

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):

Richardson Smith Gardner and Associates, Inc.

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

Name: Joan A. Smyth, P.G. Phone: 919-828-0577 x 122

E-mail: joan@rsgengineers.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Halifax County Coal Ash Landfill	S.R. 1417 Aurelian Springs, NC	42-04	.0500	August 19 2008

**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) Stream sediment monitoring data  
 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.

Joan Smyth Senior Hydrogeologist 919-828-0577 x122  
 Facility Representative Name (Print) Title (Area Code) Telephone Number

*Joan A. Smyth*  
Signature

11/10/08  
Date

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

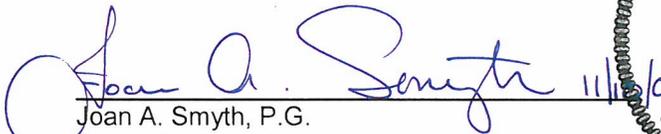


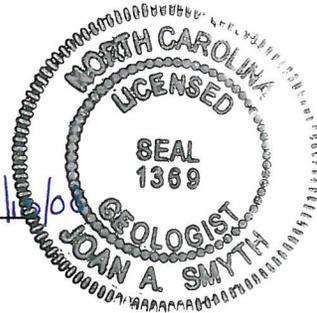
**Ground Water Monitoring Report  
Halifax County Coal Ash Landfill  
August 2008 Semi - Annual Report**

Prepared for:

**Halifax County Solid Waste Department  
P.O. Box 327  
Halifax, North Carolina 27839**

RSG Project No. **Halifax - 8**

  
Joan A. Smyth, P.G.  
Senior Hydrogeologist



**November 2008**



**RICHARDSON SMITH GARDNER & ASSOCIATES**  
**Engineering and Geological Services**  
14 N. Boylan Avenue  
Raleigh, North Carolina 27603

# **Halifax County Coal Ash Landfill**

## **Ground Water Monitoring Report**

### **August 2008 Semi-annual Monitoring Event**

**Halifax County Landfill  
Halifax County, North Carolina  
NC Solid Waste Permit # 42-04**

Prepared for:  
**Halifax County Solid Waste Department**  
P. O. Box 70  
Halifax, North Carolina 27839

**November 2008**



**Richardson Smith Gardner & Associates, Inc.**  
**Engineering and Geological Services**  
14 North Boylan Avenue  
Raleigh, North Carolina 27603

**Halifax County Coal Ash Landfill**

**Semi-annual Ground Water Monitoring Report  
August 2008 Monitoring Event**

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## 1.0 Introduction

The Halifax County Coal Ash Landfill, operating under Solid Waste Permit #42-04, is required to submit semi-annual ground water monitoring reports for ground water monitoring. This report presents the results of the second semi-annual monitoring event for 2008, conducted on August 19, 2008. This event was performed to comply with the semi-annual monitoring schedule required by NC Solid Waste Regulations.

The Halifax County Coal Ash Landfill is a monofill landfill that only accepts coal ash from power generation. The ground water monitoring network consists of six (6) wells located around the perimeter of the landfill (**Figure 1**). Also included in the monitoring network are one surface water sampling point, a sedimentation basin discharge location, and two sediment sampling locations in the stream immediately upgradient and downgradient of the sedimentation basin discharge (**Figure 1**).

This report includes summaries of the field procedures, laboratory analyses, and ground water characterization. Also included are summary tables of the results, and laboratory analytical reports.

## 2.0 Sampling Procedures

The sampling event, performed by Environment 1, Inc., consisted of collecting samples from six ground water wells (MW-8, MW-9, MW-10, MW-11, MW-12, and MW-17, shown in **Figure 1**). A surface water sample was collected from one location (SW-1). Sediment samples were collected upstream and downstream of the sedimentation basin discharge point. No samples were taken from Sediment Basin#1 as there was not enough water to take the sample.

Sampling methods followed the protocol outlined in the North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities (DENR, DWM). The depth to water in each well was gauged prior to purging and sampling. Field measurements of pH, specific conductivity, turbidity and temperature were obtained from each well. Field parameter results are included in **Table 1**.

