

# TEXTRON

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Mr. Joseph T. Martella II  
Senior Engineer  
Rhode Island Department of Environmental Management  
235 Promenade Street  
Providence, RI 02908-5767

RE: Response to RIDEM Slag Pile Removal Comments  
Former Gorham Manufacturing Facility  
Providence, RI

Dear Mr. Martella:

Thank you for your letter of September 18, 2006 clarifying Rhode Island Department of Environmental Management's (RIDEM) position regarding the removal of the slag pile from Parcel D of the former Gorham Manufacturing Facility. Based on your letter and our prior meeting I trust you would agree that we have a good faith misunderstanding with respect to the goal of the slag removal action and the appropriate analytical methods for confirmatory sampling. In this response to your letter we outline for you the basis of our position on the issues in dispute. Importantly, consistent with the March 29, 2006 Superior Court Consent Order (Consent Order) the slag pile has been removed from the property. We hope that with this letter and our upcoming meeting we can resolve outstanding issues and refocus our collective efforts on restoring the property to beneficial reuse.

## **BACKGROUND**

On March 29, 2006 the City of Providence, RIDEM and YMCA of Greater Providence entered into a Consent Order which required among other things the removal of the so-called "slag pile" from the upland portion of Parcel D. It had been determined previously that concentrations of lead in the slag material exceeded the RIDEM Upper Concentration Limit (UCL) of 10,000 mg/kg. The elevated lead was cause for concern for RIDEM given the planned construction of a high school on the adjacent parcel. Given these concerns the Consent Order contained a provision that required the removal of the slag pile. The order contained other time specific provisions as well that allowed construction of the high school to proceed. Although Textron was neither involved in the court proceedings, nor is a party to the Consent Order, Textron agreed with the City to complete certain actions in the consent order on behalf of the City, including removal of the slag pile.

Although not required in the Consent Order, at the request of RIDEM, our consultant MACTEC, submitted a Slag Removal Work Plan to RIDEM dated May 24, 2006. This work plan stated that

limits of slag removal would be either the bottom of the slag pile or the intersection with the water table whichever comes first. In order to meet the time requirements within the Consent Order, beginning May 26, 2006 Textron proceeded to install an erosion control barrier and clear the trees from the slag pile area in preparation for the slag removal.

In a letter dated June 2, 2006 (after removal actions had begun) RIDEM provided written comments on the May 24, 2006 Slag Removal Work Plan. As elaborated in the following section we did not understand RIDEM comments to change substantially the work plan with respect to the objective of the Removal Action. The objective of the removal action we understood was removal of the slag pile because the slag material exceeded UCLs. The remedial objective for Parcel C/D as stated in the Order is to achieve Industrial/Commercial standards. Consistent with the July 2006 Supplemental Site Investigation Report, Textron intends to achieve this remedial objective with the construction of a soil cap.

Textron commenced slag removal activities on May 26, 2006 and completed removal of the slag material on July 18, 2006. RIDEM visited the site during the slag removal activity and was provided periodic email updates of progress by MACTEC. A total of approximately 1,300 cubic yards of slag was removed from the site at a cost of approximately \$1.0 million dollars. Slag removal activities ceased at the visual limits of the slag and were subsequently verified with confirmatory samples to confirm concentrations were less than the UCL. Soil immediately in contact with the limits of the slag material was also removed and disposed of off-site along with the slag material to ensure compliance with the UCL standard and that no soil in contact with the slag pile remained. This removal action along with fence installation activities effectively addressed any potential risks that the slag pile may have posed.

On August 10, 2006 MACTEC notified RIDEM via email that site restoration activities (backfilling) would begin that week once they had confirmation that all UCL exceedances had been address. RIDEM notified MACTEC on August 15, 2006 that it was RIDEM's expectation that slag removal activities would continue until confirmation samples indicated concentrations less than the Industrial/Commercial Direct Contact Standard (I/CDEC), not the UCL. Upon receiving this information from RIDEM, Textron ceased backfilling activities pending resolution of this issue with RIDEM.

