

# **BCS, INC.**

ENVIRONMENTAL SERVICES

December 27, 2003

Ms. Olga Veraga  
NPDES Permit Unit  
Mail Code (CPE)  
Office of Ecosystem Protection  
Environmental Protection Agency  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

RE: NPDES Exclusion # MA 03I-119  
Former Osgood School  
101 Fourth Street, Medford, MA  
MA DEP Release Tracking Number 3-22619

Dear Ms. Veraga:

On October 19, 2003, BCS submitted a National Pollutant Discharge Elimination System (NPDES) Permit Exclusion for the above referenced site. Discharge of treated groundwater to the municipal storm drain system was required during dewatering to facilitate the excavation of fuel oil contaminated soil at the site. As explained in the October 19 exclusion request, discharge to the ground was attempted with limited success prior to discharging to the municipal storm drain system. On October 21, 2003, we received return correspondence from your office indicating that NPDES Exclusion Letters were no longer issued, however, the process and requirements for discharge were essentially unchanged.

Prior to discharge, groundwater was pumped to a 21,000 gallon "frac tank" for temporary storage. From the Frac Tank, groundwater was then routed to two sediment bag filters connected in series and finally through two 1,000-lb. carbon canistera also connected in series. After treatment, groundwater was transmitted through a three-inch diameter above ground hose to the storm drain on Third Street.

Discharge to the storm drain was not continuous during this monitoring period but was conducted intermittently as required to maintain sufficient pumping volume in the frac. tank. The initial date of discharge to the storm drain was October 22,

2003 and continued intermittently during daylight hours through October 24, 2003. Pumping rates ranged from a low of six gallons per minute (gpm) on October 24, 2003 to a high of 15 gpm on October 22, 2003. The discharge rate for the pumping system never approached the 30 gpm maximum rate specified in the Exclusion request. As required by the EPA Exclusion Letter Process, influent, inline and effluent samples were collected from the groundwater treatment system on the first and third day of discharge, namely October 22 and October 24, 2003. These samples were analyzed at New England ChromaChem Laboratories in Salem, MA via methods MA EPH, EPA 8260 and TPH Modified 8100.

Discharge to the storm drain resumed on October 27 and 31, 2003 and then was terminated until November 3, 2003. November 3, 2003, constituted Day 6 of discharge, and, influent, inline and effluent samples were collected for laboratory analysis via the same analytical methods noted above. Additional periodic discharges were made to the storm drain through November 18, 2003. However, additional laboratory analysis of dewatering water was not conducted, as the total number of "discharge days" did not reach twelve.

During the monitoring period, while discharge to the storm drain was occurring, effluent was regularly monitored visually for sheen, color and turbidity that would be considered esthetically objectionable. In addition, field screening of effluent groundwater was screened via a photoionization detector at four hour intervals while discharge was occurring. Headspace screening for Total Organic Vapors (TOVs) on effluent samples were ND or "Non-Detect" for the entire monitoring period. Influent concentrations ranged from a high of 5.5 parts per million (ppm) on October 24, 2003 to non-detectable. Visual observation did not reveal objectionable conditions present with respect to an oil sheen, discharge color and/or turbidity.

Security provisions were maintained during the entire monitoring period as outlined in the Exclusion request in the form of a lockable chain link fence surrounding the around the system. No system malfunctions were observed during the monitoring period. On October 28, 2003 1,000 pounds of granular activated carbon was removed and replaced from the primary filter as a precautionary measure. The filters were then reversed and pumping was resumed.

### **LABORATORY RESULTS**

Review of the above referenced Laboratory reports, which are attached as Appendix A, reveals that that there were no detectable concentrations of contaminants of concern in either the inline or effluent groundwater samples. All detection limits utilized were below the applicable discharge thresholds shown in Appendix A of the EPA Exclusion issued on October 21, 2003.

Review of the influent groundwater samples to the treatment system exhibited only the following detections:

October 24, 2003	Naphthalene @ 11 ug/L Total Xylenes @ 12 ug/L
November 3, 2003	Total Petroleum Hydrocarbons (TPH) @ 1 mg/L

Turnaround times for laboratory samples were arranged so that a period of one week was not exceeded prior to review of the analytical results by BCS. BCS and North Shore Construction and Development will maintain copies of these laboratory reports on file for a period of three years as required.

As noted above, copies of New England ChromaChem, Inc. laboratory reports are attached. Should you have any questions or comments regarding anything herein, please do not hesitate to contact.

Sincerely,  
**BCS, Inc.**

William J. Betters, P.G., LSP

Encl: Analytical Results

Cc:

Karen Rose  
Medford Board of Health  
85 George P. Hassett Drive  
Medford, MA 02155

Ron Lopez  
North Shore Construction and Development  
215 Salem Street  
Woburn, MA 01801

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Northeast Regional Office  
1 Winter Street  
Boston, MA 02108

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