



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

LETTER OF RESPONSIBILITY

File No. SR-08-1723

January 24, 2014

CERTIFIED MAIL

Ms. Janelle Bosek
Civic Builders
304 Hudson Street
New York, NY 10013

RE: Blackstone Valley Prep School
52 Broad Street
Cumberland, Rhode Island
Plat Map 2 / Lot 26

Dear Ms. Bosek:

On November 9, 2011, the Rhode Island Department of Environmental Management (the Department) enacted the amended Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations). The purpose of these regulations is to create an integrated program requiring reporting, investigation and remediation of contaminated sites in order to eliminate and/or control threats to human health and the environment in an efficient manner. A Letter of Responsibility (LOR) is a preliminary document used by the Department to codify and define the relationship between the Department and a Performing Party.

Please be advised of the following facts:

1. The above referenced property is located at 52 Broad Street, Cumberland, Rhode Island (the Site). The Site is further identified by the Town of Cumberland Tax Assessor's Office as Plat Map 2 / Lot 26.
2. The Department is in receipt of the following documents:
 - a. Geotechnical Design Basis Report, received by the Department on January 16, 2014, prepared by PARE Corporation (PARE), submitted by Rhode Island Department of Elementary and Secondary Education (RIDE);
 - b. Notification of Release, received by the Department on January 16, 2014, prepared and submitted by PARE; and
 - c. Geotechnical Report Review, received by the Department on January 16, 2014,

prepared by Northeast Geotechnical, Inc., submitted by RIDE.

3. The above referenced documents identify concentrations of total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), arsenic, lead, and mercury in Site soils that exceed the Department's Method 1 Direct Exposure Criteria, as referenced in the Remediation Regulations.
4. Based on the presence and nature of these Hazardous Substances and petroleum hydrocarbons, the Department concurs that a Release of Hazardous Materials has occurred as defined by Rules 3.33, 3.34, 3.59, and 3.63 of the Remediation Regulations.
5. Civic Builders is identified as the current owner of the Site by the Town of Cumberland Tax Assessor's office and as such is a Responsible Party as defined by Rule 3.70 of the Remediation Regulations.

As a result of the information known and the conditions observed at the site, the Department requests that Civic Builders comply with the following:

1. If necessary, prior to the implementation of any additional site investigation field activities and in accordance with Rule 7.07(A)(i) of the Remediation Regulations, Civic Builders must notify all abutting property owners, tenants, easement holders, and the municipality that an investigation is about to occur. The notice should briefly indicate the purpose of the investigation, the work to be performed, and the approximate scheduled dates of activities. Please submit a draft notification to the Department via E-mail for review and approval prior to distribution. A boilerplate notification to be distributed can be found online at: <http://www.dem.ri.gov/programs/benviron/waste/topicrem.htm#process>.

The Department will require a copy of the public notice letter and a list of all recipients. Failure to comply with the aforementioned items may result in enforcement actions as specified in Rhode Island General Laws 23-19.1-17 and 23-19.1-18.

2. Ensure that the requirements of Rhode Island General Law (RIGL), Title 23, *Health and Safety*, Chapter 23-19.14, *Industrial Property Remediation and Reuse Act*, Section 23-19.14-5, *Environmental Equity and Public Participation*, have been fulfilled. A copy of this section of the RIGL has been attached for your reference. In accordance with the Industrial Property Remediation and Reuse Act, prior to the establishment of a final scope of investigation for the Site, and after the completion of All Appropriate Inquiries (AAI), hold a public meeting for the purposes of obtaining information about conditions at the Site and the environmental history at the Site that may be useful in establishing the scope of the investigation and/or establishing the objectives for the environmental clean-up of the Site.
 - a. The public meeting shall be held in the City or Town in which the Site is located.
 - b. Public notice shall be given of the meeting at least ten (10) business days prior to the meeting.

- c. Following the meeting, the record of the meeting shall be open for a period of not less than ten (10) and not more than twenty (20) business days for the receipt of public comment.
- d. The results of all appropriate inquiries, analysis and the public meeting, including the comment period and responses to all comments received, shall be documented in a written report submitted to the Department.

