Honorable Angel Tavares, Mayor City of Providence, City Hall 25 Dorrance Street Providence, Rhode Island 02903 August 17, 2012

Mr. Keith Oliveira, President Providence School Board 797 Westminster Street Providence Rhode Island 02903

Mr. Alan Sepe, Acting Director of Public Property City of Providence, City Hall 25 Dorrance Street Providence, Rhode Island 02903

RE: Five (5) Year Review of the Governor Christopher DelSesto Middle School and the Anthony Carnevale Elementary School located on Springfield Street in Providence.

Dear Mayor Tavares and Messer's. Oliveira and Sepe:

The Rhode Island Department of Environmental Management (the Department), Office of Waste Management (the Office) has completed the first Five (5) Year Review required by the Second Assented to Supplemental Order dated October 2011. A copy of the Final Report has been sent to you and the other parties listed in Appendix A of the court decision and posted online on the Department's public web site:

(http://www.dem.ri.gov/programs/benviron/waste/springfd.htm)

As a result of the Five Year Review, the Department requests that the City of Providence and/or the Providence School Department comply with the following requirements:

- 1. Please find attached a new amended version of the Environmental Land Usage Restriction (ELUR) that is in effect since promulgation of the Department's November 9, 2011 Amended Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the "Remediation Regulations"). The amended regulations redefine what a "residential activity" includes and the currently recorded ELUR does not allow for that activity. The Department is requiring that the site be identified as a "restricted residential" property rather than stating no residential use. A revised boiler plate is attached. Please complete a draft revised ELUR and Soil Management Plan for review and approval by the Department. Record the finalized ELUR within 14 days of receipt and return a copy of the recorded document to my attention at the Department's address within 15 days of the date it is recorded.
- 2. The City of Providence/Providence School Department must perform, in addition to the currently required quarterly monitoring, annual monitoring for compliance with the ELUR. This requirement may be completed as part of the normal quarterly inspection;

- however, the quarterly reporting must include a specific section in the report on annual ELUR compliance.
- 3. The City of Providence/Providence School Department must perform annual vacuum testing of the sub-slab ventilation systems beneath both of the schools to insure for the Department, parents and students that the sub-slab ventilation systems are operating as designed.
- 4. The City of Providence/Providence School Department shall propose a lower indoor air quality threshold for Hydrogen Sulfide that has been used in the past. The Department of Health has informed the Department that Hydrogen Sulfide is detectable below 2 ppm in air. Please propose a new indoor air quality threshold for Hydrogen Sulfide within thirty (30) days of the date of this letter.
- 5. The City of Providence/Providence School Department shall use the correct indoor air quality threshold of 500 ppm for Methane for comparison to the indoor air quality sampling analysis.
- 6. The City of Providence/Providence School Department shall continue in-situ field measurements of soil gas samples collected from the perimeter vents and the sub-slab ventilation systems for methane, carbon monoxide, carbon dioxide, hydrogen sulfide, oxygen and total VOC's using handheld instrumentation, as specified in the O&M Plan.
- 7. In lieu of laboratory analysis, the City of Providence/Providence School Department shall perform analysis of soil gas samples collected from the perimeter vents via field instrumentation. Also, the City of Providence/Providence School Department shall begin collecting influent soil gas samples from the sub-slab ventilation systems (before the carbon vessels) via laboratory analysis at a fixed based laboratory for analysis of VOC's by Method TO-14.
- 8. The City of Providence/Providence School Department must confirm and document for the Department's records that the field instrumentation currently and in the future are capable of detecting the entire range of known contaminants of concern (COC's) for the site including Volatile Organic Compounds (VOC's).
- 9. The City of Providence/Providence School Department must begin graphing and/or plotting laboratory concentrations of COC/VOC data exceedances beginning with calendar year 2012, First Quarter. These graphs/plots must be labeled and legible for the general public's review and interpretation.
- 10. The City of Providence/Providence School Department must insure that maintenance personnel currently and in the future working at these schools have received appropriate annual training with respect to the existing onsite monitoring systems, sub-slab ventilation systems and exterior site capping. They must also be instructed on whom to notify immediately if one of the systems or the cap is not operating properly.
- 11. The City of Providence/Providence School Department must submit to the Department within sixty (60) days of the date of this letter, a Corrective Action Plan to permanently correct the continuing problem of moisture/water uptake into the Governor Christopher DelSesto Middle School sub-slab ventilation system which causes the system to shutdown.

- 12. The City of Providence/Providence School Department are reminded of the requirement to obtain a soil sample for laboratory analysis, as stated in the post construction soil management plan approved in 1999, from every location where the orange demarcation barrier becomes visible and the underlying waste may be exposed.
- 13. The City of Providence/Providence School Department, through their environmental consultant, should instruct the Site grounds maintenance personnel how to inspect the school properties for breaches/cavities in the cap. The ground maintenance personnel should thoroughly inspect the grounds every two weeks starting with just prior to the opening of school. They should keep a log of their inspections noting any issues and the appropriate repairs that were made. The log should be included in the environmental consultant's quarterly report. If the orange demarcation barrier is noted to be visible during one of the inspections, the environmental consultant must be notified immediately.

