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March 7, 2007

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 – March 2007

Dear Mr. Ellis:

On March 1, 2007 personnel from Camp Dresser & McKee Inc. (CDM) conducted environmental monitoring at the Nantucket Landfill. The environmental monitoring included field screening for landfill gas. 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).

As part of the closure construction at the landfill, the environmental monitoring network was expanded by the addition of thirteen landfill gas wells (LGW-1 through LGW-13). See the site plan for locations of the landfill gas monitoring locations.

Landfill gas wells were screened in the field for the following parameters:

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

Evaluation of Results

Landfill gas wells were screened for the parameters indicated previously in this report. Landfill gas wells LGW-8, LGW-9 and LGW-11 were previously damaged during construction activities. These three wells were replaced on October 18, 2006. Installation of the new wells was conducted by GeoSearch, Inc. with oversight by CDM. Boring logs of the three new wells (LGW-8-06, LGW-9-06 and LGW-11-06) will be submitted to you office under separate cover.



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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 detected in well LGW-8-06 at a concentration of 310 percent of the LEL. LGW-8-06 is located adjacent to a facility building. CDM screened all utilities outside the building and various points inside of the building (bathrooms, floor drains etc.) for the presence of landfill gas. Landfill gas was not detected at any of these additional sampling locations. Well LGW-8-06 is located approximately 200 feet from the property line. CDM conducted a temporary probe near the property line at the closest point to LGW-8. Methane was not detected in the temporary probe.

Gas well LGW-8-06 is located in an area that is used for composting. The decomposition of the organic materials is possibly contributing to the concentration of landfill gas detected in the well. CDM will continue to monitor utilities and the building interior during future sampling rounds.

Carbon dioxide was detected in most well locations at concentrations ranging from 0.2 to 13.4 percent. VOCs and hydrogen sulfide were not detected in wells. Sampling locations are shown on the attached plan and complete sampling results are summarized in Table 1.

The next quarterly landfill gas screening is scheduled for May 2007.

Please do not hesitate to call me at (617) 452-6659 if you have any questions or require additional information.

Very truly yours,

A handwritten signature in cursive script that reads 'Vincent M. Recchia'.

Vincent M. Recchia, P.E.
Camp Dresser & McKee Inc.

Attachments

cc: Jeff Willet, Nantucket (Letter Only)
Tracy Sundell, Nantucket (Letter Only)
Whitney Hall, Waste Options (Letter Only)