No work (remediation or construction) shall be permitted at the property until the public meeting and comment period regarding the Site's proposed reuse has closed. The above detailed required public notice, meeting and comment period shall be in addition to any other requirements for public notice and comment relating to the investigation or remedy of the Site and may be part of another meeting pertaining to the Site provided that the minimum standards established by RIGL Section 23-19.14-5 for notice and comment are met.

3. Additionally, ensure that the requirements of RIGL Title 23, *Health and Safety*, Chapter 23-19.14, *Industrial Property Remediation and Reuse Act*, Section 23-19.14-4, *Objectives of Environmental Clean-Up* have been met. A copy of this section of the RIGL has been attached for your reference. The requirements of the Objectives of Environmental Clean-Up statute, include, but are not limited to the following:
 - a. The site investigation shall include analysis for the chemicals of potential concern for vapor intrusion. The list of chemicals of potential concern for vapor intrusion is attached for your reference;
 - b. Remediate the soils where chemicals of potential concern for vapor intrusion or petroleum exceed the residential direct exposure criteria through the physical removal of said chemicals or petroleum through excavation or in situ treatment; and
 - c. Equip the school building with both a passive sub slab ventilation system capable of conversion to an active system and a vapor barrier beneath the school building or incorporated in the concrete slab, all in compliance with an approved Department Remedial Action Work Plan (RAWP) and completed prior to the occupancy of the school;
4. Conduct further investigation of the Site soil and groundwater, if warranted, in accordance with Section 7.00 of the Remediation Regulations.
5. Upon completion of the additional site investigation submit a Site Investigation Report (SIR) in accordance with Section 7.00 of the Remediation Regulations within ninety (90) days from the date of this letter. Given that some limited environmental investigation has already been performed at the Site, you may incorporate portions of the information already gathered and work already performed to address the items covered in Section 7.00. The SIR should include at least two remedial alternatives other than no action/natural attenuation and include future plans for the re-use or redevelopment (if applicable) of the property.
6. Submit an SIR checklist in accordance with Rule 7.08 of the Remediation Regulations. The SIR checklist was created as a supplemental tool to expedite the review and approval process

by cross-referencing the specific sections and pages within the SIR that provide the detailed information that addresses each stated requirement within Section 7.00 of the Remediation Regulations.

7. Upon approval by the Department of the SIR, be prepared to bring the Site into compliance with the Remediation Regulations.

Please be advised that Civic Builders, as the Responsible Party, is responsible for the proper investigation and remediation of hazardous substances and petroleum hydrocarbons at this site. Also be advised that any remedial alternative that proposes to leave contaminated media on-site at levels which exceed the Department's Residential Direct Exposure Criteria, applicable Leachability Criteria, or applicable Groundwater Criteria will, at a minimum, necessitate the recording of an institutional control in the form of an Environmental Land Usage Restriction (ELUR) on the deed for the site, and will likely require implementation of additional engineered controls to restrict human exposure.

Please notify this office within seven days of the receipt of this letter of your plans to address these items. All correspondences should be sent to the attention of:

Ashley L. Blauvelt
RIDEM / Office of Waste Management
235 Promenade Street
Providence, RI 02908

If you have any questions regarding this letter or would like the opportunity to meet with Department personnel, please contact me by telephone at (401) 222-2797, ext. 7026, or by E-mail at ashley.blauvelt@dem.ri.gov.

