

GOWANUS CANAL SUPERFUND SITE COMMUNITY UPDATE MEETING

RH-034 Combined Sewer Overflow Retention Tank Excavation

December 10, 2024

Please note that by participating in today's online event, you acknowledge and consent that your name, video, image or phone number may be visible to others in the live online meeting

Agenda

Introduction – Natalie Loney, EPA

Overview of Gowanus Canal Cleanup – Tom Mongelli, EPA

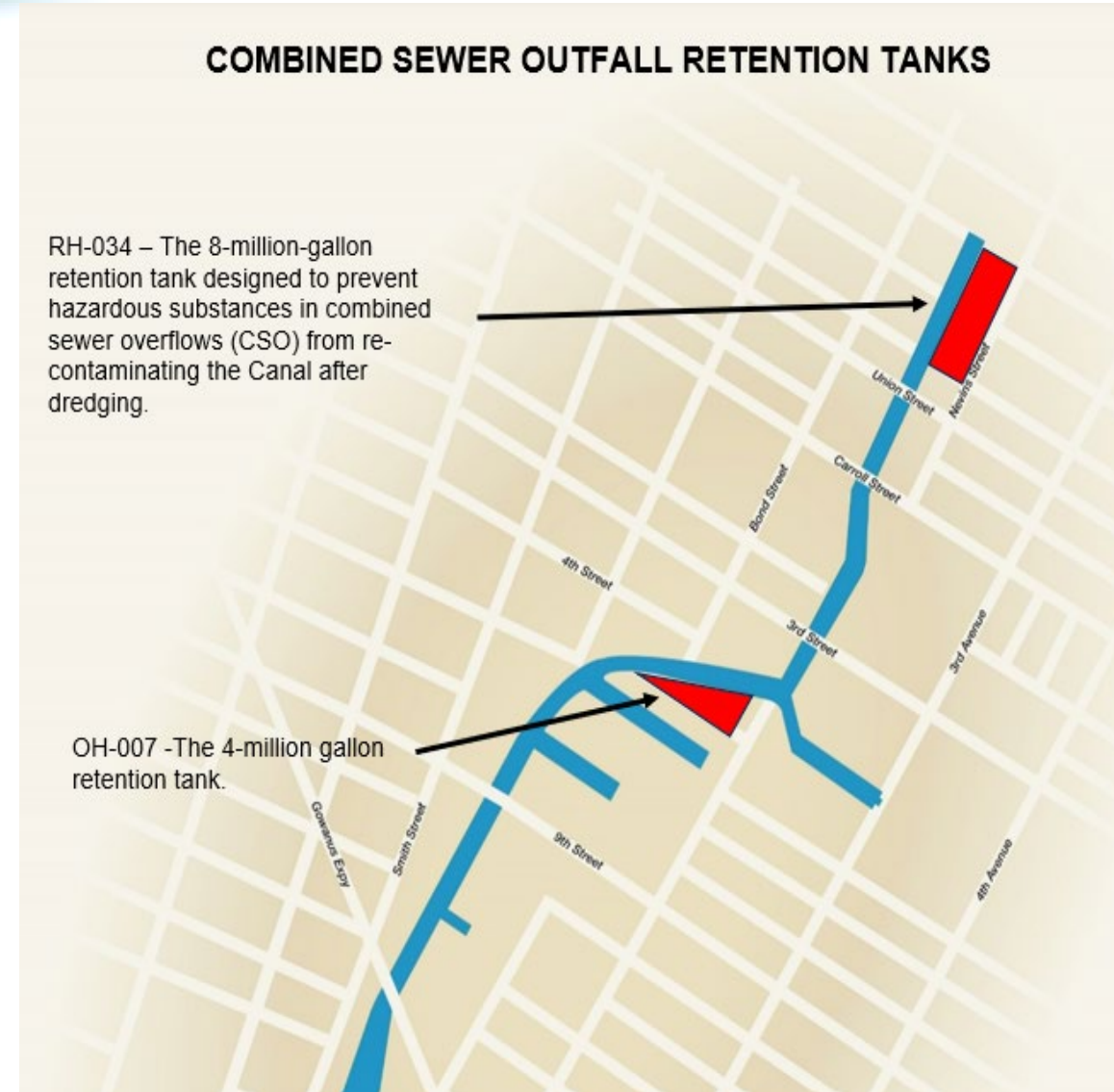
Air Monitoring – Dr. Lora Smith, EPA

Phase 2 – CSO Tank Construction – Kevin Clarke, NYCDEP

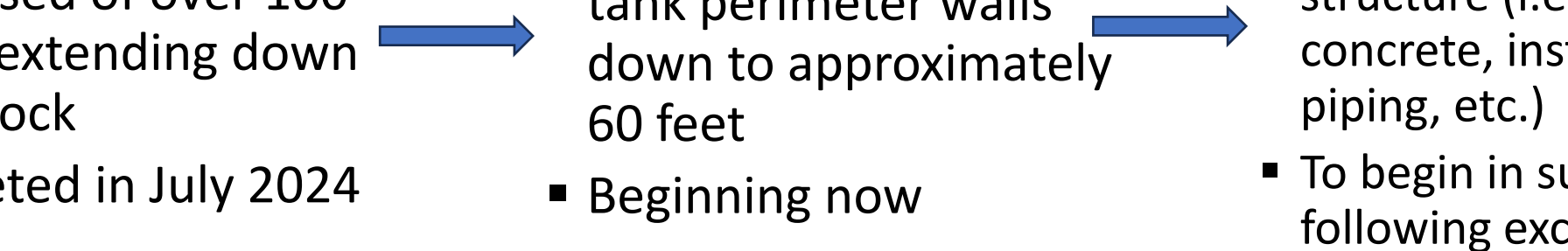
Q & A

Gowanus Canal Superfund Site

- Remedy selected by EPA in September 2013
- Selected remedy called for, among other things, construction of two retention tanks to control combined sewer overflows (CSOs)
 - 4-million gallon tank at Owl's Head peninsula (near 2nd Ave. and 6th St.)
 - 8-million gallon tank at head of Canal (Nevins St. between Butler St. and Sackett St.; part of former Fulton MGP site)