All samples were collected by Environment 1, Inc. in laboratory prepared containers for the specified analytical procedures. Sampling equipment (bailers) were cleaned in the laboratory and transported to the site in aluminum foil. Ground water samples were properly preserved, placed on ice, and transported to the laboratory facility within the specified holding times for each analysis.

## 3.0 Field & Laboratory Results

### 3.1 Laboratory Analysis

The ground and surface water samples were transported to Environment 1, Inc., a North Carolina certified laboratory (NC Wastewater ID #10). Laboratory analysis consisted of the full suite of RCRA metals as well as indicator parameters total organic carbon, sulfate and chloride.

Parameters were reported at NC Solid Waste Section Practical Quantitation Limits (SWSLs). The laboratory analytical report is included as **Appendix A**.

### **3.2 Field and Laboratory Results**

The field parameter results (**Table 1**) have remained consistent with previous sampling events. Detected constituents are presented in **Table 2**.

Three (3) inorganic constituents; cadmium (MW-8), copper (MW-17) and zinc (MW-12 & MW-17) shown in **Table 2**, were detected above the SWSL ground water standards. Of these, cadmium was found above the 2L standard in MW-8. Constituents detected below the SWSL are also included in **Table 2** and are denoted as “J” values.

No constituents were detected above the SWSL in the surface water sample. Surface water sampling location SW-1 is located immediately downgradient of the sedimentation basin outfall and is shown on **Figure 1**. Sediment samples from the surface water body indicated the detection of lead above 2L standard upgradient of the sedimentation basin.

### **4.0 Ground Water Characterization**

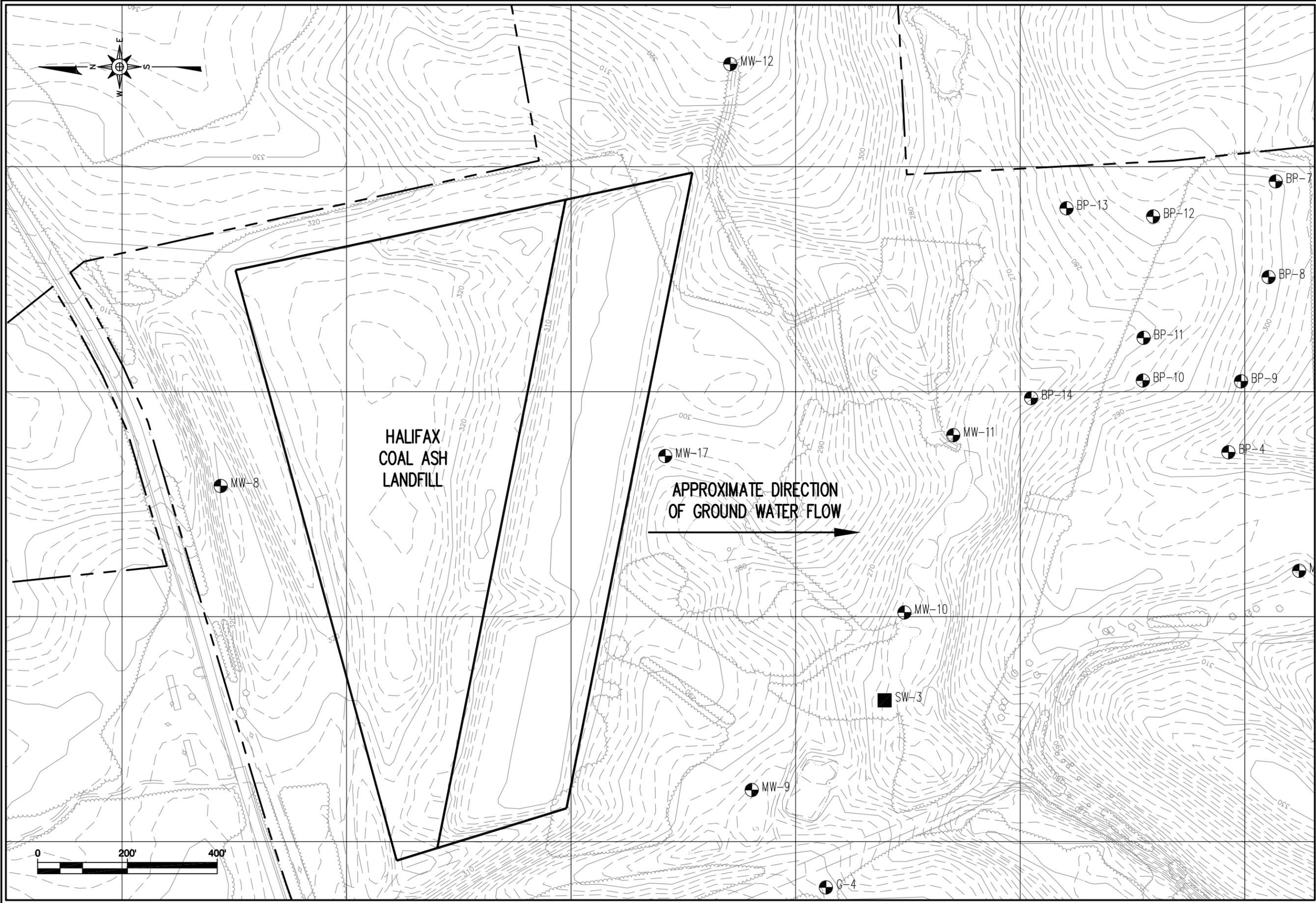
The depth to water data indicates that ground water is flowing generally to the east towards the unnamed tributary to Brewer’s Creek. This is consistent with ground water flow patterns previously detected for the site. The ground water flow map is attached as **Figure 1**.

