



Airport Professional Park  
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EA Engineering, Science, and Technology, Inc.

3 December 2013

Mr. Joseph T. Martella II, Senior Engineer  
Site Remediation Program  
Office of Waste Management  
RI Department of Environmental Management  
235 Promenade Street  
Providence, RI 02908

*RE: Addendum to Quarterly O&M Status Report No. 24  
Alvarez High School, 333 Adelaide Avenue, Providence, Rhode Island  
Case No. 2005-029  
EA Project No. 15066.01.0002*

Dear Mr. Martella:

On behalf of the City of Providence School Department (City), EA Engineering, Science, and Technology, Inc. (EA) is providing this Addendum to the Quarterly Operations and Maintenance (O&M) Status Report in accordance with Provision 6(f) of the Order of Approval and amendments (Amended OA) for the referenced Alvarez High School site (the Site, formerly Adelaide Avenue High School).

This O&M Report summarizes recently-completed Site activities related to compliance subslab vapor and indoor air sampling for the period from June 2013 through August 2013. The Rhode Island Department of Environmental Management (RI DEM) voiced several questions relative to the findings of the indoor air analyses and the investigation of the occurrence of 1,2 dichloroethane (1,2 DCA). Specifically:

- *Was there any correlation between the detection of 1,2 DCA in Room 118 and the highest roof fan?* There was no correlation between the elevated level of 1,2 DCA remaining in Room 118 and the highest level detected at the roof fans. Roof Fan 2 discharges soil gas collected from SP-4 proximal to Room 118 and SP-5 proximal to Room 110. However, Roof Fan 3 that collects soil vapor from the cafeteria, gym and kitchen had the highest 1,2 DCA concentration. Examination of the contents of the cabinets did not find any cleaners, lubricants or other materials that contained 1,2 DCA. Examination of the Aramark cleaning supplies also did not yield any source of the 1,2 DCA. The indoor air was again monitored on 18 October 2013. The results of these analyses did not detect 1,2 DCA in any of the sampling locations. The results of this investigation indicated that the detected 1,2 DCA was likely from a fugitive source that has since dissipated.
- *How was the zero and positive pressure noted in several soil vapor points addressed.* Positive (0.05 inches of water) and null pressures were noted in two soil vapor monitoring points (MP-1 and MP-3, respectively) located outside of the school during the July 7, 2013 sampling event. Additionally, a positive pressure (0.05 inches of water) was



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noted in soil vapor monitoring point MP-7 on 16 August 2013. EA surmised that the readings were attributed to water from condensation entering the lines as each of these monitoring points sample port is outside the school building. A hand vacuum pump was used to evacuate the moisture within the monitoring points. Subsequent monitoring events in September, October and November have all found negative pressures in all monitoring points. The results of these sampling events are being submitted with the 25<sup>th</sup> Quarterly Monitoring Report due December 2013.

- RI DEM voiced concern over the terminology related to the action thresholds that the RI DEM agreed to if existing analytical technologies were not able to meet the levels stated in the Connecticut Draft Proposed Indoor Residential Targeted Air Concentrations. EA had previously referred to technology limited levels as RI Action Levels, implying that RI DEM had approved these levels with regulation. All future correspondence will identify these alternative thresholds as Technology Limited Thresholds to eliminate any confusion.

If you have any questions or require additional information, please contact me at (401) 736-3440, Ext. 203.

Sincerely,

EA ENGINEERING, SCIENCE,  
AND TECHNOLOGY, INC.

A handwritten signature in blue ink, appearing to read 'Frank B. Postma', is written over a light blue horizontal line.

Frank B. Postma, LSP, LEP, PG  
Project Manager

cc: C. Jones, Prov. Dept. of Public Schools  
Director, Prov. Redevelopment Agency  
J. Padwa, City of Prov. Law Department  
R. Dorr, Neighborhood Resident  
Rep. Scott Slater  
Knight Memorial Library Repository

A. Sepe, Prov. Dept. of Public Property  
S. Fischbach, RI Legal Services  
J. Ryan, Partridge, Snow, & Hahn  
J. Pichardo, Senator  
Principal Rivers, Alvarez High School



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