

DENR USE ONLY

Paper Report

Electronic Data - Email CD (data loaded: Yes / No)

Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.)
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Municipal Engineering Services Co., P.A.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Jonathan Pfohl

Phone: (919) 772-5393

E-mail: jpfohl@mesco.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Greene County Closed MSWLF and Active C&D Landfill	105 Landfill Road (SR1239) Walstonburg, NC 27888	40-02	.1600	September 13, 2007

Environmental Status: (Check all that apply)

- Initial/Background Monitoring Detection Monitoring Assessment Monitoring Corrective Action

Type of data submitted: (Check all that apply)

- Groundwater monitoring data from monitoring wells Methane gas monitoring data
 Groundwater monitoring data from private water supply wells Corrective action data (specify) _____
 Leachate monitoring data Other(specify) _____
 Surface water monitoring data

Notification attached?

- No. No groundwater or surface water standards were exceeded.
 Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
 Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Jonathan Pfohl

Environmental Specialist

(919) 772-5393

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

Signature

Date

11/21/07

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

Groundwater Sampling Report and Statistical Analysis

Prepared for

Greene County Closed MSWLF and Active C&D Landfill
Walstonburg, North Carolina

September, 2007

Permit Number: 40-02

MESCO Project Number: G07010.0

Completed on November 21, 2007



Municipal Engineering Services Company, P.A.
Garner, Boone and Morehead City, North Carolina

**Municipal
Services**



**Engineering
Company, P.A.**

November 21, 2007

Ms. Jaelynne Drummond
Solid Waste Section
Division of Waste Management
North Carolina Department of Environment and Natural Resources
401 Oberlin Road, Suite 150
Raleigh, NC 27605

Re: Groundwater Sampling Report and Statistical Analysis
Greene County Closed unlined MSWLF and Active C&D Landfill
Permit No. 40-02
MESCO Project No. G07010.0

Dear Ms. Drummond:

Municipal Engineering Company, P.A. (MESCO), has completed the sampling report and statistical analysis for the Greene County Closed unlined MSWLF and active C&D Landfill for the September 13, 2007 sampling event. Environment I of Greenville NC completed the field sampling and laboratory analyses as part of the routine semi-annual detection monitoring program. All of the C&D landfill monitoring wells were sampled including 2 new downgradient wells MW-7 and MW-8 which were installed in June 2007. All of the monitoring wells were analyzed for the newly promulgated parameter list as outlined in 15A NCAC 13B.0544 (D). The new parameter list includes the Appendix 1 list of VOCs and metals, mercury, specific conductance, pH, temperature, alkalinity, total dissolved solids, chloride, manganese, sulfate, and iron. The surface water monitoring locations Upstream and Downstream were reported to be dry therefore samples were unattainable. Environment 1 reported all results utilizing the Method Detection Limits (MDL) with reference to the Solid Waste Section reporting limits (SWSL). The laboratory results and statistical analysis for the event are included herein.

All detected constituents were compared with North Carolina Groundwater Standards NCGW2L for regulatory exceedance. The results are shown in the enclosed tables titled "Detection Scan". There were only a few constituents detected during this sampling event. No Appendix I metals were found within the downgradient wells in concentrations above the background well MW-1 therefore interwell analysis was not completed. A water sample procured from downgradient well MW-4 was found to contain VOC(s) for the sixth consecutive event. Aromatics and purgeable halocarbons were among the 5 VOCs detected above the SWSL. The following table summarizes the VOCs that exceeded the NCGW2L Standard during the September 13, 2007 event.

Table1. Exceedance Summary (VOCs)

Well	1,4-DCB	VCM
MW-4	x	x

x=Detected in exceedance of the NCGW2L Standard

MESCO also completed the statistical analysis as required by the Solid Waste Section. The purpose of these analyses is to determine, in comparison to background levels, statistical significance of constituents detected within the downgradient wells during the September 2007 sampling event.

Statistical Analysis Methodology

Metals

An inter-well statistical analysis was not conducted upon metals during this sampling event since none of the Appendix I list of parameters were found in concentrations above the background. The C&D parameters iron and manganese were found in elevated concentrations but since C&D landfills are not required to complete statistical analysis and there is very limited historical data for these parameters they were omitted from this analysis.

VOCs

All historical VOC detections in the background well MW-1R was pooled in order to determine the total number of detections, from which the expected number of detections in a single down gradient monitoring point (y^*) was derived by utilizing the Poisson prediction interval. The parameter y^* is defined by the following equation:

$$y^* = cy + \frac{t^2 c}{2} + tc \sqrt{y \left(1 + \frac{1}{c}\right) + \frac{t^2}{4}}$$

where

$c = 1/n$ (n = number of background samples)

t = one-sided value of student's t -Statistic at 95% confidence ^a

y = number of events observed in n previous samples

y^* = expected number of events in a single future sample

^a Gibbons, R.D., 1994, Statistical methods for groundwater monitoring: John Wiley & Sons, Inc., p.12.

For each monitoring location showing any VOC detections, the number of detected VOCs was counted with each detection being considered a "hit". The number was then compared with the expected number of detections derived from the background VOC data. The value of Student's t -Statistic was derived from tabulated values included in Gibbons (1994).

Results

Historical data compiled for monitoring well MW-1R was used as the baseline. Data distribution and potential outliers were reviewed using time series charts. Based upon the complete lack of historical VOC detections within the background well every well that contained a single VOC detection is considered to be statistically significant according to the Poisson Prediction Interval at a 95% confidence level. Downgradient well MW-4 continues to be the only well sitewide to contain a VOC detection and this is the premier event that the laboratory has reported concentrations at the lower MDL values. Therefore the presence of all of the VOCs is a product of the reduction in quantifiable concentrations and should not be misconstrued as a recent release. MW-4 was sampled for the full Appendix II list of parameters in May 2007 with no constituents found other than those found within the Appendix I list.

Conclusion

Downgradient well MW-4 has been found to contain statistically significant VOCs at a 95% confidence level. Given the observed low concentrations, the inferred direction of flow, and very slow calculated flow rates it is unlikely that the VOCs would be found in concentrations above the Standard at the compliance boundary. Further the 2 newly installed wells MW-7 and MW-8 downgradient of MW-4 have been found to lack VOC detections indicating that the plume is very likely isolated to the aquifer nearest the waste boundary. The impacted aquifer monitored by MW-4 was further investigated and the findings were submitted in the formal Assessment of Corrective Measures (ACM) report on August 30, 2007. The ACM report which was approved by the Section on November 1, 2007 recommended that Monitored Natural Attenuation (MNA) would be the most viable remediation alternative. Following the required public meeting a Corrective Action Plan (CAP) will be submitted to the Section for approval.

