



**RHODE ISLAND**  
**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

**PROGRAM LETTER**

October 1, 2004

**CASE NO. 2004-025**

Mr. Thomas Deller  
City of Providence  
Department of Planning and Development  
400 Westminster Street  
Providence, RI 02903

RE: 100 Bosworth Street  
Plat 63 / Lot 555  
Providence, Rhode Island  
Case No. 2004-025

Dear Mr. Deller:

The Rhode Island Department of Environmental Management (the Department) amended the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, (the Remediation Regulations), effective February 24, 2004. 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. The purpose of the *Program Letter* is to indicate that the Department deems the investigation of the reported release complete and to notify the Responsible Party that they must perform Public Notice in accordance with Section 7.07 of the Remediation Regulations.

The Department has the following documents on file in the matter of the above referenced property (site):

1. Phase I / II Environmental Site Assessment – Plat 63, Lots 555, 435, & 344 - Olneyville, Providence, Rhode Island (ESA) and a Hazardous Material Release Notification Form, prepared by GZA GeoEnvironmental, Inc. (GZA), and dated February 2004. The Department received all of these documents on February 20, 2004.
2. Site Investigation Report - Plat 63, Lots 555, 435, & 344 -Olneyville, Providence, Rhode Island (SIR), prepared by GZA and dated August 2004. The Department received this document on August 30, 2004.

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30% post-consumer fiber

Together, the Department regards these documents as collectively constituting the Site Investigation Report (SIR) pursuant to Section 7.08 of the Remediation Regulations. However, the Department approval of the SIR is contingent upon the following:

- Please clarify if the residential housing to be developed on the site will be for-sale units or lease/rental units? Will residents be able to perform landscaping, gardening, or other activities at the site that may potentially expose them to hazardous materials? Please note that allowing these activities may require stringent remediation and restrictions. Also, please be advised that all future residents must be formally notified and comply with the land usage restrictions of the site, per section E of the ELUR. The Office will require that a provision be included in the purchase and sales agreement or lease agreement to the future residents making them aware of the restrictions that are applicable to the property. In similar circumstances, site owners have included a copy of the ELUR as an attachment to the lease agreement.
- The Department requires that the future structures to be located on site incorporate a vapor barrier into their design.
- All solid waste / miscellaneous debris on the site is required to be removed and disposed of properly at a licensed facility in accordance with all local, state, and federal laws.
- Please be advised that the Department requires all sloped areas of the site be capped by the State standard method of 2ft of clean fill or equivalent. In addition, an impermeable engineered cap must encapsulate any soils remaining on site that exceed the Method 1 GB Leachability criteria.
- It is the Office's policy that an appropriate engineered cap to limit direct exposure consists of a minimum of two feet of clean fill or equivalent [i.e. one (1) ft of clean fill underlain with a geotextile liner, six (6) inches of clean sub-base overlaid with four (4) inches of asphalt / concrete pavement laid in 2 inch by 2 inch perpendicular lifts, building foundations, etc]. Additionally, all clean fill, including sub-grade material and loam, imported to the site must be sampled prior to delivery and placement. Laboratory analytical results must be submitted to the Department via fax. Verbal approval to use the fill must be received by the Department prior to use. Clean fill and loam must be sampled for arsenic at a frequency of one sample per 500 tons. One-quarter of the total number of compliance samples of clean fill and loam will be sampled for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), Total Metals (TPP 13), and Total Petroleum Hydrocarbons (TPH). All soil that is to be utilized onsite must meet the Residential Direct Exposure Criteria (Res DEC) for all constituents or be certified to be non-jurisdictional by an environmental professional. Please also be advised that the Closure Report for the Site must include all original laboratory analytical data and a statement from the facility that provides the clean fill and / or loam attesting to the materials origin and suitability.
- Please be advised that any soils to be excavated for the purpose of grading and / or construction activities are to be disposed of properly off-site at a licensed disposal facility in accordance with all local, state, and federal laws. Prior to removal from the site, all soil must be fully characterized. In addition, copies of the bills of lading must be included in the closure report for the site.

- During the course of development activities at the site, should any soils be encountered that have visual and / or olfactory evidence of contamination, the contaminated soils must be excavated and properly disposed of off site at a licensed facility. In addition, post excavation sampling (for TPH and VOCs) will be required if the contamination is likely to have been associated with the former Underground Storage Tank (UST).

In addition, please be advised that there were several errors within Tables 4 and 5 within the SIR, when referencing the RIDEM Method 1 Residential and Industrial / Commercial Direct Exposure Criteria and the GB Groundwater Criteria. Also, Figure 4C mislabeled two sampling locations (GZ-555-7 & GZ-555-5).

The Department requires that you give public notice to all abutters and tenants on the completed package with the preferred remedial alternative of encapsulation of contaminated soils in conjunction with the implementation of an environmental land usage restriction (ELUR) on the property. All site soils are required to be capped by a State standard method of 2 feet of clean fill or equivalent (i.e. 6 inches of clean sub-grade in conjunction with 4 " of asphalt pavement / concrete; building foundations; or 1 foot of clean fill underlain with a geotextile material). The ELUR will restrict certain activities on the site and will also ensure that the cap is not disturbed. The ELUR will include a post-construction soil management plan (SMP), which will outline the procedures for managing the soils on site should disturbances below the cap be required.

Sections 7.07 and 7.09 of the Remediation Regulations address the requirements for public notice regarding the substantive findings of the completed investigation and the opportunity for public review and comment on the technical feasibility of the proposed remedial alternatives mentioned above. The Department will require a copy of the public notice letter and a list of all recipients.

The Department will formally approve the SIR in the form of a *Remedial Decision Letter* once these issues have been addressed and upon Department approval of all final responses to relevant public comments.

Correspondence regarding this matter should be sent to the attention of:

Sarah R. DeStefano, Engineer  
Department of Environmental Management - Office of Waste Management  
235 Promenade Street  
Providence, RI 02908

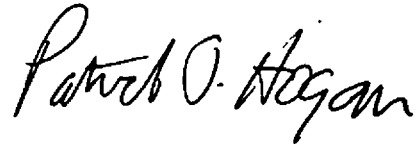
If you have any questions regarding this letter, please contact me by telephone at (401) 222-2797 Extension 7149.

Sincerely,

Authorized By,



Sarah R. DeStefano  
Engineer



Patrick J. Hogan, P.E.  
Principal Engineer

cc: Kelly J. Owens, Supervising Engineer – RIDEM / OWM  
Peter Sullivan, Sr. Environmental Scientist - RIDEM / UST  
Margaret Kilpatrick – GZA Geoenvironmental, Inc.