EA Engineering, Science, and Technology, Inc.

Airport Professional Park
2350 Post Road
Warwick, Rhode Island 02886
Telephone: 401-736-3440
Fax: 401-736-3423
www.eaest.com

20 June 2007

Mr. Joseph T. Martella II, Senior Engineer
RIDEM - Office of Waste Management
Site Remediation Program
235 Promenade Street
Providence, Rhode Island 02908

RE: 21 May 2007 Air Sampling Event/Order of Approval Compliance Follow-Up Letter
Adelaide Avenue School, 333 Adelaide Avenue, Providence, Rhode Island
Case No. 2005-029
EA Project No. 61965.01

Dear Mr. Martella:

On behalf of the Providence Department of Public Property (City), EA Engineering, Science, and Technology, Inc. (EA) is providing this letter in accordance with Item 6(e)(vi) of the Department's Order of Approval (OA) issued in June 2006 and amended in February 2007 (Amended Order) for the referenced Adelaide Avenue School site (the Site).

As communicated via telephone message to the Rhode Island Department of Environmental Management (the Department) at approximately 5:10 pm on Wednesday, 13 June 2007, several volatile organic compounds (VOCs) were identified in indoor air at the site in concentrations that exceed the Indoor Air Action Levels for this project during the sampling event completed on 21 May 2007. We have attached tables summarizing the pertinent data, figures illustrating the sampling locations, and copies of the laboratory analytical reports for your reference (Attachment A).

In accordance with the requirements of the Amended Order, EA collected eight sub-slab vapor samples, eight indoor air samples, and one ambient air sample at the Site on 21 May 2007, and submitted the samples to Alpha Woods Hole Labs (Westborough, MA) for analysis of volatile organic compounds (VOCs) via Method TO-15. This was the fourth sampling round completed at the Site in accordance with the schedule mandated by the Amended Order. Sub-slab vacuum measurements were also collected on 21 May 2007 to ensure that adequate depressurization of the sub-slab region was being maintained by the active sub-slab depressurization (SSD) system.

As the previous air sampling summary correspondence submitted to the Department dated 8 May 2007 presented, the data collected on 21 May 2007 continues to demonstrate that:

- No evidence of soil vapor intrusion into the newly constructed school has been observed.

- The continuous operation of the SSD system and confirmation of sub-slab vacuum beneath the school between -0.05 and -0.18 inches of water column illustrates ongoing, effective operation of the SSD system and elimination of the soil vapor intrusion pathway at the site.

- The sub-slab vapor samples continue to illustrate the expected steady and dramatic decrease in the concentrations of two construction-related VOC compounds (Acetone and 2-Butanone) detected in the sub-slab samples due to the use of PVC primer and glue during construction of the sampling probes. The average decrease in the concentration of Acetone and 2-Butanone in all sub-slab sampling locations is currently 99.8% since the initial round of sub-slab sampling was completed in March 2007.

- Carbon Tetrachloride, a background ambient concentration at the site and in urban communities, has consistently been detected in ambient outdoor air during each of the four sampling events completed thus far at concentrations ranging between 0.48 to 0.71 ug/$m^3$. During the same sampling events, Carbon Tetrachloride concentrations inside the school building have ranged between 0.36 to 0.79 ug/$m^3$, and all but one indoor air concentration (Sample ID = Gymnasium) collected on 21 May 2007 were less than the applicable Indoor Air Action Level (0.5 ug/$m^3$).

- In general, since indoor air sampling was initiated in March 2007, ongoing construction activities and cigarette smoking by contractors have resulted in the presence of some VOCs inside the school. However, as expected and as the amount of indoor construction activities with the potential to generate VOCs (touch-up painting, cleaning, finish carpentry, etc.) has decreased over time and since smoking by contractors has stopped, the number of VOCs detected inside the school has dramatically decreased to the point where only two VOCs known to be associated with construction activity (1,3,5-Trimethylbenzene and 1,2,4-Trimethylbenzene) were detected in several samples at concentrations that exceed the applicable Indoor Air Action Levels on 21 May 2007. Historically, these 2 VOCs were either not detected in soil gas sampled from the school property or were detected at concentrations significantly lower than the Action Level (9.3 ug/$m^3$). Furthermore, neither of these 2 VOCs have been reported to be present in any of the 32 sub-slab air samples collected at the site since March 2007, albeit with the majority of laboratory reporting limits in excess of the Action Levels applicable to indoor air.

- With the exception of 1 VOC compound in 1 indoor air sample collected on 22 March 2007 (Trichloroethylene, also known to be resultant from construction activities and also detected in ambient outdoor air at a greater concentration that that reported for the indoor sample on 22 March), none of the VOC compounds of greatest potential concern to human health at this site, as identified by the Agency for Toxic Substances and Disease Registry in their December 2006 Health Consultation, were detected in any of the 32 samples at concentrations greater than the respective Indoor Air Action Levels.

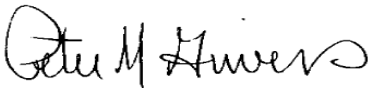
In conclusion, we continue to be encouraged by the results of the sampling and monitoring efforts completed thus far at the site, the SSD System continues to operate according to design, and data collected to date indicates that no soil vapor intrusion is occurring. In accordance with

data trends observed thus far, the 2 residual VOCs related to construction activity detected above the respective Indoor Air Action Levels inside the building are expected to continue to decrease over time, and Carbon Tetrachloride is expected to continue to be an ambient background compound for the site. Therefore, no SSD System modifications or other actions to address current site conditions are warranted or proposed at this time.

We trust that this correspondence satisfies OA Provision 6(e)(vi). However, if you have any questions or require additional information, please do not hesitate to contact me at 401-736-3440, Ext. 216.

Sincerely,

EA ENGINEERING, SCIENCE,
AND TECHNOLOGY, INC.



Peter M. Grivers, P.E., LSP
Project Manager

Attachments

cc: J. Simmons, City of Providence
A. Sepe, Providence Department of Public Property
J. Fernandez, City of Providence Law Department
S. Rapport, City of Providence Law Department
J. Boehnert, Partridge, Snow, & Hahn
J. Ryan, Partridge, Snow, & Hahn
T. Deller, Providence Redevelopment Agency
T. Gray, RIDEM Bureau of Environmental Protection
J. Langlois, RIDEM Legal Services
L. Hellested, RIDEM Office of Waste Management
K. Owens, RIDEM Office of Waste Management
C. Walusiak, RIDEM Office of Waste Management
S. Fischbach, RI Legal Services
Former Gorham Site, Parcel B – Knight Memorial Library Repository