



February 1, 2012

North Carolina Department of Environment and Natural Resources
Division of Waste Management - Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina, 27699

Attention: Ms. Elizabeth Werner

Reference: **WELL INSTALLATION REPORT (MW-8A)**
Davie County Landfill
360 Dalton Road
Mocksville, Davie County, North Carolina
S&ME Project No. 1584-03-109A



Dear Ms. Werner:

S&ME, Inc., (S&ME), on behalf of Davie County, has completed the installation of monitoring well MW-8A at the Davie County, Construction and Demolition (C&D) landfill which operated under Permit No. 30-03. As discussed in S&ME's *Water Quality Monitoring Plan Modification* document dated September 30, 2011, we recommended removal of monitor well MW-8 from post-closure monitoring and installing a replacement monitor well, MW-8A, at a relevant point behind the Compliance Boundary. Monitoring well MW-8A was installed on November 11, 2011, in accordance with October 6, 2011, NCDENR-DWM approval of the above reference *Water Quality Monitoring Plan Modification*.

The attached Non-Residential Well Construction Record and Completion Report of Well MW-8A provide documentation of the installation. The Facility's fall 2011 semi-annual post closure monitoring event successfully incorporated this new monitoring well.

If you have any questions concerning this document please contact the undersigned.

Sincerely,

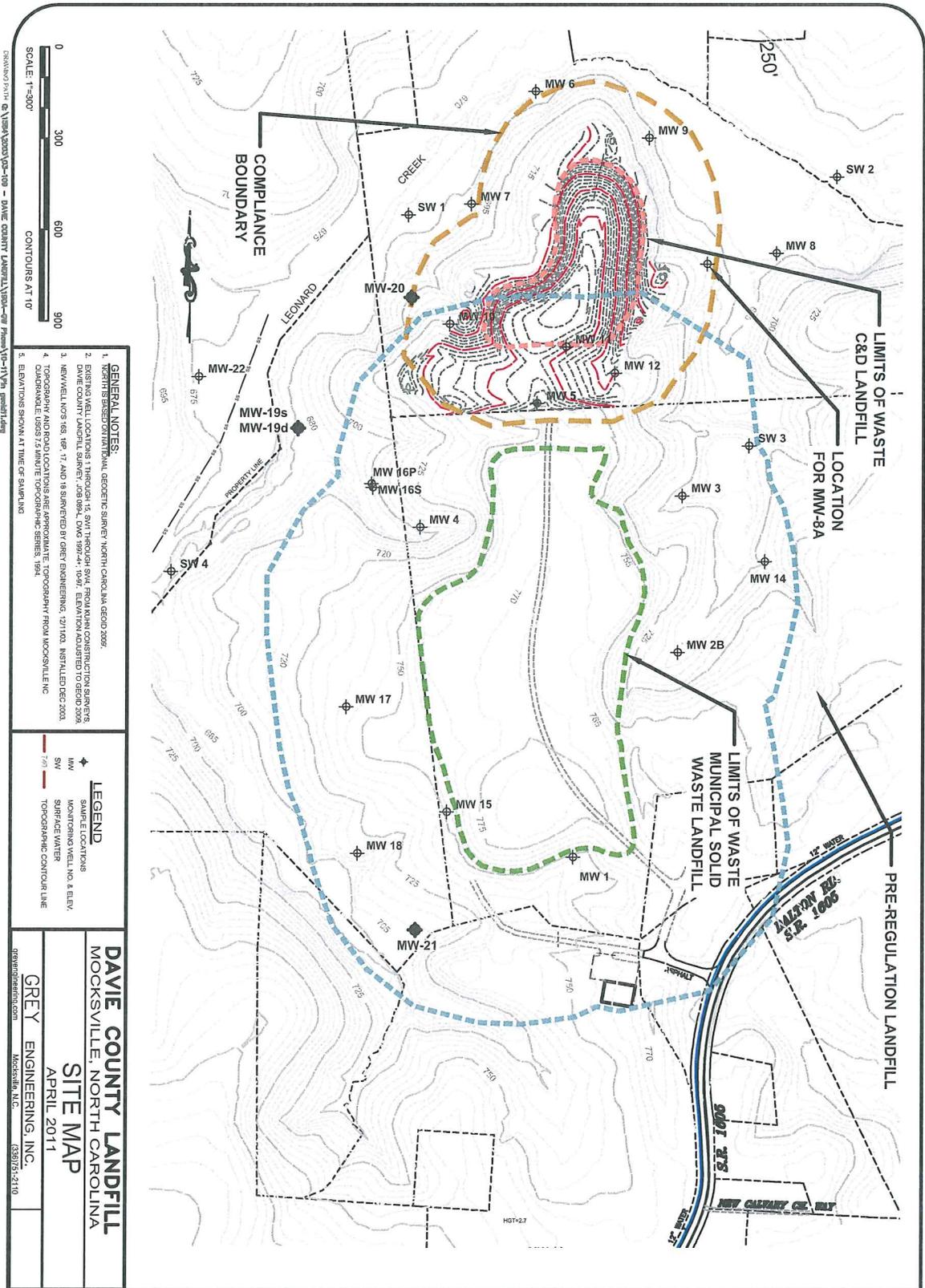
S&ME, Inc.