MESCO completed the enclosed potentiometric map with groundwater elevations on the day of sampling, flow rates and direction. The site is scheduled to be sampled again for the Appendix I list in March 2008. Please contact me either by phone at (919) 772-5393, or by email at jpfohl@mesco.com should you have any questions or concerns regarding this report.

Sincerely,

MUNICIPAL ENGINEERING SERVICES CO., P.A.

A handwritten signature in blue ink that reads "Jonathan Pfohl". The signature is written in a cursive style with a large initial 'J'.

Jonathan Pfohl
Environmental Specialist

Enclosures

cc: Mr. David Jones
Greene County

**Detection Scan All Detections above SWSL and NCGW2L
Greene County Closed MSWLF and C&D Landfill**

Well ID	Parameter Name ¹	Sample Date	Result	Unit	MDL ⁴	SWSL ²	NCGW2L ³	Exceedance
MW-1R	Barium	09/13/2007	108	ug/l	0.34	100	2000	
MW-1R	Chloride	09/13/2007	105	ug/l	5	5	250000	
MW-4	1,4-Dichlorobenzene	09/13/2007	2.9	ug/l	0.21	1	1.4	1.5
MW-4	Benzene	09/13/2007	1	ug/l	0.16	1	1	
MW-4	Chloride	09/13/2007	11	ug/l	5	5	250000	
MW-4	Cis-1,2-Dichloroethene	09/13/2007	9	ug/l	0.14	5	70	
MW-4	Iron	09/13/2007	28940	ug/l	12	300	300	28640
MW-4	Manganese	09/13/2007	156	ug/l	0.5	50	50	106
MW-4	Toluene	09/13/2007	2.3	ug/l	0.13	1	1000	
MW-4	Vinyl Chloride	09/13/2007	2.5	ug/l	0.34	1	0.015	2.485
MW-5	Chloride	09/13/2007	13	ug/l	5	5	250000	
MW-5	Iron	09/13/2007	9750	ug/l	12	300	300	9450
MW-6	Chloride	09/13/2007	8	ug/l	5	5	250000	
MW-6	Iron	09/13/2007	1407	ug/l	12	300	300	1107
MW-7	Chloride	09/13/2007	27	ug/l	5	5	250000	
MW-8	Chloride	09/13/2007	47	ug/l	5	5	250000	

¹ Table only contains detected constituents.

² SWSL = Solid Waste Section Reporting Limit (Current as of Sampling Event)

³ NCGW2L = North Carolina Ground Water 2L Standard

⁴ MDL = Method Detection Limit

**Detection Scan All Detections Reported by Laboratory
Greene County Closed MSWLF and C&D Landfill**

Well ID	Parameter Name ¹	Sample Date	Result	Unit	MDL ⁴	SWSL ²	NCGW2L ³	GWP ⁵	Exceedance
MW-1R	Antimony	09/13/2007	0.1	ug/l	0.05	6		1.4	
MW-1R	Barium	09/13/2007	108	ug/l	0.34	100	2000		
MW-1R	Beryllium	09/13/2007	0.2	ug/l	0.08	1		4	
MW-1R	Cadmium	09/13/2007	0.1	ug/l	0.06	1	1.75		
MW-1R	Chloride	09/13/2007	105	ug/l	5	5	250000		
MW-1R	Cobalt	09/13/2007	0.5	ug/l	2.53	10	70		
MW-1R	Copper	09/13/2007	0.9	ug/l	0.2	10	1000		
MW-1R	Iron	09/13/2007	104	ug/l	12	300	300		
MW-1R	Lead	09/13/2007	1.5	ug/l	0.07	10	15		
MW-1R	Manganese	09/13/2007	25	ug/l	0.5	50	50		
MW-1R	Nickel	09/13/2007	1.1	ug/l	1.35	50	100		
MW-1R	Sulfate	09/13/2007	8	ug/l	5	250	250000		
MW-1R	Thallium	09/13/2007	0.2	ug/l	0.07	50	0.28		
MW-1R	Zinc	09/13/2007	5.3	ug/l	1.86	10	1050		
MW-4	1,1-Dichloroethane	09/13/2007	3.4	ug/l	0.16	5	70		
MW-4	1,4-Dichlorobenzene	09/13/2007	2.9	ug/l	0.21	1	1.4		1.5
MW-4	Antimony	09/13/2007	0.1	ug/l	0.05	6		1.4	
MW-4	Arsenic	09/13/2007	2.8	ug/l	0.47	10	50		
MW-4	Barium	09/13/2007	55.7	ug/l	0.34	100	2000		
MW-4	Benzene	09/13/2007	1	ug/l	0.16	1	1		
MW-4	Bromomethane	09/13/2007	5.8	ug/l	0.26	10		NE	
MW-4	Chloride	09/13/2007	11	ug/l	5	5	250000		
MW-4	Chlorobenzene	09/13/2007	0.8	ug/l	0.13	3	50		
MW-4	Cis-1,2-Dichloroethene	09/13/2007	9	ug/l	0.14	5	70		
MW-4	Cobalt	09/13/2007	2	ug/l	2.53	10	70		
MW-4	Copper	09/13/2007	0.6	ug/l	0.2	10	1000		
MW-4	Iron	09/13/2007	28940	ug/l	12	300	300		28640
MW-4	Lead	09/13/2007	0.5	ug/l	0.07	10	15		
MW-4	Manganese	09/13/2007	156	ug/l	0.5	50	50		106
MW-4	Methylene Chloride	09/13/2007	0.4	ug/l	0.14	1	4.6		
MW-4	Nickel	09/13/2007	1.4	ug/l	1.35	50	100		
MW-4	Sulfate	09/13/2007	9.4	ug/l	5	250	250000		
MW-4	Toluene	09/13/2007	2.3	ug/l	0.13	1	1000		
MW-4	Total Alkalinity	09/13/2007	100	ug/l	1	1		NE	
MW-4	Trichloroethene	09/13/2007	0.3	ug/l	0.13	1	2.8		
MW-4	Vanadium	09/13/2007	0.9	ug/l	1.21	25	3.5		
MW-4	Vinyl Chloride	09/13/2007	2.5	ug/l	0.34	1	0.015		2.485
MW-4	Zinc	09/13/2007	1.4	ug/l	1.86	10	1050		
MW-5	Arsenic	09/13/2007	1.9	ug/l	0.47	10	50		
MW-5	Barium	09/13/2007	17.8	ug/l	0.34	100	2000		
MW-5	Cadmium	09/13/2007	0.1	ug/l	0.06	1	1.75		
MW-5	Chloride	09/13/2007	13	ug/l	5	5	250000		
MW-5	Cis-1,2-Dichloroethene	09/13/2007	0.4	ug/l	0.14	5	70		
MW-5	Iron	09/13/2007	9750	ug/l	12	300	300		9450
MW-5	Lead	09/13/2007	0.7	ug/l	0.07	10	15		
MW-5	Manganese	09/13/2007	42	ug/l	0.5	50	50		
MW-5	Sulfate	09/13/2007	6.2	ug/l	5	250	250000		
MW-5	Total Alkalinity	09/13/2007	21	ug/l	1	1		NE	
MW-5	Zinc	09/13/2007	2.5	ug/l	1.86	10	1050		
MW-6	Barium	09/13/2007	14	ug/l	0.34	100	2000		
MW-6	Beryllium	09/13/2007	0.1	ug/l	0.08	1		4	