- Operation of CSO tanks critical to minimize deposition of additional contaminated material



RH-034 (Nevins St.) Tank Construction

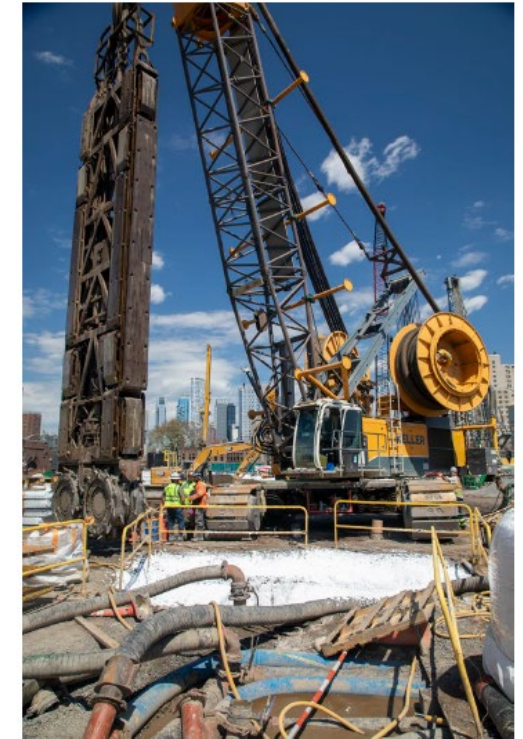
- 1st Phase – Perimeter Wall Construction
 - Comprised of over 100 panels extending down to bedrock
 - Completed in July 2024
 - 2nd Phase – Soil Excavation
 - Removal of soil within tank perimeter walls down to approximately 60 feet
 - Beginning now
 - 3rd Phase – Tank Construction
 - Construction of tank structure (i.e., pouring concrete, installation of piping, etc.)
 - To begin in summer 2025 following excavation
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A Community Air Monitoring Program measuring total volatile organic compound (VOC) and particulate matter (PM₁₀) concentrations around the site perimeter has been and will continue to be in place throughout all three phases of work.