Edmund Q.B. Henriques, L.G.
Environmental Department Manager

Attachments

Non-Residential Well Construction Record
Completion Report of Well MW-8A
Figure 1 –Monitoring Well Network Map

cc. Grey Engineering, P.O. Box 9, Mocksville, NC 27028
Davie County, 123 South Main Street, Mocksville, NC 27028



SCALE: 1"=300'
 0 300 600 900
 CONTOURS AT 10'

- GENERAL NOTES:**
1. NORTH STRIPES DOWNTOWN, GEOMETRIC SURVEY, NORTH CAROLINA GEOID 2008.
 2. EXISTING WELL LOCATIONS 1 THROUGH 18, SW 1 THROUGH SW 4, FROM MAIN CONSTRUCTION SURVEYS, DAVIE COUNTY LANDFILL SURVEY, JOB 0804, DATE 09-24-10. ELEVATION ADJUSTED TO GEOID 2008.
 3. NEWWELL NOS. 16P, 17, AND 18 SURVEYED BY GREY ENGINEERING, 12/1/03. INSTALLED DEC 2003.
 4. TOPOGRAPHY AND ROAD LOCATIONS ARE APPROXIMATE, TOPOGRAPHY FROM MOCKVILLE, NC. COORDINATE, USGS 7.5 MINUTE TOPOGRAPHIC SERIES, 1984.
 5. ELEVATIONS SHOWN AT TIME OF SURVEYING.

- LEGEND**
- ◆ SAMPLE LOCATIONS
 - ◆ MONITORING WELL NO. & ELEV.
 - SURFACE WATER
 - - - TOPOGRAPHIC CONTOUR LINE

DAVIE COUNTY LANDFILL
 MOCKVILLE, NORTH CAROLINA

SITE MAP
 APRIL 2011

GREY ENGINEERING, INC.
 Mockville, NC. (336)763-2110

S&ME

3718 OLD BATTLEGROUND ROAD
 GREENSBORO, NC. 27410
 PH. 336-288-7180
 FAX. 336-288-8980
 WWW.SMEINC.COM

SITE DETAIL
 DAVIE COUNTY LANDFILL
 DAVIE COUNTY NORTH CAROLINA

SCALE: AS SHOWN	DRAWN BY: RDM	CHECKED BY: EOBH
JOB NO. 1584-03-109	DATE: FEBRUARY 2012	FIGURE NO. 1



NON RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources- Division of Water Quality

WELL CONTRACTOR CERTIFICATION # 2254-A

1. WELL CONTRACTOR:

Seth Low
Well Contractor (Individual) Name
S&ME, Inc
Well Contractor Company Name
3201 Spring Forest Road
Street Address
Raleigh NC 27616
City or Town State Zip Code

(919) 872-2660
Area code Phone number

2. WELL INFORMATION:

WELL CONSTRUCTION PERMIT# _____
OTHER ASSOCIATED PERMIT#(if applicable) _____
SITE WELL ID #(if applicable) MW-8A

3. WELL USE (Check One Box) Monitoring Municipal/Public
Industrial/Commercial Agricultural Recovery Injection
Irrigation Other (list use) _____

DATE DRILLED 11/14/11

4. WELL LOCATION:

360 Dalton Road, 27028
(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

CITY: Mocksville COUNTY Davie

TOPOGRAPHIC / LAND SETTING: (check appropriate box)

Slope Valley Flat Ridge Other _____

LATITUDE 35 ° ' " DMS OR 1548540.73 DD

LONGITUDE 78 ° ' " DMS OR 79961.07 DD

Latitude/longitude source: GPS Topographic map
(location of well must be shown on a USGS topo map and attached to this form if not using GPS)

5. FACILITY (Name of the business where the well is located.)

Davie County Landfill
Facility Name Facility ID# (if applicable) _____
360 Dalton Road
Street Address
Mocksville NC
City or Town State Zip Code

Jim Stockert - Davie County
Contact Name
123 South Main Street
Mailing Address
Mocksville NC
City or Town State Zip Code

(336) 751-5256
Area code Phone number

6. WELL DETAILS:

- a. TOTAL DEPTH: 30 feet
- b. DOES WELL REPLACE EXISTING WELL? YES NO
- c. WATER LEVEL Below Top of Casing: 17 FT.
(Use "+" if Above Top of Casing)

d. TOP OF CASING IS +2.5 FT. Above Land Surface*
*Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. YIELD (gpm): _____ METHOD OF TEST _____

f. DISINFECTION: Type _____ Amount _____

g. WATER ZONES (depth):
Top _____ Bottom _____ Top _____ Bottom _____
Top _____ Bottom _____ Top _____ Bottom _____
Top _____ Bottom _____ Top _____ Bottom _____

