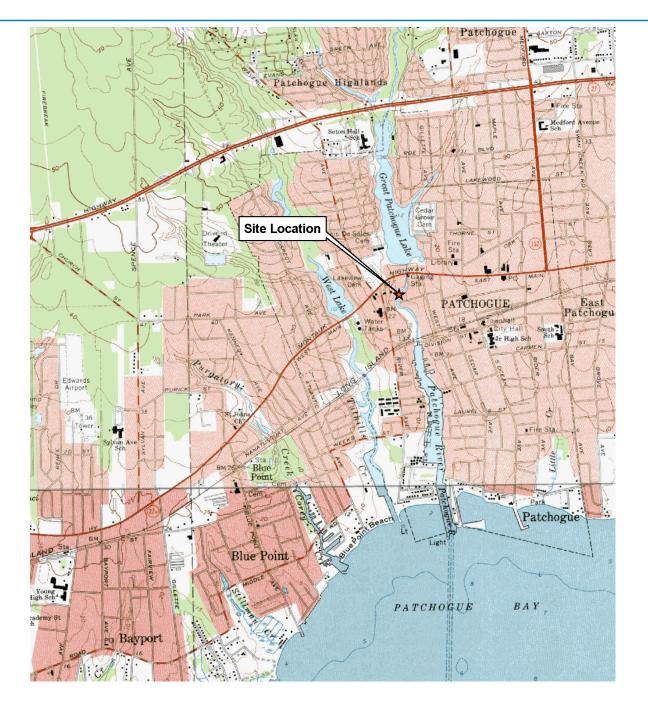


## Introduction/Outline

- Introduction
- What is a Manufactured Gas Plant Site (MGP)?
- Typical Environmental Impacts
- Site History
- Previous Investigation
- Remedial Investigation Approach
- Remedial Investigation Results
- Groundwater Monitoring
- Summary
- Future Steps
- Questions



# **Patchogue Former MGP Site**



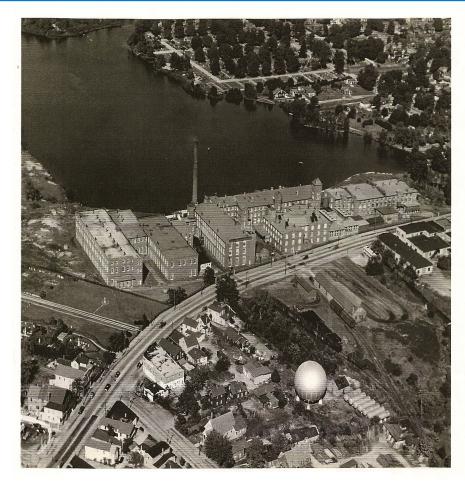


# **Current Site Setting**



## **Site History**

- Patchogue MGP constructed in 1904 and produced gas through 1914 and intermittently into the 1920's
- Modified the MGP facility to distribute gas produced off site until the 1970's when LILCO sold the site to third parties
- Most recently, the site was used as a refrigeration equipment and scrap storage yard
- A Preliminary Site Assessment (PSA) was conducted in 2001 and the report was finalized in 2002
- KeySpan (LILCO successor) acquired the site in May 2005 for remediation purposes.
- A Remedial Investigation (RI) was conducted by National Grid (KeySpan successor) in 2008-2009



Approximately 1940's



## **Previous Investigation - PSA**

- Preliminary Site Assessment (PSA) conducted in 2001
  - Consisted of a detailed record review, site reconnaissance, field survey, sample collection, sample analysis, and reporting.
  - Site sampling activities included surface soil, subsurface soil, groundwater, surface water, sediment, and test trench sampling and analysis.
  - Sampling efforts for the PSA were focused on areas indicating visible residual impacts (e.g., stained soils, sheens, tars/oils, and odors) potentially attributable to the former MGP operations.
  - Based upon the PSA results, a Remedial Investigation (RI) was recommended by the NYSDEC to further investigate the Patchogue site.



## Remedial Investigation Approach

- A Work Plan was prepared and approved by NYSDEC
- RI field investigation was conducted in 2008-2009
- RI data was evaluated to determine additional sampling needs
- The evaluation concluded that additional investigation was necessary; and thus completed
- RI Report was prepared, submitted, and approved by NYSDEC

