PROGRAM LETTER

May 18, 2011

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

RE:

Former Gorham Manufacturing Facility – Park Parcel (a.k.a. Parcel D)

333 Adelaide Ave., Providence, RI

Case No. 2005-059 (Associated with Case No. 97-030)

Dear Mr. Simpson:

On February 24, 2004, 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). 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 Rules 7.07 and 7.09 of the Remediation Regulations.

The Department has the following documents on file pertaining to the environmental conditions at the above-referenced property (the Site):

- A Report on the Distribution of Organic Components and Trace Metals in Mashapaug Pond Sediments, prepared by James G. Quinn, James S. Latimer and John T. Ellis of the Graduate School of Oceanography at the University of Rhode Island, and dated April 1986;
- 2. Correspondence entitled, "Gorham Manufacturing Co. Facility, Phase I Report," prepared by Buonicore-Cashman Associates, and dated July 13, 1987;
- 3. Environmental Assessment, Adelaide Avenue Plant, Providence, Rhode Island, prepared by Goldberg-Zoino & Associates, Inc., and dated April 1988;
- 4. <u>Soil and Ground Water Contamination Site Assessment of the Gorham Manufacturing Facility, Providence, RI</u>, prepared by Hunter, Inc., and dated May 25, 1989;
- 5. <u>Site Investigation Report, Gorham/Textron Site, Providence, Rhode Island, prepared by Camp Dresser & McKee, Inc., and dated June 1993;</u>

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- 6. Correspondence entitled, "Short-Term Response Action," and prepared by ABB Environmental Services, Inc., and dated July 11, 1997, (This correspondence also included laboratory analytical data provided under separate cover, entitled, "Analytical Laboratory Report for Short-Term Response Action Former Gorham Manufacturing Facility");
- 7. <u>Site Investigation Summary Report and Risk Assessment, Former Gorham Manufacturing Property, 333 Adelaide Avenue, Providence, Rhode Island, prepared by Harding Lawson Associates (HLA), and dated July 29, 1999;</u>
- 8. Responses to RIDEM Comments on Site Investigation Report and Risk Assessment, prepared by HLA, and received June 6, 2000;
- Revised Development Plan and Application of Remedial Alternatives, prepared by HLA, and dated March 9,2001;
- 10. Notification to Abutters of Completion of Site Investigation Activities, dated October 30, 2000, and received May 1, 2001;
- 11. Remedial Action Work Plan, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI, prepared by Harding ESE (Harding), and dated April 25, 2001;
- 12. Letter from Harding to the Department, Re: Response to RIDEM Comments on the Remedial Action Work Plan, Former Gorham Manufacturing Property, 333 Adelaide Avenue, Providence, Rhode Island, dated July 24, 2001;
- 13. <u>Data Review for Mashapaug Pond, Providence, Rhode Island,</u> prepared by the U.S. Environmental Protection Agency, and dated August 2001;
- 14. Letter from Harding to the Department, Re: Response to RIDEM Comments Dated September 4, 2001, Remedial Action Work Plan, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island, dated September 25, 2001;
- 15. Letter from IT Corporation (IT) to the Department, Re: Remedial Action Work Plan, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI, dated November 28, 2001;
- 16. Memorandum from Harding to the Department (delivered via e-mail), Re: *TPH soil issue at Gorham*, dated November 26, 2001, (revised December 18, 2001, at the request of the Department);
- 17. Letter from Textron to the Department, Re: Response to RIDEM Comments, Remedial Action Work Plan, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI, dated January 10, 2002;

