Tidewater Site Remedy Presentation
October 29, 2020
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David Rusczyk, GZA GeoEnvironmental
CURRENT CONDITIONS - TIDEWATER SITE

Former Wharf
Central Portion of Site

Granite Stone Block Wall
and Steel Sheeting

Granite Stone Block Walls
Northern Portion of Site

Manmade Earthen Riverbank
Southern Portion of the Site

Chain Link Fencing
Northwest Portion of the Site

Chain Link Fencing
Southwest Portion of the Site
SITE HISTORY

The Tidewater Site has a long History of industrial use dating back to at least 1881. Site operations, including the historic Manufactured Gas Plant (MGP), provided essential electric and gas service to the community for over 130 years. Large areas of the site are currently vacant. Current operations include a natural gas regulation facility, electrical transmission facilities and an electrical switch and substation facility.

1881: The Pawtucket Gas Company constructs the Tidewater Manufactured Gas Plant (MGP) to produce manufactured gas from coal and oil using industrial processes.

1908: Blackstone Valley Gas and Electric Company (BVG&E) purchases the Pawtucket Gas Company.

1938: The Great Hurricane of 1938 causes significant damage to the MGP and power plant.

1961: Valley Gas Company (VGC) acquires the MGP from BVG&E.

1962: The transmission towers are first evident in historical records for the power plant.

1975: The power plant is officially decommissioned.

1986: Site investigations begin.

1968: Majority of MGP operations ceases, though oil gas is produced on an as-needed basis to supplement available natural gas supply until approximately 1968.

1995: Rhode Island Department of Environmental Management (RIDEM) issues a Letter of Responsibility to BVEC and VGC.

2000: National Grid acquires the Rhode Island electric utility and the gas portion of the Tidewater Site.

2006: National Grid acquires the Rhode Island gas utility and the gas portion of the Tidewater Site.

2009-2016: Facility upgrades include:
- Natural Gas Regulating Station upgrades
- Gasholders Nos. 7 and 8 decommissioned and demolished
- Pawtucket No. 1 Substation and Switching Station modifications
- Former gas buildings demolished
- Repair of the south washout area

2018: Remedial Action Work Plan

2019: RAMP Addendum submitted to RIDEM

2020: RIDEM issued Order of Approval

FOR MORE INFORMATION, PLEASE VISIT WWW.TIDEWATERSITE.COM

Period of MGP Operations

Period of Active Power Plant Operations

1881-1908: The Pawtucket Gas Company constructs the Tidewater Manufactured Gas Plant (MGP) to produce manufactured gas from coal and oil using industrial processes.

1908-1938: Blackstone Valley Gas and Electric Company (BVG&E) purchases the Pawtucket Gas Company. The Great Hurricane of 1938 causes significant damage to the MGP and power plant.

1938-1961: Valley Gas Company (VGC) acquires the MGP from BVG&E. The MGP is officially decommissioned in 1961.


2000-present: National Grid acquires the Rhode Island gas utility and the gas portion of the Tidewater Site. Facility upgrades include natural gas regulating station upgrades, gasholders Nos. 7 and 8 decommissioned and demolished, pawtucket no. 1 substation and switching station modifications, former gas buildings demolished, and repair of the south washout area.
REMEDIAL LAYOUT PLAN

The remedy for the Site consists of targeted removal of certain impacts, installation of a subsurface barrier wall designed to protect the Seekonk River and and the use of engineered caps to isolate impacts. This remedy was selected based on its ability to address Site impacts while minimizing community disturbance during implementation.
BARRIER WALL DETAILS

A subsurface barrier wall, installed along the Seekonk River, will prevent the migration of impacted groundwater and non-aqueous phase liquids (NAPLs)

BARRIER/BULKHEAD WALL

WHAT TO EXPECT
Examples from other projects

Construction of Barrier Wall - Sheet Pile Installation

BARRIER WALL WITH RIP RAP RETAINING SLOPE

WHAT TO EXPECT
Examples from other projects

Shoreline Improvement

FOR MORE INFORMATION, PLEASE VISIT WWW.TIDEWATERSITE.COM
Impermeable Cap

- 18" Clean Fill
- 6" Topsoil
- Existing Soil
- Liner System

Permeable Cap

- 18" Clean Fill
- 6" Topsoil
- Existing Soil
- Geotextile Warning Barrier

Rip Rap Cap

- 18" Rip Rap
- 6" Crushed Stone
- Existing Soil
- Reactive Core Mat and Geotextile Warning Barrier

Fill materials vary depending on location.

