

ENSR

2 Technology Park Drive, Westford, Massachusetts 01886-3140
T 978.589.3000 F 978.589.3100 www.ensr.aecom.com

May 18, 2007

Mr. Doug Halley
Health Director
Acton Board of Health
472 Main Street
Acton, MA 01720

RECEIVED
MAY 30 2007
ACTON BOARD OF HEALTH

RE: 2006 Tank #1 Septic System Pump Out/Analytical Results
BOC Gases, 37 Lawsbrook Road
Hazardous Materials Control Permit
ENSR Project #00035-186

Dear Mr. Halley:

As a requirement of BOC Gases' Town of Acton Hazardous Materials Control Permit, septic tank sampling, content removal/disposal, and analytical results documentation is hereby provided. The sampling of the contents of the tank was performed on December 19, 2006. Pump out of this tank was performed by American Rooter and Septic Service (formerly Colonial Septic Service). Enclosed for your records are copies of the analytical results (Attachment A) and the septic pump service invoices (Attachment B).

Samples from the tank were obtained by ENSR and tested for total petroleum hydrocarbons (TPH) and volatile organic compounds (VOC) by Alpha Woods Hole Laboratory (formerly Woods Hole Group). No sheen, separate phases, or unusual odors were observed during the wastewater pump out. Analytical results have been checked and no limiting qualifications can be made to their quality. As outlined in the results (Table 1), TPH results for the tank contents were 37.3 ppm. These levels are to be expected based on the method of testing (U.S. EPA Method 1664) which is known to be affected by hydrocarbons of all types, including sewage.

Sampling indicates that VOCs (chloroform, carbon disulfide, acetone, toluene, 1,4-dichlorobenzene, chlorobenzene and p-isopropyltoluene) were present in the sanitary wastewater effluent from the tank. The majority of these compounds have been previously detected in tank samples at varying concentrations. Calculations performed based on the concentrations of chemicals from the tank content, volume of the contents, and density of the chemicals detected, determined that the maximum volume of pure compound that could have entered the tank to exhibit the concentrations found were no more than one to two milliliters, if that. The levels observed in the septic tank could be the residual effects of a previously reported isolated incident. A more likely cause of the

detectable VOCs is the use of normal, over-the-counter industrial cleaning fluids that are used by housekeeping personnel at the facility or degradation products from such fluids.

If you have any questions, please feel free to contact me at (978) 589-3000, extension 3095.

Very truly yours

A handwritten signature in cursive script that reads "Art Taddeo".

Art Taddeo
Program Manager

Attachments

cc: R. Leva, BOC (Acton, MA)
M. Resh, BOC (New Jersey)

Table 1
Septic Tank #1 Analytical Results
BOC Gases
Acton, MA
December 19, 2006

Contaminant	Mar-95	Mar-96	Sep-96	Mar-97	Sep-97	May-00	Dec-06
TPH	-	3.2	3.4	29	40	14	37.3
Methylene Chloride		2JB	-	-	9	-	0.89
Chloroform	-	2J	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
1,1,1-TCA	-	-	-	-	-	-	-
Carbon Disulfide	-	-	4J	-	4J	-	79
Acetone	200	130B	12	130	110	64	8.6
Xylenes	8.2	-	-	-	-	-	-
Toluene	85	100	-	140	100	68	2.0
1,4 Dichlorobenzene	17	40	18	-	-	-	5.4
2-Butanone (MEK)	-	4J	-	-	26	-	-
Chlorobenzene	-	4J	4J	8	54	-	8.3
p-Isopropyltoluene	-	-	-	-	-	-	11

J - Estimated
 JB - Estimated and occurs in the blank
 - Analyzed but less than the detection limit for the analytical method used for this constituent.
 All results in µg/l except for TPH which are in mg/l.

