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SCS ENGINEERS

March 11, 2009
File No. 02203039.07

via Electronic Submittal

Mr. Steve Lezinski
Engineer III
Environmental Protection
Division of Solid Waste Services
16101 Frederick Road
Derwood, Maryland 20855

Subject: 2009 LFG Bar Punch Study at Gude Landfill

Dear Steve:

A landfill gas (LFG) bar punch study was performed on March 3 thru March 5, 2009 along the landfill property boundary at the closed Gude Landfill. A bar punch was advanced from 2 to 4-feet below the ground surface depending upon subsurface materials. Shallow groundwater and rocky subsurface prevented certain probes from being installed to the maximum completion depth of 4-feet. A vinyl tube was placed in the bar punch hole to approximately 1-foot from the bottom of the hole and sealed with soil around the top of the hole, creating a temporary gas probe. Soil gas was drawn through the tubing and analyzed using a calibrated GEM-2000 landfill gas analyzer for methane, carbon dioxide, oxygen and balance gas. Gas data was recorded, coordinates of the probe locations were marked using a GPS and the probes were left in place for future monitoring.

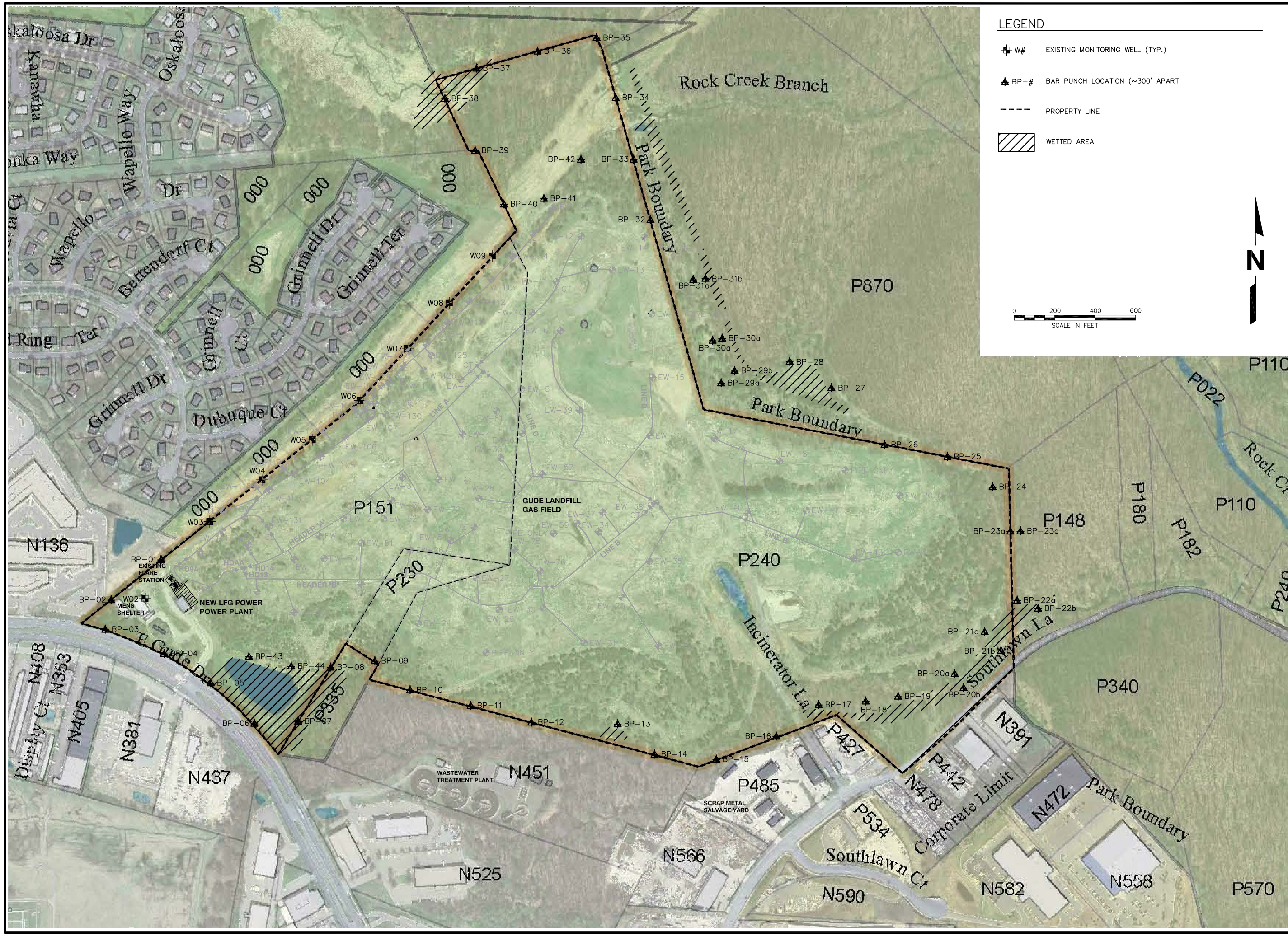
Soil gas readings, field logs and a probe location map are attached.

If you have any questions or require further information, please feel free to contact either of us at (703) 471-6150.