Well ID	Parameter Name ¹	Sample Date	Result	Unit	MDL ⁴	SWSL ²	NCGW2L ³	GWP ⁵	Exceedance
MW-6	Cadmium	09/13/2007	0.1	ug/l	0.06	1	1.75		
MW-6	Chloride	09/13/2007	8	ug/l	5	5	250000		
MW-6	Chromium	09/13/2007	0.6	ug/l	1.38	10	50		
MW-6	Copper	09/13/2007	0.5	ug/l	0.2	10	1000		
MW-6	Iron	09/13/2007	1407	ug/l	12	300	300		1107
MW-6	Lead	09/13/2007	0.8	ug/l	0.07	10	15		
MW-6	Manganese	09/13/2007	15	ug/l	0.5	50	50		
MW-6	Sulfate	09/13/2007	6.8	ug/l	5	250	250000		
MW-6	Total Alkalinity	09/13/2007	4	ug/l	1	1		NE	
MW-6	Vanadium	09/13/2007	1.2	ug/l	1.21	25	3.5		
MW-6	Zinc	09/13/2007	3.1	ug/l	1.86	10	1050		
MW-7	Barium	09/13/2007	37.2	ug/l	0.34	100	2000		
MW-7	Beryllium	09/13/2007	0.1	ug/l	0.08	1		4	
MW-7	Cadmium	09/13/2007	0.2	ug/l	0.06	1	1.75		
MW-7	Chloride	09/13/2007	27	ug/l	5	5	250000		
MW-7	Chromium	09/13/2007	0.3	ug/l	1.38	10	50		
MW-7	Cobalt	09/13/2007	0.6	ug/l	2.53	10	70		
MW-7	Copper	09/13/2007	0.6	ug/l	0.2	10	1000		
MW-7	Iron	09/13/2007	254	ug/l	12	300	300		
MW-7	Lead	09/13/2007	0.3	ug/l	0.07	10	15		
MW-7	Manganese	09/13/2007	5.5	ug/l	0.5	50	50		
MW-7	Nickel	09/13/2007	1.2	ug/l	1.35	50	100		
MW-7	Sulfate	09/13/2007	7.2	ug/l	5	250	250000		
MW-7	Total Alkalinity	09/13/2007	2	ug/l	1	1		NE	
MW-7	Zinc	09/13/2007	3.8	ug/l	1.86	10	1050		
MW-8	Barium	09/13/2007	38.3	ug/l	0.34	100	2000		
MW-8	Bromoform	09/13/2007	0.2	ug/l	0.11	3	4.43		
MW-8	Cadmium	09/13/2007	0.2	ug/l	0.06	1	1.75		
MW-8	Chloride	09/13/2007	47	ug/l	5	5	250000		
MW-8	Chloroform	09/13/2007	0.3	ug/l	0.13	5	70		
MW-8	Chloromethane	09/13/2007	0.3	ug/l	0.18	1	2.6		
MW-8	Chromium	09/13/2007	0.3	ug/l	1.38	10	50		
MW-8	Cobalt	09/13/2007	0.7	ug/l	2.53	10	70		
MW-8	Copper	09/13/2007	0.5	ug/l	0.2	10	1000		
MW-8	Iron	09/13/2007	275	ug/l	12	300	300		
MW-8	Lead	09/13/2007	0.7	ug/l	0.07	10	15		
MW-8	Manganese	09/13/2007	14	ug/l	0.5	50	50		
MW-8	Nickel	09/13/2007	1.6	ug/l	1.35	50	100		
MW-8	Sulfate	09/13/2007	7.6	ug/l	5	250	250000		
MW-8	Total Alkalinity	09/13/2007	2	ug/l	1	1		NE	
MW-8	Vanadium	09/13/2007	0.8	ug/l	1.21	25	3.5		
MW-8	Zinc	09/13/2007	5.1	ug/l	1.86	10	1050		
EB	Antimony	09/13/2007	0.1	ug/l	0.05	6		1.4	
EB	Barium	09/13/2007	0.1	ug/l	0.34	100	2000		
EB	Iron	09/13/2007	75	ug/l	12	300	300		
EB	Manganese	09/13/2007	0.6	ug/l	0.5	50	50		
EB	Zinc	09/13/2007	0.9	ug/l	1.86	10	1050		

¹ Table only contains detected constituents.

² SWSL = Solid Waste Section Reporting Limit (Current as of Sampling Event)

³ NCGW2L = North Carolina Ground Water 2L Standard

⁴ MDL = Method Detection Limit

⁵ GWP = Groundwater Protection Standard (Current as of Sampling Event)

**Hydrologic Properties at Monitoring Well Locations
Greene County Closed MSWLF and C&D Landfill**

Monitoring Well	Hydraulic Conductivity (cm/sec)	Effective Porosity (%)	Hydraulic Gradient	Flow Rate (ft/yr)	Flow Direction	Water Table Depth (ft)	Water Table Elev. (ft)
MW-1R	1.20E-04	37%	0.023	7.7	N28E	6.86	114.92
MW-4	1.10E-04	40%	0.033	9.5	N64E	19.99	97.9
MW-5	1.40E-04	37%	0.063	24.7	N68E	19.33	96.43
MW-6	1.90E-04	43%	0.022	10.2	N34E	12.22	105.19
MW-7	1.98E-04	7%	0.021	61.2	N77E	14.39	96.09
MW-8	1.14E-03	7%	0.005	87.5	N65E	12.52	98.84

NOTE: Data for hydraulic conductivities obtained from GAI Consultants' Water Quality Modifications (October, 1994)

Hydrologic Gradient taken from the September 13, 2007 sampling event.

