

State of Vermont  
Department of Environmental Conservation  
Waste Management Division  
103 South Main Street/West Building  
Waterbury, VT 05671-0404  
(802) 241-3888  
FAX (802) 241-3296

July 2, 2009

Mr. Michel George  
Campus Planning & Auxiliary Services  
Champlain College  
P.O. Box 670  
Burlington, VT 05402-670

RE: Sites Management Activities Completed, Former Eagles Club, Burlington, (SMS Site #1999-2638)

Dear Mr. George:

The Sites Management Section (SMS) has recently conducted a review of the above referenced site file. Information contained within our site file includes the following:

- On May 25, 1999, one 3,000 gallon fuel oil Underground Storage Tank (UST) was removed from the former Eagles Club property. During excavation, a photoionization detector (PID) was utilized to screen soils for volatile organic compounds (VOCs); readings ranged from 2.3 to 216 parts per million (ppm), with the highest readings recorded at approximately 7 ft below ground surface (bgs). Soils in the excavation pit generally consisted of gravel on top of fine-grained, olive green silt. Groundwater was not encountered during the course of excavation.
- A site investigation was conducted in November 1999. Six soil borings were advanced, four for completion as groundwater monitoring wells. During boring, soils screened with a PID exhibited VOC concentrations ranging from <0.1 to 206.8 ppm, with the highest readings recorded in the former UST area. Following installation, groundwater samples were collected from each of the on-site monitoring wells, and submitted for analysis of petroleum VOCs via EPA Method 8021B, and for Total Petroleum Hydrocarbons (TPH) via EPA Method 8015 DRO. The samples collected from down-gradient MWs -2 and -3 both contained MTBE at levels below the Vermont Groundwater Enforcement Standards (VGES). The sample collected from MW-1 contained detectable quantities of multiple petroleum related contaminants, including Naphthalene in excess of the VGES, and 1,2,4- and 1,3,5-Trimethylbenzene (TMB) in excess of the VGES in effect at the time. Additionally, detectable quantities of TPH were measure in MWs -1, -2, and -4. It was noted that the property is served by municipal water and sewer.
- Indoor air monitoring was conducted in the former Eagles Club building during the November 1999 initial site investigation activities. A PID was utilized to monitor VOC concentrations in ambient air; all readings were less than 1.0 ppm.
- Additional samples were collected from all four on-site monitoring wells in October 2000, and submitted for analysis of petroleum VOCs and TPH. The sample collected from MW-1 contained detectable quantities of multiple petroleum related contaminants, including Naphthalene in excess of the VGES, and 1,2,4- and 1,3,5-TMB in excess of the VGES in effect at the time. The sample collected from MW-3 also contained 1,2,4-TMB in excess of the VGES in effect at the time, and a detectable quantity of Naphthalene, at a level below the VGES. Both the samples collected from MWs -1, and -2 contained detectable quantities of TPH.
- Groundwater sampling was conducted again in October 2001; samples were collected from three of the on-site monitoring wells, and analyzed for petroleum VOCs and TPH. The samples collected from both MWs -1 and -3 contained Naphthalene in excess of the VGES, and 1,2,4- and 1,3,5-TMB in excess of the VGES in effect at the time, as well as detectable quantities of TPH. Additionally, it was noted that the samples collected from MWs -1 and -3 were analyzed for petroleum VOCs via EPA Method 8260; low levels of additional petroleum related contaminants were detected in both samples.

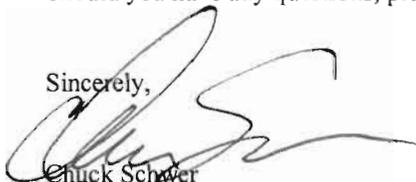


- Also in October 2001, indoor air monitoring was conducted in the former Eagles Club boiler room, as well as both the apartment building and garage located down-gradient and across the street from the former Eagles Club property. A PID was utilized to monitor VOC concentrations in ambient air; readings in the Eagles Club building were 0.0 ppm, readings in the garage ranged from 15 to 200 ppm, readings in the apartment basement ranged from 0.0 to 268 ppm, and readings taken in the first and second floor hallways were 10 ppm and 4.0 ppm, respectively. It was noted that the apartment basement was utilized for tenant parking, and PID readings in the apartment building may have been affected by auto exhaust.
- Air monitoring and sampling was conducted in the apartment building (162 Maple Street) adjacent to the former Eagles Club property in January 2002. Ambient air in both the apartment living space and the basement garage was screened for petroleum VOCs with a PID; readings peaked at 0.5 ppm in the apartment, and 0.7 ppm in the garage. Additionally, samples were collected from each space for analysis via EPA Method To-14. The sample collected from the upstairs living space contained low levels of multiple petroleum related contaminants, as well as Acetone, Trichloroethane, and Alcohol. The sample from the garage contained low levels of 1,4-Dioxane. The SMS noted that additional air sampling was not warranted.
- Additional rounds of groundwater sampling were conducted in October 2002 and April 2009. Samples collected during the 2009 monitoring round contained no petroleum related contaminants in excess of the VGES.
- All four on-site groundwater monitoring wells were properly abandoned on June 24, 2009.

Based on the above, it appears that this site does not pose an unacceptable risk to human health or the environment. Therefore, the SMS is assigning the site a Sites Management Activities Completed (SMAC) designation. The SMAC designation does not release Champlain College from any past or future liability associated with the petroleum contamination at this site. It does, however, mean the SMS is not requesting any additional work in response to the UST removal at this time.

Should you have any questions, please do not hesitate to call me; I may be reached at (802) 241-3876.

Sincerely,



Chuck Schaefer  
Chief, Sites Management Section

CC: Martha Roy – Verterre (submitted electronically)  
DEC Regional Office – Essex Junction (submitted electronically)  
Burlington City Select Board  
Burlington City Health Officer