

# John Fitch Way Project

Former Warren Street Gas Works
Remediation and Restoration



### Introductions



**Project Community Liaison** 

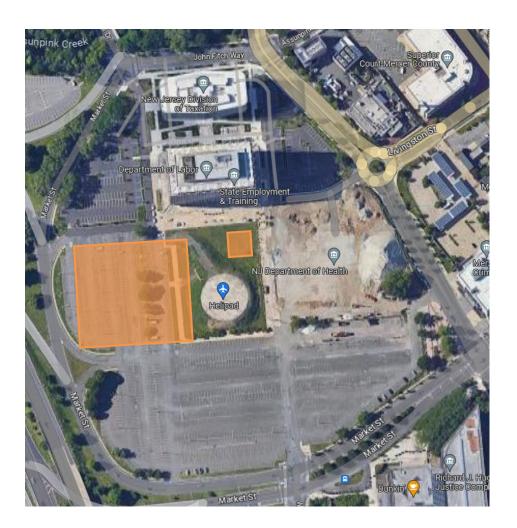
### **Questions Are Encouraged**



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

### **Presentation Overview**

- ☐ Site History
- Current RemediationProject
- Protecting Public Health& Safety
- Mitigating Impact to Community
- Your Questions







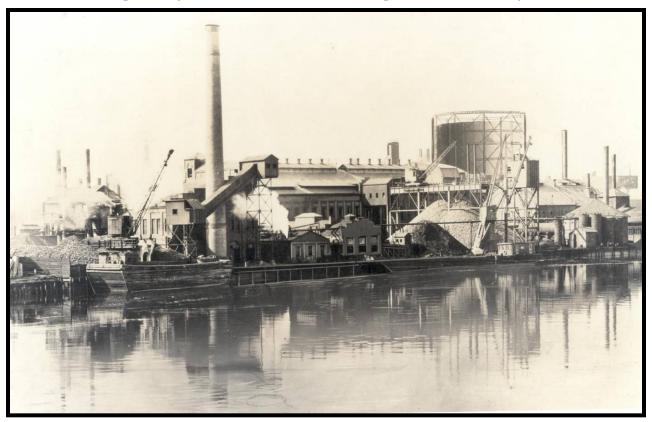




PSE&G Senior Project Manager

### What Is a Manufactured Gas Plant Site?

Prior to the widespread availability of natural gas, "manufactured " gas was created through a process of heating coal in a specialized oven.





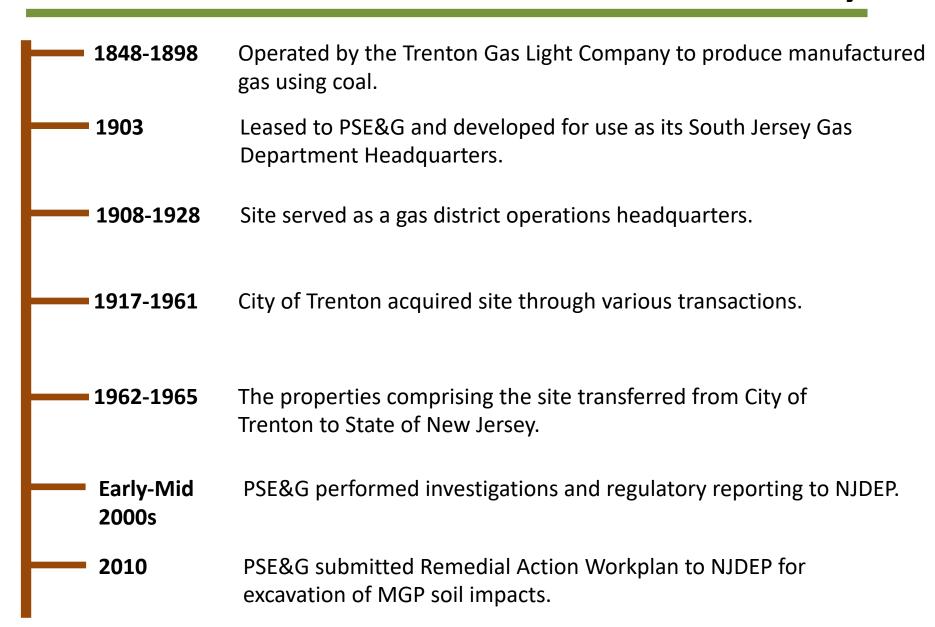
### **Manufactured Gas Plant Products and Benefits**