Flow rate (Q) is defined by the equation:

where
$$Q = -\frac{K}{n_e} \cdot \frac{dh}{dl}$$

K = hydraulic conductivity

n_e = effective porosity

dh = head difference

dl = horizontal distance

Statistical Analysis Results Summary

Inter-Well Analysis Summary
Greene County Closed Sanitary Landfill
Background Well: (MW-1R)

NO Appendix I Metals Detected within any downgradient well

**Summary of Pooled Appendix I VOCs in Background Well (MW-1R)
Greene County Closed Sanitary Landfill**

Constituent	Samples	NDs	% NDs
1,1,1,2-Tetrachloroethane	28	28	100.00
1,1,1-Trichloroethane	28	28	100.00
1,1,2,2-Tetrachloroethane	28	28	100.00
1,1,2-Trichloroethane	28	28	100.00
1,1-Dichloroethane	28	28	100.00
1,1-Dichloroethene	28	28	100.00
1,2,3-Trichloropropane	28	28	100.00
1,2-Dibromo-3-chloropropane	28	28	100.00
1,2-Dibromoethane	28	28	100.00
1,2-Dichlorobenzene	28	28	100.00
1,2-Dichloroethane	28	28	100.00
1,2-Dichloropropane	28	28	100.00
1,4-Dichlorobenzene	28	28	100.00
2-Butanone	28	28	100.00
2-Hexanone	28	28	100.00
4-Methyl-2-Pentanone	28	28	100.00
Acetone	28	28	100.00
Acrylonitrile	28	28	100.00
Benzene	28	28	100.00
Bromochloromethane	28	28	100.00
Bromodichloromethane	28	28	100.00
Bromoform	28	28	100.00
Bromomethane	28	28	100.00
Carbon disulfide	28	28	100.00
Carbon tetrachloride	28	28	100.00
Chlorobenzene	28	28	100.00
Chloroethane	28	28	100.00
Chloroform	28	28	100.00
Chloromethane	28	28	100.00
cis-1,2-Dichloroethene	28	28	100.00
cis-1,3-Dichloropropene	28	28	100.00
Chlorodibromomethane	28	28	100.00
Dibromomethane	28	28	100.00
Ethylbenzene	28	28	100.00
Iodomethane	28	28	100.00
Dichloromethane	28	28	100.00
Styrene	28	28	100.00
Tetrachloroethylene	28	28	100.00
Toluene	28	28	100.00
trans-1,2-Dichloroethene	28	28	100.00
trans-1,3-Dichloropropene	28	28	100.00
trans-1,4-Dichloro-2-butene	28	28	100.00
Trichloroethylene	28	28	100.00
Trichlorofluoromethane	28	28	100.00
Vinyl acetate	28	28	100.00
Vinyl chloride	28	28	100.00
Xylene	28	28	100.00
Total	1316	1316	100.00

**Poisson Prediction Interval Based upon Pooled Background Appendix I VOCs
Greene County Closed Sanitary Landfill**

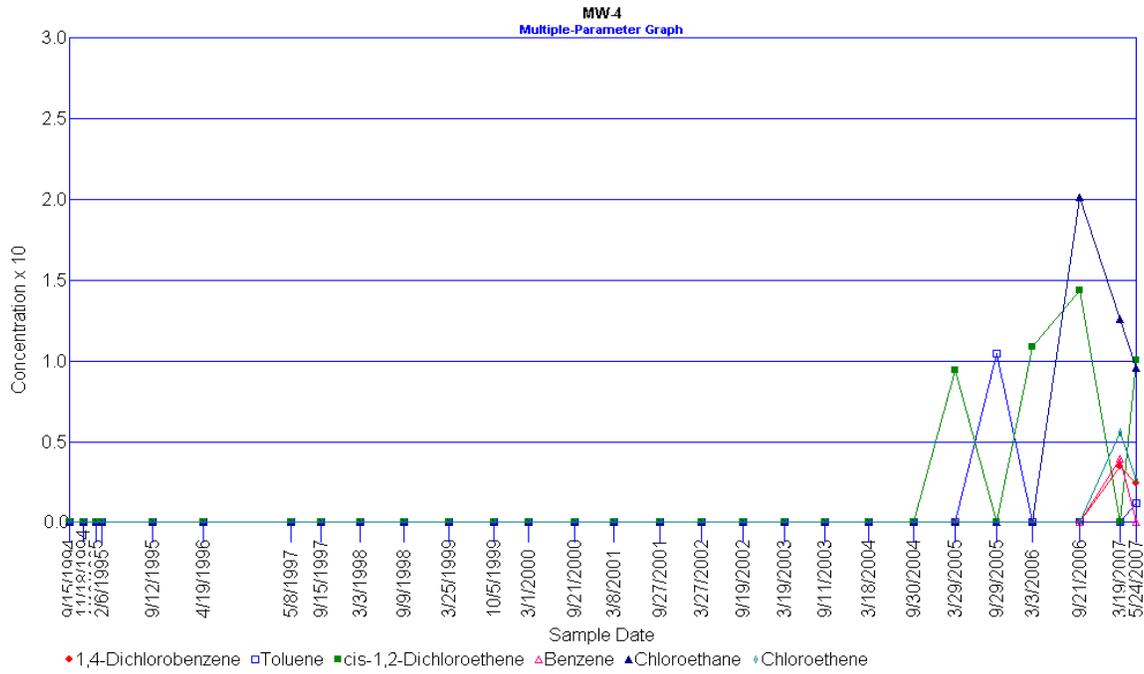
All detected VOCs >SWSL (Background Well: MW-1)

Constituent	MW-4
1,4-Dichlorobenzene	x
cis-1,2-Dichloroethene	x
Toluene	x
Benzene	x
Vinyl Chloride	x
Detection(s) per Scan	5.00

Total number of sampling events [n] = 28
 Total number of detections in background wells [y] = 0
 Number of comparisons (downgradient wells) [k] = 5
 One-sided value of Student's t-statistic (95% confidence) [t] = 2.47
 Expected number of detections in a single future sample [y*] = **0.2179**