### **5.0 Conclusions**

A review of constituent data indicates no ground water impact at the site. Three (3) inorganic constituents were detected in MW-8, MW-12 & MW-17. Also, one (1) inorganic constituent was detected in the surface water sample collected upgradient of the sedimentation basin. These detections are likely due to the elevated turbidity as these constituents naturally occur in soils in this area. The next semi-annual event is scheduled for February 2009. A report will be submitted upon receipt of the results of that sampling event.

Figures

G:\CAD\Halifax\Halifax-8\sheets\HALI-B0103.dwg - 2/19/2008 5:46 PM



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FIGURE NO.	1
SCALE:	AS SHOWN
CHECKED BY:	J.A.S.
PROJECT NO.	HALIFAX-8
FILE NAME	HALI-B0103
DATE:	Feb. 2008

TITLE:  
**DIRECTION OF  
 GROUND WATER FLOW  
 HALIFAX COAL ASH LANDFILL  
 AURELIAN SPRINGS, NC**

Tables

**Table 1**  
**Halifax County Coal Ash Landfill**  
**Field Parameters**

**08/19/08**

<b>Monitoring Location</b>	<b>pH (std units)</b>	<b>Static Water Level (feet)</b>	<b>Specific Conductivity (umhos/cm)</b>	<b>Temperature (degrees C)</b>	<b>Turbidity (NTU)</b>
MW-8	5.2	19.94	64	16	440
MW-9	5.3	12.51	35	19	150
MW-10	5.6	4.50	37	19	6
MW-11	6.4	5.44	109	18	54
MW-12	5.0	45.02	30	16	220
MW-17	5.3	19.34	36	18	170
SW-1	6.7	nm	134	19	8.4
Sed Basin 1	nm	nm	nm	nm	nm

nm - Not Measured

**Table 2**  
**Halifax County Coal Ash Landfill**  
**Detected Inorganic Constituents**  
**08/19/08**

Monitoring Location	SWSL*	2L GW Standard	MW-8	MW-9	MW-10	MW-11	MW-12	MW-17	SW-1	Sed Basin 1
Arsenic	10	50	0.4 J	0.1 J	0.2 J	0.2 J	0.2 J	0.3 J	0.5 J	nm
Barium	100	2000	48.7 J	21.7 J	28.1 J	11.4 J	22.2 J	90.6 J	12.6 J	nm
Cadmium	1	1.75	<b>3.7</b>	0.1 J	0.1 J	0.1 J	0.1 J	0.4 J	0.1 J	nm
Chromium, total	10	50	1.1 J	ND	ND	ND	0.4 J	3.0 J	ND	nm
Copper	10	1000	2.3 J	0.6 J	0.3 J	1.0 J	1.7 J	<b>12</b>	0.2 J	nm
Lead	10	15	3.1 J	0.2 J	0.3 J	0.3 J	0.6 J	2.3 J	0.4 J	nm
Mercury	0.2	1.05	0.03 J	0.02 J	0.03 J	0.04 J	0.04 J	0.05 J	0.04 J	nm
Selenium	10	50	ND	ND	ND	0.2 J	ND	0.4 J	ND	nm
Silver	10	17.5	ND	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	nm
Zinc	10	1050	4.9 J	5.4 J	0.5 J	6.6 J	<b>16</b>	<b>29</b>	2 J	nm