Sincerely,

Miles Gornto
Staff Professional
SCS ENGINEERS

Michael Kalish, PE
Project Manager
SCS ENGINEERS



NO.	REVISION	DATE

SHEET TITLE
BAR PUNCH LOCATIONS

PROJECT TITLE
GUDE LANDFILL
LANDFILL GAS SYSTEM

CLIENT
MONTGOMERY COUNTY
DPWT/DSWS
16101 FREDERICK ROAD
DERWOOD, MARYLAND 20855

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PROJ. NO.	DWN. BY: MAK	Q/A RVW BY: MAK
DSN. BY: MAK	CHK. BY: MAK	APP. BY: MAK

CADD FILE: MONITORING

DATE: 3.10.09

SCALE: AS SHOWN

DRAWING NO. **1** of 1

3/3/09 thru 3/5/09 Gude Landfill Bar Punch LFG Readings

ID	CH_4%	CO_2%	O_2%	Peak CH_4%	Depth (ft)
BP-01	0.0	3.4	16.2	0.0	4
BP-02	0.0	2.8	17.8	0.0	4
BP-03	0.0	1.8	19.9	0.0	4
BP-04	0.0	1.4	20.0	0.0	3.5
BP-05	0.0	1.6	19.5	0.0	3
BP-06	0.0	0.1	20.8	0.0	4
BP-07	0.0	0.2	20.8	0.0	4
BP-08	0.0	0.1	20.8	0.0	3
BP-09	3.5	11.9	5.7	3.5	4
BP-10	0.0	1.2	19.4	0.0	4
BP-11	0.0	0.6	20.3	0.0	3.5
BP-12	0.0	0.5	20.4	0.0	4
BP-13	16.0	13.9	13.7	16.0	3
BP-14	0.0	2.4	18.6	0.0	3
BP-15	0.0	1.6	19.7	0.0	3
BP-16	0.0	3.4	20.0	0.0	3
BP-17	0.0	5.2	16.9	0.0	3
BP-18	0.0	1.9	19.7	0.4	4
BP-19	0.0	2.3	19.5	0.2	4
BP-20a	35.0	21.4	3.6	35.0	4
BP-20b	0.0	0.7	20.0	0.0	4
BP-21a	70.4	33.1	0.0	70.4	4
BP-21b	0.0	0.1	20.3	0.0	4
BP-22a	66.0	35.7	0.1	66.0	4
BP-22b	0.0	0.8	19.9	0.0	4
BP-23a	47.3	24.4	3.2	48.4	4
BP-23b	2.8	8.3	17.0	8.2	4
BP-24	0.0	4.2	16.1	0.0	4
BP-25	0.4	9.5	16.3	0.4	4
BP-26	0.0	1.0	19.8	0.0	3.5
BP-27	0.0	1.5	20.1	0.0	4
BP-28	0.0	0.6	20.3	0.1	3.5
BP-29a	17.5	12.3	6.1	18.0	3.5
BP-29b	2.7	8.6	8.0	27.3	4
BP-30a	3.1	2.9	18.1	3.1	3
BP-30b	0.3	4.8	18.8	0.3	4
BP-31a	0.0	1.4	20.0	0.1	3
BP-31b	0.0	1.0	19.5	0.0	4
BP-32	0.0	3.9	18.2	0.0	3.5
BP-33	0.0	1.9	20.0	0.0	4
BP-34	0.0	0.0	20.8	0.0	3
BP-35	0.0	0.0	20.8	0.0	2
BP-36	0.0	0.4	20.4	0.1	4
BP-37	0.0	0.8	20.2	0.1	4
BP-38	0.1	0.5	20.1	0.1	4
BP-39	0.1	0.7	20.1	0.1	4
BP-40	0.1	1.5	20.7	0.2	4
BP-41	0.0	0.0	20.8	0.2	4
BP-42	0.0	0.7	20.8	0.2	4
BP-43	4.6	1.0	18.7	4.6	4
BP-44	27.4	19.4	11.2	28.6	3

SCS ENGINEERS
DAILY FIELD REPORT

Project Name: Gude Landfill Bar Punch Study		**Project Number:** 02203039.07	
		Task: 1	**Labor Code:**
Project Manager: Mike Kalish		**Field Personnel:** Miles Gornto	
Date: 3/3/09	**Vehicle:** F-150		
Weather: 20 F, windy and snowy			

Work Completed:

Complete 16 bar punches along northern landfill boundary. Rocky conditions along eastern boundary require multiple probe attempts at some locations to advance past shallow cobbles.

Wet area located in northeastern most corner and along eastern boundary from approximately BP-34 to BP-29.

Decide to re-probe BP-29 thru BP-31. Original locations located on bench of landfill. Relocate to the toe of slope in the dry bed of intermittent creek.

Prepared by: Miles Gornto	**Reviewed by:** Michael Kalish

SCS ENGINEERS
DAILY FIELD REPORT

Project Name: Gude Landfill Bar Punch Study		**Project Number:** 02203039.07	
		Task: 1	**Labor Code:**
Project Manager: Mike Kalish		**Field Personnel:** Miles Gornto	
Date: 3/4/09	**Vehicle:** F-150		
Weather: 31 F, sunny, snow on ground			

Work Completed:

Complete 17 bar punches along eastern landfill boundary.

Wet area located along southern boundary on the south side of the creek from approximately BP-21 to BP-17.

Decide to re-probe BP-20 thru BP-23. Original locations located on landfill side of creek. Relocate to Southlawn Lane side of creek to show no gas migrating across creek.

Prepared by: Miles Gornto	**Reviewed by:** Michael Kalish

SCS ENGINEERS
DAILY FIELD REPORT

Project Name: Gude Landfill Bar Punch Study		**Project Number:** 02203039.07	
		Task: 1	**Labor Code:**
Project Manager: Mike Kalish		**Field Personnel:** Miles Gornto	
Date: 3/5/09	**Vehicle:** F-150		
Weather: 48 F, sunny			

Work Completed:

Complete 18 bar punches along southern and western landfill boundary. Rocky conditions along southern boundary require multiple probe attempts per location to advance past shallow cobbles and boulders.

Wet area located in the immediate vicinity of stormwater retention pond, particularly to the west of the pond..

Prepared by: Miles Gornto	**Reviewed by:** Michael Kalish