Sincerely,



Ashley L. Blauvelt
Sanitary Engineer
Office of Waste Management

cc: Terrence Gay, Assoc. Director for Environmental Protection, RIDEM/Office of the Director
Leo Hellested, Chief, RIDEM/OWM
Matthew DeStefano, Deputy Chief, RIDEM/OWM
Kelly J. Owens, Assoc. Supervising Engineer, RIDEM/OWM
Jeffrey Crawford, Principal Environmental Scientist, RIDEM/OWM
Susan Forcier, Esq., RIDEM/Legal Services
Nichole Pollock, Legislative Liaison, RIDEM/Office of the Director
Joseph da Silva, RI Dept. of Elementary and Secondary Education
Timothy P. Thies, PARE Corporation

Attachments: RIGL 23-19.14-5, *Environmental Equity and Public Participation*
RIGL 23-19.14-4, *Objectives of Environmental Clean-Up*
List of Chemicals of Potential Concern for Vapor Intrusion

TITLE 23

Health and Safety

CHAPTER 23-19.14

Industrial Property Remediation and Reuse Act

SECTION 23-19.14-5

§ 23-19.14-5 Environmental equity and public participation. – (a) The department of environmental management shall consider the effects that clean-ups would have on the populations surrounding each site and shall consider the issues of environmental equity for low income and racial minority populations. The department of environmental management will develop and implement a process to ensure community involvement throughout the investigation and remediation of contaminated sites. That process shall include, but not be limited to, the following components:

- (1) Notification to abutting residents when a work plan for a site investigation is proposed;
- (2) Adequate availability of all public records concerning the investigation and clean-up of the site, including, where necessary, the establishment of informational repositories in the impacted community; and
- (3) Notification to abutting residents, and other interested parties, when the investigation of the site is deemed complete by the department of environmental management.
- (4) Whenever a site that is known to be contaminated or is suspected of being contaminated based upon its past use is considered for possible reuse as the location of a school, child-care facility, or as a recreational facility for public use, the person proposing such reuse shall, prior to the establishment of a final scope of investigation for the site and after the completion of all appropriate inquiries, hold a public meeting for the purposes of obtaining information about conditions at the site and the environmental history at the site that may be useful in establishing the scope of the investigation of the site and/or establishing the objectives for the environmental clean-up of the site. The public meeting shall be held in a city or town in which the site is located; public notice shall be given of the meeting at least ten (10) business days prior to the meeting; and following the meeting, the record of the meeting shall be open for a period of not less than ten (10) and not more than twenty (20) business days for the receipt of public comment. The results of all appropriate inquiries, analysis and the public meeting, including the comment period, shall be documented in a written report submitted to the department.
 - (ii) No work (remediation or construction), shall be permitted at the property until the public meeting and comment period regarding the site's proposed reuse has closed except where the director determines that such work is necessary to mitigate or prevent:
 - (A) an imminent threat to human health, public safety or the environment; or
 - (B) off-site migration of known or suspected contamination.
 - (iii) The public notice, meeting and comment required by this section shall be in addition to any other

requirements for public notice and comment relating to the investigation or remedy of the site and may be made part of another meeting pertaining to the site provided that the minimum standards established by this section for notice and comment are met. Any investigation or remediation undertaken prior to the completion of the public comment period shall be limited to measures necessary to define and/or mitigate the imminent threat and/or off-site migration.

(iv) The director shall establish, by regulation, standards and practice, which are consistent with federal practices, for purposes of satisfying the requirement to carry out all appropriate inquiries for the purposes of this chapter, the standard for the reporting of the results of those inquiries, and the process for notification to the public of the public meeting, the standards and practices for conducting the public meeting, and reporting on public comment.

(b) Effective until January 1, 2007, the community involvement process may be coordinated, as appropriate, with the public notice and comment opportunity provided in § 23-19.14-11.

(c) The department of environmental management will develop and implement a process by which a person that is or may be affected by a release or threatened release of a hazardous material at a site located in the community in which the person works or resides may request the conduct of a site assessment; and a decision process, with objective criteria, specifying how the department will consider and appropriately respond to such requests.

(d) The department of environmental management will maintain, update not less than annually, and make available to the public a record of sites, by name and location, at which remedial actions have been completed in the previous year and are planned to be addressed under the state site remediation and Brownfields program in the upcoming year. The public record shall identify whether or not the site, on completion of the remedial action, will be suitable for unrestricted use and, if not, shall identify the institutional controls relied on in the remedy.

History of Section.