Statistically Significant VOC detections within MW-4 at a 95% confidence level

**Time Series Plots for Select Constituents
Greene County Closed Sanitary Landfill**



Basic Statistics

Basic Statistics**Parameter: 1,4-Dichlorobenzene**

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

	Total Observations
155	
Total Non-Detects	153
Pooled Mean	2.42597
Pooled Std Dev	0.383189
Background Mean	2.37768
Background Std Dev	0.489205

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1R	28	28	100	66.575

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1R	2.37768	0.489205	0	2156	77

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	28	26	92.8571	70.8
MW-5	27	27	100	66.5
MW-6	27	27	100	66.5
Downstream	24	24	100	59
Upstream	19	19	100	46.5
MW-7	1	1	100	0.075
MW-8	1	1	100	0.075

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	2.52857	0.171825	0.150893	0.0734094	2311	82.5357
MW-5	2.46296	0.19245	0.0852844	0.074086	2079	77
MW-6	2.46296	0.19245	0.0852844	0.074086	2079	77
Downstream	2.45833	0.204124	0.0806548	0.0764069	1848	77
Upstream	2.44737	0.229416	0.0696898	0.0816411	1463	77
MW-7	0.075	0	-2.30268	0.279535	77	77
MW-8	0.075	0	-2.30268	0.279535	77	77

Analysis of Variance Statistics

SS Wells	11.5219
SS Total	22.6124

Kruskal-Wallis Statistics

Non-Detect Rank	77
Background Rank Sum	2156
Background Rank Mean	77
H Statistic	0.348901
H Adjusted for Ties	9.13033

Basic Statistics**Parameter: cis-1,2-Dichloroethene**

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

	Total Observations
155	
Total Non-Detects	151
Pooled Mean	2.67555
Pooled Std Dev	1.45256
Background Mean	2.41321
Background Std Dev	0.459227

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1R	28	28	100	67.57

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1R	2.41321	0.459227	0	2128	76

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	28	24	85.7143	104.5
MW-5	27	27	100	67.5
MW-6	27	27	100	67.5
Downstream	24	24	100	60
Upstream	19	19	100	47.5
MW-7	1	1	100	0.07
MW-8	1	1	100	0.07

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	3.73214	3.15924	1.31893	0.365664	2438	87.0714
MW-5	2.5	0	0.0867857	0.369034	2052	76
MW-6	2.5	0	0.0867857	0.369034	2052	76
Downstream	2.5	0	0.0867857	0.380595	1824	76
Upstream	2.5	0	0.0867857	0.406667	1444	76
MW-7	0.07	0	-2.34321	1.39241	76	76
MW-8	0.07	0	-2.34321	1.39241	76	76

Analysis of Variance Statistics

SS Wells	49.7529
SS Total	324.928

Kruskal-Wallis Statistics

Non-Detect Rank	76
Background Rank Sum	2128
Background Rank Mean	76
H Statistic	1.3956
H Adjusted for Ties	18.4994

Basic Statistics**Parameter: Toluene**

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

155	Total Observations
Total Non-Detects	152
Pooled Mean	2.54919
Pooled Std Dev	0.994128
Background Mean	2.41339
Background Std Dev	0.458282

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1R	28	28	100	67.575

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1R	2.41339	0.458282	0	2142	76.5

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	28	26	92.8571	76.5
MW-5	27	27	100	67.5
MW-6	27	27	100	67.5
Downstream	24	23	95.8333	68.4
Upstream	19	19	100	47.5
MW-7	1	1	100	0.075
MW-8	1	1	100	0.075

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	2.73214	1.52584	0.31875	0.257211	2296	82
MW-5	2.5	0	0.0866071	0.259581	2065.5	76.5
MW-6	2.5	0	0.0866071	0.259581	2065.5	76.5
Downstream	2.85	1.71464	0.436607	0.267713	1914.5	79.7708
Upstream	2.5	0	0.0866071	0.286053	1453.5	76.5
MW-7	0.075	0	-2.33839	0.979429	76.5	76.5
MW-8	0.075	0	-2.33839	0.979429	76.5	76.5

Analysis of Variance Statistics

SS Wells	16.0451
SS Total	152.197

Kruskal-Wallis Statistics

Non-Detect Rank	76.5
Background Rank Sum	2142
Background Rank Mean	76.5
H Statistic	0.374695
H Adjusted for Ties	6.57943

Basic Statistics**Parameter: Benzene**

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

	Total Observations
155	
Total Non-Detects	154
Pooled Mean	2.41381
Pooled Std Dev	0.438584
Background Mean	2.37714
Background Std Dev	0.491821

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1R	28	28	100	66.56

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1R	2.37714	0.491821	0	2170	77.5

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	28	27	96.4286	68.96
MW-5	27	27	100	66.5
MW-6	27	27	100	66.5
Downstream	24	24	100	59
Upstream	19	19	100	46.5
MW-7	1	1	100	0.06
MW-8	1	1	100	0.06

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	2.46286	0.540061	0.0857143	0.0941371	2247.5	80.2679
MW-5	2.46296	0.19245	0.0858201	0.0950047	2092.5	77.5
MW-6	2.46296	0.19245	0.0858201	0.0950047	2092.5	77.5
Downstream	2.45833	0.204124	0.0811905	0.097981	1860	77.5
Upstream	2.44737	0.229416	0.0702256	0.104693	1472.5	77.5
MW-7	0.06	0	-2.31714	0.358463	77.5	77.5
MW-8	0.06	0	-2.31714	0.358463	77.5	77.5

Analysis of Variance Statistics

SS Wells	11.3853
SS Total	29.6229

Kruskal-Wallis Statistics

Non-Detect Rank	77.5
Background Rank Sum	2170
Background Rank Mean	77.5
H Statistic	0.0872253
H Adjusted for Ties	4.53571

Basic Statistics**Parameter: Chloroethene**

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

	Total Observations
155	
Total Non-Detects	153
Pooled Mean	4.81177
Pooled Std Dev	0.823894
Background Mean	4.73482
Background Std Dev	1.02806

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-1R	28	28	100	132.575

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-1R	4.73482	1.02806	0	2156	77

Compliance Wells

There are 7 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-4	28	26	92.8571	138.1
MW-5	27	27	100	132.5
MW-6	27	27	100	132.5
Downstream	24	24	100	117.5
Upstream	19	19	100	92.5
MW-7	1	1	100	0.075
MW-8	1	1	100	0.075