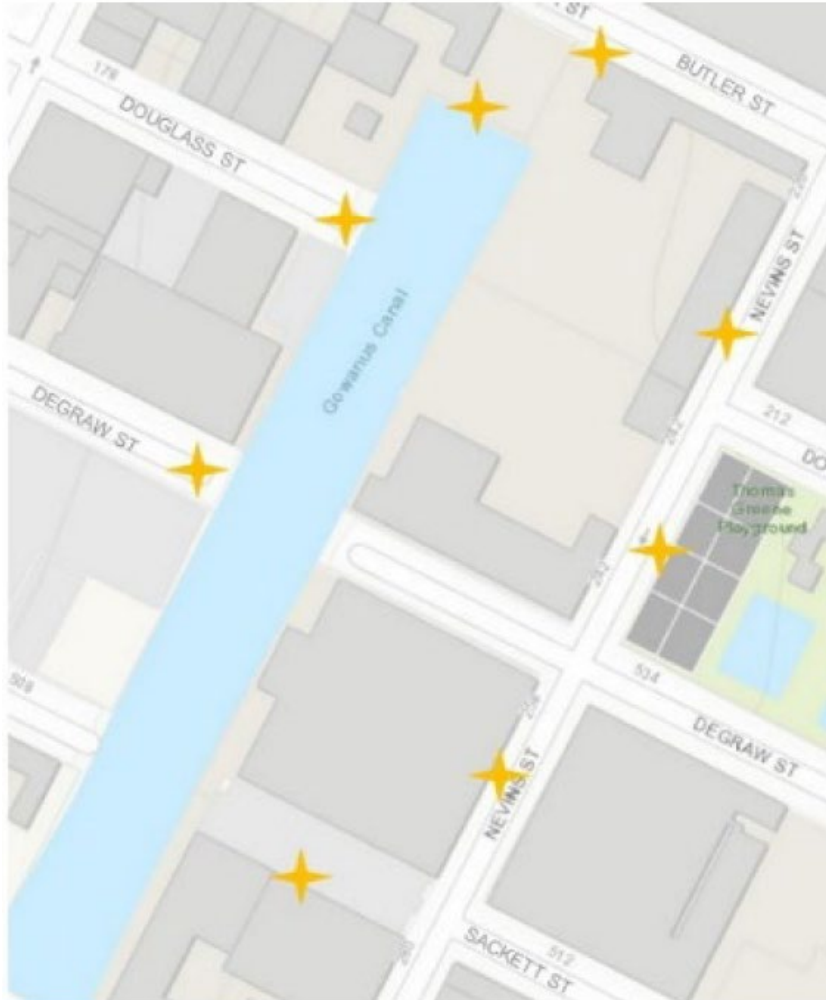


Odors and Emissions During Prior Work

- Numerous odor complaints received beginning in late December 2023
- Additional Steps Taken
 - Site perimeter misting system
 - Application of odor-suppressing foam
 - Placement of tarps
 - Tenting of desander (implemented February 2024)
- Additional Monitoring
 - Perimeter Odor Checks
 - Several times per day
 - Additional investigations in response to complaints
 - Added air sampling



Air Monitoring – Community Air Monitoring Program (CAMP)



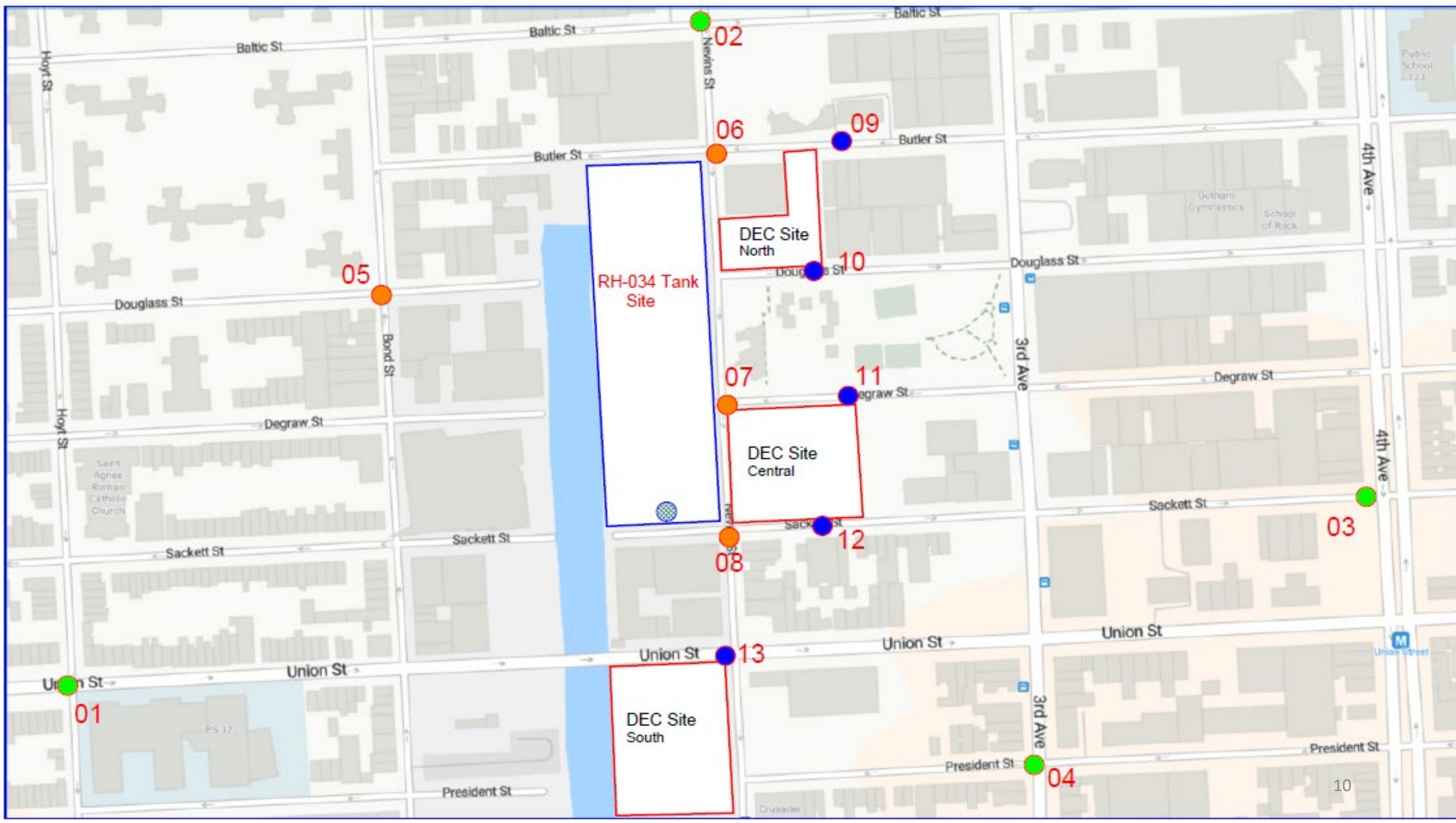
- 8 stations around site perimeter
- Measure PM₁₀ and total VOCs in real time
 - Purpose to indicate when air being impacted outside site perimeter
 - Definitive health assessments NOT possible from this data
 - Exceedances rare, short duration (<15 min), and typically attributable to emissions from construction vehicles/equipment, cement delivery, etc.

