016	W88-160408-	< 0.001 U	< 0.001 U	< 0.001 U	0.001	0.00249	0.00225	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	8.53	
MW-89	4/8/2016	W89-160408-	< 0.001 U	< 0.001 U	0.00107	0.0103	0.00655	0.0116	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	12.8	
MW-93	4/19/2016	W93-160419-	< 0.001 U	< 0.001 U	0.00135	0.00124	0.00819	0.0084	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	33.9	
MW-94	4/22/2016	W94-160422-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.00225	0.00213	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	22.8	
MW-95	4/14/2016	W95-160414-	< 0.001 U	< 0.001 U	0.00109	0.00107	0.00385	0.00392	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	18.8	
MW-100	4/14/2016	W100160414-	< 0.001 U	< 0.001 U	< 0.001 U	0.0183	0.0061	0.0121	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.002 U	25.2	
MW-101	5/10/2016	W101160510-	< 0.001 U	< 0.001 U	0.0136	0.0103	0.0213	0.021	< 0.001 U	< 0.001 U	< 0.002 U	< 0.002 U	54.9	
MW-105	6/3/2016	W105160603-	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	0.0629	0.0466	< 0.001 U	< 0.001 DU	< 0.002 U	< 0.002 U	15.3	
EQUIPMENT BLANK	4/8/2016	WU1S160408E	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.01 U	< 0.01 U		
EQUIPMENT BLANK	4/8/2016	WU1H160408E	< 0.02 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 DU	< 0.001 U	< 0.002 U	< 0.01 U	< 0.01 U		
FIELD BLANK	4/7/2016	W85-160407F	< 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	< 0.01 U	
FIELD BLANK	4/22/2016	W84-160422F	< 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	< 0.01 U	

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Calcium, total (mg/L)	Chromium, dissolved (mg/L)	Chromium, total (mg/L)	Cobalt, dissolved (mg/L)	Cobalt, total (mg/L)	Copper, dissolved (mg/L)	Copper, total (mg/L)	Iron, dissolved (mg/L)	Iron, total (mg/L)	Lead, dissolved (mg/L)	Lead, total (mg/L)	Magnesium, dissolved (mg/L)	Magnesium, total (mg/L)
MW-21	4/13/2016	W21-160413-	10.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	2.2	2.98	< 0.001 U	< 0.001 U	3.55	5.71
MW-24	4/6/2016	W24-160406-	13.8	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	3.1	3.26	< 0.001 U	< 0.001 U	7.84	8.66
MW-30A	4/15/2016	W30A160415-	21.3	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.015 T	< 0.001 U	< 0.001 U	12.2	11.5
MW-30A	4/15/2016	W30A160415D	21.3	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.014 T	< 0.001 U	< 0.001 U	12.4	11.7
MW-47	4/6/2016	W47-160406-	114	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	1.43	2.01	< 0.001 U	< 0.001 U	45	54.1
MW-56	4/20/2016	W56-160420-	14.5 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.0574	0.159	< 0.001 U	< 0.001 U	8.49	8.57
MW-59	4/20/2016	W59-160420-	14.8 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	3.93	4.49	< 0.001 U	< 0.001 U	9.23	9.48
MW-62	4/21/2016	W62-160421-	24.9 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.134	< 0.001 U	< 0.001 U	9.57	9.83
MW-64	4/6/2016	W64-160406-	17.5	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.042 T	2.75	< 0.001 U	< 0.001 U	11.7	13
MW-65	4/6/2016	W65-160405-	12.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	3.83	5.37	< 0.001 U	< 0.001 U	6.16	6.94
MW-66	4/4/2016	W66-160404-	18.7	< 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	12.7	14.2
MW-67	4/25/2016	W67-160425-	33.7	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.219	0.98	< 0.001 DU	< 0.001 U	19.7	19.3
MW-68	4/4/2016	W68-160404-	27.4	< 0.005 U	< 0.005 DU	< 0.003 U	< 0.003 U	< 0.002 U	0.00363	0.621	4.38	< 0.001 U	< 0.001 U	13	14.6
MW-69	4/25/2016	W69-160425-	30	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.936	1.02	< 0.001 DU	< 0.001 U	13.7	13.8
MW-72	4/7/2016	W72-160407-	30.8	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	1.91	5.74	< 0.001 U	< 0.001 U	15.6	18.1
MW-73	4/22/2016	W73-160422-	11.6 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.0705	< 0.001 U	< 0.001 U	6.27	6.3
MW-74	4/19/2016	W74R160419-	57.9 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.026 T	< 0.001 U	< 0.001 U	37.3	46.8
MW-75	4/19/2016	W75-160419-	26.9 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	2.08	1.89	< 0.001 U	< 0.001 U	19.4	19.6
MW-76	4/5/2016	W76-160405-	20.3	< 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	7.74	9.35
MW-76	4/5/2016	W76-160405D	19.9	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	7.98	9.11
MW-80	4/11/2016	W80-160411-	29.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	2.01	2.43	< 0.001 U	< 0.001 U	14.5	14.7
MW-81	4/7/2016	W81-160407-	11.9	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	5.26	6.17
MW-82	4/6/2016	W82-160406-	29.1	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.0531	< 0.001 U	< 0.001 U	14.4	16.7
MW-83	4/15/2016	W83-160415-	42.9	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	18.6	18.2
MW-84	4/22/2016	W84-160422-	11.1 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	8.76	8.84
MW-85	4/7/2016	W85-160407-	28.9	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	14.8	17.5
MW-86	4/14/2016	W86-160414-	13.5	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.618	6.63	< 0.001 U	< 0.001 U	9.79	9.4
MW-87	4/19/2016	W87-160419-	43.4 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	4.28	14.2	< 0.001 U	< 0.001 U	29.1	29.3
MW-88	4/8/2016	W88-160408-	9.14	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	6.39	6.57
MW-89	4/8/2016	W89-160408-	13.2	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.648	6.19	< 0.001 U	< 0.001 U	9.89	9.33
MW-93	4/19/2016	W93-160419-	34.8 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	0.013 T	< 0.001 U	< 0.001 U	17.5	17.8
MW-94	4/22/2016	W94-160422-	21.8 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	0.00232	0.00231	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	9.3	9.33
MW-95	4/14/2016	W95-160414-	20.3	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	< 0.01 U	< 0.01 U	< 0.001 U	< 0.001 U	10.7	10.8
MW-100	4/14/2016	W100160414-	27.7	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	0.938	22.9	< 0.001 U	< 0.001 U	14.6	15.1
MW-101	5/10/2016	W101160510-	51.7	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 U	< 0.002 U	< 0.002 U	1.08	1.85	< 0.001 U	< 0.001 U	32.7	30
MW-105	6/3/2016	W105160603-	17.3 D	< 0.005 U	< 0.005 U	< 0.003 U	< 0.003 DU	< 0.002 U	0.00258	< 0.01 U	1.74	< 0.001 U	< 0.001 U	5.3	5.75 D
EQUIPMENT BLANK	4/8/2016	WU1S160408E		< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U		< 0.015 U	
EQUIPMENT BLANK	4/8/2016	WU1H160408E		< 0.005 U		< 0.003 U		< 0.002 U		< 0.01 U		< 0.001 U		< 0.015 U	
FIELD BLANK	4/7/2016	W85-160407F	< 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	< 0.015 U	< 0.015 U
FIELD BLANK	4/22/2016	W84-160422F	< 0.01 DU	< 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	< 0.015 U	< 0.015 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Manganese, dissolved (mg/L)	Manganese, total (mg/L)	Mercurv., dissolved (mg/L)	Mercury, total (mg/L)	Nickel, dissolved (mg/L)	Nickel, total (mg/L)	Potassium, dissolved (mg/L)	Potassium, total (mg/L)	Selenium, dissolved (mg/L)	Selenium, total (mg/L)
MW-21	4/13/2016	W21-160413-	0.0761	0.0855	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.975	0.991	< 0.001 U	< 0.001 U
MW-24	4/6/2016	W24-160406-	0.0914	0.106	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.843	0.985	< 0.001 U	< 0.001 U
MW-30A	4/15/2016	W30A160415-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.55	1.48	< 0.001 U	< 0.001 U
MW-30A	4/15/2016	W30A160415D	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.56	1.46	< 0.001 U	< 0.001 U
MW-47	4/6/2016	W47-160406-	2.05	2.14	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	3.88	5.15	< 0.001 U	< 0.001 U
MW-56	4/20/2016	W56-160420-	0.256	0.277	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.06 D	1.15 D	< 0.001 U	< 0.001 U
MW-59	4/20/2016	W59-160420-	0.111	0.133	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.04 D	1.16 D	< 0.001 U	< 0.001 U
MW-62	4/21/2016	W62-160421-	< 0.001 U	0.003	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.13 D	1.3 D	< 0.001 U	< 0.001 U
MW-64	4/6/2016	W64-160406-	0.0445	0.137	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.51	1.66	< 0.001 U	< 0.001 U
MW-65	4/6/2016	W65-160405-	0.158	0.194	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.863	0.971	< 0.001 U	< 0.001 U
MW-66	4/4/2016	W66-160404-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.09	1.25	< 0.001 U	< 0.001 U
MW-67	4/25/2016	W67-160425-	0.157	0.212	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.65	1.74	< 0.001 U	< 0.001 U
MW-68	4/4/2016	W68-160404-	0.258	0.318	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.53	1.71	< 0.001 U	< 0.001 U
MW-69	4/25/2016	W69-160425-	0.235	0.237	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.63	1.73	< 0.001 U	< 0.001 U
MW-72	4/7/2016	W72-160407-	0.263	0.368	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.73	1.92	< 0.001 U	< 0.001 U
MW-73	4/22/2016	W73-160422-	< 0.001 U	0.00244	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.757 D	0.849 D	< 0.001 U	< 0.001 U
MW-74	4/19/2016	W74R160419-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.98 D	2.61 D	< 0.001 U	0.00104
MW-75	4/19/2016	W75-160419-	0.163	0.162	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.67 D	1.84 D	< 0.001 U	< 0.001 U
MW-76	4/5/2016	W76-160405-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.3	1.47	< 0.001 U	< 0.001 U
MW-76	4/5/2016	W76-160405D	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.29	1.44	< 0.001 U	< 0.001 U
MW-80	4/11/2016	W80-160411-	0.303	0.32	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.63	1.72	< 0.001 U	< 0.001 U
MW-81	4/7/2016	W81-160407-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.765	0.825	< 0.001 U	< 0.001 U
MW-82	4/6/2016	W82-160406-	< 0.001 U	< 0.001 DU	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.74	1.89	< 0.001 U	< 0.001 U
MW-83	4/15/2016	W83-160415-	0.00215	0.00253	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.72	2.49	< 0.001 U	< 0.001 U
MW-84	4/22/2016	W84-160422-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.922 D	1.06 D	< 0.001 U	< 0.001 U
MW-85	4/7/2016	W85-160407-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.45	1.6	0.00116	0.0011
MW-86	4/14/2016	W86-160414-	0.0108	0.0161	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.19	1.12	< 0.001 U	< 0.001 U
MW-87	4/19/2016	W87-160419-	0.528	0.594	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.19 D	2.42 D	< 0.001 U	< 0.001 U
MW-88	4/8/2016	W88-160408-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	0.864	0.88	< 0.001 U	< 0.001 U
MW-89	4/8/2016	W89-160408-	0.188	0.333	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.51	1.45	< 0.001 U	< 0.001 U
MW-93	4/19/2016	W93-160419-	0.176	0.213	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.49 D	1.64 D	< 0.001 U	< 0.001 U
MW-94	4/22/2016	W94-160422-	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.82 D	2.01 D	< 0.001 U	< 0.001 U
MW-95	4/14/2016	W95-160414-	0.165	0.177	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.2	1.17	< 0.001 U	< 0.001 U
MW-100	4/14/2016	W100160414-	0.164	0.289	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.69	1.7	< 0.001 U	< 0.001 U
MW-101	5/10/2016	W101160510-	1.22	1.06	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	2.67	2.8	< 0.001 U	< 0.001 U
MW-105	6/3/2016	W105160603-	< 0.001 U	0.0295 D	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	1.09	1.3	< 0.001 U	< 0.001 U
EQUIPMENT BLANK	4/8/2016	WU1S160408E	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.001 U	< 0.001 U
EQUIPMENT BLANK	4/8/2016	WU1H160408E	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.001 U	< 0.001 U
FIELD BLANK	4/7/2016	W85-160407F	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 U	< 0.001 U	< 0.001 U	< 0.001 U
FIELD BLANK	4/22/2016	W84-160422F	< 0.001 U	< 0.001 U	< 0.0001 U	< 0.0001 U	< 0.01 U	< 0.01 U	< 0.3 DU	< 0.001 U	< 0.001 U	< 0.001 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill ---Groundwater Metals Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Silver, dissolved (mg/L)	Silver, total (mg/L)	Sodium, dissolved (mg/L)	Sodium, total (mg/L)	Thallium, dissolved (mg/L)	Thallium, total (mg/L)	Tin, dissolved (mg/L)	Vanadium, dissolved (mg/L)	Vanadium, total (mg/L)	Zinc, dissolved (mg/L)
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-21	4/13/2016	W21-160413-	< 0.003 U	< 0.003 U	5.01	5.19	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-24	4/6/2016	W24-160406-	< 0.003 U	< 0.003 U	4.81	5.26	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-30A	4/15/2016	W30A160415-	< 0.003 U	< 0.003 U	15.5	15	< 0.001 U	< 0.001 U		0.00203	0.00206	< 0.004 U
MW-30A	4/15/2016	W30A160415D	< 0.003 U	< 0.003 U	15.8	15.4	< 0.001 U	< 0.001 U		0.00207	0.00205	< 0.004 U
MW-47	4/6/2016	W47-160406-	< 0.003 U	< 0.003 U	16.4	17.2	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-56	4/20/2016	W56-160420-	< 0.003 U	< 0.003 U	5.34	5.45	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-59	4/20/2016	W59-160420-	< 0.003 U	< 0.003 U	5.84	6.11	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-62	4/21/2016	W62-160421-	< 0.003 U	< 0.003 U	15.9	16.2	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-64	4/6/2016	W64-160406-	< 0.003 U	< 0.003 U	6.59	7.23	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-65	4/6/2016	W65-160405-	< 0.003 U	< 0.003 U	4.55	5.15	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-66	4/4/2016	W66-160404-	< 0.003 U	< 0.003 U	6.63	7.42	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-67	4/25/2016	W67-160425-	< 0.003 U	< 0.003 U	8.7 D	8.94	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 DU
MW-68	4/4/2016	W68-160404-	< 0.003 U	< 0.003 U	7.35	8.23	< 0.001 U	< 0.001 U		< 0.002 U	0.00215	< 0.004 U
MW-69	4/25/2016	W69-160425-	< 0.003 U	< 0.003 U	7.62 D	7.93	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 DU
MW-72	4/7/2016	W72-160407-	< 0.003 U	< 0.003 U	6.63	7.62	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-73	4/22/2016	W73-160422-	< 0.003 U	< 0.003 U	5.65	5.75	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-74	4/19/2016	W74R160419-	< 0.003 U	< 0.003 U	12.7	15.7	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-75	4/19/2016	W75-160419-	< 0.003 U	< 0.003 U	8.28	8.41	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-76	4/5/2016	W76-160405-	< 0.003 U	< 0.003 U	7.31	8.91	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-76	4/5/2016	W76-160405D	< 0.003 U	< 0.003 U	7.53	8.58	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-80	4/11/2016	W80-160411-	< 0.003 U	< 0.003 U	7.18	7.41	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-81	4/7/2016	W81-160407-	< 0.003 U	< 0.003 U	4.96	5.68	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-82	4/6/2016	W82-160406-	< 0.003 U	< 0.003 U	6.65	7.69	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-83	4/15/2016	W83-160415-	< 0.003 U	< 0.003 U	8.84	8.74	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-84	4/22/2016	W84-160422-	< 0.003 U	< 0.003 U	5.94	6.17	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-85	4/7/2016	W85-160407-	< 0.003 U	< 0.003 U	7.25	8.61	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-86	4/14/2016	W86-160414-	< 0.003 U	< 0.003 U	6.52	6.3	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-87	4/19/2016	W87-160419-	< 0.003 U	< 0.003 U	10.2	10.4	< 0.001 U	< 0.001 U		< 0.002 U	0.00242	< 0.004 U
MW-88	4/8/2016	W88-160408-	< 0.003 U	< 0.003 U	5.45	5.5	< 0.001 U	< 0.001 U		0.00274	0.00271	< 0.004 U
MW-89	4/8/2016	W89-160408-	< 0.003 U	< 0.003 U	9.71	9.41	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	0.00433
MW-93	4/19/2016	W93-160419-	< 0.003 U	< 0.003 U	9.4	9.59	< 0.001 U	< 0.001 U		0.00202	0.0021	0.00408
MW-94	4/22/2016	W94-160422-	< 0.003 U	< 0.003 U	8.64	8.75	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-95	4/14/2016	W95-160414-	< 0.003 U	< 0.003 U	5.75	5.84	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-100	4/14/2016	W100160414-	< 0.003 U	< 0.003 U	8.31	8.57	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-101	5/10/2016	W101160510-	< 0.003 U	< 0.003 U	15.3	15.5	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
MW-105	6/3/2016	W105160603-	< 0.003 U	< 0.003 U	10.1	9.86 D	< 0.001 U	< 0.001 U		< 0.002 U	0.00454	< 0.004 U
EQUIPMENT BLANK	4/8/2016	WU1S160408E	< 0.003 U	< 0.05 U			< 0.001 U	< 0.01 U		< 0.002 U	< 0.004 U	
EQUIPMENT BLANK	4/8/2016	WU1H160408E	< 0.003 U	< 0.05 U			< 0.001 U	< 0.01 U		< 0.002 U	< 0.004 U	
FIELD BLANK	4/7/2016	W85-160407F	< 0.003 U	< 0.003 U	< 0.05 U	< 0.05 U	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U
FIELD BLANK	4/22/2016	W84-160422F	< 0.003 U	< 0.003 U	< 0.05 U	< 0.05 U	< 0.001 U	< 0.001 U		< 0.002 U	< 0.002 U	< 0.004 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016
 Cedar Hills Landfill ---Groundwater Metals Analytical Data
 Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Zinc, total (mg/L)
MW-21	4/13/2016	W21-160413-	< 0.004 U
MW-24	4/6/2016	W24-160406-	< 0.004 U
MW-30A	4/15/2016	W30A160415-	< 0.004 U
MW-30A	4/15/2016	W30A160415D	< 0.004 U
MW-47	4/6/2016	W47-160406-	< 0.004 U
MW-56	4/20/2016	W56-160420-	< 0.004 U
MW-59	4/20/2016	W59-160420-	0.00407
MW-62	4/21/2016	W62-160421-	< 0.004 U
MW-64	4/6/2016	W64-160406-	< 0.004 U
MW-65	4/6/2016	W65-160405-	< 0.004 U
MW-66	4/4/2016	W66-160404-	< 0.004 U
MW-67	4/25/2016	W67-160425-	< 0.004 U
MW-68	4/4/2016	W68-160404-	< 0.004 U
MW-69	4/25/2016	W69-160425-	< 0.004 U
MW-72	4/7/2016	W72-160407-	0.00813
MW-73	4/22/2016	W73-160422-	< 0.004 U
MW-74	4/19/2016	W74R160419-	< 0.004 U
MW-75	4/19/2016	W75-160419-	< 0.004 U
MW-76	4/5/2016	W76-160405-	< 0.004 U
MW-76	4/5/2016	W76-160405D	< 0.004 U
MW-80	4/11/2016	W80-160411-	< 0.004 U
MW-81	4/7/2016	W81-160407-	< 0.004 U
MW-82	4/6/2016	W82-160406-	< 0.004 U
MW-83	4/15/2016	W83-160415-	< 0.004 U
MW-84	4/22/2016	W84-160422-	< 0.004 U
MW-85	4/7/2016	W85-160407-	< 0.004 U
MW-86	4/14/2016	W86-160414-	< 0.004 U
MW-87	4/19/2016	W87-160419-	< 0.004 U
MW-88	4/8/2016	W88-160408-	< 0.004 U
MW-89	4/8/2016	W89-160408-	0.0303
MW-93	4/19/2016	W93-160419-	< 0.004 U
MW-94	4/22/2016	W94-160422-	< 0.004 U
MW-95	4/14/2016	W95-160414-	< 0.004 U
MW-100	4/14/2016	W100160414-	0.00509
MW-101	5/10/2016	W101160510-	< 0.004 U
MW-105	6/3/2016	W105160603-	0.00501 D
EQUIPMENT BLANK	4/8/2016	WU1S160408E	
EQUIPMENT BLANK	4/8/2016	WU1H160408E	
FIELD BLANK	4/7/2016	W85-160407F	< 0.004 U
FIELD BLANK	4/22/2016	W84-160422F	< 0.004 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	1,1,1,2-Tetrachloroethane 630-20-6 ($\mu\text{g/L}$)	1,1,1-Trichloroethane 71-55-6 ($\mu\text{g/L}$)	1,1,2,2-Tetrachloroethane 79-34-5 ($\mu\text{g/L}$)	1,1,2-Trichloroethane 79-00-5 ($\mu\text{g/L}$)	1,1-Dichloroethane 75-34-3 ($\mu\text{g/L}$)	1,1-Dichloroethene 75-35-4 ($\mu\text{g/L}$)	1,2,3-Trichloropropane 96-18-4 ($\mu\text{g/L}$)	1,2-Dibromo-3-Chloropropane 96-12-8 ($\mu\text{g/L}$)	1,2-Dibromoethane 106-93-4 ($\mu\text{g/L}$)	1,2-Dichlorobenzene 95-50-1 ($\mu\text{g/L}$)	1,2-Dichloroethane 107-06-2 ($\mu\text{g/L}$)	1,2-Dichloropropane 78-87-5 ($\mu\text{g/L}$)
VOA TRIP BLANK	4/6/2016	VTRP160407C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/7/2016	VTRP160408-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/7/2016	VTRP160411C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/11/2016	VTRP160413C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/11/2016	VTRP160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/11/2016	VTRP160414C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/12/2016	VTRP160412-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/14/2016	VTRP160415C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/14/2016	VTRP160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/15/2016	VTRP160419C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/15/2016	VTRP160420-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/19/2016	VTRP160420C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/20/2016	VTRP160421C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/21/2016	VTRP160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/21/2016	VTRP160422C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/22/2016	VTRP160425C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	5/9/2016	VTRP160511C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	5/10/2016	VTRP160510-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	6/3/2016	VTRP160603-	< 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 April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	1,4-Dichloro-	2-Butanone	2-Hexanone	4-Methyl-2-	Acetone	Arylonitrile	Benzene	Bromochloro-	Bromodichloro-	Bromoform	Bromo-	Carbon
			benzene ($\mu\text{g/L}$)	78-93-3 ($\mu\text{g/L}$)	591-78-6 ($\mu\text{g/L}$)	108-10-1 ($\mu\text{g/L}$)	67-64-1 ($\mu\text{g/L}$)	107-13-1 ($\mu\text{g/L}$)	71-43-2 ($\mu\text{g/L}$)	74-97-5 ($\mu\text{g/L}$)	75-27-4 ($\mu\text{g/L}$)	75-25-2 ($\mu\text{g/L}$)	75-25-2 ($\mu\text{g/L}$)	74-83-9 ($\mu\text{g/L}$)
MW-100	4/14/2016	W100160414-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-101	5/10/2016	W101160510-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-105	6/3/2016	W105160603-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-21	4/13/2016	W21-160413-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-24	4/6/2016	W24-160406-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-30A	4/15/2016	W30A160415-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-30A	4/15/2016	W30A160415D	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-47	4/6/2016	W47-160406-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-56	4/20/2016	W56-160420-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-59	4/20/2016	W59-160420-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-62	4/21/2016	W62-160421-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-64	4/6/2016	W64-160406-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-65	4/6/2016	W65-160405-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-66	4/4/2016	W66-160404-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-67	4/25/2016	W67-160425-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-68	4/4/2016	W68-160404-	< 0.2 U	< 4 U	< 4 U	< 4 U	5.2 T	< 0.07 U	< 0.2 U					
MW-69	4/25/2016	W69-160425-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-72	4/7/2016	W72-160407-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-73	4/22/2016	W73-160422-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-74	4/19/2016	W74R160419-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-75	4/19/2016	W75-160419-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-76	4/5/2016	W76-160405-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-76	4/5/2016	W76-160405D	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-80	4/11/2016	W80-160411-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-81	4/7/2016	W81-160407-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-82	4/6/2016	W82-160406-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-83	4/15/2016	W83-160415-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-84	4/22/2016	W84-160422-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-85	4/7/2016	W85-160407-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-86	4/14/2016	W86-160414-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-87	4/19/2016	W87-160419-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-88	4/8/2016	W88-160408-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-89	4/8/2016	W89-160408-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-93	4/19/2016	W93-160419-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-94	4/22/2016	W94-160422-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
MW-95	4/14/2016	W95-160414-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
EW-25	4/22/2016	EW25160422-	< 0.2 U	< 4 U	< 4 U	< 4 U	65.9	< 0.07 U	< 0.2 U					
EQUIPMENT BLANK	4/22/2016	EW25160422E	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
FIELD BLANK	4/7/2016	W85-160407F	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
FIELD BLANK	4/22/2016	W84-160422F	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/1/2016	VTRP160404C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/4/2016	VTRP160405C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/4/2016	VTRP160406-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/5/2016	VTRP160406C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/5/2016	VTRP160407-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	1,4-Dichloro-	2-Butanone	2-Hexanone	4-Methyl-2-	Acetone	Arylonitrile	Benzene	Bromochloro-	Bromodichloro-	Bromoform	Bromo-	Carbon
			benzene ($\mu\text{g/L}$)	78-93-3 ($\mu\text{g/L}$)	591-78-6 ($\mu\text{g/L}$)	Pentanone ($\mu\text{g/L}$)	67-64-1 ($\mu\text{g/L}$)	107-13-1 ($\mu\text{g/L}$)	71-43-2 ($\mu\text{g/L}$)	74-97-5 ($\mu\text{g/L}$)	75-27-4 ($\mu\text{g/L}$)	75-25-2 ($\mu\text{g/L}$)	74-83-9 ($\mu\text{g/L}$)	75-15-0 ($\mu\text{g/L}$)
VOA TRIP BLANK	4/6/2016	VTRP160407C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/7/2016	VTRP160408-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/7/2016	VTRP160411C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/11/2016	VTRP160413C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/11/2016	VTRP160414-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/11/2016	VTRP160414C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/12/2016	VTRP160412-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/14/2016	VTRP160415C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/14/2016	VTRP160419-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/15/2016	VTRP160419C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/15/2016	VTRP160420-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/19/2016	VTRP160420C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/20/2016	VTRP160421C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/21/2016	VTRP160422-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/21/2016	VTRP160422C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	4/22/2016	VTRP160425C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	5/9/2016	VTRP160511C	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	5/10/2016	VTRP160510-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					
VOA TRIP BLANK	6/3/2016	VTRP160603-	< 0.2 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.07 U	< 0.2 U					

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Carbon	Chloro-	Chloro-	Chloro-	Chloro-	cis-1,2-	cis-1,3-	Dibromo-	Dichloro-	Ethyl -	m, p-Xylene
			Tetrachloride	Benzene	dibromo-	ethane	methane	Dichloro-	Dichloro-	methane	difluoro-	benzene	(ug/L)
			56-23-5	108-90-7	124-48-1	75-00-3	67-66-3	74-87-3	156-59-2	10061-01-5	74-95-3	75-71-8	100-41-4
MW-100	4/14/2016	W100160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	5/10/2016	W101160510-	< 0.2 U	< 0.2 U	< 0.2 U	0.22 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-105	6/3/2016	W105160603-	< 0.2 U	< 0.2 U	< 0.2 U	< 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-21	4/13/2016	W21-160413-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/6/2016	W24-160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/15/2016	W30A160415-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.42	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-30A	4/15/2016	W30A160415D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.42	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-47	4/6/2016	W47-160406-	< 0.2 U	< 0.2 U	< 0.2 U	0.31 T	< 0.2 U	< 0.2 U	4.22	< 0.2 U	< 0.2 U	5.12	< 0.2 U
MW-56	4/20/2016	W56-160420-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.35	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-59	4/20/2016	W59-160420-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.99	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-62	4/21/2016	W62-160421-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	6.63	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-64	4/6/2016	W64-160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/6/2016	W65-160405-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/4/2016	W66-160404-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/25/2016	W67-160425-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/4/2016	W68-160404-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/25/2016	W69-160425-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/7/2016	W72-160407-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/22/2016	W73-160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/19/2016	W74R160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/19/2016	W75-160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/5/2016	W76-160405-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.607	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-76	4/5/2016	W76-160405D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.607	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-80	4/11/2016	W80-160411-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/7/2016	W81-160407-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/6/2016	W82-160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/15/2016	W83-160415-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/22/2016	W84-160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW-85	4/7/2016	W85-160407-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/14/2016	W86-160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/19/2016	W87-160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/8/2016	W88-160408-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/8/2016	W89-160408-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/19/2016	W93-160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/22/2016	W94-160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/14/2016	W95-160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
EW-25	4/22/2016	EW25160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	1.25	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
EQUIPMENT BLANK	4/22/2016	EW25160422E	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/7/2016	W85-160407F	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/22/2016	W84-160422F	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/1/2016	VTRP160404C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/4/2016	VTRP160405C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/4/2016	VTRP160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/5/2016	VTRP160406C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/5/2016	VTRP160407-	< 0.2 U	< 0.2 U	< 0.2 U	< 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 April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Carbon	Chloro-	Chloro-	Chloro-	Chloro-	cis-1,2-	cis-1,3-	Dibromo-	Dichloro-	Ethyl -	m, p-Xylene
			Tetrachloride	Benzene	dibromo-	ethane	methane	Dichloro-	Dichloro-	methane	Difluoro-	benzene	(ug/L)
		56-23-5	108-90-7	124-48-1	75-00-3	67-66-3	74-87-3	156-59-2	10061-01-5	74-95-3	75-71-8	100-41-4	(ug/L)
VOA TRIP BLANK	4/6/2016	VTRP160407C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/7/2016	VTRP160408-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/7/2016	VTRP160411C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/11/2016	VTRP160413C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/11/2016	VTRP160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/11/2016	VTRP160414C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/12/2016	VTRP160412-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/14/2016	VTRP160415C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/14/2016	VTRP160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/15/2016	VTRP160419C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/15/2016	VTRP160420-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/19/2016	VTRP160420C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/20/2016	VTRP160421C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/21/2016	VTRP160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/21/2016	VTRP160422C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	4/22/2016	VTRP160425C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	5/9/2016	VTRP160511C	< 0.2 U	< 0.2 U	< 0.2 U	< 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	5/10/2016	VTRP160510-	< 0.2 U	< 0.2 U	< 0.2 U	< 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	6/3/2016	VTRP160603-	< 0.2 U	< 0.2 U	< 0.2 U	< 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 April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Methyl Iodide ($\mu\text{g/L}$)	Methylene Chloride ($\mu\text{g/L}$)	o-Xylene ($\mu\text{g/L}$)	Styrene ($\mu\text{g/L}$)	Tetrachloroethene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	trans-1,2-Dichloroethene ($\mu\text{g/L}$)	trans-1,3-Dichloropropene ($\mu\text{g/L}$)	trans-1,4-Dichlorobutene ($\mu\text{g/L}$)	Trichloroethene ($\mu\text{g/L}$)	Trichlorofluoromethane ($\mu\text{g/L}$)	Vinyl Acetate ($\mu\text{g/L}$)	Vinyl Chloride ($\mu\text{g/L}$)
			74-88-4	75-09-2	95-47-6	100-42-5	127-18-4	108-88-3	156-60-5	10061-02-6	110-57-6	79-01-6	75-69-4	108-05-4	75-01-4
MW-100	4/14/2016	W100160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	5/10/2016	W101160510-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.665
MW-105	6/3/2016	W105160603-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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-21	4/13/2016	W21-160413-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/6/2016	W24-160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/15/2016	W30A160415-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	1.07	< 0.2 U	< 0.2 U	< 0.02 U
MW-30A	4/15/2016	W30A160415D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	1.1	< 0.2 U	< 0.2 U	< 0.02 U
MW-47	4/6/2016	W47-160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	6.44
MW-56	4/20/2016	W56-160420-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/20/2016	W59-160420-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/21/2016	W62-160421-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/6/2016	W64-160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/6/2016	W65-160405-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	0.0437
MW-66	4/4/2016	W66-160404-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/25/2016	W67-160425-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/4/2016	W68-160404-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 GU	< 0.2 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	4/25/2016	W69-160425-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/7/2016	W72-160407-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/22/2016	W73-160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/19/2016	W74R160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/19/2016	W75-160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/5/2016	W76-160405-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.38 T	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	9.51	< 0.2 U	< 0.2 U	< 0.02 U
MW-76	4/5/2016	W76-160405D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.39 T	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	9.24	< 0.2 U	< 0.2 U	< 0.02 U
MW-80	4/11/2016	W80-160411-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/7/2016	W81-160407-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/6/2016	W82-160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	5.19	< 0.2 U	< 0.2 U	< 0.02 U
MW-83	4/15/2016	W83-160415-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	2.06	< 0.2 U	< 0.2 U	< 0.02 U
MW-84	4/22/2016	W84-160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW-85	4/7/2016	W85-160407-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/14/2016	W86-160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/19/2016	W87-160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/8/2016	W88-160408-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/8/2016	W89-160408-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/19/2016	W93-160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/22/2016	W94-160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	0.921	< 0.2 U	< 0.2 U	< 0.02 U
MW-95	4/14/2016	W95-160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
EW-25	4/22/2016	EW25160422-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.36 T	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	1.16	< 0.2 U	< 0.2 U	< 0.02 U
EQUIPMENT BLANK	4/22/2016	EW25160422E	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/7/2016	W85-160407F	0.2 U	0.581	< 0.2 U	< 0.2 U	< 0.2 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	4/22/2016	W84-160422F	0.2 U	0.551	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.29 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/1/2016	VTRP160404C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/4/2016	VTRP160405C	< 0.2 U	0.35 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/4/2016	VTRP160406-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/5/2016	VTRP160406C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/5/2016	VTRP160407-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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 April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Groundwater VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Methyl Iodide ($\mu\text{g/L}$)	Methylene Chloride ($\mu\text{g/L}$)	o-Xylene ($\mu\text{g/L}$)	Styrene ($\mu\text{g/L}$)	Tetrachloro-ethene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	trans-1,2-Dichloro-ethene ($\mu\text{g/L}$)	trans-1,3-Dichloro-propene ($\mu\text{g/L}$)	trans-1,4-Dichloro-2-butene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	Trichloro-fluoromethane ($\mu\text{g/L}$)	Vinyl Acetate ($\mu\text{g/L}$)	Vinyl Chloride ($\mu\text{g/L}$)
			74-88-4	75-09-2	95-47-6	100-42-5	127-18-4	108-88-3	156-60-5	10061-02-6	110-57-6	79-01-6	75-69-4	108-05-4	75-01-4
VOA TRIP BLANK	4/6/2016	VTRP160407C	< 0.2 U	0.34 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/7/2016	VTRP160408-	< 0.2 U	0.31 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/7/2016	VTRP160411C	< 0.2 U	0.32 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/11/2016	VTRP160413C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/11/2016	VTRP160414-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/11/2016	VTRP160414C	< 0.2 U	0.28 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/12/2016	VTRP160412-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/14/2016	VTRP160415C	< 0.2 U	0.27 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/14/2016	VTRP160419-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	4/15/2016	VTRP160419C	< 0.2 U	0.26 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/15/2016	VTRP160420-	< 0.2 U	0.26 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/19/2016	VTRP160420C	< 0.2 U	0.25 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/20/2016	VTRP160421C	< 0.2 U	0.543	< 0.2 U	< 0.2 U	< 0.2 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	4/21/2016	VTRP160422-	< 0.2 U	0.45	< 0.2 U	< 0.2 U	< 0.2 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	4/21/2016	VTRP160422C	< 0.2 U	0.617	< 0.2 U	< 0.2 U	< 0.2 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	4/22/2016	VTRP160425C	< 0.2 U	0.35 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	5/9/2016	VTRP160511C	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	5/10/2016	VTRP160510-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 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	6/3/2016	VTRP160603-	< 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

Surface Water Analytical Data

Washington Department of Ecology Submission Cover Letter

**WQWebDMR - Permit# WAR000756 - DMR Submission Id: 1548865 -
8/3/2016 2:28:01 PM**

Report Received Dated:

8/3/2016 2:28:01 PM

Company Name	Signer Name	System Name
King County Solid Waste Division	Pamela Badger	WQWebPortal

Attachments:

Document Name of Description	Document File Name
Submitted Copy of Record for King County Solid Waste Division	Copy of Record KingCountySolidWasteDivision Wednesday August 03 2016

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

**For Ecology Use Only ---
Dev**



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+kvLPH486S5CaB5PL7ki3AGQ7irjFMAr2ePJ3Tp7bK1a6pJdkb8gLCaF7tjk8=



Validation Report

Facility: CEDAR HILLS LANDFILL - Permit: WAR000756

Monitoring Period: 04/01/2016 to 06/30/2016

Validation Message Type: Warning

Outfall	Monitoring Point	Parameter	Units	Sample Date/ Statistical Base	Value Entered	Limit/Benchmark	Error Message
GS1	GS1	Oil & Grease Not Applicable	Yes/No	04/05/2016	Yes	BM: <= 0	The reported value exceeded the benchmark. You are required to take action (See Permit Condition S8).



Washington State Department of Ecology Discharge Monitoring Report (DMR)

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Permit Number: WAR000756

Permittee: CEDAR HILLS LANDFILL

Facility County: King

Receiving Waterbody: Unnamed stream

Monitoring Period: 04/01/2016 - 06/30/2016

Outfall: GS1 - Discharge to unnamed stream (wetland)

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured	pH	Standard Units	Oil & Grease Yes/No	Copper Total	Zinc Total	BOD5 Total	Solids (Residue) Total suspended (TSS)	Ammonia Total	Alpha-terpineol (3-Cyclohexene-1-methanol, alpha, alpha, trimethyl)	Benzene Acid Micrograms/L (ug/L) Quarterly Grab	p-Cresol (4-methylphenol) Micrograms/L (ug/L) Quarterly Grab
		NTU Quarterly Grab	Quarterly Grab	Quarterly Visual Observation	Yes/No Quarterly	Micrograms/L (ug/L) Quarterly Grab	Micrograms/L (ug/L) Quarterly Grab	Micrograms/L (ug/L) Quarterly Grab	Milligrams/L (mg/L) Quarterly Grab	Milligrams/L (mg/L) Quarterly Grab	Micrograms/L (ug/L) Quarterly Grab	Micrograms/L (ug/L) Quarterly Grab	Micrograms/L (ug/L) Quarterly Grab
		GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1
Limit Set		ISGP Western WA - 2015 Permit	ISGP Western WA - 2015 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit				
2-T	4/5/16	3.42	7.75	Yes*		13.2	22.7	2.98	6.6	0.181	<5	<50	<10
Minimum		7.75											
		BM: >= 5.0 (RO)											
Average		3.42				13.2	22.7						
		BM: <= 25				BM: <= 14	BM: <= 117						
Maximum		7.75											
		BM: <= 9.0 (RO)											
Month 1 Average								2.98	6.6	0.181	<5	<50	<10
								<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14
Month 2 Average								M	M	M	M	M	M
								<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14
Month 3 Average								M	M	M	M	M	M
								<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14

Reporting Codes Used: B - Below Detection Limit/No Detection, M - Monitoring Is Conditional/Not Req This MP

Outfall: GS1 - Discharge to unnamed stream (wetland)

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
GS1	Oil & Grease Not Applicable Yes/No	4/5/2016	Yes	Presence of oil sheen attributed to truck rollover accident that released fuel into Stormwater ditch in January 2016. Spill was immediately cleaned up to the maximum extent practicable (Ecology staff onsite during cleanup). Sampling results indicate that residual amounts of petroleum remain, likely bound to sediment and/or vegetation near sampling location. The quantity of residual petroleum remaining is small and it is unlikely that additional cleanup measures would remove a meaningful quantity. In May 2016, Ecology concurred that the operational end point for the cleanup had been reached. Natural attenuation is the preferred method of managing residual impacts in this situation.



Week	Monitoring Point	Pheno Micrograms/L (ug/L)	Zinc Total Micrograms/L (ug/L)	pH Standard Units
		Quarterly Grab	Quarterly Grab	Quarterly Grab
	Limit Set	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit
2-T	4/5/16	<4	22.7	7.75
	Minimum			7.75
				>= 6.0 (RO)
	Average			
	Maximum			7.75
				<= 9.0 (RO)
	Month 1 Average	<4	22.7	
		<= 15	<= 110	
	Month 2 Average	M	M	
		<= 15	<= 110	
	Month 3 Average	M	M	
		<= 15	<= 110	



Washington State Department of Ecology Discharge Monitoring Report (DMR)

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Permit Number: WAR000756

Permittee: CEDAR HILLS LANDFILL

Facility County: King

Receiving Waterbody: Unnamed stream

Monitoring Period: 04/01/2016 - 06/30/2016

Outfall: N4 - Discharge to unnamed stream (McDonald Cr)

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Quarterly Grab	pH Standard Units Quarterly Grab	Oil & Grease Yes/No Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly Grab	Zinc Total Micrograms/L (ug/L) Quarterly Grab	Total BOD5 Total Milligrams/L (mg/L) Quarterly Grab	Solids (Residue) Total suspended (TS) Milligrams/L (mg/L) Quarterly Grab	Ammonia Total Milligrams/L (mg/L) Quarterly Grab	Alpha-terpineol (3-Cyclohexene-1-methanol, alpha, alpha, trimethyl-) Micrograms/L (ug/L) Quarterly Grab	Benzolic Acid Micrograms/L (ug/L) Quarterly Grab	p-Cresol (4-methylphenol) Micrograms/L (ug/L) Quarterly Grab
	ISGP Western WA - 2015 Permit	ISGP Western WA - 2015 Permit	ISGP Western WA - 2015 Permit	ISGP Western WA - 2015 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit
2-T	4/5/16	1.37	8.13	No	8.38	14.8	<2	3	<0.01	<5	<50	<10
		8.13										
	Minimum		BM: >= 5.0 (RO)									
	Average	1.37			8.38	14.8						
		BM: <= 25			BM: <= 14	BM: <= 117						
	Maximum		8.13									
			BM: <= 9.0 (RO)									
	Month 1 Average						<2	3	<0.01	<5	<50	<10
							<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14
	Month 2 Average						M	M	M	M	M	M
							<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14
	Month 3 Average						M	M	M	M	M	M
							<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14

Reporting Codes Used: B - Below Detection Limit/No Detection, M - Monitoring Is Conditional/Not Req This MP



Week	Monitoring Point	Phenol	Zinc	pH
		Micrograms/L (µg/L) Quarterly Grab	Total Micrograms/L (µg/L) Quarterly Grab	Standard Units Quarterly Grab
		N4	N4	N4
	Limit Set	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit
2-T	4/5/16	<4	14.8	8.13
	Minimum			8.13
				>= 6.0 (RO)
	Average			
	Maximum			8.13
				<= 9.0 (RO)
Month 1 Average		<4	14.8	
		<= 15	<= 110	
Month 2 Average		M	M	
		<= 15	<= 110	
Month 3 Average		M	M	
		<= 15	<= 110	



Washington State Department of Ecology Discharge Monitoring Report (DMR)

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Permit Number: WAR000756

Permittee: CEDAR HILLS LANDFILL

Facility County: King

Receiving Waterbody: Unnamed stream

Monitoring Period: 04/01/2016 - 06/30/2016

Outfall: SL3 - Discharge to unnamed stream (ditch)

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured	pH	Standard Units	Oil & Grease Yes/No	Copper Total	Zinc Total	Total BOD5	Solids (Residue)	Ammonia Total	Benzene Acid	p-Cresol [4-methylphenol] Quarterly
		NTU Quarterly Grab	Quarterly Grab	Quarterly Visual Observation	Quarterly Grab	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Milligrams/L (mg/L)	Milligrams/L (mg/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)
		SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3
Limit Set		ISGP Western WA - 2015 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit			
2-T	4/5/16	1.33	7.41	No	2.62	8.93	<2	<1	<0.01	<5	<50	<10
Minimum		7.41										
		BM: >= 5.0 (RO)										
Average		1.33			2.62	8.93						
		BM: <= 25			BM: <= 14	BM: <= 117						
Maximum		7.41										
		BM: <= 9.0 (RO)										
Month 1 Average							<2	<1	<0.01	<5	<50	<10
							<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14
Month 2 Average							M	M	M	M	M	M
							<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14
Month 3 Average							M	M	M	M	M	M
							<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14

Reporting Codes Used: B - Below Detection Limit/No Detection, M - Monitoring Is Conditional/Not Req This MP

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Pamela Badger

8/3/2016 2:28:00 PM

Signature

Date



Week	Monitoring Point	Phenol Micrograms/L (ug/L)	Zinc Total Micrograms/L (ug/L)	pH Standard Units
		Quarterly Grab	Quarterly Grab	Quarterly Grab
		ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2015 permit
Limit Set		<4	8.93	7.41
2-T	4/5/16			
Minimum				7.41
				>= 6.0 (RO)
Average				
Maximum				7.41
				<= 9.0 (RO)
Month 1 Average		<4	8.93	
		<= 15	<= 110	
Month 2 Average		M	M	
		<= 15	<= 110	
Month 3 Average		M	M	
		<= 15	<= 110	

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

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

Contact Person: Sendy Jimenez (206) 477-5224

Staff Gage	Location	Date	Reference Elevation Staff Gage 0' (msl)	Reference Elevation Top of Peizo (msl)	Depth to Water (Peizometer) (feet)	Staff Gage Reading (feet)	Surface Water Elevation (msl)
SW-G1	SW-W1	4/20/2016	415.38	418.84	2.83		416.01
SW-G1	SW-W1	4/20/2016	415.38	418.84		0.57	415.95
SW-G1	SW-W1	5/27/2016	415.38	418.84		0.56	415.94
SW-G2	SW-N1	4/20/2016	355.68	358.21	3.01		355.20
SW-G2	SW-N1	4/20/2016	355.68	358.21		0.35	356.03
SW-G2	SW-N1	5/27/2016	355.68	358.21		0.35	356.03
SW-G3	SW -V	4/20/2016	466.46	469.88			NR
SW-G3	SW -V	5/27/2016	466.46	469.88	5.43		464.45
SW-G3	SW -V	4/20/2016	466.46	469.88			NR
SW-G4	Upstream of SW-E1	4/20/2016	502.41	505.85	4.52		501.33
SW-G4	Upstream of SW-E1	5/27/2016	502.41	505.85	4.91		500.94
SW-G4	Upstream of SW-E1	4/20/2016	502.41	505.85			NR
SW-G5	SW-E1	4/20/2016	486.92	490.34	2.97		487.37
SW-G5	SW-E1	5/27/2016	486.92	490.34	3.22		487.12
SW-G5	SW-E1	4/20/2016	486.92	490.34		0.43	487.35
SW-G6	Upstream of SW-GS1	4/20/2016	490.72	494.12	2.67		491.45
SW-G6	Upstream of SW-GS1	5/27/2016	490.72	494.12	3.1		491.02
SW-G6	Upstream of SW-GS1	4/20/2016	490.72	494.12		1.70	492.42
SW-G7	SW-S2	4/20/2016	453.03	456.41	3.59		452.82
SW-G7	SW-S2	4/20/2016	453.03	456.41		0.75	453.78
SW-G7	SW-S2	5/27/2016	453.03	456.41		0.27	453.30
SW-G8	Upstream of SW-S1	4/20/2016	510.61	515.56	4.79		510.77
SW-G8	Upstream of SW-S1	4/20/2016	510.61	515.56		0.19	510.80
SW-G8	Upstream of SW-S1	5/27/2016	510.61	515.56		0.15	510.76
SW-G9	SW-S1	4/20/2016	490.93	494.35	3.13		491.22
SW-G9	SW-S1	4/20/2016	490.93	494.35		0.31	491.24
SW-G9	SW-S1	5/27/2016	490.93	494.35		0.25	491.18