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-4	4.93214	0.466709	0.197321	0.168405	2311	82.5357
MW-5	4.90741	0.481125	0.172586	0.169957	2079	77
MW-6	4.90741	0.481125	0.172586	0.169957	2079	77
Downstream	4.89583	0.51031	0.161012	0.175282	1848	77
Upstream	4.86842	0.573539	0.1336	0.187289	1463	77
MW-7	0.075	0	-4.65982	0.641267	77	77
MW-8	0.075	0	-4.65982	0.641267	77	77

Analysis of Variance Statistics

SS Wells	46.17
SS Total	104.535

Kruskal-Wallis Statistics

Non-Detect Rank	77
Background Rank Sum	2156
Background Rank Mean	77
H Statistic	0.348901
H Adjusted for Ties	9.13033

Laboratory Results

Environment 1, Incorporated

Drinking Water ID: 37713
Wastewater ID: 10

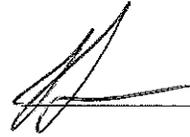
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6005

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL, NC 28580

DATE COLLECTED: 09/13/07
DATE REPORTED : 10/01/07

REVIEWED BY: 

PARAMETERS	MDL	SWSL	Upstream	Downstream	Well #4	Well #5	Well #6	Analysis Date	Analyst	Method Code
PH (field measurement), Units			Missing	Missing	5.6	5.2	5.2	09/13/07	RJH	SM4500HB
Total Alkalinity, mg/l	1.0	1.0			100	21	4	09/13/07	TRB	SM2320B
Chloride, mg/l	5.0	5.0			11	13	8	09/18/07	MDM	SM4500-CLB
Total Dissolved Residue, mg/l	1.0	1.0			98	42	88	09/19/07	TRB	SM2540C
Sulfate, mg/l	5.0	250.0			9.4 J	6.2 J	6.8 J	09/17/07	TRB	SM4500-SO4
Antimony, ug/l	0.05	6.0	Missing	Missing	0.1 J	--- U	--- U	09/21/07	CMF	EPA200.8
Arsenic, ug/l	0.47	10.0	Missing	Missing	2.8 J	1.9 J	--- U	09/21/07	CMF	EPA200.8
Barium, ug/l	0.34	100.0	Missing	Missing	55.7 J	17.8 J	14.0 J	09/21/07	CMF	EPA200.8
Beryllium, ug/l	0.17	1.0	Missing	Missing	--- U	--- U	0.1 J	09/21/07	CMF	EPA200.8
Cadmium, ug/l	0.06	1.0	Missing	Missing	--- U	0.1 J	0.1 J	09/21/07	CMF	EPA200.8
Cobalt, ug/l	2.53	10.0	Missing	Missing	2.0 J	--- U	--- U	09/21/07	CMF	EPA200.8
Copper, ug/l	2.24	10.0	Missing	Missing	0.6 J	--- U	0.5 J	09/21/07	CMF	EPA200.8
Total Chromium, ug/l	1.38	10.0	Missing	Missing	--- U	--- U	0.6 J	09/21/07	CMF	EPA200.8
Iron, ug/l	12.0	300.0			28940	9750	1407	09/27/07	ADD	SM3111B
Manganese, ug/l	0.50	50.0			156	42 J	15 J	09/20/07	LFJ	EPA200.7
Lead, ug/l	0.07	10.0	Missing	Missing	0.5 J	0.7 J	0.8 J	09/21/07	CMF	EPA200.8
Mercury, ug/l	0.13	0.20			--- U	--- U	--- U	09/21/07	CMF	EPA200.8
Nickel, ug/l	1.35	50.0	Missing	Missing	1.4 J	--- U	--- U	09/21/07	CMF	EPA200.8
Selenium, ug/l	0.35	10.0	Missing	Missing	--- U	--- U	--- U	09/21/07	CMF	EPA200.8
Silver, ug/l	2.32	10.0	Missing	Missing	--- U	--- U	--- U	09/21/07	CMF	EPA200.8
Thallium, ug/l	0.07	5.0	Missing	Missing	--- U	--- U	--- U	09/21/07	CMF	EPA200.8
Vanadium, ug/l	1.21	25.0	Missing	Missing	0.9 J	--- U	1.2 J	09/21/07	CMF	EPA200.8
Zinc, ug/l	1.86	10.0	Missing	Missing	1.4 J	2.5 J	3.1 J	09/21/07	CMF	EPA200.8
Conductivity (at 25c), uMhos	1.0	1.0	Missing	Missing	223	87	58	09/13/07	RJH	SM2510B
Temperature, °C			Missing	Missing	20	21	20	09/13/07	RJH	SM2550B
Static Water Level, feet					19.99	19.33	12.22	09/13/07	RJH	
Well Depth, feet					26.16	28.34	26.87	09/13/07	RJH	

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6005

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL, NC 28580

DATE COLLECTED: 09/13/07
DATE REPORTED : 10/01/07

REVIEWED BY: 