If you have any questions regarding this letter or the property, please contact me by telephone at (401) 222-2797 ext. 7102 or by my e-mail at jeff.Crawford@dem.ri.gov.

Sincerely,

Jeffrey Crawford

Principal Environmental Scientist Office of Waste Management

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Cc: Terry Gray, Assistant Director

Leo Hellested, Chief OWM

Kelly Owens, Supervising Engineer OWM

Susan Forcier, Esq. –Office of Legal Services Mr. Carleton W. Jones, Chief Operating Officer

Providence Public School District

Donna Pallister, Arcadis

Appendix G ENVIRONMENTAL LAND USAGE RESTRICTION

This Declaration of	Environmental Land Usage Restriction ("Restriction") is made on this						
day of	, 20 by The Providence Public Building Authority						
(PPBA) of the City of Providence, State of Rhode Island, a public body corporate and							
politic, and an instrumentality and agency of the City, having a distinct legal existence from							
the City, and its suc	cessors and/or assigns (hereinafter, the "Grantor").						

WITNESSETH:

WHEREAS, the Grantor, **PPBA**, is the Owner in fee simple of certain real property identified as *(INSERT ALL PLAT's and LOTS)* Rhode Island (the "Property"), more particularly described in Exhibit A (Legal Description) which is attached hereto and made a part hereof;

WHEREAS, the Property (Site Map Exhibit B) has been determined to contain soil and/or groundwater which is contaminated with certain Hazardous Materials and/or petroleum in excess of applicable **residential** criteria pursuant to the <u>Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases ("Remediation Regulations")</u>;

WHEREAS, the Grantor and the Department have determined that the environmental land use restrictions set forth below are consistent with the regulations adopted by the Rhode Island Department of Environmental Management ("Department") pursuant to R.I.G.L. § 23-19.14-1 and that this restriction shall be a Conservation Restriction pursuant to R.I.G.L. § 34-39-1 et. seq. and shall not be subject to the 30 year limitation provided in R.I.G.L. § 34-4-21;

WHEREAS, the Department's written approval of this Restriction is contained in the document entitled: Remedial Decision Letter dated April 9, 1999 and the Order of Approval dated June 4, 1999, issued pursuant to the Remediation Regulations;

WHEREAS, to prevent exposure to or migration of Hazardous Substances and to abate hazards to human health and/or the environment, and in accordance with the **Remedial Decision** Letter and the Order of Approval, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the **Property**;

WHEREAS, the Grantor believes that this Restriction will effectively protect public health and the environment from such contamination; and

WHEREAS, the Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against the Grantor and the Grantor's successors and assigns. NOW, THEREFORE, Grantor agrees as follows:

A. Restrictions Applicable to the Property: In accordance with the Remedial Decision Letter

and the Order of Approval, the use, occupancy and activity of and at the Property is restricted as follows:

- i. No residential use of the **Property** shall be permitted beyond the current approved use as a school;
- ii. No groundwater at the **Property** shall be used as potable water;
- iii. No soil at the **Property** shall be disturbed in any manner without written permission of the Department's Office of Waste Management, except as permitted in the Remedial Action Work Plan (RAWP) or Soil Management Plan (SMP) approved by the Department;
- iv. Humans engaged in activities at the **Property** shall not be exposed to soils containing Hazardous Materials and/or petroleum in concentrations exceeding the applicable Department approved Direct Exposure Criteria set forth in the <u>Remediation</u> <u>Regulations</u>;
- v. No subsurface structures shall be constructed on the **Property** over groundwater containing Hazardous Materials and/or petroleum in concentrations exceeding the applicable Department approved GB Groundwater Objectives set forth in the <u>Remediation Regulations</u>;
- vi. The engineered controls at the **Property** described in the Soil Management Plan **SMP** contained in Exhibit C attached hereto shall not be disturbed and shall be properly maintained to prevent humans engaged in **residential** activity from being exposed to soils containing Hazardous Materials and/or petroleum in concentrations exceeding the applicable Department-approved **residential** Direct Exposure Criteria in accordance with the Remediation Regulations; and
- vii. The engineered controls at the **Property** described in the **SMP**, contained in Exhibit C attached hereto shall not be disturbed and shall be properly maintained so that water does not infiltrate soils containing Hazardous Materials and/or petroleum in concentrations exceeding the applicable Department-approved leachability criteria set forth in the Remediation Regulations.
- B. No action shall be taken, allowed, suffered, or omitted at the Property if such action or omission is reasonably likely to:
 - i. Create a risk of migration of Hazardous Materials and/or petroleum;
 - ii. Create a potential hazard to human health or the environment; or
 - iii. Result in the disturbance of any engineering controls utilized at the **Property**, except as permitted in the Department-approved **SMP** contained in Exhibit C.
- C. Emergencies: In the event of any emergency which presents a significant risk to human health or to the environment, including but not limited to, maintenance and repair of utility

lines or a response to emergencies such as fire or flood, the application of Paragraphs A (iii.viii.) and B above may be suspended, provided such risk cannot be abated without suspending such Paragraphs and the Grantor complies with the following:

- i. Grantor shall notify the Department's Office of Waste Management in writing of the emergency as soon as possible but no more than three (3) business days after Grantor's having learned of the emergency. (This does not remove Grantor's obligation to notify any other necessary state, local or federal agencies.);
- ii. Grantor shall limit both the extent and duration of the suspension to the minimum period reasonable and necessary to adequately respond to the emergency;
- iii. Grantor shall implement reasonable measures necessary to prevent actual, potential, present and future risk to human health and the environment resulting from such suspension;
- iv. Grantor shall communicate at the time of written notification to the Department its intention to conduct the Emergency Response Actions and provide a schedule to complete the Emergency Response Actions;
- v. Grantor shall continue to implement the Emergency Response Actions, on the schedule submitted to the Department, to ensure that the **Property** is remediated in accordance with the Remediation Regulations (or applicable variance) or restored to its condition prior to such emergency. Based upon information submitted to the Department at the time the ELUR was recorded pertaining to known environmental conditions at the **Property**, emergency maintenance and repair of utility lines shall only require restoration of the **Property** to its condition prior to the maintenance and repair of the utility lines; and
- vi. Grantor shall submit to the Department, within ten (10) days after the completion of the Emergency Response Action, a status report describing the emergency activities that have been completed.
- D. Release of Restriction; Alterations of Subject Area: The Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of the Property inconsistent with this Restriction unless the Grantor has received the Department's prior written approval for such alteration. If the Department determines that the proposed alteration is significant, the Department may require the amendment of this Restriction. Alterations deemed insignificant by the Department will be approved via a letter from the Department. The Department shall not approve any such alteration and shall not release the Property from the provisions of this Restriction unless the Grantor demonstrates to the Department's satisfaction that Grantor has managed the Property in accordance with applicable regulations.
- E. Notice of Lessees and Other Holders of Interests in the Property: The Grantor, or any future holder of any interest in the Property, shall cause any lease, grant, or other transfer of any interest in the Property to include a provision expressly requiring the lessee, grantee, or

transferee to comply with this Restriction. The failure to include such provision shall not affect the validity or applicability of this Restriction to the **Property**.

- **F.** Enforceability: If any court of competent jurisdiction determines that any provision of this Restriction is invalid or unenforceable, the Grantor shall notify the Department in writing within fourteen (14) days of such determination.
- **G. Binding Effect:** All of the terms, covenants, and conditions of this Restriction shall run with the land and shall be binding on the Grantor, its successors and assigns, and each Owner and any other party entitled to control, possession or use of the **Property** during such period of Ownership or possession.
- **H. Inspection & Non-Compliance:** It shall be the obligation of the Grantor, or any future holder of any interest in the **Property**, to provide for annual inspections of the **Property** for compliance with the ELUR in accordance with Department requirements.

A qualified environmental professional will, on behalf of the Grantor or future holder of any interest in the **Property**, evaluate the compliance status of the **Property** on an annual basis. Upon completion of the evaluation, the environmental professional will prepare and simultaneously submit to the Department and to the Grantor or future holder of any interest in the **Property** an evaluation report detailing the findings of the inspection, and noting any compliance violations at the **Property**. If the **Property** is determined to be out of compliance with the terms of the ELUR, the Grantor or future holder of any interest in the **Property** shall submit a corrective action plan in writing to the Department within ten (10) days of receipt of the evaluation report, indicating the plans to bring the **Property** into compliance with the ELUR, including, at a minimum, a schedule for implementation of the plan.

In the event of any violation of the terms of this Restriction, which remains uncured more than ninety (90) days after written notice of violation, all Department approvals and agreements relating to the **Property** may be voided at the sole discretion of the Department.

I. Terms Used Herein: The definitions of terms used herein shall be the same as the definitions contained in Section 3 (DEFINITIONS) of the Remediation Regulations.

IN WITNESS WHEREOF, the Grantor has hereunto set (his/her) hand and seal on the day and year set forth above.

The Providence Public Building Authority(PPBA) of the City of Providence, State of Rhode Island					
By:					
,	Grantor (signature)	Grantor (typed name)			

STATE OF RHODE ISLAND COUNTY OF					
In (CITY/TOWN), in said County and State, on the hefore me Personally appeared	day of	, 20			
before me Personally appeared, to me known and known by me to be the party executing the foregoing instrument and (he/she) acknowledged said instrument by (him/her) executed to be (his/her) free act and deed.					
Notary Public:					
My Comm. Expires:					