

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):

S&ME, Inc (Consultant)

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

Name: Julie P. Robertson, P.G., Project Manager Phone: 704-523-4726
E-mail: jrobertson@smeinc.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Lincoln County Landfill	5291 Crouse Road, Crouse, NC 28033	55-03		December 17, 2014

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?

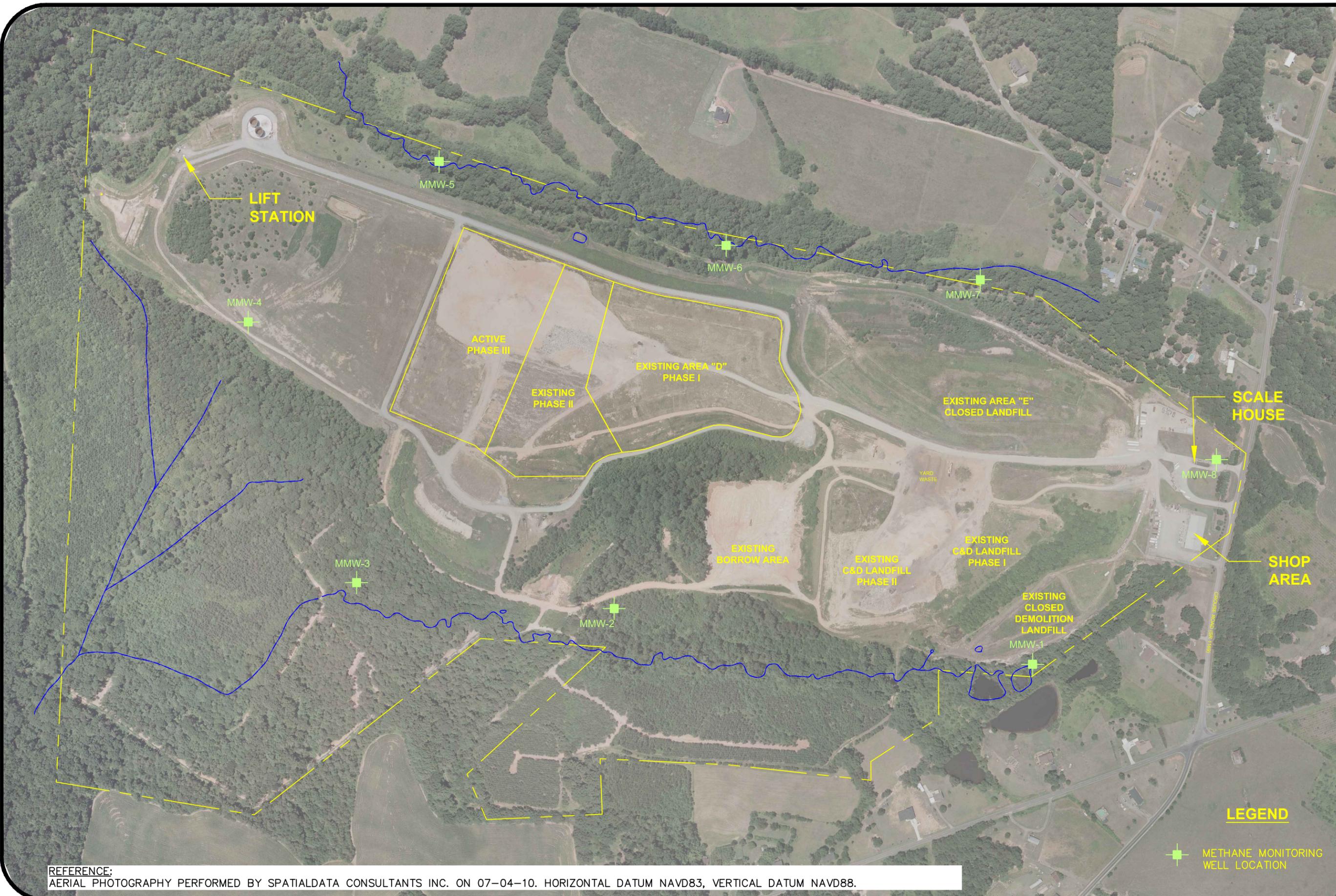
- No. No groundwater or surface water standards or explosive methane gas limits were exceeded.
 Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater 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.

Julie P. Robertson, P.G. Project Manager/Senior Geologist 704-523-4726
 Facility Representative Name (Print) Title (Area Code) Telephone Number
 Signature *Julie P. Robertson* Date 12/18/14
 Affix NC Licensed/ Professional Geologist/Engineer Seal here:





REFERENCE:
 AERIAL PHOTOGRAPHY PERFORMED BY SPATIALDATA CONSULTANTS INC. ON 07-04-10. HORIZONTAL DATUM NAVD83, VERTICAL DATUM NAVD88.