PARAMETERS	MDL	SWSL	Well #7	Well #8	Well #1R	Piezometer #2	Equipment Blank	Analysis Date	Analyst	Method Code		
PH (field measurement), Units			4.6	5.0	4.2			09/13/07	RJH	SM4500HB		
Total Alkalinity, mg/l	1.0	1.0	2	2	---	U		09/13/07	TRB	SM2320B		
Chloride, mg/l	5.0	5.0	27	47	105			09/18/07	MDM	SM4500-CLB		
Total Dissolved Residue, mg/l	1.0	1.0	43		226			09/19/07	TRB	SM2540C		
Total Dissolved Residue, mg/l	1.0	1.0		27				09/20/07	TRB	SM2540C		
Sulfate, mg/l	5.0	250.0	7.2 J	7.6 J	8.0 J			09/17/07	TRB	SM4500-SO4		
Antimony, ug/l	0.05	6.0	---	U	---	U	0.1 J	09/21/07	CMF	EPA200.8		
Arsenic, ug/l	0.47	10.0	---	U	---	U	---	U	09/21/07	CMF	EPA200.8	
Barium, ug/l	0.04	100.0	37.2 J	38.3 J	108		0.1 J	09/21/07	CMF	EPA200.8		
Beryllium, ug/l	0.08	1.0	0.1 J	---	U	0.2 J	---	U	09/21/07	CMF	EPA200.8	
Cadmium, ug/l	0.06	1.0	0.2 J	0.2 J	0.1 J		---	U	09/21/07	CMF	EPA200.8	
Cobalt, ug/l	0.41	10.0	0.6 J	0.7 J	0.5 J		---	U	09/21/07	CMF	EPA200.8	
Copper, ug/l	0.20	10.0	0.6 J	0.5 J	0.9 J		---	U	09/21/07	CMF	EPA200.8	
Total Chromium, ug/l	0.24	10.0	0.3 J	0.3 J	---	U	---	U	09/21/07	CMF	EPA200.8	
Iron, ug/l	12.0	300.0	254 J	275 J	104 J		75 J	09/27/07	ADD	SM3111B		
Manganese, ug/l	0.50	50.0	5.5 J	14 J	25 J		0.6 J	09/20/07	LFJ	EPA200.7		
Lead, ug/l	0.07	10.0	0.3 J	0.7 J	1.5 J		---	U	09/21/07	CMF	EPA200.8	
Mercury, ug/l	0.13	0.20	---	U	---	U	---	U	09/21/07	CMF	EPA200.8	
Nickel, ug/l	1.35	50.0	1.2 J	1.6 J	1.1 J		---	U	09/21/07	CMF	EPA200.8	
Selenium, ug/l	0.35	10.0	---	U	---	U	---	U	09/21/07	CMF	EPA200.8	
Silver, ug/l	0.52	10.0	---	U	---	U	---	U	09/21/07	CMF	EPA200.8	
Thallium, ug/l	0.07	5.0	---	U	---	U	0.2 J	---	U	09/21/07	CMF	EPA200.8
Vanadium, ug/l	1.21	25.0	---	U	0.8 J	---	---	U	09/21/07	CMF	EPA200.8	
Zinc, ug/l	1.86	10.0	3.8 J	5.1 J	5.3 J		0.9 J	09/21/07	CMF	EPA200.8		
Conductivity (at 25c), uMhos	1.0	1.0	55	52	434			09/13/07	RJH	SM2510B		
Temperature, °C			21	22	22			09/13/07	RJH	SM2550B		
Static Water Level, feet			14.39	12.52	6.86	18.73		09/13/07	RJH			
Well Depth, feet			21.38	20.24	19.51			09/13/07	RJH			

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL, NC 28580

CLIENT ID: 6005

ANALYST: MAO
DATE COLLECTED: 09/13/07
DATE ANALYZED: 09/20/07
DATE REPORTED: 10/01/07

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Well #4	Well #5	Well #6	Well #7	Well #8	
1. Chloromethane	0.18	1.0	---	U	---	U	0.30 J	
2. Vinyl Chloride	0.34	1.0	2.50	---	U	---	U	
3. Bromomethane	0.26	10.0	5.80 J	---	U	---	U	
4. Chloroethane	0.29	10.0	---	U	---	U	---	U
5. Trichlorofluoromethane	0.13	1.0	---	U	---	U	---	U
6. 1,1-Dichloroethene	0.14	5.0	---	U	---	U	---	U
7. Acetone	1.21	100.0	---	U	---	U	---	U
8. Iodomethane	0.12	10.0	---	U	---	U	---	U
9. Carbon Disulfide	0.14	100.0	---	U	---	U	---	U
10. Methylene Chloride	0.14	1.0	0.40 J	---	U	---	U	
11. trans-1,2-Dichloroethene	0.13	5.0	---	U	---	U	---	U
12. 1,1-Dichloroethane	0.16	5.0	3.40 J	---	U	---	U	
13. Vinyl Acetate	0.20	5.0	---	U	---	U	---	U
14. Cis-1,2-Dichloroethene	0.14	5.0	9.00	0.40 J	---	U	---	U
15. 2-Butanone	0.85	100.0	---	U	---	U	---	U
16. Bromochloromethane	0.11	3.0	---	U	---	U	---	U
17. Chloroform	0.13	5.0	---	U	---	U	---	0.30 J
18. 1,1,1-Trichloroethane	0.11	1.0	---	U	---	U	---	U
19. Carbon Tetrachloride	0.13	1.0	---	U	---	U	---	U
20. Benzene	0.16	1.0	1.00	---	U	---	U	
21. 1,2-Dichloroethane	0.12	1.0	---	U	---	U	---	U
22. Trichloroethene	0.13	1.0	0.30 J	---	U	---	U	
23. 1,2-Dichloropropane	0.17	1.0	---	U	---	U	---	U
24. Bromodichloromethane	0.13	1.0	---	U	---	U	---	U
25. Cis-1,3-Dichloropropene	0.17	1.0	---	U	---	U	---	U
26. 4-Methyl-2-Pentanone	0.68	100.0	---	U	---	U	---	U
27. Toluene	0.13	1.0	2.30	---	U	---	U	
28. trans-1,3-Dichloropropene	0.14	1.0	---	U	---	U	---	U
29. 1,1,2-Trichloroethane	0.20	5.0	---	U	---	U	---	U
30. Tetrachloroethene	0.16	1.0	---	U	---	U	---	U
31. 2-Hexanone	1.00	50.0	---	U	---	U	---	U
32. Dibromochloromethane	0.14	1.0	---	U	---	U	---	U
33. 1,2-Dibromoethane	0.13	1.0	---	U	---	U	---	U
34. Chlorobenzene	0.13	3.0	0.80 J	---	U	---	U	
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	---	U	---	U	---	U
36. Ethylbenzene	0.16	1.0	---	U	---	U	---	U
37. Xylenes	0.48	4.0	---	U	---	U	---	U
38. Dibromomethane	0.17	10.0	---	U	---	U	---	U
39. Styrene	0.16	1.0	---	U	---	U	---	U
40. Bromoform	0.11	3.0	---	U	---	U	---	0.20 J
41. 1,1,2,2-Tetrachloroethane	0.16	1.0	---	U	---	U	---	U
42. 1,2,3-Trichloropropane	0.06	1.0	---	U	---	U	---	U
43. 1,4-Dichlorobenzene	0.21	1.0	2.90	---	U	---	U	
44. 1,2-Dichlorobenzene	0.13	5.0	---	U	---	U	---	U
45. 1,2-Dibromo-3-Chloropropane	0.26	1.0	---	U	---	U	---	U
46. Acrylonitrile	1.49	200.0	---	U	---	U	---	U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	---	U	---	U	---	U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37115
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL, NC 28580