For more information, please visit www.tidewatersite.com
The Tidewater Site remedy includes excavation and disposal of targeted impacted areas, as well as the installation of an engineered cap to prevent direct contact with Site materials and protect groundwater. In order to install the engineered cap and minimize the amount of materials needed to be transported offsite, National Grid will re-grade the Tidewater Site. Clean fill materials will be transported onto the Site to construct the cap.

### ROUTES

**From Site to I-95N:**
- Taft Street to Roosevelt Avenue Extension
- Roosevelt Avenue Extension to Main Street
- Main Street to I-95N On-Ramp

**From Site to I-95S:**
- Taft Street to Jenks Way
- Jenks Way to Pleasant Street
- Pleasant Street to Grace Street
- Grace Street to George Street
- George Street to Cedar Street
- Cedar Street to I-95S On-Ramp

**From I-95N to Site**
- Marrin Street to Grace Street
- Grace Street to Pleasant Street
- Pleasant Street to Jenks Way
- Jenks Way to Taft Street
- Taft Street to Tidewater Street

**From I-95S to Site**
- Cedar Street to George Street
- George Street to Grace Street
- Grace Street to Pleasant Street
- Pleasant Street to Jenks Way
- Jenks Way to Taft Street
- Taft Street to Tidewater Street
WHAT TO EXPECT DURING REMEDY CONSTRUCTION

National Grid regularly completes work similar to what is outlined in the Remedial Action Plan (RAWP) for the Tidewater Site. These images from other similar projects show the type of activities the community can expect to see during construction of the remedy.

- Water Truck Control Dust
- Covered Stockpiles Control Dust and Odors
- Foam Addresses Any Odors
- Straw Wattles Limit Erosion
- Turbidity Curtains Prevent Sediments From Migrating Away From Site
- Tracking Pad Prevents Offsite Tracking of Material

FOR MORE INFORMATION, PLEASE VISIT WWW.TIDEWATERSITE.COM
Throughout construction of the remedy, National Grid will deploy a robust, multi-tier air monitoring program to protect both onsite workers and community.
# Anticipated Remedy Construction Schedule

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For more information, please visit www.tidewatersite.com
SITE CONDITIONS AFTER IMPLEMENTATION OF REMEDY TIDEWATER SITE

- Permeable Path
- Vegetated/Tri Screening
- Upland Meadow
- Transmission Tower Access
- Vegetated Coastal Buffer
- Bulkhead with Railing
- Riprap Revetment
- Upland Meadow

For more information, please visit www.tidewatersite.com
EXAMPLES OF SITE CONDITIONS AFTER IMPLEMENTATION OF REMEDY FROM OTHER PROJECTS

Example of Bulkhead
Example of Bulkhead Railing System
Example of River Bike Path
Example of Bike Path with Adjacent Revetment
Example of a Riprap Revetment
Example of Vegetated Coastal Buffer

FOR MORE INFORMATION, PLEASE VISIT WWW.TIDEWATERSITE.COM
ADDITIONAL INFORMATION - TIDEWATER SITE

1. Pawtucket Public Library

2. National Grid’s Tidewater Website
   www.tidewatersite.com

3. RIDEM Tidewater Website
   http://www.dem.ri.gov/programs/benviron/waste/tide.htm

Email or Mailing Distribution Lists
Submit request to: Kenneth.lento@nationalgrid.com

Phone Alert System
Submit request to: Kenneth.lento@nationalgrid.com