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Landfill not leaking, NCES report asserts  
by Rebecca Brown

Bethlehem -- The Trudeau Road landfill is not leaking, its owners say. They've furnished a report to prove it. State regulators say they'll have a response as early as next week.

The report, written by engineering firm Sanborn, Head & Associates, completes a "corrective action plan" ordered by the state after increased levels of contaminants were found at a groundwater monitoring well at the landfill owned by North Country Environmental Services.

In April, abnormally high levels of volatile organic compounds (VOCs) were found in several test wells at the Trudeau Road facility. Some VOC levels were above limits set by federal groundwater safety standards.

Subsequent tests at the same well have shown decreased levels of VOCs, and none have exceeded allowable limits.

Some landfill critics have charged that the April test well results indicate that the landfill's double-lined bottom is leaking.

But according to engineer Scott Shillaber of Sanborn Head, landfill gas, not leaks through the liner, is the culprit. Landfill gas, he explains, can condense on the inside of a test well pipe, drip down, and contaminate water inside the well without affecting surrounding groundwater.

NCES was directed by the state to investigate three possible sources of the VOCs in the test wells: leaks through the double liner system; leachate either from "breakouts" or eruptions from the side of the landfill or from trash overflows at its base; and gas condensate.

Ruling out liner leaks, the Sanborn Head report claims there is "very little landfill" upgradient of the test wells in question, and that test results for over two years have varied greatly. If the liner was leaking, test results would be more consistent, the report says.

The report also rules out overflowing refuse as a leachate source. It explains that 1995 construction uncovered waste in an anchor trench, but maintains that construction of the double liner eliminated that problem.

The corrective action plan states that the landfill operators will more closely track leachate breakouts and repairs at the sides of the landfill. Surveying stakes were also placed to evaluate placement of refuse at the base of the landfill.

In supporting the landfill gas hypothesis, Shillaber explained that VOCs and inorganic materials like metals and chloride in leachate and in the test wells were compared. If leachate were affecting the groundwater, the test well results should include proportionate levels of inorganic

indicators. But they didn't. Inorganic compounds don't vaporize into gas. So it followed that gas, not surrounding groundwater, was the source of the VOCs in the test wells, he concluded.

To see if a crack in the long well tubes let in gas, cameras were sent down. The lights failed on one, but the other provided adequate pictures. Condensate was observed on inner walls of the wells, but no cracks were seen. The engineers have not ruled out cracks in the casings, however.

The corrective action plan also states that a planned fall expansion of the gas extraction system should reduce gas pressure within the landfill.

State Department of Environmental Services Waste Management Division staffer Jim Berg said his office plans to review the NCES report this week and comment on it shortly.