## **SLAG REMOVAL CRITERIA**

The specific language in the Consent Order regarding removal of the slag pile is contained under the **Removal Actions** heading in the second to last paragraph on page 2 and is as follows:

*“The so-called “slag pile” approximately located on the upland portion of Parcels C and/or D, behind Parcel B.”*

This one sentence is the only description of the work in the Consent Order. Given the unique properties of the slag material (large, black, dense, rock-like, non-soil objects), the objective of the Consent Order was clear to Textron; the so-called slag pile consisting of large, black, dense, rock-like, non-soil objects was to be removed. Nowhere in the Consent Order does it mention that soils surrounding the slag material need to be removed along with the slag material until RIDEM I/CDEC Standards are achieved. In fact item 2b of the Consent Order states:

*“to the maximum extent practical, the Removal Actions shall not interfere with or make the performance of any long-term remedy more difficult, costly, or time consuming”.*

The “long term” remedy for the park parcel which will address the I/CDEC is the construction of a cap.

The June 2, 2006 RIDEM work plan comment letter did reference I/CDEC as the remedial objective. Textron interpreted this to be applicable to the overall remedial objective for parcel D, not specific to the slag pile excavation. Support for Textron’s interpretation can be found in the same RIDEM June 2, 2006 letter that states:

*“Since it is the Department’s understanding that the ultimate remedial objective for the “Park Parcel” is to render soils compliant with the I/CDEC, and the soils surrounding the slag material area have not been sufficiently demonstrated to consistently meet the I/CDEC for contaminants of concern, Textron may choose to either...ii) Backfill and re-grade with existing site soils and provide written acknowledgement that the slag material excavation area is still subject to any future remedial requirements to be implemented in the remedy for the entire “Park Parcel” as applicable.”*

As communicated to RIDEM in several previous submittals, the former slag pile was located in an area of the site that was historically filled during operation of the Gorham facility. The fill materials, as described in the July 1999 Site Investigation Summary Report, consists of casting sands, coal, coal ash, slag, asphalt, bricks, pipes, wood, cloth, and glass. Analysis of the fill material generally indicated exceedances of the RIDEM I/C DEC standards for metals and PAHs. To address these exceedances, a soil cap over the entire fill area was proposed in the July 2006 SIR. It is not practical to continue excavating the fill near the former slag pile until there exists no I/C DEC exceedances.

In your September 18, 2006 letter, you state that MACTEC responded to your June 2, 2006 comments on their work plan in an email dated July 12, 2006. This is not accurate. The response from MACTEC came in an email from David Heislein to you dated June 12, 2006. In that email MACTEC states that “Once the confirmatory samples are collected the area between the City’s fence and the Cove will be graded using existing site soils and will be evaluated within the SIR for any further investigation or remediation”. In our opinion this makes clear our intention to address any residual soils exceeding I/CDEC as part of the final park remedy.

The July 12 email from MACTEC to RIDEM you referenced was in response to your letter to Textron dated July 11, 2006 regarding interim backfilling (which the contractor had done to create an access point for equipment) you observed during your July 10<sup>th</sup> site visit. Your letter stated the need for confirmatory sampling prior to backfilling. The July 12<sup>th</sup> response from MACTEC confirmed their intent to collect confirmatory sampling and stated that a comparison to UCLs and I/CDEC will be done. This was not as you have said an acknowledgement or agreement that MACTEC would continue the Removal Action until no I/CDEC exceedances remained. The reference to I/CDEC comparison simply meant that remaining I/CDEC exceedances would be included in consideration of the final site remedy (i.e., addressed with a cap).

In an August 8 email update to RIDEM MACTEC stated that no UCL exceedances remained, but some samples did exceed I/CDEC standards. These areas were anticipated and the Supplemental

SIR, submitted to RIDEM July 31, 2006, includes capping of the slag area. Given the future use of a soil cap to reduce exposure pathways associated with site soils/fill in exceedance of I/C DEC standards, continued excavation of the soils adjacent to the slag pile and the associated costs have little value from a risk reduction perspective.

