TEXTRON

Former Gorham Manufacturing Facility Site Proposed Groundwater Remediation System Providence, Rhode Island

August 2012

This Project Update has been prepared to notify and inform the community about a proposed groundwater cleanup action for the Former Gorham Manufacturing Facility Site. Implementing this cleanup action marks another important step in Textron's ongoing efforts to ensure that environmental conditions at the former Gorham Manufacturing Site do not pose a risk to human health or the environment.

Background

Beginning in 1890, the Gorham Manufacturing Company operated a silver products company on a 37acre parcel of land on Adelaide Avenue next to Mashapaug Pond in Providence, RI. The company produced fine Gorham silver tea and flatware, among other products. Textron, Inc. (Textron) purchased the Gorham Manufacturing Company in 1967, and continued operations at the site until 1985, at which time the business was sold and a private developer acquired the property. The City of Providence eventually obtained ownership of the property in 1990 through a tax foreclosure.

Several environmental studies have been completed at the Site, which have identified groundwater, soil, and sediment impacts associated with historic Gorham operations at select locations on the property. Groundwater impacts are primarily associated with volatile organic compounds (VOCs) that were used in metal cleaning processes; specific examples of the VOCs in groundwater on the Gorham site include trichloroethylene (TCE) and tetrachloroethylene (PCE). Soil impacts are primarily associated with metals, and sediment within Mashapaug Cove contains both VOCs and metals.

Textron has been working in conjunction with the Rhode Island Department of Environmental Management (RIDEM) to study and cleanup (remediate) these impacts. Some groundwater and soil remediation activities have already occurred on portions of the site and have improved conditions to allow for redevelopment to occur. Additional remediation measures for soil and sediment will occur in the future, with soil work on the portion of the property that borders Mashapaug Pond planned to begin later this summer. Additional background information can be obtained by contacting the individuals listed at the end of this Project Update or by visiting the RIDEM project website also listed at the end of this Update.

Proposed Groundwater System

The proposed groundwater system that is the focus of this Project Update will accomplish two main objectives: 1) The system will remove and treat groundwater contamination; and 2) The system will *contain* groundwater from moving off the Site.

Details of the Proposed Groundwater System

The first step for installing this system will be to drill two 10-inch diameter borings into the ground to a depth of approximately 65 feet below ground surface, into which extraction wells will be constructed. One extraction well has already been installed; it is located behind the Parcel A retail building. Water was extracted from this well last year to obtain information on pumping conditions, and this information was used to help in the design of the groundwater remediation system. The two other extraction wells will be installed in the parking area south of the Parcel A retail building at the locations shown in red on Figure 1.

The next step will be to dig a trench, approximately 950 feet long and 4 feet deep, which will connect the extraction wells with the treatment system. Piping (to move the extracted water from the wells to the treatment system) and other electrical equipment will be placed in the trench (see Figure 1). The trench will be excavated and backfilled as pipes are installed. Portions of the retail property parking lot where the trench is open during construction activities will be barricaded during this time as a safety measure for pedestrians accessing the parking lot. Disturbed areas of the parking lot will be restored with asphalt following installation of all necessary system components.

The groundwater treatment system will be located in a cargo container that will be located on a concrete pad behind the Parcel A Retail building. Three traffic-control bollards will be installed to protect the

Figure 1



treatment system container and equipment from vehicles traveling behind the retail building.

The system will include the following main treatment components: a first step filtering unit, an air stripper (to remove VOCs from the groundwater), an air treatment vessel (to remove VOCs from the air flowing out of the air stripper before it is discharged to ambient air), and a final filtering unit. The treatment system will be equipped with "fail-safe" controls that will automatically shut the system down in the unlikely event of system malfunction. The treatment system will also be equipped with remote monitoring technology that will allow Textron's environmental consultant to monitor performance and make adjustments to the system in a timely manner.

Once treated, water will be discharged to a storm drain that connects to the large basin behind the Parcel A retail building. Consistent with a RIDEM permit, Textron will sample treated water on a {quarterly} basis to confirm clean water is being discharged. Note – more frequent testing will be conducted during the initial period of time when the system first starts treating water to ensure it is functioning properly. All testing results will be made available to the public on the RIDEM website for the former Gorham project.

Schedule

This Update has been prepared to notify the community of the proposed groundwater remediation system for the Former Gorham Manufacturing Facility Site. Questions from the public on this proposed approach will be accepted during a Public Comment Period (see below for more information). Once the public comment period has concluded, Textron will prepare a document called the *Remedial Action Work Plan*, which will provide the detailed design and drawings for the groundwater system. RIDEM will then review and approve this plan. Once the plan is approved, construction activities can begin.

Construction activities may begin as early as October 2012 and are expected to take approximately 4-6 weeks to be completed.

Community Communications

Communicating with the community is important to Textron. Since December 2006, our environmental staff has regularly joined RIDEM and community members at various meetings regarding the former Gorham Site. At RI DEM's request, Textron has prepared this Project Update to inform the public about the proposed groundwater remediation approach and to provide information about how individuals can ask questions about the proposed activities.

Textron and RIDEM are accepting written public questions/comments about the proposed groundwater system for 30 days, from **August 13, 2012 to September 12, 2012.** The proposed groundwater system is described in this Project Update. Questions/comments can be sent to the individuals listed below by regular mail or by email.

For Additional Information or to Submit Comments

Textron wants to keep you informed about our environmental project at the former Gorham Manufacturing Company Site. For questions or further information, please contact:

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The Rhode Island Department of Environmental Management has a repository of project documents available on their website. That site can be found at the following link: http://www.dem.ri.gov/programs/benviron/waste/gorham.htm#phs