- 18. Letter from IT to the Department, Re: Remedial Action Work Plan Revisions, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI, dated January 28, 2002;
- 19. Letter from IT to the Department, Re: Remedial Action Work Plan Revisions, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI, dated February 12, 2002;
- Mashapaug Pond Data Report and Analysis, prepared by Environmental Science Services, Inc., and dated February 15, 2002;
- 21. Revised Site Map for Remedial Action Work Plan, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI, prepared by IT, and submitted March 5, 2002;
- 22. Supplemental Site Investigation Work Plan to Support Human Health and Ecological Risk Assessment Activities, Park Parcel/Mashapaug Cove, Former Gorham Manufacturing Property, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC Engineering and Consulting, Inc. (MACTEC), dated November 2005, and received November 17, 2005;
- 23. Quality Assurance Project Plan, Short-Term Limited Site Investigation, Former Gorham Property and Mashapaug Cove, Providence, Rhode Island, prepared by Fuss & O'Neill (F&O), and dated December 2005;
- 24. <u>Supplemental Site Investigation</u>, <u>Gorham Manufacturing Property & Mashapaug Cove</u>, prepared by F&O, and dated April 2006;
- 25. Slag Removal Work Plan, Former Gorham Manufacturing Facility, Plat 51 Lots 323, 324, and 326, 333 Adelaide Avenue, Providence, Rhode Island, 97-030 (Including Case No. 2005-029 and Case No. 2005-059), prepared by MACTEC, and dated May 24, 2006;
- 26. Supplemental Site Investigation Work Plan, Park Parcel/Mashapug Cove, Former Gorham Manufacturing Site, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated June 2006;
- 27. Supplemental Site Investigation Report, Former Gorham Manufacturing Site, 333 Adelaide Avenue, Providence, Rhode Island (SSIR), prepared by MACTEC, dated July 31, 2006, and received August 9, 2006;
- 28. Letter from MACTEC to Robert Dorr, Re: Historical Records, Former Gorham Site, 333 Adelaide Ave., Providence, RI, dated September 12, 2006;
- 29. Letter from the City of Providence to the Department, Re: Reply to Slag Pile Removal Letter Dated 21 September 2006, Former Gorham Manufacturing Facility Park Parcel, 333 Adelaide Ave., Providence, Rhode Island, dated September 29, 2006;

- 30. <u>Slag Removal Action Summary Report, Former Gorham Manufacturing Site, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated September 29, 2006;</u>
- 31. <u>Submittal of Technical Report, Geophysical Survey, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI, prepared by MACTEC, and dated October 2, 2006;</u>
- 32. Letter from Textron to the Department, Re: Response to RIDEM Slag Pile Removal Comments, Former Gorham Manufacturing Facility, Providence, RI, dated October 3, 2006;
- 33. Letter from Robert Dorr to EA Engineering Science and Technology, Inc. (EA), Re: *Alternative Route to Park Parcel*, dated October 6, 2006;
- 34. Park Parcel Consent Order Compliance Summary of Soil & Debris Pile Removal, Former Gorham Manufacturing Facility, Plat 51 Lots 323, 324, and 326, 333 Adelaide Avenue, Providence, Rhode Island, Case No. 97-030 (Including Case No. 2005-029 and 2005-059), prepared by EA, and dated October 19, 2006;
- 35. Former Slag Pile Area Supplemental Removal Action Work Plan, Former Gorham Manufacturing Facility, Plat 51 Lots 323, 324, and 326, 333 Adelaide Avenue, Providence, Rhode Island, Case No. 97-030 (Including Case No. 2005-029 and 2005-059), prepared by MACTEC, and dated October 26, 2006;
- 36. Letter from Robert Dorr to Mactec Re: MACTEC Files Textron UST Closure Reports Jan '81 thru Jan '99, dated October 28, 2006;
- 37. Electronic mail (e-mail) from Textron to the Department, Subject: Former Gorham Manufacturing Site Slag Information, dated November 2, 2006, including attachments a) Letter from Kenneth Kastner (Hogan & Hartson) to Jamieson Schiff (Textron), and b) Enclosures to Letter from Kenneth Kastner to Jamieson Schiff, both dated November 1, 2006;
- 38. E-mail from Textron to the Department, Subject: Response to RIDEM November 6, 2006 Letter, dated November 7, 2006;
- 39. Letter from Robert Dorr to Textron Re: Community Response to Textron's Assertion that the Gorham Manufacturing Smelter was a former "Primary Lead Processing Facility," dated November 14, 2006;
- 40. Remedial Project Information Sheet July 2006, Supplemental Investigation of Parcels C & D and Mashapaug Cove, Former Gorham Manufacturing Facility, prepared by Textron, and Distributed at the December 4, 2006 Gorham/Textron Site Public Meeting;
- 41. Letter from Sylvia Aldredge to the Department, Re: Textron Remediation Responsibilities (former) Gorham Textron Dumps Site, 333 Adelaide Avenue, Parcel D, the So-Called Park Parcel, dated December 7, 2006;