NR = No Reading Taken

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Surface Water Field Parameters

Contact Person: Sandy Jimenez (206) 477-5224

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature (°C)	Turbidity (NTU)	Oxygen, Dissolved (mg/L)
SW-GS1	4/5/2016	SGS1160405P	7.75	150	11.5	3.42	9.5
SW-N4	4/5/2016	SN4-160405P	8.13	100	13.7	1.37	9.28
SW-SL3	4/5/2016	SSL3160405P	7.41	125	10.5	1.33	8.75

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Surface Water Conventional Metals Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	Ammonia,	Biological	Suspended	Copper,	Zinc,
			(NH3) (mg/L)	Oxygen Demand (mg/L)	Solids (mg/L)	total (mg/L)	total (mg/L)
SW-GS1	4/5/2016	SGS1160405P	0.181	2.98	6.6	0.0132	0.0227
SW-N4	4/5/2016	SNA-160405P	< 0.01 U	< 2 U	3	0.00838	0.0148
SW-SL3	4/5/2016	SSL3160405P	< 0.01 U	< 2 U	< 1 U	0.00262	0.00893

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Surface Water Semi-VOA Analytical Data

Contact Person: Sendy Jimenez (206) 477-5224

Site	Date	Sample ID	4-Methyl-	alpha	Benzoic	Phenol
			106-44-5 (ug/L)	98-55-5 (ug/L)	65-85-0 (ug/L)	108-95-2 (ug/L)
SW-GS1	4/5/2016	SGS1160405P	10 U	5 U	50 U	4 U
SW-N4	4/5/2016	SN4-160405P	10 U	5 U	50 U	4 U
SW-SL3	4/5/2016	SSL3160405P	10 U	5 U	50 U	4 U

Leachate Analytical Data

Leachate Monitoring Activities 2nd Quarter 2016

Station ID	Date	Activity	Sample ID	Comment
API	4/13/16	Monthly Characterization Sample	LAPI160413M	
API	5/11/16	Monthly Characterization Sample	LAPI160511M	
API	6/15/16	Monthly Characterization Sample	LAPI160615M	
LEPS	4/13/16	Monthly Characterization Sample	LEPS160412M	
LEPS	4/13/16	Permit Sample	LEPS160412P	
LEPS	5/11/16	Monthly Characterization Sample	LEPS160510M	
LEPS	5/11/16	Permit Sample	LEPS160510P	
LEPS	6/15/16	Monthly Characterization Sample	LEPS160614M	
LEPS	6/15/16	Permit Sample	LEPS160614P	
MH46N	4/13/16	Monthly Characterization Sample	L46N160413M	
MH46N	5/11/16	Monthly Characterization Sample	L46N160511M	
MH46N	6/15/16	Monthly Characterization Sample	L46N160615M	
PS2A	4/13/16	Monthly Characterization Sample	LP2A160413M	
PS2A	5/11/16	Monthly Characterization Sample	LP2A160511M	
PS2A	6/15/16	Monthly Characterization Sample	LP2A160615M	

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Leachate Field Parameters

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

Site	Date	Sample ID	pH (Field)	Conductance (Field)	Temperature
			(std. Units)	(umho/cm)	(o C)
LS-API	4/13/2016	LAPI160413M	8.04	7000	18
LS-API	5/11/2016	LAPI160511M	8.18	9500	21.5
LS-API	6/15/2016	LAPI160615M	8.14	8900	24.6
LS-LEPS	4/13/2016	LEPS160412M	8.48	7000	13.4
LS-LEPS	4/13/2016	LEPS160412P	8.48	7000	13.4
LS-LEPS	5/11/2016	LEPS160510M	8.56	8100	16.7
LS-LEPS	5/11/2016	LEPS160510P	8.56	8100	16.7
LS-LEPS	6/15/2016	LEPS160614M	8.2	8900	14.8
LS-LEPS	6/15/2016	LEPS160614P	8.2	8900	14.8
LS-MH46N	4/13/2016	L46N160413M	7.16	7500	23.2
LS-MH46N	5/11/2016	L46N160511M	7.35	3500	15
LS-MH46N	6/15/2016	L46N160615M	6.98	9400	23.4
LS-PS2A	4/13/2016	LP2A160413M	7.87	330	10
LS-PS2A	5/11/2016	LP2A160511M	7.29	690	12.3
LS-PS2A	6/15/2016	LP2A160615M	7.55	2950	12.4
FIELD BLANK	6/15/2016	LAPI160615F	9.25	350	15.2

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Leachate Conventional Analytical Data

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

Site	Date	Sample ID	Alkalinity, Total (CaCO ₃)	Ammonia, (NH ₃ as N)	Biological Oxygen Demand	Chemical Oxygen Demand	Chloride	Coliforms, Fecal	Coliforms, Total	Cyanide	Fluoride	Nitrate+Nitrite (NO ₃ +NO ₂ as N)	Phosphorus, Total (as P)
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(CFU/100mL)	(CFU/100mL)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LS-API	4/13/2016	LAPI160413M	4960	977	1540 J	3830 S	1320	43000	540000	< 0.02 SU	< 0.1 U	0.55	9.28
LS-API	5/11/2016	LAPI160511M	8590	1950	1930	5710	2060	80000	2100000	0.027 ST	< 0.1 U	0.69 T	13.3
LS-API	6/15/2016	LAPI160615M	9390	1950	1820	6060 S	2220	60000	2200000	0.033 ST	< 0.1 U	< 0.01 U	15.2
LS-LEPS	4/12/2016	LEPS160412M	2790	512	72.7 J	876	704	3500 H	15000 H	< 0.02 SU	< 0.1 U	< 0.01 U	3.18
LS-LEPS	5/10/2016	LEPS160510M	4220	776	227	1270	1150	6700 CH	13000 H	< 0.02 SU	< 0.1 U	5.26	9.44
LS-LEPS	6/14/2016	LEPS160614M	3690	652	236	1640 S	1450	43000 H	53000 H	0.022 ST	< 0.1 U	155	10.4
LS-MH46N	4/13/2016	L46N160413M	2490	516	74.7 J	1270	1340	< 1 U	< 1 U	< 0.02 SU	< 0.1 U	< 0.01 U	3.45
LS-MH46N	5/11/2016	L46N160511M	3050	662	91.5	1600	1660	< 1 U	< 1 U	< 0.02 SU	< 0.1 U	0.11 T	3.87
LS-MH46N	6/15/2016	L46N160615M	3380	709	103	1890	1860	< 1 U	150	0.071 T	< 0.1 U	< 0.01 U	4.29
LS-PS2A	4/13/2016	LP2A160413M	77.8	10.8	7.64 J	39.1	26.2	< 1 U	14	< 0.02 U	< 0.1 U	1.58	< 0.1 U
LS-PS2A	5/11/2016	LP2A160511M	134	36.5	9.81	82.4	80.5	< 1 U	70	< 0.02 U	< 0.1 U	4.49	0.12 T
LS-PS2A	6/15/2016	LP2A160615M	659	153	127	387	326	2	51	< 0.02 U	< 0.1 U	4.31	0.58
FIELD BLANK	6/15/2016	LAPI160615F	2.5 T	< 0.01 U	< 2 U	< 5 U	< 0.1 U	< 1 U	< 1 U	< 0.02 SU	< 0.1 U	< 0.01 U	< 0.1 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Leachate Conventional Analytical Data

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

Site	Date	Sample ID	Phosphorus,	Specific	Sulfate	Sulfide	Total	Total	Total	Total	Volatile
			Sol. Reactive	Conductance	(SO4)	Total	Fats, Oils	Kjeldahl	Organic	Suspended	Volatile
			(mg/L)	(μmho/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LS-API	4/13/2016	LAPI160413M	4.89	12700	59.3	1.4 T	6.4	1110 S	1080 S	257	3050
LS-API	5/11/2016	LAPI160511M	8.65	19900	32.3	1.43	6.4	2240	1510 S	41	3800
LS-API	6/15/2016	LAPI160615M	8.44	20900	43.4	< 0.1 U	4.8 GT	2320 S	1500 S	58	4280
LS-LEPS	4/12/2016	LEPS160412M	0.838	7180	50.1	0.13 T	3.1 T	584	193 S	107	1460
LS-LEPS	5/10/2016	LEPS160510M	2.8	10100	64.5	0.88 T	< 2 U	776	273 S	347	2140
LS-LEPS	6/14/2016	LEPS160614M	2.4	11300	70.1	< 0.1 U	2.8 GT	720 S	368 S	447	2690
LS-MH46N	4/13/2016	L46N160413M	2.84	8680	3.3 T	1.77	3.6 T	495	353 S	1.68	1260
LS-MH46N	5/11/2016	L46N160511M	3.28	10200	1.5 T	0.35 T	5.4	606	443 S	< 1 U	1590
LS-MH46N	6/15/2016	L46N160615M	2.54	11400	< 0.1 U	0.47 T	3.6 GT	773	512 S	1	1480
LS-PS2A	4/13/2016	LP2A160413M	0.0185	318	18.7	0.022 T	< 2 U	11.1	13.9	2.8	101
LS-PS2A	5/11/2016	LP2A160511M	0.0522	819	80.9	0.017 T	< 2 U	35.8	28.6	1.1	130
LS-PS2A	6/15/2016	LP2A160615M	0.337	2710	86.4	< 0.1 U	2 GT	186	111	2.5	480
FIELD BLANK	6/15/2016	LAPI160615F	< 0.05 U	2 T	< 0.1 U	< 0.1 U	< 2 U	0.11 T	< 1 U	< 1 U	< 1 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Leachate Metal Analytical Data

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

Site	Date	Sample ID	Aluminum,	Antimony,	Arsenic,	Barium,	Beryllium,	Cadmium,	Calcium,	Chromium,	Cobalt,	Copper,	Iron,	Lead,
			total	total	total	total	total	total	total	total	total	total	total	total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LS-API	4/13/2016	LAPI160413M	5.29	< 0.001 U	0.154	0.224	< 0.001 U	< 0.002 U	116 D	0.178	0.0429	0.0252	17.6	< 0.001 U
LS-API	5/11/2016	LAPI160511M	0.794	0.024 T	0.262	0.259	< 0.001 U	< 0.002 U	113	0.276	0.0508	0.0365	7.19	< 0.001 U
LS-API	6/15/2016	LAPI160615M	0.963	0.023 T	0.295	0.291	< 0.001 U	< 0.002 U	74.9	0.309	0.0556	0.0216	6.28	< 0.001 U
LS-LEPS	4/12/2016	LEPS160412M	0.26 T	< 0.001 U	0.087 T	0.0977	< 0.001 U	< 0.002 U	64.4	0.0816	0.0192	0.0054 T	6.89	< 0.001 U
LS-LEPS	4/12/2016	LEPS160412P						< 0.002 U		0.102		0.0056 T		< 0.001 U
LS-LEPS	5/10/2016	LEPS160510M	5.48	0.026 T	0.171	0.184	< 0.001 U	< 0.002 U	87.4	0.172	0.0322	0.0227	13.8	< 0.001 U
LS-LEPS	5/10/2016	LEPS160510P						< 0.002 U		0.142		0.016 T		< 0.001 U
LS-LEPS	6/15/2016	LEPS160614P						< 0.002 U		0.179		0.012 T		< 0.001 U
LS-LEPS	6/14/2016	LEPS160614M	4.5	0.031 T	0.225	0.205	< 0.001 U	< 0.002 U	80.4	0.208	0.0413	0.014 T	13.6	< 0.001 U
LS-MH46N	4/13/2016	L46N160413M	< 0.02 U	< 0.001 U	0.076 T	0.287	< 0.001 U	< 0.002 U	68.2	0.0779	0.0252	< 0.002 U	2.17	< 0.001 U
LS-MH46N	5/11/2016	L46N160511M	< 0.02 U	< 0.001 U	0.084 T	0.382	< 0.001 U	< 0.002 U	82.5	0.0974	0.0319	< 0.002 U	2.25	< 0.001 U
LS-MH46N	6/15/2016	L46N160615M	< 0.02 U	< 0.001 U	0.087 T	0.465	< 0.001 U	< 0.002 U	87.4	0.114	0.0345	< 0.002 U	2.38	< 0.001 U
LS-PS2A	4/13/2016	LP2A160413M	< 0.02 U	< 0.001 U	< 0.001 U	0.0154	< 0.001 U	< 0.002 U	14.8	< 0.005 U	< 0.003 U	0.019 T	1.14	< 0.001 U
LS-PS2A	5/11/2016	LP2A160511M	< 0.02 U	< 0.001 U	< 0.001 U	0.0271	< 0.001 U	< 0.002 U	20.2	< 0.005 U	0.0039 T	0.015 T	1.08	< 0.001 U
LS-PS2A	6/15/2016	LP2A160615M	< 0.02 U	< 0.001 U	< 0.001 U	0.0292	< 0.001 U	< 0.002 U	24.2	0.011 T	0.0081 T	0.0441	0.936	< 0.001 U
FIELD BLANK	6/15/2016	LAPI160615F	< 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 April 1, 2016 to June 30, 2016

Cedar Hills Landfill --- Leachate Metal Analytical Data

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

Site	Date	Sample ID	Magnesium,	Manganese,	Mercury,	Nickel,	Potassium,	Selenium,	Silver,	Sodium,	Thallium,	Tin,	Vanadium,	Zinc,
			total	total	total	total	total	total	total	total	total	total	total	total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LS-API	4/13/2016	LAPI160413M	81	1.19 D	< 0.0001 U	0.191	466 D	< 0.001 U	< 0.003 U	1250	< 0.001 U	0.039 T	0.0607	1.35
LS-API	5/11/2016	LAPI160511M	116	1.03	< 0.0001 U	0.279	735 D	< 0.001 U	< 0.003 U	2020	< 0.001 U	0.046 T	0.0783	0.467
LS-API	6/15/2016	LAPI160615M	123	0.689	< 0.0001 U	0.31	844 D	< 0.001 U		2250	< 0.001 U	0.046 T	0.086	0.341
LS-LEPS	4/12/2016	LEPS160412M	44.4	0.737	< 0.0001 U	0.0973	237	< 0.001 U	< 0.003 U	647	< 0.001 U	< 0.01 U	0.036 T	0.109
LS-LEPS	4/12/2016	LEPS160412P				0.1								0.116
LS-LEPS	5/10/2016	LEPS160510M	70.8	1.02	< 0.0001 U	0.161	389	< 0.001 U	< 0.003 U	1090	< 0.001 U	0.031 T	0.0559	0.474
LS-LEPS	5/10/2016	LEPS160510P				0.155								0.456
LS-LEPS	6/15/2016	LEPS160614P				0.195								0.428
LS-LEPS	6/14/2016	LEPS160614M	82.6	0.924	< 0.0001 U	0.199	524 D	< 0.001 U		1390	< 0.001 U	0.042 T	0.066	0.437
LS-MH46N	4/13/2016	L46N160413M	43.2	0.422	< 0.0001 U	0.106	278	< 0.001 U	< 0.003 U	912	< 0.001 U	< 0.01 U	0.0933	0.0266
LS-MH46N	5/11/2016	L46N160511M	52.5	0.487	< 0.0001 U	0.133	343	< 0.001 U	< 0.003 U	1140	< 0.001 U	< 0.01 U	0.12	< 0.004 U
LS-MH46N	6/15/2016	L46N160615M	57.1	0.485	< 0.0001 U	0.162	391	< 0.001 U		1320	< 0.001 U	< 0.01 U	0.144	0.0059 T
LS-PS2A	4/13/2016	LP2A160413M	5.49	0.0686	< 0.0001 U	0.014 T	6.55	< 0.001 U	< 0.003 U	19.9	< 0.001 U	< 0.01 U	< 0.002 U	0.013 T
LS-PS2A	5/11/2016	LP2A160511M	9.13	0.117	< 0.0001 U	0.013 T	17.2	< 0.001 U	< 0.003 U	61.5	< 0.001 U	< 0.01 U	< 0.002 U	0.0269
LS-PS2A	6/15/2016	LP2A160615M	12.7	0.198	< 0.0001 U	0.0408	88.1	< 0.001 U		257	< 0.001 U	< 0.01 U	< 0.002 U	0.0559
FIELD BLANK	6/15/2016	LAPI160615F	< 0.015 U	< 0.001 U	< 0.0001 U	< 0.01 U	< 0.3 DU	< 0.001 U		< 0.05 U	< 0.001 U	< 0.01 U	< 0.002 U	< 0.004 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016
 Cedar Hills Landfill --- Leachate VOA Analytical Data
 Contact Person --- Senny Jimenez (206) 477-5224

Site	Date	Sample ID	1,1,1,2-Tetrachloroethane 630-20-6 (ug/L)	1,1,1-Trichloroethane 71-55-6 (ug/L)	1,1,2,2-Tetrachloroethane 79-34-5 (ug/L)	1,1,2-Trichloroethane 79-00-5 (ug/L)	1,1-Dichloroethane 75-34-3 (ug/L)	1,1-Dichloroethene 75-35-4 (ug/L)	1,1-Dichloropropene 563-58-6 (ug/L)	1,2,3-Trichloropropane 96-18-4 (ug/L)	1,2-Dibromo-3-Chloropropan 96-12-8 (ug/L)	1,2-Dibromoethane 106-93-4 (ug/L)	1,2-Dichlorobenzene 95-50-1 (ug/L)	1,2-Dichloroethane 107-06-2 (ug/L)
LS-API	4/13/2016	LAPI160413M	< 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	5/11/2016	LAPI160511M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	3.1 T
LS-API	6/15/2016	LAPI160615M	< 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	4/12/2016	LEPS160412M	< 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	5/10/2016	LEPS160510M	< 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	6/14/2016	LEPS160614M	< 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	4/13/2016	L46N160413M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	2.3 T	< 0.2 U
LS-MH46N	5/11/2016	L46N160511M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	2.1 T	< 0.2 U
LS-MH46N	6/15/2016	L46N160615M	< 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	4/13/2016	LP2A160413M	< 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	5/11/2016	LP2A160511M	< 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	6/15/2016	LP2A160615M	< 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	4/11/2016	VTRP160413C	< 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	4/12/2016	VTRP160412-	< 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	5/9/2016	VTRP160511C	< 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	5/10/2016	VTRP160510-	< 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	6/15/2016	LAPI160615F	< 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 April 1, 2016 to June 30, 2016
 Cedar Hills Landfill --- Leachate VOA Analytical Data
 Contact Person --- Senny Jimenez (206) 477-5224

Site	Date	Sample ID	1,2-Dichloro-propane	1,3 Dichloro-benzene	1,3-Dichloro-propane	1,4-Dichloro-benzene	2,2-Dichloro-propane	2-Butanone	2-Hexanone	2-Methyl-1-propanol	3-Chloro-propene	4-Methyl-2-Pentanone	Acetone	Acetonitrile
			78-87-5 (ug/L)	541-73-1 (ug/L)	142-28-9 (ug/L)	106-46-7 (ug/L)	594-20-7 (ug/L)	78-93-3 (ug/L)	591-78-6 (ug/L)	78-83-1 (ug/L)	107-05-1 (ug/L)	108-10-1 (ug/L)	67-64-1 (ug/L)	75-05-8 (ug/L)
LS-API	4/13/2016	LAPI160413M	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2950 D	< 4 U	< 100 U	< 10 U	28 T	3620 D	< 100 U	
LS-API	5/11/2016	LAPI160511M	< 0.2 U	< 0.2 U	< 0.2 U	2.4 T	< 0.2 U	5780 D	< 4 U	< 100 U	< 10 U	50.7	5850 D	< 100 U
LS-API	6/15/2016	LAPI160615M	< 0.2 U	3260 D	< 4 U	29 T	< 10 U	< 4 U	4850 D	< 100 U				
LS-LEPS	4/12/2016	LEPS160412M	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
LS-LEPS	5/10/2016	LEPS160510M	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
LS-LEPS	6/14/2016	LEPS160614M	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
LS-MH46N	4/13/2016	L46N160413M	< 0.2 U	< 0.2 U	< 0.2 U	9.33	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-MH46N	5/11/2016	L46N160511M	< 0.2 U	< 0.2 U	< 0.2 U	8.83	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-MH46N	6/15/2016	L46N160615M	< 0.2 U	< 0.2 U	< 0.2 U	6.52	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U
LS-PS2A	4/13/2016	LP2A160413M	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	46 T	< 100 U				
LS-PS2A	5/11/2016	LP2A160511M	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
LS-PS2A	6/15/2016	LP2A160615M	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
VOA TRIP BLANK	4/11/2016	VTRP160413C	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
VOA TRIP BLANK	4/12/2016	VTRP160412-	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
VOA TRIP BLANK	5/9/2016	VTRP160511C	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
VOA TRIP BLANK	5/10/2016	VTRP160510-	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				
FIELD BLANK	6/15/2016	LAPI160615F	< 0.2 U	< 4 U	< 4 U	< 100 U	< 10 U	< 4 U	< 4 U	< 100 U				

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016
 Cedar Hills Landfill --- Leachate VOA Analytical Data
 Contact Person --- Sency Jimenez (206) 477-5224

Site	Date	Sample ID	Acrolein (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromo-chloro-methane (ug/L)	Bromo-dichloro-methane (ug/L)	Bromoform (ug/L)	Bromo-methane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloro-dibromo-methane (ug/L)
			107-02-8	107-13-1	71-43-2	74-97-5	75-27-4	75-25-2	74-83-9	75-15-0	56-23-5	108-90-7	124-48-1
LS-API	4/13/2016	LAPI160413M	< 10 U	< 0.07 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	27 DT	23 DT	< 0.2 U	< 0.2 U	< 0.2 U
LS-API	5/11/2016	LAPI160511M	< 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
LS-API	6/15/2016	LAPI160615M	< 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
LS-LEPS	4/12/2016	LEPS160412M	< 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
LS-LEPS	5/10/2016	LEPS160510M	< 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
LS-LEPS	6/14/2016	LEPS160614M	< 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
LS-MH46N	4/13/2016	L46N160413M	< 10 U	< 0.07 U	3.4 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2 T	< 0.2 U
LS-MH46N	5/11/2016	L46N160511M	< 10 U	< 0.07 U	3.3 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2 T	< 0.2 U
LS-MH46N	6/15/2016	L46N160615M	< 10 U	< 0.07 U	2.4 T	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
LS-PS2A	4/13/2016	LP2A160413M	< 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
LS-PS2A	5/11/2016	LP2A160511M	< 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
LS-PS2A	6/15/2016	LP2A160615M	< 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
VOA TRIP BLANK	4/11/2016	VTRP160413C	< 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
VOA TRIP BLANK	4/12/2016	VTRP160412-	< 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
VOA TRIP BLANK	5/9/2016	VTRP160511C	< 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
VOA TRIP BLANK	5/10/2016	VTRP160510-	< 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
FIELD BLANK	6/15/2016	LAPI160615F	< 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

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016
 Cedar Hills Landfill --- Leachate VOA Analytical Data
 Contact Person --- Senny Jimenez (206) 477-5224

Site	Date	Sample ID	Chloroethane ($\mu\text{g/L}$)	Chloroform ($\mu\text{g/L}$)	Chloro-methane ($\mu\text{g/L}$)	Chloroprene ($\mu\text{g/L}$)	cis-1,2-Dichloro-ethene ($\mu\text{g/L}$)	cis-1,3-Dichloro-propene ($\mu\text{g/L}$)	Dibromo-methane ($\mu\text{g/L}$)	Dichloro-difluoro-methane ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	m & p Xylenes ($\mu\text{g/L}$)	Methyl Iodide ($\mu\text{g/L}$)
			75-00-3	67-66-3	74-87-3	126-99-8	156-59-2	10061-01-5	74-95-3	75-71-8	100-41-4	mpx	74-88-4
LS-API	4/13/2016	LAPI160413M	27 DT	< 0.2 U	32 DT	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.3 T	27 DT	< 0.2 U
LS-API	5/11/2016	LAPI160511M	< 0.2 U	< 0.2 U	< 0.2 U	< 20 U	2.2 T	< 0.2 U	< 0.2 U	< 0.2 U	4.1	10.9	< 0.2 U
LS-API	6/15/2016	LAPI160615M	< 0.2 U	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	2.8 T	7	< 0.2 U
LS-LEPS	4/12/2016	LEPS160412M	< 0.2 U	< 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
LS-LEPS	5/10/2016	LEPS160510M	< 0.2 U	< 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
LS-LEPS	6/14/2016	LEPS160614M	< 0.2 U	< 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
LS-MH46N	4/13/2016	L46N160413M	< 0.2 U	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	41.3	48.5	< 0.2 U
LS-MH46N	5/11/2016	L46N160511M	< 0.2 U	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	40.1	41.3	< 0.2 U
LS-MH46N	6/15/2016	L46N160615M	< 0.2 U	< 0.2 U	< 0.2 U	< 20 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	27.5	26.1	< 0.2 U
LS-PS2A	4/13/2016	LP2A160413M	< 0.2 U	< 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
LS-PS2A	5/11/2016	LP2A160511M	< 0.2 U	< 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
LS-PS2A	6/15/2016	LP2A160615M	< 0.2 U	< 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
VOA TRIP BLANK	4/11/2016	VTRP160413C	< 0.2 U	< 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
VOA TRIP BLANK	4/12/2016	VTRP160412-	< 0.2 U	< 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
VOA TRIP BLANK	5/9/2016	VTRP160511C	< 0.2 U	< 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
VOA TRIP BLANK	5/10/2016	VTRP160510-	< 0.2 U	< 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
FIELD BLANK	6/15/2016	LAPI160615F	< 0.2 U	< 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

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016
 Cedar Hills Landfill --- Leachate VOA Analytical Data
 Contact Person --- Senny Jimenez (206) 477-5224

Site	Date	Sample ID	Methyl	Methylacrylo-	Methylene	o-Xylene	Propriionitrile	Styrene	Tetrachloro-	Toluene	trans-1,2-	trans-1,3-	trans-1,4-	Trichloro-
			Methacrylate	nitrile	Chloride	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	Dichloro-	Dichloro-	Dichloro-2-	ethene
			80-62-6	126-98-7	75-09-2	95-47-6	107-12-0	100-42-5	127-18-4	108-88-3	156-60-5	10061-02-6	110-57-6	79-01-6
LS-API	4/13/2016	LAPI160413M	< 2 U	< 5 U	133 D	2.9 T	< 60 U	< 0.2 U	< 0.2 U	29 DT	20 DT	< 0.2 U	< 100 U	< 0.2 U
LS-API	5/11/2016	LAPI160511M	< 2 U	< 5 U	< 0.2 U	5.59	< 60 U	< 0.2 U	< 0.2 U	18.3	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U
LS-API	6/15/2016	LAPI160615M	< 2 U	< 5 U	3.4 T	3.8 T	< 60 U	< 0.2 U	< 0.2 U	14.2	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U
LS-LEPS	4/12/2016	LEPS160412M	< 2 U	< 5 U	14.7	< 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
LS-LEPS	5/10/2016	LEPS160510M	< 2 U	< 5 U	< 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
LS-LEPS	6/14/2016	LEPS160614M	< 2 U	< 5 U	< 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
LS-MH46N	4/13/2016	L46N160413M	< 2 U	< 5 U	6.14	3 T	< 60 U	< 0.2 U	< 0.2 U	3.9 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U
LS-MH46N	5/11/2016	L46N160511M	< 2 U	< 5 U	< 0.2 U	3 T	< 60 U	< 0.2 U	< 0.2 U	4.74	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U
LS-MH46N	6/15/2016	L46N160615M	< 2 U	< 5 U	2.3 T	2.2 T	< 60 U	< 0.2 U	< 0.2 U	3.4 T	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U
LS-PS2A	4/13/2016	LP2A160413M	< 2 U	< 5 U	5.25	< 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
LS-PS2A	5/11/2016	LP2A160511M	< 2 U	< 5 U	< 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
LS-PS2A	6/15/2016	LP2A160615M	< 2 U	< 5 U	< 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
VOA TRIP BLANK	4/11/2016	VTRP160413C	< 2 U	< 5 U	< 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
VOA TRIP BLANK	4/12/2016	VTRP160412-	< 2 U	< 5 U	< 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
VOA TRIP BLANK	5/9/2016	VTRP160511C	< 2 U	< 5 U	< 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
VOA TRIP BLANK	5/10/2016	VTRP160510-	< 2 U	< 5 U	< 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
FIELD BLANK	6/15/2016	LAPI160615F	< 2 U	< 5 U	2.2 T	< 0.2 U	< 60 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 100 U	< 0.2 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016
 Cedar Hills Landfill --- Leachate VOA Analytical Data
 Contact Person --- Senty Jimenez (206) 477-5224

Site	Date	Sample ID	Trichloro-	Vinyl	Vinyl
			fluoro-	Acetate	Chloride
			methane		
			75-69-4 (ug/L)	108-05-4 (ug/L)	75-01-4 (ug/L)
LS-API	4/13/2016	LAPI160413M	< 0.2 U	< 0.2 U	24.8 D
LS-API	5/11/2016	LAPI160511M	< 0.2 U	< 0.2 U	6.24 D
LS-API	6/15/2016	LAPI160615M	< 0.2 U	< 0.2 U	0.202
LS-LEPS	4/12/2016	LEPS160412M	< 0.2 U	< 0.2 U	< 0.02 U
LS-LEPS	5/10/2016	LEPS160510M	< 0.2 U	< 0.2 U	< 0.02 U
LS-LEPS	6/14/2016	LEPS160614M	< 0.2 U	< 0.2 U	< 0.02 U
LS-MH46N	4/13/2016	L46N160413M	< 0.2 U	< 0.2 U	6.95
LS-MH46N	5/11/2016	L46N160511M	< 0.2 U	< 0.2 U	4.53
LS-MH46N	6/15/2016	L46N160615M	< 0.2 U	< 0.2 U	2.41
LS-PS2A	4/13/2016	LP2A160413M	< 0.2 U	< 0.2 U	< 0.02 U
LS-PS2A	5/11/2016	LP2A160511M	< 0.2 U	< 0.2 U	< 0.02 U
LS-PS2A	6/15/2016	LP2A160615M	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/11/2016	VTRP160413C	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	4/12/2016	VTRP160412-	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	5/9/2016	VTRP160511C	< 0.2 U	< 0.2 U	< 0.02 U
VOA TRIP BLANK	5/10/2016	VTRP160510-	< 0.2 U	< 0.2 U	< 0.02 U
FIELD BLANK	6/15/2016	LAPI160615F	< 0.2 U	< 0.2 U	< 0.02 U

Environmental Monitoring Data

Data Collected from April 1, 2016 to June 30, 2016

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

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

Site	Date	Sample ID	2,4,5-T	2,4,5-TP	2,4-D	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Alpha BHC	Alpha Chlordane	Aroclor 1016	Aroclor 1221	Aroclor 1232
			93-76-5 (ug/L)	93-72-1 (ug/L)	94-75-7 (ug/L)	72-54-8 (ug/L)	72-55-9 (ug/L)	50-29-3 (ug/L)	309-00-2 (ug/L)	319-84-6 (ug/L)	57-74-9 (ug/L)	12674-11-2 (ug/L)	11104-28-2 (ug/L)	11141-16-5 (ug/L)
LS-API	4/13/2016	LAPI160413M	<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-API	5/11/2016	LAPI160511M	<2 U	1.55	<5 U	<0.1 U	<0.1 GU	<0.1 GU	<0.025 GU	<0.025 GU	<0.025 GU	<0.01 U	<0.01 U	<0.01 U
LS-API	6/15/2016	LAPI160615M	<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-LEPS	4/12/2016	LEPS160412M	<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-LEPS	5/10/2016	LEPS160510M	<2 U	<1 U	<5 U	<0.1 U	<0.1 GU	<0.1 GU	<0.025 GU	<0.025 GU	<0.025 GU	<0.01 U	<0.01 U	<0.01 U
LS-LEPS	6/14/2016	LEPS160614M	<2 U	1.67	7.42	<0.1 U	<0.1 U	<0.1 U	<0.025 U	<0.025 U	<0.025 U	<0.01 U	<0.01 U	<0.01 U
LS-MH46N	4/13/2016	L46N160413M	<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	0.094 T	<0.01 U
LS-MH46N	5/11/2016	L46N160511M	<2 U	<1 U	<5 U	<0.1 U	<0.1 U	<0.1 U	<0.025 U	<0.025 U	0.028 J	<0.01 U	<0.01 U	<0.01 U
LS-MH46N	6/15/2016	L46N160615M	<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	4/13/2016	LP2A160413M	<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	5/11/2016	LP2A160511M	<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	6/15/2016	LP2A160615M	<2 U	1.6	<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	6/15/2016	LAPI160615F	<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 April 1, 2016 to June 30, 2016

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

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

Site	Date	Sample ID	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Beta BHC	Delta BHC	Dieldrin	Dinoseb	Endo- sulfan I	Endo- sulfan II	Endo- sulfan Sulfate	Endrin
			53469-21-9 (ug/L)	12672-29-6 (ug/L)	11097-69-1 (ug/L)	11096-82-5 (ug/L)	319-85-7 (ug/L)	319-86-8 (ug/L)	60-57-1 (ug/L)	88-85-7 (ug/L)	959-98-8 (ug/L)	33213-65-9 (ug/L)	1031-07-8 (ug/L)	72-20-8 (ug/L)
LS-API	4/13/2016	LAPI160413M	0.14	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-API	5/11/2016	LAPI160511M	0.131	< 0.01 U	0.068 T	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-API	6/15/2016	LAPI160615M	0.143	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-LEPS	4/12/2016	LEPS160412M	0.048 T	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-LEPS	5/10/2016	LEPS160510M	0.075 T	< 0.01 U	0.042 T	< 0.01 GU	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-LEPS	6/14/2016	LEPS160614M	0.084 T	< 0.01 U	0.037 T	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-MH46N	4/13/2016	L46N160413M	0.132 J	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-MH46N	5/11/2016	L46N160511M	0.152	< 0.01 U	< 0.01 U	< 0.01 U	0.111	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-MH46N	6/15/2016	L46N160615M	0.151	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-PS2A	4/13/2016	LP2A160413M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-PS2A	5/11/2016	LP2A160511M	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U
LS-PS2A	6/15/2016	LP2A160615M	0.059 T	< 0.01 U	0.042 T	0.041 T	< 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	6/15/2016	LAPI160615F	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.025 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	< 0.1 U	< 0.5 U	< 0.1 U

Environmental Monitoring Data

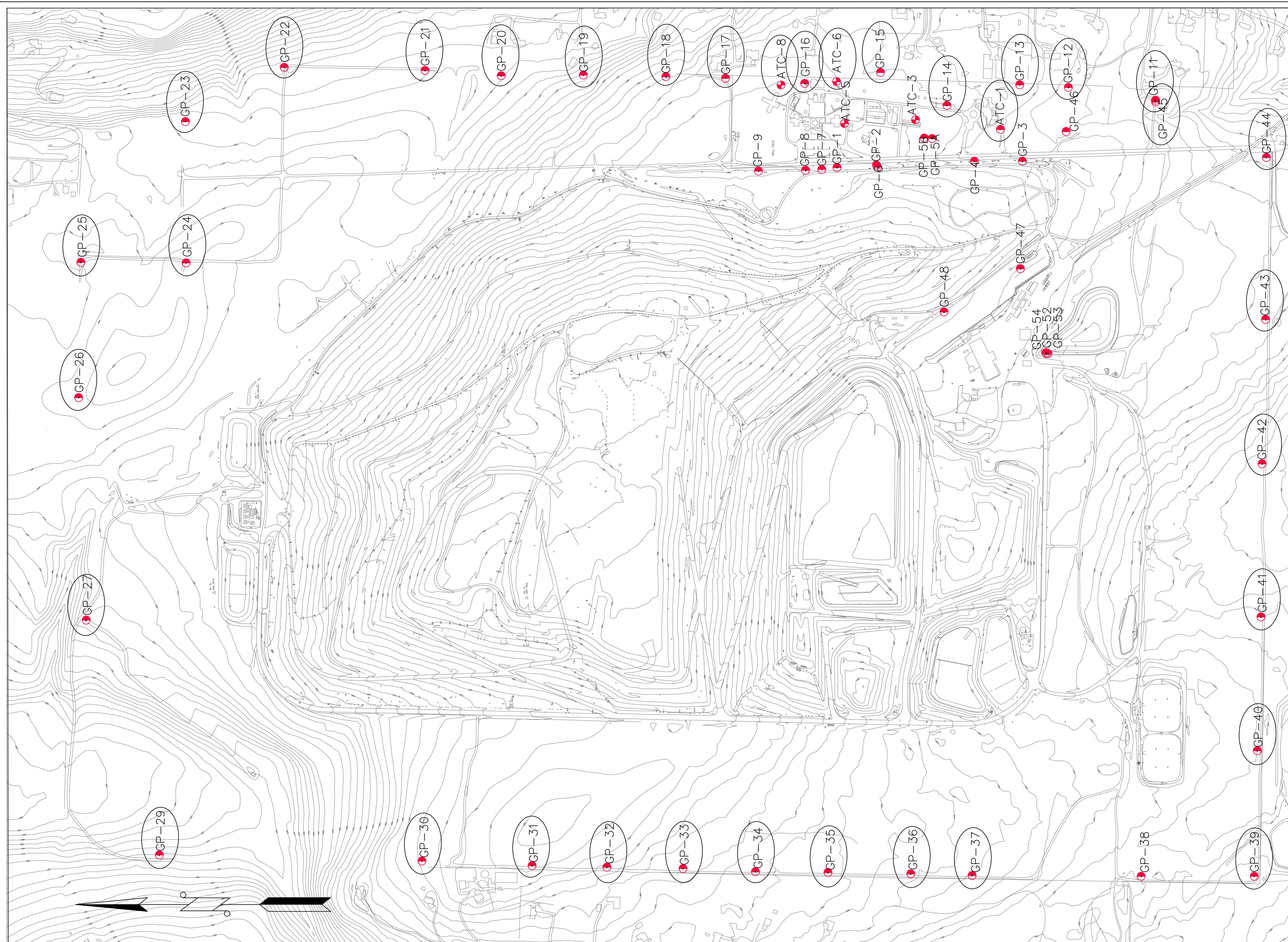
Data Collected from April 1, 2016 to June 30, 2016

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

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

Site	Date	Sample ID	Endrin	Heptachlor	Heptachlor	Isodrin	Lindane	Methoxy-	Toxaphene
			Aldehyde		Epoxide			chlor	
			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	4/13/2016	LAPI160413M	< 0.2 GU	< 0.025 U	< 0.025 U	< 10 U	0.0648	< 2 U	< 2.5 U
LS-API	5/11/2016	LAPI160511M	< 0.2 GU	< 0.025 U	< 0.025 U	< 10 U	0.043 JT	< 2 U	< 2.5 U
LS-API	6/15/2016	LAPI160615M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	0.371 G	< 2 U	< 2.5 U
LS-LEPS	4/12/2016	LEPS160412M	< 0.2 GU	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-LEPS	5/10/2016	LEPS160510M	< 0.2 GU	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-LEPS	6/14/2016	LEPS160614M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-MH46N	4/13/2016	L46N160413M	< 0.2 GU	< 0.025 U	< 0.025 U	< 10 U	0.0397	< 2 U	< 2.5 U
LS-MH46N	5/11/2016	L46N160511M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	0.06 J	< 2 U	< 2.5 U
LS-MH46N	6/15/2016	L46N160615M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-PS2A	4/13/2016	LP2A160413M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-PS2A	5/11/2016	LP2A160511M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
LS-PS2A	6/15/2016	LP2A160615M	< 0.2 U	< 0.025 U	< 0.025 U	< 10 U	< 0.025 U	< 2 U	< 2.5 U
FIELD BLANK	6/15/2016	LAPI160615F	< 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	GP-8 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	533.88	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	

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LEGEND

INTERIOR LGF MONITORING PROBES

LFG MIGRATION MONITORING PROBES

DATE	REVISION	BY

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

April 2016 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	4/19/2016 8:41	0.0	0.2	20.9	0	0.02	
ATC-01S	4/19/2016 8:40	0.0	0.1	21.0	0	0	
ATC-06D	4/19/2016 8:15	0.0	1.0	4.2	0	0.35	
ATC-06S	4/19/2016 8:13	0.0	0.1	21.0	0	-1.01	
ATC-08D	4/19/2016 8:02	0.0	0.3	19.2	0	-0.01	
ATC-08S	4/19/2016 8:00	0.0	2.2	17.2	0	-0.01	
GP-11A	4/19/2016 9:31	0.0	0.1	21.0	0	0.06	
GP-11B	4/19/2016 9:32	0.0	0.6	15.2	0	0.26	
GP-11C	4/19/2016 9:34	0.0	0.2	18.3	0	0.59	
GP-11D	4/19/2016 9:35	0.0	0.1	21.0	0	0.05	
GP-12A	4/19/2016 8:49	0.0	0.1	21.0	0	-0.01	
GP-12B	4/19/2016 8:51	0.0	0.1	21.0	0	-0.01	
GP-12C	4/19/2016 8:52	0.0	0.2	16.4	0	-14.44	
GP-12D	4/19/2016 8:54	0.0	0.2	20.3	0	0.18	
GP-13A	4/19/2016 8:57	0.0	0.1	21.0	0	0.03	
GP-13B	4/19/2016 8:59	0.0	0.1	21.0	0	0.04	
GP-13C	4/19/2016 9:00	0.0	0.2	15.2	0	-0.03	
GP-13D	4/19/2016 9:01	0.0	0.1	21.0	0	0.23	
GP-14A	4/19/2016 9:06	0.0	0.1	21.0	0	0.06	
GP-14B	4/19/2016 9:07	0.0	0.1	21.0	0	0	
GP-15A	4/19/2016 8:23	0.0	0.2	20.8	0	0.02	
GP-15C	4/19/2016 8:24	0.0	2.1	10.5	0	-0.02	
GP-15D	4/19/2016 8:26	0.0	0.1	20.9	0	-1.05	
GP-16A	4/19/2016 8:06	0.0	0.2	21.0	0	0.01	
GP-16B	4/19/2016 8:07	0.0	0.1	21.0	0	0.31	
GP-16C	4/19/2016 8:09	0.0	0.2	20.6	0	0.51	
GP-17A	4/19/2016 10:55	0.0	0.2	21.0	0	-2.85	No Reading, Water.
GP-17B	4/19/2016 10:57	0.0	0.8	18.0	0	0	
GP-17C	4/19/2016 10:58	0.0	0.0	21.0	0	0.89	
GP-18A	4/19/2016 11:02	0.0	0.1	21.0	0	-9.51	No Reading, Water.
GP-18B	4/19/2016 11:04	0.0	0.2	12.9	0	0.07	
GP-18C	4/19/2016 11:05	0.0	0.1	17.9	0	1.01	
GP-19A	4/19/2016 11:08	0.0	0.0	21.0	0	0	
GP-19B	4/19/2016 11:09	0.0	0.5	16.2	0	0.12	
GP-19C	4/19/2016 11:10	0.0	0.0	21.0	0	0.07	
GP-20A	4/19/2016 11:13	0.0	0.0	21.0	0	0.01	
GP-20B	4/19/2016 11:14	0.0	0.2	18.3	0	0.09	
GP-20C	4/19/2016 11:16	0.0	0.1	7.3	0	0.48	
GP-21A	4/19/2016 11:18	0.0	0.0	21.0	0	0.02	
GP-21B	4/19/2016 11:20	0.0	0.1	10.7	0	0.28	
GP-21C	4/19/2016 11:21	0.0	0.0	12.8	0	-0.07	No Reading, Water.
GP-22A	4/19/2016 11:25	0.0	0.4	20.8	0	-12.18	
GP-22C	4/19/2016 11:26	0.0	1.4	3.9	0	0.98	
GP-23A	4/19/2016 11:30	0.0	0.0	21.0	0	0.05	
GP-23B	4/19/2016 11:31	0.0	0.0	21.0	0	0.04	
GP-23C	4/19/2016 11:33	0.0	0.0	21.0	0	0.01	
GP-24A	4/19/2016 11:36	0.0	4.5	7.4	0	0.01	
GP-24B	4/19/2016 11:37	0.0	0.4	20.2	0	-0.01	
GP-25	4/19/2016 11:39	0.0	2.7	14.2	0	0.03	
GP-26	4/19/2016 11:42	0.0	0.6	20.7	0	0.15	
GP-27	4/19/2016 11:45	0.0	5.8	9.8	0	0.02	
GP-29A	4/19/2016 11:50	0.0	1.2	19.9	0	0.03	
GP-29B	4/19/2016 11:52	0.0	0.6	21.0	0	0.01	
GP-30A	4/19/2016 12:45	0.0	2.4	17.9	0	0.05	
GP-30B	4/19/2016 12:46	0.0	1.1	19.2	0	0.02	
GP-31A	4/19/2016 12:49	0.0	0.9	19.2	0	0.3	No Reading, Water.
GP-31B	4/19/2016 12:51	0.0	0.2	18.5	0	0	
GP-31C	4/19/2016 12:52	0.0	0.7	19.4	0	0.04	
GP-32A	4/19/2016 12:55	0.0	1.4	19.8	0	0.88	
GP-32B	4/19/2016 12:56	0.0	0.4	20.7	0	0.06	
GP-32C	4/19/2016 12:58	0.0	0.4	20.7	0	0.01	
GP-33A	4/19/2016 13:00	0.0	1.3	18.2	0	0.03	
GP-33B	4/19/2016 13:02	0.0	0.1	21.0	0	0	
GP-33C	4/19/2016 13:03	0.0	0.0	21.0	0	-0.05	
GP-34A	4/19/2016 13:05	0.0	0.1	21.0	0	0.01	No Reading, Water.
GP-34B	4/19/2016 13:06	0.0	0.1	20.3	0	0.02	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

April 2016 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-34C	4/19/2016 13:08	0.0	0.0	20.5	0	0.9	
GP-35A	4/19/2016 13:11	0.0	0.0	21.0	0	0.02	
GP-35B	4/19/2016 13:12	0.0	0.0	21.0	0	0.03	
GP-35C	4/19/2016 13:14	0.0	0.0	21.0	0	0.03	
GP-36A	4/19/2016 13:16	0.0	0.2	7.5	0	0.7	
GP-36B	4/19/2016 13:18	0.0	0.0	20.7	0	0.03	
GP-36C	4/19/2016 13:19	0.0	0.3	8.9	0	1.84	
GP-37A	4/19/2016 13:22	0.0	0.2	9.0	0	0.09	No Reading, Water.
GP-37B	4/19/2016 13:23	0.0	0.1	20.0	0	0.82	
GP-37C	4/19/2016 13:25	0.0	0.5	1.6	0	2	
GP-39	4/19/2016 13:29	0.0	0.9	18.0	0	0.04	
GP-40	4/19/2016 13:33	0.0	0.0	17.3	0	0.02	
GP-41A	4/19/2016 13:36	0.0	0.0	20.6	0	0.02	
GP-41B	4/19/2016 13:37	0.0	0.0	20.4	0	0.08	
GP-41C	4/19/2016 13:38	0.0	0.0	20.6	0	0.06	
GP-42A	4/19/2016 14:09	0.0	0.0	21.0	0	0	No Reading, Water.
GP-42B	4/19/2016 14:17	0.0	0.5	20.2	0	0.67	
GP-43A	4/19/2016 14:23	0.0	0.2	21.0	0	0.49	
GP-43B	4/19/2016 14:24	0.0	0.0	21.0	0	-0.01	
GP-43C	4/19/2016 14:26	0.0	0.0	21.0	0	-0.01	
GP-44A	4/19/2016 14:30	0.0	0.0	21.0	0	-0.01	
GP-44B	4/19/2016 14:31	0.0	0.2	19.7	0	0.02	
GP-44C	4/19/2016 14:33	0.0	0.0	21.0	0	0.01	
GP-45D	4/19/2016 9:40	0.0	0.1	20.7	0	0.38	
GP-45I	4/19/2016 9:38	0.0	0.1	19.2	0	0.06	
GP-45S	4/19/2016 9:37	0.0	0.1	21.0	0	0.05	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