Monitoring Location	SWSL*	Surface Water Standard	Sediment #1 Upstream	Sediment #2 Downstream
Arsenic	200	50	ND	ND
Barium	5000	-	ND	ND
Cadmium	100	2	ND	ND
Chromium, total	100	50	ND	ND
Lead	100	25	<b>296</b>	ND
Mercury	0.57	0.012	ND	ND
Selenium	200	5	ND	ND
Silver	100	0.06	ND	ND

- ND - Not detected at or above PQL
- Shading - Levels above 2L standard or no 2L standard
- Bold Letters - Levels below 2L standard
- NA - Constituent Not Analyzed
- J - Detected constituents below PQL limit
- nm - Not Measured

All SWSL's and 2L Standards and Results are in ug/l.

\* **SWSL Standards are different for Monitoring wells and Sediment Samples.**

Appendix A

Laboratory Analytical Report

# 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#: 6042

HALIFAX CO. (COAL ASH LANDFILL)  
MR. FRANK RALPH  
P.O. BOX 70  
HALIFAX ,NC 27839

DATE COLLECTED: 08/19/08  
DATE REPORTED : 08/29/08

REVIEWED BY: 

PARAMETERS	MDL	Well					Analysis		Method Code			
		SWSL	#8	#9	#10	#11	#12	Date		Analyst		
PH (field measurement), Units			5.2	5.3	5.6	6.4	5.0	08/19/08	RJH	SM4500HB		
Total Organic Carbon, mg/l	0.15	1.0	2.64	---	U	---	U	---	U	08/21/08	SEJ	SM5310C
Chloride, mg/l	5.0	5.0	---	U	---	U	---	U	---	08/20/08	MJN	SM4500-CLB
Sulfate, mg/l	5.0	250.0	8.5 J	---	U	---	U	---	U	08/22/08	TRB	SM4500-SO4
Arsenic, ug/l	0.07	10.0	0.4 J	0.1 J	0.2 J			08/25/08	LFJ	EPA200.8		
Arsenic, ug/l	0.07	10.0				0.2 J		08/27/08	CMF	EPA200.8		
Barium, ug/l	0.11	100.0	48.7 J	21.7 J	28.1 J			08/25/08	LFJ	EPA200.8		
Barium, ug/l	0.11	100.0				11.4 J	22.2 J	08/27/08	CMF	EPA200.8		
Cadmium, ug/l	0.04	1.0	3.7	0.1 J	0.1 J			08/25/08	LFJ	EPA200.8		
Cadmium, ug/l	0.04	1.0				0.1 J	0.1 J	08/27/08	CMF	EPA200.8		
Copper, ug/l	0.05	10.0	2.3 J	0.6 J	0.3 J			08/25/08	LFJ	EPA200.8		
Copper, ug/l	0.05	10.0				1.0 J	1.7 J	08/27/08	CMF	EPA200.8		
Total Chromium, ug/l	0.11	10.0	1.1 J	---	U	---	U	08/25/08	LFJ	EPA200.8		
Total Chromium, ug/l	0.11	10.0				---	U	08/27/08	CMF	EPA200.8		
Lead, ug/l	0.04	10.0	3.1 J	0.2 J	0.3 J			08/25/08	LFJ	EPA200.8		
Lead, ug/l	0.04	10.0				0.3 J	0.6 J	08/27/08	CMF	EPA200.8		
Mercury, ug/l	0.01	0.20	0.03 J	0.02 J	0.03 J			08/25/08	LFJ	EPA200.8		
Mercury, ug/l	0.01	0.20				0.04 J	0.04 J	08/27/08	CMF	EPA200.8		
Selenium, ug/l	0.14	10.0	---	U	---	U	---	U	08/25/08	LFJ	EPA200.8	
Selenium, ug/l	0.14	10.0				0.2 J	---	U	08/27/08	CMF	EPA200.8	
Silver, ug/l	0.04	10.0	---	U	0.1 J	0.1 J			08/22/08	LFJ	EPA200.8	
Silver, ug/l	0.04	10.0				0.1 J	0.1 J	08/27/08	CMF	EPA200.8		
Zinc, ug/l	0.04	10.0	4.9 J	5.4 J	0.5 J			08/25/08	LFJ	EPA200.8		
Zinc, ug/l	0.04	10.0				6.6 J	16	08/27/08	CMF	EPA200.8		
Turbidity, NTU	1.0	1.0	440	150	6.3	54	220	08/19/08	MJN	SM2130B		
Conductivity (at 25c), uMhos	1.0	1.0	64	35	37	109	30	08/19/08	RJH	SM2510B		
Temperature, °C			16	19	19	18	16	08/19/08	RJH	SM2550B		
Static Water Level, feet			19.94	12.51	4.50	5.44	45.02	08/19/08	RJH			
Well Depth, feet			23.29	24.97	16.22	21.71	51.02	08/19/08	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#: 6042

