

John Fitch Way Project

Former Warren Street Gas Works Remediation and Restoration

PROJECT UPDATE



Introductions

Tom Reilly Project Community Liaison

Questions Are Encouraged



- Comments@jfitchwayproject.com
- Project Information Line: (855) 356-2383
- FAQs on the project website: jfitchwayproject.com



Site History

Ron Meloskie PSE&G Senior Project Manager

Presentation Overview

- Site History
- Current Remediation Project
- Protecting Public Health& Safety
- Mitigating Impact toCommunity
- Your Questions





Manufactured Gas Plant Products and Benefits

- Manufactured gas was primarily used for street lighting, heat and cooking from the early 1800s through the early to mid 1900s.
- Manufactured gas also replaced whale oil which was used for interior lighting.
- Many useful chemical byproducts were produced such as coke, ammonia, creosote, oils, benzene, and tar that had commercial applications.
- PSE&G has 38 former Manufactured Gas Plant sites in NJ that are required to be remediated including the Former South Warren Street Gas Works.







Current Site Conditions Aerial View

- NJ Dept. of Labor,
 Division Taxation and a
 NJ State Police helipad
 near excavation areas.
- A 2.68-million gallon water storage tank is located beneath the helipad.
- DOJ complex located across Market Street.
- State employee parking – Agreement in place to relocate parking while work in progress.



Pre-mobilization Activity Running Electricity to Project Site



On or about March 4th

- 30 parking spaces will be temporarily closed for about 2 weeks.
- Trenching will be performed outside of the area of environmental impacts.
- Electrical conduit and service line installed to bring electricity to site.



Pre-mobilization Activity Establish Alternate Walkway



To be installed and available for use prior to existing sidewalk closure

- Will be ADA compliant
- Additional lighting will be established.
- > Security will be posted.



Safety is Priority 1

- Health and Safety Plan (HASP)
- Emergency Personnel Site Visit
- Traffic Plan Approved by City, County, State Police
- Onsite Safety Officer
- Daily Safety Meetings
- Regular Communications with Community







Current

Remediation

James Boyer, PE PS&S Environmental Consultant

Project Overview

Full mobilization for soil remediation is anticipated on or about April 15th an estimated duration of 18 months.



Remove approximately ~100,000 tons of MGP impacted soil. Certified Clean Fill will be utilized to backfill where soil is excavated.



Soil transported offsite for thermal treatment or beneficial reuse at a licensed facility.

Any underground structures and other debris will be removed and transported offsite for treatment and disposal.



Once work is complete, the area will be restored to pre-existing conditions.



The majority of the excavation will be done within a temporary enclosure.



The temporary enclosure is rectangular and will need to be moved 3-4 times.



Allows uninterrupted operation of the State Police helipad.



Typical Remediation Activities within a Temporary Enclosure







A Freeze Wall Will Provide Excavation Support and Groundwater Management

Less noise and vibration vs. steel sheeting



How Ground Freezing Works

- 3" steel freeze pipes are installed around the perimeter of the planned excavation
- Chilled calcium chloride brine (-15°F to -20°F) is then circulated through the freeze pipes via manifolds and pumps.
- It is a closed loop system.
- Nothing is released into the soil.



Freeze Wall Example



Odor Management

MGP related impacts can have an odor similar to that of roofing tar, road paving, or mothballs.

- Odors can be detected at levels well below what would be considered a health concern and what can be detected by air monitoring equipment.
- Odor levels are NOT indicative of concentration levels.
- Odor control agents such as an odorcontrol/suppressant foam (e.g., Rusmar) may be used by the remedial contractor to prevent MGP-related nuisance odors.





Dust Management

- Excavation and related activities have the potential to generate dust when soil is disturbed.
- Contractor will actively work to minimize dust and odors.
 - Water mist
 - Foam spray
 - Plastic sheeting or tarps
 - Odor neutralizer
 - Clean fill cover

Trucks will be covered and wheels cleaned before leaving site.





Vibration Monitoring

Vibrations will be monitored using portable seismographs to ensure protection of nearby structures.



Portable seismograph for vibration monitoring



John Fitch Way Project Primary Truck Route Map



General Schedule Overview

Prepare Site for Soil Remediation	12 weeks Starting on or about April 15
Conduct Soil Remediation	52 weeks
Restore Site	12 weeks





Public Health

& Safety

Deb Barsotti, PhD, DABT Triumvirate Environmental

Perimeter Air Monitoring Plan (PAMP)

- Prepared in accordance with the NJDEP Perimeter Air Monitoring Technical Guidance.
- Provides:
 - ✓ Summary of the contaminants of concern (COCs)
 - ✓ Site-Specific, health-based action levels
 - ✓ Air monitoring strategy for real time and confirmatory sampling
 - ✓ Proposed air monitoring station locations (VOCs and Dust)
 - Response actions for exceedances of established early warning threshold and action levels



Perimeter Air Monitoring Plan

- Baseline air monitoring assessment prior to mobilization.
- A full time H&S officer using a photoionization detector or PID in the immediate work area.
- Perimeter air monitoring will be performed during disturbance of contaminated soil.
- The network uses a telemetry system for continuous and immediate notification.
- A full time, onsite Air Monitoring Technician to ensure response to early warning alerts.





Interior View of Air Monitoring Station

The Air Monitoring Station continually monitors and records electronically dust in ppm and total volatile organic compounds (TVOC) in ppm.



Dust Meter to measure particulate matter

> PID Meter to measure total VOCs





Monitors Between Work and People



Minimum of 4 air monitors

Based on: Current work locations

Wind conditions

Where people are

Monitors added and moved as needed



Health Protection Measures

Uses "Early Warning" Approach

- Air monitoring results continuously monitored.
- Set to alarm at an <u>internal threshold</u>, more conservative than the regulatory action level.
- Alerts personnel before an action level is reached so mitigation measures can be taken.

Air Monitoring Action Level	PM-10	Τνος
Air Concentrations	150 μg/m³	1.15 ppm

ppm = parts per million; μ g/m³ = micrograms per cubic meter; TVOC = total volatile organic compounds

Health Protection Measures

Regulatory Action Levels Are Site-Specific

- The Chronic Action Level represents the safe exposure limit to an individual at the site perimeter over the entire estimated duration of the project
- Derived for the project, based upon an EPA screening level equation.
- Weekly confirmatory sampling is compared to the site's chronic action level. Verified data is posted weekly to JFitchWayProject.com

Benzene (µg/m3)	
Chronic Action Level OSHA PEL – 1,000 ppb	13.3 ppb
Current Running Average	



Employee and Community

Information

Kelly Henry Project Community Liaison

Activities Over Next 3 Months

March 1	State establishes alternative parking options.
March – Early April	 Run electric to project site. Install temporary walkway. Perform baseline air monitoring assessment.
On or about April 15 – Late May/Early June	 Establish 8' temporary fencing around site perimeter Establish 24/7 onsite security guard Establish temporary trailers for contractor and consultant offices Establish soil erosion controls around site perimeter Start to mobilize personnel and equipment to project site Start to establish Freeze Wall Start to construct temporary enclosure (tent)



Keeping You Informed

Webinars and In-Person Information Sessions

Project Specific Website

Weekly Updates
via Email and
Posting to Website

Dedicated Call Line

Dedicated Community Liaisons





Keeping the Dialogue Going

WEBSITE

• JFitchWayProject.com

PROJECT INFORMATION LINE

• (855) 356-2383

PROJECT EMAIL

comments@JFitchWayProject.com