(P.L. 1995, ch. 187, § 1; P.L. 2002, ch. 186, § 1; P.L. 2006, ch. 250, § 1; P.L. 2006, ch. 275, § 1.)

TITLE 23

Health and Safety

CHAPTER 23-19.14

Industrial Property Remediation and Reuse Act

SECTION 23-19.14-4

§ 23-19.14-4 Objectives of environmental clean-up. – (a) The department of environmental management will develop, maintain and publish numerical objectives for the most commonly found hazardous substances. These objectives will be applicable for the clean-up of contaminated properties to levels which are protective of human health and the environment based on current and reasonably foreseeable future use of a property and the surrounding natural resources. To further ensure the safety of school children while attending school, the department of environmental management, shall:

(1) Adopt numerical objectives for properties dedicated to school use equivalent to the numerical objectives set by the department for residential use of such properties;

(2) Evaluate chemicals of concern for vapor intrusion and adopt numerical objectives for those contaminants in soil and groundwater where such standards do not already exist in regulation and apply the numerical objectives for residential use established for said chemicals and petroleum to properties dedicated to school use; and

(3) Develop and adopt procedures for determining whether levels of chemicals of potential concern for vapor intrusion and petroleum in soil or groundwater pose a reasonable potential for migration of contaminated vapors or gases into structures to be utilized as school facilities.

(b) The construction of any new school building; or

(2) Construction of an addition to any existing school building; or

(3) Leasing of any portion of an existing building to serve as a school shall be prohibited on any portion of a parcel of property for which, upon occupancy, there exists an ongoing potential for hazardous materials and/or petroleum to migrate as vapors or gases into the building from the subsurface of the parcel of property, unless:

(i) At a property where concentrations of chemicals of potential concern for vapor intrusion or petroleum in the subsurface exceed the residential direct exposure criteria in soil, source areas of said chemicals or petroleum within the vadose zone of the site that includes said property shall be remediated:

(A) Through the physical removal of said chemicals or petroleum through excavation or in situ treatment; and

(B) The school building shall be equipped with both a passive sub slab ventilation system capable of conversion to an active system and a vapor barrier beneath the school building or incorporated in the

concrete slab, all in compliance with an approved department of environmental management remedial action work plan and completed prior to the occupancy of the school;

(ii) At a property where concentrations of chemicals of potential concern for vapor intrusion or petroleum in the subsurface do not exceed the residential direct exposure criteria in soil but contamination exists on the property due to the presence of any chemicals of potential concern for vapor intrusion or petroleum in groundwater, the department of environmental management shall:

(A) Require the property's owner or operator to prepare a site specific conceptual site model and conduct soil gas sampling to determine the location of the source area of said chemicals or petroleum in the site's vadose zone;

(B) Evaluate the results of said model and sampling to determine if levels of any chemicals of potential concern for vapor intrusion or petroleum could migrate as vapors or gases into the occupied portions of the building where the school is proposed based on procedures developed pursuant to this chapter; and

(C) Where the reasonable potential for migration of contaminated vapors or gases is determined to exist, the department shall require remediation to eliminate said potential as follows:

(I) Where the source area is located on the site that includes said property, requiring the physical removal of said chemicals or petroleum in the source area in the vadose zone through excavation or in situ treatment; provided, the concentrations of said chemicals or petroleum in said source area exceed the direct residential exposure criteria in soil; and

(II) Requiring the installation of both a passive sub slab ventilation system capable of conversion to an active system and a vapor barrier beneath the school building or incorporated in the concrete slab, all in compliance with an approved department of environmental management remedial action work plan and completed prior to the occupancy of the school; and, provided further, should monitoring of a passive sub-slab ventilation system indicate that active ventilation is necessary to protect the health and safety of users of a school equipped with a passive system, the department of environmental management shall require conversion of the passive system to an active system along with financial assurances to provide for the funding of the operation and monitoring of said active system for as long as active ventilation is deemed necessary by the department.