7. CASING:	Depth	Diameter	Thickness/Weight	Material
Top	<u>2.5</u>	Bottom <u>15</u> Ft.	<u>2"</u>	<u>sch40 PVC</u>
Top	_____	Bottom _____ Ft.	_____	_____
Top	_____	Bottom _____ Ft.	_____	_____

8. GROUT:	Depth	Material	Method
Top	<u>0</u>	Bottom <u>7</u> Ft.	<u>cement</u> <u>Pour</u>
Top	_____	Bottom _____ Ft.	_____
Top	_____	Bottom _____ Ft.	_____

9. SCREEN:	Depth	Diameter	Slot Size	Material
Top	<u>15</u>	Bottom <u>30</u> Ft.	<u>2 in.</u>	<u>.010 in. PVC</u>
Top	_____	Bottom _____ Ft.	_____ in.	_____ in.
Top	_____	Bottom _____ Ft.	_____ in.	_____ in.

10. SAND/GRAVEL PACK:	Depth	Size	Material
Top	<u>12</u>	Bottom <u>31</u> Ft.	<u>#2 Sand</u>
Top	<u>7</u>	Bottom <u>12</u> Ft.	<u>3/8 bentonite chips</u>
Top	_____	Bottom _____ Ft.	_____

11. DRILLING LOG	Top	Bottom	Formation Description
	<u>0</u>	<u>1/4"</u>	<u>Topsoil/Grass</u>
	<u>1/4"</u>	<u>9.5</u>	<u>Red Orange Silty Sand</u>
	<u>9.5</u>	<u>13</u>	<u>Brown Sandy Silt</u>
	<u>13</u>	<u>16.5</u>	<u>Orange Green Brown Silty Sand</u>
	<u>16.5</u>	<u>22</u>	<u>Brown Orange Silty Sand</u>
	<u>22</u>	<u>30</u>	<u>Brown Orange Silty Sand w PWR</u>
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

12. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Seth D Low 12/27/11
SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE

Seth D. Low
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

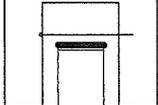
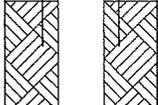
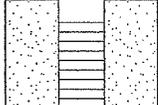
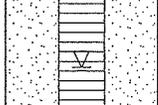
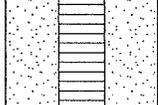
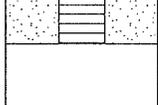
COMPLETION REPORT OF WELL No. MW-8A

PROJECT: **Davie County Landfill**
 PROJECT NO: **1584-03-109A**
 PROJECT LOCATION: **Mocksville, North Carolina**

WATER LEVEL:

DRILLING CONTRACTOR: **T. Whitehead**
 DRILLING METHOD: **HSA/Air Rotary**
 DATE DRILLED: **11/14/11**

LATITUDE:
 LONGITUDE:
 TOP OF CASING ELEVATION:
 DATUM: **MSL**
 LOGGED BY: **E. Henriques/G. Simcox**

STRATA			WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
DESCRIPTION	SYMBOL	DEPTH (ft.)					
		0		0.00	GS		PROTECTIVE CASING Diameter: Type: Interval:
moist, brown-black Saprolite: moist, reddish brown, silty sand to clayey silt		5		0.00	TOC		
		7.00		7.00	CG		RISER CASING Diameter: 2 Type: PVC Interval: -2.5-15
Saprolite: moist, reddish brown sandy silt with thin clay seams		10		14.00	BS		GROUT Type: Portland Interval: 0-7
Saprolite: moist, orange-green-brown, mottled silty sand		15		14.00	BS		SEAL Type: Bentonite Interval: 7-14
Saprolite: moist, brown-orange-reddish brown, silty sand		20		20.00	BS		FILTERPACK Type: #2 Sand Interval: 14-30
Partially Weathered Rock: sampled as moist-saturated, brown-reddish brown, partially weathered rock		25		25.00	BS		SCREEN Diameter: 2 Type: PVC Interval: 15-30
		30		30.00	FP BSC		

LEGEND

-  FILTER PACK
-  BENTONITE
-  CEMENT GROUT
-  CUTTINGS / BACKFILL
-  STATIC WATER LEVEL
- TOC TOP OF CASING
- GS GROUND SURFACE
- BS BENTONITE SEAL
- FP FILTER PACK
- TSC TOP OF SCREEN
- BSC BOTTOM OF SCREEN
- TD TOTAL DEPTH
- CG CEMENT GROUT

MONITORING WELL 1584-03-109A.GPJ S&ME.GDT 12/22/11



COMPLETION REPORT OF WELL No. MW-8A