May 2016 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	5/4/2016 8:05	0.0	0.2	21.0	0	-0.06	
ATC-01S	5/4/2016 8:04	0.0	0.1	21.0	0	0.02	
ATC-06D	5/4/2016 9:06	0.0	0.8	7.2	0	0.03	
ATC-06S	5/4/2016 9:04	0.0	1.7	17.6	0	0.02	
ATC-08D	5/4/2016 9:18	0.0	0.2	19.5	0	0.01	
ATC-08S	5/4/2016 9:16	0.0	2.4	16.6	0	0.07	
GP-11A	5/4/2016 7:43	0.0	0.4	20.9	0	-0.05	
GP-11B	5/4/2016 7:44	0.0	0.1	21.0	0	-0.17	
GP-11C	5/4/2016 7:46	0.0	0.1	21.0	0	-0.07	
GP-11D	5/4/2016 7:48	0.0	0.1	21.0	0	-0.02	
GP-12A	5/4/2016 8:13	0.0	0.1	21.0	0	-0.02	
GP-12B	5/4/2016 8:15	0.0	0.1	21.0	0	-0.01	
GP-12C	5/4/2016 8:16	0.0	0.2	17.7	0	-14.73	
GP-12D	5/4/2016 8:18	0.0	0.2	21.0	0	-0.04	
GP-13A	5/4/2016 8:22	0.0	0.1	21.0	0	0.01	
GP-13B	5/4/2016 8:24	0.0	0.1	21.0	0	0	
GP-13C	5/4/2016 8:26	0.0	0.1	21.0	0	-0.06	
GP-13D	5/4/2016 8:28	0.0	0.1	21.0	0	-0.58	
GP-14A	5/4/2016 8:34	0.0	0.1	20.9	0	-0.15	
GP-14B	5/4/2016 8:36	0.0	0.1	20.9	0	-0.19	
GP-15A	5/4/2016 8:49	0.0	0.1	20.8	0	-0.03	
GP-15C	5/4/2016 8:51	0.0	0.7	16.9	0	0.01	
GP-15D	5/4/2016 8:53	0.0	0.1	20.8	0	-2.27	
GP-16A	5/4/2016 9:09	0.0	3.6	14.8	0	0.06	
GP-16B	5/4/2016 9:11	0.0	0.2	20.5	0	-0.48	
GP-16C	5/4/2016 9:13	0.0	0.1	20.6	0	-0.51	
GP-17A	5/4/2016 12:44	0.0	0.0	0.0	0	0	No Reading, Water.
GP-17B	5/4/2016 12:47	0.0	0.8	17.2	0	0.23	
GP-17C	5/4/2016 12:48	0.0	0.1	20.0	0	-0.21	
GP-18A	5/4/2016 12:54	0.0	1.4	14.7	0	0.12	
GP-18B	5/4/2016 12:56	0.0	0.3	11.9	0	0.18	
GP-18C	5/4/2016 12:58	0.0	0.2	16.4	0	0.13	
GP-19A	5/4/2016 13:01	0.0	0.0	20.4	0	0.11	
GP-19B	5/4/2016 13:03	0.0	0.6	15.5	0	0.08	
GP-19C	5/4/2016 13:05	0.0	0.0	20.6	0	0.12	
GP-20A	5/4/2016 16:18	0.0	0.0	20.0	0	0.05	
GP-20B	5/4/2016 16:20	0.0	0.3	16.8	0	0.05	
GP-20C	5/4/2016 16:21	0.0	0.2	12.2	0	0.27	
GP-21A	5/4/2016 13:14	0.0	0.0	20.5	0	0.1	
GP-21B	5/4/2016 13:16	0.0	0.1	10.2	0	0.38	
GP-21C	5/4/2016 13:17	0.0	0.3	13.1	0	-0.03	
GP-22A	5/4/2016 13:20	0.0	2.0	12.3	0	0.13	
GP-22C	5/4/2016 13:23	0.0	1.3	3.5	0	0.31	
GP-23A	5/4/2016 13:30	0.0	0.1	20.4	0	0.1	
GP-23B	5/4/2016 13:32	0.0	0.0	20.5	0	0.1	
GP-23C	5/4/2016 13:34	0.0	0.0	20.6	0	0.12	
GP-24A	5/4/2016 13:40	0.0	5.3	7.7	0	0.09	
GP-24B	5/4/2016 13:41	0.0	0.7	17.7	0	0.11	
GP-25	5/4/2016 13:46	0.0	3.1	14.4	0	0.12	
GP-26	5/4/2016 13:50	0.0	0.5	20.2	0	0.09	
GP-27	5/4/2016 13:55	0.0	6.9	9.0	0	0.14	
GP-29A	5/4/2016 14:00	0.0	0.5	20.0	0	0.1	
GP-29B	5/4/2016 14:02	0.0	0.7	20.1	0	0.06	
GP-30A	5/4/2016 14:13	0.0	2.3	17.5	0	0.1	
GP-30B	5/4/2016 14:15	0.0	1.0	18.5	0	0.03	
GP-31A	5/4/2016 14:18	0.0	0.0	0.0	0	0	No Reading, Water.
GP-31B	5/4/2016 14:20	0.0	0.2	19.0	0	0.06	
GP-31C	5/4/2016 14:22	0.0	1.3	16.4	0	0.07	
GP-32A	5/4/2016 14:26	0.0	0.2	20.5	0	0.08	
GP-32B	5/4/2016 14:28	0.0	0.2	20.4	0	0.21	
GP-32C	5/4/2016 14:29	0.0	0.3	20.4	0	0.06	
GP-33A	5/4/2016 14:32	0.0	0.2	20.6	0	1.32	
GP-33B	5/4/2016 14:34	0.0	0.1	20.7	0	0.05	
GP-33C	5/4/2016 14:36	0.0	0.1	20.7	0	-0.49	
GP-34A	5/4/2016 14:39	0.0	0.0	0.0	0	0	No Reading, Water.
GP-34B	5/4/2016 14:41	0.0	0.2	20.5	0	0.08	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

May 2016 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-34C	5/4/2016 14:44	0.0	0.1	20.7	0	-0.01	
GP-35A	5/4/2016 14:47	0.0	0.1	20.7	0	0.1	
GP-35B	5/4/2016 14:49	0.0	0.1	20.7	0	0.07	
GP-35C	5/4/2016 14:51	0.0	0.1	20.7	0	0.06	
GP-36A	5/4/2016 14:55	0.0	0.3	4.1	0	0.43	
GP-36B	5/4/2016 14:56	0.0	0.3	17.6	0	0.1	
GP-36C	5/4/2016 14:58	0.0	0.3	19.3	0	0.31	
GP-37A	5/4/2016 15:03	0.0	0.0	0.0	0	0	No Reading, Water.
GP-37B	5/4/2016 15:04	0.0	0.5	17.8	0	1.38	
GP-37C	5/4/2016 15:06	0.0	0.6	1.8	0	0.22	
GP-39	5/4/2016 15:13	0.0	1.4	17.5	0	0.05	
GP-40	5/4/2016 15:17	0.0	0.1	16.7	0	-0.51	
GP-41A	5/4/2016 15:22	0.0	0.1	20.5	0	0.05	
GP-41B	5/4/2016 15:24	0.0	0.1	20.5	0	0.17	
GP-41C	5/4/2016 15:26	0.0	0.1	20.6	0	0.07	
GP-42A	5/4/2016 15:29	0.0	0.0	0.0	0	0	No Reading, Water.
GP-42B	5/4/2016 15:31	0.0	0.7	19.0	0	0.51	
GP-43A	5/4/2016 15:34	0.0	0.3	19.9	0	0.21	
GP-43B	5/4/2016 15:36	0.0	0.1	20.6	0	0.07	
GP-43C	5/4/2016 15:38	0.0	0.1	19.9	0	0.04	
GP-44A	5/4/2016 15:43	0.0	0.1	20.6	0	0.06	
GP-44B	5/4/2016 15:45	0.0	0.1	20.7	0	-0.45	
GP-44C	5/4/2016 15:47	0.0	0.1	20.6	0	0.06	
GP-45D	5/4/2016 7:55	0.0	0.1	21.0	0	-0.1	
GP-45I	5/4/2016 7:53	0.0	0.1	21.0	0	0	
GP-45S	5/4/2016 7:51	0.0	0.1	21.0	0	0.03	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
June 2016 Monitoring

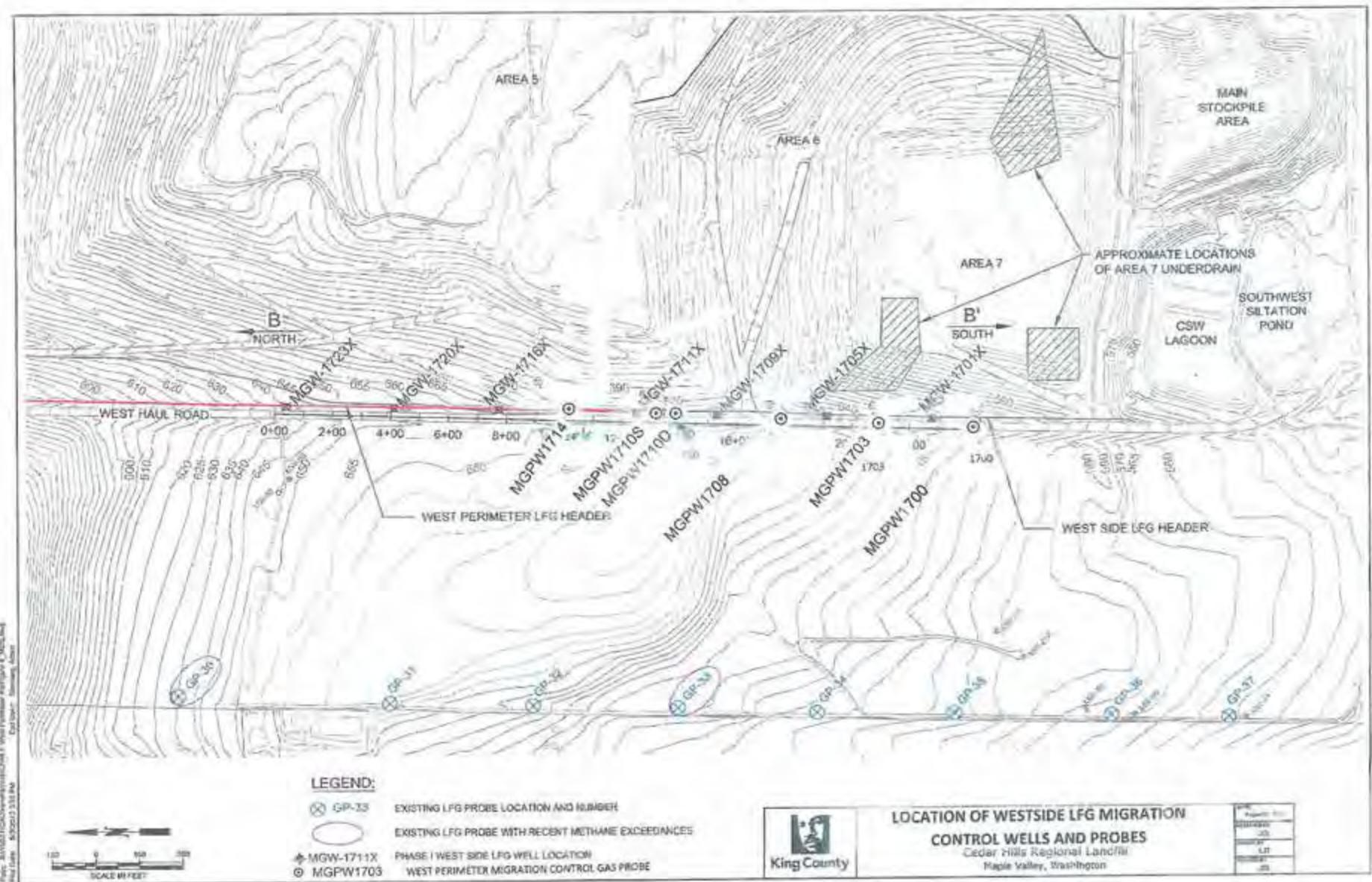
Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
ATC-01D	6/14/2016 12:52	0.0	0.1	20.8	0	0	
ATC-01S	6/14/2016 12:51	0.0	1.9	18.7	0	-0.01	
ATC-06D	6/14/2016 13:02	0.0	0.1	20.8	0	-0.02	
ATC-06S	6/14/2016 13:01	0.0	0.2	20.7	0	-0.03	
ATC-08D	6/14/2016 13:21	0.0	0.2	19.9	0	0.03	
ATC-08S	6/14/2016 13:20	0.0	2.7	18.3	0	0.01	
GP-11A	6/14/2016 12:11	0.0	0.7	18.8	0	0.01	
GP-11B	6/14/2016 12:13	0.0	0.6	14.1	0	0.05	
GP-11C	6/14/2016 12:14	0.0	0.2	17.0	0	-0.02	
GP-11D	6/14/2016 12:15	0.0	0.1	20.1	0	0.07	
GP-12A	6/14/2016 12:29	0.0	0.1	20.2	0	0.04	
GP-12B	6/14/2016 12:31	0.0	0.1	20.3	0	0.01	
GP-12C	6/14/2016 12:32	0.0	0.1	19.6	0	-2.05	
GP-12D	6/14/2016 12:34	0.0	0.2	20.2	0	0.84	
GP-13A	6/14/2016 12:38	0.0	2.2	18.2	0	0	
GP-13B	6/14/2016 12:39	0.0	0.1	20.5	0	-0.02	
GP-13C	6/14/2016 12:40	0.0	0.2	14.6	0	-0.01	
GP-13D	6/14/2016 12:42	0.0	0.1	20.3	0	0.11	
GP-14A	6/14/2016 12:46	0.0	0.1	20.0	0	0.02	
GP-14B	6/14/2016 12:47	0.0	0.1	20.7	0	0.02	
GP-15A	6/14/2016 13:06	0.0	0.0	0.0	0	-0.02	No Reading, Water.
GP-15C	6/14/2016 13:07	0.0	1.5	11.5	0	-0.01	
GP-15D	6/14/2016 13:08	0.0	0.1	20.7	0	-1.78	
GP-16A	6/14/2016 13:24	0.0	2.7	18.7	0	0	
GP-16B	6/14/2016 13:26	0.0	0.1	20.6	0	0.18	
GP-16C	6/14/2016 13:27	0.0	0.2	19.5	0	0.63	
GP-17A	6/14/2016 10:18	0.0	0.0	0.0	0	0.06	No Reading, Water.
GP-17B	6/14/2016 10:19	0.0	0.6	18.5	0	0.07	
GP-17C	6/14/2016 10:21	0.0	0.1	20.4	0	0.92	
GP-18A	6/14/2016 10:23	0.0	1.6	16.3	0	-0.01	
GP-18B	6/14/2016 10:25	0.0	0.2	17.2	0	0.01	
GP-18C	6/14/2016 10:26	0.0	0.2	17.6	0	1.05	
GP-19A	6/14/2016 10:29	0.0	0.1	20.4	0	0.03	
GP-19B	6/14/2016 10:30	0.0	0.4	17.4	0	0.07	
GP-19C	6/14/2016 10:31	0.0	0.1	20.4	0	0.01	
GP-20A	6/14/2016 10:34	0.0	0.4	19.9	0	0.04	
GP-20B	6/14/2016 10:35	0.0	0.2	18.2	0	0.05	
GP-20C	6/14/2016 10:36	0.0	0.2	14.6	0	-0.01	
GP-21A	6/14/2016 10:39	0.0	0.1	20.5	0	0.02	
GP-21B	6/14/2016 10:40	0.0	0.1	12.1	0	0.06	
GP-21C	6/14/2016 10:42	0.0	0.1	20.6	0	-0.5	
GP-22A	6/14/2016 10:47	0.0	3.3	12.0	0	-0.01	
GP-22C	6/14/2016 10:48	0.0	1.6	3.1	0	0.9	
GP-23A	6/14/2016 13:58	0.0	0.1	20.3	0	0.02	
GP-23B	6/14/2016 13:59	0.0	0.1	20.4	0	-0.01	
GP-23C	6/14/2016 14:00	0.0	0.1	20.4	0	0.08	
GP-24A	6/14/2016 14:05	0.0	5.9	12.1	0	0.04	
GP-24B	6/14/2016 14:06	0.0	1.1	19.3	0	0.17	
GP-25	6/14/2016 14:10	0.0	3.4	16.7	0	0.05	
GP-26	6/14/2016 14:13	0.0	0.2	20.2	0	0.05	
GP-27	6/14/2016 14:16	0.0	7.2	10.0	0	0.04	
GP-29A	6/14/2016 14:21	0.0	1.2	19.0	0	0.04	
GP-29B	6/14/2016 14:22	0.0	0.5	20.1	0	0.04	
GP-30A	6/14/2016 6:48	0.0	2.8	17.7	0	0.05	
GP-30B	6/14/2016 6:49	0.0	1.2	18.8	0	0.03	
GP-31A	6/14/2016 6:53	0.5	14.1	1.8	10	-0.25	
GP-31B	6/14/2016 6:54	0.0	0.4	16.3	0	0.09	
GP-31C	6/14/2016 6:56	0.0	1.2	17.5	0	0.04	
GP-32A	6/14/2016 7:01	0.0	0.3	19.9	0	0.08	
GP-32B	6/14/2016 7:02	0.0	0.3	20.0	0	0.08	
GP-32C	6/14/2016 7:03	0.0	0.2	20.1	0	0.06	
GP-33A	6/14/2016 7:09	0.0	2.4	17.7	0	0.02	
GP-33B	6/14/2016 7:10	0.0	0.1	20.2	0	0.02	
GP-33C	6/14/2016 7:11	0.0	0.1	20.2	0	-0.13	
GP-34A	6/14/2016 7:17	0.0	0.0	0.0	0	1.8	No Reading, Water.
GP-34B	6/14/2016 7:19	0.0	0.3	19.8	0	-0.01	
GP-34C	6/14/2016 7:20	0.0	0.1	19.5	0	1	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
June 2016 Monitoring

Probe ID	Date/Time	CH4 %vol	CO2 %vol	O2 %vol	Lower Explosive Limit %LEL	Static Pressure in INWC	Comments
GP-35A	6/14/2016 7:32	0.0	0.2	20.2	0	0.08	
GP-35B	6/14/2016 7:33	0.0	0.1	20.2	0	0.07	
GP-35C	6/14/2016 7:34	0.0	0.1	20.0	0	0.1	
GP-36A	6/14/2016 7:39	0.0	0.3	8.9	0	0.51	
GP-36B	6/14/2016 7:40	0.0	0.1	20.0	0	0.08	
GP-36C	6/14/2016 7:41	0.0	0.3	14.1	0	0.62	
GP-37A	6/14/2016 7:47	0.0	0.1	20.0	0	-0.01	
GP-37B	6/14/2016 7:48	0.0	0.1	20.1	0	-0.02	
GP-37C	6/14/2016 7:49	0.0	0.5	5.6	0	1.53	
GP-39	6/14/2016 7:58	0.0	1.7	17.8	0	0.01	
GP-40	6/14/2016 8:07	0.0	0.1	16.0	0	0.02	
GP-41A	6/14/2016 8:10	0.0	5.9	14.0	0	0	
GP-41B	6/14/2016 8:12	0.0	0.9	5.5	0	0.04	
GP-41C	6/14/2016 8:13	0.0	0.1	20.0	0	-0.08	
GP-42A	6/14/2016 8:17	0.0	0.0	0.0	0	-0.03	No Reading, Water.
GP-42B	6/14/2016 8:18	0.0	0.6	17.8	0	0.48	
GP-43A	6/14/2016 8:22	0.0	0.1	20.2	0	-0.2	
GP-43B	6/14/2016 8:23	0.0	0.1	20.3	0	0	
GP-43C	6/14/2016 8:24	0.0	0.1	20.1	0	0.06	
GP-44A	6/14/2016 8:28	0.0	0.1	20.3	0	0.07	
GP-44B	6/14/2016 8:29	0.0	0.2	19.3	0	0.4	
GP-44C	6/14/2016 8:31	0.0	0.1	20.2	0	0.07	
GP-45D	6/14/2016 12:19	0.0	0.1	19.9	0	0.04	
GP-45I	6/14/2016 12:18	0.0	0.1	19.5	0	0.07	
GP-45S	6/14/2016 12:17	0.0	0.1	20.1	0	0.05	

**SECOND QUARTER
BUILDING MONITORING**

 King County	INSTRUMENT: Place check by instrument used :			<input type="checkbox"/> <input checked="" type="checkbox"/> X	WEATHER: Sunny	DATE: 04/07/16 TECH: DB
	HEATH DetectoPak III (sn:8746-4) Foxboro TVA 1000 FID/PID (sn: 7785301)					
ENVIS ID	BLDG #	DESCRIPTION	CH ₄ (ppm)	BAR PRESS (in. Hg)	TIME	REMARKS
GOC- 04/07/16	1	FRONT OFFICE	0	29.90	2:05pm	
GCR- 04/07/16	2	CONF ROOM	0	29.90	2:07pm	
GAO- 04/07/16	3	PAYROLL OFFICE	0	29.90	2:10pm	
GEO- 04/07/16	4	ENGR. OFFICE	0	29.90	2:12pm	
GLRC- 04/07/16	5	LUNCHROOM	0	29.90	2:15pm	
GSPC 04/07/16		SPOC	0	29.90	2:25pm	
GELO- 04/07/16 A	6A	DRY STORAGE	0	29.90	2:18pm	
GELO- 04/07/16 B	6B	ELECTRICIAN OFFICE	0	29.90	2:20pm	
GAP- 04/07/16		ACCOUNT PAYABLE	0	29.90	2:22pm	
GSO- 04/07/16 A	7A	SHOP OFFICE	0	29.90	2:30pm	
GPR- 04/07/16 B	7B	PARTS ROOM	0	29.90	2:27pm	
GMS- 04/07/16 C	7C	SHOP PIT AREA/BAY	0	29.90	2:32pm	
GTB- 04/07/16 D	7D	SHOP TIRE BAY	0	29.90	2:35pm	
GEW- 04/07/16 E	7E	EAST WELD SHOP	0	29.90	2:40pm	
GWW- 04/07/16 F	7F	WEST WELD SHOP	0	29.90	2:42pm	
GCS- 04/07/16	8	CARPENTER'S	0	29.90	3:00pm	
GSS- 04/07/16	9	WASTEWATER	0	29.90	3:05pm	
GSS- 04/07/16 B	9B	CARPENTER/STORAGE	0	29.90	3:10pm	
GSH- 04/07/16	10	SCALEHOUSE	0	29.90	2:02pm	
GB13- 04/07/16	13	WW COMPRESSOR	0	29.90	3:15pm	
GB16- 04/07/16	16	GENERATOR	0	29.90	3:20pm	
GB19- 04/07/16	19	LEPS (P.S.# 5)	0	29.90	3:30pm	
GB19- 04/07/16 B	19B	LEPS/H ₂ O ₂ ROOM	0	29.90	3:32pm	
GB20- 04/07/16	20	LEPS ELEC PANALS	0	29.90	3:35pm	
GB21- 04/07/16	21	STORAGE(OLD PS 1)	0	29.90	3:45pm	
GB22- 04/07/16	22	STORAGE/N FLARE	0	29.90	4:20pm	
GB23- 04/07/16	23	LFGAS	0	29.90	4:22pm	
GB24- 04/07/16	24	NE GENERATOR BLDG	0	29.90	4:00pm	
GBWW- 04/07/16	30	WOMEN BRK RM	0	29.90	2:26pm	
GPWT- 04/07/16	PW	PRESSURE WASH RM	0	29.90	2:50pm	
GBRR- 04/07/16	RR	TRUCKWASH RR W	0	29.90	2:52pm	
GBSS- 04/07/16	SS	TRUCKWASH RR E	0	29.90	2:55pm	
GBZZ- 04/07/16	29	MANAGERS TRAILER	0	29.90	2:17pm	
GBPT- 04/07/16		CCG FASTER	0	29.90	2:16pm	
GCLS- 04/07/16		CHLORINE SHED	0	29.90	2:00pm	



CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Second Quarter 2016 Monitoring

Probe ID	Date	Time	Barometric			Static	
			Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Pressure in INWC
MGPW 1700	4/6/2016	12:20pm	30.37	0.0	0.2	19.9	-0.1
MGPW 1700	4/21/2016	12:15pm	29.86	0.0	0.2	18.4	0.12
MGPW 1700	5/3/2016	10:33am	30.02	0.0	0.0	20.5	0
MGPW 1700	5/19/2016	8:33am	29.94	0.0	0.0	20.8	0.33
MGPW 1700	6/8/2016	2:33pm	29.9	0.0	0.1	19.7	-0.1
MGPW 1700	6/21/2016	1:36pm	30.22	0.1	0.1	20.5	-0.08
MGPW 1708	4/6/2016	12:25pm	30.37	0.0	0.2	20.2	-1.36
MGPW 1708	4/21/2016	12:20pm	29.86	0.0	0.1	19.7	-0.52
MGPW 1708	5/3/2016	10:29am	30.02	0.0	0.0	20.5	-1.46
MGPW 1708	5/19/2016	8:29am	29.94	0.0	0.0	20.9	-0.58
MGPW 1708	6/8/2016	2:37pm	29.9	0.0	0.1	20.4	-2.21
MGPW 1708	6/21/2016	1:45pm	30.22	0.0	0.1	20.0	-1.66
MGPW 1710S	4/6/2016	11:33am	30.37	0.0	0.3	19.8	-0.64
MGPW 1710S	4/21/2016	11:15am	29.86	0.0	0.1	20.0	-0.38
MGPW 1710S	5/3/2016	10:24am	30.02	0.0	0.0	20.7	-1.18
MGPW 1710S	5/19/2016	8:22am	29.94	0.0	0.0	20.8	-0.51
MGPW 1710S	6/8/2016	2:41pm	29.90	0.0	0.1	20.5	-1.72
MGPW 1710S	6/21/2016	1:51pm	30.22	0.0	0.1	19.8	-1.01
MGPW 1710D	4/6/2016	11:35am	30.37	0.0	0.2	20.1	-1.22
MGPW 1710D	4/21/2016	11:13am	29.86	0.0	0.1	19.9	-0.56
MGPW 1710D	5/3/2016	10:26am	30.02	0.0	0.0	20.6	-1.25
MGPW 1710D	5/19/2016	8:24am	29.94	0.0	0.0	20.8	-0.56
MGPW 1710D	6/8/2016	2:43pm	29.9	0.0	0.1	20.6	-2.04
MGPW 1710D	6/21/2016	1:53pm	30.22	0.0	0.1	20.0	-1.34
MGPW 1714	4/6/2016	11:15am	30.37	0.0	0.2	19.9	-1.23
MGPW 1714	4/21/2016	11:09am	29.86	0.0	0.2	19.8	-0.5
MGPW 1714	5/3/2016	10:22am	30.02	0.0	0.0	20.8	-1.14
MGPW 1714	5/19/2016	8:20am	29.94	0.0	0.0	20.7	-0.45
MGPW 1714	6/8/2016	2:46pm	29.90	0.0	0.1	20.6	-1.93
MGPW 1714	6/21/2016	1:59pm	30.22	0.0	0.1	19.8	-1.16

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

QUAL	QUALIFIER DESCRIPTION
U	Undetected; Analyte Concentration Less than Method Detection Limit (< MDL)
T	Estimated; Less than Reporting Detection Limit (<RDL) but Greater than Method Detection Limit (> MDL)
J	Reported Value is an Estimate
B	Matrix Target Analyte Present in Blank, AND, Sample Result Less than or Equal to 10x Blank Detection
C	Confluent Growth
E	Estimated; Outside Expected Accuracy
H	Exceeds Holding Time
R	Data Rejected
S	Sample Handling Errors
X	Too Numerous to Count
D	Re-analysis Due to Dilution
P	PASS – Qualitative Result Acceptable
F	FAIL – Qualitative Result is not Acceptable
G	Estimated with Low Bias (Coliform; BOD; All Other Chemistry Parameters)
L	Estimated with High Bias (BOD; All Other Chemistry Parameters)