HALIFAX CO. (COAL ASH LANDFILL)  
MR. FRANK RALPH  
P.O. BOX 70  
HALIFAX ,NC 27839

DATE COLLECTED: 08/19/08  
DATE REPORTED : 08/29/08

REVIEWED BY: 

PARAMETERS	MDL	Well		Analysis		Method Code
		SWSL	#17	Date	Analyst	
PH (field measurement), Units				5.3	08/19/08 RJH	SM4500HB
Total Organic Carbon, mg/l	0.15	1.0		1.09	08/21/08 SEJ	SM5310C
Chloride, mg/l	5.0	5.0		---	08/20/08 MJN	SM4500-CLB
Sulfate, mg/l	5.0	250.0		---	08/22/08 TRB	SM4500-SO4E
Arsenic, ug/l	0.07	10.0		0.3 J	08/27/08 CMF	EPA200.8
Barium, ug/l	0.11	100.0		90.6 J	08/27/08 CMF	EPA200.8
Cadmium, ug/l	0.04	1.0		0.4 J	08/27/08 CMF	EPA200.8
Copper, ug/l	0.05	10.0		12	08/27/08 CMF	EPA200.8
Total Chromium, ug/l	0.11	10.0		3.0 J	08/27/08 CMF	EPA200.8
Lead, ug/l	0.04	10.0		2.3 J	08/27/08 CMF	EPA200.8
Mercury, ug/l	0.01	0.20		0.05 J	08/27/08 CMF	EPA200.8
Selenium, ug/l	0.14	10.0		0.4 J	08/27/08 CMF	EPA200.8
Silver, ug/l	0.04	10.0		0.1 J	08/27/08 CMF	EPA200.8
Zinc, ug/l	0.04	10.0		29	08/27/08 CMF	EPA200.8
Turbidity, NTU	1.0	1.0		170	08/19/08 MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0		36	08/19/08 RJH	SM2510B
Temperature, °C				18	08/19/08 RJH	SM2550B
Static Water Level, feet				19.34	08/19/08 RJH	
Well Depth, feet				26.81	08/19/08 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#: 6042 A

HALIFAX CO. (COAL ASH LANDFILL)  
MR. FRANK RALPH  
P.O. BOX 70  
HALIFAX ,NC 27839

DATE COLLECTED: 08/18/08  
DATE REPORTED : 09/04/08

REVIEWED BY: 

