Former Gorham Manufacturing Site

Phase II, Phase III and Parcel C Activities

Gregory Simpson, Textron
David Heislein, AMEC Foster Wheeler

February 5, 2015
Agenda

• Purpose of Meeting

• Brief Site History and Summary of Completed Remediation Work

• Summary of Investigation Activities

• Proposed Remediation Plan Details

• Schedule

• Proposed City of Providence Development

• Instructions For Submittal of Comments

• Questions
Purpose of Tonight’s Meeting

- Review site history and completed remediation activities
- Review Cove (Phase II) and Upland (Parcel C and Phase III) investigation activities
- Provide clear understanding of planned remediation activities and associated schedule
- Provide instructions to submit comments on planned remediation activities
• Constructed late 1890’s; Closed 1985
• Silver flatware, Bronze statuary
• Over 1,000,000 SF of floor space
• Peak employment – 2,000+
1920 Facility Index Drawing of the Former Gorham Facility
Completed Remediation Activities

- **Groundwater Remediation Activities**
  - Groundwater Extraction & Treatment (2013 – present)

- **Upland Remediation Activities**
  - Parcel A – 2001 (Cap – soil, asphalt and building) - Retail
  - Parcel B – 2006 (Cap - soil, asphalt and building) – High school
  - Phase I, Parcel C-1 – (Slag Removal – 2006, Cap 2012) - Undeveloped
Completed Remediation Activities – Groundwater Injection Events

• Parcel A

• Two Injection Events – 2002, 2004

• Source Area was targeted and treated with an oxidant

• Chlorinated solvents – Tetrachloroethylene (PCE) and Trichloroethylene (TCE)

• Reduced impacts by over 50%
Completed Remediation Activities – Groundwater Extraction and Treatment System

- Parcel A
- System installed in 2013
- Control groundwater flow
- 3 Extraction Wells and On-Site Treatment Compound
- To date, almost 6,000,000 gallons treated and 120lbs of contaminants removed
- Routine Compliance sampling and groundwater monitoring
- Long-term operation is anticipated
Completed Remediation Activities – Parcel A Soil Remediation

- Work completed in 2001 to allow for retail development
- 18,600 tons of petroleum impacted soil treated
- Treated material reused on site
- Capping accomplished with asphalt, soil and buildings
- Industrial/Commercial criteria
- Ongoing monitoring of cap integrity
- Sub-slab mitigation systems
Completed Remediation Activities – Parcel B Soil Remediation (City of Providence)

• Parcel B

• Work completed by City of Providence in 2007

• Soil, asphalt and building caps

• Residential/unrestricted criteria

• Sub-slab vapor extraction system

• Ongoing monitoring
Completed Remediation Activities – Parcel C-1 - Phase I - Soil Remediation

• Parcel C-1 (Park Parcel)
• Former slag pile addressed in 2006
• Work completed in 2012
• Soil cap – location specific
• Fill areas addressed
• Residential criteria
• Ongoing monitoring
Completed Remediation Activities – Parcel C-1 - Phase I - Soil Remediation

Slag Excavation

Slag material ready for disposal
Completed Remediation Activities – Parcel C-1 - Phase I - Soil Remediation
Summary of Parcel C and Phase III Soil Investigations

- **Historical Use of Parcel C and Phase III Areas**
  - Passive, Non-manufacturing, Storage, "Casino"
  - Fill zones

- **Many phases of investigations**

- **Soil sampling results**
  - Metals, PAHs, Dioxin
  - Fill Material
Summary of Parcel C and Phase III Soil Investigations

- Phase III Area
- Multiple soil sampling events
- Exceedances of Residential Direct Contact Standards
Summary of Parcel C and Phase III Soil Investigations

- Parcel C Area
- Multiple soil sampling events
- Exceedances of Residential Direct Contact Standards
- Fill Material
- Soil/Debris Pile
Summary of Sediment Investigation Activities

- Multiple Sediment Sampling Events
- Bathometric Survey
- Magnetometer Survey
- Analysis performed for site-related compounds
- Physical property analysis on sediments
- Difference between Inner and Outer Cove
- Background impacts in Pond – Urban runoff
- Risk Assessment
- Surface water Sampling
Summary of Sediment Investigation Activities

Photos of Mashapuag Cove Sediment Sampling Activities
Planned Remediation Activities
Planned Phase II Remediation Activities
Tentative Schedule of Remediation Activities

- February 20, 2015 – Public Comments due to RIDEM
- March 2015 – Draft Remedial Action Work Plan to RIDEM
- March 2015 – Submit federal permit application
- May 2015 – Final Remedial Action Work Plan/Permit Approvals
- June 2015 – Construction contractor selected
- July 2015 – Start construction
- November 2015 – Complete construction
- January 2016 – Construction Completion Reports
Proposed City of Providence Development
Proposed City of Providence Development

Figure 2
Site Plan
Parcel C
Adelaide Avenue
Providence, Rhode Island
Instructions for Submitting Comments

• **Comments relative to the technical feasibility of the proposed Phase II, Phase III and Parcel C Remedy**

• **Written:**
  Joseph T. Martella II, Senior Engineer
  RI Department of Environmental Management
  Office of Waste Management
  235 Promenade Street
  Providence, RI 02908-5767

• **Electronic:**
  joseph.martella@dem.ri.gov

• Comments need to be received by February 20, 2015 before 4:30PM to be valid
Questions