RIDEM's request to continue excavating until the I/CDEC standards in soil are met is inconsistent with the requirement in the Consent Order that indicates the removal actions shall not make performance of any long-term remedy more difficult, costly or time consuming. Removal of the fill materials present at the limits of the slag excavation is more difficult, costly and time consuming than the previously approved capping remedy to address exceedances in the fill material.

In summary, removal of the slag pile was based on UCL exceedances and a perceived potential short-term risk posed by the elevated lead concentrations detected in the slag material. These issues have been addressed by the removal action. As stated in the Consent Order, the long-term remedial objective for Parcel D, including the location of the former slag pile is the I/C DEC standard. This long-term remedial objective will be met with the installation of a soil cap. Removal of fill material adjacent to the slag pile below the I/C DEC is not practical nor is it consistent with the remedial objectives identified in the Consent Order, the current Supplemental SI recommendations and the previously approved 2001 RAWP.

## **ANALYTICAL TESTING**

RIDEM's September 18, 2006 letter requests that Toxicity Characteristic Leaching Procedure (TCLP) sampling be performed at the limits of the slag pile removal (i.e. fill material) in addition to the previously collected samples for total metals. RIDEM's rationale for requiring this analysis is based on elevated TCLP results of the slag material that were collected for waste characterization purposes.

The TCLP test was designed by EPA in the mid-1980's to simulate leaching conditions within the highly acidic environments in a typical municipal un-lined solid waste landfill for groundwater protection purposes. As such, the test involves placing the material in question in a container with the acidic leaching solution (acetic acid) for a predetermined amount of time, followed analysis of the extract. TCLP is used by EPA to determine if a waste material is considered hazardous.

As communicated to RIDEM on July 12 and August 12, 2006, a monitoring well (GZA-5) was previously located in the center of the former slag pile. Groundwater analytical results from this well dating back to 1998 did not exhibit any elevated lead concentrations that would indicate the slag material was a source of leaching contaminants into the environment. The discrepancy between the elevated TCLP results of the slag material itself and the lack of evidence of lead in the groundwater under the slag pile can be attributed to the fact that actual leaching conditions that the slag pile was subjected to (i.e. rain water) are very different (less acidic) than the solution used in the TCLP test.

RIDEM's September 18, 2006 letter further requests that excavation of the former slag area must continue until there are no remaining TCLP exceedances. Given the previously mentioned presence of fill material and the known residual concentrations of that material, RIDEM is essentially requiring that fill material on the site be excavated even though said impacts are not at all associated with the

slag pile. Again, this is contradictory to the language in the Consent Order and inconsistent with the proposed capping remedy.

Regarding the TCLP testing requirement you reference in the EPA guidance document (Management of Remediation Waste under RCRA), Textron is not aware of that being applied in circumstances such as this case. We understand the reference in the EPA policy to be applicable to listed hazardous waste and to describe the circumstances where soil that is in contact with such listed waste may or may not be considered hazardous waste. We are not aware of any requirement that soil, in proximity of visually identifiable material such as slag that is removed (if such removed material is considered a characteristic hazardous waste), must then also be sampled to see if it, too, would be a characteristic hazardous waste if excavated, particularly when the soil which had been in contact with the slag has been removed.

## CONCLUSIONS

For the reasons stated above, Textron respectfully disagrees with the requirements identified in RIDEM's September 18, 2006 letter. It is Textron's belief that it has made more than a good faith effort to comply with the spirit of the Consent Order regarding the slag removal. We believe it is logical, prudent and protective for remaining soils issues to be addressed as part of the overall Park Parcel remedy.

The aforementioned notwithstanding it is our desire to resolve our differing views in a cooperative and amicable manner. To this end we look forward to discussing these issues with RIDEM at our October 4<sup>th</sup> meeting.

Sincerely,

TEXTRON Inc.



Gregory L. Simpson  
Project Manager