- 42. Former Slag Pile Area Supplemental Removal Action Work Plan, Former Gorham Manufacturing Facility, Plat 51 Lots 323, 324, and 326, 333 Adelaide Avenue, Providence, Rhode Island, Case No. 97-030 (Including Case No. 2005-029 and 2005-059), prepared by MACTEC, and dated January 16, 2007;
- 43. Response to Comments, Supplemental Site Investigation Report, Former Gorham Manufacturing Site, 333 Adelaide Avenue, Providence, Rhode Island, July 2006, prepared by MACTEC, and dated February 1, 2007;
- 44. Response to Comments, Former Slag Pile Area Supplemental Removal Action Work Plan, Former Gorham Manufacturing Site, 333 Adelaide Avenue, Providence, Rhode Island, January 16, 2007, prepared by MACTEC, and dated February 26, 2007;
- 45. Letter from Robert Dorr to Textron Re: Slag Pile Removal Action Work Plan Community Comments, dated April 22, 2007;
- 46. Community Information Session Newsletter, Former Gorham Manufacturing Site, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated June 25, 2007;
- 47. Supplemental Site Investigation Report Addendum June 2007, Former Gorham Manufacturing Site, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated June 28, 2007;
- 48. Letter from the Gorham area Community to Mactec, Re: Park Parcel Accelerated Phase 1 Remediation, Supplemental Site Investigation Report Addendum, Community Concerns and Comments, dated July 11, 2007;
- 49. Letter from the Gorham area Community to Textron, Re: *Community Stakeholders*, dated July 23, 2007;
- 50. Letter from Textron to Robert Dorr Re: Former Gorham Manufacturing Site, Providence, RI, dated July 26, 2007;
- 51. Letter from the Gorham area Community to the Department, Re: Textron's Park Parcel Remediation Plan, Community Stake holder's Comments, First Opportunity for Public Response, dated September 5, 2007;
- 52. Gorham Public Questions & Answers, Park Parcel Public Meeting, Former Gorham Manufacturing Site, Providence, Rhode Island, August 23, 2007, prepared by MACTEC, and dated October 22, 2007;
- 53. <u>December 2007 Investigation Activities, Building N Underground Storage Tanks, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated January 8, 2008;</u>

- 54. Letter from Textron to the Department, Re: Phase I Park Parcel Closure, Former Gorham Manufacturing Site, prepared by Textron, and dated February 20, 2008;
- 55. Letter from Textron to the Department, Re: Park Parcel Remediation, Former Gorham Site, prepared by Textron, and dated March 12, 2008;
- 56. <u>Building N Underground Storage Tanks Closure Report, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated April 3, 2008;</u>
- 57. Letter from the Gorham area Community to RIDEM, Re: Park Parcel Remediation Incomplete Investigation RAWP, dated April 4, 2008;
- 58. <u>Mashapaug Cove Groundwater Investigation</u>, Former Gorham Manufacturing Facility, 333 <u>Adelaide Avenue</u>, <u>Providence</u>, <u>Rhode Island</u>, prepared by MACTEC, and dated December 12, 2008;
- 59. Groundwater Investigation Work Plan, Former Gorham Manufacturing Facility, 333

 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated October 14, 2009;
- 60. <u>Data Summary Report, Mashapaug Cove Groundwater Investigation, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated April 7, 2010;</u>
- 61. Letter from Environmental Justice League of Rhode Island (EJLRI) to the Department, dated May 19, 2010; and
- 62. Park Parcel Phase I, Recommended Remedial Action, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island, prepared by MACTEC, and dated May 17, 2011.

The Department regards the above-mentioned documents as collectively constituting the necessary requirements of the Site Investigation Report (SIR) pursuant to Rule 7.08 of the <u>Remediation Regulations</u>. The items listed above will be referred to as the **SIR** in this and all future correspondences regarding this Site.

The Department requires that you initiate public notice pursuant to Rules 7.07.B and 7.09 of the Remediation Regulations to all abutting property owners, tenants, the City of Providence and all utilities with easements on the property on the completed package with the preferred remedial alternative. The preferred remedial alternative as proposed involves a three phased approach to the remediation of the Park Parcel and Mashapaug Cove. Phase I, which is the subject of this Program Letter, includes the limited removal of surface soil with post-removal confirmation sampling at three locations in the western shoreline area, additional soil removal at two locations within the former slag pile area, and encapsulation of any soil exceeding a residential direct exposure criteria within the Park Parcel Phase I area, in order to contain historic fill

material, prevent direct exposure, limit infiltration in the former slag pile area, and restrict wind erosion or surface run-off. Upon completion of the remedial activities, an Environmental Land Usage Restriction (ELUR) will be recorded on the deed for the Park Parcel. The ELUR shall 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. As part of the ELUR, it shall be the responsibility of the property owner to provide for annual inspections of the property by a qualified environmental professional, and to submit a report, subject to review by the Department, which shall certify that the property is in compliance with the Department approved remedy and the terms of the ELUR. The Department will also perform random audits of the remedy. Textron shall maintain and monitor the completed engineered cap in the Phase I area until the responsibility is taken over by the City of Providence or Providence Redevelopment Authority (PRA) at the time the ELUR is recorded.