APPENDIX C

Meteorological Data

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/1/2016	1:00	3.25525	14.693	9.94975	11.58	29.8825	0
4/1/2016	2:00	4.89575	152.675	22.115	10.6075	29.8875	0
4/1/2016	3:00	5.24325	121.35	8.567	10.645	29.88	0
4/1/2016	4:00	5.19625	153.95	8.31475	10.695	29.88	0
4/1/2016	5:00	3.38275	161.35	16.889	9.865	29.8825	0
4/1/2016	6:00	1.7235	105.66	29.80775	9.715	29.8925	0
4/1/2016	7:00	3.5285	204.95	9.111	9.735	29.9025	0
4/1/2016	8:00	2.01625	158.8	15.935	10.8925	29.915	0
4/1/2016	9:00	1.75	208.95	31.5425	12.79	29.93	0
4/1/2016	10:00	4.42	245.575	18.0625	14.1675	29.9325	0
4/1/2016	11:00	4.4605	268.775	19.76	15.655	29.9375	0
4/1/2016	12:00	5.15475	264.85	23.4675	17.0975	29.93	0
4/1/2016	13:00	5.13875	245.95	21.0925	18.3275	29.925	0
4/1/2016	14:00	4.9285	276.325	23.73	19.53	29.905	0
4/1/2016	15:00	6.9715	267.4	20.5925	20.0025	29.89	0
4/1/2016	16:00	7.97175	261.975	15.4275	20.135	29.8875	0
4/1/2016	17:00	5.9475	265.975	21.37	20.1275	29.875	0
4/1/2016	18:00	2.91225	249.0475	16.965	20.05	29.8575	0
4/1/2016	19:00	2.58675	345.425	12.06675	18.6225	29.8475	0
4/1/2016	20:00	2.90575	112.6625	8.69325	16.725	29.84	0
4/1/2016	21:00	1.678	124.7975	18.43825	15.465	29.84	0
4/1/2016	22:00	1.85975	143.125	27.6095	14.39	29.8425	0
4/1/2016	23:00	3.33575	138.275	22.96875	13.275	29.85	0
4/2/2016	0:00	5.20425	165.225	9.73425	11.8975	29.8525	0
4/2/2016	1:00	6.0015	153.7	8.94525	11.27	29.86	0
4/2/2016	2:00	5.41175	171.05	8.672	10.785	29.86	0
4/2/2016	3:00	5.36925	224.6	12.62725	9.7975	29.8625	0.01
4/2/2016	4:00	3.73025	219.25	14.10475	8.3675	29.8725	0
4/2/2016	5:00	4.05125	190.675	12.015	7.777	29.8775	0
4/2/2016	6:00	4.1365	189.45	12.8585	7.61	29.87	0
4/2/2016	7:00	5.5815	212.575	6.77775	7.20675	29.8775	0
4/2/2016	8:00	6.6055	197.1	10.26175	6.50675	29.9025	0
4/2/2016	9:00	7.444	155.475	11.8325	7.63	29.91	0
4/2/2016	10:00	6.837	156.85	17.9875	9.4675	29.91	0
4/2/2016	11:00	5.486	189.15	22.4625	11.305	29.91	0.01
4/2/2016	12:00	4.7115	186.275	31.3975	13.25	29.905	0
4/2/2016	13:00	3.519	233.3	49.705	14.5325	29.885	0
4/2/2016	14:00	5.41075	255.15	28.81	15.6825	29.8675	0
4/2/2016	15:00	6.46625	281.8	20.8925	16.01	29.855	0
4/2/2016	16:00	7.598	286.625	17.215	15.99	29.835	0
4/2/2016	17:00	8.52775	262.075	13.855	15.99	29.82	0
4/2/2016	18:00	8.05025	246.7	11.9975	15.7275	29.82	0
4/2/2016	19:00	4.80575	243.1	7.709	14.565	29.82	0
4/2/2016	20:00	1.182	152.3175	29.7725	13.515	29.8225	0
4/2/2016	21:00	1.78625	83.2425	29.6925	11.9775	29.83	0
4/2/2016	22:00	2.67475	35.175	8.33525	10.4675	29.83	0
4/2/2016	23:00	2.82275	49.1075	10.128	8.92	29.83	0
4/3/2016	0:00	2.8605	40.875	12.3465	8.5	29.83	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/3/2016	1:00	3.3235	36.24	7.07275	8.02525	29.8275	0
4/3/2016	2:00	3.41625	133.15	15.53075	8.5525	29.8175	0
4/3/2016	3:00	5.0265	148.525	9.14475	8.0875	29.81	0
4/3/2016	4:00	4.18425	172.45	9.75225	8.4625	29.805	0
4/3/2016	5:00	0.70275	95.7475	22.9245	7.64675	29.79	0
4/3/2016	6:00	2.21925	134.975	20.7475	7.43275	29.7875	0
4/3/2016	7:00	3.91325	135.575	10.95	7.96475	29.78	0
4/3/2016	8:00	6.0555	53.0875	11.89875	8.6725	29.7675	0
4/3/2016	9:00	5.51775	289.975	23.3025	11.4825	29.7375	0
4/3/2016	10:00	3.68875	282.7	24.7125	12.905	29.7575	0.01
4/3/2016	11:00	2.51775	191.975	40.7975	15.665	29.745	0
4/3/2016	12:00	2.54075	208.575	53.3125	17.7825	29.725	0
4/3/2016	13:00	6.01075	254.275	35.2025	18.5375	29.7025	0
4/3/2016	14:00	8.0155	275.25	17.9125	18.7825	29.675	0
4/3/2016	15:00	7.47	278.075	20.735	19.3975	29.655	0
4/3/2016	16:00	5.1225	299.825	21.56	19.3425	29.6325	0
4/3/2016	17:00	4.65075	283.15	16.905	19.31	29.605	0
4/3/2016	18:00	6.9495	299.05	5.554	17.7775	29.585	0
4/3/2016	19:00	2.38925	118.7525	22.725	17.1825	29.57	0
4/3/2016	20:00	8.24875	251.775	27.0025	15.515	29.58	0
4/3/2016	21:00	5.516	219.325	19.745	14.4625	29.6175	0
4/3/2016	22:00	9.785	239.6	9.7875	12.955	29.65	0
4/3/2016	23:00	7.96675	192.625	11.1525	9.7775	29.69	0.12
4/4/2016	0:00	10.865	152.85	9.3715	9.2525	29.725	0.07
4/4/2016	1:00	12.0775	145.35	9.7575	9.0525	29.7425	0.06
4/4/2016	2:00	13.6075	144.125	10.1125	8.7175	29.7525	0.02
4/4/2016	3:00	12.5	167.4	8.26675	8.2425	29.7675	0
4/4/2016	4:00	10.295	173.075	11.588	7.89	29.79	0
4/4/2016	5:00	10.1225	202.425	10.84	8.205	29.7925	0
4/4/2016	6:00	9.73	176.075	11.565	7.57275	29.8075	0
4/4/2016	7:00	11.4775	170.4	10.07225	7.40125	29.835	0
4/4/2016	8:00	14.0825	182.275	8.753	7.59325	29.8575	0
4/4/2016	9:00	14.6825	191.325	10.945	8.10925	29.885	0
4/4/2016	10:00	14.555	194.3	11.6625	8.74	29.9075	0
4/4/2016	11:00	15.755	204.75	13.44	9.5875	29.9375	0
4/4/2016	12:00	17.27	205.95	12.1275	10.465	29.9625	0
4/4/2016	13:00	19.7	212	11.4375	11.565	29.9725	0
4/4/2016	14:00	23.59	227.075	10.6925	11.4775	29.985	0
4/4/2016	15:00	22.555	230.8	10.245	11.535	30.0075	0.01
4/4/2016	16:00	20.0625	229.325	10.3025	11.725	30.0375	0
4/4/2016	17:00	19.1675	234.475	10.355	10.8325	30.065	0
4/4/2016	18:00	16.9925	229.225	8.686	10.27	30.0875	0
4/4/2016	19:00	12.8975	222.875	9.52375	9.1025	30.1125	0
4/4/2016	20:00	9.29225	210.35	9.84	7.951	30.135	0
4/4/2016	21:00	9.1635	196.15	10.3275	7.66525	30.185	0
4/4/2016	22:00	10.735	194.725	9.19925	7.4005	30.2025	0
4/4/2016	23:00	8.635	183.45	9.66	7.10675	30.2175	0
4/5/2016	0:00	6.755	174.15	12.85	6.77425	30.24	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/5/2016	1:00	8.358	160.925	10.4025	6.454	30.245	0
4/5/2016	2:00	7.041	181.925	10.08975	6.5045	30.2625	0
4/5/2016	3:00	6.686	155.05	9.6725	6.2995	30.2725	0
4/5/2016	4:00	6.77025	166.35	11.4125	6.58175	30.2825	0
4/5/2016	5:00	5.53225	165.925	9.3005	6.629	30.2975	0
4/5/2016	6:00	7.31575	180.8	8.01975	6.765	30.3175	0
4/5/2016	7:00	6.46875	169.125	10.1175	6.912	30.3125	0
4/5/2016	8:00	7.07875	171.075	13.3475	7.32225	30.325	0
4/5/2016	9:00	6.667	185.1	10.985	7.67975	30.355	0
4/5/2016	10:00	6.35375	163.775	12.81	8.16025	30.4	0
4/5/2016	11:00	8.707	163.75	14.405	9.1875	30.3975	0
4/5/2016	12:00	8.41525	181.675	16.27	9.78	30.3875	0
4/5/2016	13:00	10.3725	209.925	10.5625	9.995	30.3825	0
4/5/2016	14:00	8.9955	201.525	12.465	10.6675	30.3925	0
4/5/2016	15:00	7.26275	194.05	15.5175	11.22	30.39	0
4/5/2016	16:00	8.84175	206.475	12.99925	11.6	30.35	0
4/5/2016	17:00	7.47775	201.275	10.685	11.5275	30.3175	0
4/5/2016	18:00	6.079	202.9	11.3375	11.2025	30.305	0
4/5/2016	19:00	2.40775	208.475	21.14	10.585	30.2925	0
4/5/2016	20:00	2.67375	49.2725	14.26	9.4375	30.2975	0
4/5/2016	21:00	3.22775	113.775	16.1025	8.5425	30.2875	0
4/5/2016	22:00	6.07975	137.575	13.611	8.36	30.2825	0
4/5/2016	23:00	5.04725	136.9	9.7575	8.4	30.29	0
4/6/2016	0:00	1.40025	84.92	23.825	7.81425	30.29	0
4/6/2016	1:00	3.25625	136.275	11.4675	7.517	30.285	0
4/6/2016	2:00	4.236	181.2	38.6125	6.71	30.2675	0
4/6/2016	3:00	4.186	182.55	13.3225	6.1255	30.2575	0
4/6/2016	4:00	3.49125	156.95	14.1	6.43725	30.245	0
4/6/2016	5:00	3.2525	127.025	17.62	6.38075	30.23	0
4/6/2016	6:00	2.2865	146.925	20.99	6.06275	30.225	0
4/6/2016	7:00	1.90725	169.72	46.925	6.534	30.2175	0
4/6/2016	8:00	1.20775	48.4525	19.6175	8.6125	30.245	0
4/6/2016	9:00	1.405	153.65	39.95	10.3625	30.26	0
4/6/2016	10:00	1.554	258.525	45.3725	12.48	30.2575	0
4/6/2016	11:00	2.5845	181.7865	26.67	14.4675	30.245	0
4/6/2016	12:00	4.3955	16.672	33.635	15.71	30.2225	0.01
4/6/2016	13:00	6.9655	103.075	26.6425	17.2025	30.19	0
4/6/2016	14:00	10.2575	22.1975	13.8475	17.745	30.1475	0
4/6/2016	15:00	10.995	18.4015	11.8125	18.7875	30.1	0
4/6/2016	16:00	13.1175	10.4375	11.8525	19.5425	30.06	0
4/6/2016	17:00	11.43	95.037	15.79	19.575	30.025	0
4/6/2016	18:00	9.8625	13.425	13.74	18.4575	30.005	0
4/6/2016	19:00	9.5425	15.11	15.4725	17.0675	29.9875	0
4/6/2016	20:00	9.10025	27.5225	13.3475	15.8175	29.9825	0
4/6/2016	21:00	9.6625	18.635	10.27025	14.7225	29.985	0
4/6/2016	22:00	12.6225	21.5825	10.615	13.7575	29.9625	0
4/6/2016	23:00	12.89	24.1825	9.92775	13.04	29.9325	0
4/7/2016	0:00	11.4375	32.88	9.405	11.5575	29.905	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/7/2016	1:00	5.12275	33.705	10.3325	10.32	29.885	0
4/7/2016	2:00	9.81625	29.355	10.215	9.7375	29.86	0
4/7/2016	3:00	9.71625	29.52	9.01525	9.5375	29.825	0
4/7/2016	4:00	9.42225	33.805	9.5025	8.7525	29.8025	0
4/7/2016	5:00	9.494	32.6575	8.97	8.645	29.7725	0
4/7/2016	6:00	6.758	30.2775	11.17	8.475	29.745	0
4/7/2016	7:00	8.05825	100.095	26.8025	8.44	29.7275	0
4/7/2016	8:00	4.65825	27.47	32.32525	9.49	29.7175	0
4/7/2016	9:00	3.51225	105.2425	20.01175	11.8275	29.705	0
4/7/2016	10:00	4.06	26.115	13.8525	14.85	29.6875	0
4/7/2016	11:00	4.97725	101.664	17.9875	17.8475	29.68	0.01
4/7/2016	12:00	3.718	29.22575	22.12	20.28	29.6775	0
4/7/2016	13:00	4.03075	231.6525	23.41	22.8625	29.6625	0
4/7/2016	14:00	2.13725	184.155	28.4525	26.105	29.6325	0
4/7/2016	15:00	4.90675	180.4	40.2725	28.6725	29.605	0
4/7/2016	16:00	7.52	112.275	17.5075	28.9925	29.585	0
4/7/2016	17:00	8.19075	121.1	15.565	28.5775	29.5675	0
4/7/2016	18:00	5.0075	102.2025	19.1175	27.905	29.56	0
4/7/2016	19:00	4.42225	140.6	15.21	26.17	29.5575	0
4/7/2016	20:00	4.79025	154.775	16.19	23.5625	29.555	0
4/7/2016	21:00	2.2	111.68	24.5275	21.4975	29.575	0
4/7/2016	22:00	4.28775	35.6175	12.1325	17.9825	29.5925	0
4/7/2016	23:00	4.086	92.52	25.6825	18.2475	29.6	0
4/8/2016	0:00	4.15875	116.175	21.7825	18.6725	29.6	0
4/8/2016	1:00	6.0915	147.25	11.155	19.005	29.595	0
4/8/2016	2:00	5.0845	196.025	14.145	17.8075	29.58	0
4/8/2016	3:00	3.4255	299.625	9.9785	16.55	29.5775	0
4/8/2016	4:00	2.97975	168.8875	14.96875	15.8975	29.565	0
4/8/2016	5:00	2.2535	47.54	14.51675	15.3825	29.5475	0
4/8/2016	6:00	2.955	264.725	18.6125	15.3325	29.545	0
4/8/2016	7:00	3.565	252.395	11.85875	14.3575	29.565	0
4/8/2016	8:00	2.71125	38.205	10.456	14.87	29.5775	0
4/8/2016	9:00	1.99825	227.5825	23.9675	16.6025	29.57	0
4/8/2016	10:00	3.08975	302.575	24.1875	18.5825	29.5725	0
4/8/2016	11:00	3.6065	283.775	21.0025	20.13	29.5775	0.01
4/8/2016	12:00	6.65475	274.325	16.105	21.3575	29.565	0
4/8/2016	13:00	6.43675	281.425	17.0575	22.49	29.5475	0
4/8/2016	14:00	8.39	262.85	13.9975	23.1975	29.5325	0
4/8/2016	15:00	7.64925	254.9	23.3325	24.4325	29.5075	0
4/8/2016	16:00	10.03	168.87975	16.205	23.19	29.4975	0
4/8/2016	17:00	9.46625	262.915	17.865	21.9725	29.485	0
4/8/2016	18:00	10.84	267.095	17.0925	20.2825	29.465	0
4/8/2016	19:00	12.28	96.86375	16.06	17.94	29.455	0
4/8/2016	20:00	7.137	182.80375	35.9225	16.3075	29.4725	0
4/8/2016	21:00	9.263	39.4125	14.675	14.5375	29.48	0
4/8/2016	22:00	13.195	31.4625	10.98	13.7925	29.48	0
4/8/2016	23:00	13.8975	22.125	7.28925	12.545	29.4825	0
4/9/2016	0:00	7.343	4.647	11.3025	11.89	29.4925	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/9/2016	1:00	5.7435	19.325	12.1365	10.0575	29.5	0
4/9/2016	2:00	4.647	16.68525	16.6525	9.41	29.5	0
4/9/2016	3:00	3.25425	173.277	15.9425	8.8625	29.5	0
4/9/2016	4:00	1.26375	83.5545	15.55275	8.325	29.5	0
4/9/2016	5:00	1.4565	175.5	13.13	7.8665	29.5	0
4/9/2016	6:00	2.77175	176.375	12.27325	7.70275	29.5	0
4/9/2016	7:00	3.08575	145.85	6.84775	7.77125	29.505	0
4/9/2016	8:00	4.35775	184.9	10.29375	8.56	29.52	0
4/9/2016	9:00	3.0385	209.925	24.085	9.85	29.52	0
4/9/2016	10:00	2.9585	202.725	35.775	12.2125	29.52	0
4/9/2016	11:00	4.3295	255.75	38.8025	13.645	29.5175	0
4/9/2016	12:00	6.00075	265.575	24.815	14.9125	29.51	0
4/9/2016	13:00	5.55425	275.5	31.6725	15.82	29.5075	0
4/9/2016	14:00	5.5615	265.575	30.3475	16.35	29.495	0
4/9/2016	15:00	6.5205	250.9	21.0175	16.91	29.475	0
4/9/2016	16:00	5.9745	267.325	21.8675	17.0525	29.46	0
4/9/2016	17:00	6.8245	254.125	15.575	17.21	29.455	0
4/9/2016	18:00	5.76825	238.175	12.6275	16.965	29.44	0
4/9/2016	19:00	4.88825	258.9	7.52775	15.755	29.44	0
4/9/2016	20:00	4.72725	283.1	9.741	14.2875	29.4425	0
4/9/2016	21:00	4.16875	258.25	11.16925	12.9225	29.4525	0
4/9/2016	22:00	5.35075	216.45	7.18275	11.0325	29.4625	0
4/9/2016	23:00	4.91425	212.2	11.5805	9.775	29.4775	0
4/10/2016	0:00	3.9025	206.55	12.21625	9.295	29.505	0
4/10/2016	1:00	3.501	206.55	5.84	8.6175	29.525	0
4/10/2016	2:00	4.715	204.75	6.18225	8.094	29.5425	0
4/10/2016	3:00	3.49475	189.325	10.01	7.9295	29.5525	0
4/10/2016	4:00	4.512	183.825	11.3675	7.8075	29.56	0
4/10/2016	5:00	5.1715	198.45	7.3855	7.58875	29.565	0
4/10/2016	6:00	5.48175	191.65	11.6925	7.374	29.5825	0
4/10/2016	7:00	5.849	211.725	9.5525	7.371	29.5925	0
4/10/2016	8:00	5.3455	193.025	12.27575	7.407	29.6025	0
4/10/2016	9:00	2.96025	155.95	26.0425	7.81425	29.6125	0
4/10/2016	10:00	4.73325	212.575	15.8375	8.6025	29.6225	0
4/10/2016	11:00	6.254	208.15	16.245	9.3275	29.63	0
4/10/2016	12:00	5.54025	210.725	18.4075	10.295	29.63	0
4/10/2016	13:00	5.47775	186.85	25.205	11.2375	29.6275	0
4/10/2016	14:00	7.14375	184.9	18.985	11.66	29.6175	0
4/10/2016	15:00	5.31025	222.325	24.78	12.0925	29.61	0
4/10/2016	16:00	4.68625	221.75	26.21	12.515	29.6125	0
4/10/2016	17:00	4.27025	168.615	37.205	13.4825	29.6225	0
4/10/2016	18:00	8.442	261.025	10.805	12.4775	29.6325	0
4/10/2016	19:00	6.95225	255.425	8.4915	11.7775	29.6425	0
4/10/2016	20:00	7.257	244.725	7.50325	10.8075	29.66	0
4/10/2016	21:00	7.12275	231.2	7.303	10.2425	29.6925	0
4/10/2016	22:00	4.59725	219.65	10.685	9.9175	29.7025	0
4/10/2016	23:00	4.69825	206.225	8.73625	9.675	29.7125	0
4/11/2016	0:00	4.13575	196.1	6.12075	9.4725	29.7275	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/11/2016	1:00	5.334	188.675	6.479	9.2575	29.755	0
4/11/2016	2:00	6.993	192.375	7.83475	8.965	29.7725	0
4/11/2016	3:00	6.898	168.075	9.191	8.655	29.7825	0
4/11/2016	4:00	6.30875	151.125	7.93075	8.3425	29.7925	0
4/11/2016	5:00	6.76975	151.175	8.79675	8.2275	29.7975	0
4/11/2016	6:00	6.2175	164.175	8.834	8.12	29.795	0
4/11/2016	7:00	6.11775	177.5	11.95	8.3075	29.8125	0
4/11/2016	8:00	6.30525	160.525	13.0175	8.495	29.8225	0
4/11/2016	9:00	5.10075	185.4	19.525	9.02	29.8325	0
4/11/2016	10:00	5.4275	188.05	22.32	9.3875	29.8425	0
4/11/2016	11:00	5.60575	168.375	23.065	9.935	29.85	0
4/11/2016	12:00	6.372	201.625	14.7325	10.3525	29.85	0
4/11/2016	13:00	4.33225	258.8	22.775	10.6875	29.8475	0
4/11/2016	14:00	3.91375	248.875	26.2275	11.2625	29.835	0
4/11/2016	15:00	4.511	252.15	34.1475	11.595	29.8175	0
4/11/2016	16:00	5.1785	260.2	21.0375	11.76	29.805	0
4/11/2016	17:00	3.81625	278.875	29.17	11.8	29.785	0
4/11/2016	18:00	1.90375	254.115	21.2	11.6975	29.7675	0
4/11/2016	19:00	1.618	301.925	7.96675	11.3475	29.755	0
4/11/2016	20:00	1.15225	167.3375	12.02125	11.04	29.74	0
4/11/2016	21:00	2.44975	174.2675	30.14975	10.4775	29.74	0
4/11/2016	22:00	2.3775	176.55	12.429	10.135	29.74	0
4/11/2016	23:00	4.16575	209.225	17.9475	9.7225	29.7425	0
4/12/2016	0:00	5.89025	219.325	7.81825	9.1775	29.755	0
4/12/2016	1:00	4.46775	192.825	15.8945	8.685	29.77	0
4/12/2016	2:00	5.50575	175.125	13.33525	8.43	29.77	0
4/12/2016	3:00	4.946	135.95	9.10625	8.16	29.77	0
4/12/2016	4:00	5.69725	165.025	14.025	8.167	29.78	0
4/12/2016	5:00	5.8165	217	10.655	7.95375	29.81	0
4/12/2016	6:00	3.899	141.825	23.9275	7.70825	29.8075	0
4/12/2016	7:00	6.20575	156.45	12.79	7.86625	29.81	0
4/12/2016	8:00	7.13375	151.8	10.5695	7.7975	29.8425	0
4/12/2016	9:00	6.94175	126.35	12.715	8.416	29.8475	0
4/12/2016	10:00	8.78275	152.6	14.7525	10.195	29.84	0
4/12/2016	11:00	11.5125	188.45	16.8975	11.8	29.835	0
4/12/2016	12:00	14.035	202.875	11.9975	12.28	29.82	0
4/12/2016	13:00	13.5925	195.45	11.9675	12.78	29.8175	0
4/12/2016	14:00	13.1425	196.55	10.4425	12.5425	29.81	0
4/12/2016	15:00	12.0175	212.8	18.83	12.1125	29.8075	0
4/12/2016	16:00	8.7695	306.35	10.4	8.985	29.8	0
4/12/2016	17:00	9.62475	251.325	13.3975	7.85075	29.805	0.12
4/12/2016	18:00	4.208	146.5	26.02	7.05	29.82	0.14
4/12/2016	19:00	7.3895	142	11.17	6.87325	29.82	0.13
4/12/2016	20:00	9.4	139.625	10.3075	6.56225	29.82	0.12
4/12/2016	21:00	8.7925	134.275	10.7325	6.155	29.8225	0.03
4/12/2016	22:00	8.606	130.175	10.675	6.1515	29.825	0
4/12/2016	23:00	5.73275	188.15	26.8325	6.0605	29.815	0
4/13/2016	0:00	5.294	128.075	9.31975	5.826	29.83	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/13/2016	1:00	4.32025	133.55	10.5825	5.97675	29.83	0
4/13/2016	2:00	4.92525	119.5	9.4775	6.03	29.8325	0
4/13/2016	3:00	5.461	148.25	7.16975	5.744	29.84	0
4/13/2016	4:00	2.941	136.725	14.22275	5.94075	29.84	0
4/13/2016	5:00	3.89	114.975	8.32975	6.00775	29.8375	0
4/13/2016	6:00	4.503	141.45	14.79825	6.20625	29.83	0
4/13/2016	7:00	4.317	147.75	13.37	6.848	29.825	0
4/13/2016	8:00	3.9785	137.9	11.92	7.77775	29.805	0
4/13/2016	9:00	5.412	179.15	19.375	8.9925	29.7825	0
4/13/2016	10:00	7.7965	184.45	13.02	9.68	29.76	0
4/13/2016	11:00	6.74275	200.7	24.005	10.5975	29.7525	0
4/13/2016	12:00	7.62675	225.425	17.915	11.4125	29.72	0
4/13/2016	13:00	7.3025	194.6	30.9825	11.825	29.6775	0
4/13/2016	14:00	5.3335	215.6	27.405	11.6575	29.6325	0
4/13/2016	15:00	3.451	234.325	31.8575	11.91	29.6025	0
4/13/2016	16:00	2.11725	234.725	44.3475	12.0375	29.57	0
4/13/2016	17:00	3.18475	147.6625	38.83	12.27	29.525	0
4/13/2016	18:00	4.5165	46.2075	12.5475	11.8575	29.4625	0
4/13/2016	19:00	5.0975	54.0475	17.8545	10.6225	29.3925	0
4/13/2016	20:00	4.046	62.3	19.935	10.41	29.3325	0
4/13/2016	21:00	7.15175	159.125	12.445	10.2575	29.3075	0
4/13/2016	22:00	7.57475	170.275	11.365	10.23	29.2925	0
4/13/2016	23:00	4.91875	132.4575	26.06075	10.145	29.2675	0
4/14/2016	0:00	11.51175	246.75	10.3825	9.36	29.275	0
4/14/2016	1:00	12.4195	207.35	14.89	5.99475	29.33	0.08
4/14/2016	2:00	4.9185	111.35	14.86	5.45825	29.3525	0.06
4/14/2016	3:00	4.10325	83.85	14.6975	5.7145	29.33	0
4/14/2016	4:00	4.44675	35.4575	6.197	5.0435	29.3275	0
4/14/2016	5:00	5.16525	37.11	7.4175	4.8095	29.315	0
4/14/2016	6:00	5.184	40.445	6.89475	4.5495	29.2925	0
4/14/2016	7:00	6.2825	42.1175	8.249	4.23325	29.27	0.01
4/14/2016	8:00	3.5615	51.3775	16.1975	5.11225	29.2775	0
4/14/2016	9:00	2.172	159.6725	19.1625	7.31475	29.3025	0
4/14/2016	10:00	5.05825	215.525	18.0775	9.225	29.315	0
4/14/2016	11:00	5.16075	217.537	26.4875	10.32	29.335	0
4/14/2016	12:00	10.1355	30.945	13.665	11.19	29.3525	0
4/14/2016	13:00	9.4865	101.77	19.1425	11.69	29.3625	0
4/14/2016	14:00	11.5425	317.225	16.79	12.8925	29.375	0
4/14/2016	15:00	13.8525	328.375	10.99	12.6225	29.4025	0
4/14/2016	16:00	11.62	326.15	9.26475	11.775	29.445	0
4/14/2016	17:00	9.845	316.2	10.42025	11.8075	29.47	0
4/14/2016	18:00	10.4275	257.5325	15.785	12.0925	29.5125	0
4/14/2016	19:00	7.93325	332.275	12.379	10.315	29.56	0
4/14/2016	20:00	8.10975	310.725	7.041	9.25	29.605	0
4/14/2016	21:00	5.10525	263.983	19.18	8.915	29.66	0
4/14/2016	22:00	3.85375	250.44	19.3325	8.13525	29.7	0
4/14/2016	23:00	4.9265	33.9625	16.435	7.37075	29.735	0
4/15/2016	0:00	3.601	161.125	20.475	7.2675	29.7625	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/15/2016	1:00	3.33825	120.775	18.985	7.1275	29.8075	0
4/15/2016	2:00	3.867	127.025	8.82125	7.22675	29.835	0
4/15/2016	3:00	4.4145	138.15	9.6625	7.34225	29.86	0
4/15/2016	4:00	4.18625	135.35	8.688	7.36	29.8975	0
4/15/2016	5:00	5.03025	163.1	11.185	7.19975	29.9275	0
4/15/2016	6:00	6.86925	174.825	8.15025	7.3635	29.9575	0
4/15/2016	7:00	6.3095	154.05	8.421	7.35175	29.99	0
4/15/2016	8:00	5.62325	142.35	10.295	7.8155	30.025	0
4/15/2016	9:00	6.97325	171.3	15.18	8.825	30.0425	0
4/15/2016	10:00	6.95525	184.575	15.58	9.27	30.0575	0
4/15/2016	11:00	7.80425	183.3	15.0925	10.2675	30.0825	0
4/15/2016	12:00	9.7675	192.325	10.32275	10.26	30.095	0
4/15/2016	13:00	5.931	177.375	14.0425	10.5925	30.11	0
4/15/2016	14:00	6.5405	161.55	27.8075	11.2225	30.1125	0
4/15/2016	15:00	4.50575	167.6	24.74	12.195	30.12	0
4/15/2016	16:00	4.9465	203.325	19.3075	12.515	30.12	0
4/15/2016	17:00	4.1475	199	17.9575	12.625	30.115	0
4/15/2016	18:00	4.74625	187.875	14.91	12.6975	30.0975	0
4/15/2016	19:00	3.60575	253.7	13.15425	11.9725	30.095	0
4/15/2016	20:00	1.795	74.8575	24.37	10.955	30.1125	0
4/15/2016	21:00	1.127	59.7825	7.99825	9.9725	30.1225	0
4/15/2016	22:00	1.4315	168.375	22.95	8.6625	30.13	0
4/15/2016	23:00	2.3395	218.75	13.83225	8.26875	30.13	0
4/16/2016	0:00	2.703	155.1	10.4685	7.36325	30.1275	0
4/16/2016	1:00	5.03325	151.125	8.81225	7.18825	30.12	0
4/16/2016	2:00	4.35625	158.1	12.2925	6.72525	30.12	0
4/16/2016	3:00	3.05875	132.075	15.058	6.3305	30.12	0
4/16/2016	4:00	3.779	139.275	8.54	5.94725	30.1175	0
4/16/2016	5:00	2.551	145.925	10.73	5.634	30.105	0
4/16/2016	6:00	3.088	148.725	11.22775	5.9055	30.0925	0
4/16/2016	7:00	1.1445	118.6615	18.1975	6.704	30.1	0
4/16/2016	8:00	1.882	281.275	19.655	7.83125	30.1025	0
4/16/2016	9:00	1.23675	222.5625	42.925	10.2725	30.11	0
4/16/2016	10:00	1.52425	282.225	45.0475	12.0525	30.11	0
4/16/2016	11:00	2.95475	278.475	45.14	13.6325	30.11	0
4/16/2016	12:00	3.62175	239.2	31.15	14.67	30.1075	0
4/16/2016	13:00	2.2855	185.0525	44.735	16.4575	30.095	0
4/16/2016	14:00	3.35925	234.775	48.3575	17.4175	30.08	0
4/16/2016	15:00	5.5605	287.625	19.935	17.4625	30.0775	0
4/16/2016	16:00	5.3605	295.875	21.275	18.2675	30.07	0
4/16/2016	17:00	4.90375	260.425	21.1375	18.475	30.065	0
4/16/2016	18:00	4.14725	285.3	11.3475	18.0225	30.05	0
4/16/2016	19:00	2.90475	157.91825	11.263	16.82	30.0475	0
4/16/2016	20:00	3.46175	27.0875	7.4785	15.1675	30.0425	0
4/16/2016	21:00	3.9225	35.105	6.94875	14.095	30.05	0
4/16/2016	22:00	5.07625	40.7475	9.882	12.385	30.05	0
4/16/2016	23:00	6.48275	22.2575	8.83825	11.475	30.05	0
4/17/2016	0:00	6.16925	39.05	9.4825	10.825	30.05	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/17/2016	1:00	5.44875	21.9475	8.9575	10.5575	30.0475	0
4/17/2016	2:00	4.4525	20.2725	8.55725	9.9575	30.0375	0
4/17/2016	3:00	5.49225	21.1675	7.1835	9.2625	30.025	0
4/17/2016	4:00	6.617	25.4	7.827	8.23975	30.0075	0
4/17/2016	5:00	6.5455	27.1675	8.68625	7.7145	29.9975	0
4/17/2016	6:00	6.07475	24.0775	9.2915	7.65225	29.9875	0
4/17/2016	7:00	5.06625	100.24	19.8275	8.5945	29.98	0
4/17/2016	8:00	3.40925	101.55	21.845	11.2225	29.98	0
4/17/2016	9:00	3.083	7.57925	24.4825	14.915	29.9775	0
4/17/2016	10:00	3.3265	18.6625	19.0625	17.84	29.97	0
4/17/2016	11:00	4.379	24.7475	17.49	20.15	29.965	0
4/17/2016	12:00	5.80875	84.105	48.105	23.415	29.945	0
4/17/2016	13:00	8.20275	138.025	18.815	25.005	29.925	0
4/17/2016	14:00	8.94225	133.6	21.9825	25.655	29.905	0
4/17/2016	15:00	8.33275	115.8	22.115	26.0175	29.8875	0
4/17/2016	16:00	9.4475	95.575	14.965	26.21	29.875	0
4/17/2016	17:00	6.7695	98.2	18.1325	26.1175	29.855	0
4/17/2016	18:00	4.94525	88.55	17.945	25.3525	29.84	0
4/17/2016	19:00	5.21125	95.8	16.7425	24.355	29.84	0
4/17/2016	20:00	7.444	102.9	13.1425	22.96	29.84	0
4/17/2016	21:00	9.3275	107.7	12.5475	22.2525	29.84	0
4/17/2016	22:00	9.16	110.825	12.6325	21.5875	29.84	0
4/17/2016	23:00	8.7475	113.425	13.0975	21.2325	29.8375	0
4/18/2016	0:00	7.5135	112.35	13.1475	20.8225	29.83	0
4/18/2016	1:00	11.0425	118.95	11.7875	20.86	29.825	0
4/18/2016	2:00	10.73	124.55	12.3425	21.24	29.8075	0
4/18/2016	3:00	7.23475	128.775	14.5975	20.8675	29.8025	0
4/18/2016	4:00	6.835	116.875	13.2525	19.845	29.81	0
4/18/2016	5:00	7.99	115.9	11.5325	19.5575	29.8075	0
4/18/2016	6:00	8.94275	118.675	12.3025	20.0775	29.8	0
4/18/2016	7:00	7.2515	114.175	15.4775	21.02	29.8075	0
4/18/2016	8:00	6.53325	112.15	18.67	22.4325	29.83	0
4/18/2016	9:00	9.9725	126.025	16.9575	24.8725	29.8325	0
4/18/2016	10:00	8.263	111.125	19.9575	26.1475	29.84	0
4/18/2016	11:00	9.21	132.85	17.2	27.35	29.84	0
4/18/2016	12:00	7.96125	131.575	27.6475	28.3	29.8375	0
4/18/2016	13:00	5.53125	157.75	36.4925	29.105	29.8275	0
4/18/2016	14:00	4.722	179.975	35.555	29.6025	29.815	0
4/18/2016	15:00	3.176	160.7775	29.3875	30.1825	29.795	0
4/18/2016	16:00	6.3545	287.875	25.99	29.835	29.775	0
4/18/2016	17:00	8.29	313.4	8.877	28.9925	29.7575	0
4/18/2016	18:00	7.85475	306.5	6.58	27.5575	29.7475	0
4/18/2016	19:00	7.8935	93.88075	14.4625	26.7525	29.74	0
4/18/2016	20:00	5.382	37.925	11.29025	24.8375	29.7425	0
4/18/2016	21:00	6.17125	42.375	7.9865	22.7075	29.7525	0
4/18/2016	22:00	4.39275	47.71	9.66175	21.27	29.76	0
4/18/2016	23:00	3.9775	31.2975	11.596	20.1825	29.7575	0
4/19/2016	0:00	2.88775	21.425	20.475	19.45	29.75	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/19/2016	1:00	0.98825	113.984	16.0125	19.7475	29.7475	0
4/19/2016	2:00	2.20625	165.715	24.8575	18.9575	29.7375	0
4/19/2016	3:00	3.541	103.0925	8.7035	17.18	29.73	0
4/19/2016	4:00	3.13375	320.775	19.40775	17.5575	29.73	0
4/19/2016	5:00	3.37075	292.825	13.66975	17.6225	29.73	0
4/19/2016	6:00	4.334	177.1	23.055	15.285	29.73	0
4/19/2016	7:00	3.7615	99.5875	14.42325	16.8525	29.7325	0
4/19/2016	8:00	1.73225	91.23975	22.6675	18.9375	29.7375	0
4/19/2016	9:00	1.98425	187.36	23.3075	20.4675	29.73	0
4/19/2016	10:00	2.62075	14.896	18.5175	21.47	29.725	0
4/19/2016	11:00	4.21675	302.25	24.945	23.065	29.705	0
4/19/2016	12:00	6.087	276.6	16.1525	24.4675	29.685	0
4/19/2016	13:00	7.49375	277.075	14.2825	25.4025	29.665	0
4/19/2016	14:00	6.64825	286.175	18.685	26.835	29.645	0
4/19/2016	15:00	7.64475	164.595	22.2775	27.7075	29.62	0
4/19/2016	16:00	9.22	17.57	12.415	27.605	29.5875	0
4/19/2016	17:00	7.6555	181.2925	13.7875	27.5725	29.5725	0
4/19/2016	18:00	6.3215	311.625	11.966	26.645	29.55	0
4/19/2016	19:00	5.049	91.44575	33.285	25.5325	29.5475	0
4/19/2016	20:00	5.316	47.4325	15.9225	23.3925	29.5425	0
4/19/2016	21:00	6.14775	36.94	10.31825	21.69	29.55	0
4/19/2016	22:00	4.3	98.2225	28.545	18.9325	29.5475	0
4/19/2016	23:00	5.68025	35.51	9.3585	18.11	29.54	0
4/20/2016	0:00	4.1855	55.145	7.8525	17.5425	29.5375	0
4/20/2016	1:00	1.71925	149.35	13.94	18.19	29.53	0
4/20/2016	2:00	1.75975	136.625	15.65	17.185	29.5275	0
4/20/2016	3:00	2.18	125.85	14.213	17.02	29.5175	0
4/20/2016	4:00	3.961	171.75	15.13975	15.375	29.5125	0
4/20/2016	5:00	3.03025	140.975	16.945	14.655	29.52	0
4/20/2016	6:00	1.658	127	9.0555	14.0925	29.52	0
4/20/2016	7:00	1.1115	39.625	10.19375	15.1425	29.5225	0
4/20/2016	8:00	1.71175	155.05	34.445	16.4875	29.5275	0
4/20/2016	9:00	1.6395	253.75	30.15	17.8375	29.52	0
4/20/2016	10:00	2.85675	229.075	37.6325	19.6475	29.5175	0
4/20/2016	11:00	4.4495	279.7	29.6	21.3475	29.505	0
4/20/2016	12:00	4.3065	281.65	25.74	22.51	29.4825	0
4/20/2016	13:00	7.3085	280	16.155	23.6825	29.455	0
4/20/2016	14:00	7.42975	262.725	16.4325	24.635	29.435	0
4/20/2016	15:00	7.5305	266.025	18.1575	25.295	29.4175	0
4/20/2016	16:00	7.272	218.25	13.935	25.34	29.405	0
4/20/2016	16:45	6.16275	226.4375	19.09125	25.4225	29.39375	0
4/20/2016	18:00	5.66775	226.925	9.56825	24.805	29.3825	0
4/20/2016	19:00	5.25875	204.875	4.19075	23.325	29.3925	0
4/20/2016	20:00	5.551	224.925	19.68	21.915	29.4075	0
4/20/2016	21:00	8.04225	243.025	14.2805	19.4925	29.4475	0
4/20/2016	22:00	5.9705	206.75	15.8525	17.23	29.5025	0
4/20/2016	23:00	5.74625	191.5	13.112	16.0075	29.51	0
4/21/2016	0:00	4.637	141.45	17.46	15.6425	29.5075	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/21/2016	1:00	4.5385	132.1025	25.285	15.825	29.5	0
4/21/2016	2:00	8.0495	281.425	21.8825	14.1975	29.49	0
4/21/2016	3:00	6.11175	220.825	11.843	12.92	29.4675	0
4/21/2016	4:00	4.35	258.35	10.30775	12.1025	29.49	0
4/21/2016	5:00	3.9125	258.475	7.52	10.9275	29.4875	0
4/21/2016	6:00	4.67525	220.075	13.42325	10.5925	29.4825	0
4/21/2016	7:00	2.32625	138.3	14.6345	11.3525	29.4875	0
4/21/2016	8:00	3.66275	186.1	23.4975	12.58	29.4775	0
4/21/2016	9:00	3.10125	190.625	27.42	13.685	29.4675	0
4/21/2016	10:00	2.3485	224.775	30.13	15.625	29.4575	0
4/21/2016	11:00	4.8405	194.25	25.435	17.0225	29.4425	0
4/21/2016	12:00	7.75275	252.275	18.1925	18.3	29.4175	0
4/21/2016	13:00	5.92225	216.725	31.24	19.41	29.405	0
4/21/2016	14:00	6.80525	279.825	21.06	19.9925	29.385	0
4/21/2016	15:00	5.092	296.1	22.595	19.9275	29.3625	0.01
4/21/2016	16:00	5.19375	259.85	24.35	20.5175	29.34	0
4/21/2016	17:00	6.295	261.3	15.995	20.4225	29.34	0
4/21/2016	18:00	5.307	236.45	12.905	19.7775	29.3375	0
4/21/2016	19:00	3.3775	271.975	8.47825	18.82	29.3275	0
4/21/2016	20:00	1.7095	202.1975	21.525	17.98	29.32	0
4/21/2016	21:00	2.77075	42.8225	8.10175	17.115	29.3125	0
4/21/2016	22:00	5.20725	112.385	12.43575	15.855	29.28	0
4/21/2016	23:00	9.78	24.57	9.83425	14.735	29.2475	0
4/22/2016	0:00	8.407	15.748	8.827	14.1225	29.2325	0
4/22/2016	1:00	4.1655	68.51325	24.5775	13.3475	29.2125	0
4/22/2016	2:00	4.8505	146.4	21.895	12.145	29.23	0
4/22/2016	3:00	4.85825	146.325	17.37	11.6825	29.2625	0
4/22/2016	4:00	5.34325	155.925	13.17525	12.0775	29.2675	0
4/22/2016	5:00	5.96825	144.65	8.8535	11.87	29.255	0
4/22/2016	6:00	4.9565	135.675	9.86625	11.59	29.235	0
4/22/2016	7:00	3.944	112.9	10.41	11.795	29.2175	0
4/22/2016	8:00	2.789	118.825	9.607	12.3275	29.2075	0
4/22/2016	9:00	3.0825	190.475	21.6925	13.785	29.205	0
4/22/2016	10:00	3.03625	236.75	28.215	14.905	29.23	0
4/22/2016	11:00	7.9265	258.275	18.86925	15.2825	29.2675	0
4/22/2016	12:00	13.845	252.875	8.86875	13.16	29.3025	0
4/22/2016	13:00	12.08	234.925	10.275	11.84	29.35	0.01
4/22/2016	14:00	9.18075	177.25	12.1175	11.0675	29.3925	0
4/22/2016	15:00	8.63275	172.775	13.32	11.865	29.4325	0
4/22/2016	15:00	8.2209375	171.99375	13.55	11.99375	29.433125	0
4/22/2016	16:00	7.67425	184.075	16.7275	12.98	29.445	0
4/22/2016	17:00	5.885	186.875	17.02	13.635	29.465	0
4/22/2016	18:00	3.5455	228.925	23.97	13.295	29.4825	0
4/22/2016	19:00	8.2575	234.75	7.62875	12.1475	29.495	0
4/22/2016	20:00	6.424	136.6	19.105	10.235	29.52	0
4/22/2016	21:00	3.64525	163.25	18.4275	10.5325	29.55	0
4/22/2016	22:00	3.71625	164.425	18.745	10.33	29.5575	0
4/22/2016	23:00	6.631	172.325	11.15	10.605	29.5875	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/23/2016	0:00	6.3725	171.35625	11.3605	10.42875	29.606875	0
4/23/2016	1:00	7.5935	154.075	9.03725	10.115	29.6275	0
4/23/2016	2:00	7.73175	171	9.75325	10.005	29.655	0
4/23/2016	3:00	8.602	176.125	9.7335	9.875	29.675	0
4/23/2016	4:00	7.76875	182.975	8.38	9.665	29.6925	0
4/23/2016	5:00	6.7765	169.7	8.9125	9.41	29.7025	0
4/23/2016	6:00	5.68775	143	9.19725	9.3425	29.7125	0
4/23/2016	7:00	5.658	164.175	9.709	9.705	29.725	0
4/23/2016	8:00	7.061	186.05	10.3825	10.445	29.74	0
4/23/2016	9:00	9.83	202.625	11.9125	11.3975	29.7425	0
4/23/2016	10:00	11.3825	208.25	11.545	12.0125	29.75	0
4/23/2016	11:00	11.025	220.075	12.099	11.43	29.7525	0.02
4/23/2016	12:00	6.61125	201.475	16.7175	12.1825	29.7575	0
4/23/2016	13:00	6.4395	230.2	23.525	13.5425	29.745	0
4/23/2016	14:00	5.90125	202.625	21.0125	14.54	29.7275	0
4/23/2016	15:00	6.919	198.725	17.61	14.785	29.715	0
4/23/2016	16:00	7.5295	222.775	17.3475	15.3525	29.695	0
4/23/2016	17:00	10.505	229.825	10.1425	14.9975	29.68	0
4/23/2016	18:00	7.187	204.875	11.533	12.9375	29.68	0
4/23/2016	19:00	6.61325	184.225	17.815	11.6325	29.6825	0
4/23/2016	20:00	8.269	200.2	13.015	10.8375	29.69	0.06
4/23/2016	21:00	8.84075	215.275	9.03	10.36	29.69	0.01
4/23/2016	22:00	9.928	188.925	8.86275	10.025	29.69	0
4/23/2016	23:00	10.245	181.525	8.58225	9.875	29.6875	0
4/24/2016	0:00	8.15625	185.675	11.22	9.8025	29.6825	0
4/24/2016	1:00	9.518	180.975	10.9975	9.545	29.69	0
4/24/2016	2:00	9.1005	189.125	8.05975	9.42	29.6925	0.01
4/24/2016	3:00	8.8025	182.35	7.7465	9.2175	29.6975	0
4/24/2016	4:00	7.62175	190.5	9.9125	8.9275	29.69	0
4/24/2016	5:00	7.4865	182.075	9.54	8.855	29.69	0.01
4/24/2016	6:00	8.3145	183.2	11.54025	8.6525	29.6925	0
4/24/2016	7:00	9.0155	188.775	10.46	8.5225	29.7	0
4/24/2016	8:00	11.8875	205.45	10.59	8.18	29.7025	0
4/24/2016	9:00	10.195	199.425	10.2225	7.8255	29.715	0
4/24/2016	10:00	7.96575	198.6	10.825	8.315	29.7325	0
4/24/2016	11:00	9.13175	119.88075	24.77	7.34225	29.75	0.05
4/24/2016	12:00	7.04775	17.8155	16	7.3395	29.78	0.03
4/24/2016	13:00	11.81	21.965	11.905	8.2975	29.78	0
4/24/2016	14:00	8.79225	29.7625	14.8175	9.3875	29.7825	0
4/24/2016	15:00	5.06575	25.4475	16.275	9.305	29.7875	0.07
4/24/2016	16:00	4.42625	58.08	17.385	8.28975	29.785	0.06
4/24/2016	17:00	3.1785	107.575	19.08	8.495	29.8025	0.01
4/24/2016	18:00	4.139	115.2925	30.5175	7.5685	29.8125	0.01
4/24/2016	19:00	3.03575	103.54	9.66575	6.89075	29.8225	0
4/24/2016	20:00	5.0485	135.725	13.45	6.0105	29.835	0
4/24/2016	21:00	2.65825	125.2	18.1725	6.10125	29.8525	0
4/24/2016	22:00	2.09225	114.175	16.91	5.94125	29.86	0
4/24/2016	23:00	2.2195	130.0125	38.225	6.03675	29.8625	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/25/2016	0:00	3.81075	63.85	18.835	6.61525	29.8725	0
4/25/2016	1:00	3.3895	152.43	33.672	6.81225	29.8825	0
4/25/2016	2:00	1.79675	212.625	30.3355	6.33025	29.89	0
4/25/2016	3:00	3.84875	213.125	16.25975	6.14425	29.89	0
4/25/2016	4:00	1.03925	80.1575	10.9625	5.76425	29.8925	0
4/25/2016	5:00	1.63025	164.85	16.95	5.637	29.9	0
4/25/2016	6:00	2.59875	159.65	13.13025	5.68825	29.905	0.03
4/25/2016	7:00	2.34425	231.075	10.3445	5.9935	29.9225	0.02
4/25/2016	8:00	2.9415	258.375	14.475	6.33875	29.9325	0.01
4/25/2016	9:00	4.89375	252.3	12.415	6.42	29.9425	0.01
4/25/2016	10:00	3.1275	240.025	24.165	6.74775	29.9525	0.03
4/25/2016	11:00	5.69775	265.925	18.26675	6.9865	29.96	0.06
4/25/2016	12:00	3.03625	93.515	32.8375	8.17625	29.9575	0.01
4/25/2016	13:00	4.18175	160.4775	21.8875	8.8125	29.9475	0
4/25/2016	14:00	3.33425	156.95	27.5575	9.8775	29.9375	0
4/25/2016	15:00	4.232	243.1325	29.805	11.145	29.9275	0
4/25/2016	16:00	5.46075	35.53275	19	11.4625	29.92	0
4/25/2016	17:00	8.242	259.226	21.94	12.3275	29.9175	0
4/25/2016	18:00	7.94125	333.175	11.4725	11.12	29.9075	0
4/25/2016	19:00	5.508	332.6	9.7985	10.3625	29.9	0
4/25/2016	20:00	3.3115	97.85	15.502	9.7525	29.905	0
4/25/2016	21:00	5.13025	41.745	9.6975	8.269	29.92	0
4/25/2016	22:00	3.377	50.505	16.4725	7.70325	29.92	0
4/25/2016	23:00	4.08925	131	17.6325	7.16	29.92	0
4/26/2016	0:00	3.381	121.6075	17.93475	5.59475	29.92	0
4/26/2016	1:00	3.952	128.75	8.9205	5.688	29.9175	0
4/26/2016	2:00	4.869	123.85	7.98725	5.29775	29.9075	0
4/26/2016	3:00	4.358	126.8	8.43975	5.5845	29.8975	0
4/26/2016	4:00	2.706	180.65	15.415	5.5035	29.89	0
4/26/2016	5:00	3.91325	154.925	11.54825	4.291	29.8875	0
4/26/2016	6:00	4.58575	129.025	7.665	4.464	29.88	0
4/26/2016	7:00	5.16375	131.925	9.827	5.8145	29.8775	0
4/26/2016	8:00	3.2835	192.875	16.4675	6.703	29.8675	0
4/26/2016	9:00	5.2305	196.525	13.9875	7.635	29.8575	0
4/26/2016	10:00	4.7315	191.125	23.2875	9.0275	29.8475	0
4/26/2016	11:00	3.42775	230.7	49.8025	10.425	29.83	0
4/26/2016	12:00	2.87825	231.875	57.6475	11.7375	29.795	0
4/26/2016	13:00	3.92625	334	21.765	12.335	29.775	0
4/26/2016	14:00	5.03325	246.5	23.3375	12.8725	29.7575	0
4/26/2016	15:00	3.2535	204.46	41.2375	13.6225	29.7475	0
4/26/2016	16:00	7.30875	280.05	16.945	13.355	29.7375	0
4/26/2016	17:00	6.18525	278	14.015	12.9125	29.7275	0
4/26/2016	18:00	4.25625	278.825	9.2665	12.525	29.7175	0
4/26/2016	19:00	2.98675	257.425	8.94	12.1475	29.705	0
4/26/2016	20:00	2.45975	288.35	12.5125	11.5075	29.6925	0
4/26/2016	21:00	4.63	284.5	28.70325	10.6575	29.7	0
4/26/2016	22:00						
4/26/2016	23:00	3.721	37.5825	15.0525	8.83	29.7	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/27/2016	0:00	4.2415	49.745	8.42275	8.3825	29.6975	0
4/27/2016	1:00	2.286	51.1175	9.99575	8.405	29.69	0
4/27/2016	2:00	0.98875	53.99	8.43875	8.41	29.6875	0
4/27/2016	3:00	1.7815	159.175	18.555	8.415	29.68	0
4/27/2016	4:00	1.66425	150.275	20.6675	8.02975	29.6775	0
4/27/2016	5:00	1.34375	134.225	12.397	7.528	29.6675	0
4/27/2016	6:00	1.706	113.05	12.95925	7.26125	29.66	0
4/27/2016	7:00	2.7015	163.5	12.316	7.4335	29.6625	0
4/27/2016	8:00	2.79175	118.9225	20.03	8.208	29.6725	0
4/27/2016	9:00	5.32975	29.485	17.65	9.095	29.68	0
4/27/2016	10:00	4.827	34.0625	15.7075	9.4325	29.6825	0
4/27/2016	11:00	4.5355	25.85	15.81	9.8775	29.69	0
4/27/2016	12:00	4.33025	173.1575	20.1575	10.5325	29.6925	0
4/27/2016	13:00	3.93775	176.3325	36.93	11.17	29.7	0
4/27/2016	14:00	5.138	307.725	12.9575	11.035	29.7025	0
4/27/2016	15:00	2.75575	29.0875	17.9575	11.2675	29.71	0
4/27/2016	16:00	4.0345	50.675	17.915	11.6025	29.71	0
4/27/2016	17:00	3.14075	79.4275	23.57	11.62	29.71	0
4/27/2016	18:00	3.19725	52.55	12.3045	11.505	29.71	0
4/27/2016	19:00	3.2455	27.36	6.73475	11.04	29.7125	0
4/27/2016	20:00	1.47925	38.3525	8.71925	10.755	29.7225	0
4/27/2016	21:00	2.1845	55.0025	6.9995	10.2175	29.735	0
4/27/2016	22:00	1.301	47.3325	6.7325	10.135	29.7475	0
4/27/2016	23:00	0.67175	243.6725	16.798	9.73	29.7425	0
4/28/2016	0:00	1.8165	32.7125	5.56975	9.335	29.7525	0
4/28/2016	1:00	4.03225	19.53	8.334	8.9025	29.7575	0
4/28/2016	2:00	2.32375	30.987	13.67425	8.925	29.7525	0
4/28/2016	3:00	2.9895	156.175	21.94	8.8975	29.7625	0
4/28/2016	4:00	1.97325	131.4	19.4625	8.895	29.7725	0
4/28/2016	5:00	3.4075	130.075	10.524	9.0075	29.785	0
4/28/2016	6:00	2.58325	148.65	14.1835	8.865	29.805	0
4/28/2016	7:00	3.435	132.6	10.90675	8.9125	29.82	0
4/28/2016	8:00	3.08725	150.6	17.0575	9.4825	29.8225	0
4/28/2016	9:00	3.53725	147.775	26.4925	10.735	29.8275	0
4/28/2016	10:00	2.94825	207.85	34.9675	11.4825	29.82	0
4/28/2016	11:00	2.98025	241.925	36.725	12.2175	29.8175	0
4/28/2016	12:00	2.81625	242.175	26.69	12.58	29.81	0
4/28/2016	13:00	3.6665	276.225	32.4	13.0025	29.81	0
4/28/2016	14:00	4.0475	204.875	23.535	12.9	29.81	0
4/28/2016	15:00	2.1275	90.3525	32.6125	13.3925	29.8125	0
4/28/2016	16:00	4.665	101.125	16.195	13.2	29.815	0
4/28/2016	17:00	4.5385	134.95	10.765	12.9775	29.7975	0
4/28/2016	18:00	4.09675	141.275	10.1425	12.795	29.7875	0
4/28/2016	19:00	2.536	137.6	14.495	12.4175	29.78	0
4/28/2016	20:00	2.1595	163.25	19.43	12.045	29.7825	0
4/28/2016	21:00	2.277	117.225	15.8525	11.3325	29.7925	0
4/28/2016	22:00	5.314	188.375	13.14125	11.1925	29.8	0
4/28/2016	23:00	2.95625	211.25	6.7995	11.0725	29.8	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
4/29/2016	0:00	6.51475	230.85	8.6	10.725	29.8	0
4/29/2016	1:00	6.11475	247.325	10.928	10.14	29.7975	0
4/29/2016	2:00	5.54075	207.525	8.195	9.66	29.79	0
4/29/2016	3:00	6.48725	210.9	8.73275	9.3025	29.79	0
4/29/2016	4:00	5.638	196.7	10.21075	8.775	29.7875	0
4/29/2016	5:00	3.42225	141.85	12.79	8.3825	29.78	0
4/29/2016	6:00	4.228	128.275	8.5725	8.25	29.7825	0
4/29/2016	7:00	3.997	114.925	8.06375	8.265	29.79	0
4/29/2016	8:00	3.868	113.125	9.1565	8.19	29.795	0.02
4/29/2016	9:00	3.0775	88.695	15.9225	8.067	29.815	0.01
4/29/2016	10:00	3.65975	53.7825	17.2075	8.305	29.8325	0.03
4/29/2016	11:00	7.8945	25.7575	9.3825	8.445	29.84	0
4/29/2016	12:00	4.505	55.5675	26.115	9.805	29.8425	0
4/29/2016	13:00	1.7035	68.86	20.5875	10.4625	29.8525	0
4/29/2016	14:00	2.307	178.775	25.3975	10.6	29.86	0
4/29/2016	15:00	2.35825	256.175	40.005	11.735	29.865	0
4/29/2016	16:00	2.181	248.925	33.89	12.29	29.88	0
4/29/2016	17:00	2.77275	129.73575	36.565	13.2225	29.8825	0
4/29/2016	18:00	2.817	255.48175	27.6775	13.6225	29.8925	0
4/29/2016	19:00	2.3465	340.6	10.695	12.4275	29.9	0
4/29/2016	20:00	2.28775	31.8875	12.38	11.3675	29.9075	0
4/29/2016	21:00	2.4915	102.525	11.66	10.17	29.935	0
4/29/2016	22:00	2.49875	66.4475	6.868	9.16	29.9525	0
4/29/2016	23:00	6.6505	46.21	10.58825	8.32075	29.965	0
4/30/2016	0:00	10.6375	30.3425	8.41575	8.82	29.9825	0
4/30/2016	1:00	5.17775	114.185	47.452	8.3525	29.995	0
4/30/2016	2:00	1.743	144.5725	65.2625	8.10925	30.0175	0
4/30/2016	3:00	3.153	120.4	23.2875	7.5665	30.045	0
4/30/2016	4:00	4.4045	139.1	13.197	7.32925	30.065	0
4/30/2016	5:00	1.3735	157.55	23.51	7.07375	30.0825	0
4/30/2016	6:00	1.33625	175.7	14.94875	7.149	30.095	0
4/30/2016	7:00	1.823	209.425	25.0525	7.793	30.1175	0
4/30/2016	8:00	3.205	112.2475	42.39	9.46	30.1425	0
4/30/2016	9:00	6.935	15.48525	20.055	10.98	30.15	0
4/30/2016	10:00	4.6255	177.565	29.1925	12.4225	30.1475	0
4/30/2016	11:00	8.5765	310.525	23.165	13.5525	30.1375	0
4/30/2016	12:00	11.4825	330.875	15.125	14.585	30.1275	0
4/30/2016	13:00	10.47	180.915	19.8825	15.3125	30.1175	0
4/30/2016	14:00	9.3925	168.665	27.405	16.4825	30.1075	0
4/30/2016	15:00	6.90675	261.27	29.32	17.17	30.0975	0
4/30/2016	16:00	8.515	315.05	21.17	17.63	30.0875	0
4/30/2016	17:00	9.545	321.325	12.5975	17.6575	30.0775	0
4/30/2016	18:00	9.775	332.2	12.84	17.31	30.07	0
4/30/2016	19:00	8.534	336.7	12.03	16.425	30.0675	0
4/30/2016	20:00	7.9735	342.3	10.91975	14.725	30.0625	0
4/30/2016	21:00	5.9715	101.437	20.42	14.3425	30.07	0
4/30/2016	22:00	6.90375	11.718	9.50975	13.075	30.07	0
4/30/2016	23:00	9.6225	16.595	6.56825	11.6925	30.065	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/1/2016		7.747	33.1825	11.095	10.99	30.0475	0
5/1/2016		5.7585	26.67	10.5575	10.46	30.0325	0
5/1/2016		5.9695	42.2425	10.395	9.2375	30.0075	0
5/1/2016		4.194	60.5975	11.535	8.855	29.995	0
5/1/2016		4.3545	50.77	9.331	8.6075	29.9775	0
5/1/2016		4.62175	29.9725	6.66475	8.39	29.965	0
5/1/2016		4.232	26.4975	7.16575	7.74775	29.95	0
5/1/2016		3.98875	31.565	9.277	8.5825	29.9475	0
5/1/2016		2.6535	39.8	15.175	11.1825	29.935	0
5/1/2016		2.41875	50.365	29.1525	14.495	29.9125	0
5/1/2016		4.40575	32.7675	15.86	16.6975	29.8825	0
5/1/2016		8.96675	25.11	8.999	19.0225	29.85	0
5/1/2016		12.145	21.125	11.375	20.4475	29.81	0
5/1/2016		10.385	20.625	16.4	22.265	29.7725	0
5/1/2016		7.4655	166.12125	29.765	24.1175	29.7425	0
5/1/2016		12.8	289.65	13.7025	24.1625	29.7175	0
5/1/2016		11.945	324.025	14.275	24.2325	29.7025	0
5/1/2016		10.2025	353.1	16.3775	24.2425	29.6725	0
5/1/2016		12.4925	92.64875	13.46	23.4175	29.645	0
5/1/2016		10.53	106.4625	15.115	22.41	29.6325	0
5/1/2016		6.74275	53.8475	14.015	21.4625	29.645	0
5/1/2016		6.4675	93.575	11.2575	21.7675	29.66	0
5/1/2016		6.50175	106.225	11.925	21.3475	29.6575	0
5/1/2016		7.132	114.175	12.4875	20.675	29.6475	0
5/2/2016		6.1555	117.05	11.43	20.0775	29.64	0
5/2/2016		9.33075	134.7	10.6	19.5075	29.6375	0
5/2/2016		12.815	130.975	10.51	20.0775	29.63	0
5/2/2016		10.69	129.1	11.74	19.965	29.6325	0
5/2/2016		5.37	116.8	13.045	18.635	29.6425	0
5/2/2016		3.246	83.3425	22.7325	17.6025	29.65	0
5/2/2016		3.9935	57.38	12.665	16.72	29.65	0
5/2/2016		3.57825	96.18	36.565	18.75	29.65	0
5/2/2016		2.18175	131.675	34.95	21.1125	29.655	0
5/2/2016		3.277	127.375	34.455	23.5725	29.6725	0
5/2/2016		4.431	114.175	36.3825	25.59	29.68	0
5/2/2016		6.00725	120.875	34.0625	27.2225	29.6775	0
5/2/2016		5.12775	134.05	39.225	27.6425	29.6675	0
5/2/2016		6.60975	253.375	20.1575	28.0175	29.6525	0
5/2/2016		7.61825	306.375	15.98	28.025	29.625	0
5/2/2016		10.23	298.9	13.8475	28.2675	29.6075	0
5/2/2016		7.728	302.4	19.7625	28.95	29.5975	0
5/2/2016		7.30925	277.4	15.77	28.27	29.5875	0
5/2/2016		8.03475	278.275	7.83575	26.69	29.58	0
5/2/2016		6.2305	221.9165	17.6595	26.1575	29.5875	0
5/2/2016		9.09025	224.225	11.96	22.2125	29.6225	0
5/2/2016		5.09425	148.775	17.265	20.93	29.665	0
5/2/2016		5.17775	135.85	9.09275	19.9975	29.68	0
5/2/2016		3.41675	132.325	18.3075	19.44	29.68	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/3/2016		2.97125	120.55	17.8725	18.9475	29.68	0
5/3/2016		4.38675	207.95	16.24925	17.4425	29.6775	0
5/3/2016		4.7195	168.75	10.97325	15.79	29.6725	0
5/3/2016		5.56375	166.925	14.8475	15.0925	29.685	0
5/3/2016		5.9455	145.275	14.8665	14.3625	29.7025	0
5/3/2016		5.06275	168.7	13.7975	13.3575	29.715	0
5/3/2016		4.0385	129.4475	17.8225	13.07	29.7325	0
5/3/2016		1.909	172.1875	23.4935	13.5725	29.74	0
5/3/2016		2.76025	266.525	18.905	14.4425	29.745	0
5/3/2016		2.7865	186.875	27.9675	15.2675	29.76	0
5/3/2016		1.77825	206.725	38.0675	16.5075	29.7625	0
5/3/2016		3.05525	126.6725	48.955	18.6	29.7675	0
5/3/2016		3.77	252.625	39.12	19.925	29.7575	0
5/3/2016		6.1195	235.7	36.4175	20.99	29.75	0
5/3/2016		7.83975	233.475	18.2075	20.915	29.7525	0
5/3/2016		7.41775	222.025	17.8375	20.535	29.7575	0
5/3/2016		5.471	253.975	20.1075	20.715	29.75	0
5/3/2016		6.01575	269.75	14.7375	20.38	29.75	0
5/3/2016		8.19075	268.8	9.7975	19.46	29.7475	0
5/3/2016		7.36275	279.575	10.76225	18.09	29.745	0
5/3/2016		4.332	157.0925	24.59	16.745	29.765	0
5/3/2016		9.79775	27.505	10.9475	14.7075	29.7825	0
5/3/2016		12.81	22.435	12.47	13.35	29.7925	0
5/3/2016		10.44925	27.79	15.6525	12.7	29.8	0
5/4/2016		6.29675	33.5525	29.795	12.065	29.8025	0
5/4/2016		7.678	93.831	24.06	10.8775	29.81	0
5/4/2016		8.98175	21.80775	20.6725	9.5975	29.8075	0.01
5/4/2016		6.04175	37.6525	17.1825	9.27	29.7925	0.06
5/4/2016		7.86225	24.195	13.9275	9.4925	29.77	0
5/4/2016		11.1525	13.14	12.02325	9.4525	29.7675	0
5/4/2016		10.5925	101.77	14.4475	9.4125	29.7625	0
5/4/2016		9.341	8.895	14.06	9.48	29.7675	0
5/4/2016		10.7525	12.0975	13.4125	9.45	29.76	0
5/4/2016		10.9225	22.18	10.9525	9.3725	29.76	0
5/4/2016		9.6125	23.1475	12.2625	9.9825	29.76	0
5/4/2016		12.0775	12.75925	14.5175	11.6	29.7575	0
5/4/2016		9.284	265.54	16.155	11.8325	29.7475	0
5/4/2016		7.75225	351.85	16.4025	12.1825	29.7375	0
5/4/2016		7.67225	177.9305	14.0025	11.905	29.73	0
5/4/2016		5.6515	351.425	16.5825	11.6725	29.7225	0.01
5/4/2016		8.51325	107.0375	14.2075	11.965	29.695	0
5/4/2016		7.57975	10.75	13.18	12.2975	29.6775	0
5/4/2016		6.9635	343.15	13.04	11.8625	29.67	0
5/4/2016		4.934	186.0975	13.225	11.58	29.675	0
5/4/2016		5.0705	99.48875	9.26375	11.3675	29.69	0
5/4/2016		6.4175	90.4875	12.76	11.29	29.69	0
5/4/2016		8.419	15.26775	9.5425	10.9825	29.69	0
5/4/2016		7.34175	11.614	9.2005	10.7875	29.695	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/5/2016		5.31125	85.42275	12.8925	10.6375	29.7075	0
5/5/2016		2.8285	167.27925	22.575	10.2225	29.705	0
5/5/2016		5.7755	95.97375	13.795	10.2075	29.7175	0
5/5/2016		6.267	22.305	9.48875	9.99	29.71	0
5/5/2016		4.06275	46.0225	19.94	9.8675	29.71	0
5/5/2016		3.9255	22.8675	20.835	9.2	29.71	0
5/5/2016		5.34475	15.2	9.8115	9.3625	29.7125	0
5/5/2016		3.123	185.4275	16.37	9.8075	29.7225	0
5/5/2016		7.1155	10.69275	13.6525	11.2725	29.73	0
5/5/2016		8.1395	20.0825	10.645	11.875	29.7325	0
5/5/2016		7.97375	28.305	12.065	12.615	29.7425	0
5/5/2016		6.56075	103.9775	21.71	13.9125	29.7475	0
5/5/2016		6.84825	30.8975	23.555	14.5475	29.7375	0
5/5/2016		7.2055	35.33	21.91	15.2125	29.725	0
5/5/2016		7.5075	28.9675	24.6125	15.9425	29.71	0
5/5/2016		7.8105	14.2015	16.985	16.385	29.7075	0
5/5/2016		9.015	17.8395	19.76	16.835	29.6975	0
5/5/2016		8.20275	184.5475	16.08	16.695	29.6925	0
5/5/2016		8.7225	10.424	12.5075	16.59	29.7	0
5/5/2016		9.01	18.94	8.755	16.02	29.705	0
5/5/2016		8.5145	8.476	9.90875	15.295	29.7225	0
5/5/2016		6.99975	17.49575	12.95075	14.325	29.735	0
5/5/2016		7.02575	20.115	6.72775	13.9375	29.7525	0
5/5/2016		9.6125	10.3385	8.60775	13.7475	29.765	0
5/6/2016		9.605	18.294	6.3615	12.9425	29.78	0
5/6/2016		6.66	23.57625	11.84575	12.27	29.78	0
5/6/2016		3.4265	71.685	17.795	11.9	29.775	0
5/6/2016		2.8495	104.125	14.06975	11.485	29.76	0
5/6/2016		2.81575	59.8425	24.08	11.185	29.76	0
5/6/2016		2.15125	157.6325	44.3075	10.3675	29.7625	0
5/6/2016		5.10125	50.2	21.7675	9.325	29.7775	0
5/6/2016		8.94875	31.1975	9.2975	9.965	29.8	0
5/6/2016		2.6075	109.6425	26.565	12.9825	29.8025	0
5/6/2016		5.75925	31.505	13.4775	14.6325	29.8075	0
5/6/2016		7.22125	30.035	10.01	16.4775	29.795	0
5/6/2016		7.25425	20.7325	15.935	18.3675	29.775	0
5/6/2016		7.7145	175.92075	29.28	19.9025	29.7575	0
5/6/2016		10.293	91.467	16.6875	20.92	29.7475	0
5/6/2016		11.86	90.74625	16.45	21.3475	29.7375	0
5/6/2016		8.75575	261.496	22.77	22.48	29.725	0
5/6/2016		7.007	168.6665	26.1	23.2125	29.7075	0
5/6/2016		5.517	260.697	31.5275	23.135	29.7	0
5/6/2016		7.34925	178.09175	23.4225	22.2175	29.695	0
5/6/2016		7.0425	183.9035	17.295	21.26	29.68	0
5/6/2016		5.33075	13.34	14.8525	19.9875	29.6825	0
5/6/2016		5.5445	27.4775	19.145	19.3425	29.69	0
5/6/2016		7.1595	22.1375	10.285	18.47	29.6875	0
5/6/2016		5.7255	19.0525	14.7825	18.1775	29.675	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/7/2016		5.687	16.136	16.935	17.7275	29.6625	0
5/7/2016		1.0145	168.9875	24.56225	16.1025	29.665	0
5/7/2016		2.037	61.4225	16.265	14.7125	29.65	0
5/7/2016		2.427	148.55	44.3425	13.78	29.6475	0
5/7/2016		3.15725	215.7	35.8325	12.9275	29.64	0
5/7/2016		1.4735	100.6175	34.74	13.345	29.64	0
5/7/2016		1.914	131.35	18.935	14.1125	29.64	0
5/7/2016		2.885	219	20.025	14.26	29.6375	0
5/7/2016		2.6545	251.525	29.23	15.6925	29.63	0
5/7/2016		2.55725	217.35	32.9025	17.425	29.6275	0
5/7/2016		3.21	211.925	33.875	19.225	29.6175	0
5/7/2016		4.52425	240.325	26.555	20.965	29.605	0
5/7/2016		6.45625	267.3	19.5175	22.255	29.59	0
5/7/2016		8.73375	278.2	22.075	23.2275	29.5875	0
5/7/2016		10.7175	292.475	13.97	23.8325	29.575	0
5/7/2016		7.80875	291.675	16.5875	24.595	29.5575	0
5/7/2016		5.784	294.65	22.3675	25.2825	29.545	0
5/7/2016		5.558	168.98325	29.01	25.39	29.525	0
5/7/2016		8.88025	167.698	13.8	24.36	29.51	0
5/7/2016		10.439	17.1875	14.7325	20.6325	29.5075	0
5/7/2016		14.43	34.735	10.2475	18.5325	29.4975	0
5/7/2016		14.545	114.5825	17.3775	17.89	29.5	0
5/7/2016		10.32	26.586	19.38	16.35	29.5325	0
5/7/2016		11.6875	22.685	11.12	14.9675	29.5425	0
5/8/2016		8.746	31.2275	11.6525	13.74	29.555	0
5/8/2016		7.93975	30.075	11.355	12.94	29.5725	0
5/8/2016		6.131	11.19	17.66	12.5075	29.5825	0
5/8/2016		5.295	34.0675	23.98	11.92	29.5975	0
5/8/2016		4.95025	38.305	23.845	9.9225	29.625	0.03
5/8/2016		5.8315	263.575	34.345	8.97	29.6425	0.11
5/8/2016		8.72175	179.1	10.1875	7.87925	29.655	0.04
5/8/2016		8.53525	159.35	11.3375	7.486	29.6725	0
5/8/2016		5.7295	142.9	9.33	7.99775	29.6825	0
5/8/2016		5.96275	163.75	15.605	8.5625	29.69	0
5/8/2016		6.66875	175.65	16.7875	8.995	29.69	0
5/8/2016		6.152	161.15	14.8125	9.53	29.6875	0
5/8/2016		4.85875	148.925	18.66	10.3525	29.68	0
5/8/2016		3.522	151.85	36.425	11.235	29.6775	0
5/8/2016		4.63	133.25	22.185	12.605	29.6625	0
5/8/2016		3.06225	253.7	69.3125	14.3375	29.635	0
5/8/2016		7.494	223	11.845	15.1425	29.6125	0
5/8/2016		6.59675	246.75	11.95225	14.645	29.5875	0
5/8/2016		8.8625	274.65	10.705	13.675	29.5825	0
5/8/2016		9.985	257.325	9.8425	12.48	29.5875	0
5/8/2016		9.235	262.4	12.04	11.6075	29.5875	0
5/8/2016		10.795	217.25	10.583	10.74	29.62	0.01
5/8/2016		5.7425	157.325	15.6025	8.5315	29.655	0.04
5/8/2016		4.3585	88.88	13.1	7.439	29.6725	0.1

