



Halladay Street Gas Works Soil Remediation Project



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March 2013

Overview

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2. What Did Manufactured Gas Plants Look Like?
3. Halladay Street Gas Works Layout, Remediation Design and Schedule
4. Project Overview/Challenges

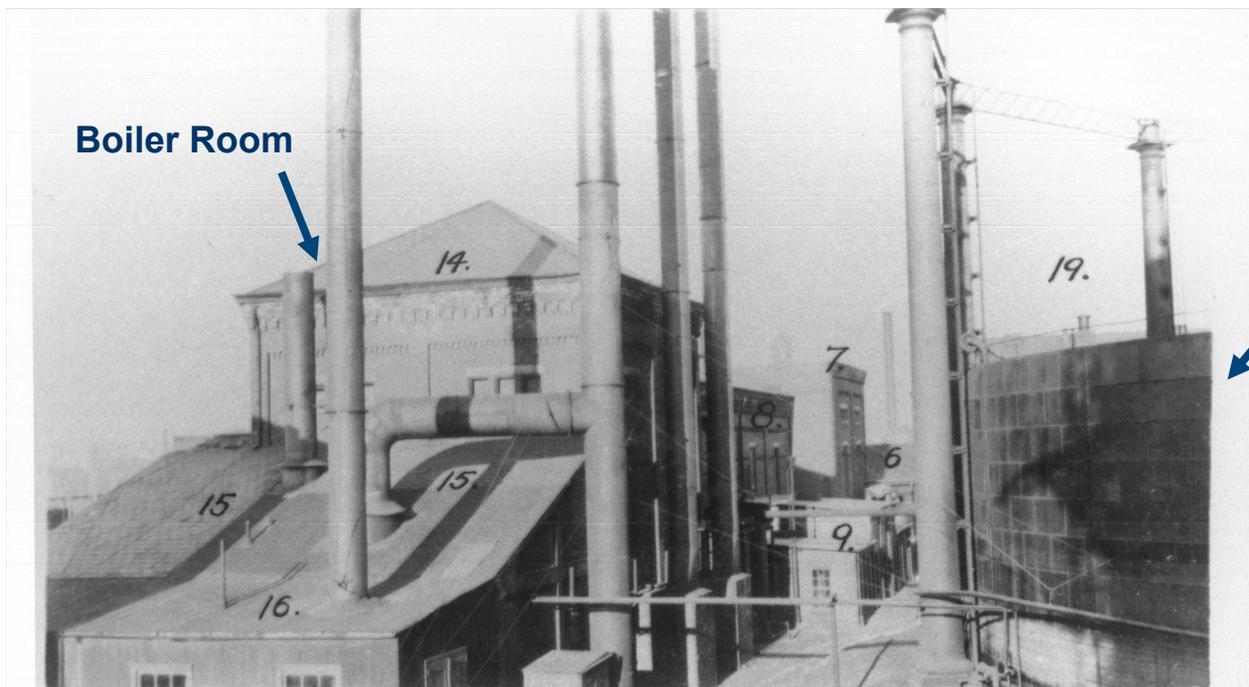
What is a Manufactured Gas Plant?

- Before “natural” gas was discovered it was manufactured by heating coal in an oxygen-deprived oven called a Retort.
- Manufactured gas was then purified and stored in structures called “Holders.”
- Estimates vary between 3,000 and 5,000 Manufactured Gas Plants operated in America from the mid-1800’ s to about 1960.

Manufactured Gas Plant Products and Benefits

- Manufactured gas was used for street lighting, heating and cooking.
- Many useful chemical byproducts were produced such as coke, ammonia, creosote, oils, benzene and tar that had commercial applications.
- Manufactured gas replaced whale oil used for lighting.

Halladay Street Gas Works Circa 1920



108-B.

6-Pipe Shop. 7-Scrubber & Condenser Room. 8-Generator House. 9-Engine & Blower Room. 14-Boiler Room #1. 15-Boiler Room #2. 16-Boiler Shed (G.I.). 19-Relief Holder 470 M.c.f.

Halladay Street Gas Works and Garfield Ave Chromium Sites



- Former Halladay St. Gas Works operated on 8.5 acres from 1880's to mid-1950's
- Sold to PPG in 1954 for site to process chromium ore
- PSE&G and PPG are coordinating cleanup of two waste streams
- 350,000 tons of waste to be dug up and hauled away

Cleanup Underway

- Cleanup plan approved by DEP in 2012
- PSE&G is currently cleaning up remnants of former gas works (piping, holder foundations, etc.) located over a 2-acre portion called “AREA - A”
 - ❖ Completion target date – March 2014
- PPG will excavate 6.5-acres portion primarily contaminated with chromium wastes referred to as “AREA - B”
 - ❖ Completion target date – late 2014

Former Halladay Street Gas Works Gas Holder Foundation Excavation



Former Halladay Street Remediation Project Challenges

- Relocation of Overhead Electric Lines along Halladay Street (Completed)
- Odors from Coal Tar
 - Being managed with foam
- Dust
 - Being managed by watering
- Multiple Waste Types
 - Managed through close coordination with PPG
 - Environmental protections approved by DEP