

**State of Vermont
Department of Environmental Conservation
Waste Management Division
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December 23, 2010

DAVID SHELDON
TOWN OF MANCHESTER WASTEWATER SUPERVISOR
6039 MAIN STREET
MANCHESTER CENTER, VERMONT 05255

RE: Sites Management Activity Complete, Lincoln Avenue Pump Station, SMS Site #2010-4103
Manchester Center, Vermont

Dear Mr. Sheldon:

The Sites Management Section (SMS) has reviewed the August 27, 2010 (revised December 3, 2010) report prepared by Environmental Compliance Services (ECS) titled "*Summary Report, Lincoln Ave. Pump Station, 177 Lincoln Ave. Manchester, Vermont*". With respect to the June 7, 2010 discovery of petroleum contaminated soil during municipal construction, the SMS makes the Sites Management Activity Complete (SMAC) determination described further below:

- On June 7, 2010 the Dufresne Group reported petroleum contaminated soil had been observed during waterline construction at the Lincoln Avenue wastewater pump station. ECS was contacted to assess the contamination. You reported that a 1,000 gallon gasoline tank had been closed in place on site at an unknown date and that a 500 gallon fuel oil tank had been removed from adjacent to the gasoline tank in ~1980.
- On June 9, 2010 three soil samples were collected from 5' depth and screened for volatile organic compounds (VOCs) using a photoionization detector (PID). PID readings of the soil samples were S-1 (120 parts per million), S-2 (14.7 ppm) and X-1 (4.7 ppm). S-1 and S-2 were sent to a lab for confirmatory analysis. Groundwater was observed at 5'; oil globules and a petroleum sheen were noted on the water surface.
- On June 14, 2010, 8 soil borings were advanced; 3 borings were completed as temporary groundwater monitor wells. Soil samples were field screened using a PID. Detectable PID readings, petroleum odors, and oil sheens on water samples were reported in 3 borings. The highest PID reading was noted in SB-1/MW-1 of 86.3 ppm at 4-8' depth. PID readings decreased with depth
- Three groundwater samples were analyzed. MW-3 contained naphthalene at 1.4 µg/L, which is below the Vermont Groundwater Enforcement Standard. No other VOCs were noted in MW-3 or in the other 2 water samples.



Over

- Soil samples were collected from 4 of borings between 4 and 16' depth. Low levels of butyl benzene and trimethylbenzene were noted below EPA Regional Screening levels for residential soil. Total petroleum hydrocarbons (TPH) was found in 3 samples ranging from 419 to 790 mg/kg. This is below the 1,000 mg/kg guideline used by the Vermont DEC SMS for evaluating industrial soils, but above the 200 mg/kg guideline for residential soils. Samples S-1 and S-2 collected on June 9, 2010 contained naphthalene and trimethylbenzene as well as TPH at levels above the residential and industrial guidelines. Fuel identification showed that the contamination most closely resembled fuel oil, not gasoline.
- The soil sample results were used to guide the excavation of 44.6 tons of petroleum contaminated soil. This soil was properly disposed of at the ESMI facility in Ft. Edwards, NY. The sand filled gasoline UST was uncovered however, it was found to be encased in concrete, so it was left in place. Confirmatory soil samples were collected from the bottom and sidewalls of the excavated area. PID readings ranged from 0 to 2 ppm. 4 samples were sent for lab analysis. Naphthalene (106 µg/kg) and 1,2,4-trimethylbenzene (83.1 µg/kg) were found in 2 samples and were below the EPA RSLs. The SMS agrees that the majority of soil contamination was removed by excavation and no further investigation is needed.
- During the June 9, 2010 soil investigation you, Mr. Sheldon, confirmed to ECS personnel that no water supply wells are known in the area and that the site and surroundings are on municipal water. The indoor air of the basement of the pump house was screened using a PID and no elevated VOC levels were noted. No other sensitive receptors were reported.
- The three temporary groundwater monitoring wells were destroyed by the soil excavation.

Based on the above, the SMS is assigning this site a Site Management Activity Completed designation. This SMAC designation does not release the Town of Manchester Center of any past or future liability associated with the petroleum contamination onsite. It does, however, mean that the SMS is not requesting any additional work in response to the June 2010 discovery petroleum contaminated soil at the Lincoln Avenue pump station property.

Please feel free to call with any questions.

Sincerely,



Chuck Schwer
Program Manager, Sites Management Section

CC: Manchester Center Selectboard
Manchester Center Health Officer
DEC Regional Office (via electronic mail)
Chrissy Legge, Dufresne Group (via electronic mail)
Alicia Flammia, ECS (via electronic mail)
Tom Rigley, ECS (via electronic mail)