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/9/2016		6.82675	122	13.265	7.13575	29.6825	0.03
5/9/2016		5.1735	107.075	10.205	7.06475	29.69	0
5/9/2016		4.234	105.15	12.4825	7.22575	29.695	0
5/9/2016		4.45875	112.95	15.4915	7.1525	29.715	0
5/9/2016		2.40325	122.55	19.2675	7.32425	29.735	0
5/9/2016		2.195	137.775	32.735	7.50425	29.7525	0
5/9/2016		2.4465	136.825	22.725	7.49475	29.7675	0
5/9/2016		3.06825	161.5	15.96	7.83175	29.7975	0
5/9/2016		2.60975	141.675	33.6525	8.4775	29.825	0
5/9/2016		2.6315	137.725	27.27	9.015	29.8425	0
5/9/2016		2.74825	167.65	30.2625	9.88	29.8525	0
5/9/2016		3.27	283.225	30.075	11.49	29.86	0
5/9/2016		4.18	293.8	31.7075	12.7475	29.86	0
5/9/2016		3.309	242.3775	61.6075	14.1875	29.86	0
5/9/2016		4.74425	153.405	29.5	15.49	29.86	0
5/9/2016		5.2965	16.40825	31.245	16.0875	29.8575	0
5/9/2016		5.4765	323.95	31.14	16.8075	29.8475	0
5/9/2016		7.3405	305.375	16.505	16.9825	29.84	0
5/9/2016		7.91225	307.625	13.4075	16.905	29.84	0
5/9/2016		6.08925	302.925	8.20175	16.2725	29.8425	0
5/9/2016		5.60975	317.7	8.905	14.6375	29.855	0
5/9/2016		2.66225	38.6875	12.628	13.375	29.8775	0
5/9/2016		3.60975	42.1675	8.699	12.2875	29.9025	0
5/9/2016		1.488	145.025	27.585	11.69	29.9125	0
5/10/2016		2.021	88.915	17.482	10.5175	29.9225	0
5/10/2016		3.06825	190.725	15.1375	9.5225	29.935	0
5/10/2016		3.26175	188.6	13.585	8.5625	29.9525	0
5/10/2016		2.85025	174.625	11.51175	8.14825	29.9625	0
5/10/2016		3.4945	191.9	8.6245	7.76275	29.9725	0
5/10/2016		2.96775	150.775	18.6655	7.934	29.9825	0
5/10/2016		2.457	56.17	11.1035	8.0615	29.995	0
5/10/2016		3.31425	44.5925	12.149	8.995	30.01	0
5/10/2016		1.55925	53.22	25.3875	11.97	30.0125	0
5/10/2016		1.82275	179.249	45.285	14.265	30.02	0
5/10/2016		4.492	245.335	32.7225	15.9825	30.0175	0
5/10/2016		9.028	253.2625	16.435	17.4975	30.0075	0
5/10/2016		9.49	320.85	15.6175	18.795	30	0
5/10/2016		9.12275	261.175	19.8325	19.725	29.995	0
5/10/2016		10.4325	250.31075	16.9625	20.5725	29.9775	0
5/10/2016		7.804	243.8575	24.8325	21.0775	29.965	0
5/10/2016		6.30125	334.05	27.625	21.34	29.9475	0
5/10/2016		6.5815	249.855	25.26	21.38	29.935	0
5/10/2016		7.383	338.8	14.7375	20.9225	29.9175	0
5/10/2016		5.57975	343.825	11.53225	19.95	29.91	0
5/10/2016		4.087	169.162	9.08025	18.29	29.91	0
5/10/2016		1.6465	103.492	10.2075	16.3075	29.915	0
5/10/2016		2.5105	119.415	17.6825	15.1425	29.9275	0
5/10/2016		3.0615	76.0775	42.1725	14.93	29.9175	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/11/2016		5.3325	170.75	30.83025	12.32	29.91	0
5/11/2016		2.7345	120.925	14.42975	12.6875	29.905	0
5/11/2016		3.7525	164.45	15.35375	11.7025	29.8875	0
5/11/2016		3.7085	160.9	11.8625	11.8075	29.88	0
5/11/2016		2.80475	129.2175	24.3025	10.8	29.8775	0
5/11/2016		2.792	90.1525	13.9425	11.57	29.8675	0
5/11/2016		1.743	167.4	24.2075	11.35	29.855	0
5/11/2016		1.40525	51.4625	14.615	12.34	29.84	0
5/11/2016		1.91	132.35	20.47	15.135	29.835	0
5/11/2016		1.65825	59.29775	35.605	17.57	29.8175	0
5/11/2016		2.4965	114.825	48.81	19.72	29.805	0
5/11/2016		3.128	222.35	50.5675	21.695	29.785	0
5/11/2016		5.085	238.8	24.48	22.825	29.7675	0
5/11/2016		6.14875	268.375	33.3025	23.8075	29.755	0
5/11/2016		9.9325	233.65	19.115	24.4175	29.7375	0
5/11/2016		9.135	228.925	20.3275	24.7875	29.7225	0
5/11/2016		8.16875	227.975	18.44	25.02	29.695	0
5/11/2016		8.69	234.575	14.27675	24.94	29.675	0
5/11/2016		6.86125	238.725	13.525	24.645	29.6575	0
5/11/2016		3.97125	251.85	11.51	24.2775	29.6475	0
5/11/2016		6.14425	213.1275	12.46075	21.02	29.6425	0
5/11/2016		9.5115	23.5475	8.58025	18.3375	29.65	0
5/11/2016		9.068	34.205	10.81	17.495	29.65	0
5/11/2016		6.51425	37.6525	10.0525	15.9975	29.6475	0
5/12/2016		6.32025	41.5375	8.00475	14.4475	29.64	0
5/12/2016		5.46575	26.2625	9.3875	13.475	29.6425	0
5/12/2016		4.19175	33.03	7.904	12.75	29.65	0
5/12/2016		4.639	30.845	8.001	11.575	29.6525	0
5/12/2016		3.78175	34.1025	9.98025	11.54	29.66	0
5/12/2016		4.368	131.395	13.80075	11.6275	29.6625	0
5/12/2016		5.6645	159.425	8.0495	11.1125	29.675	0
5/12/2016		6.43525	196.775	7.67825	11.6575	29.6975	0
5/12/2016		5.10575	168.7	18.515	13.4725	29.72	0
5/12/2016		3.916	187.075	29.065	15.165	29.72	0
5/12/2016		3.73175	224.225	38.0575	16.5525	29.7225	0
5/12/2016		5.13475	219.075	26.6425	18.085	29.7325	0
5/12/2016		6.43	234.45	22.6125	19.45	29.7375	0
5/12/2016		5.65925	284.1	25.5675	20.395	29.73	0
5/12/2016		7.37925	277.725	19.5325	21.1225	29.7325	0
5/12/2016		6.425	257.6	28.94	21.75	29.74	0
5/12/2016		5.19875	268.575	32.29	22.3675	29.74	0
5/12/2016		4.1045	253.875	38.03	22.6575	29.7375	0
5/12/2016		3.095	260.65	30.565	22.34	29.7275	0
5/12/2016		1.48525	302.6	14.335	22.465	29.72	0
5/12/2016		2.5775	97.045	12.5815	20.23	29.72	0
5/12/2016		3.1205	56.1775	7.6235	18.395	29.7225	0
5/12/2016		3.24125	58.5	16.115	16.49	29.7325	0
5/12/2016		3.583	26.84	10.39425	15.315	29.7375	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/13/2016		3.7375	21.0225	6.76725	14.1775	29.73	0
5/13/2016		3.61575	22.1975	11.65975	13.615	29.7275	0
5/13/2016		2.96525	19.5525	5.16775	13.04	29.7175	0
5/13/2016		3.72425	17.0225	7.36725	12.325	29.71	0
5/13/2016		4.64025	16.875	13.0625	10.7175	29.7075	0
5/13/2016		4.40275	24.0525	10.44075	10.415	29.6975	0
5/13/2016		2.9335	20.3775	18.45	11.0225	29.69	0
5/13/2016		2.20875	180.0825	40.4125	13.04	29.69	0
5/13/2016		3.4395	93.60675	22.01	15.275	29.69	0
5/13/2016		3.91875	354.15	18.7825	18.345	29.6875	0
5/13/2016		3.00725	17.0375	27.88	21.7825	29.68	0
5/13/2016		6.9685	282.175	16.4225	23.06	29.675	0
5/13/2016		8.94	278.525	11.6475	24.4925	29.6575	0
5/13/2016		8.98	291.975	17.3925	26.06	29.645	0
5/13/2016		8.48925	311.2	17.8975	27.1425	29.625	0
5/13/2016		9.2785	308.65	20.1525	27.4475	29.605	0
5/13/2016		9.39125	105.095	20.725	28.01	29.585	0
5/13/2016		8.517	20.7875	17.17	27.445	29.5675	0
5/13/2016		8.8355	11.08075	12.9275	26.225	29.56	0
5/13/2016		7.902	22.973	17.93	24.7625	29.5625	0
5/13/2016		6.008	40.8275	16.3725	23.52	29.57	0
5/13/2016		4.32825	32.24	11.42	22.1625	29.5725	0
5/13/2016		2.61575	55.7425	27.175	22.195	29.58	0
5/13/2016		3.14675	36.1625	26.8925	20.46	29.5775	0
5/14/2016		3.9715	142.5175	27.93	19.035	29.5725	0
5/14/2016		5.68175	213.675	8.59425	15.875	29.58	0
5/14/2016		6.57325	187.025	11.125	13.7075	29.59	0
5/14/2016		6.109	190.525	10.43825	12.3325	29.6175	0
5/14/2016		5.2875	198.3	14.6265	11.79	29.6125	0
5/14/2016		6.173	192.2	8.01225	10.73	29.6175	0
5/14/2016		3.6255	158.5125	30.11	10.82	29.615	0
5/14/2016		4.62175	236.15	21.205	11.255	29.6375	0
5/14/2016		3.72425	142.2	17.9475	11.5225	29.655	0
5/14/2016		2.42575	140	25.945	11.9825	29.64	0
5/14/2016		2.8455	184.6175	34.4575	12.0525	29.64	0.01
5/14/2016		3.454	198.15	27.385	12.1275	29.6425	0.02
5/14/2016		5.0295	206.625	13.075	12.005	29.6525	0
5/14/2016		5.2435	240.725	13.5275	11.705	29.66	0
5/14/2016		5.3725	247.9	8.958	11.74	29.66	0
5/14/2016		4.36325	204.25	12.305	12.12	29.66	0
5/14/2016		4.977	178.125	15.99	12.43	29.6625	0
5/14/2016		4.6605	174.3	17.715	12.4975	29.67	0
5/14/2016		3.5325	163.425	14.52	12.495	29.6675	0.01
5/14/2016		5.011	136.675	8.85775	12.12	29.6575	0.01
5/14/2016		5.812	142.525	8.1255	11.7875	29.655	0
5/14/2016		5.735	153.15	9.925	11.5425	29.6725	0.01
5/14/2016		5.6325	163.8	11.7125	11.2425	29.685	0.01
5/14/2016		7.559	166.35	9.31275	10.76	29.6975	0.01

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/15/2016		7.82725	154.525	5.952	10.335	29.6875	0
5/15/2016		6.5855	147.5	8.06	10.1725	29.6775	0.01
5/15/2016		6.1545	146	8.16625	10.0875	29.67	0
5/15/2016		5.28475	140.85	9.1575	10.0325	29.67	0
5/15/2016		4.8775	136.625	8.809	10.0025	29.6675	0
5/15/2016		4.87025	141.425	7.58375	10.0325	29.6625	0
5/15/2016		4.98575	140.525	8.6815	9.9575	29.67	0
5/15/2016		5.41525	140.525	9.3345	10.1125	29.6725	0
5/15/2016		5.72025	153.625	9.99675	10.2975	29.68	0.01
5/15/2016		6.34475	183.275	9.2055	10.4725	29.68	0.02
5/15/2016		5.2205	183.325	10.3935	10.7925	29.6825	0
5/15/2016		4.827	180.825	9.3965	10.765	29.6925	0.01
5/15/2016		4.09775	184.05	13.295	10.8625	29.7025	0.03
5/15/2016		5.111	189.175	11.77725	10.95	29.715	0.01
5/15/2016		6.48975	205.75	8.72925	10.935	29.73	0.01
5/15/2016		4.611	190.25	8.36125	11.0225	29.735	0.01
5/15/2016		5.6255	182.975	11.23475	11.0375	29.75	0.01
5/15/2016		6.06525	189.175	8.447	11.0575	29.7525	0.02
5/15/2016		5.28625	185.175	8.77075	11.1575	29.7625	0.02
5/15/2016		5.88825	188.625	8.9935	11.1525	29.77	0.03
5/15/2016		5.72525	177.175	10.57175	10.9925	29.7725	0.02
5/15/2016		4.857	174.675	11.435	10.95	29.7875	0.02
5/15/2016		3.929	139.65	13.025	10.8375	29.81	0.02
5/15/2016		5.51375	176.15	11.2235	10.805	29.81	0.01
5/16/2016		5.36075	175.9	11.91475	10.6275	29.8125	0.01
5/16/2016		5.97275	178.675	10.6655	10.3925	29.8225	0.01
5/16/2016		4.95425	178.975	12.2675	10.29	29.8325	0.01
5/16/2016		3.69125	170.675	18.3	10.1775	29.8425	0.01
5/16/2016		4.669	142.4	12.33	9.9825	29.8525	0.01
5/16/2016		3.56075	154.38	20.02625	9.81	29.865	0.01
5/16/2016		3.189	45.9525	19.7	9.23	29.885	0.04
5/16/2016		7.58575	29.9975	11.2775	8.86	29.9075	0.02
5/16/2016		7.9565	29.515	10.3525	8.845	29.935	0
5/16/2016		8.29	28.985	9.43	8.965	29.9525	0.01
5/16/2016		6.53375	32.0425	10.6075	9.5375	29.965	0
5/16/2016		6.09	28.7475	10.5575	10.095	29.985	0
5/16/2016		3.61825	24.2875	12.0975	10.88	30.0025	0
5/16/2016		1.72075	53.5375	14.225	11.2325	30.01	0
5/16/2016		2.5995	176.9125	24.95	11.6525	30.0125	0
5/16/2016		1.97325	105.4	21.6025	11.905	30.0225	0
5/16/2016		3.2525	101.25	17.84	12.2525	30.03	0
5/16/2016		1.80025	133.1	28.675	12.75	30.03	0
5/16/2016		1.36025	54.9675	15.49775	12.5475	30.0275	0
5/16/2016		0.887	26.635	6.22225	12.445	30.02	0
5/16/2016		0.65075	117.74	8.45775	12.0575	30.0225	0
5/16/2016		2.08175	345.2	7.54725	11.89	30.035	0
5/16/2016		2.832	37.315	8.07125	11.235	30.05	0
5/16/2016		4.02725	42.4925	6.496	11.21	30.05	0

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/17/2016		3.678	115.095	10.997	11.055	30.0525	0
5/17/2016		2.661	30.1875	12.105	10.785	30.0575	0
5/17/2016		5.4825	33.5175	9.1375	10.0925	30.05	0
5/17/2016		6.60375	26.43	8.065	9.665	30.0475	0
5/17/2016		6.0915	30.7825	8.68375	9.6225	30.04	0
5/17/2016		7.50275	34.5025	8.7775	9.195	30.04	0
5/17/2016		7.1395	31.7375	8.51725	9.435	30.045	0
5/17/2016		3.8015	36.65	14.36025	10.9975	30.065	0
5/17/2016		3.92925	40.7325	15.0675	12.3025	30.08	0
5/17/2016		6.0265	42.8825	16.665	13.8625	30.0775	0
5/17/2016		4.1285	25.85325	31.52	15.435	30.07	0
5/17/2016		5.229	261.2425	27.0825	16.305	30.07	0
5/17/2016		6.296	98.4	32.5175	17.2375	30.0675	0
5/17/2016		5.091	20.6775	29.61	18.185	30.055	0
5/17/2016		6.05925	252.07	29.985	19.2625	30.0375	0
5/17/2016		8.034	317.875	19.505	19.6125	30.025	0
5/17/2016		7.86125	324.925	14.645	19.1975	30.0075	0
5/17/2016		7.844	310.4	10.845	19.0325	29.9975	0
5/17/2016		7.6975	307.175	8.5775	18.4725	29.985	0
5/17/2016		6.671	303.375	7.85825	17.6675	29.965	0
5/17/2016		6.06775	334.85	6.9995	16.325	29.95	0
5/17/2016		4.68825	29.48	9.2705	15.3025	29.95	0
5/17/2016		4.35725	67.0075	7.32325	14.235	29.9475	0
5/17/2016		3.10725	53.5875	8.5625	14.055	29.9375	0
5/18/2016		3.215	54.8075	8.21225	12.335	29.925	0
5/18/2016		4.041	43.355	8.74525	11.65	29.91	0
5/18/2016		2.40475	40.2025	8.3325	11.8325	29.91	0
5/18/2016		3.24875	84.855	12.0425	11.4175	29.9025	0
5/18/2016		2.14825	170.65	22.221	11.2975	29.88	0
5/18/2016		3.25625	159.525	12.7275	10.98	29.88	0
5/18/2016		4.08275	141.925	12.37	10.54	29.8775	0
5/18/2016		4.64275	193.2	7.99875	11.3475	29.87	0
5/18/2016		3.28975	211.625	23.9925	12.145	29.87	0
5/18/2016		3.82525	202.875	24.1975	13.285	29.865	0
5/18/2016		2.91775	213.8	33.2525	14.3975	29.8425	0
5/18/2016		4.65925	199.1	36.0725	16.04	29.82	0
5/18/2016		8.9665	242.975	17.8175	16.5325	29.82	0
5/18/2016		8.0205	252.375	12.48	15.655	29.815	0
5/18/2016		5.435	249.325	14.2525	15.4925	29.7925	0
5/18/2016		5.02425	235.15	16.25	15.8475	29.765	0
5/18/2016		7.8775	251.35	15.7725	15.735	29.7425	0
5/18/2016		14.1925	258.925	10.065	15.5275	29.7125	0
5/18/2016		13.735	259.9	11.445	14.7525	29.685	0
5/18/2016		11.28	260	11.239	13.9375	29.67	0
5/18/2016		11.08	250.075	9.54625	12.3125	29.67	0
5/18/2016		7.325	263.375	13.0225	11.94	29.675	0
5/18/2016		5.48	192.075	29.89	11.3575	29.6875	0
5/18/2016		3.26925	133.425	66.755	9.8225	29.68	0.01

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/19/2016		4.756	93.92	26.62	8.98	29.6775	0.01
5/19/2016		2.89325	69.0525	26.7775	8.18	29.67	0.06
5/19/2016		4.41825	95.8375	10.62	7.9005	29.6675	0.14
5/19/2016		4.99275	100.625	11.4275	7.59825	29.6575	0.09
5/19/2016		6.30175	116.8	9.91	7.40975	29.6475	0.04
5/19/2016		5.205	109.5	12.185	7.196	29.64	0.04
5/19/2016		5.41425	160.55	12.3675	7.149	29.64	0.02
5/19/2016		5.85675	166.775	13.4475	7.17525	29.64	0.01
5/19/2016		5.06875	137.5	11.9725	7.26525	29.64	0
5/19/2016		4.311	123.575	13.4925	7.84625	29.6375	0
5/19/2016		5.7485	110.725	11.6625	8.7975	29.625	0
5/19/2016		4.833	123.25	20.425	10.2325	29.61	0
5/19/2016		4.8575	84.315	17.9325	10.88	29.6025	0
5/19/2016		6.72	127.875	24.955	12.8075	29.575	0
5/19/2016		9.679	196.9	17.35	13.4675	29.5575	0
5/19/2016		12.6225	203	11.56	12.2825	29.55	0
5/19/2016		12.3775	173.375	11.5075	11.61	29.5525	0
5/19/2016		8.6265	147.55	12.675	10.5075	29.56	0
5/19/2016		6.751	126.025	11.865	9.3825	29.5575	0
5/19/2016		5.62	124.4	12.4625	9.4725	29.5525	0
5/19/2016		4.497	124.25	9.34	9.265	29.56	0
5/19/2016		4.33475	130.45	8.535	8.8975	29.56	0.05
5/19/2016		4.72025	115.8	8.6325	8.53	29.5625	0.01
5/19/2016		4.5225	116.525	8.84425	8.355	29.5675	0.01
5/20/2016		4.879	122.725	10.96	8.1775	29.5575	0.05
5/20/2016		3.654	117.625	11.2725	8.115	29.55	0.01
5/20/2016		3.30725	106.45	9.959	8.0425	29.55	0
5/20/2016		3.877	109.2	11.045	7.91275	29.5475	0.01
5/20/2016		2.71025	102.325	11.845	7.7985	29.54	0
5/20/2016		2.7775	95.6	13.6825	7.76	29.54	0.01
5/20/2016		1.889	92.59	16.36	8.13575	29.5375	0
5/20/2016		1.33875	98.15625	22.1975	9.5925	29.5325	0
5/20/2016		3.394	211.23	44.185	10.525	29.535	0
5/20/2016		4.684	240.96	25.77	11.51	29.515	0
5/20/2016		3.02075	240.8925	32.4325	12.6125	29.4975	0
5/20/2016		4.40125	89.7375	27.2775	13.5675	29.485	0
5/20/2016		6.08975	315.475	25.16	14.61	29.4675	0
5/20/2016		7.83725	315.9	19.2325	15.06	29.455	0
5/20/2016		9.6375	313.35	12.73	15.7775	29.4375	0
5/20/2016		8.43775	321.2	19.21	16.67	29.4275	0
5/20/2016		10.0175	318.3	16.6725	16.4425	29.4175	0
5/20/2016		8.72375	319.925	16.8225	16.3325	29.41	0
5/20/2016		5.40525	252.598	15.8575	15.4775	29.41	0
5/20/2016		5.772	311.675	7.9815	14.6275	29.4125	0
5/20/2016		1.237	129.1555	21.005	13.905	29.42	0
5/20/2016		2.05125	82.015	34.03	12.4925	29.42	0
5/20/2016		1.93875	261.1925	15.85	12.3775	29.42	0
5/20/2016		1.53625	27.74775	14.5375	11.8725	29.42	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/21/2016		1.20525	170.375	30.4875	11.4525	29.4175	0
5/21/2016		1.85675	124.075	16.10425	11.7825	29.4075	0
5/21/2016		4.593	194.5	15.71875	11.125	29.4	0
5/21/2016		3.3615	118.9575	28.9105	10.6225	29.4	0
5/21/2016		3.91275	140.375	7.379	10.6275	29.4	0
5/21/2016		5.666	153.375	6.0955	10.105	29.4025	0.05
5/21/2016		5.52725	142.95	8.52575	9.6425	29.415	0.08
5/21/2016		4.6455	138.3	35.3125	9.3675	29.4325	0.11
5/21/2016		2.386	210.45	35.2275	9.3	29.4425	0.17
5/21/2016		4.28825	182.725	12.74175	9.295	29.4525	0.06
5/21/2016		2.93325	192.05	26.52	9.445	29.465	0.05
5/21/2016		2.64725	236	41.0025	9.9475	29.4825	0.04
5/21/2016		5.6995	262.425	14.06	10.565	29.4925	0.03
5/21/2016		6.764	242.675	13.3125	11.3525	29.5	0
5/21/2016		6.5555	218.025	13.5325	11.835	29.5025	0
5/21/2016		6.20825	215.575	10.3035	12.1475	29.515	0
5/21/2016		7.4065	189	15.174	11.76	29.53	0.06
5/21/2016		6.31375	235.8	19.925	11.705	29.535	0.02
5/21/2016		9.7875	242.225	8.32275	11.4775	29.5525	0
5/21/2016		8.09175	230.725	9.4535	11.11	29.565	0
5/21/2016		4.13625	203.15	15.7675	10.89	29.5825	0
5/21/2016		4.26575	190.975	8.64875	10.595	29.595	0
5/21/2016		6.21675	175.825	9.9775	10.2225	29.61	0
5/21/2016		5.98375	160.95	12.8525	9.98	29.61	0
5/22/2016		4.5165	159.85	13.9775	9.92	29.6125	0
5/22/2016		6.27975	151.65	10.58	9.8025	29.6175	0
5/22/2016		6.9225	151.375	8.59975	9.69	29.61	0
5/22/2016		6.6775	169.425	11.6825	9.79	29.61	0
5/22/2016		6.12275	160.275	12.5875	9.5575	29.6125	0
5/22/2016		7.81975	183.45	7.93825	9.385	29.6225	0
5/22/2016		5.8515	174.375	10.00025	9.3725	29.635	0
5/22/2016		5.9545	170	10.53	9.535	29.6525	0
5/22/2016		5.0715	134.275	10.3275	10.0575	29.66	0
5/22/2016		8.26025	173.225	12.38	11.4525	29.66	0.01
5/22/2016		8.15475	182.725	15.6575	12.53	29.6575	0
5/22/2016		8.48275	207.8	16.1975	13.475	29.6475	0
5/22/2016		8.56825	213.775	11.8525	13.6325	29.64	0
5/22/2016		11.4825	221.775	12.57	14.4875	29.6375	0
5/22/2016		8.5975	233.925	12.951	14.8675	29.63	0
5/22/2016		7.82475	197.3	14.0805	13.655	29.63	0
5/22/2016		7.30725	163.475	14.295	14.1675	29.63	0
5/22/2016		7.2425	165.75	18.4875	14.145	29.63	0
5/22/2016		9.101	178.9	11.9365	13.4725	29.63	0
5/22/2016		5.882	152.875	11.639	12.415	29.63	0
5/22/2016		6.725	153.75	8.12125	11.8675	29.6325	0
5/22/2016		3.67925	162.325	11.915	11.58	29.6425	0
5/22/2016		5.92725	172.55	8.133	11.42	29.65	0
5/22/2016		6.0985	167.525	10.9335	10.77	29.6525	0

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/23/2016		5.241	170.175	12.92375	10.485	29.66	0
5/23/2016		7.35575	180.8	7.5895	10.4325	29.6575	0
5/23/2016		5.45075	169.35	13.4775	10.1975	29.65	0
5/23/2016		3.74675	141.8	10.94	10.01	29.65	0
5/23/2016		4.58075	146.8	8.22125	9.905	29.65	0
5/23/2016		4.05775	140.075	8.551	9.9	29.6525	0
5/23/2016		3.605	147.4	10.834	10.215	29.66	0
5/23/2016		5.4145	177.1	9.9725	10.9175	29.66	0
5/23/2016		4.47925	187.45	16.235	11.445	29.6625	0
5/23/2016		3.28375	171.85	21.0625	11.9925	29.67	0
5/23/2016		2.93625	156.8725	20.1625	12.3275	29.6725	0
5/23/2016		3.25875	86.5775	17.6525	12.8975	29.68	0
5/23/2016		3.6755	94.41	18.59	13.38	29.6775	0
5/23/2016		2.57775	85.025	18.7575	13.61	29.67	0
5/23/2016		2.847	73.675	29.4	14.66	29.6725	0
5/23/2016		2.786	104.8675	30.4025	15.035	29.68	0
5/23/2016		6.781	30.44	10.495	14.54	29.6775	0
5/23/2016		7.066	31.235	10.52525	14.365	29.6675	0
5/23/2016		4.7325	35.5475	12.7	14.17	29.66	0
5/23/2016		2.51275	69.0875	15.8185	13.9175	29.6575	0
5/23/2016		1.46525	121.03	18.9925	13.4225	29.65	0
5/23/2016		1.729	72.86	19.14	12.2475	29.6525	0
5/23/2016		1.70025	33.4375	15.7	11.5225	29.6625	0
5/23/2016		1.5385	32.025	10.0005	11.61	29.67	0
5/24/2016		1.99475	44.52	9.56925	11.7725	29.67	0
5/24/2016		0.96875	255.1225	31.915	11.3625	29.67	0
5/24/2016		3.117	31.8975	12.17625	11.01	29.67	0
5/24/2016		3.076	38.8675	10.7375	10.4325	29.67	0
5/24/2016		2.2015	137.8	15.8975	10.845	29.67	0
5/24/2016		1.30525	101.575	8.77775	10.9225	29.67	0
5/24/2016		2.2265	150.775	15.2975	11.13	29.6725	0
5/24/2016		0.69775	77.91	16.8175	11.15	29.685	0
5/24/2016		2.21825	143.2	16.665	11.755	29.705	0
5/24/2016		3.6905	144.825	15.68	12.19	29.7225	0
5/24/2016		2.13	108.4425	38.855	12.8425	29.735	0
5/24/2016		1.42725	158.725	37.1425	13.8375	29.7525	0
5/24/2016		4.515	243.075	18.6575	14.2025	29.7625	0
5/24/2016		3.24875	268.875	18.285	14.5375	29.7725	0
5/24/2016		4.8675	262.475	26.4	15.92	29.7825	0
5/24/2016		4.91125	284.675	17.32	15.985	29.785	0
5/24/2016		3.72575	296.675	31.0875	16.4575	29.77	0
5/24/2016		1.96475	243.2425	25.78	16.68	29.7675	0
5/24/2016		2.00625	71.4375	13.33	15.725	29.76	0
5/24/2016		2.945	140.4	11.645	15.165	29.76	0
5/24/2016		2.281	98.43	9.87	14.5225	29.76	0
5/24/2016		0.98575	179.075	8.0695	14.43	29.765	0
5/24/2016		0.46925	147.53025	14.3555	13.935	29.7825	0
5/24/2016		2.20875	177.325	16.8475	13.505	29.7925	0

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/25/2016		1.2855	144.8925	9.68525	12.9225	29.8025	0
5/25/2016		2.985	140.725	16.495	12.7125	29.8125	0
5/25/2016		3.985	161.3	10.73875	12.28	29.8225	0
5/25/2016		3.35275	187.95	9.92975	12.2125	29.8325	0
5/25/2016		4.06425	196.25	7.59525	12.1225	29.845	0
5/25/2016		5.26875	199.075	5.78525	11.775	29.8625	0
5/25/2016		6.21675	197.9	6.74575	11.4675	29.875	0
5/25/2016		4.38475	188.625	12.1975	11.37	29.895	0
5/25/2016		5.502	187.65	11.7925	11.455	29.915	0
5/25/2016		5.4965	193.025	12.12	11.5525	29.935	0
5/25/2016		4.069	181.975	21.8	12.3225	29.955	0
5/25/2016		4.037	193.075	29.715	13.55	29.975	0
5/25/2016		4.60775	191.975	24.6775	14.425	29.995	0
5/25/2016		6.29775	192.475	15.4375	14.9275	30.01	0
5/25/2016		6.72225	212.95	15.585	15.33	30.0125	0
5/25/2016		6.9935	214.45	13.9175	15.4075	30.02	0
5/25/2016		8.55725	225.15	14.005	15.4675	30.02	0
5/25/2016		10.83	231.25	13.5425	15.64	30.02	0
5/25/2016		8.13925	237.1	10.1375	14.8875	30.015	0
5/25/2016		7.91325	252.025	9.895	14.0925	30	0
5/25/2016		9.2625	252.3	7.679	12.8825	30	0
5/25/2016		7.07825	236.55	7.311	12.0275	30.0025	0
5/25/2016		4.01475	234.95	12.6055	11.6	30.0125	0
5/25/2016		4.15075	200.1	10.549	11.335	30.02	0
5/26/2016		8.87	196.85	8.6125	11.01	30.02	0
5/26/2016		8.5125	190.05	8.9555	10.4275	30.02	0
5/26/2016		7.91	165.6	9.13125	9.9825	30.02	0
5/26/2016		6.84425	144.225	9.3025	9.6975	30.02	0
5/26/2016		6.6815	141.025	9.4	9.59	30.0175	0
5/26/2016		6.99325	138.15	9.1825	9.425	30.01	0
5/26/2016		6.67225	145.875	8.7465	9.6025	30.01	0
5/26/2016		5.7725	155.625	12.765	10.025	30.0125	0
5/26/2016		6.9885	190.625	11.02	10.6425	30.02	0
5/26/2016		7.22175	202.175	12.785	10.9125	30.0225	0
5/26/2016		6.553	193.05	16.63	10.825	30.03	0
5/26/2016		5.7565	184.325	19.4225	10.5775	30.03	0
5/26/2016		4.4355	141.025	21.9125	11.0225	30.03	0
5/26/2016		3.021	97.8475	41.105	12.8025	30.03	0
5/26/2016		5.29675	186.375	23.4975	13.4325	30.0275	0
5/26/2016		5.028	242.125	23.445	13.52	30.0175	0
5/26/2016		5.69625	226.15	13.37	13.765	30.01	0
5/26/2016		8.1875	210.4	13.7575	14.4	30.005	0
5/26/2016		9.42	219.15	8.985	13.7025	29.985	0
5/26/2016		9.61475	232.175	9.7605	13	29.9675	0
5/26/2016		10.3725	210.725	9.04675	12.3	29.96	0
5/26/2016		10.845	199.6	9.75575	11.6825	29.9625	0
5/26/2016		12.9	223.025	8.58	11.0925	29.9725	0
5/26/2016		12.42	196.7	9.5125	10.455	29.98	0

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/27/2016		10.7275	197.225	10.445	9.9975	29.9775	0
5/27/2016		11.2375	198.9	10.2025	9.7325	29.9675	0
5/27/2016		9.8775	197.05	10.3875	9.3975	29.9575	0
5/27/2016		8.266	187.65	11.0675	9.195	29.9475	0
5/27/2016		6.88975	205.875	15.305	8.8975	29.94	0
5/27/2016		9.6575	213.3	9.19875	8.7975	29.9425	0
5/27/2016		10.2825	204.525	9.1975	8.5725	29.9525	0
5/27/2016		8.58	202.15	9.9075	8.5625	29.965	0
5/27/2016		5.037	218.325	20.265	8.9	29.98	0
5/27/2016		4.268	184.6025	26.4325	9.52	29.9825	0
5/27/2016		3.585	122.5125	39.435	11.04	29.995	0
5/27/2016		3.96075	132.0425	29.655	11.815	30.01	0
5/27/2016		2.7045	61.7875	29.71	12.1125	30.0075	0
5/27/2016		3.33025	86.71	29.6025	13.0975	29.9975	0
5/27/2016		3.67925	126.84	36.91	14.0275	29.985	0
5/27/2016		6.75275	226.925	24.7025	15.215	29.97	0
5/27/2016		9.46	270.725	15.97	15.985	29.9625	0
5/27/2016		12.4475	272.3	16.3375	15.2325	29.935	0
5/27/2016		7.7495	320.625	10.685	12.945	29.9175	0
5/27/2016		9.46	238.825	13.1975	13.275	29.9075	0
5/27/2016		10.657	238.6	8.68225	12.6425	29.9025	0
5/27/2016		9.8175	230.5	8.20475	11.9875	29.915	0
5/27/2016		10.5425	237.225	10.335	11.37	29.93	0
5/27/2016		10.7175	225.125	8.463	10.9	29.9275	0
5/28/2016		10.5225	201.6	8.9545	10.15	29.92	0
5/28/2016		9.7425	189.175	8.665	9.555	29.92	0
5/28/2016		8.7175	179.9	8.465	9.1575	29.9175	0
5/28/2016		8.425	173.25	9.2	8.5725	29.9075	0
5/28/2016		6.99425	146.6	7.6985	8.00275	29.8975	0.01
5/28/2016		5.7395	139.325	8.795	7.8965	29.8875	0.02
5/28/2016		7.92875	128.325	8.8675	8.01975	29.8775	0.01
5/28/2016		8.20625	129.425	10.57	8.595	29.87	0.02
5/28/2016		7.2145	136.65	11.6475	9.0025	29.8725	0.01
5/28/2016		7.652	115.4	11.7225	9.5625	29.8775	0
5/28/2016		7.01575	158.175	17.485	12.0325	29.875	0
5/28/2016		7.19025	201.175	11.13	12.9975	29.89	0
5/28/2016		7.38825	192	11.8075	12.8425	29.8875	0.02
5/28/2016		5.41475	133.65	21.78	13.5925	29.8775	0
5/28/2016		10.105	207.75	10.725	15.1575	29.87	0
5/28/2016		11.56	225.45	8.92	15.54	29.8725	0
5/28/2016		7.06325	266.95	10.335	14.4375	29.8725	0
5/28/2016		2.53825	319.4	15.17475	13.5975	29.8475	0
5/28/2016		4.57775	255.35	14.3825	12.6575	29.8375	0.03
5/28/2016		3.0605	219.975	18.2425	11.83	29.8325	0.05
5/28/2016		4.54425	128.6	8.74675	11.4675	29.8375	0.05
5/28/2016		4.53125	128.275	11.3675	11.43	29.8325	0.01
5/28/2016		4.76275	152.425	10.64	11.3775	29.84	0.02
5/28/2016		5.2965	158.7	8.8955	11.5	29.84	0.02