PARAMETERS	MDL	SW-1 SWSL	Basin #1	Analysis		Method
				Date	Analyst	Code
PH (field measurement), Units			6.7	Missing	08/18/08 RJH	SM4500HB
Total Organic Carbon, mg/l	0.15	1.0	1.33	Missing	08/21/08 SEJ	SM5310C
Chloride, mg/l	5.0	5.0	---	U Missing	08/20/08 MJN	SM4500-CLB
Sulfate, mg/l	5.0	250.0	5.2	J Missing	08/22/08 TRB	SM4500-SO4E
Arsenic, ug/l	0.07	10.0	0.5	J Missing	08/25/08 LFJ	EPA200.8
Barium, ug/l	0.11	100.0	12.6	J Missing	08/25/08 LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0	0.1	J Missing	08/25/08 LFJ	EPA200.8
Copper, ug/l	0.05	10.0	0.2	J Missing	08/25/08 LFJ	EPA200.8
Total Chromium, ug/l	0.11	10.0	---	U Missing	08/25/08 LFJ	EPA200.8
Lead, ug/l	0.04	10.0	0.4	J Missing	08/25/08 LFJ	EPA200.8
Mercury, ug/l	0.01	0.20	0.04	J Missing	08/25/08 LFJ	EPA200.8
Selenium, ug/l	0.14	10.0	---	U Missing	08/25/08 LFJ	EPA200.8
Silver, ug/l	0.04	10.0	0.1	J Missing	08/22/08 LFJ	EPA200.8
Zinc, ug/l	0.04	10.0	2.0	J Missing	08/25/08 LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	8.4	Missing	08/18/08 MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	134	Missing	08/18/08 RJH	SM2510B
Temperature, °C			19	Missing	08/18/08 RJH	SM2550B

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







Results for Metals

Client Sample ID: Sediment Sample #1  
Client Project ID: 6042A-Halifax Co. (Coal Ash Landfill)  
Lab Sample ID: G239-799-3  
Lab Project ID: G239-799  
ICP InitWt/Vol: 5 mL Final Vol: 50 mL  
Hg InitWt/Vol: 20 mL Final Vol: 57 mL  
Prep Batch: 12223 12242

Analyzed By: PSW DCP  
Date Collected: 8/18/2008 09:45  
Date Received: 8/22/2008  
Matrix: Leachate

Metals	Result	RL	DF	Units	Method	Date Analyzed
TCLP						
Arsenic	BQL	0.200	1	MG/L	6010B	8/27/2008
Barium	BQL	5.00	1	MG/L	6010B	8/27/2008
Cadmium	BQL	0.100	1	MG/L	6010B	8/27/2008
Chromium	BQL	0.100	1	MG/L	6010B	8/27/2008
Lead	<b>0.296</b>	0.100	1	MG/L	6010B	8/27/2008
Mercury	BQL	0.000570	1	MG/L	7470	8/28/2008
Selenium	BQL	0.200	1	MG/L	6010B	8/27/2008
Silver	BQL	0.100	1	MG/L	6010B	8/27/2008

Comments

BQL = Below Quantitation Limits  
DF = Dilution Factor  
J = Between MDL and RL  
B= Amount in Prep Blank > MDL

Reviewed By:   
METALS.XLS



Results for Metals

Client Sample ID: Sediment Sample #2  
Client Project ID: 6042A-Halifax Co. (Coal Ash Landfill)  
Lab Sample ID: G239-799-4  
Lab Project ID: G239-799  
ICP InitWt/Vol: 5 mL      Final Vol: 50 mL  
Hg InitWt/Vol: 20 mL      Final Vol: 57 mL  
Prep Batch: 12223 12242

Analyzed By: PSW DCP  
Date Collected: 8/18/2008 09:55  
Date Received: 8/22/2008  
Matrix: Leachate

Metals	Result	RL	DF	Units	Method	Date Analyzed
TCLP						
Arsenic	BQL	0.200	1	MG/L	6010B	8/27/2008
Barium	BQL	5.00	1	MG/L	6010B	8/27/2008
Cadmium	BQL	0.100	1	MG/L	6010B	8/27/2008
Chromium	BQL	0.100	1	MG/L	6010B	8/27/2008
Lead	BQL	0.100	1	MG/L	6010B	8/27/2008
Mercury	BQL	0.000570	1	MG/L	7470	8/28/2008
Selenium	BQL	0.200	1	MG/L	6010B	8/27/2008
Silver	BQL	0.100	1	MG/L	6010B	8/27/2008

Comments

BQL = Below Quantitation Limits  
DF = Dilution Factor  
J = Between MDL and RL  
B= Amount in Prep Blank > MDL

Reviewed By:   
METALS.XLS



## List of Reporting Abbreviations And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

### Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