(iii) At a property where concentrations of chemicals of potential concern for vapor intrusion or petroleum in the subsurface do not exceed the residential direct exposure criteria in soil on the site that includes said property, and where the department has determined that levels of any chemicals of potential concern for vapor intrusion or petroleum will not present a reasonable potential for migration of contaminated vapors or gases into structures to be utilized as school facilities on the property, the property may be used for school purposes subject to any conditions that the department of environmental management may impose pursuant to this chapter.

(c) The construction of any school building, or construction of an addition to any existing school building, or leasing of any portion of an existing building to serve as a school on any portion of a parcel of property formerly used for industrial, manufacturing or landfill purposes that is contaminated by hazardous materials, shall be prohibited unless at least thirty (30) days prior to selecting the location for construction or leasing the building the project sponsor undertakes all of the following measures with ten (10) days prior written notice to the public of each measure undertaken:

(1) Prepares and posts on the sponsor's website a written report that: (i) Projects the costs to acquire or

lease the property, and to cleanup and maintain the property in accordance with the department of environmental management's Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (the Remediation Regulations); (ii) Projects the time period required to complete a cleanup of the property for school purposes prior to occupancy by obtaining either an Interim Letter of Compliance, a Letter of Compliance or a Non-Jurisdictional Letter indicating that the property is not jurisdictional under the Remediation Regulations of the department of environmental management; (iii) Discusses the rationale for selecting the property for use as school purposes and an explanation of any alternatives to selecting said property considered by the project sponsor;

(2) Solicits written comments on the report prepared pursuant to subdivision (1) of this subsection for a period of at least thirty (30) days after posting said report on the sponsors website and conducts a public hearing during said thirty (30) day period at which public comment is taken on said report; and

(3) Prepares a second written report that summarizes and responds to the public comments received during the public comment period and at the public hearing and posts said second report on the sponsor's website.

(d) The sponsor of any school project subject to the provisions of subsection (c) of this section shall consider the results and findings contained in the reports required by subsection (c) when selecting the location of said project.

(e) As used in this section.

(1) The term "school" means any residential or non-residential school building, public, private or charter, of any city or town or community educational system regulated, directly or secondarily, by the board of regents for elementary and secondary education or the department of elementary and secondary education or any other state education board or local city or town school board or school committee or other legal educational subdivision acting under it. As used in this chapter, the term "school or schools" includes, but is not limited to, school playgrounds, school administration buildings, indoor school athletic facilities, school gymnasiums, school locker rooms, and similar school buildings. A school shall not include any institutions for education of adults (e.g. colleges, universities, graduate schools, trade schools) or child-care facilities as regulated by the department of children, youth and families.

(2) The term "landfill" means for the purposes of this section, any portion of a parcel of property that was used as a landfill as defined in § 23-19.1-4 or a sanitary landfill, dump or other disposal area where more than thirty (30) cubic yards of solid waste was disposed.

(3) The term "hazardous materials" means any materials defined as hazardous materials pursuant to § 23-19.14-3.

(4) The term "solid waste" means any materials defined as solid waste pursuant to § 23-18.9-7.

(5) The term "chemicals of potential concern for vapor intrusion" means those chemicals that the U.S. Environmental Protection Agency recommends for routine evaluation during vapor intrusion assessments in said Agency's most recent guidance on the assessment of vapor intrusion into indoor air from subsurface sources, and any other chemicals that the department of environmental management may recommend for said routine evaluation.

(6) The term "source area" means the horizontal and vertical extent of natural or man-made media impacted by a release of hazardous materials or causing a release of hazardous materials at

concentrations in excess of the numerical objectives developed pursuant to paragraph (a) of this section.

(7) The term "vadose zone" means the full extent of the soil column existing above the elevation of groundwater.

(8) The term "conceptual site model" means a written and/or illustrative representation of the physical, chemical and biological processes that control the transport, migration and actual or potential impacts of hazardous materials in soil, air, groundwater, surface water and/or sediments to human and/or ecological receptors at a site.

(f) The provisions of this section shall not apply to the renovation or reconstruction of any building for school purposes that was used continuously as a school for a period of at least twenty-five (25) years where: (1) The footprint of the building after renovation or reconstruction does not exceed more than five percent (5%) of the current footprint of the building; and (2) The site of the building is not subject to a remedial action work plan approved by the department of environmental management.