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/29/2016		4.80075	169.175	10.71	11.5125	29.84	0
5/29/2016		5.3175	174.775	8.99225	11.58	29.8425	0
5/29/2016		5.596	170.3	11.445	11.3875	29.85	0
5/29/2016		6.84575	188.15	7.632	11.12	29.85	0
5/29/2016		6.162	188.075	7.12575	10.8625	29.855	0
5/29/2016		5.38475	191.625	12.0275	10.6225	29.875	0
5/29/2016		4.03125	163.6	14.02	10.455	29.8925	0
5/29/2016		3.45875	160.275	14.3575	10.785	29.905	0
5/29/2016		5.41825	162.575	16.6325	11.7125	29.9275	0
5/29/2016		6.721	197.2	17.23	12.165	29.95	0.01
5/29/2016		4.26625	186.6475	29.085	11.905	29.955	0.02
5/29/2016		9.2665	37.9725	12.0525	10.285	29.97	0.02
5/29/2016		9.585	30.3275	10.4725	11.625	29.9775	0
5/29/2016		12.5775	32.3275	8.325	11.765	30	0
5/29/2016		12.6525	32.3275	8.4075	12.34	30	0
5/29/2016		12.245	26.965	10.62	13.1225	30.0025	0
5/29/2016		12.6975	29.125	11.505	13.745	30.005	0
5/29/2016		12	25.4225	10	14.0275	29.9925	0
5/29/2016		11.1825	25.735	13.0325	13.89	29.9975	0
5/29/2016		8.863	36.5225	12.315	13.26	29.9925	0
5/29/2016		6.842	31.0425	15.17	12.895	30.0025	0
5/29/2016		9.7675	32.94	9.5655	11.96	30.015	0
5/29/2016		8.042	33.19	8.99625	10.99	30.0325	0
5/29/2016		9.045	32.645	9.3445	10.0025	30.0425	0
5/30/2016		10.445	29.225	7.58525	9.8625	30.055	0
5/30/2016		11.485	36.4125	8.6665	9.9475	30.07	0
5/30/2016		10.795	37.105	8.73975	9.895	30.0725	0
5/30/2016		5.85425	36.82	18.63425	8.59	30.08	0
5/30/2016		4.372	54.7175	12.79475	7.3365	30.0825	0
5/30/2016		1.56225	121.25	35.32	7.28725	30.0925	0
5/30/2016		1.7795	117.33	21.9075	7.6075	30.105	0
5/30/2016		1.01625	53.95	29.86	9.87	30.125	0
5/30/2016		1.542	183.24	48.4475	11.2725	30.1375	0
5/30/2016		8.523	24.91	12.94	13.325	30.125	0
5/30/2016		10.43	16.415	12.4	14.4575	30.1075	0
5/30/2016		8.97425	178.02475	22.5825	16.105	30.1	0
5/30/2016		9.335	325.25	18.11	17.54	30.0975	0
5/30/2016		6.96575	346.45	25.0675	18.515	30.0875	0
5/30/2016		7.30775	177.5475	25.185	19.3875	30.0775	0
5/30/2016		6.85425	254.5505	26.51	20.2575	30.065	0
5/30/2016		8.5975	91.1035	20.6675	20.49	30.045	0
5/30/2016		8.858	337.225	20.835	20.7275	30.025	0
5/30/2016		8.6635	350.2	17.95	20.29	30.005	0
5/30/2016		9.3125	335.35	12.94125	18.74	29.9875	0
5/30/2016		8.66225	345.6	10.2275	16.9675	29.98	0
5/30/2016		4.55	254.1625	15.565	16.075	29.9825	0
5/30/2016		5.9325	30.4525	10.342	14.9	29.9825	0
5/30/2016		7.7975	35.665	9.37175	13.5925	29.9575	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
5/31/2016		7.67125	40.8825	8.8725	12.785	29.9475	0
5/31/2016		6.784	27.07625	10.6925	11.745	29.94	0
5/31/2016		4.09125	44.1325	12.795	11.0675	29.9375	0
5/31/2016		3.659	115.6825	24.0625	10.9025	29.925	0
5/31/2016		3.09275	126.56	21.7955	10.95	29.9075	0
5/31/2016		1.91175	122.9975	19.68	10.935	29.8975	0
5/31/2016		1.7475	119.9575	22.065	11.24	29.895	0
5/31/2016		3.1595	192.7775	14.4	12.28	29.9075	0
5/31/2016		2.6365	22.9175	20.375	14.8	29.8975	0
5/31/2016		1.7945	110.805	36.39	17.0375	29.885	0
5/31/2016		2.2545	169.64175	34.215	19.05	29.865	0
5/31/2016		5.12175	213.4125	25.935	20.69	29.8475	0
5/31/2016		6.08775	289.2	17.4425	22.1525	29.8375	0
5/31/2016		5.235	284.475	23.665	23.9275	29.8275	0
5/31/2016		6.07175	282.475	17.295	24.8275	29.815	0
5/31/2016		5.46175	278.475	19.3375	25.885	29.795	0
5/31/2016		4.994	273.45	20.22	25.945	29.775	0
5/31/2016		4.7005	293.35	11.42	25.3025	29.755	0
5/31/2016		2.6825	306.7	15.9275	25.2175	29.7375	0
5/31/2016		3.2455	152.815	11.266	23.84	29.725	0
5/31/2016		3.3385	188.2425	14.25	21.6225	29.7075	0
5/31/2016		4.28775	109.0775	14.045	19.995	29.7	0
5/31/2016		5.1265	107.7975	27.8275	18.35	29.6975	0
5/31/2016		6.687	43.85	8.1215	17.2375	29.69	0
6/1/2016		7.35775	38.905	8.86525	16.095	29.69	0
6/1/2016		6.562	41.1425	9.9325	14.91	29.69	0
6/1/2016		3.407	56.5	12.505	14.8275	29.69	0
6/1/2016		4.048	114.65	12.54625	14.5775	29.69	0
6/1/2016		3.35575	143.325	15.7825	14.5325	29.6875	0
6/1/2016		3.81625	176.75	15.6775	13.875	29.6825	0
6/1/2016		4.92825	177.525	10.256	13.105	29.7	0
6/1/2016		4.376	143.65	16.065	14.2925	29.7325	0
6/1/2016		3.96775	148.775	24.08	15.9825	29.735	0
6/1/2016		3.567	195.4	29.95	17.195	29.7175	0
6/1/2016		3.18325	225.8	44.655	18.765	29.71	0
6/1/2016		5.3015	207.25	34.5125	19.8575	29.7075	0
6/1/2016		5.95	231.5	23.7725	20.71	29.7	0
6/1/2016		6.87875	236.775	24.6425	21.6575	29.7	0
6/1/2016		6.994	238.15	24.4125	22.44	29.6975	0
6/1/2016		8.29925	260.4	14.5225	21.7675	29.69	0
6/1/2016		6.794	255.6	19.3425	22.045	29.6875	0
6/1/2016		7.312	256.95	18.83	21.8425	29.675	0
6/1/2016		10.7975	247.375	9.2	20.7475	29.66	0
6/1/2016		9.555	234.075	10.101	19.4875	29.66	0
6/1/2016		6.59025	230.175	9.95775	18.645	29.6625	0
6/1/2016		8.75575	227.425	12.47075	16.4725	29.675	0
6/1/2016		5.417	174.175	21.195	14.9175	29.6875	0.02
6/1/2016		5.75	169.15	12.9775	14.615	29.68	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/2/2016		5.82175	154.65	11.3675	14.4075	29.6775	0
6/2/2016		8.0655	192.8	9.87	14.2425	29.6725	0.03
6/2/2016		12.125	231.75	9.7175	13.8425	29.6875	0.02
6/2/2016		10.1375	223.625	10.8975	13.5275	29.7125	0.02
6/2/2016		8.7735	206.575	13.3075	13.48	29.7225	0
6/2/2016		8.647	195.875	11.3225	13.35	29.7375	0.05
6/2/2016		9.3575	191.425	9.4	13.095	29.765	0.02
6/2/2016		10.02	184.125	10.4775	12.76	29.785	0
6/2/2016		8.975	192.425	10.1425	12.8675	29.8125	0
6/2/2016		9.2375	202.4	12.1275	13.32	29.8575	0
6/2/2016		6.44	196.725	15.075	13.6575	29.8875	0
6/2/2016		7.24225	199.325	12.625	14.28	29.915	0
6/2/2016		9.6075	221.425	11.8725	15.415	29.94	0
6/2/2016		9.17	223.525	12.5575	16.0325	29.975	0
6/2/2016		9.22	207.8	14.825	17.345	29.9975	0
6/2/2016		8.32825	189.625	12.6325	17.39	30.02	0
6/2/2016		6.5735	185.3	17.6875	17.7975	30.025	0
6/2/2016		7.73475	206.275	14.9875	19	30.04	0
6/2/2016		6.756	259.6	13.9575	18.7875	30.035	0
6/2/2016		5.173	278.475	8.68625	17.7725	30.02	0
6/2/2016		3.36	272.4	11.052	17.1375	30.0225	0
6/2/2016		3.41375	259.825	10.733	16.5975	30.0375	0
6/2/2016		2.22875	174	18.3375	15.815	30.06	0
6/2/2016		2.636	175.475	19.19	15.41	30.06	0
6/3/2016		2.087	173.925	25.84125	14.58	30.0575	0
6/3/2016		2.37175	191.175	18.17175	14.225	30.0525	0
6/3/2016		0.99125	75.7525	12.888	13.52	30.06	0
6/3/2016		1.21425	233.35	24.2725	12.83	30.065	0
6/3/2016		3.24925	139.525	16.8165	11.9575	30.08	0
6/3/2016		3.65275	99.4625	10.74175	12.125	30.0825	0
6/3/2016		1.08375	70.945	18.3525	13.3775	30.1	0
6/3/2016		2.01925	49.68	21.5925	14.8775	30.13	0
6/3/2016		1.39375	139.231	29.7525	17.0175	30.125	0
6/3/2016		3.38425	300.725	36.14	18.47	30.1025	0
6/3/2016		4.118	327.25	34.9575	19.915	30.08	0
6/3/2016		6.61225	108.335	23.1875	21.3425	30.08	0
6/3/2016		5.48025	168.01475	34.8675	22.985	30.08	0
6/3/2016		4.49275	155.27275	32.5925	24.3	30.0725	0
6/3/2016		5.4315	301.2	23.2325	25.7325	30.0525	0
6/3/2016		6.45275	322.325	30.39	26.52	30.055	0
6/3/2016		6.4785	173.078	29.6875	26.5675	30.0325	0
6/3/2016		8.72725	263.5665	16.395	26.105	30	0
6/3/2016		8.3535	262.6745	15.305	25.525	29.9675	0
6/3/2016		7.79225	334.2	13.4725	24.35	29.955	0
6/3/2016		8.2965	255.39125	16.93	22.565	29.9425	0
6/3/2016		7.408	26.795	14.375	20.76	29.9475	0
6/3/2016		8.816	30.725	13.76	20.03	29.9425	0
6/3/2016		11.1375	31.925	7.9655	19.27	29.9475	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/4/2016		8.15775	10.13575	20.8175	18.65	29.94	0
6/4/2016		7.216	25.555	9.535	17.16	29.935	0
6/4/2016		5.83475	22.2375	10.0925	16.245	29.9225	0
6/4/2016		10.8325	26.48	9.0375	16.0325	29.9275	0
6/4/2016		10.53	31.7225	8.0485	15.18	29.915	0
6/4/2016		9.3235	28.6	11.185	14.4825	29.8975	0
6/4/2016		7.704	23.98	11.4175	15.1075	29.895	0
6/4/2016		6.94875	32.0875	9.43	16.1425	29.9125	0
6/4/2016		5.13225	29.9725	12.8075	17.8375	29.92	0
6/4/2016		7.03825	29.6525	13.4775	19.7125	29.91	0
6/4/2016		11.1125	30.04	10.095	21.165	29.8775	0
6/4/2016		9.8025	27.48	12.185	23.205	29.8675	0
6/4/2016		11.535	29.6175	9.6675	24.895	29.8525	0
6/4/2016		11.1875	19.385	13.3525	26.6625	29.82	0
6/4/2016		13.44	12.4175	12.6025	27.675	29.7825	0
6/4/2016		11.9975	181.40025	16.9975	28.7775	29.7525	0
6/4/2016		11.655	2.811	17.32	29.225	29.7225	0
6/4/2016		11.025	12.851	17.925	29.0025	29.6875	0
6/4/2016		11.1075	14.01625	18.7425	28.36	29.65	0
6/4/2016		10.51	25.03	14.845	27.17	29.65	0
6/4/2016		13.3175	25.94	10.4425	25.6475	29.65	0
6/4/2016		10.26	21.7725	11.9425	23.8125	29.65	0
6/4/2016		11.8825	25.37	10.085	22.575	29.645	0
6/4/2016		11.64625	24.265	11.18	21.83	29.6325	0
6/5/2016		10.5875	34.23	9.2825	20.3275	29.64	0
6/5/2016		7.6465	31.875	7.956	19.0525	29.64	0
6/5/2016		5.49075	32.1075	10.035	18.325	29.6375	0
6/5/2016		4.71175	42.115	8.97975	17.18	29.63	0
6/5/2016		4.71075	44.515	7.75025	17.515	29.63	0
6/5/2016		4.02575	183.0075	23.83375	16.5	29.63	0
6/5/2016		0.723	52.245	9.43375	18.2175	29.635	0
6/5/2016		1.36825	88.2275	16.6775	19.525	29.65	0
6/5/2016		1.15325	94.34	39.6475	20.5525	29.6525	0
6/5/2016		1.55525	138.85	64.87	23.455	29.655	0
6/5/2016		1.8525	286.875	51.2675	25.495	29.64	0
6/5/2016		3.62	284.075	32.74	27.1525	29.6375	0
6/5/2016		3.64825	281.45	30.3075	28.915	29.63	0
6/5/2016		5.99025	279.45	17.5925	30.3075	29.62	0
6/5/2016		5.63725	275.8	21.0175	31.185	29.5825	0
6/5/2016		6.319	272.275	17.695	32.47	29.55	0
6/5/2016		8.20325	272.05	10.81625	33.0525	29.52	0
6/5/2016		7.27325	284.35	11.4875	33.06	29.51	0
6/5/2016		6.1745	306.425	10.15	32.4625	29.4825	0
6/5/2016		4.0005	330.1	16.27225	31.2775	29.4975	0
6/5/2016		6.16425	319.375	8.3325	28.37	29.525	0
6/5/2016		4.428	259.91	15.9425	26.755	29.5425	0
6/5/2016		8.30075	32.32	12.34	24.8175	29.5525	0
6/5/2016		11.045	38.84	14.2125	24.0975	29.56	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/6/2016		8.24475	49.0125	19.635	23.3175	29.5625	0
6/6/2016		4.779	89.6775	30.295	22.9875	29.5725	0
6/6/2016		5.0165	164.975	18.2875	22.2675	29.575	0
6/6/2016		5.8445	222.475	13.14375	20.225	29.5625	0
6/6/2016		2.98775	181.525	12.1375	19.5225	29.575	0
6/6/2016		3.53075	174.175	9.01	18.5725	29.5975	0
6/6/2016		2.74825	164.25	10.46775	18.3475	29.6225	0
6/6/2016		3.204	164.35	19.455	19.065	29.63	0
6/6/2016		2.268	179.9125	35.0025	20.765	29.625	0
6/6/2016		3.28275	97.455	26.5225	23.0325	29.6075	0
6/6/2016		8.42625	325.1	15.3275	25.1075	29.6	0
6/6/2016		8.31075	174.56175	17.7025	26.21	29.6	0
6/6/2016		8.5605	174.635	16.9375	27.1125	29.595	0
6/6/2016		7.95975	255.55575	26.0825	28.4925	29.5775	0
6/6/2016		10.16	339.275	19.5375	29.0125	29.5675	0
6/6/2016		10.7425	331.775	17.0825	29.2625	29.555	0
6/6/2016		11.1875	314.025	10.255	29.2375	29.5325	0
6/6/2016		8.5995	304.5	13.2925	29.27	29.5075	0
6/6/2016		8.27875	317.55	8.6645	27.985	29.5	0
6/6/2016		6.98475	179.5375	14.535	26.3225	29.5125	0
6/6/2016		9.563	261.1975	12.281	23.8525	29.55	0
6/6/2016		15.385	26.22	7.1245	21.1425	29.545	0
6/6/2016		10.715	35.66	8.56525	20.315	29.53	0
6/6/2016		9.2975	27.73	8.108	19.865	29.525	0
6/7/2016		9.48	30.81	8.299	19.5675	29.5075	0
6/7/2016		6.563	29.395	11.00225	17.5675	29.5	0
6/7/2016		10.085	22.8975	7.361	17.22	29.5025	0
6/7/2016		8.875	27.37	8.02675	17.0725	29.51	0
6/7/2016		5.23325	57.435	34.08	15.44	29.5125	0
6/7/2016		2.14225	119.40075	28.065	15.6025	29.5225	0
6/7/2016		2.923	38.8975	21.465	15.0025	29.5325	0
6/7/2016		4.00475	36.585	11.7125	16.2225	29.5425	0
6/7/2016		2.08125	285.7	36.2675	18.445	29.545	0
6/7/2016		3.295	34.89125	35.945	20.5975	29.5275	0
6/7/2016		4.49375	27.2875	23.665	22.425	29.52	0
6/7/2016		6.83725	282.45	19.1875	23.7	29.5175	0
6/7/2016		5.93125	296.25	27.9925	24.955	29.51	0
6/7/2016		5.233	289.125	28.695	26.45	29.505	0
6/7/2016		4.85075	298.225	26.5825	28.0075	29.485	0
6/7/2016		8.04425	273.175	16.8	28.7475	29.465	0
6/7/2016		6.2595	287.025	19.755	29.2875	29.445	0
6/7/2016		6.5755	290.45	17.265	29.555	29.43	0
6/7/2016		5.83475	312.325	10.38325	27.7725	29.4275	0
6/7/2016		6.603	347.35	40.4925	24.4775	29.425	0
6/7/2016		6.619	193.2675	23.105	22.26	29.4425	0
6/7/2016		10.9425	34.94	10.2125	20.7	29.4475	0
6/7/2016		4.72525	89.91	30.6925	19.7525	29.44	0
6/7/2016		6.726	42.4925	11.07	18.6225	29.44	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/8/2016		8.062	33.835	9.211	17.66	29.4375	0
6/8/2016		5.4395	36.6625	11.292	17.075	29.43	0
6/8/2016		8.3255	32.19	8.7825	15.9875	29.435	0
6/8/2016		7.29925	50.885	13.195	15.6825	29.4525	0
6/8/2016		3.976	138.6	15.904	14.8875	29.4675	0
6/8/2016		3.8145	182.55	29.8	13.935	29.49	0
6/8/2016		5.38375	196.325	10.595	13.6125	29.495	0
6/8/2016		4.47725	153.925	16.735	13.8375	29.51	0
6/8/2016		7.03425	200.025	13.5	15.0525	29.515	0
6/8/2016		7.6365	194.4	22.3425	16.3425	29.53	0
6/8/2016		8.6535	217.425	17.7725	17.715	29.53	0
6/8/2016		12.67	209.025	15.3475	18.645	29.54	0
6/8/2016		12.5825	222.475	15.685	18.625	29.575	0
6/8/2016		12.215	228.1	16.255	18.5625	29.6	0
6/8/2016		14.685	234.775	14.87	18.1475	29.6325	0
6/8/2016		10.4025	250.875	11.5	15.8175	29.6425	0
6/8/2016		7.72375	223.15	16.32	15.4925	29.6525	0
6/8/2016		10.42	189.425	11.875	16.3175	29.6575	0
6/8/2016		10.36	206.45	9.49525	16.95	29.65	0
6/8/2016		8.369	201.95	12.6525	16.79	29.6525	0
6/8/2016		10.035	238.975	11.668	16.1875	29.66	0
6/8/2016		10.6	254.95	9.725	14.7275	29.665	0
6/8/2016		9.20075	258.225	9.105	13.385	29.68	0
6/8/2016		7.2685	241.05	7.79325	12.66	29.6825	0
6/9/2016		6.73025	236.6	9.47375	12.49	29.695	0
6/9/2016		5.74575	202.3	9.716	12.2875	29.705	0
6/9/2016		5.924	204.275	8.9575	12.06	29.6925	0
6/9/2016		5.69375	196.625	7.96625	11.63	29.7	0
6/9/2016		5.52275	192.95	8.03025	11.39	29.7	0
6/9/2016		5.41025	173.975	8.33875	11.115	29.7025	0
6/9/2016		7.38625	190.6	9.055	11.1075	29.7125	0
6/9/2016		4.826	174.575	17.185	11.52	29.72	0
6/9/2016		5.6075	168.325	17.9525	11.7625	29.72	0
6/9/2016		5.83025	171.65	14.2975	12.5375	29.72	0
6/9/2016		5.54375	191.6	22.1175	13.9275	29.72	0
6/9/2016		6.046	208.975	24.84	14.6125	29.72	0
6/9/2016		4.5515	177.325	26.4225	14.8875	29.715	0
6/9/2016		5.47625	152.85	12.6925	14.0625	29.7	0.01
6/9/2016		4.86875	114.225	11.338	13.0625	29.695	0.02
6/9/2016		5.0695	100.75	14.895	13.4825	29.6775	0
6/9/2016		5.477	117.25	13.04	13.12	29.66	0.01
6/9/2016		4.374	95.065	15.4075	13.9775	29.625	0
6/9/2016		4.17275	129.275	20.5775	15.3725	29.6075	0
6/9/2016		4.426	154.725	15.2125	15.1275	29.5975	0
6/9/2016		8.655	207.525	10.04625	14.06	29.5925	0
6/9/2016		5.05875	207.725	10.6725	12.82	29.605	0
6/9/2016		8.6485	231.075	9.7825	12.5375	29.62	0
6/9/2016		2.5815	251.2	22.46	11.94	29.6225	0.01

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/10/2016		2.34875	164.175	24.1375	11.765	29.6275	0
6/10/2016		7.1065	203.725	15.1025	11.4825	29.6225	0.01
6/10/2016		8.2775	191.6	9.6025	10.8325	29.635	0
6/10/2016		8.7225	191.575	9.5575	10.235	29.6575	0
6/10/2016		8.44625	187.65	7.88	9.775	29.685	0
6/10/2016		7.43175	156.8	12.2825	9.4175	29.7025	0
6/10/2016		5.38975	144.625	14.03	9.5025	29.7125	0
6/10/2016		6.19425	153.95	15.1	10.6475	29.725	0
6/10/2016		4.932	150	25.5625	11.4075	29.7425	0
6/10/2016		8.87225	217.175	16.26	13.0775	29.75	0
6/10/2016		9.09675	189.25	20.8175	14.135	29.7525	0
6/10/2016		9.94	207.05	19.915	15.135	29.76	0
6/10/2016		8.878	239.95	26.2725	15.5075	29.7575	0
6/10/2016		8.36925	223.575	28.1675	16.69	29.75	0
6/10/2016		9.41025	258.35	17.285	15.93	29.75	0
6/10/2016		11.415	253.95	11.5175	13.97	29.755	0
6/10/2016		9.6555	216.5	14.17	13.8075	29.7725	0
6/10/2016		8.3455	184.7	9.7225	11.0425	29.7825	0.05
6/10/2016		9.0575	167.875	10.91	10.4275	29.7925	0
6/10/2016		5.60825	129	10.225	10.2425	29.8025	0
6/10/2016		3.02875	143.3	13.48	10.4	29.8125	0
6/10/2016		3.62225	116.65	11.741	9.815	29.825	0
6/10/2016		3.602	163.6	14.5675	10.2725	29.845	0
6/10/2016		4.55475	201.875	11.9225	9.9875	29.865	0.01
6/11/2016		2.9925	148.2	17.7475	9.35	29.88	0.01
6/11/2016		4.48875	148.8	20.825	9.4375	29.8825	0
6/11/2016		4.9025	160.85	13.45	9.345	29.895	0
6/11/2016		6.85775	185.775	8.01125	9.4125	29.915	0
6/11/2016		4.03725	181.2	18.145	9.3575	29.935	0.1
6/11/2016		7.20625	223.225	11.6025	9.415	29.9575	0.06
6/11/2016		8.7655	213.6	8.664	9.3975	29.9875	0
6/11/2016		6.402	204.725	10.155	9.5875	30.0175	0
6/11/2016		4.4035	185.45	13.45	10.01	30.045	0
6/11/2016		5.6225	133.025	13.5625	10.9175	30.065	0
6/11/2016		6.57575	145.875	14.1375	11.785	30.0825	0
6/11/2016		7.08925	134.25	13.34	11.9925	30.09	0.01
6/11/2016		5.0645	110.4	15.845	12.28	30.09	0.01
6/11/2016		3.6635	155.2	34.1725	12.8125	30.0925	0.08
6/11/2016		4.42125	102.075	20.4675	13.62	30.1025	0
6/11/2016		3.991	132.24	32.595	15.2625	30.115	0
6/11/2016		6.10725	167.375	20.03	15.64	30.13	0
6/11/2016		5.97925	58.22325	29.745	13.84	30.125	0.02
6/11/2016		5.115	44.72	8.2795	12.555	30.11	0
6/11/2016		3.4465	33.7675	9.22	12.945	30.1125	0
6/11/2016		2.78575	35.3175	6.66225	12.5375	30.12	0
6/11/2016		1.72225	91.155	19.0375	12.31	30.125	0
6/11/2016		2.218	136.25	17.65	12.315	30.14	0
6/11/2016		2.259	45.6225	14.2505	11.4375	30.14	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/12/2016		2.16775	104	10.12525	11.4825	30.14	0
6/12/2016		2.1725	136.65	15.23	11.1225	30.14	0
6/12/2016		2.09	66.4075	17.51075	10.83	30.1375	0
6/12/2016		2.00075	52.255	17.3075	10.8475	30.13	0
6/12/2016		4.02525	42.87	10.765	10.56	30.13	0
6/12/2016		4.8605	21.9075	13.63	10.5275	30.1325	0
6/12/2016		4.54525	48.0675	14.6725	10.7	30.1425	0
6/12/2016		5.6815	28.7175	13.835	11.3175	30.1525	0
6/12/2016		6.92075	22.8625	15.13	12.2025	30.16	0
6/12/2016		5.04575	44.0525	24.3	13.535	30.1625	0
6/12/2016		3.462	178.2375	39.51	14.9	30.1625	0
6/12/2016		3.97	290.925	43.935	16.2175	30.14	0
6/12/2016		5.3285	163.01325	34.895	16.8175	30.135	0
6/12/2016		5.65575	321	31.2075	17.55	30.1175	0
6/12/2016		5.40025	309.8	43.255	18.4125	30.105	0
6/12/2016		5.36325	312.35	30.4075	18.74	30.0875	0
6/12/2016		6.1835	249.005	34.7975	19.3025	30.0725	0
6/12/2016		5.64975	259.555	23.94	19.445	30.045	0
6/12/2016		6.0615	249.3775	27.785	19.265	30.0225	0
6/12/2016		7.23425	327.125	10.7375	18.495	29.995	0
6/12/2016		8.06525	314.075	6.0085	16.595	29.97	0
6/12/2016		5.698	248.5475	9.37625	14.955	29.94	0
6/12/2016		5.906	34.165	9.812	13.4025	29.9325	0
6/12/2016		6.556775	39.6	9.2955	12.45	29.905	0
6/13/2016		7.2075	39.4275	8.856	11.93	29.885	0
6/13/2016		4.12475	49.825	10.224	10.895	29.865	0
6/13/2016		2.15425	122.3	15.3975	10.9825	29.8475	0
6/13/2016		3.367	107.075	16.482	10.135	29.8375	0
6/13/2016		6.573	138.025	8.08225	10.0575	29.8275	0
6/13/2016		6.5645	145.95	8.1705	10.2675	29.8175	0
6/13/2016		4.9615	178.175	12.805	10.4175	29.8125	0
6/13/2016		6.555	175.175	12.33	10.56	29.8175	0
6/13/2016		7.17225	164	14.46	10.755	29.8075	0
6/13/2016		7.23875	148.925	11.4475	11.465	29.7975	0
6/13/2016		9.015	158.425	12.6125	13.19	29.7875	0
6/13/2016		10.604	197.55	13.7175	13.0825	29.7775	0
6/13/2016		9.9175	191.25	15.385	13.5275	29.7675	0.01
6/13/2016		10.74	222.3	15.4425	13.9225	29.76	0.01
6/13/2016		11.3325	226.975	12.2	13.2825	29.7575	0.01
6/13/2016		11.5875	203.925	11.3075	13.2175	29.7475	0
6/13/2016		9.355	175.025	15.6475	14.13	29.7375	0
6/13/2016		15.715	212.55	14.0825	15.3025	29.7275	0
6/13/2016		19.1525	231.675	10.545	14.8425	29.72	0
6/13/2016		14.1925	233.125	10.56	13.745	29.72	0
6/13/2016		12.5625	226.55	9.86425	12.735	29.715	0
6/13/2016		11.4075	196.2	11.115	11.4725	29.7025	0
6/13/2016		8.92375	174.475	11.405	9.89	29.7075	0
6/13/2016		7.7425	174.025	13.0025	9.5225	29.6975	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/14/2016		7.301	179.375	9.34325	9.0625	29.69	0
6/14/2016		5.215	146.85	11.807	8.4025	29.6825	0
6/14/2016		6.077	156.65	10.93975	8.5375	29.6575	0
6/14/2016		7.4115	197.875	7.50875	8.2325	29.6475	0
6/14/2016		7.50975	182.2	7.7225	8.23	29.6425	0.01
6/14/2016		7.9535	163.65	9.8555	7.82425	29.65	0
6/14/2016		8.55875	157.15	8.646	7.359	29.65	0
6/14/2016		5.49175	148.85	13.29	7.85175	29.655	0
6/14/2016		11.4	183.925	11.3225	9.385	29.6725	0
6/14/2016		14.8075	197.675	10.905	10.6825	29.68	0
6/14/2016		13.1125	224.375	15.5325	10.4275	29.68	0.03
6/14/2016		11.65	191.8	13.815	8.815	29.6875	0.08
6/14/2016		13.325	185.9	13.3925	10.56	29.71	0
6/14/2016		15.0075	193.175	11.4475	12.0675	29.71	0
6/14/2016		17.0475	202.225	12.98	12.8	29.7125	0
6/14/2016		16.58	198.825	9.9775	11.0075	29.7175	0.01
6/14/2016		12.4175	191	11.0675	11.0975	29.7125	0
6/14/2016		11.94	168.3	11.13	10.5775	29.7225	0
6/14/2016		10.93	152.75	11.4425	10.52	29.735	0
6/14/2016		9.7125	157.5	11.24	9.995	29.75	0
6/14/2016		11.045	161.675	11.165	9.225	29.745	0.02
6/14/2016		6.905	143.075	9.1825	7.8795	29.7325	0
6/14/2016		5.15075	143.375	8.28375	7.872	29.74	0
6/14/2016		6.2275	149.2	8.934	8.08525	29.74	0
6/15/2016		5.45	142.2	8.61	7.8165	29.7375	0
6/15/2016		5.31925	140	7.58925	8.0485	29.7275	0
6/15/2016		4.949	147.85	6.17525	7.74275	29.72	0
6/15/2016		4.905	135.975	7.00275	7.644	29.7175	0
6/15/2016		3.91925	152.725	12.93075	7.86425	29.71	0
6/15/2016		2.34125	151.275	15.445	7.999	29.71	0
6/15/2016		2.937	153.15	15.9325	8.1385	29.7125	0
6/15/2016		1.275	129.9	17.095	8.855	29.7225	0
6/15/2016		1.529	104.955	22.52	9.765	29.73	0
6/15/2016		3.22025	152.625	44.8975	11.205	29.73	0
6/15/2016		5.46	211.25	23.7975	11.9175	29.725	0
6/15/2016		4.425	249.25	21.6475	12.495	29.71	0
6/15/2016		4.35525	270.925	50.72	14.2625	29.71	0
6/15/2016		3.96775	177.86	50.1075	15.1525	29.7025	0
6/15/2016		5.05825	264.8	34.2675	16.2175	29.675	0
6/15/2016		5.2485	272.6	36.95	16.295	29.6575	0
6/15/2016		5.2575	281.625	31.72	16.665	29.65	0
6/15/2016		7.2815	272.7	22.69	17.3625	29.6475	0
6/15/2016		8.9195	261.95	17.955	16.8375	29.6375	0
6/15/2016		6.15225	156.25	51.1825	15.2825	29.635	0
6/15/2016		10.0025	158.925	11.07	12.135	29.6525	0
6/15/2016		6.831	123.9	14.4275	9.8175	29.665	0.24
6/15/2016		3.76025	59.8725	13.039	9.4125	29.685	0
6/15/2016		4.1245	44.525	10.2035	9.2325	29.7025	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

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Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/16/2016		2.843	128.0575	19.1475	9.4075	29.71	0
6/16/2016		1.44425	189.6	12.3295	9.3975	29.7125	0
6/16/2016		1.709	130.725	14.5	9.205	29.7225	0
6/16/2016		2.251	118.5	15.61725	9.185	29.7325	0
6/16/2016		2.3465	154.9	14.6625	9.28	29.745	0
6/16/2016		2.12775	161.325	12.22	9.2	29.765	0
6/16/2016		2.3355	158.2	12.685	9.245	29.7875	0
6/16/2016		4.355	138.95	13.1575	9.93	29.8125	0
6/16/2016		4.96225	165.55	22.815	10.9975	29.8275	0
6/16/2016		5.28925	168.5	25.9775	12.4225	29.8575	0
6/16/2016		5.542	228.775	34.885	12.93	29.8825	0
6/16/2016		3.30275	202.25	44.06	13.84	29.89	0
6/16/2016		4.49225	272.625	37.0725	15.035	29.8925	0
6/16/2016		5.4235	270.65	35.3075	16.2525	29.9	0
6/16/2016		7.98325	261.5	22.9125	17.445	29.9025	0
6/16/2016		8.53225	257.575	25.84	18.415	29.9075	0
6/16/2016		6.13925	267.525	34.5275	18.9225	29.9	0
6/16/2016		7.4485	250.825	27.275	19.085	29.8975	0
6/16/2016		7.33225	269.225	23.005	18.605	29.8925	0
6/16/2016		7.95	158.175	21.6375	15.08	29.9025	0.1
6/16/2016		7.80025	114.85	13.3825	11.695	29.915	0
6/16/2016		4.5395	88.545	21.57	11.1575	29.9325	0
6/16/2016		4.50225	115.775	17.7375	10.5225	29.945	0
6/16/2016		5.7365	103.525	9.90475	10.23	29.9575	0
6/17/2016		3.12225	47.3825	12.7475	10.0225	29.9475	0
6/17/2016		3.952	51.4625	11.6705	9.32	29.9375	0
6/17/2016		4.525	31.905	10.41125	8.6475	29.9275	0
6/17/2016		3.22675	61.9075	22.172	7.54025	29.92	0
6/17/2016		2.0215	153.8325	18.357	7.91325	29.92	0
6/17/2016		2.5535	87.354	17.91575	7.34825	29.9225	0
6/17/2016		1.5035	111.185	22.18	8.55	29.9325	0
6/17/2016		2.3585	109.68	19.74	9.75	29.94	0
6/17/2016		2.55475	35.43	35.1775	11.7275	29.94	0
6/17/2016		5.07375	32.575	16.005	14.0275	29.935	0
6/17/2016		10.29375	22.285	13.78	15.7675	29.9125	0
6/17/2016		12.1925	13.97	12.9175	17.0725	29.89	0
6/17/2016		10.1375	265.44375	17.755	18.6375	29.8825	0
6/17/2016		9.44175	336.35	15.6375	18.6875	29.86	0
6/17/2016		8.75375	227.15	14.09	16.875	29.865	0.01
6/17/2016		4.60225	298.025	52.8075	16.07	29.885	0
6/17/2016		7.748	229.9	13.2015	14.8225	29.9	0
6/17/2016		5.778	178.85	14.6825	13.0875	29.895	0
6/17/2016		3.0135	214.15	20.4025	13.5875	29.8825	0
6/17/2016		2.39575	238.925	27.62	14.28	29.89	0
6/17/2016		2.3495	161.6225	18.365	13.4975	29.8875	0
6/17/2016		2.2385	55.99	15.405	12.755	29.8825	0
6/17/2016		2.08075	141.2125	23.43	12.2825	29.8875	0.04
6/17/2016		1.94525	38.47	7.1275	11.315	29.8775	0.05

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/18/2016		4.99675	106.5125	12.47625	10.855	29.865	0.11
6/18/2016		8.84425	37.68	10.39	10.4425	29.84	0.1
6/18/2016		4.476	151.4475	41.01825	10.535	29.8125	0.04
6/18/2016		1.925	262.1	39.835	10.645	29.82	0.01
6/18/2016		1.44025	167.108	32.0875	10.5575	29.825	0
6/18/2016		1.64925	155.875	20.405	10.7025	29.8375	0
6/18/2016		2.644	168.05	24.3875	10.76	29.8375	0.02
6/18/2016		5.4715	203.925	8.601	10.9675	29.865	0
6/18/2016		4.68125	221.2	10.26075	11.305	29.8875	0
6/18/2016		6.31975	223.95	11.41925	11.5475	29.9175	0
6/18/2016		5.48925	193.9	16.055	11.65	29.9475	0.02
6/18/2016		6.80825	186.95	8.95875	11.92	29.98	0
6/18/2016		5.18675	191.575	12.535	12.595	30.0125	0
6/18/2016		5.1305	166.675	21.625	13.8975	30.0275	0
6/18/2016		10.4965	168.725	16.4025	12.2275	30.0525	0.03
6/18/2016		6.793	122.475	15.4725	12.7575	30.0675	0
6/18/2016		9.956	186.075	26.235	14.755	30.095	0
6/18/2016		11.90625	201.3	17.8325	14.3325	30.1175	0
6/18/2016		13.335	213.225	15.6175	14.2025	30.145	0
6/18/2016		12.775	214.8	12.135	13.975	30.17	0
6/18/2016		12.63	211.725	15.0475	13.75	30.2075	0
6/18/2016		6.65075	153.6	9.86575	11.81	30.235	0
6/18/2016		5.115	137.925	9.316	10.485	30.25	0
6/18/2016		5.37275	141.9	7.9	10.0725	30.2525	0
6/19/2016		5.459	162.4	7.769	9.745	30.2625	0
6/19/2016		5.117	143	7.1495	9.3925	30.2725	0
6/19/2016		4.76325	141.1	8.4495	9.335	30.28	0
6/19/2016		4.0615	139.25	8.65125	9.485	30.2825	0
6/19/2016		3.45825	127.525	9.02225	9.6175	30.29	0
6/19/2016		2.96725	99.58	8.71925	9.44	30.2875	0
6/19/2016		1.45425	54.205	11.4375	10.515	30.285	0
6/19/2016		2.105	60.705	16.4525	11.4125	30.3	0
6/19/2016		2.1185	144.6275	46.0475	13.0175	30.2975	0
6/19/2016		3.62525	232.025	30.31	14.1475	30.285	0
6/19/2016		4.8845	305.725	25.2825	15.5125	30.2675	0
6/19/2016		6.49475	19.55525	33.535	16.7225	30.255	0
6/19/2016		9.1125	103.78925	19.655	17.47	30.235	0
6/19/2016		9.3575	261.2535	24.67	18.7775	30.215	0
6/19/2016		10.0525	265.84375	20.8375	19.5375	30.1925	0
6/19/2016		10.43	348.625	18.3675	19.975	30.1625	0
6/19/2016		11.4875	345.25	17.9675	20.105	30.1325	0
6/19/2016		13.6425	349.4	13.7925	19.545	30.1025	0
6/19/2016		10.31	343	17.445	19.1425	30.0775	0
6/19/2016		9.9025	344.8	17.7675	18.4825	30.065	0
6/19/2016		8.6245	178.93075	16.06	16.96	30.05	0
6/19/2016		9.5525	94.63625	14.8225	15.75	30.0475	0
6/19/2016		12.41	21.985	13.195	15.03	30.0375	0
6/19/2016		14.635	19.81	11.6875	14.325	30.025	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/20/2016		13.31	17.8975	12.5375	13.7475	30.005	0
6/20/2016		13.565	22.865	11.0875	13.31	29.9925	0
6/20/2016		10.135	40.1825	10.8275	12.505	30	0
6/20/2016		9.5325	32.5175	9.73	11.785	29.9975	0
6/20/2016		8.716	31.925	8.842	11.285	29.9875	0
6/20/2016		7.1235	35.2575	10.16	11.0575	29.9775	0
6/20/2016		3.0715	42.7975	15.937	11.2125	29.97	0
6/20/2016		1.33125	111	38.81	12.0775	29.9775	0
6/20/2016		1.99775	109.75	23.98	12.4025	29.9975	0
6/20/2016		1.9	198.9725	43.18	13.815	29.995	0
6/20/2016		2.6825	139.115	40.05	14.59	30.01	0
6/20/2016		2.34	225.2	41.145	15.7025	30.01	0
6/20/2016		2.677	278.3	31.77	16.5575	30.01	0
6/20/2016		2.826	306.35	21.4275	16.735	30.01	0
6/20/2016		2.1665	201.0525	39.2525	16.9125	30.01	0
6/20/2016		2.669	157.725	44.3325	19.455	30.0075	0
6/20/2016		3.20875	171	42.7375	20.6275	30	0
6/20/2016		2.92425	221.175	34.0575	22.0775	29.9925	0
6/20/2016		4.96325	222.175	20.4875	22.4725	29.9625	0
6/20/2016		5.021	233.325	14.4375	22.235	29.9375	0
6/20/2016		10.34175	261.7	9.0945	20.35	29.9275	0
6/20/2016		11.98	231.375	11.50125	17.6825	29.935	0
6/20/2016		8.63625	189.65	14.7625	13.405	29.985	0.03
6/20/2016		6.99325	184.55	18.2175	12.44	30.0025	0.04
6/21/2016		6.52975	134.45	12.48475	11.745	30.01	0.09
6/21/2016		4.407	131.075	12.18	11.6175	30.015	0
6/21/2016		6.7885	140.9	10.6825	11.665	30.0325	0.06
6/21/2016		6.06975	141.05	8.6825	11.53	30.0425	0
6/21/2016		7.056	145.5	9.2155	11.38	30.05	0
6/21/2016		6.19325	144.6	9.0375	11.42	30.0525	0
6/21/2016		6.8825	159.475	8.926	11.5825	30.065	0
6/21/2016		7.36775	155.725	10.0445	11.9975	30.0875	0
6/21/2016		8.365	154.675	9.6725	13.025	30.12	0
6/21/2016		7.535	152.975	12.3975	13.9	30.1525	0
6/21/2016		6.79725	161.45	18.8925	15.4175	30.1625	0
6/21/2016		6.36175	190.25	28.83	16.4875	30.17	0
6/21/2016		4.64	231.4	34.97	17.105	30.1675	0
6/21/2016		4.9755	239.075	31.5875	17.9075	30.1525	0
6/21/2016		4.28925	196.125	44.7725	18.94	30.1275	0
6/21/2016		3.74525	235.5625	26.96	19.44	30.115	0
6/21/2016		6.30575	192.795	31.78	20.4	30.0925	0
6/21/2016		5.849	288.425	28.24	20.6325	30.0575	0
6/21/2016		6.13975	295.125	16.0475	19.9375	30.01	0
6/21/2016		6.448	311.575	9.1675	18.8575	29.975	0
6/21/2016		8.786	313.675	6.29875	17.565	29.955	0
6/21/2016		7.34325	255.42825	13.5275	16.31	29.94	0
6/21/2016		7.61825	30.565	13.97	15.15	29.9375	0
6/21/2016		9.7625	35.4075	10.265	13.5875	29.9225	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed	Wind	Sigma Theta	2 M Temperature	Barometric	Precipitation
		(Average)	Direction				
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/22/2016		9.8275	29.37	8.499	12.65	29.8975	0
6/22/2016		9.1375	32.23	10.24	12.025	29.885	0
6/22/2016		4.67125	19.3575	15.5775	11.5625	29.87	0
6/22/2016		9.905	28.3875	8.597	11.685	29.8725	0
6/22/2016		6.3075	45.1975	10.5275	11.835	29.88	0
6/22/2016		4.30325	53.1375	12.01675	11.8925	29.8825	0
6/22/2016		3.64675	49.8925	12.74	12.4725	29.89	0
6/22/2016		1.87525	65.6725	32.27	13.5825	29.89	0
6/22/2016		5.22825	39.8875	18.845	15.295	29.89	0
6/22/2016		2.4755	301.675	40.5875	16.46	29.89	0
6/22/2016		3.713	245.975	38.63	17.7025	29.8825	0
6/22/2016		4.8475	236.075	31.495	19.0575	29.8575	0
6/22/2016		4.54875	270.275	40.1225	19.9775	29.845	0
6/22/2016		5.21575	270.675	51.89	21.0175	29.825	0
6/22/2016		7.27175	273.7	19.9475	20.95	29.8075	0
6/22/2016		4.9125	234.475	33.8825	21.6925	29.795	0
6/22/2016		5.0475	258.525	32.205	22.2525	29.7775	0
6/22/2016		3.41225	266.925	32.675	22.365	29.76	0
6/22/2016		5.87275	254	12.545	21.4775	29.7225	0
6/22/2016		5.14125	305.6	9.54275	20.34	29.695	0
6/22/2016		5.234	310.575	8.89375	18.6425	29.68	0
6/22/2016		3.5375	274.75	12.7475	17.4975	29.6825	0
6/22/2016		7.60075	245.2	7.968	16.51	29.6975	0
6/22/2016		7.64975	221.125	9.1775	15.625	29.725	0
6/23/2016		7.6515	247.225	14.2165	14.1675	29.74	0
6/23/2016		1.6675	262.71	22.6075	13.1125	29.7375	0
6/23/2016		3.51825	98.8725	11.3215	12.8975	29.725	0
6/23/2016		2.376	89.7	10.01925	12.8375	29.7075	0
6/23/2016		2.40575	211.325	20.948	13.4775	29.7	0
6/23/2016		2.46675	172.965	28.6375	12.6425	29.7025	0
6/23/2016		3.58	130.97	26.32775	11.1775	29.71	0.03
6/23/2016		5.2185	145.525	13.7025	11.335	29.715	0.01
6/23/2016		6.993	138.45	12.385	12.2025	29.735	0
6/23/2016		7.411	146.875	11.36	13.5475	29.755	0
6/23/2016		8.625	163.15	15.57	15.13	29.7725	0
6/23/2016		7.573	197.6	14.17	16.035	29.785	0.01
6/23/2016		5.908	121.7	19.45	16.7225	29.8025	0
6/23/2016		9.652	208.85	18.806	16.3775	29.8075	0.06
6/23/2016		10.9925	228.025	10.735	14.915	29.8	0.04
6/23/2016		8.66725	235.375	12.45	15.08	29.8025	0.02
6/23/2016		7.4405	241.225	13.675	14.69	29.8175	0
6/23/2016		7.14575	213.825	13.535	14.225	29.84	0.02
6/23/2016		3.83225	138.075	16.06	13.6425	29.8375	0.03
6/23/2016		4.3015	118.45	17.0475	13.8	29.835	0
6/23/2016		6.3765	158	13.7625	13.4225	29.8475	0.01
6/23/2016		4.365	177.6	18.175	13.105	29.845	0
6/23/2016		3.14325	256.925	47.5725	12.7975	29.865	0.01
6/23/2016		5.343	209.84	19.67	11.4175	29.88	0.05

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/24/2016		3.9505	198.9075	69.84	10.7675	29.88	0.13
6/24/2016		4.079	263.6	19.805	10.41	29.8825	0.06
6/24/2016		4.594	202.075	9.3695	10.105	29.895	0.03
6/24/2016		5.62725	171.425	10.594	9.675	29.9125	0.01
6/24/2016		5.34625	143.9	14.22	9.28	29.9225	0
6/24/2016		4.02	124.225	12.865	9.185	29.935	0
6/24/2016		4.63625	146.65	13.59	9.825	29.955	0.01
6/24/2016		7.6195	181.725	9.995	10.505	29.975	0
6/24/2016		8.975	184.65	9.6575	10.91	29.995	0
6/24/2016		8.1345	184.4	9.955	10.945	30.015	0.01
6/24/2016		7.3885	173.375	11.655	11.1575	30.035	0
6/24/2016		4.46875	131.075	16.45	11.475	30.055	0
6/24/2016		4.88475	112.725	15.235	12.7375	30.0775	0.01
6/24/2016		5.45175	136	24.1625	14.585	30.1075	0
6/24/2016		4.3955	122.05	18.44	15.3275	30.1325	0
6/24/2016		5.20625	133.2	13.3775	15.865	30.14	0
6/24/2016		5.09875	107.8	12.1975	15.0475	30.135	0.01
6/24/2016		6.296	139.475	16.87	14.4225	30.12	0.05
6/24/2016		4.81975	104.775	9.7975	14.3025	30.1175	0
6/24/2016		2.686	121.16	15.55375	14.3375	30.115	0.02
6/24/2016		2.90875	33.5625	8.88325	13.665	30.13	0
6/24/2016		6.752	227.75	25.044	14.3975	30.135	0
6/24/2016		5.4955	220.075	10.2385	14.0725	30.155	0
6/24/2016		6.26925	206.05	11.3775	13.07	30.17	0
6/25/2016		3.27975	148.45	16.665	12.2475	30.1725	0.01
6/25/2016		2.1695	125.975	18.2375	11.8975	30.18	0
6/25/2016		2.22325	76.625	10.71825	11.665	30.1775	0
6/25/2016		3.078	93.2225	8.036	11.625	30.17	0
6/25/2016		2.86975	47.9975	12.065	11.4225	30.1675	0
6/25/2016		2.9325	31.88	10.195	11.3325	30.1625	0
6/25/2016		3.44725	31.925	7.83025	11.4725	30.1675	0
6/25/2016		5.99825	29.715	10.31275	12.6	30.165	0
6/25/2016		7.22175	26.49	11.8125	13.5325	30.1825	0
6/25/2016		6.456	32.98	15.5625	14.3575	30.1875	0
6/25/2016		5.978	37.7425	14.4675	15.03	30.18	0
6/25/2016		5.01075	174.37	32.185	16.3525	30.1775	0
6/25/2016		6.456	187.38	23.76	17.505	30.1675	0
6/25/2016		7.6185	17.531	21.115	18.6975	30.1575	0
6/25/2016		7.912	28.9	18.6925	19.3975	30.1425	0
6/25/2016		7.61425	17.61325	24.71	20.2525	30.1125	0
6/25/2016		7.6145	265.81	27.31	20.9625	30.085	0
6/25/2016		8.03375	325.775	16.7825	21.495	30.06	0
6/25/2016		8.56	333.375	19.695	21.1075	30.025	0
6/25/2016		8.7845	254.613	13.825	20.0975	30.0075	0
6/25/2016		7.51075	316.025	9.41075	18.2375	29.9975	0
6/25/2016		5.2335	249.24	24.75	16.8425	29.99	0
6/25/2016		5.507	22.5775	11.8025	15.545	29.99	0
6/25/2016		9.1085	22.665	11.34	14.81	29.99	0

