

THE JOHNSON COMPANY, INC.

Environmental Sciences and Engineering

MAR 11 1994

March 10, 1994

Mr. Chuck Schwer, Supervisor
Sites Management Section
Vermont Department of Environmental Conservation
Waterbury, Vermont 05671-0404

Re: Petroleum Contamination Investigation
Wolcott Town Garage
JCO #1-2345-1 (305)

93-1534

Dear Chuck:

On February 23, 1994, The Johnson Company conducted a site inspection at the Wolcott Town Garage to address the request of the Vermont Sites Management Section (SMS) for additional information regarding the soil and groundwater contamination at the property. The contamination at question was first documented when a 1,000 gallon #2 fuel oil underground storage tank (UST) was removed from the property on November 4, 1993. Approximately 30 cubic yards of contaminated soils were excavated and stockpiled on site during the UST removal. The report completed by The Johnson Company describing the UST removal activities was submitted to the SMS and to the Town of Wolcott on November 4.

As a response to this November 4 report, the SMS requested the following:

1. *Develop a plan to treat and/or monitor the stockpiled soils. The soils must be located in an area such that they have a low potential to impact nearby receptors. They must also be properly encapsulated in plastic.*
2. *Perform an assessment of the site to determine the potential for sensitive receptors to be impacted by the contamination. This should include basements of the adjacent garage and fire department, nearby surface water and wetlands, and any public or private drinking water wells which are located within the vicinity of the site. If any water supplies appear at risk from this contamination, they should be sampled and analyzed using EPA 8020.*

During our February 23 site inspection, the stockpile of contaminated soils was inspected. The stockpile was covered with approximately 15 inches of snow, so it was not possible to inspect the plastic that was placed under and covering the soils. A Town employee who helped to stockpile and cover the soils described the procedure as follows: the soils were placed on two layers of six mil polyethylene sheeting with a front end loader. The plastic sheeting was wrapped up and over the soils, and an additional layer of plastic was placed over the top and sides of the stockpile. Clean sand was placed around the base of the stockpile to help keep the plastic encapsulation in place.

This stockpile is located in an area used by the Town to store sand and gravel. The elevation of this portion of the property is 20 to 30 feet above the garage. The stockpile is approximately 300-400 feet southwest of the garage. The area on which the stockpile is located slopes gently toward the northeast. Directly behind the stockpile, the ground slopes very steeply upwards. A small swale that may be a wetland is located at the base of the steep slope, 15 to 20 feet south of the stockpile. If any contaminated soil or water were to run-off from the stockpile, it would most likely migrate in a northeast direction, away from the wetland. There are no nearby buildings or streams that are in a position to be adversely impacted by any potential contaminant releases from this stockpile.

This stockpile will be inspected on a monthly basis by Town personnel to assure that the plastic covering remains intact. In the fall of 1994, five soil samples from within the stockpile will be collected and screened with a photoionization detector (PID) using a plastic bag headspace analysis method to check the degree of treatment the stockpiled soil has undergone over the past year. If organic vapors are still present in the stockpile, it will be recovered and a plan to reevaluate the stockpile will be proposed, which will be based on the PID readings obtained during the first inspection. If no organic vapors are detected, the stockpile will be dismantled. The soils will either be used as fill or left on the property, and the polyethylene will be disposed of.

The approved workplan for completing the tasks described in #2 above was written as follows: "...we propose to identify and sample any drinking water supply which is within 300 feet of the site in a down-gradient direction, or within 100 feet in an up-gradient or cross-gradient direction. We will also screen, with the PID, the indoor air quality of any basements within 100 feet of the site. This assumes that access to any such basements is permitted. We also propose to sample the surface water of the small ponded area directly adjacent to the former location of the UST. This water will be analyzed for aromatic hydrocarbons using EPA Method 8020, and for total petroleum hydrocarbons using EPA Method 418.1."

Our survey of the area around the Town garage property showed that there are no drinking water supply wells within the prescribed distances of the site. There is an upgradient spring-fed well on the Town property that is approximately 185 feet from the former location of the UST. There is also a cross-gradient well that is approximately 350 feet from the former location of the UST. These are the two closest drinking water supply wells to the site. In accordance with the workplan, they were not sampled. There are no buildings with basements within 100 feet of the site. The closest such building is a house located approximately 350 feet north of the site.

The surface water area approximately 40 feet south of the former location of the UST was sampled for laboratory analysis for aromatic hydrocarbons using EPA Method 8020, and for total petroleum hydrocarbons using EPA Method 418.1. The samples were obtained by chipping through the ice covering this surface water. The samples were collected from this ponded area immediately adjacent to the inlet structure which pipes the water to the Lamoille River. The water samples were placed in a cooler

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immediately upon collection, and were taken directly to Microassays of Vermont, Inc. laboratory in Middlesex, Vermont.

The laboratory verbally reported on March 10, 1994 that no contaminants were detected at concentrations above the practical quantitation limit by either the EPA 418.1 or the EPA 8020 analytical methods. Copies of the laboratory data reports will be forwarded to you upon their receipt.

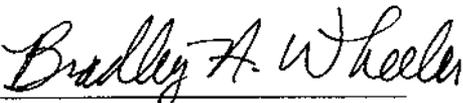
Based on the results of this receptor survey, the reported results of the surface water sample analysis and the reported results of the groundwater sample collected from the excavation on the day of the UST removal, The Johnson Company does not recommend that any further investigation of this site be carried out. Based on SMS approval, the monitoring of the soil stockpile will proceed as outlined above. The results will be reported to the SMS prior to the dismantling of the stockpile, which will only be carried out after it is approved by the SMS.

We believe that this site meets the Hazardous Materials Management Division (HMMD) site closure requirements, and request that this site be removed from the "Vermont Hazardous Waste Sites, Active Sites List" and placed on the HMMD "Closed - NFAP (No Further Action Planned)" list.

If you have any questions about this report, please do not hesitate to call.

Sincerely,

THE JOHNSON COMPANY, INC.

By: 
Bradley A. Wheeler, CPSS
Senior Scientist

cc: Linda Martin, Wolcott Town Clerk