



RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

September 18, 2006

Mr. Gregory L. Simpson
Project Manager
Textron, Inc.
40 Westminster Street
Providence, RI 02903

RE: Former Gorham Manufacturing Facility – Park Parcel, 333 Adelaide Ave., Providence, RI
Slag Pile Removal Compliance Sampling Comments
Case No. 2005-059 (Associated with Case No. 97-030)

Dear Mr. Simpson:

As you will recall, on August 21, 2006, representatives of the Rhode Island Department of Environmental Management (the Department) met with you and David McCabe of Textron, Inc. (Textron), regarding the above referenced property (the Site). The purpose of the meeting was to discuss a discrepancy between the Department's and Textron's interpretation of the requirements of the March 29, 2006 Superior Court Consent Order for the "Park Parcel" at the Site. The Court Order required the City of Providence to begin removal of a pile of contaminated slag material from the "Park Parcel" within 60 days and complete the work within 180 days.

Although Textron is not a party to the Court Order, on May 24, 2006, Textron's consultant, MACTEC Engineering and Consulting, Inc. (MACTEC), submitted a proposal to remove the slag (Slag Removal Work Plan). The Department responded to the plan in a letter dated June 2, 2006, requiring that 2.f) *"The remedial objective shall be the Department's Method 1 Industrial/Commercial Direct Exposure Criteria (I/CDEC) pursuant to the Remediation Regulations"* and also that 2.g) *"Backfilling or regrading should not be completed until confirmatory grab soil samples indicate that the slag material area has been remediated to a concentration consistent with the I/CDEC."* MACTEC responded via electronic mail (e-mail) on July 12, 2006, indicating that *"Confirmatory soil samples will also be collected this week from the sidewalls and bottom of the excavation area in accordance with RIDEM comments dated June 2, 2006 on our Slag Removal Work Plan"* and *"Following our receipt of the confirmatory soil data, we will compare the results to industrial/commercial standards and UCLs."*

The Department relied on MACTEC's correspondence as confirmation that Textron would comply with the Department's requirement that the remedial objective for the slag-pile area include the removal of all the contaminated material until testing demonstrated compliance with the I/CDEC. However, contrary to MACTEC's correspondence, Textron is now telling the Department that MACTEC will only remove contaminated material that is determined to contain pollutants in excess of the Department's Upper Concentration Limits (UCLs), as opposed to the much more protective I/CDECs.

Although the Court Order handled removal of the slag separately from the investigation and remediation of the remainder of the Park Parcel, the Department has always considered the removal of the slag-pile to be a portion of the overall remedy for the Park Parcel. The remedy for the slag-pile was simply expedited due to the clearly identifiable environmental and public health threat associated with the pile. It is the Department's position that the intent and spirit of the Court Order was to require prompt removal of all contamination associated with the slag-pile, demonstrated through compliance with the I/CDEC. Accordingly, additional removal and appropriate compliance sampling must be performed to achieve this remedial goal. Given that the excavation area is open and the contaminated soils are still exposed and accessible for removal, this is the time to accomplish this task. The Department further notes that since only 15 of the 51 compliance samples actually exceeded the I/CDEC, the amount of material actually requiring removal should, hopefully, be limited. Following satisfactory completion of the targeted slag-pile cleanup, the remainder of the exposed soils at the Park Parcel should be addressed.

As you are also aware, no Toxicity Characteristic Leaching Procedure (TCLP) compliance sampling has been performed in the excavation. Since we now know that the slag material is a characteristically hazardous waste, compliance sampling must include TCLP testing for metals to insure that no hazardous waste remains in the ground. The Department based its decision to require TCLP testing on conversations with staff from the Environmental Protection Agency's (EPA's) Resource Conservation and Recovery Act (RCRA) program and on the EPA guidance document, Management of Remediation Waste Under RCRA. The Department's rationale for requiring TCLP compliance testing is detailed below.