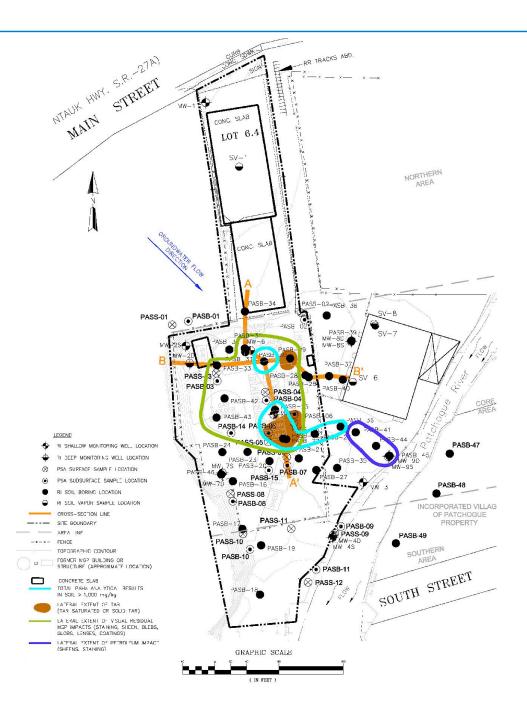


## Remedial Investigation Scope

- 37 Soil Borings
- 2 Test Trenches
- 14 Monitoring Wells (9 shallow and 5 deep)
- 10 Sediment Samples
- 5 Surface Water Samples
- 4 Soil Vapor Samples
- 1 Indoor Air and 1 Ambient Air Sample

