

5/19/08

(4)

May 16, 2008
File No. 0022-01-01

Mr. Doug Halley, Director
Acton Board of Health
Acton Town Hall
472 Main Street
Acton, Massachusetts 01720

Subject: Northeast Area Groundwater Pre-Design Results Report
WR Grace Chemical Plant Site
Acton MA

Dear Doug:

At your request we have conducted a review of the Northeast Area Groundwater Pre-Design Results Report dated May 5, 2008 prepared by GeoTrans, Inc. for W.R. Grace & Co. – Conn (“Grace”). Principally the report describes the potential for adverse consequences which might arise were Grace to initiate remediation of its chemical contamination located in the “Northeast Plume”. The report also describes the installation and testing of two new groundwater monitoring points, MW-06 D1 and MW-06-D2.

Possible Adverse Consequences from Northeast Plume Remediation

Based on their hydrogeologic model, GeoTrans opined that if the contaminated groundwater from the Northeast Plume were to be pumped out at a rate equal to or greater than 12.5 gallons per minute, then the gasoline contamination from the BOC gasses MCP Site would be mobilized and migrate towards and past the proposed Northeast Plume extraction points.

OTO has the following comments on this issue:

1. Grace should demonstrate that a real hydrogeologic connection exists between the proposed extraction wells and the BOC site rather than relying on groundwater modeling. It is possible that a short duration pump test could resolve whether there is a strong connection or not.
2. Grace did not describe the potential fate of the BOC fuel oil contamination were it to be mobilized by the pumping of Northeast Plume groundwater. This information is needed to assess the possible risks associated with the migration of the petroleum hydrocarbons.
3. Since the BOC fuel oil release is present as a Light Non-Aqueous Phase Liquid (LNAPL), it seems unlikely that it will be drawn down to greater depths in the aquifer. GeoTrans should provide a more detailed explanation of how the LNAPL migration will occur.

MW-6 D1 and D2 Monitoring Well Installation

OTO comment:

1. Could GeoTrans explain the variability in the Photoionization data presented on the boring log for MW-6 D?

Please let us know if you have questions on these comments.

Sincerely,
O'Reilly, Talbot & Okun Associates, Inc.

James D. Okun
Principal