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SCS ENGINEERS

October 3, 2007
File No. 02199312.01

Received
OCT 2007
Waste Management

Mr. Johnny Beal
Solid Waste Specialist
Wake County
PO Box 550
Raleigh, NC 27602

Subject: Landfill Gas Monitoring Probe Installation – September 27, 2007
North Wake County Landfill – Raleigh, North Carolina

Dear Johnny:

SCS Engineers, PC (SCS) is pleased to present the attached record documentation for the landfill gas (LFG) monitoring probe installed at the North Wake County Landfill (Solid Waste Permit No. 92-09). On September 27, 2007, Bedford Well Drilling installed one LFG monitoring probe along the facility boundary at the southwestern corner of the Unlined Closed Landfill at the subject site. The LFG monitoring probe was installed in accordance with the Proposed Landfill Gas Monitoring Network Report, revised 4/11/06, and the Updated LFG Remediation Plan, dated 7/12/07. The probe will be used to monitor subsurface LFG quality and pressure at the Facility Permit Boundary adjacent to the Unlined Closed Landfill.

The new probe identified as M-19R serves as a replacement for probe M-19, which was installed adjacent to the access road in January 2007. The new probe M-19R was relocated approximately 100 feet west and is positioned at the facility boundary. This LFG monitoring probe is being incorporated into the LFG monitoring network and effectively replaces LFG monitoring probe M-19, which will remain for informational purposes.

Probe M-19R was installed to a depth of 6 feet; the borehole was terminated due to auger refusal. Based on SCS' observations during drilling, auger refusal occurred due the encountering competent granite bedrock. Drilling did not encounter the severely weathered granite layer found elsewhere at the site, which is likely due to the proximity to Nance Spring Branch. It is noted that the bottom-of-casing elevation of LFG Probe M-19R, at approximately 224 feet, is similar to the monitoring probes installed in January 2007, which is lower than the elevation of the adjacent homes in Falls River Development and corresponds to the estimated bottom-of-refuse elevation. Therefore, SCS believes LFG Probe M-19R is capable of replacing LFG Probe M-19 in the LFG probe monitoring network.

The approximate as-built location for LFG monitoring probe M-19R was measured by SCS during installation on 9/27/07. SCS contacted Wake County's surveyor, TWT, and requested they survey the as-built location of LFG Probe M-19R in conjunction with their

next quarterly surveying event. The boring log and well construction diagram for LFG monitoring probe M-19R are attached. A drawing of the approximate as-built location for the LFG monitoring probe is also attached.

If you have questions or require additional information, please contact either of the undersigned.

Sincerely,

D. Brandon King

D. Brandon King
Associate Staff Scientist

Robert E. Dick, PE
Project Director
SCS ENGINEERS

DBK/RED:asd

Attach.

cc: Jackie Drummond, NCDENR

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NORTH WAKE COUNTY LANDFILL
RALEIGH, NC
Project No. 02199312.01

LFG MONITORING WELL
M-19R

BORING LOG

Depth in Feet		SAMPLES	RECOVERED	PID	GROUNDWATER	USCS	DESCRIPTION	REMARKS
+1								
0	Concrete, Steel Cover							
-1								
2	Bentonite						Dark brown sandy silt (0-6 feet). Bedrock encountered at 6 feet (Auger refusal).	
3								
4	Perf. PVC (3.5 ft. total)							
5	Washed Aggregate							
6								Terminated at 6 feet
7								
8								Groundwater not encountered
9								
10								
11								
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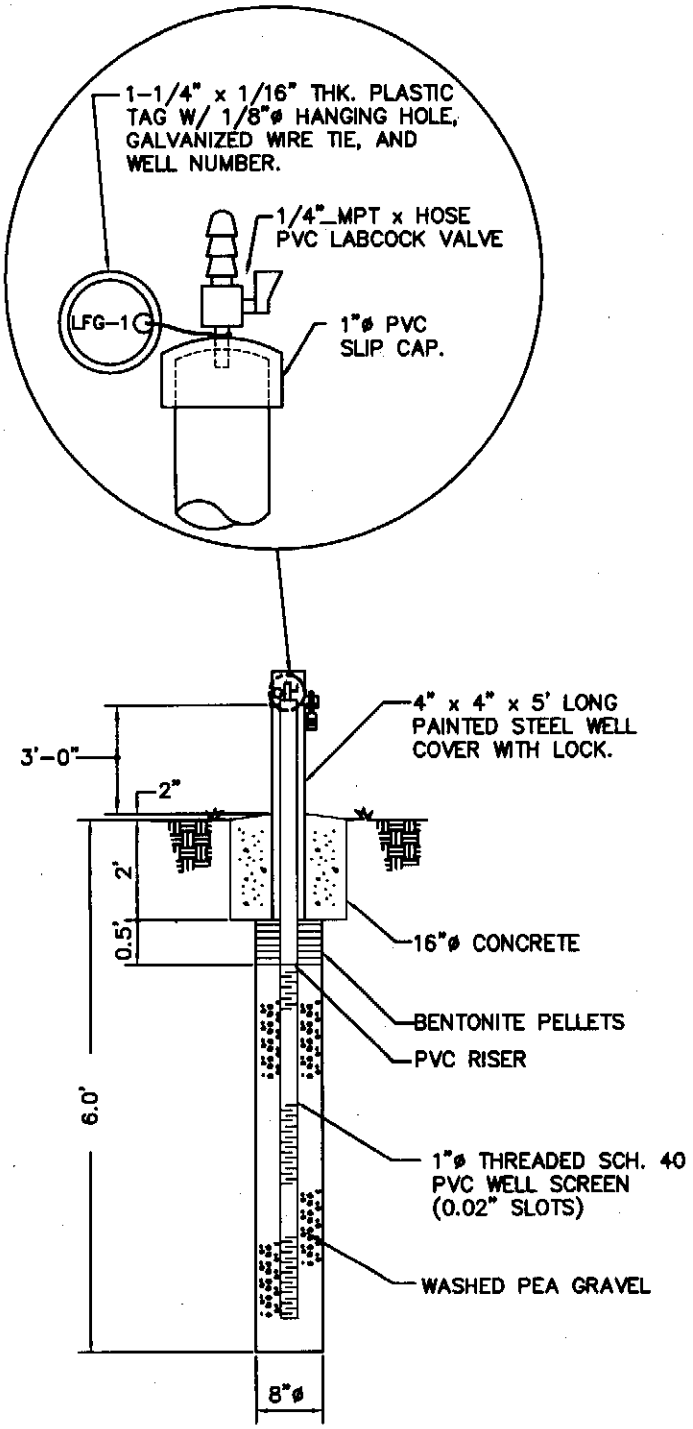
Drilling Company:	Bedford Well Drilling	Date Started:	9/27/2007	Time Started:	NA
		Date Ended:	9/27/2007	Time Ended:	NA
Drilling Method:	Hollow Stem Auger	Boring Diameter:	8-inch	Elevation:	NA
		Well Diameter:	1.0-inch	Total Depth:	6.0 feet
Logged By:	B. King	Casing Material:	SCH 40 PVC		



LFG MONITORING PROBE DETAIL

NO SCALE

DRAWN BY:DBK DATE:10/3/07 FILE NAME:02199312.01

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TYPICAL LFG MONITORING WELL