The proposed Phase I soil cap consists of three distinct components including a fill area cap, a wetland buffer cap, and a former slag area cap. The fill area extends along the top of the western slope and extends along the shoreline of Mashapaug Pond's inner cove. The fill area will be capped with a minimum of two feet of clean soil consisting of 18 inches of cover soil covered by six inches of top soil, then seeded or stabilized with erosion control matting. The portions of the fill area cap along the area of the Gorham site known as Parcel B (a.k.a. Alvarez High School) and Parcel C (a.k.a. the undeveloped lot to the west of Alvarez High School, formerly proposed for a YMCA), will match the existing grade at the High School boundary and the proposed future grade at the Parcel C boundary. The wetland buffer area consists of the area within the 50 foot wetland boundary (delineated approximately five to ten feet upland from the Mashapaug cove shoreline). An effort will be made to save as many large trees within the buffer zone as possible, however clearing and grubbing of the wetland buffer zone scrub material will be conducted to support the installation of the soil cap. One foot of soil at the toe of the wetland buffer zone will be removed to allow the soil cap to key into the existing grade above the wetland boundary. Twelve inches of clean soil will then be spread throughout the buffer zone to provide the soil cap. The finished surface for the wetland buffer cap will be stabilized with erosion control matting, and Department approved wetland vegetation will be planted as part of the wetland buffer area restoration. All of the Phase I work will be conducted outside of the wetland boundary, with all of the remediation work within the freshwater wetlands to be conducted in the future as part of the Phase II cove sediment remediation. The cap design for the former slag area includes a geotextile membrane to limit infiltration and restrict contact with the underlying soils. The existing soil will be graded and capped with six inches of clean sand, followed by a 40-mil geotextile membrane, a drainage composite layer, twelve inches of clean cover soil, and an additional six inches of clean top soil, which will be seeded or stabilized with erosion control matting). The existing chain link fence will be relocated along the boundary between Parcels C and D, and temporary fencing will remain in place to restrict access to the steep slope down to the shoreline and until the cove sediments (Phase II) and remaining Parcel D surface soils (Phase III) have been remediated. All existing groundwater monitoring wells within the Phase I cap will be secured during construction activities and maintained for future groundwater monitoring purposes. Former groundwater monitoring well GZA-5 will be restored to its location within the former slag pile area, and one additional monitoring well will be installed downgradient of the former slag pile area for future groundwater monitoring purposes. The implementation and completion of the Phase I work shall in no way interfere with the eventual implementation and completion of Phase II, Phase III, or an eventual groundwater remedy for the overall Gorham site. Upon Textron's completion of remedial activities on the Park Parcel, responsibility for maintaining the remedy and any future development of the Park Parcel shall be assumed by the owner of the property, currently the City of Providence through the PRA.

Please be reminded that Textron must meet *all* other Federal, State and local requirements prior to commencing any site activities.

Rules 7.07 and 7.09 of the <u>Remediation Regulations</u> outline 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. Please submit a draft notification to the Department via email for review and approval *prior* to distribution. The Department will require a copy of the public notice letter and a list of all recipients, including abutters, tenants, the City of Providence, and all utilities with easements.

The Department will formally approve the SIR in the form of a *Remedial Decision Letter* once the Public Notice issues have been addressed and upon Department approval of all final responses to relevant public comments. At that time, the Site will enter the Remediation phase, and Textron will be required to submit a Remedial Action Work Plan (RAWP) and a draft ELUR and SMP for Department review and approval in accordance with Sections 8.0 and 9.0 of the <u>Remediation Regulations</u>. The RAWP shall describe all technical details associated with the implementation of the approved remedy.

All correspondence regarding this Site should be sent to the attention of:

Joseph T. Martella II – Senior Engineer RIDEM / 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 7109 or by e-mail at joseph.martella@dem.ri.gov.

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cc:

Joseph T. Martella II Senior Engineer Rhode Island DEM

Office of Waste Management

Authorized by,

Kelly J. Owens

Supervising Engineer Rhode Island DEM

Office of Waste Management

Terrence D. Gray, P.E., Assistant Director, RIDEM/AW&C

Leo Hellested, P.E., Chief, RIDEM/OWM

Susan Forcier, Esq., RIDEM/OLS

Elizabeth Scott, RIDEM/OWR
Charles Horbert, RIDEM/OWR/Wetlands Permitting
Martin Wencek, RIDEM/OWR/Wetlands Permitting
Robert Vanderslice, PhD, RIDOH
Tammie A. McRae, ATSDR
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