History of Section.

(P.L. 1995, ch. 187, § 1; P.L. 1997, ch. 41, § 1; P.L. 1997, ch. 60, § 1; P.L. 2012, ch. 163, § 1; P.L. 2012, ch. 179, § 1; P.L. 2013, ch. 296, § 1.)

Chemicals of Potential Concern for Vapor Intrusion

Acetaldehyde
Acetone
Acetone Cyanohydrin
Acetonitrile
Acrolein
Acrylonitrile
Allyl Chloride
Aroclor 1221
Aroclor 1232
Azobenzene
Benzene
Benzyl Chloride
Biphenyl, 1,1'-
Bis(2-chloro-1-methylethyl) ether
Bis(2-chloroethyl)ether
Bis(chloromethyl)ether
Bromo-2-chloroethane, 1-
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromomethane
Butadiene, 1,3-
Carbon Disulfide
Carbon Tetrachloride
Chloro-1,1-difluoroethane, 1-
Chloro-1,3-butadiene, 2-
Chlorobenzene
Chlorobenzotrifluoride, 4-
Chlorodifluoromethane
Chloroform
Chloromethane
Chloromethyl Methyl Ether
Chloropicrin
Cumene
Cyanide (CN-)
Cyclohexane
Cyclohexene
Dibromo-3-chloropropane, 1,2-
Dibromochloromethane
Dibromoethane, 1,2-
Dibromomethane (Methylene Bromide)
Dichloro-2-butene, 1,4-
Dichloro-2-butene, cis-1,4-
Dichloro-2-butene, trans-1,4-

Dichlorobenzene, 1,2-
Dichlorobenzene, 1,4-
Dichlorodifluoromethane
Dichloroethane, 1,1-
Dichloroethane, 1,2-
Dichloroethylene, 1,1-
Dichloroethylene, 1,2-trans-
Dichloropropane, 1,2-
Dichloropropene, 1,3-
Dicyclopentadiene
Difluoroethane, 1,1-
Dihydrosafrole
Diisopropyl Ether
Dimethylvinylchloride
Epichlorohydrin
Epoxybutane, 1,2-
Ethyl Chloride
Ethyl Methacrylate
Ethylbenzene
Ethyleneimine
Ethylene Oxide
Hexamethylene Diisocyanate, 1,6-
Hexane, N-
Hexanone, 2-
Hydrogen Cyanide
Mercury (elemental)
Methacrylonitrile
Methyl Acrylate
Methyl Ethyl Ketone (2-Butanone)
Methyl Isobutyl Ketone (4-methyl-2-pentanone)
Methyl Isocyanate
Methyl Methacrylate
Methyl Styrene (Mixed Isomers)
Methyl tert-Butyl Ether (MTBE)
Methylene Chloride
Naphthalene
Nitrobenzene
Nitromethane
Nitropropane, 2-
Nitroso-di-N-butylamine, N-
Nonane, n-
Pentane, n-
Phosgene
Propionaldehyde
Propyl benzene
Propylene

Propylene Glycol Dinitrate
Propylene Oxide
Styrene
Tetrachloroethane, 1,1,1,2-
Tetrachloroethane, 1,1,2,2-
Tetrachloroethylene
Tetrafluoroethane, 1,1,1,2-
Tetrahydrofuran
Toluene
Trichloro-1,2,2-trifluoroethane, 1,1,2-
Trichlorobenzene, 1,2,4-
Trichloroethane, 1,1,1-
Trichloroethane, 1,1,2-
Trichloroethylene
Trichlorofluoromethane
Trichloropropane, 1,2,3-
Trichloropropene, 1,2,3-
Triethylamine
Trimethylbenzene, 1,2,3-
Trimethylbenzene, 1,2,4-
Vinyl Acetate
Vinyl Bromide
Vinyl Chloride
Xylene, p-
Xylene, m-
Xylene, o-
Xylenes