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2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/26/2016		9.58525	28.445	8.42275	13.7525	29.9925	0
6/26/2016		11.8025	25.0725	9.8325	13.755	30	0
6/26/2016		13.295	17.17	7.1335	13.2275	29.9975	0
6/26/2016		8.11125	18.95	12.60025	12.3225	29.99	0
6/26/2016		8.2635	32.3875	7.66025	11.19	29.9925	0
6/26/2016		7.0785	28.9325	7.11975	10.985	30	0
6/26/2016		5.17075	33.98	9.31225	11.7225	30.0025	0
6/26/2016		5.982	41.9075	13.5775	12.9675	30.015	0
6/26/2016		4.25075	40.475	18.6375	15.2925	30.03	0
6/26/2016		5.113	96.46375	24.185	17.9325	30.0275	0
6/26/2016		11.27	11.075	13.855	19.5075	30.0175	0
6/26/2016		9.18	13.54925	19.285	20.9675	30.0075	0
6/26/2016		9.2425	25.4775	14.6375	22.2075	29.9975	0
6/26/2016		10.2325	31.5175	11.2625	23.2875	29.985	0
6/26/2016		10.1675	31.43	12.2875	24.1725	29.965	0
6/26/2016		9.4225	21.2425	16.7325	25.125	29.9475	0
6/26/2016		9.425	13.1365	16.0575	25.725	29.93	0
6/26/2016		7.9185	179.29	18.595	26.06	29.8975	0
6/26/2016		5.6945	327.525	21.69	26.26	29.8875	0
6/26/2016		5.044	319.175	11.5075	25.28	29.88	0
6/26/2016		5.426	319.675	11.5425	23.495	29.8775	0
6/26/2016		3.98675	343.225	17.75	21.2025	29.87	0
6/26/2016		9.48	6.0755	13.9225	20.2325	29.87	0
6/26/2016		9.7185	15.8275	11.515	19.4475	29.8725	0
6/27/2016		6.46975	28.7225	9.93	17.975	29.8825	0
6/27/2016		8.334	35.65	8.685	16.925	29.89	0
6/27/2016		5.59975	31.5475	8.4615	16.3275	29.89	0
6/27/2016		4.27225	34.4875	8.835	15.9375	29.89	0
6/27/2016		3.44275	58.71	7.83225	15.5475	29.8925	0
6/27/2016		1.445	93.65	8.97775	15.7875	29.9025	0
6/27/2016		1.448	220.55	11.94325	15.8375	29.92	0
6/27/2016		2.97375	193.7	13.795	16.85	29.955	0
6/27/2016		2.65875	168.25	30.7475	18.79	29.9725	0
6/27/2016		2.524	236.8	38.165	20.4125	29.98	0
6/27/2016		4.695	252.95	17.63	21.015	29.9775	0
6/27/2016		4.084	216.45	30.94	22.56	29.9725	0
6/27/2016		5.367	260.425	21.925	23.77	29.9775	0
6/27/2016		5.36775	278.15	37.34	25.39	29.97	0
6/27/2016		6.52525	280.55	26.9575	26.515	29.965	0
6/27/2016		4.1735	301.375	45.6225	27.34	29.9475	0
6/27/2016		4.40225	316.525	32.7275	28.34	29.9375	0
6/27/2016		4.46425	336.9	33.08	28.42	29.9225	0
6/27/2016		6.10275	305.15	17.66	28.3575	29.8975	0
6/27/2016		7.3165	281.925	11.4625	26.9975	29.8925	0
6/27/2016		6.8985	273.775	9.41025	24.97	29.8975	0
6/27/2016		6.38075	293.9	13.2395	22.2975	29.8975	0
6/27/2016		4.6695	217.625	17.4015	20.3025	29.925	0
6/27/2016		5.294	258.5	9.50675	18.0325	29.94	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/28/2016		4.421	258.35	5.5735	16.8525	29.9425	0
6/28/2016		3.5675	254.85	9.9915	15.6075	29.95	0
6/28/2016		4.6675	261.325	6.5845	14.0725	29.9525	0
6/28/2016		3.459	265.725	7.87275	12.98	29.96	0
6/28/2016		2.86	221.1	13.457	12.5525	29.9625	0
6/28/2016		3.30425	200.525	9.0885	12.0025	29.9725	0
6/28/2016		3.68325	206.6	5.89425	11.7775	29.985	0
6/28/2016		4.4645	198.15	13.065	11.8275	30.005	0
6/28/2016		3.51025	198.225	22.2125	12.295	30.0225	0
6/28/2016		3.21675	215.4	29.97	13.205	30.03	0
6/28/2016		3.241	194.15	32.56	14.7825	30.03	0
6/28/2016		3.601	229.25	50.025	16.675	30.0275	0
6/28/2016		4.42125	213.325	36.0425	18.855	30.015	0
6/28/2016		4.85825	250.9	29.5925	20.9425	30	0
6/28/2016		5.87925	254.875	27.06	22.0275	29.995	0
6/28/2016		6.223	270.575	23.1175	23.045	29.975	0
6/28/2016		8.213	264.875	20.2075	23.8525	29.955	0
6/28/2016		7.00425	260.9	20.5	24.1925	29.935	0
6/28/2016		5.87175	265.375	17.9375	24.275	29.915	0
6/28/2016		5.829	265.85	11.83	23.835	29.9	0
6/28/2016		6.15525	252.95	7.918	22.3975	29.8975	0
6/28/2016		4.49225	295.85	8.152	20.265	29.89	0
6/28/2016		5.16625	275.625	10.21225	18.96	29.895	0
6/28/2016		4.72075	229.6	7.66325	17.1725	29.9125	0
6/29/2016		5.036	213.35	8.724	15.7275	29.9225	0
6/29/2016		4.38575	210.75	5.8965	14.4925	29.9325	0
6/29/2016		5.175	199.625	4.57725	13.2975	29.94	0
6/29/2016		5.4795	195.7	6.22675	12.765	29.9425	0
6/29/2016		5.08425	197.875	6.6525	12.19	29.9525	0
6/29/2016		2.427	213.125	19.645	12.23	29.965	0
6/29/2016		3.0555	192.575	13.7975	12.3625	29.9825	0
6/29/2016		2.9205	210.85	18.3425	12.6325	29.9925	0
6/29/2016		5.03125	232.075	10.98	12.56	30.005	0
6/29/2016		4.5295	244.025	15.4875	12.925	30.02	0
6/29/2016		3.8685	218.425	17.515	13.77	30.0225	0
6/29/2016		3.18675	209.6	26.0525	14.64	30.03	0
6/29/2016		2.7905	244.85	43.215	15.5275	30.03	0
6/29/2016		2.881	231.4	35.19	16.2125	30.0275	0
6/29/2016		3.82475	233.5	29.0075	16.98	30.02	0
6/29/2016		2.333	110.0675	36.7425	17.96	30.0175	0
6/29/2016		4.074	261.4	37.445	20.3425	30.0075	0
6/29/2016		5.64375	225.975	20.9925	20.7525	30	0
6/29/2016		4.77175	222.15	19.3225	20.975	29.995	0
6/29/2016		2.00925	199.375	38.13	21.1825	29.9725	0
6/29/2016		1.79025	282.025	14.19475	20.6675	29.9475	0
6/29/2016		2.53825	183.7325	8.6785	18.725	29.9425	0
6/29/2016		0.8175	153.0625	39.61975	17.6275	29.95	0
6/29/2016		3.877	219.9	9.0515	16.3925	29.95	0

Cedar Hills Regional Landfill Meteorological Monitoring System Data

2nd Quarter of 2016

Date	Time	Wind Speed (Average)	Wind Direction	Sigma Theta	2 M Temperature (Average)	Barometric Pressure	Precipitation
		Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
6/30/2016		5.42425	243.325	8.449	15.005	29.9525	0
6/30/2016		5.73925	259.175	9.39125	14.36	29.965	0
6/30/2016		3.3015	235.075	13.0625	13.8125	29.9825	0
6/30/2016		5.05275	211.3	9.80175	13.495	29.9925	0
6/30/2016		4.82425	237.875	14.9575	13.2075	30.0025	0
6/30/2016		4.221	271.2	9.3115	12.895	30.015	0
6/30/2016		5.001	219.45	13.26525	12.4975	30.0325	0
6/30/2016		3.7185	187.575	15.21	12.2675	30.045	0
6/30/2016		3.48325	198.1	14.6625	12.315	30.0625	0
6/30/2016		1.44875	209.975	28.475	13.1225	30.0725	0
6/30/2016		1.76775	269.25	33.1225	14.03	30.0825	0
6/30/2016		2.94775	226.1	29.91	15.065	30.09	0
6/30/2016		3.01225	294.575	40.83	16.09	30.0875	0
6/30/2016		3.6975	289.65	34.06	16.9075	30.0775	0
6/30/2016		5.869	270.6	25.8025	18.305	30.07	0
6/30/2016		4.93725	286.2	51.0725	18.99	30.0675	0
6/30/2016		2.817	178.3325	43.6975	19.46	30.0525	0
6/30/2016		3.81225	255.2225	41.27	21.1675	30.0275	0
6/30/2016		3.47975	174.76	33.81	21.25	30.0125	0
6/30/2016		3.9135	211.9025	46.6775	20.905	29.98	0
6/30/2016		3.25575	289.525	11.6995	19.665	29.94	0
6/30/2016		1.487	85.2975	30.8175	17.715	29.9075	0
6/30/2016		2.99125	46.8275	6.28325	16.055	29.8975	0
6/30/2016		2.282	87.1175	6.6215	14.97	29.89	0
6/30/2016		3.92675	142.904375	18.927875	14.48	29.89	0
Quarterly Average =		5.89 (mph)	162.37 (degrees)	17.07 (degrees)	14.11 (° C)	29.80 (inches-Hg)	0.003 (inches)

APPENDIX D

Area 5 Top Deck Report

CEDAR HILLS REGIONAL LANDFILL AREA 5 TOP DECK MONITORING REPORT

Second Quarter 2016



Department of Natural Resources and Parks
Solid Waste Division

August 2016
Printed on recycled paper

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AREA 5 TOP DECK MONITORING QUARTERLY REPORT

SECOND QUARTER 2016

I. REPORT OVERVIEW

This report provides the quarterly performance analysis of the interim soil cover system over Area 5 in the Cedar Hills Regional Landfill (CHRLF). The intent of the report is to demonstrate that the top deck cover system is functioning to limit infiltration of rainwater, protect surface water quality, and control landfill gas emissions. Monitoring of surface emissions, leachate quantity, and stormwater quality is conducted, and results are presented in this report.

II. LEACHATE MONITORING

Leachate monitoring is performed to demonstrate that the landfill cover system is effectively limiting rainwater infiltration and therefore leachate production.

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

In the interim, KCSWD staff continues to evaluate leachate volumes collected throughout the landfill. Table 1 presents a historical account of leachate generation at the site since 1986. The evaluation accounts for variations in rainfall by normalizing the leachate flows in terms of gallons discharged per inch of rainfall. The flow has also been normalized relative to pounds of waste in-place. These normalized values for the entire site are included in Table 1.

TABLE 1**CEDAR HILLS REGIONAL LANDFILL LEACHATE PRODUCTION for 2nd QUARTER of 2016**

Year	Leachate	Surface Area of Refuse	Refuse In Place	Precipitation	Flow			
					(MG/yr)	(Acres)	(lbs)	(in/yr)
1986	163.03	138.5	11,328,841,100	54.79	1,177,112	21,484	0.0144	0.00026
1987	139.53	138.5	12,927,926,300	39.6	1,007,422	25,440	0.0108	0.00027
1988	169.67	161.9	14,525,504,000	48.63	1,048,009	21,551	0.0117	0.00024
1989	176	161.9	16,203,204,000	44.12	1,087,110	24,640	0.0109	0.00025
1990	294.75	161.9	17,965,254,000	71.6	1,820,594	25,427	0.0164	0.00023
1991	224.27	221.4	19,778,412,000	45.85	1,012,967	22,093	0.0113	0.00025
1992	156.46	221.4	21,454,600,000	38.64	706,694	18,289	0.0073	0.00019
1993	150.83	221.4	23,051,348,000	35.01	681,264	19,459	0.0065	0.00019
1994	159.8	221.4	24,657,528,000	38.55	721,764	18,723	0.0065	0.00017
1995	201.11	221.4	26,294,654,000	48.4	908,376	18,768	0.0076	0.00016
1996	243.03	221.4	27,946,704,000	57.08	1,097,714	19,231	0.0087	0.00015
1997	239.23	221.4	29,665,380,000	57.24	1,080,511	18,877	0.0081	0.00014
1998	202.8	221.4	31,432,828,000	42.82	916,006	21,392	0.0065	0.00015
1999	219.15	283.42	33,273,828,000	45.9	773,229	16,848	0.0066	0.00014
2000	148.82	283.42	35,167,828,000	33.15	525,102	15,840	0.0042	0.00013
2001	174.08	283.42	37,041,828,000	47.28	614,194	12,991	0.0047	0.0001
2002	133.4	283.42	38,919,828,000	35.13	470,690	13,399	0.0034	0.0001
2003	181.6	283.42	40,877,828,000	46.39	640,761	13,812	0.0044	0.0001
2004	185.72	328.72	42,889,828,000	34.08	564,983	16,578	0.0043	0.00013
2005	175.31	328.72	44,867,538,000	40.75	533,313	13,087	0.0039	0.0001
2006	264.95	328.72	46,820,938,000	52.94	806,009	15,225	0.0057	0.00011
2007	161.48	328.72	47,129,756,000	38.68	491,239	16,143	0.0034	0.000112
2008	126.02	328.72	48,990,990,000	42.32	383,366	9,059	0.0026	0.00006
2009	172.16	328.72	49,414,219,997	42.42	523,741	12,347	0.0035	0.00008
2010	199.4	335.72	51,076,043,997	49.25	593,959	12,060	0.0039	0.00008
2011	180.2	353.12*	52,701,411,694	51.05	510,308	9,996	0.0034	0.00007
2012	202.3	353.12*	54,315,239,773	58.16	572,972	9,852	0.0037	0.00006
2013	156.4	353.12*	55,933,569,773	47.77	442,923	9,272	0.0028	0.00006
2014	189.14	353.12*	57,638,062,970	64.07	535,631	8,360	0.0033	0.00005
2015	176.26	353.12*	59,401,111,988	51.39	499,159	9,713	0.0030	0.00006
2016	94.26	353.12*	60,329,761,498	26.34	266,940	10,134	0.0016	0.00006

2016: Precipitation, leachate and refuse in place through 2nd Quarter of 2016

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

III. SURFACE MONITORING

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

1. Landfill gas inspections and surface emissions monitoring;
2. Top Deck Surface Inspections; and,
3. Settlement monitoring.

The purpose of this monitoring is to detect any conditions affecting the cover system that may permit landfill gas emissions, leachate seeps, or excessive or differential settlement.

Landfill Gas Inspections

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

Also throughout the 2nd Quarter of 2016, Facility Engineering and Science Unit (FESU) staff performed monthly Landfill Facility Site Inspections. These inspections are also included in Appendix A: Inspection Reports.

In addition to KCSWD inspections, six inspection was performed by Public Health – Seattle & King County (PHSKC) during the 2nd Quarter of 2016. The dates of the inspection were as follows: April 6th; April 12th; May 9th; May 17th; May 26th; June 7th. All PHSKC inspection reports were noted as satisfactory and/or complete this quarter, with the exception of one inspection on May 17th, 2016. The follow-up inspection on May 26th, 2016 indicated items noted as unsatisfactory were addressed.

Air Quality Criteria

Each quarter, serpentine walks are conducted across the Area 5 Top Deck and its side slopes to verify that methane gas emissions are below regulatory criteria. The 2nd Quarter of 2016 Serpentine Walk was conducted from June 15th to the 23rd. There were no exceedances of regulatory criteria observed during the Serpentine Walk. The results from the 2nd Quarter 2016 Serpentine Surface Monitoring Data can be found in Appendix B: Gas Monitoring Reports, along with a plot of GPS generated track lines.

Top Deck Surface Inspections

Visual inspections for indications of leachate seeps are conducted each quarter by KCSWD personnel in conjunction with the surface emissions monitoring and monthly inspections. No indications of leachate seeps were recorded during the 2nd Quarter of 2016 by KCSWD staff, or by PHSKC personnel.

Settlement Monitoring

Settlement of Area 5 is evaluated both through visual inspections and through topographic surveys at control points on the top deck. A site map showing the settlement monitoring points is included as Figure 1. Visual inspections are completed by both operations and engineering staff. No evidence of erosion was found during inspections.

The most recent settlement levels for Area 5 were measured on April 12th, 2016. The survey data is given in Table 2, and the settlement at each point is given in Table 3. As noted in Table 3, the average refuse settlement rate (measured in feet/month) for Area 5 decreased over the previous measurement range. For the approximate six month interval of October 27th to April 12th, 2016, the average rate of settlement was calculated to be 0.09 feet/month, versus 0.10 feet/month from the previous time period. This is an approximately 10% decrease in the settlement rate.

Future plans for Area 5 are to complete the final lift, followed by application of final cover.

TABLE 2
CEDAR HILLS REGIONAL LANDFILL AREA 5 SURFACE SURVEY DATA for 2nd QUARTER of 2016

A5SM-1 ^a		A5SM-2		A5SM-3 ^b		PMX20074 ^c	
Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
10/4/2005	699.18	10/4/2005	785.17	2/14/2007	786.4	8/16/2007	781.56
2/1/2006	697.7	2/1/2006	782.52	4/20/2007	786.25	2/29/2008	780.1
6/27/2006	696.51	6/27/2006	780.48	7/24/2007	785.68	7/29/2008	779.13
2/14/2007	694.53	4/20/2007	776.95	2/29/2008	784.87	11/24/2008	778.21
7/24/2007	693.34	7/24/2007	775.63	7/29/2008	784.31	4/6/2009	777.41
2/29/2008	691.77	2/29/2008	773.44	11/24/2008	783.76	7/9/2009	776.99
7/29/2008	691.26	7/29/2008	772.2	4/6/2009	783.35	12/22/2009	776.1
11/24/2008	690.61	11/24/2008	771.29	7/9/2009	783.05	3/1/2010	775.81
4/6/2009	690.16	4/6/2009	770.35	12/22/2009	782.44	8/2/2010	775.29
7/9/2009	689.77	7/9/2009	769.79	3/1/2010	782.08	12/21/2010	774.79
12/22/2009	689.13	12/22/2009	768.6	8/2/2010	781.78	4/6/2011	774.42
3/1/2010	688.77	3/1/2010	768.05	12/21/2010	781.25	8/8/2011	774.19
8/2/2010	688.6	8/2/2010	767.28	4/6/2011	780.94	1/23/2012	773.79
12/21/2010	688.1	12/21/2010	766.53	8/8/2011	780.66	5/18/2012	773.41
4/6/2011	687.83	4/6/2011	765.86	1/23/2012	780.26	7/12/2012	773.26
8/8/2011	687.46	8/8/2011	765.34	5/18/2012	779.9	--	--
1/23/2012	687.19	1/23/2012	764.53	7/12/2012	779.69	--	--
5/18/2012	686.78	5/18/2012	763.99	11/2/2012	779.56	--	--
7/12/2012	686.69	7/12/2012	763.83	5/22/2013	779.09	--	--
11/2/2012	686.55	11/6/2012	763.35	9/5/2013	779.66	--	--
5/22/2013	686.09	5/22/2013	762.77	2/19/2014	777.68	--	--
--	--	8/8/2013	762.53	2/9/2015	777.63	--	--
--	--	2/19/2014	762.06	4/6/2015	777.51	--	--
--	--	2/9/2015	761.09	7/2/2015	777.38	--	--
--	--	4/6/2015	761.11	10/27/2015	777.12	--	--
--	--	7/2/2015	760.96	2/3/2016	776.83	--	--
--	--	10/27/2015	760.62	4/12/2016	776.87	--	--
--	--	2/3/2016	760.35			--	--
--	--	4/12/2016	760.35			--	--

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

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

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

TABLE 3**CEDAR HILLS REGIONAL LANDFILL AREA 5 SETTLEMENT for 2nd QUARTER of 2016**

Settlement Monitoring Locations	Units	SETTLEMENT DATE RANGE (MM/YYYY)										
		06/2006 - 07/2007	07/2007 - 07/2008	07/2008 - 07/2009	07/2009 - 08/2010	08/2010 - 08/2011	08/2011 - 07/2012	07/2012-05/2013	05/2013-02/2014	02/2014-02/2015	02/2015-07/2015	07/2015-10/2015
A5SM-1	Feet	3.17	2.08	1.49	1.17	1.14	0.77	0.60	N/A	N/A	N/A	N/A
A5SM-2	Feet	4.85	3.43	2.41	2.51	1.94	1.51	1.06	0.71	0.97	0.13	0.34
A5SM-3	Feet	N/A	1.37	1.26	1.27	1.12	0.97	0.60	1.41	0.05	0.25	0.26
PMX2007-4	Feet	N/A	2.43	2.14	1.7	1.1	0.93	N/A	N/A	N/A	N/A	N/A
Average Settlement for Area 5	Feet/Date Range	4.01	2.33	1.83	1.66	1.33	1.05	0.75	1.06	0.51	0.19	0.30
	Feet/Month	0.31	0.19	0.15	0.13	0.11	0.1	0.19	0.11	0.04	0.03	0.10
												0.09

IV. STORMWATER SAMPLING

Collection of Samples

No samples were collected from the Area 5 Top Deck stormwater monitoring stations SW-A5TD1, SW-A5TD2, SW-A5TD4, and SW-A5TD6 during the 2nd Quarter of 2016. This was due to ‘No Flow’ conditions for stormwater run-off each time the stations were checked. Therefore, no comparisons can be made with the surface water or leachate samples, nor can a review be performed for evaluating exceedances for the 2nd Quarter of 2016.

V. CONCLUSION

Stormwater samples for the Area 5 Top Deck were unable to be collected during the 2nd Quarter of 2016 due to ‘No Flow’ conditions when the stations were checked. This observation was in line with the overall regional precipitation levels for the quarter, which were substantially lower than historical levels. Therefore, no determinations can be made regarding Area 5’s 2nd Quarter 2016 stormwater runoff with respect to exceedances of water quality criteria or benchmarks, nor can comparisons be made with background surface water flow (from SW-S1), and leachate effluent (from LS-API).

Inspection reports from the 2nd Quarter 2016 showed no issues with the interim cover system for Area 5. The Area 5 settlement rate decreased by approximately ten (10) percent versus the previous monitoring period. Additionally, there were no indications of major differential settling, nor signs of surficial erosion.

This report demonstrates that the interim cover is functioning effectively to control erosion, limit stormwater infiltration, prevent leachate seeps, and limit landfill gas emissions.

Figures



LEGEND:

○ ACTIVE MONITORING STATION

AERIAL FLown SEPTEMBER 2014



KING COUNTY DEPARTMENT OF
NATURAL RESOURCES AND PARKS
SOLID WASTE DIVISION

CEDAR HILLS REGIONAL LANDFILL
SETTLEMENT MONITORING LOCATIONS

DATE	REVISION	BY

APPROVED: VDO DATE Feb 2014
RECOMMENDED _____ DATE _____
DESIGNED _____ DRAWN _____
PROJECT NO. _____ SURVEY NO. _____ SHEET 1 OF 1
E:\\CAD\\2014\\CedarHills\\SettlementMonitoring\\SettMon1.dwg

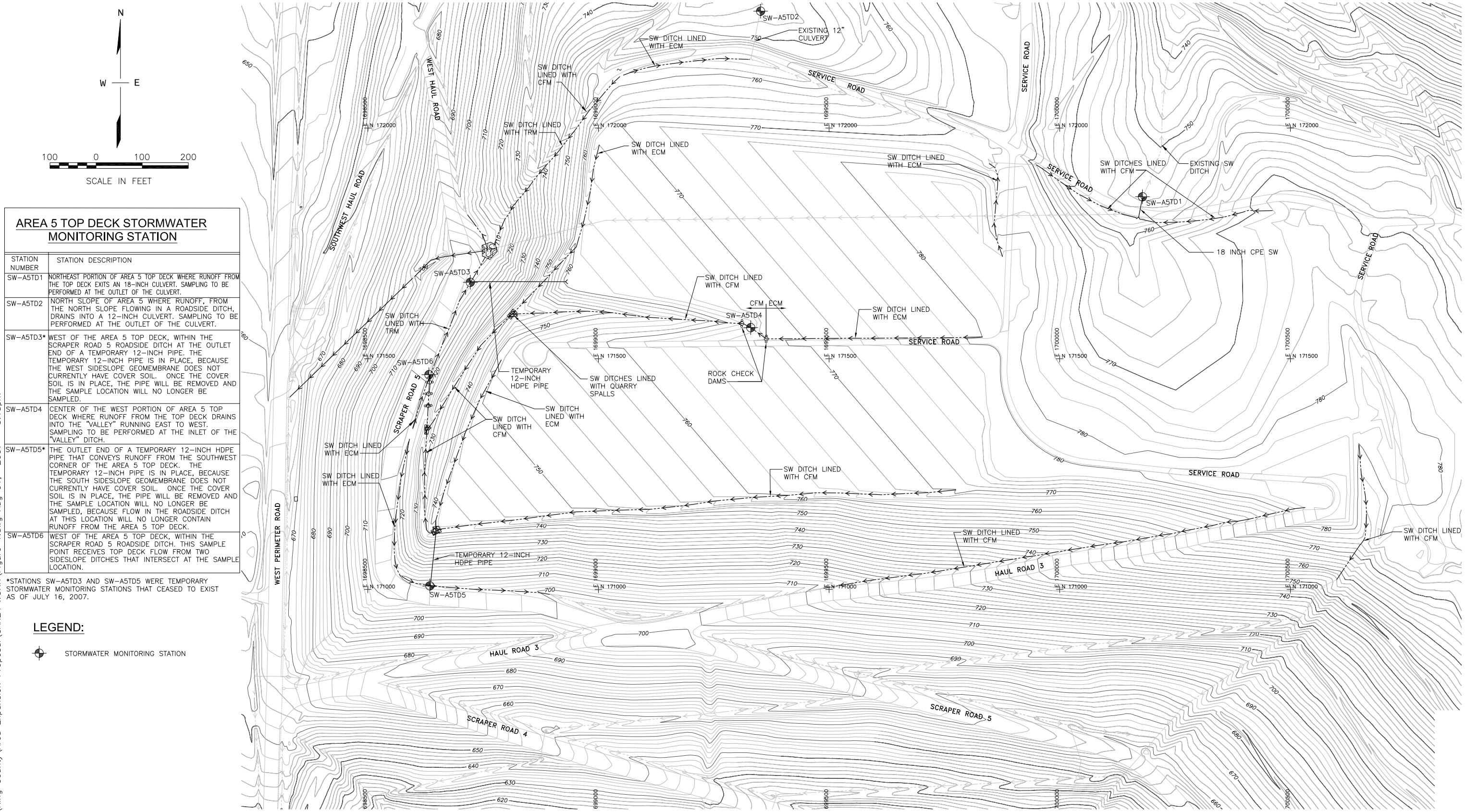


Figure 1
Area 5 Top Deck
Stormwater Monitoring Stations

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

Appendix A:

Inspection Reports

SOLID WASTE DIVISION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: Stevn Larry

Date: 4-21-2016

Location: Cedar Hills Ambient Temperature (°F) 50 Weather Condition: Cloudy/Overcast

ACTION CODES

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

Item No.	Action Code(s) (See below or over for map) Area Map	Area Code(s) (See below or over for map) Area Map	Status			State Reason if "Fair or Poor"	Date Corrective Action Implemented
			G	F	P		
1	D5	F(3-4)			X	There accumulated rock soil and some litter in the stormwater channel along the toe of the liner of Area 7.	
2	D5	F(3-4)			X	There is water accumulating under the liner causing a bulge along the western liner toe of Area 7. The toe bulge can stretching the liner seam at the top and may cause a rupture if left un-checked.	
3	C12	F(4-5)		X		There are large sheets of plastic or tarps accumulating on the eastern toe of Area 7 that needs to be removed.	

4	D2	D,E & F		X		The stormwater ditch along the haul road needs silt accumulation removed and the silt fencing road side catches repaired.	
5	D2	G		X		The stormwater ditch where the truck overturned still needs rock of the channel.	

AREA CODES (for Cedar Hills)

East Main Hill = EMH

Southwest Main Hill = SWMH

Southeast Pit Area = SEPA

Central Pit = CP

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

Area 7 = A7

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

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

Overall site description the day of site inspection: The site appears clean and maintained. Minor maintenance improvements needed.

- 1) Over turned truck zone, the channel bed requires rock armor.
- 2) The haul road ditches require ditch cleaning, silt removed and the roadside silt fence catches repaired
- 3) There is a large plastic tarps pile along the eastern toe of Area 7 that needs removing.
- 4) Stormwater ditches along the liner toe of Area 7 needs vector removal of accumulated rock, soil and litter.

Photos taken during the site inspection can be seen at:

P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 16\4-April

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

SWPPP Modifications Necessary? (circle Y or N)

If Y, log changes in Appendix I of SWPPP.

Potential Pollutant Sources Y / N

Site Map Y / N

INSPECTION REPORT SIGNATURE PAGE

INSPECTOR / QUALIFIED PERSONNEL

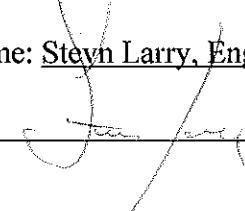
Based on professional judgment, which of the following statements is true: (select one)

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

* Immediately notify Environmental Compliance Coordinator

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

Printed name: Stevn Larry, Engineer II

Signature:  Date: 4/26/2016

DULY AUTHORIZED REPRESENTATIVE

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

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

* Immediately notify Environmental Compliance Coordinator

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

Printed name: Bill Berni, Operations Manager

Signature:  Date: 4/26/16

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

A

B

C

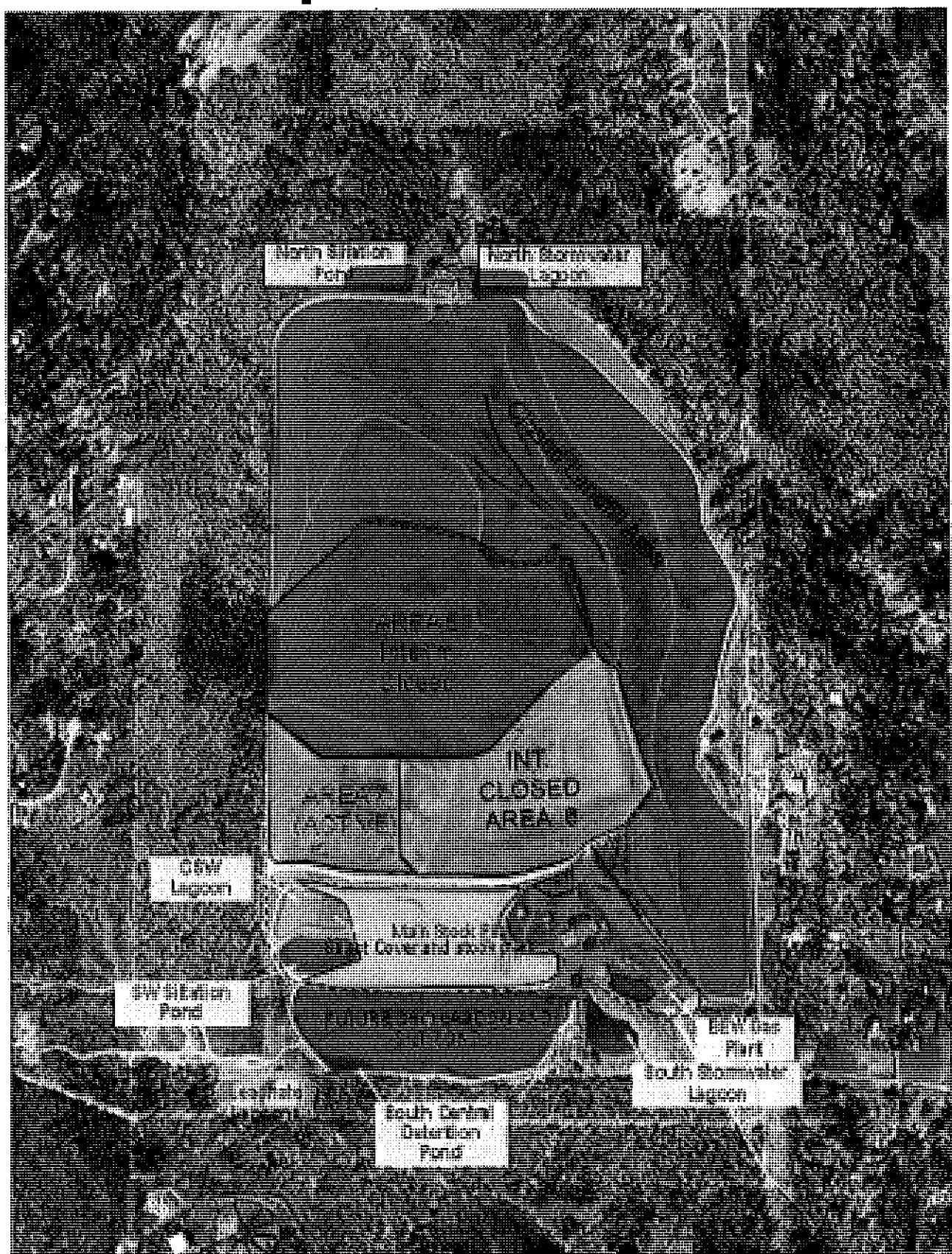
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SOLID WASTE DIVISION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: Stevn Larry Date: 5-11-2016
 Location: Cedar Hills Ambient Temperature (°F) 50 Weather Condition: Cloudy/Overcast

ACTION CODES

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

Item No.	Action Code(s)	Area Code(s) (See below or over for map) Area Map	Status			State Reason if "Fair or Poor"	Date Corrective Action Implemented
			G	F	P		
1	D5	F(3-4)			X	There is accumulated litter and debris in the stormwater channels along the toe of the liner of Area 7.	
2	D5	F(3-4)			X	There is blowing litter and debris on top of the Area 7 liner across the entire covered liner site that needs collecting.	
3	D5	F(3-4)			X	There is accumulated silt and mud in the haul road stormwater ditches that was collected behind the rock check dams that need vactor truck cleaned	

3		G-5				There are removed office trailer skirt panels missing that need replacing/sealing to prevent wildlife from getting in.	
4		G-5				The office trailers have dirty siding, time for cleaning.	
5	C12	F4				The stormwater ditch behind the outdoor weld shop has litter in the stormwater ditch that need cleaning.	
6						There is downed buffer zone signage.	

AREA CODES (for Cedar Hills)

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

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
 Area 7 = A7

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

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

Overall site description the day of site inspection: The site appears clean and maintained. Minor maintenance improvements needed.

- 1) Rock check dams, along the haul road, need mud/silt removed by the vactor truck.
- 2) There is downed "Do Not Enter" buffer zone signage.
- 3) There is blowing debris across the entire liner cover system of Area 7. The liner needs clearing of accumulated debris.
- 4) Stormwater ditches, both the asphalt ditch and the liner stormwater ditch, along the entire length of the liner toe of Area 7 needs clearing of accumulated litter.
- 5) There is accumulated litter in the stormwater ditch located behind the Outdoor Weld Shop that needs removal.
- 6) The Office Trailers siding is dirty and need annual cleaning.
- 7) The Office Trailer skirting needs panels replaced to prevent animal entry under the trailers.

Photos taken during the site inspection can be seen at:

P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 16\5 May

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

SWPPP Modifications Necessary? (circle Y or N)

If Y, log changes in Appendix I of SWPPP.

Potential Pollutant Sources Y / N

Site Map Y / N

INSPECTION REPORT SIGNATURE PAGE

INSPECTOR / QUALIFIED PERSONNEL

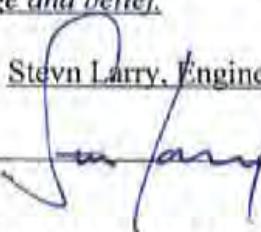
Based on professional judgment, which of the following statements is true: (select one)

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

* Immediately notify Environmental Compliance Coordinator

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

Printed name: Stevn Larry, Engineer II

Signature: 

Date: 5/11/2014

DULY AUTHORIZED REPRESENTATIVE

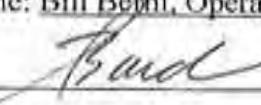
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I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance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

Printed name: Bill Benni, Operations Manager

Signature: 

Date: 5/12/16

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

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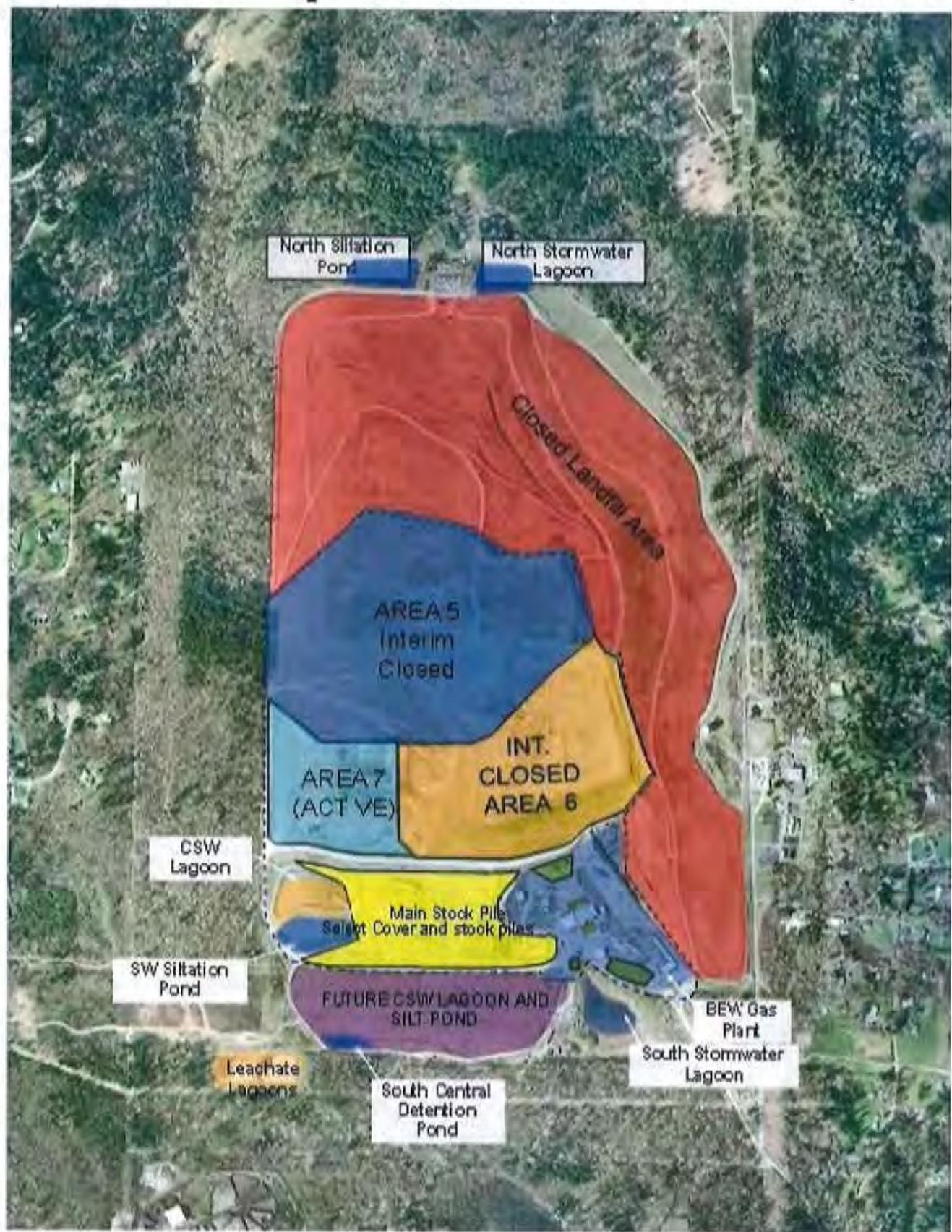
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SOLID WASTE DIVISION

Landfill Facility Site Inspections

Type – Permit Compliance

Inspected By: Stevn Larry

Date: 6-2-2016

Location: Cedar Hills **Ambient Temperature (°F)** 50 **Weather Condition:** Cloudy/Overcast/Light Rain

Ambient Temperature (°F) 50

Weather Condition: Cloudy/Overcast/Light Rain

ACTION CODES

AREA CODES (for Cedar Hills)

$G \equiv \text{Good}$

F = Fair

P = Poor

East Main Hill = EMH

Area 2/3 = A2/3

Aeration Ponds = AP

Area 5 = A5

**East Main Hill = EMH
Southwest Main Hill = SWMH**

Area 4 = A4

Sq. Solid Waste Area = SSWA

Area 5 = A5

Southeast Pit Area = SEPA
Central Pit = CP

Stockpile = SP

North Flare Station = NFS

Area 7 = A7

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

1. *Regulatory Priority* - permit, regulations & code & compliance driven.
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 - c. *Routine* – need to be completed & not necessarily. May be completed under existing operations preventative programs.
 - d. *Deferred* – desirable but not required to maintain status quo operations (e.g., planting or wild life enhancement projects etc.)

Overall site description the day of site inspection: The site appears clean and maintained with no minor maintenance improvements needed.

This inspection form can be located at:

P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 16\2 June

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

SWPPP Modifications Necessary? (circle Y or N)

If Y, log changes in Appendix I of SWPPP.

Potential Pollutant Sources Y / N

Site Map Y / N

INSPECTION REPORT SIGNATURE PAGE

INSPECTOR / QUALIFIED PERSONNEL

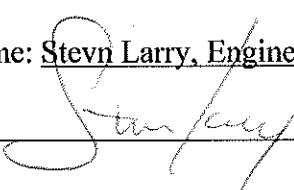
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* Immediately notify Environmental Compliance Coordinator

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

Printed name: Stevn Larry, Engineer II

Signature:  Date: 6-3-16

DULY AUTHORIZED REPRESENTATIVE

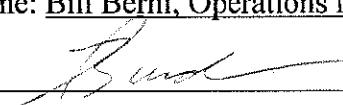
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Printed name: Bill Berni, Operations Manager

Signature:  Date: 6-3-16

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

A

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C

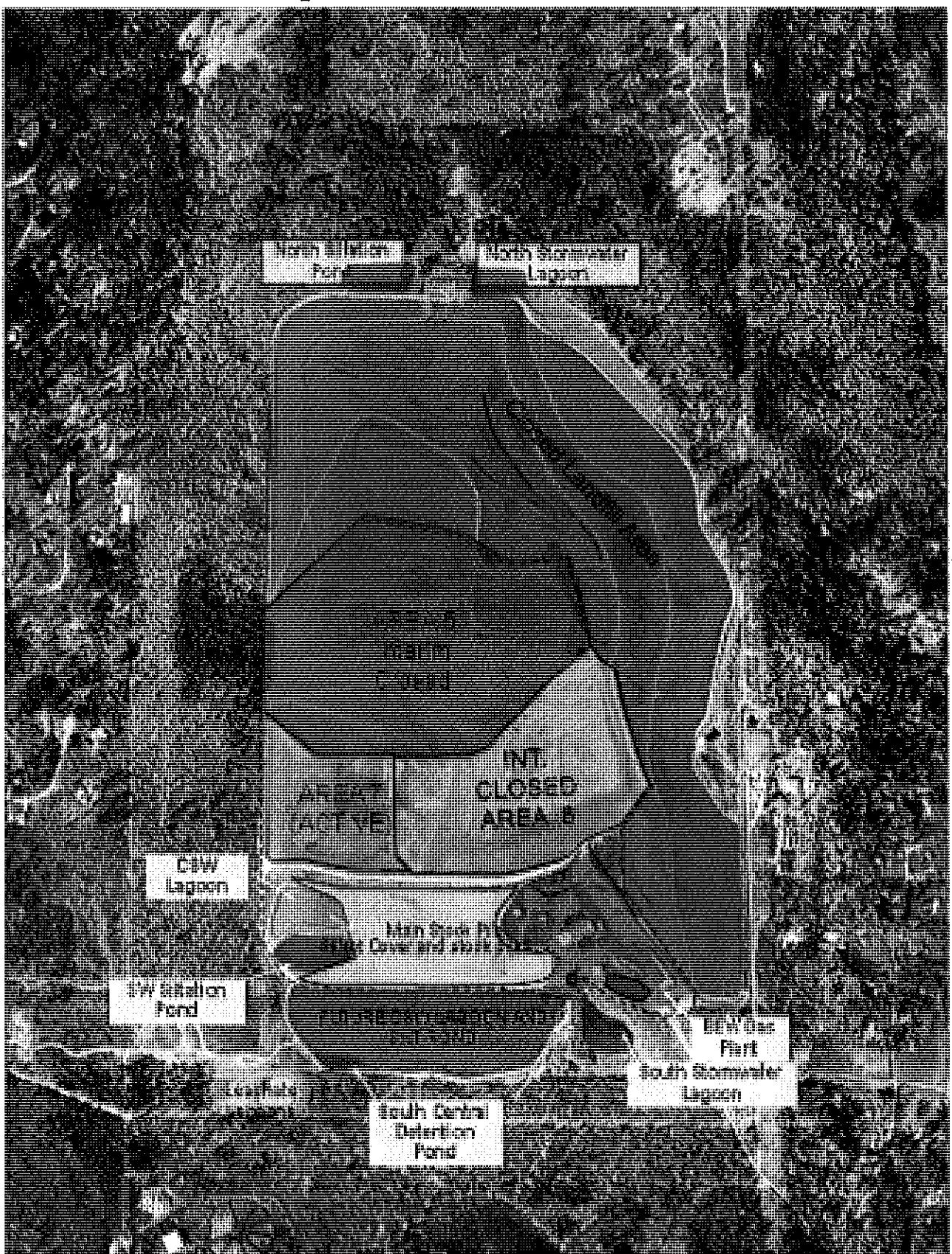
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SOLID WASTE INSPECTION REPORT

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Wednesday, April 6, 2016 Time In: 11:30 am Time Out: 2:30 pm Inspector: Darshan Dhillon Result: SATISFACTORY

VIOLATIONS OBSERVED (if any)

OVERALL INSPECTION COMMENTS:

Compactor operators are trained to monitor incoming loads of garbage and exclude unacceptable trash.
Records of weekly inspections have been maintained up-to-date.
No bubbling gas was noticed.
All of the monitoring wells have been locked.
Integrity of the perimeter fence has been maintained.
Workers were wearing required PPE.
Daily cover has been maintained.
Soil is being stock piled on top of area 5 for future use.
No strong odors of CH4 were detected.
Access to the facility has been controlled by a perimeter fence.
Run on and run off is being controlled by a network of ditches around the landfill.
Regular safety training is provided to workers who are involved with the landfill.
Landfill gas (LFG) concentrations is monitored from the monitoring wells on a quarterly basis. One of the workers (Dean) was measuring LFG concentration from Well number ASE0011S in area 5 and it was found to be at 200 CFM. TLFG flow is being calculated by the LFG meter by taking measurements of pressure differential between dynamic and static pressure in the well.



Darshan Dhillon
H&EI III

PIC Phone #: 206-263-8863

Email: Scott.Barden@kingcounty.gov

INSPECTION CHECKLIST

The following items are evaluated during inspections.

Violations cited as out of compliance during this inspection are highlighted below.

Out=out of compliance

OUT

OUT



SOLID WASTE INSPECTION REPORT

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Tuesday, April 12, 2016 Time In: 12:55 pm Time Out: 2:45 pm Inspector: Darshan Dhillon Result: SATISFACTORY

VIOLATIONS OBSERVED (if any)

OVERALL INSPECTION COMMENTS:

A large quantity of contaminated bean bags (approximately 50 to 90) were being disposed of in the land fill at the time of inspection.

No Landfill gas odors were detected.

Large number of birds were flying over the landfill. Most of them were eagles and crows. Solid waste was being compacted and covered with soil.

No bubbling gas was detected in any of the areas.

Workers were wearing required PPE

Up-to-date Inspection data is being maintained.

Leachate pond is being aerated by the pumping system.

No damage was found to the perimeter fence.



Darshan Dhillon
H&EI III

PIC Phone #: 206-263-8863

Email: Scott.Barden@kingcounty.gov

The following items are evaluated during inspections.

Violations cited as out of compliance during this inspection are highlighted below.