LEGEND
 METHANE MONITORING WELL LOCATION

SCALE: 1" = 400'
 PROJECT NO. 1356-03-255B
 DATE: 10-4-10
 DRAWN BY: CLD
 CHECKED BY:



METHANE MONITORING LOCATIONS
 LINCOLN COUNTY LANDFILL
 GROUSE, NORTH CAROLINA

FIGURE NO.
1

DRAWING PATH: Q:\1356\LINCOLN COUNTY\03-255B\METHANE LOCATION.dwg

Table 1
December 2014 Landfill Gas Readings
Lincoln County Landfill
S&ME Project No. 1356-10-044

Monitoring Location	Time of Measurement	Measurements			
		% LEL	% CH ₄ (by volume)	% O ₂	% CO ₂
MMW-1	13:42	0.0	0.0	12.6	5.5
MMW-2	13:55	0.0	0.0	16.2	2.5
MMW-3	14:06	0.0	0.0	13.3	4.1
MMW-4	14:21	0.0	0.0	16.8	2.0
MMW-5	14:31	0.0	0.0	14.6	4.3
MMW-6	15:08	>>>	9.6	0.0	18.9
MMW-7	15:36	0.0	0.0	6.9	15.3
MMW-8	15:49	0.0	0.0	10.8	9.7
Scale House	15:56	0.0	0.0	19.1	0.1
Landfill Shop	16:06	0.0	0.0	18.6	0.0
Lift Station	14:39	0.0	0.0	18.7	0.6

Notes:

Methane readings taken on 12/17/2014

% = Percent

LEL = Lower Explosive Limit, 5% methane by volume

>>> = Greater than 100% of LEL

CH₄ = Methane

O₂ = Oxygen

CO₂ = Carbon Dioxide

Highlighted and bold = Value is in exceedance of 100 % LEL

NC Division of Waste Management - Solid Waste Section

Landfill Gas Monitoring Data Form

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Facility Name: Lincoln County Landfill Permit Number: 55-03

Date of Sampling: 12-17-2014 NC Landfill Rule (.0500 or .1600): .1600

Name and Position of Sample Collector: Douglas Morrison

Type and Serial Number of Gas Meter: Landtec GEM 2000 Calibration Date of Gas Meter: 12-17-14

Date and Time of Field Calibration: 12-17-14

Type of Field Calibration Gas (15/15 or 35/50): 35/50 Expiration Date of Field Calibration Gas Canister: N/A

Pump Rate of Gas Meter: 300 cc/min

Ambient Air Temperature: 59°F Barometric Pressure: 30.07" General Weather Conditions: Clear

Instructions: Under "Location or LFG Well" identify the monitoring wells or describe the location for other tests (e.g., inside buildings). A drawing showing the location of test must be attached. Report methane readings in both % LEL and % methane by volume. A reading in percent methane by volume can be converted to % LEL as follows: % methane by volume = % LEL/20

Location or LFG Well ID	Sample Tube Purge	Time	Time Pumped (s)	Initial %LEL	Stabilized %LEL	%CH4 by Volume	%O2	%CO2	Notes
MMW-1	—	1:36	1:42 pm	000 %	000 %	0.0 %	17.6%	5.5 %	
MMW-2	—	1:49	1:55 pm	000 %	000 %	0.0 %	16.2%	2.5 %	
MMW-3	—	2:00	2:06 pm	000 %	000 %	0.0 %	13.3%	4.1 %	
MMW-4	—	2:15	2:21 pm	000 %	000 %	0.0 %	16.8%	2.0 %	
MMW-5	—	2:25	2:31 pm	000 %	000 %	0.0 %	14.6%	4.3 %	
MMW-6	—	3:02	3:08 pm	222 %	222 %	9.6 %	0.0 %	18.9 %	
MMW-7	—	3:30	3:36 pm	222 %	000 %	0.0 %	6.9 %	15.3 %	
MMW-8	—	3:43	3:49 pm	000 %	000 %	0.0 %	10.8%	9.7 %	
Scale House	—	3:50	3:56 pm	000 %	000 %	0.0 %	19.1%	0.1 %	
Landfill Shop	—	4:00	4:06 pm	000 %	000 %	0.0 %	18.6%	0.0 %	
Lift Station	—	2:33	2:39 pm	000 %	000 %	0.0 %	18.7%	0.6 %	

If your facility has more gas monitoring locations than there is room on this form, please attach additional sheets listing the same information as contained on this form.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Douglas O Morrison
SIGNATURE

SENIOR HEAVY EQUIPMENT OPERATOR
TITLE