

**E. 14th Street Works Site
East River Ball Fields
Update**

Con Edison

January 24, 2008

Manufactured Gas Plants

- Heated coal and oil to make gas
- Before natural gas and electricity were available
- Generated gas for lighting, heating, cooking
- Over 2,000 MGP in the U.S operating between 1820s and 1950s
- Plants were gradually closed as natural gas became available.
- Natural gas pipelines came to NYC in 1940s

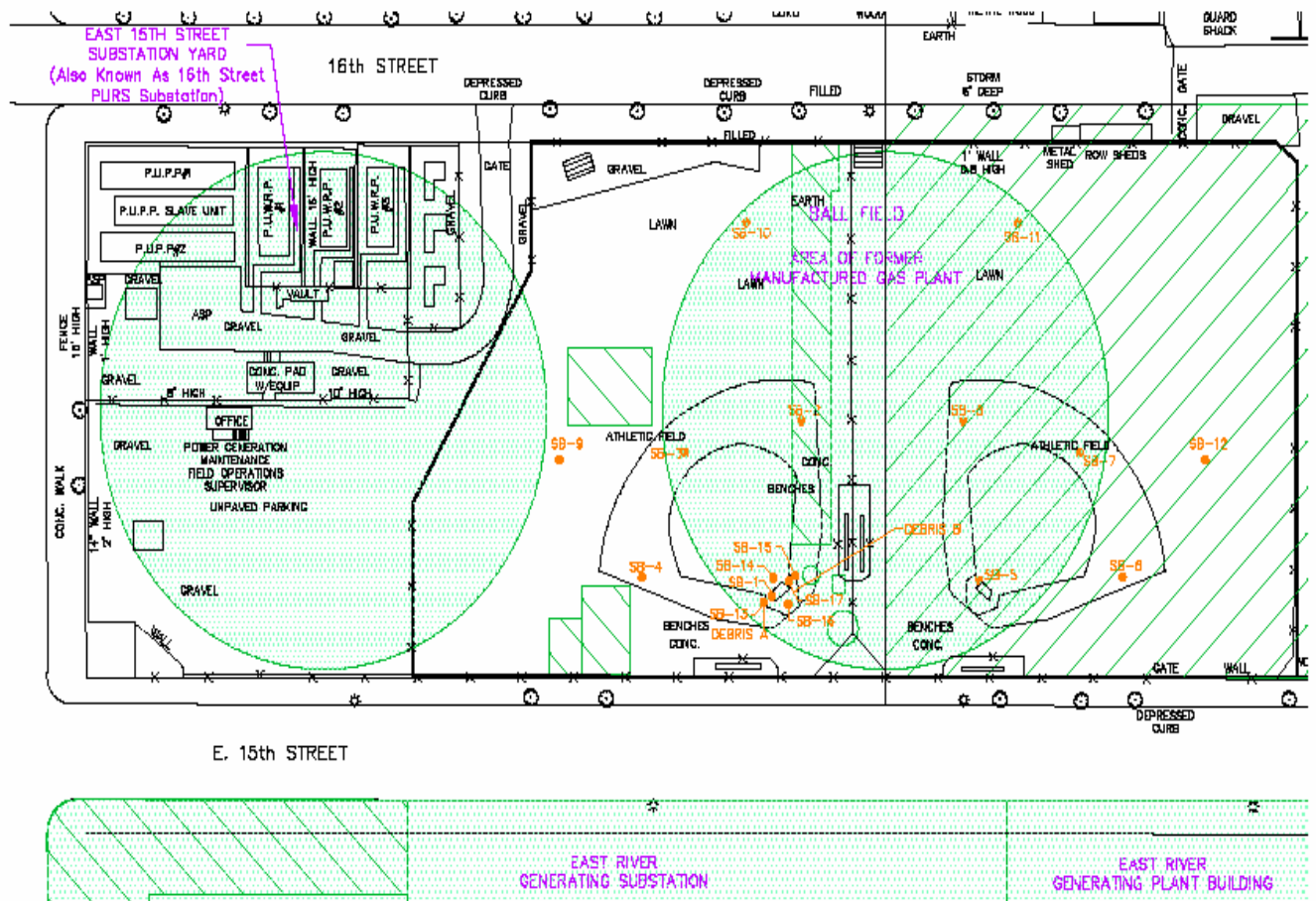
MGP Sites and Environmental Concerns

- Byproducts of gas production were coal tars and oils
- Residuals were often left behind after plants were closed
- Recognition in the 1990s of potential public health and environmental concerns
- National issue with many utilities actively investigating and remediating sites

MGP Exposure Pathways

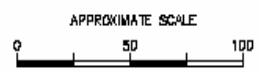
- Direct contact with MGP impacted soils
- Ingestion of MGP impacted soil or groundwater
- Inhalation of MGP impacted vapors

I:\22001\2201\BALL FIELD.dwg Last Modified: Sat 08/20/2012 5:22pm Plotted on Oct 10, 2012 5:31am By jeb



- NOTES:**
1. LOCATIONS OF INFIELDS & BORINGS ARE APPROXIMATE
 2. SOIL BORINGS SB-1, SB-1A, SB-1B AND SB-1C WERE ALL COLLECTED FROM THE SAME LOCATION AT DIFFERENT DEPTHS

Figure 1
Soil Boring Location Map
Ball Field Area
East River Generation Facility
New York, NY



