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December 20, 2002

Mr. David Ellis
Department of Environmental Protection
Southeast Regional Office
20 Riverside Drive
Lakeville, Massachusetts 02347

Subject: Summary of Landfill Gas Sampling Results
Nantucket Landfill - December 2002

Dear Mr. Ellis:

On December 13, 2002, personnel from Camp Dresser & McKee Inc. (CDM) conducted landfill gas monitoring at the Nantucket Landfill. The environmental sampling was conducted in accordance with the approved Environmental Monitoring Plan, prepared by SECOR International Inc. in July 1999 and in conformance with the Solid Waste Management Regulations (310 CMR 19.132).

Landfill gas monitoring well locations are shown in the attached Site Plan. CDM analyzed the samples in the field using field instruments for the following parameters:

- Hydrogen Sulfide (H₂S);
- Methane (CH₄);
- Carbon Dioxide (CO₂);
- Lower Explosive Limit (LEL);
- Oxygen (O₂); and
- Volatile Organics.

CDM analyzed the samples in the field using field instruments at the following locations:

- LGW-1;
- LGW-2;
- LGW-3;
- LGW-4;
- LGW-5;
- LGW-7;
- LGW-9;
- LGW-12; and



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■ LGW-13.

Landfill gas wells LFG-6, LFG-8, LFG-10 and LFG-11 could not be located and therefore were not sampled. It is believed that these four wells have been destroyed during recent construction activities.

Prior to purging the wells, initial readings were taken at each location. Following recording of the initial readings, approximately 10 minutes was allowed for purging before final readings were recorded. Methane was not detected in any of the nine-landfill gas wells monitored. Trace levels of carbon dioxide were detected using field instrumentation. Carbon dioxide concentrations ranged from 0.2 to 4.7 percent. There were also trace levels of volatile organic compounds (VOCs) and hydrogen sulfide found at the wells, ranging from 0.0 to 1.0 ppm. These concentrations are extremely low and show no indication of landfill gas migration towards the site property boundaries. Landfill gas well-sampling results are summarized in attached Table 1.

The landfill gas will continue to be conducted quarterly. The next round of landfill gas monitoring is scheduled for March 2003.

Please do not hesitate to call me at (617) 452-6541 if you have any questions or require additional information.

Very truly yours,

A handwritten signature in black ink that reads "Bruce W. Haskell".

Bruce W. Haskell, P.E.
Camp Dresser & McKee Inc.

Attachments

c: Jeff Willet, Nantucket
Tracy Sundell, Nantucket
Whitney Hall, Waste Options

**TABLE 1
NANTUCKET LANDFILL
NANTUCKET, MASSACHUSETTS
LANDFILL GAS MONITORING SUMMARY - DECEMBER 2002**

Sample Location	Date	Methane ²	% LEL	CO ₂	O ₂	OVM	H ₂ S
		(% vol.)	(% vol.)	(% vol.)	(% vol.)	(ppm)	(ppm)
LGW-1	12/13/2002	0.0	0.0	1.7	19.2	0.0	0.0
LGW-2	12/13/2002	0.0	0.0	2.1	18.1	0.1	0.0
LGW-3	12/13/2002	0.0	0.0	0.4	20.0	1.0	0.0
LGW-4	12/13/2002	0.0	0.0	0.3	20.0	0.0	0.0
LGW-5	12/13/2002	0.0	0.0	4.5	14.7	0.0	0.0
LGW-6	12/13/2002	NS	NS	NS	NS	NS	NS
LGW-7	12/13/2002	0.0	0.0	3.7	16.2	0.0	0.0
LGW-8	12/13/2002	NS	NS	NS	NS	NS	NS
LGW-9	12/13/2002	0.0	0.0	4.7	19.5	0.3	0.0
LGW-10	12/13/2002	NS	NS	NS	NS	NS	NS
LGW-11	12/13/2002	NS	NS	NS	NS	NS	NS
LGW-12	12/13/2002	0.0	0.0	2.5	18.2	0.0	0.0
LGW-13	12/13/2002	0.0	0.0	0.2	20.3	0.0	0.0

Notes:
 1. WELLS WERE PURGED FOR APPROXIMATELY 10 MINUTES BEFORE
 FINAL READINGS WERE RECORDED.
 NS NOT SAMPLED