CLIENT ID: 6005
ANALYST: MAO
DATE COLLECTED: 09/13/07
DATE ANALYZED: 09/20/07
DATE REPORTED: 10/01/07

Page: 2

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Well #1R	Equipment Blank	Trip Blank	
1. Chloromethane	0.18	1.0	---	U	---	U
2. Vinyl Chloride	0.34	1.0	---	U	---	U
3. Bromomethane	0.26	10.0	---	U	---	U
4. Chloroethane	0.29	10.0	---	U	---	U
5. Trichlorofluoromethane	0.13	1.0	---	U	---	U
6. 1,1-Dichloroethene	0.14	5.0	---	U	---	U
7. Acetone	1.21	100.0	---	U	---	U
8. Iodomethane	0.12	10.0	---	U	---	U
9. Carbon Disulfide	0.14	100.0	---	U	---	U
10. Methylene Chloride	0.14	1.0	---	U	---	U
11. trans-1,2-Dichloroethene	0.13	5.0	---	U	---	U
12. 1,1-Dichloroethane	0.16	5.0	---	U	---	U
13. Vinyl Acetate	0.20	5.0	---	U	---	U
14. Cis-1,2-Dichloroethene	0.14	5.0	---	U	---	U
15. 2-Butanone	0.85	100.0	---	U	---	U
16. Bromochloromethane	0.11	3.0	---	U	---	U
17. Chloroform	0.13	5.0	---	U	---	U
18. 1,1,1-Trichloroethane	0.11	1.0	---	U	---	U
19. Carbon Tetrachloride	0.13	1.0	---	U	---	U
20. Benzene	0.16	1.0	---	U	---	U
21. 1,2-Dichloroethane	0.12	1.0	---	U	---	U
22. Trichloroethene	0.13	1.0	---	U	---	U
23. 1,2-Dichloropropane	0.17	1.0	---	U	---	U
24. Bromodichloromethane	0.13	1.0	---	U	---	U
25. Cis-1,3-Dichloropropene	0.17	1.0	---	U	---	U
26. 4-Methyl-2-Pentanone	0.68	100.0	---	U	---	U
27. Toluene	0.13	1.0	---	U	---	U
28. trans-1,3-Dichloropropene	0.14	1.0	---	U	---	U
29. 1,1,2-Trichloroethane	0.20	5.0	---	U	---	U
30. Tetrachloroethene	0.16	1.0	---	U	---	U
31. 2-Hexanone	1.00	50.0	---	U	---	U
32. Dibromochloromethane	0.14	1.0	---	U	---	U
33. 1,2-Dibromoethane	0.13	1.0	---	U	---	U
34. Chlorobenzene	0.13	3.0	---	U	---	U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	---	U	---	U
36. Ethylbenzene	0.16	1.0	---	U	---	U
37. Xylenes	0.48	4.0	---	U	---	U
38. Dibromomethane	0.17	10.0	---	U	---	U
39. Styrene	0.16	1.0	---	U	---	U
40. Bromoform	0.11	3.0	---	U	---	U
41. 1,1,2,2-Tetrachloroethane	0.16	1.0	---	U	---	U
42. 1,2,3-Trichloropropane	0.06	1.0	---	U	---	U
43. 1,4-Dichlorobenzene	0.21	1.0	---	U	---	U
44. 1,2-Dichlorobenzene	0.13	5.0	---	U	---	U
45. 1,2-Dibromo-3-Chloropropane	0.26	1.0	---	U	---	U
46. Acrylonitrile	1.49	200.0	---	U	---	U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	---	U	---	U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Enviroment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6005 Week: 37

GREENE CO. LANDFILL
 DAYID JONES
 P.O. BOX 543
 SNOW HILL NC 28580

CHAIN OF CUSTODY RECORD

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field pH	Alkalinity	Chloride	TDS	Sulfate	Metals	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	PARAMETERS
	DATE	TIME				CHLORINE	UV	NONE													
Upstream					4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A	A	A	A	A	B	A	A		E	E	E	A - NONE D - NaOH B - HNO ₃ E - HCL C - H ₂ SO ₄ F - ZINC ACETATE G - NA THIOSULFATE
Downstream					4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>													CLASSIFICATION: <input type="checkbox"/> WASTEWATER (NPDES) <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> DMO/GW <input checked="" type="checkbox"/> SOLID WASTE SECTION
Well #4	09	13 07	1118		8																CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY Y N
Well #5	09	13 07	1810		8																SAMPLES COLLECTED BY: (Please Print) Hoop for
Well #6	09	13 07	1830		8																SAMPLES RECEIVED IN LAB AT 8.6 °C
Well #7	09	13 07	1150		8																
Well #8	09	13 07	1130		8																
Well #1R	09	13 07	1350		9																
Piezometer #1					1																
Piezometer #2	09	13 07			1																
Equipment Blank	09	13 07			3																
REINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hulse	13 07	[Signature]	13 07	[Signature]	13 07	[Signature]	13 07	[Signature]	13 07	[Signature]	13 07	[Signature]	13 07	[Signature]	13 07	[Signature]	13 07	[Signature]	13 07	[Signature]	13 07
REINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
REINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
REINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

Instructions for completing this form are on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested. No 153975

COMMENTS:
 UP
 DN
 PZ1
 UP + DN
 DRY AT COLLECTION

Env. vent 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6005 Week: 37

GREENE CO. LANDFILL
 DAVID JONES
 P.O. BOX 543
 SNOW HILL, NC 28580

CHAIN OF CUSTODY RECORD

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field pH	Alkalinity	Chloride	TDS	Sulfate	Metals	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	CHLORINE NEUTRALIZED AT COLLECTION	
	DATE	TIME				<input type="checkbox"/> CHLORINE	<input type="checkbox"/> UV	<input type="checkbox"/> NONE														
Trip Blank					2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A	A	A	A	A	B	A	A						
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
			<i>David Jones</i>	9/13/05	<i>David Jones</i>	2:10																
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME

PH CHECK (LAB)

CONTAINER TYPE, PG

CHEMICAL PRESERVATION

A - NONE D - NaOH
 B - HNO₃ E - HCL
 C - H₂SO₄ F - ZINC ACETATE
 G - NA THIOSULFATE

CLASSIFICATION:

WASTEWATER (NPDES)
 DRINKING WATER
 DWO/GW
 SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY

SAMPLES COLLECTED BY: *FSH*

SAMPLES RECEIVED IN LAB AT *36* °C

Instructions for completing this form are on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.