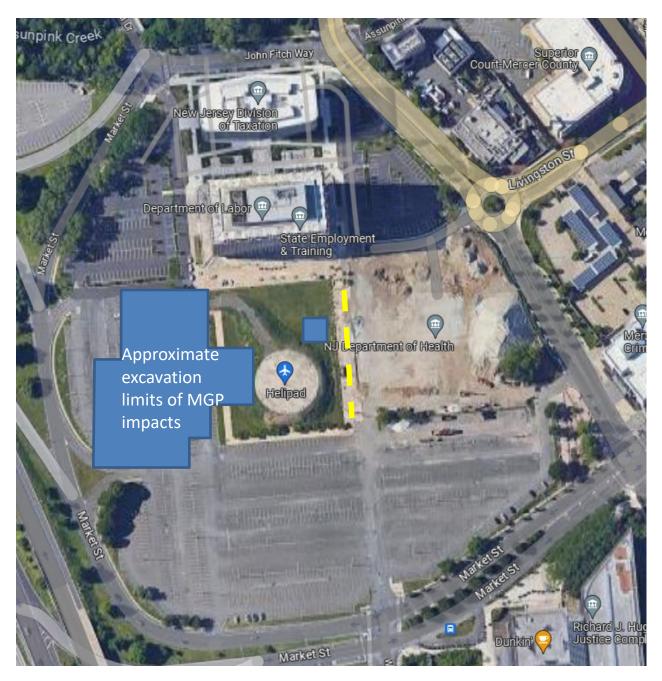
- Manufactured gas was primarily used for street lighting, heat and cooking from the early 1800s through the early to mid 1900s.
- Manufactured gas also replaced whale oil which was used for interior lighting.
- Many useful chemical byproducts were produced such as coke, ammonia, creosote, oils, benzene, 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.





### **South Warren Street Gas Works – Site History**





# 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.



### **Working Within NJDEP Regulations**

Since early 2000s, PSE&G has actively worked to investigate and remediate the environmental impacts at the site.

- All work is conducted under the rules and regulations of the NJDEP and under the direction of the Licensed Site Remediation Professional (LSRP) of record.
- ➤ In 2023, PSE&G and the State of New Jersey reached a Remediation Agreement.

#### Primary phases of site investigation and remediation

Site Assessment Remedial Investigation

Remedial Action Work Plan

Remedial Action

Site Closure & Monitoring

Soil

Groundwater

# **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 in the first quarter of 2024 with an estimated duration of 12 - 18 months.\*

\*NOTE: In Feb. 2024, the expected start date was changed to mid-April with an estimated duration of 18 months.

EXCAVATION

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

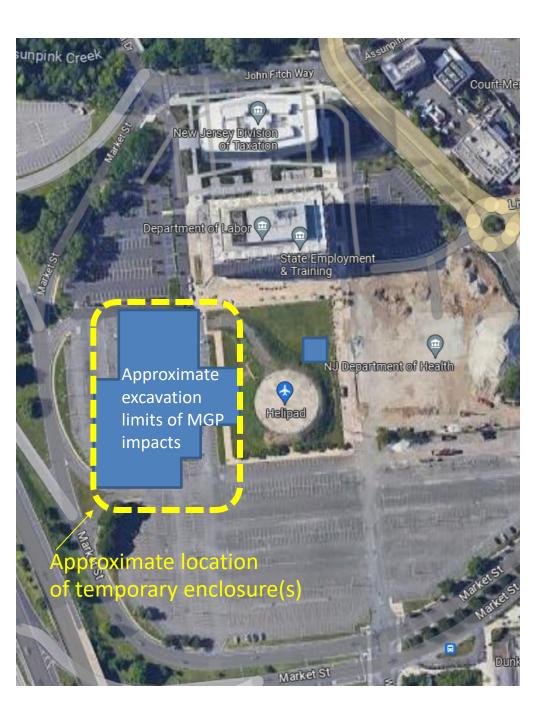
**DISPOSAL** 

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.

RESTORATION

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



Allows uninterrupted operation of the State Police helipad.



# Typical Remediation Activities within a Temporary Enclosure









# **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.
- Dust control will be managed utilizing best management practices (e.g., water truck, truck wash station, covered trucks, etc.).
- Contractor Will Actively Work to Minimize Dust and Odors.
  - Water mist
  - Foam spray
  - Plastic sheeting or tarps
  - Odor neutralizer
  - Clean fill cover







### **Vibration Monitoring**

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



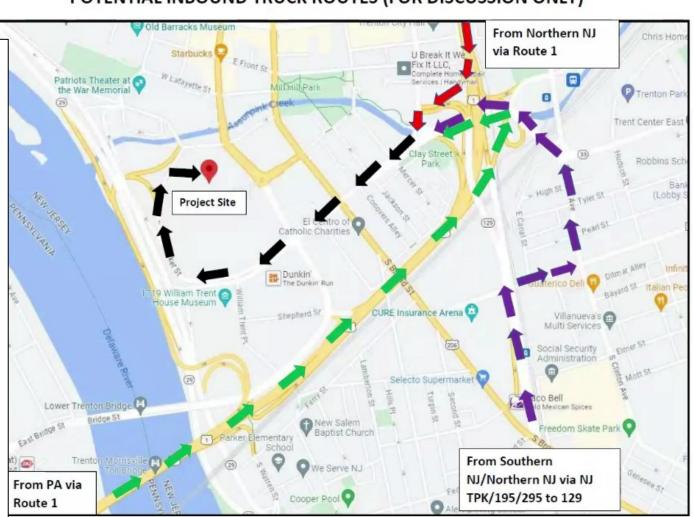
Portable seismograph for vibration monitoring