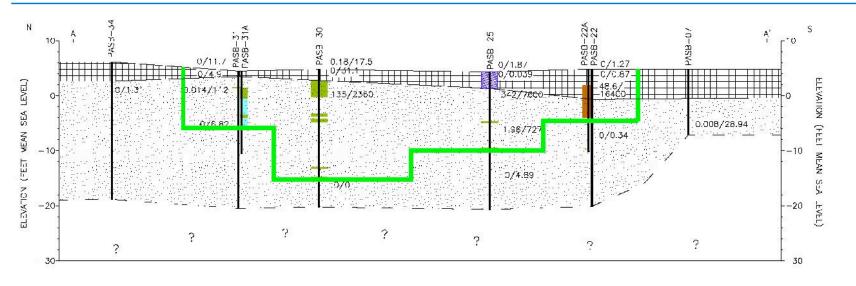


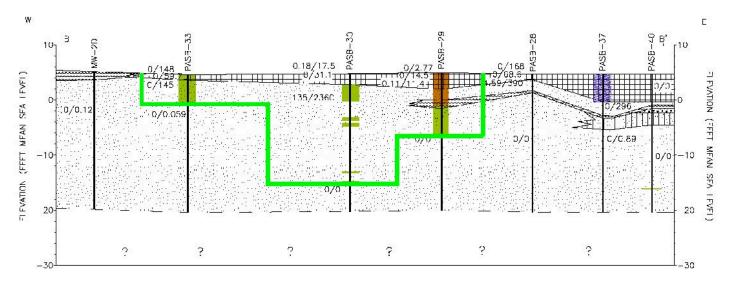
## **Conceptual Site Model**





# **Conceptual Site Model**

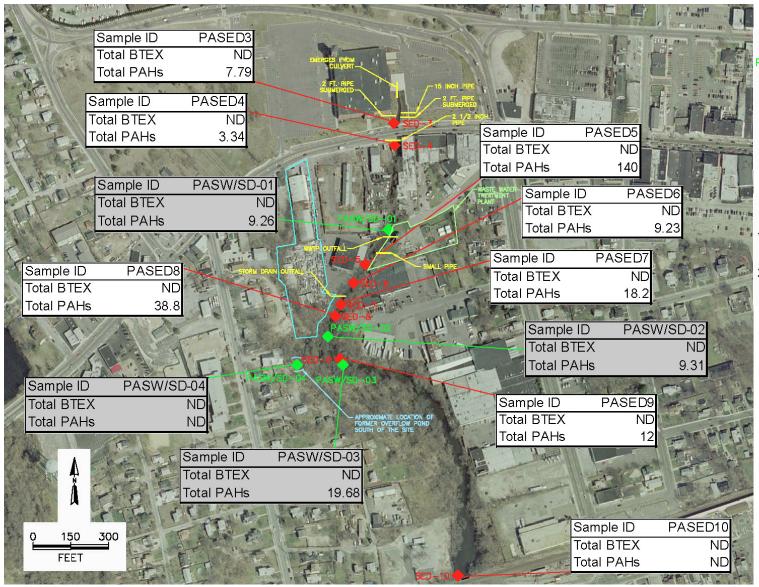








## **Sediment Results**



#### LEGEND

PASW/SD-01

PSA SEDIMENT SAMPLE LOCATION

SED-10 ◆

RI SEDIMENT SAMPLE LOCATION

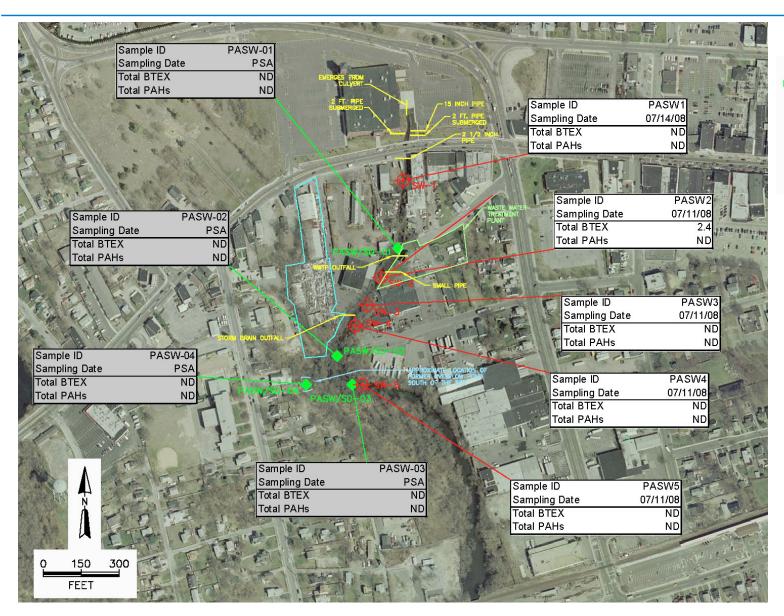
SITE BOUNDARY

#### NOTES:

- ALL RESULTS ARE REPORTED IN MG/KG.
- 2. BOXES SHADED GRAY PRESENT DATA FROM THE PSA.



## **Surface Water Results**



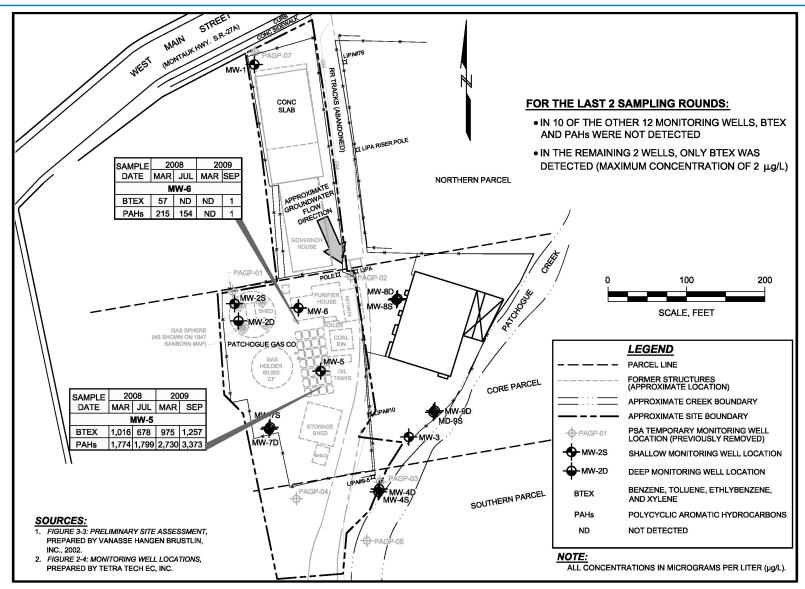
# PASW/SD-01 PSA SURFACE WATER SAMPLE LOCATION SW-1 RI SURFACE WATER SAMPLE LOCATION SITE BOUNDARY

#### NOTES:

- ALL RESULTS ARE REPORTED IN MG/L.
- BOXES SHADED GRAY PRESENT DATA FROM THE PSA.



# **Groundwater Quality Results**





## **Groundwater Results**

- Groundwater is Within Approximately 5 Feet of Land Surface and Flows to the South/Southeast
- Groundwater Sampled Twice During RI (2008) and Twice Subsequently (2009)
- Impacts Localized to Central Portion of Site (MW-5) in Vicinity of Former High Pressure Gas Tanks and Impacted Shallow Soil



## **Summary and Conclusions**

- The Remedial Investigation delineated the MGP impacts from various media, such as surface water, soil, groundwater, sediment, and soil vapor.
- During the RI, the data showed no current open pathways through which people could be exposed to potentially hazardous materials at levels of concern and very limited off-site presence of contaminants.
   Consequently, no risk of imminent harm will result.
- Groundwater sampling will continue to ensure contaminants are not migrating through the groundwater.



## **Future Steps**

- Continued twice annual groundwater monitoring
- Prepare a Focused Feasibility Study
- Determine remedial alternative
- NYSDEC will present the alternative to the public in a Proposed Remedial Action Plan
- National Grid will prepare a remedial work plan
- Once approved, the remedial action will take place
- Removal of visually impacted soil and replaced with clean fill eliminating secondary source for soil, groundwater, and sediments.



## **Contact Information**

Questions or concerns about the work or the site, call:

- ◆ National Grid Hotline (631) 348-6100
- ◆ NYSDEC, Lisa Gorton (518) 402-9564
- ◆ NYSDOH, Jacquelyn Nealon (800) 458-1158 Ext. 27880
- National Grid Community Relations –

James Christman – (516) 545-5035



## **Questions and Answers**

Please state your name and the street on which you live

Please only one question or comment at a time

Please try and keep questions or comments to 1 minute