Out=out of compliance

OUT

Additional Operating Criteria WAC 173-351-220(1)

- 0837-Road dust must be controlled
- 0838-Litter must be controlled
- 0839-Scavenging must be prohibited
- 0840-Staffing must be a minimum 2 personnel on site with one at the active portion when open
- 0841-Certification of operators of solid waste landfills must be current
- 0842-Reserve operational equipment must be available and adequate
- 0843-Active area boundaries must be clearly marked
- 0844-Must compact solid waste before succeeding layers are added per WAC
- 0845-Maintain monitoring systems for groundwater, explosive gas and other monitoring per permit
- 0846-Provide orderly and sanitary recycling methods to general public unless alternatives provided
- 0847-Prohibit disposal of dangerous waste unless DWR are met
- 0848-Must allow inspections by public health

Annual Report

- 0828-Annual report due April 1st

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

- 0856-Final cover installed to minimize, infiltration and erosion per design
- 0857-Closure plan followed for areas of the MSWLF unit within 30 days of final receipt of wastes
- 0858-For closed areas, closure activities must be completed within 180 days
- 0859-For closed areas post closure care must be conducted per post- closure plan and WAC
- 0860-Final cover for closed areas must be maintained (vegetation, settlement, erosion,# run on/off)
- 0861-Leachate collection systems maintained and operated per post-closure plan and WAC 173-351-300
- 0862-Gas monitoring systems maintained and operated per post-closure plan and WAC 173-351-200

Design Criteria New MSWLF expansion 173-351-300

- 0849-New MSWLF units and expansions have approved liner & leachate collection system construction

Groundwater sampling and analysis requirements WAC 173-351-4

- 0853-Roundwater monitoring must be accordance with an approved sampling / analysis document

Liquids Restrictions

- 0825-Bulk or non-containerized liquid waste may not be placed in MSWLF unit unless exceptions allow
- 0826-Containers holding liquid waste may not be placed in a MSWLF unit unless meet 200 (9)(b)(i-iii)

MSLF Groundwater reporting WAC 173-351-415

- 0854-Annual groundwater report due by April 1st
- 0855-Quarterly groundwater monitoring reports submitted

MSLF Leachate Managementfor Surface Impoundments WAC 173-

OUT

Design Standards - Surface Impoundments

- 0740-Embankments and slopes must be maintained and be in good condition
- 0741-Freeboard for the surface impoundment is > 18 inches or as specified per the permit

Ground Water monitoring requirements for surface impoundments and tanks

- 0766-Surface impoundments not equipped with a leak detection layer must meet WAC 173-350-500
- 0767-Surface impoundments w/a leak detection layer are subject to WAC 173-350-040 (5),173-350-330(b)

Operating standards - Surface Impoundments and tanks

- 0750-Must prevent overfilling and maintain required freeboard = 18 inches from wave action/precip
- 0751-Must control access to the site
- 0752-Must control nuisance odors for wastes or liquids
- 0753-Must control birds at impoundments storing wastes capable of attracting birds
- 0754-Records kept of weekly inspections and liner inspections at least every 5 years
- 0755-Daily records kept on-site of the quantity and type of wastes removed for at least 5 years

Operating Criteria WAC 173-351-200

Access Restriction

- 0818-Access must be controlled (public /animal/vehicle). Barriers must be maintained.
- 0819-Lockable gate at each entry must be maintained and in good condition

Air Criteria

- 0816-MSWLF units must meet all applicable air standards
- 0817-Open burning of garbage is prohibited. Other types of burning only under appropriate permit

Cover Material Requirements

- 0806-Approved cover material must be applied at a depth of 6 in# at the end of the day or as needed
- 0807-Only approved alternative cover materials are in use and are applied at an approved depth

Disease Vectors Controlled

- 0808-Procedures must be in place to control disease vectors e g. (rodents, flies, mosquitoes, other)

Explosive Gases Control

- 0809-Methane gas must not exceed 25% of lower explosive limit for facility structures
- 0810-Methane gas concentration must not exceed lower explosive limit at the property boundary-beyond
- 0811-Methane gas concentration must not exceed 100ppm/volume of methane in offsite structures
- 0812-Explosive gases must be controlled and a routine methane monitoring program in place
- 0813-Monitoring for explosive gas occurs quarterly at a minimum
- 0814-Required measures must be taken if methane gas levels exceed limits (notify, monitor, evacuate)
- 0815-Must have procedures for methane gas level exceedance (gas levels, interim steps, remediation)

Incoming Waste Management

- 0800-Procedures must be in place for excluding the receipt of prohibited waste
- 0801-Random inspections must be conducted for incoming loads to prevent receipts of prohibited waste
- 0802-Record must be kept of random inspections of incoming loads to prevent prohibited waste
- 0803-Facility personnel must be trained to recognize prohibited wastes and training logs kept
- 0804-Immediate notification to Public Health and Ecology for any prohibited waste discovered

Performance Standards

- 0290-Must not pose a threat to human health or environment
- 0291-Protects from ground water contamination
- 0292-The facility must conform to the approved local comprehensive solid waste management plan
- 0293-Complies with RCW 70.94 Emission or ambient air quality standards
- 0294-Complies with all other local/state/federal laws and regulations

Performance Standards for groundwater monitoring System Design

- 0850-All groundwater monitoring system must be designed and maintained per WAC 173-351-405
- 0851-All wells must be clearly labeled, capped and locked
- 0852-Equipment used for groundwater monitoring is maintained

Permit Requirements

- 0863-Permit Required

Plan of Operation

- 0829-Plan of operation is current, complete and a hard copy present at the permit approved location
- 0830-Operators handle solid waste as described in plan of operations
- 0831-Operators conducting inspections per plan of operation
- 0832-Plan of operation procedures followed for fire or explosion
- 0833-Plan of operation procedures followed for actions to take for sudden releases of gas, leachate
- 0834-Maintain and operate leachate and gas collection equipment per plan of operation
- 0835-Safety equipment listed in plan of operation must be on-site and working (shower, eyewash)
- 0836-Any additional requirements by Public Health are followed as outlined on the plan of operation

Record Keeping

- 0827-Operating record is available at the approved location and is complete for all required records

Run-on/runoff Control Systems

- 0820-Prevent run-on to the active portion of the landfill during the peak discharge from 25yr storm
- 0821-Must provide runoff control for active portions to collect & control water vol. 24hr/25yr storm
- 0822-Runoff from active portion of the landfill must be handled in accordance w. WAC 173-351-200(8)

Surface Water Requirements

- 0823-MSWLF units must not discharge pollutants into waters of the state
- 0824-Must not cause the discharge of a nonpoint source pollution to waters of the state

SOLID WASTE INSPECTION REPORT

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Monday, May 9, 2016 Time In: 1:30 pm Time Out: 3:45 pm Inspector: Darshan Dhillon Result: SATISFACTORY

VIOLATIONS OBSERVED (if any)

OVERALL INSPECTION COMMENTS:

All of the monitoring wells were locked.
Perimeter fence was in good repair.
Oxygenation of leachate ponds was taking place through agitation of leachate.
Fencing around the leachate ponds was in good repair.
Water level in siltation ponds is very low.
Workers were wearing required PPE.
Records of incoming refuse are electronically kept.
Inspection records are kept up-to-date.
Note: A boat was parked on the active face of the landfill by the tipping station. It appeared to be in good shape. I was just wondering if that boat was being buried or the fate of the boat.
- A lot of trash was falling from the active face into the black geo-membrane lined storm water ditch located on the Southwest side of the active face. It needs to be cleaned.



Darshan Dhillon

H&E I III

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INSPECTION CHECKLIST

The following items are evaluated during inspections.

Violations cited as out of compliance during this inspection are highlighted below.

Out=out of compliance

OUT

OUT



SOLID WASTE INSPECTION REPORT

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Return Inspection of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Tuesday, May 17, 2016 Time In: 11:30 am Time Out: 2:35 pm Inspector: Darshan Dhillon Result: UNSATISFACTORY

VIOLATIONS OBSERVED (if any)

-0291-Protects from ground water contamination

The facility must comply with RCW 90.48 Water Pollution control including WAC 173-200 Water Quality Standards for Ground Water. WAC 173-350-040 (2)

-0838-Litter must be controlled

All owners or operators of MSWLF units must operate the facility so as to collect scattered litter as necessary to prevent vector harborage, a fire hazard, an aesthetic nuisance, or adversely affect wildlife or its habitat. WAC 173-351-220 (2)

OVERALL INSPECTION COMMENTS:

Trash from the SW storm water drainage ditch has not been removed yet. Site was shown to Scott Barden.

Monitoring wells in area 6 are being monitored for gas production and concentrations.

Additional axillary flare was working to its full capacity burning approximately 300 cubic of LFG per minute. It is a landfill gas with only 17% of methane in it. BEW plant does not accept it unless the methane concentration is greater than 42%.

Monthly inspections are conducted on a regular basis last inspection was conducted on 5/11/2016.

Following items were noted to be "Not OK" in the inspection report:

Ditches, Runoff Control Berms and litter.

Following items recorded to be "Poor" condition instead of Good: "There is accumulation of litter in stormwater channels along the toe of the liner Area 7", "There is blowing litter and debris on top of the area 7 liner acrodd the entire covered liner site that needs collecting", "There is accumulated silt and mud in the haul road stormwater ditches that was collected behind the rock check dams that need vactor truck cleaned". Must be corrected and put in good condition by May 25, 2016.

In the inspection of 4-21-2016 it was noted that Silt Fences / Filter Fabric "Not OK". along with above mentioned items. "There are large sheets of plastic or tarps accumulating on the eastern toe of Area 7 that needs to be removed".

Grass/weed is growing taller on all over the landfill which needs to be mowed by May 25, 2016.

Last time the Plan of operation was updated in 2008. The plan of operation must be updated by December 31, 2016.

Workers were wearing required PPE.

No dust was visible at the time of inspection. Solid waste being compacted by compactors by going over it multiple times.

Ponds were oxygenated and no smell was detected from the siltation ponds.

Darshan Dhillon
H&EI III

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SOLID WASTE INSPECTION REPORT

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Return Inspection of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Thursday, May 26, 2016 Time In: 2:05 pm Time Out: 3:40 pm Inspector: Darshan Dhillon Result: SATISFACTORY

VIOLATIONS OBSERVED (if any)

OVERALL INSPECTION COMMENTS:

Thanks for removing the trash from the stormwater drain located above the SSWA.
Records of regular inspections has been maintained.
Daily alternative cover (HDPE) is installed on the active face of the landfill at the end of the day. It was observed on Saturday May 21, 2016.
Some part of trash is still being covered with 6 inches of soil.
Access road to the storm water ditch (which was filled with trash) was closed due to construction activities.
Inspection was conducted by walking around the active face and around heavy construction equipment.
Stormwater ditch where the truck was overturned has been lined with rocks.



Darshan Dhillon
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SOLID WASTE INSPECTION REPORT

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Tuesday, June 7, 2016 Time In: 9:00 am Time Out: 12:30 pm Inspector: Darshan Dhillon Result: COMPLETE

VIOLATIONS OBSERVED (if any)

-0860-Final cover for closed areas must be maintained (vegetation, settlement, erosion,# run on/off)

Post closure care must include maintaining the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, maintaining the vegetative cover (including cutting of vegetation when needed) or other events, and preventing run-on and runoff from eroding or otherwise damaging the final cover. WAC 173-351-500 (2)(a)(i)

Grass and weed growing tall on area 2,3 and Main hill area which has to be mowed and keep it low. Due to dry weather this overgrown grass/weed pose a potential for fire hazard.

OVERALL INSPECTION COMMENTS:

An alternative daily cover is placed on top of the refuse.

Mandatory Safety training provide on 5/26/2016 and following topics:

- Bloodborne Pathogens Update
- Asbestos reminder
- Fire extinguisher review / Renton aquifer
- Hazard Communications/ Right to Know / MSDS Exposure Records
- Global Harmonization Training
- Storm water Compliance Training

Daily and weekly inspections are conducted and records are maintained.

Workers were wearing required PPE as stipulated in the plan of operation.

Mohamed Ali Health & Environmental Investigator accompanied me to look at the Cedar Hills Landfill.



Darshan Dhillon

H&EI III

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Cedar Hills Area 5 Maintenance

for the period 04/01/2016 *to* 06/30/2016

Click the blue 'Y' to see notes

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
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Area 5

CHAREA5	0000016131	CLOSED	Monthly Gas System PM	04/13/2016	N
CHAREA5	0000016131	CLOSED	Monthly Stormwater PM	04/13/2016	N
CHAREA5	0000016131	CLOSED	Monthly Cover System PM	04/13/2016	N
CHAREA5	0000016223	CLOSED	Monthly Gas System PM	05/01/2016	N
CHAREA5	0000016223	CLOSED	Monthly Stormwater PM	05/01/2016	N
CHAREA5	0000016223	CLOSED	Monthly Cover System PM	05/01/2016	N
CHAREA5	0000016358	CLOSED	Monthly Gas System PM	06/24/2016	N
CHAREA5	0000016358	CLOSED	Monthly Stormwater PM	06/24/2016	N
CHAREA5	0000016358	CLOSED	Monthly Cover System PM	06/24/2016	N
CHAREA5E	0000016064	CLOSED	Monthly Header PM	04/21/2016	N
CHAREA5E	0000016200	CLOSED	Monthly Header PM	05/03/2016	N
CHAREA5E	0000016335	CLOSED	Monthly Header PM	06/03/2016	N
CHAREA5W	0000016065	CLOSED	Monthly Header PM	04/21/2016	N
CHAREA5W	0000016199	CLOSED	Monthly Header PM	05/19/2016	N
CHAREA5W	0000016334	CLOSED	Monthly Header PM	06/03/2016	N

Cedar Hills Landfill Storm Water Pollution Prevention Plan Maintenance

for the period 04/01/2016 to 06/30/2016

[Click the blue 'Y' to see notes](#)

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
Catch Basins						
	Cedar Hills	0000031926	CLOSED	PMM	04/07/2016	N
	Cedar Hills	0000032286	CLOSED	PMM	05/03/2016	Y
	Cedar Hills	0000032595	CLOSED	PMM	06/03/2016	Y
Trash Racks						
	Cedar Hills	0000032011	CLOSED	PMW	04/07/2016	N
	Cedar Hills	0000032025	CLOSED	PMW	05/09/2016	Y
	Cedar Hills	0000032125	CLOSED	PMW	04/13/2016	N
	Cedar Hills	0000032179	CLOSED	PMW	04/21/2016	N
	Cedar Hills	0000032248	CLOSED	PMW	04/29/2016	N
	Cedar Hills	0000032360	CLOSED	PMW	05/03/2016	N
	Cedar Hills	0000032466	CLOSED	PMW	05/16/2016	Y
	Cedar Hills	0000032529	CLOSED	PMW	05/24/2016	Y
	Cedar Hills	0000032636	CLOSED	PMW	06/03/2016	N
	Cedar Hills	0000032739	CLOSED	PMW	06/07/2016	Y
	Cedar Hills	0000032778	CLOSED	PMW	06/13/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
	Cedar Hills	0000032846	CLOSED	PMW	06/20/2016	Y
	Cedar Hills	0000032931	CLOSED	PMW	06/27/2016	Y
Ditches						
	Cedar Hills	0000031926	CLOSED	PMM	04/07/2016	N
	Cedar Hills	0000032011	CLOSED	PMW	04/07/2016	N
	Cedar Hills	0000032025	CLOSED	PMW	05/09/2016	Y
	Cedar Hills	0000032125	CLOSED	PMW	04/13/2016	N
	Cedar Hills	0000032179	CLOSED	PMW	04/21/2016	N
	Cedar Hills	0000032248	CLOSED	PMW	04/29/2016	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	Cedar Hills	0000032286	CLOSED	PMM	05/03/2016	Y
	Cedar Hills	0000032287	CLOSED	PMQ	05/03/2016	N
	Cedar Hills	0000032360	CLOSED	PMW	05/03/2016	N
	Cedar Hills	0000032466	CLOSED	PMW	05/16/2016	Y
	Cedar Hills	0000032529	CLOSED	PMW	05/24/2016	Y
	Cedar Hills	0000032595	CLOSED	PMM	06/03/2016	Y
	Cedar Hills	0000032636	CLOSED	PMW	06/03/2016	N
	Cedar Hills	0000032739	CLOSED	PMW	06/07/2016	Y
	Cedar Hills	0000032778	CLOSED	PMW	06/13/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/22/2016	Y
	Cedar Hills	0000032846	CLOSED	PMW	06/20/2016	Y
	Cedar Hills	0000032931	CLOSED	PMW	06/27/2016	Y

Pipes/Culverts

Cedar Hills	0000032287	CLOSED	PMQ	05/03/2016	N
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Ponds/Lagoons

Cedar Hills	0000032011	CLOSED	PMW	04/07/2016	N
Cedar Hills	0000032025	CLOSED	PMW	05/09/2016	Y
Cedar Hills	0000032125	CLOSED	PMW	04/13/2016	N
Cedar Hills	0000032179	CLOSED	PMW	04/21/2016	N
Cedar Hills	0000032248	CLOSED	PMW	04/29/2016	N
Cedar Hills	0000032287	CLOSED	PMQ	05/03/2016	N
Cedar Hills	0000032360	CLOSED	PMW	05/03/2016	N
Cedar Hills	0000032466	CLOSED	PMW	05/16/2016	Y
Cedar Hills	0000032529	CLOSED	PMW	05/24/2016	Y
Cedar Hills	0000032636	CLOSED	PMW	06/03/2016	N
Cedar Hills	0000032739	CLOSED	PMW	06/07/2016	Y
Cedar Hills	0000032778	CLOSED	PMW	06/13/2016	Y
Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	Cedar Hills	0000032792	CLOSED	PMW	06/22/2016	Y
	Cedar Hills	0000032846	CLOSED	PMW	06/20/2016	Y
	Cedar Hills	0000032931	CLOSED	PMW	06/27/2016	Y
General						
	Cedar Hills	0000032011	CLOSED	PMW	04/07/2016	N
	Cedar Hills	0000032025	CLOSED	PMW	05/09/2016	Y
	Cedar Hills	0000032125	CLOSED	PMW	04/13/2016	N
	Cedar Hills	0000032179	CLOSED	PMW	04/21/2016	N
	Cedar Hills	0000032248	CLOSED	PMW	04/29/2016	N
	Cedar Hills	0000032287	CLOSED	PMQ	05/03/2016	N
	Cedar Hills	0000032360	CLOSED	PMW	05/03/2016	N
	Cedar Hills	0000032466	CLOSED	PMW	05/16/2016	Y
	Cedar Hills	0000032529	CLOSED	PMW	05/24/2016	Y
	Cedar Hills	0000032636	CLOSED	PMW	06/03/2016	N
	Cedar Hills	0000032739	CLOSED	PMW	06/07/2016	Y
	Cedar Hills	0000032778	CLOSED	PMW	06/13/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/08/2016	Y
	Cedar Hills	0000032792	CLOSED	PMW	06/22/2016	Y
	Cedar Hills	0000032846	CLOSED	PMW	06/20/2016	Y
	Cedar Hills	0000032931	CLOSED	PMW	06/27/2016	Y
Leachate System						
	Cedar Hills	0000032287	CLOSED	PMQ	05/03/2016	N
	CHPS1	0000032003	CLOSED	PMW	04/05/2016	N
	CHPS1	0000032099	CLOSED	PMW	04/11/2016	Y
	CHPS1	0000032157	CLOSED	PMW	04/18/2016	N
	CHPS1	0000032224	CLOSED	PMW	04/26/2016	N
	CHPS1	0000032311	CLOSED	PMW	05/04/2016	N
	CHPS1	0000032426	CLOSED	PMW	05/09/2016	N
	CHPS1	0000032455	CLOSED	PMW	05/16/2016	N
	CHPS1	0000032513	CLOSED	PMW	05/23/2016	N
	CHPS1	0000032627	CLOSED	PMW	05/31/2016	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHPS1	0000032691	CLOSED	PMW	06/06/2016	N
	CHPS1	0000032766	CLOSED	PMW	06/13/2016	N
	CHPS1	0000032830	CLOSED	PMW	06/20/2016	N
	CHPS1	0000032922	CLOSED	PMW	06/27/2016	N
	CHPS2	0000032002	CLOSED	PMW	04/11/2016	N
	CHPS2	0000032153	CLOSED	PMW	04/18/2016	N
	CHPS2	0000032226	CLOSED	PMW	04/26/2016	N
	CHPS2	0000032312	CLOSED	PMW	05/03/2016	N
	CHPS2	0000032424	CLOSED	PMW	05/09/2016	N
	CHPS2	0000032457	CLOSED	PMW	05/16/2016	N
	CHPS2	0000032512	CLOSED	PMW	05/23/2016	N
	CHPS2	0000032626	CLOSED	PMW	05/31/2016	N
	CHPS2	0000032692	CLOSED	PMW	06/06/2016	N
	CHPS2	0000032767	CLOSED	PMW	06/13/2016	N
	CHPS2	0000032831	CLOSED	PMW	06/20/2016	N
	CHPS2	0000032921	CLOSED	PMW	06/27/2016	N
	CHPS3	0000032087	CLOSED	PMW	04/05/2016	N
	CHPS3	0000032098	CLOSED	PMW	04/11/2016	Y
	CHPS3	0000032154	CLOSED	PMW	04/18/2016	N
	CHPS3	0000032227	CLOSED	PMW	04/26/2016	N
	CHPS3	0000032313	CLOSED	PMW	05/03/2016	N
	CHPS3	0000032425	CLOSED	PMW	05/16/2016	N
	CHPS3	0000032510	CLOSED	PMW	05/23/2016	N
	CHPS3	0000032625	CLOSED	PMW	05/31/2016	N
	CHPS3	0000032693	CLOSED	PMW	06/06/2016	N
	CHPS3	0000032768	CLOSED	PMW	06/13/2016	Y
	CHPS3	0000032832	CLOSED	PMW	06/20/2016	N
	CHPS3	0000032920	CLOSED	PMW	06/27/2016	N
	CHPS4	0000032001	CLOSED	PMW	04/05/2016	Y
	CHPS4	0000032097	CLOSED	PMW	04/11/2016	Y
	CHPS4	0000032155	CLOSED	PMW	04/18/2016	Y
	CHPS4	0000032228	CLOSED	PMW	04/26/2016	N
	CHPS4	0000032314	CLOSED	PMW	05/04/2016	N
	CHPS4	0000032428	CLOSED	PMW	05/09/2016	Y
	CHPS4	0000032456	CLOSED	PMW	05/16/2016	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHPS4	0000032511	CLOSED	PMW	05/23/2016	N
	CHPS4	0000032628	CLOSED	PMW	05/31/2016	N
	CHPS4	0000032694	CLOSED	PMW	06/06/2016	N
	CHPS4	0000032764	CLOSED	PMW	06/13/2016	N
	CHPS4	0000032833	CLOSED	PMW	06/20/2016	Y
	CHPS4	0000032919	CLOSED	PMW	06/27/2016	Y
	LEPS	0000031921	CLOSED	PMM	04/07/2016	Y
	LEPS	0000032008	CLOSED	PMW	04/05/2016	Y
	LEPS	0000032101	CLOSED	PMW	04/11/2016	Y
	LEPS	0000032161	CLOSED	PMW	04/18/2016	N
	LEPS	0000032232	CLOSED	PMW	04/26/2016	N
	LEPS	0000032277	CLOSED	PMM	05/04/2016	Y
	LEPS	0000032316	CLOSED	PMW	05/04/2016	N
	LEPS	0000032452	CLOSED	PMW	05/16/2016	N
	LEPS	0000032508	CLOSED	PMW	05/23/2016	N
	LEPS	0000032565	CLOSED	PMM	06/02/2016	Y
	LEPS	0000032565	CLOSED	PMM	06/02/2016	Y
	LEPS	0000032631	CLOSED	PMW	05/31/2016	N
	LEPS	0000032688	CLOSED	PMW	06/06/2016	N
	LEPS	0000032761	CLOSED	PMW	06/13/2016	N
	LEPS	0000032835	CLOSED	PMW	06/20/2016	N
	LEPS	0000032915	CLOSED	PMW	06/27/2016	N

Landfill Cover

CHAPONDS	0000016129	CLOSED	PMV	04/13/2016	N
CHAPONDS	0000016221	CLOSED	PMV	05/01/2016	N
CHAPONDS	0000016356	CLOSED	PMV	06/24/2016	N
CHAREA4	0000016130	CLOSED	PMV	04/13/2016	N
CHAREA4	0000016222	CLOSED	PMV	05/01/2016	N
CHAREA4	0000016357	CLOSED	PMV	06/24/2016	N
CHAREA5	0000016131	CLOSED	PMV	04/13/2016	N
CHAREA5	0000016223	CLOSED	PMV	05/01/2016	N
CHAREA5	0000016358	CLOSED	PMV	06/24/2016	N
CHAREA6	0000016132	CLOSED	PMV	04/13/2016	N
CHAREA6	0000016224	CLOSED	PMV	05/11/2016	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHAREA6	0000016359	CLOSED	PMV	06/24/2016	N
	CHAREAS23	0000016134	CLOSED	PMV	04/13/2016	N
	CHAREAS23	0000016226	CLOSED	PMV	05/01/2016	N
	CHAREAS23	0000016361	CLOSED	PMV	06/24/2016	N
	CHCENTRALPIT	0000016135	CLOSED	PMV	04/13/2016	N
	CHCENTRALPIT	0000016227	CLOSED	PMV	05/01/2016	N
	CHCENTRALPIT	0000016362	CLOSED	PMV	06/24/2016	N
	CHEMH	0000016136	CLOSED	PMV	04/13/2016	N
	CHEMH	0000016228	CLOSED	PMV	05/01/2016	N
	CHEMH	0000016363	CLOSED	PMV	06/24/2016	N
	CHNFLARESTN	0000016140	CLOSED	PMV	04/13/2016	N
	CHNFLARESTN	0000016232	CLOSED	PMV	05/01/2016	N
	CHNFLARESTN	0000016367	CLOSED	PMV	06/24/2016	N
	CHSEPA	0000016137	CLOSED	PMV	04/13/2016	N
	CHSEPA	0000016229	CLOSED	PMV	05/01/2016	N
	CHSEPA	0000016364	CLOSED	PMV	06/24/2016	N
	CHSSWA	0000016138	CLOSED	PMV	04/13/2016	N
	CHSSWA	0000016230	CLOSED	PMV	05/01/2016	N
	CHSSWA	0000016365	CLOSED	PMV	06/24/2016	N
	CHSTOCKPILE	0000016128	CLOSED	PMV	04/13/2016	N
	CHSTOCKPILE	0000016220	CLOSED	PMV	05/01/2016	N
	CHSTOCKPILE	0000016355	CLOSED	PMV	06/24/2016	N
	CHSWMH	0000016139	CLOSED	PMV	04/13/2016	N
	CHSWMH	0000016231	CLOSED	PMV	05/01/2016	N
	CHSWMH	0000016366	CLOSED	PMV	06/24/2016	N

Landfill Gas

CHAREA5E	0000016059	CLOSED	PMW	04/06/2016	N
CHAREA5E	0000016108	CLOSED	PMW	04/21/2016	N
CHAREA5E	0000016194	CLOSED	PMW	05/03/2016	N
CHAREA5E	0000016266	CLOSED	PMW	05/19/2016	N
CHAREA5E	0000016329	CLOSED	PMW	06/03/2016	N
CHAREA5E	0000016401	CLOSED	PMW	06/21/2016	N
CHAREA5W	0000016060	CLOSED	PMW	04/06/2016	N
CHAREA5W	0000016109	CLOSED	PMW	04/21/2016	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHAREA5W	0000016195	CLOSED	PMW	05/03/2016	N
	CHAREA5W	0000016267	CLOSED	PMW	05/19/2016	N
	CHAREA5W	0000016330	CLOSED	PMW	06/03/2016	N
	CHAREA5W	0000016402	CLOSED	PMW	06/21/2016	N
	CHAREA6	0000016061	CLOSED	PMW	04/14/2016	N
	CHAREA6	0000016110	CLOSED	PMW	04/20/2016	N
	CHAREA6	0000016196	CLOSED	PMW	05/05/2016	N
	CHAREA6	0000016268	CLOSED	PMW	05/17/2016	N
	CHAREA6	0000016331	CLOSED	PMW	06/02/2016	N
	CHAREA6	0000016403	CLOSED	PMW	06/15/2016	N
	CHAREAS23	0000016013	CLOSED	PMW	04/05/2016	N
	CHAREAS23	0000016078	CLOSED	PMW	04/19/2016	N
	CHAREAS23	0000016148	CLOSED	PMW	05/09/2016	N
	CHAREAS23	0000016236	CLOSED	PMW	05/24/2016	N
	CHAREAS23	0000016282	CLOSED	PMW	06/01/2016	N
	CHAREAS23	0000016371	CLOSED	PMW	06/28/2016	N
	CHCMH	0000016036	CLOSED	PMW	04/06/2016	N
	CHCMH	0000016091	CLOSED	PMW	04/19/2016	N
	CHCMH	0000016171	CLOSED	PMW	05/17/2016	N
	CHCMH	0000016172	CLOSED	PMW	05/06/2016	N
	CHCMH	0000016249	CLOSED	PMW	05/17/2016	N
	CHCMH	0000016306	CLOSED	PMW	06/08/2016	N
	CHCMH	0000016384	CLOSED	PMW	06/21/2016	N
	CHEMH	0000016024	CLOSED	PMW	04/01/2016	N
	CHEMH	0000016083	CLOSED	PMW	04/19/2016	N
	CHEMH	0000016159	CLOSED	PMW	05/02/2016	N
	CHEMH	0000016241	CLOSED	PMW	05/16/2016	N
	CHEMH	0000016294	CLOSED	PMW	06/07/2016	N
	CHEMH	0000016376	CLOSED	PMW	06/29/2016	N
	CHSEPA	0000016025	CLOSED	PMW	04/12/2016	N
	CHSEPA	0000016027	CLOSED	PMW	04/12/2016	N
	CHSEPA	0000016084	CLOSED	PMW	04/27/2016	N
	CHSEPA	0000016160	CLOSED	PMW	05/09/2016	N
	CHSEPA	0000016242	CLOSED	PMW	05/19/2016	N
	CHSEPA	0000016295	CLOSED	PMW	06/06/2016	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHSEPA	0000016377	CLOSED	PMW	06/21/2016	N

Landfill Roads

CHACTIVEAREA	0000016119	CLOSED	PMR	04/13/2016	N
CHACTIVEAREA	0000016211	CLOSED	PMR	05/01/2016	N
CHACTIVEAREA	0000016346	CLOSED	PMR	06/24/2016	N
CHMAINGATE	0000016120	CLOSED	PMR	04/13/2016	N
CHMAINGATE	0000016212	CLOSED	PMR	05/01/2016	N
CHMAINGATE	0000016347	CLOSED	PMR	06/24/2016	N
CHPSR	0000016121	CLOSED	PMR	04/13/2016	N
CHPSR	0000016213	CLOSED	PMR	05/01/2016	N
CHPSR	0000016348	CLOSED	PMR	06/24/2016	N
CHSTOCKPILE	0000016128	CLOSED	PMR	04/13/2016	N
CHSTOCKPILE	0000016220	CLOSED	PMR	05/01/2016	N
CHSTOCKPILE	0000016355	CLOSED	PMR	06/24/2016	N

Landfill Roads

Sweeper	0	see Equipment Operator Spreadsheet	NA	0	N
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Equipment

Click the word 'Equipment' to see Work Order Numbers

Appendix B:

Gas Monitoring Reports

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6/15/16

Cal. Time: 730 AM

Technician: J. Parker

Surveyor P.J.

Calibration :

Test Instrument used: TVA 1000

Cal. Gas Lot No: 20320

Cal Gas Used:

CH₄ 496 ppm

O₂ zero

Barometric Pressure	Time
Start 29.95	730 AM
Stop 29.91	1200 PM

90% response time in seconds:

1 4 seconds

$$2 \frac{3}{4} \text{ seconds}$$

3 seconds

avg. 3 seconds

Weather Conditions: Wetcast

Wind Speed &

Direction (out of): Inph S.E

Northing (UTM #)

Easting (10 T #)

Time

Comments

A graph showing a linear relationship between two variables. The x-axis has 10 major grid lines and 11 unlabeled tick marks. The y-axis has 10 major grid lines and 11 unlabeled tick marks. A straight line starts at approximately (0.5, 0) and ends at approximately (9.5, 10).

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6/15/16

Cal. Time: 1200 pm

Technician: J. Parker

Surveyor P. S.

Calibration :

Test Instrument used: TUV 1000

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm

O₂ zero

Barometric Pressure	Time
Start	24.91
Stop	24.91

90% response time in seconds:

1 4 seconds

$$2 \frac{4}{4} \text{ seconds}$$

3 3 seconds

avg. 4 seconds

Weather Conditions: Mostly cloudy

Wind Speed &

Direction (out of): Ganghwa

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6/16/16

Cal. Time: 730 AM

Technician: J. Parker

Surveyor P. J.

Calibration :

Test Instrument used: TVA 1000

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 494 ppm

O₂ zero

Barometric Pressure	Time
Start 30.01	730AM
Stop 30.04	100PM

90% response time in seconds:

$$1 \frac{4}{5} \text{ seconds}$$

2 4 seconds

3 3 seconds

avg. 4 seconds

Weather Conditions: Mostly cloudy

Wind Speed & Direction

Direction (out of): 5 mph SW

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6/16/16

Cal. Time: 100 pm

Technician: J. Parker

Surveyor P. A.

Calibration :

Test Instrument used: TVA-1000

Cal. Gas Lot No: 20328

CH₄ H₂S 80m

O₂ ze(0)

Barometric Pressure	Time
Start	30.04
Stop	30.06

90% response time in seconds:

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

Weather Conditions: Partly Cloudy

Wind Speed &

Direction (out of): Lemph Sw

**DNRP / King County Solid Waste
Serpentine Surface Monitoring Data**

Landfill Site: Cedar Hills

Date: 6/17/16

Cal. Time: 6:00 AM

Technician: J. Parker

Surveyor P.J.

Calibration :

Test Instrument used: TVA 1000

Cal. Gas Lot No: 20328

CH_4 49.6 ppm

O₂ zero

Barometric Pressure	Time
Start	6:00 AM
Stop	12:00 PM

90% response time in seconds:

.1 4 seconds

2 3 seconds

3 3 seconds

avg. 3 seconds

Weather Conditions: Clear

Wind Speed &

Direction (out of): CaM

Northing (UTM #)

Easting (10 T #)

Time

Comments

A graph illustrating a market equilibrium. The vertical axis represents price or demand, and the horizontal axis represents quantity. A horizontal supply curve is shown as a straight line parallel to the x-axis. A downward-sloping demand curve is shown as a concave curve. The two curves intersect at a single point, which represents the equilibrium price and quantity. The grid consists of 10 horizontal lines and 10 vertical lines.

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6/17/16

Cal. Time: 1200 pm

Technician: S Parker

Surveyor PJ

Calibration :

Test Instrument used: TVA 1000

Cal. Gas Lot No: 20328

Cal Gas Used:

CH₄ Uganda
O₂ zero

Barometric Pressure	Time
Start	30.08 1200pm
Stop	30.08 4:15pm

90% response time in seconds:

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

Weather Conditions: Mostly cloudy

Wind Speed &

Direction (out of): South

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Ledge Hills

Date: 6/21/16

Cal. Time: 6:00 AM

Technician: J. Parker

Surveyor P. J.

Calibration :

Test Instrument used: TUV A1000

Cal. Gas Lot No: 20328

Cal Gas Used:

CH₄ 496 ppm

O₂ zero

Barometric Pressure	Time
Start 30.21	600AM
Stop 30.23	100PM

90% response time in seconds:

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

Weather Conditions: Mostly cloudy

Wind Speed &

Direction (out of): 6 mph SE

Northing (UTM #)

Easting (10 T #)

Time

Comments

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6-22-16

Cal. Time: 6:00

Technician: Dye

Surveyor PJ

Calibration :

Test Instrument used: TVA-1000

Cal. Gas Lot No: 20328

Cal Gas Used:

CH₄ 49 L ppm

O₂ And Zero

Barometric Pressure	Time
Start 30.10	6:00
Stop 30.01	11:30

90% response time in seconds:

1 4 seconds

2 5 seconds

3 4 seconds

avg. 4 seconds

Weather Conditions: Partly/Mostly Cloudy

Wind Speed &

Direction (out of): 3 mph ENG

Northing (UTM #)

Easting (10 T #) Time

Comments

A graph illustrating a downward-sloping demand curve. The vertical axis is represented by a series of horizontal grid lines, and the horizontal axis is represented by a series of vertical grid lines, creating a grid pattern. A single, continuous black line starts at the top left corner of the grid and slopes downward to the bottom right corner, representing a linear demand curve.

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6-22-16

Cal. Time: 11:30 am

Technician: Dye

Surveyor PJ

Calibration :

Test Instrument used: TVA-1000

Cal. Gas Lot No: 20328

Cal Gas Used:

CH_4 496 ppm

O₂ Air Zero

Barometric Pressure	Time
Start 30.07	11:30 a.m.
Stop 29.92	3:30 p.m.

90% response time in seconds:

1 4 seconds

2 4 seconds

3 4 seconds

avg. 4 seconds

Weather Conditions: Mostly Cloudy

Wind Speed &

Direction (out of):

Northing (UTM #)

Easting (10 T #)

Time

Comments

A graph illustrating a downward-sloping demand curve. The vertical axis (y-axis) and horizontal axis (x-axis) are represented by a grid of lines. A single straight line with a negative slope is drawn, representing the demand curve. It intersects the vertical axis at a positive value and the horizontal axis at a positive value.

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6-23-16

Cal. Time: 6:00pm

Technician: Dye

Surveyor DJ

Calibration :

Test Instrument used: TVA-1000

Cal. Gas Lot No: ~~49~~ 20328

Cal Gas Used:

CH₄ 496 nm

O₂ Zero

Barometric Pressure	Time
Start 29.98	6:00
Stop 29.99	10:30

90% response time in seconds:

1 4 seconds

2 4 seconds

3 4 seconds

avg. 4 seconds

Weather Conditions: Overcast / Rain

Wind Speed &

Direction (out of): length SSE

Northing (UTM #)

Easting (10 T #)

Time

Comments

A graph on a grid illustrating a function $y = f(x)$. The horizontal axis (x-axis) and vertical axis (y-axis) both have 10 major grid lines, creating a 9x9 grid of squares. A smooth, continuous curve starts at the top-left corner (0, 10) and slopes downward to the bottom-right corner (10, 0). Two straight lines are also plotted: one line passes through the points (0, 10) and (10, 0), representing the linear function $y = -x + 10$; the other line passes through the points (0, 9) and (9, 0), representing the linear function $y = -x + 9$.

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 6-23-16

Cal. Time: 11:00

Technician: Dyc

Surveyor PS

Calibration :

Test Instrument used: TVA-1000

Surveyor PS

Cal. Gas Lot No: 20328

Cal Gas Used:

CH₄ 49.6 ppm

O₂ Zero

Barometric Pressure	Time
Start 29.99	11:00-
Stop 30.01	3:00 pm

90% response time in seconds:

1 4 seconds

2 4 seconds

3 4 seconds

avg. 4 seconds

Weather Conditions: Overcast

Wind Speed &

Direction (out of): 5 mph SW

Northing (UTM #)

Easting (10 T #)

Time

Comments

A graph plotted on a grid. A single, continuous black line starts at the top left corner and slopes downward to the bottom right corner, representing a function like $y = -x + b$.

Cedar Hills Regional Landfill

Quarterly Surface Emission Monitoring Plot of GPS Generated Track Lines

JUNE 2016

Scale 1"=800'

KING COUNTY SOLID WASTE

201 S JACKSON ST, SUITE 701

SEATTLE, WA 98104-3505

CEDAR HILLS REGIONAL LANDFILL
SCALE 1"=800'
CONTROLLING ELEVATION 875'
DATE OF INFORMATION: 01-01-00

3 DRAFT
SHEET
1
100' DRAWS



KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS Christie True, Director SOLID WASTE DIVISION		
CEDAR HILLS QUARTERLY GAS EMISSIONS MONITORING		
APPROVED	RECOMMENDED	DATE XX-XX-XX
DESIGNED PJM	DRAWN PJM	DATE 06-27-10
PROJECT NO.	SURVEY NO.	SHEET 1 OF 1

DATE	REVISION	BY

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: ZZZZZZZG: Landfill Gas - not classified

TECHNICIAN COPY

**WO#: 0000016276**

Date In: 05/27/2016 09:14

Date Promised: 05/28/2016 09:14

Date Out: 00:00

WO Status: A Last WO#: 0000016210

WO Priority: Last WO Date: 04/26/2016

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
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PM SERVICE

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

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMQ_BS	PM Service PMQ per list Billable Scheduled, Target	0	763	W	0.00000
PMQ_BS	PM Service PMQ per list Billable Scheduled, Target	0	762		0.00000

NOTES

Work Order Task List

Repair Code: PMQ BS

Equipment: CEDAR HILLS

Work Order: 0000016276

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

6-15 10 hrs
 6-16 10 hrs
 6-17 10 hrs
 6-21 10 hrs

6/22 10 hrs
 6/23 10 hrs

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#: 0000016131**

Date In: 03/31/2016 12:26

Date Promised: 04/01/2016 12:26

Date Out: 00:00

WO Status: A Last WO#: 0000015997
 WO Priority: Last WO Date: 02/29/2016
 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	04/10/2016	Gas System
T	0 - MONTHS	04/10/2016	Stormwater
V	0 - MONTHS	04/10/2016	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>761</i>	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	0	761 <i>761</i>	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0	761 <i>761</i>	0.00000	Gas

NOTES

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

PMG BS

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

PMT BS

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

PMV BS

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

DATE: 4-13-16

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CH AREA5 License: na

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

TECHNICIAN COPY

**WO#: 0000016223**

Date In: 04/26/2016 09:24

Date Promised: 04/27/2016 09:24

Date Out: 00:00

WO Status: A Last WO#: 0000016131

WO Priority: Last WO Date: 03/31/2016

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		
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	04/10/2016	Gas System
T	0 - MONTHS	04/10/2016	Stormwater
V	0 - MONTHS	04/10/2016	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

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

NOTES

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

PMG BS

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

PMT BS

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

PMV BS

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

DATE: 5-1-16

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#: 0000016358**

Date In: 05/27/2016 10:52

Date Promised: 05/28/2016 10:52

Date Out: 00:00

WO Status: A Last WO#:0000016223

WO Priority: Last WO Date: 04/26/2016

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	06/10/2016	Gas System
T	0 - MONTHS	06/10/2016	Stormwater
V	0 - MONTHS	06/10/2016	Cover System

WARRANTY INFORMATION

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

REPAIRS

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

NOTES

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

PMG BS

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

PMT BS

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

PMV BS

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

DATE: 6/21/14

Work Order Report - WO# 0000016038

3/31/2016 10:20:47 AM

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA5TD License: na

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

TECHNICIAN COPY

**WO#: 0000016038**

Date In: 03/31/2016 10:20

Date Promised: 04/01/2016 10:20

Date Out: 00:00

WO Status: A Last WO#:D000015891

WO Priority: Last WO Date: 02/29/2016

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:	Comments:	
Fuel Cap1:		CH Area 5
Fuel Cap2:		

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	04/10/2016	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

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

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA5TD

Work Order: 0000016038

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

35 ✓

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA5TD License: na

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

TECHNICIAN COPY

**WO#: 0000016173**

Date In: 04/25/2016 13:34

Date Promised: 04/26/2016 13:34

Date Out: 00:00

WO Status: A Last WO#: 0000016038

WO Priority: Last WO Date: 03/31/2016

Track DownTime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	05/10/2016	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	750 RB	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV 8S

Equipment: CHAREASTD

Work Order: 0000016173

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

5/20/16

40 min.

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA5TD License: na

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

TECHNICIAN COPY

**WO#: 0000016308**

Date In: 05/27/2016 09:49

Date Promised: 05/28/2016 09:49

Date Out: 00:00

WO Status: A Last WO#: 0000016173

WO Priority: Last WO Date: 04/25/2016

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:	Comments:	
Fuel Cap1:		CH Area 5
Fuel Cap2:		

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
V	0 - MONTHS	07/10/2016	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

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

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREASTD

Work Order: 0000016308

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

6-13-16

HAK

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA6 License: na

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

TECHNICIAN COPY

**WO#: 0000016132**

Date In: 03/31/2016 12:27

Date Promised: 04/01/2016 12:27

Date Out: 00:00

WO Status: A Last WO#:0000016110

WO Priority: Last WO Date: 03/31/2016

Track Downtime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	04/10/2016	Gas System
S	0 - MONTHS	04/28/2016	Scheduled Inspection
T	0 - MONTHS	04/10/2016	Stormwater
V	0 - MONTHS	04/10/2016	Cover System
W	W - WEEKS	04/14/2016	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

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

NOTES

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

PMG BS

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

PMT BS

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

PMV BS

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

DATE: 4-13-14

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

Equipment: CHAREA6 License: na

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

Color: .
 Serial: na
 Engine:

TECHNICIAN COPY



WO#: 0000016224

Date In: 04/26/2016 09:25

Date Promised: 04/27/2016 09:25

Date Out: 00:00

WO Status: A Last WO#:0000016198
 WO Priority: Last WO Date: 04/25/2016
 Track Downtime: Y Operator: WG

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	04/10/2016	Gas System
S	0 - MONTHS	04/28/2016	Scheduled Inspection
T	0 - MDNTHS	04/10/2016	Stormwater
V	0 - MONTHS	04/10/2016	Cover System
W	W - WEEKS	04/28/2016	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	D	762 JJ	0.00000	Gas
PMT BS	PM Service PM Stormwater Billable Scheduled, Target	O	762 JJ	0.00000	Gas
PMV BS	PM Service PM Cover System Billable Scheduled, Target	O	762 JJ	0.00000	Gas

NOTES

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

PMG BS

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

PMT BS

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

PMV BS

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

DATE: 5-1-16

WO Company: Gas King County Landfill Gas

WO Department: 7572 Waste Water, LF Gas

WO Shop: Gas Landfill Gas

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**WO#: 0000016359**

Date In: 05/27/2016 10:53

Date Promised: 05/28/2016 10:53

Date Out: 00:00

WO Status: A Last WO#: 0000016333

WO Priority: Last WO Date: 05/27/2016

Track Downtime: Y Operator: WG

Equipment: CHAREA6 License: na

Location: 20 Color:
 Year: 2006 Serial: na
 Make: U0 Engine:
 Model: UD
 Class: ZZZZZZZGS: Landfill Gas - not classified

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

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
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PM SERVICE

Type	Cycle	Next Due	Description
G	0 - MONTHS	06/10/2016	Gas System
S	0 - MONTHS	06/28/2016	Scheduled Inspection
T	0 - MONTHS	06/10/2016	Stormwater
V	0 - MONTHS	06/10/2016	Cover System
W	W - WEEKS	06/09/2016	Weekly Inspection

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	MID	Est. Labor	Shop
PMG BS	PM Service PM Gas System Billable Scheduled, Target	0	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, CHAREA7, CHAREAS23,
CHCENTRALPIT, CHEMH, CHSEPA, CHSSWA, CHSWMH (10)

PMG BS

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

PMT BS

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

PMV BS

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

DATE: 6/24/16

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: ZZZZZZZG5: Landfill Gas - not classified	

TECHNICIAN COPY

**WO#: 0000016066**

Date In: 03/31/2016 10:46

Date Promised: 04/01/2016 10:46

Date Out: 00:00

WO Status: A Last WO#: 0000015931

WO Priority: Last WO Date: 02/29/2016

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	10 - MONTHS	04/10/2016	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

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

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000016066

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

I W

Work Order Report - WO# 0000016201

4/25/2016 2:17:25 PM

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#: 0000016201

Date In: 04/25/2016 14:16

Date Promised: 04/26/2016 14:16

Date Out: 00:00

WO Status: A Last WO#: 0000016066

WO Priority: Last WO Date: 03/31/2016

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	04/10/2016	Cover System

WARRANTY INFORMATION

Type	Cycle	Date Expires	Description
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REPAIRS

RTY	Description	Status	Est. Labor	Shop
PMV BS	PM Service PM Cover System Billable Scheduled, Target	0 763	<i>N</i>	0.00000 Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000016201

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

WOM

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#: 0000016336**

Date In: 05/27/2016 10:17

Date Promised: 05/28/2016 10:17

Date Out: 00:00

WO Status: A Last WO#: 0000016201

WO Priority: Last WO Date: 04/25/2016

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:	20:2D- 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	10 - MONTHS	06/10/2016	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	750 YRB	0.00000	Gas

NOTES

Work Order Task List

Repair Code: PMV BS

Equipment: CHAREA6TD

Work Order: 0000016336

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

6/8/16

1 hr.