### **Truck Routes To Be Determined**

#### POTENTIAL INBOUND TRUCK ROUTES (FOR DISCUSSION ONLY)

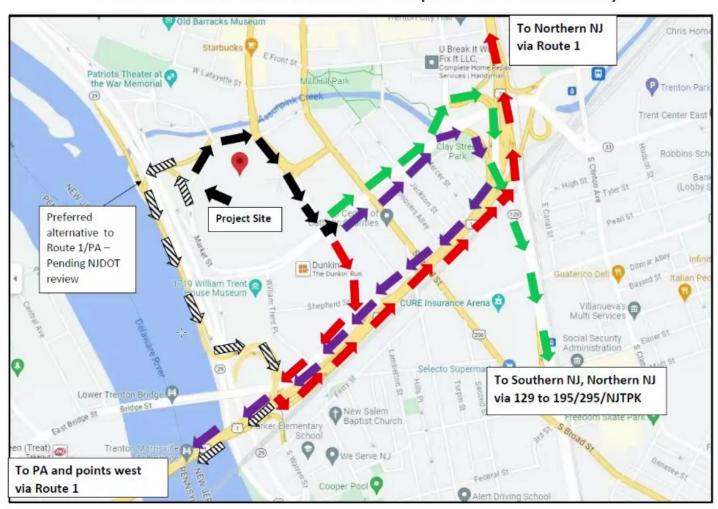
- ☐ When a contractor for the project is chosen, preferred truck routes will be determined.
- ☐ Those routes will be vetted with city, county and state authorities before mobilization.
- We will work closely with city police to ensure the routes operate as safely and efficiently as possible.





### **Truck Routes To Be Determined**

#### POTENTIAL OUTBOUND TRUCK ROUTES (FOR DISCUSSION ONLY)









# 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

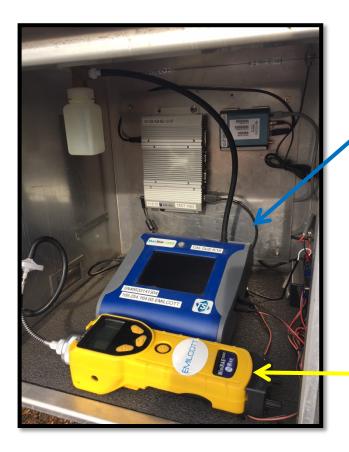
- ☐ A full time H&S officer using a photoionization detector or PID in the immediate work area.
- Perimeter air monitoring will be performed during disturbance of contaminated soil.
- The network uses a telemetry system for continuous and immediate notification.
- A full time, onsite Air Monitoring Technician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



# Perimeter Air Monitoring Plan

If the air monitoring station reading registers above the internal PSE&G action level, a laboratory analytical air sample is collected using a SUMMA<sup>TM</sup> canister. SUMMA<sup>TM</sup> canisters are also used to collect and analyze air samples weekly during soil disturbance activity to supplement and corroborate real-time air sampling.

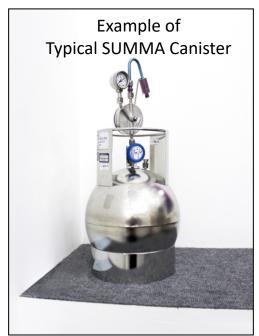
#### **Confirmatory Samplings Performed**

#### **Baseline Sampling**

Performed before invasive work begins

#### **Weekly Sampling**

For Duration of Active Remedial Work





**Example of Puff** 

# **Monitors Between Work and People**



Minimum of 4 air monitors

**Based on:** 

**Current work locations** 

Wind conditions

Where people are

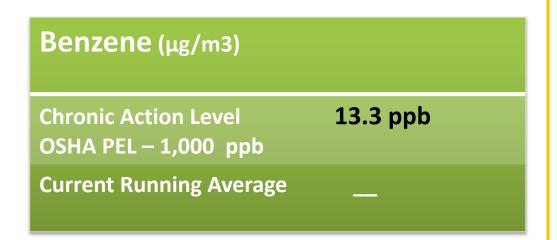
Monitors added and moved as needed



### **Health Protection Measures**

### **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



Assumptions/variables used as input parameters into the USEPA calculator

- Sensitive Receptor:
  - **Full Time Resident**
- Anticipated Duration of Soil Removal:
  - 260 work days 37.14 calendar weeks
- Work Shifts: 5 days/week,
  - 10 hours/day, ground intrusive work

### **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<br>Action Level | PM-10     | TVOC     |
|--------------------------------|-----------|----------|
| Air<br>Concentrations          | 150 μg/m³ | 1.15 ppm |

ppm = parts per million;  $\mu g/m^3$  = micrograms per cubic meter; TVOC = total volatile organic compounds



# **Employee and Community**

**Information** 



# **Keeping You Informed**

Webinars and In-Person Information Sessions

Project Specific Website

Weekly Updates via Email and Posting to Website

**Dedicated Call Line** 

**Fact Sheets** 



# **Keeping the Dialogue Going**

#### **WEBSITE**

JFitchWayProject.com

#### PROJECT INFORMATION LINE

• (855) 356-2383

#### **PROJECT EMAIL**

comments@JFitchWayProject.com