According to Management of Remediation Waste Under RCRA, (second paragraph on page 2):

*"As with any other solid waste, remediation wastes are subject to RCRA Subtitle C only if they are listed or identified hazardous waste. **Environmental media are subject to RCRA Subtitle C only if they contain listed hazardous waste, or exhibit a characteristic of hazardous waste.**"* (Emphasis added.)

Therefore contaminated environmental media (in this case soil remaining in the excavation) that exhibits a characteristic of hazardous waste is subject to RCRA.

Also referencing page nine, Regulations and Policies that Apply to Contaminated Environmental Media Only, Contained-in policy:

*"Contaminated environmental media, of itself, is not hazardous waste and, generally, is not subject to regulation under RCRA. **Contaminated environmental media can become subject to regulation under RCRA if they "contain" hazardous waste.** As discussed more fully below, **EPA generally considers contaminated environmental media to contain hazardous waste: (1) when they exhibit a characteristic of hazardous waste; or, (2) when they are contaminated with concentrations of hazardous constituents from listed hazardous waste that are above health-based levels.***

If contaminated environmental media contain hazardous waste, they are subject to all applicable RCRA requirements until they no longer contain hazardous waste. EPA considers contaminated environmental media to no longer contain hazardous waste: (1) when they no longer exhibit a characteristic of hazardous waste; and (2) when concentrations of hazardous constituents from listed hazardous wastes are below health-based levels. Generally, contaminated environmental media that do not (or no longer) contain hazardous waste are not subject to any RCRA requirements; however, as discussed below, in some circumstances, contaminated environmental media that contained hazardous waste when first generated (i.e., first removed from the land, or area of contamination) remain subject to LDR treatment requirements even after they "no longer contain" hazardous waste.

The determination that any given volume of contaminated media does not contain hazardous waste is called a "contained-in determination." In the case of media that exhibit a characteristic of hazardous waste, the media are considered to "contain" hazardous waste for as long as they exhibit a characteristic. Once the characteristic is eliminated (e.g., through treatment), the media are no longer considered to "contain" hazardous waste. Since this determination can be made through relatively straightforward analytical testing, no formal "contained-in" determination by EPA or an authorized state is required." (Emphasis added.)

The slag material that has been removed from the site is a characteristically hazardous waste based upon its failure of the TCLP test for lead. Therefore, any environmental media (soil) contacting or impacted by the hazardous waste, which as a result now exhibits a characteristic of hazardous waste, is also considered to be hazardous waste and subject to the requirements of RCRA. Consequently, any soil remaining in the slag pile excavation area that exhibits a characteristic of hazardous waste must be removed as if it were hazardous waste.

Based on the above, the slag area compliance sampling must include TCLP testing for metals (at a minimum lead and copper) and excavation must continue until there are no remaining TCLP exceedances. Because the TCPL compliance sampling requirement is based upon Federal regulatory guidance and requirements for defining and managing of hazardous waste, the Department must require the TCLP sampling to verify that no hazardous waste remains in the ground. The only circumstances under which TCLP sampling will not be required is if Textron provides the Department with solid documentation indicating that TCLP sampling is not necessary, and a concurring opinion from EPA that the contaminated media in question is not a hazardous waste.

Textron has argued that the low levels of lead detected in groundwater samples from GZA-5 (a groundwater monitoring well formerly located within the slag pile area, removed during excavation, and tested in 1998, 2004 and 2006) demonstrates that lead is not leaching. However, if Textron is convinced that the slag has not leached, and it believes that it has truly removed all of the slag material, then the remaining soil should not have any TCLP exceedances, or should have very limited exceedances that would not be difficult to remove. If there are TCLP exceedances in the soil, then either there is still residual slag material in the excavation, or the slag material has

historically impacted the soils (possibly via leaching), to a contamination level where the soil is capable of leaching at characteristically hazardous waste concentrations.

The bottom line is that if the soil in the excavation exhibits a characteristic of hazardous waste, then it is still a hazardous waste and, therefore, it must be removed for proper off site disposal.

If you have any questions regarding this letter, please contact me by telephone at (401) 222-2797 x7109 or by e-mail at joseph.martella@dem.ri.gov.

Sincerely,



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