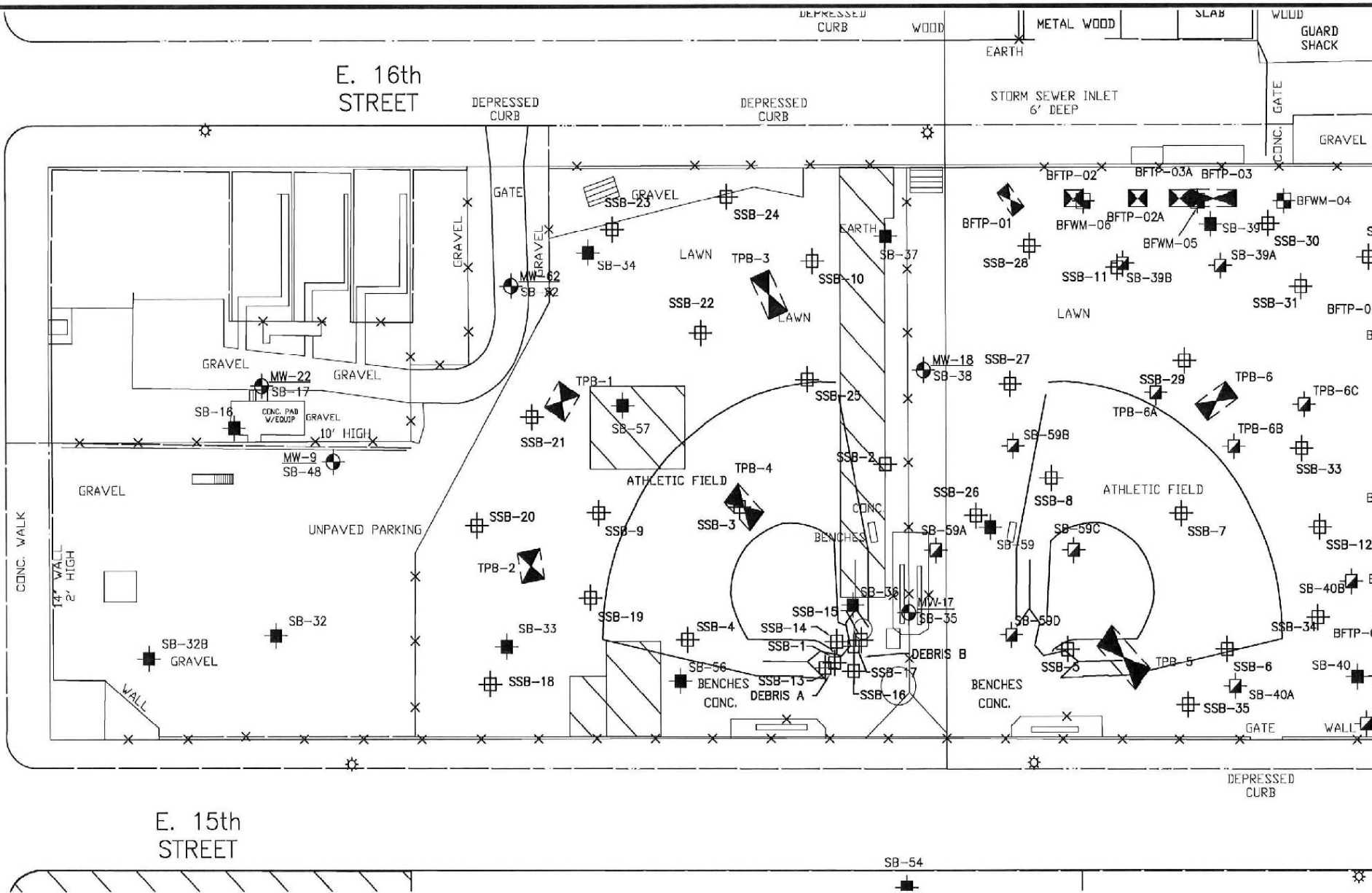
- LEGEND**
- FORMER GAS HOLDER LOCATION
 - LOCATION OF SHALLOW SOIL BORING
 - FORMER MANUFACTURED GAS PLANT (FMGP) COKE YARD
 - FMGP ANCILLARY STRUCTURES (E.G., STORAGE SHED, TOOL SHED, RIGGER'S HOUSE, EXHAUST HOUSE, ETC.)



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almo
pam

Investigation Programs

- Site Investigation conducted January 2004
- Additional Delineation Sampling conducted January – February 2005
- 23 soil borings
- 6 Test Pits
- Over 130 soil samples taken including 42 surface soil samples



LEGEND:

SSB-30 SURFACE SOIL SAMPLE LOCATION
 FORMER MGP STRUCTURES

NOTES:

1. DRAWING ADAPTED FROM THE APRIL 2005 REPORT ENTITLED "EAST RIVER STATION BALL FIELDS SITE INVESTIGATION REPORT" PREPARED BY HALEY & ALDRICH, NEW YORK, NEW YORK.

Investigation Results

- MGP impacts in subsurface soil is very limited in the first 5 feet (two locations at 2 feet) with most impacts deeper than 10 feet
- Low levels of potential MGP-related compounds in surface soils in the range of NYC background but above NYSDEC cleanup levels
- Groundwater has MGP impacts but is not used for drinking water

NYSDEC Review

- No additional investigations were necessary
- Enough data had been generated for NYSDEC to make their determination if remediation was necessary
- Upper 2 feet of exposed soil must meet NYSDEC soil cleanup criteria
- Site Management Plan must be developed and implemented
- Institutional controls must be established