Air Sampling – Summa Canisters

1st Phase – Perimeter Wall Construction (Oct. 2023 – July 2024)

- Collected 24-hour samples
- Method TO-15 (~100 VOCs, including naphthalene)
 - Approximately weekly from 2/25 – 9/11/24; corner of Nevins & Sackett, site work ongoing
 - 6/27, 7/2, 7/10, 7/17 & 7/23/24 ; 13 locations, site work ongoing
 - 8/28/24; after perimeter wall installation completed
 - Daily from 10/16 – present; site staging work





Health Assessment of Sample Results

- Naphthalene concentrations were below a health-based level of concern
- Naphthalene odors over short durations may cause temporary health effects (headache, nausea, etc.)
- Goal for moving forward is to keep volatile concentrations below a health-based level of concern AND minimize quality-of-life impacts

Next (2nd) Phase of Work – Soil Excavation

- Goals:** 1) Ensure protection of human health
2) Ensure timely implementation to minimize quality of life impacts and preserve the integrity of the completed in-canal remedy

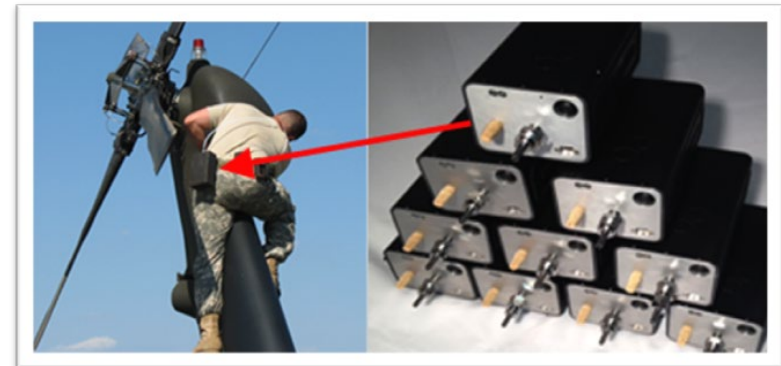
EPA will allow NYCDEP to begin next phase of work on accelerated schedule with:

- Expanded air monitoring
 - Data to be reviewed daily by EPA, NYCDEP, NYSDEC, and NYSDOH
- Improved odor investigation procedures
- Enhanced mitigation measures
- Increased community notifications

If mitigation measures in use are not effective, EPA will direct NYCDEP to stop soil excavation work until a tent can be constructed.

New Air Monitoring Technologies

- EPA's Trace Atmospheric Gas Analyzer (TAGA) Bus
 - Currently on-site; will be deployed ~2 weeks in both December and January. Additional deployments to be scheduled.
 - Only two available in the United States
 - Measures low level (part per billion) naphthalene in air via onboard instruments
- NaDos (NAphthalene DOSimeter) Sensors
 - Near real time
 - Also measures low level (part per billion) naphthalene in air



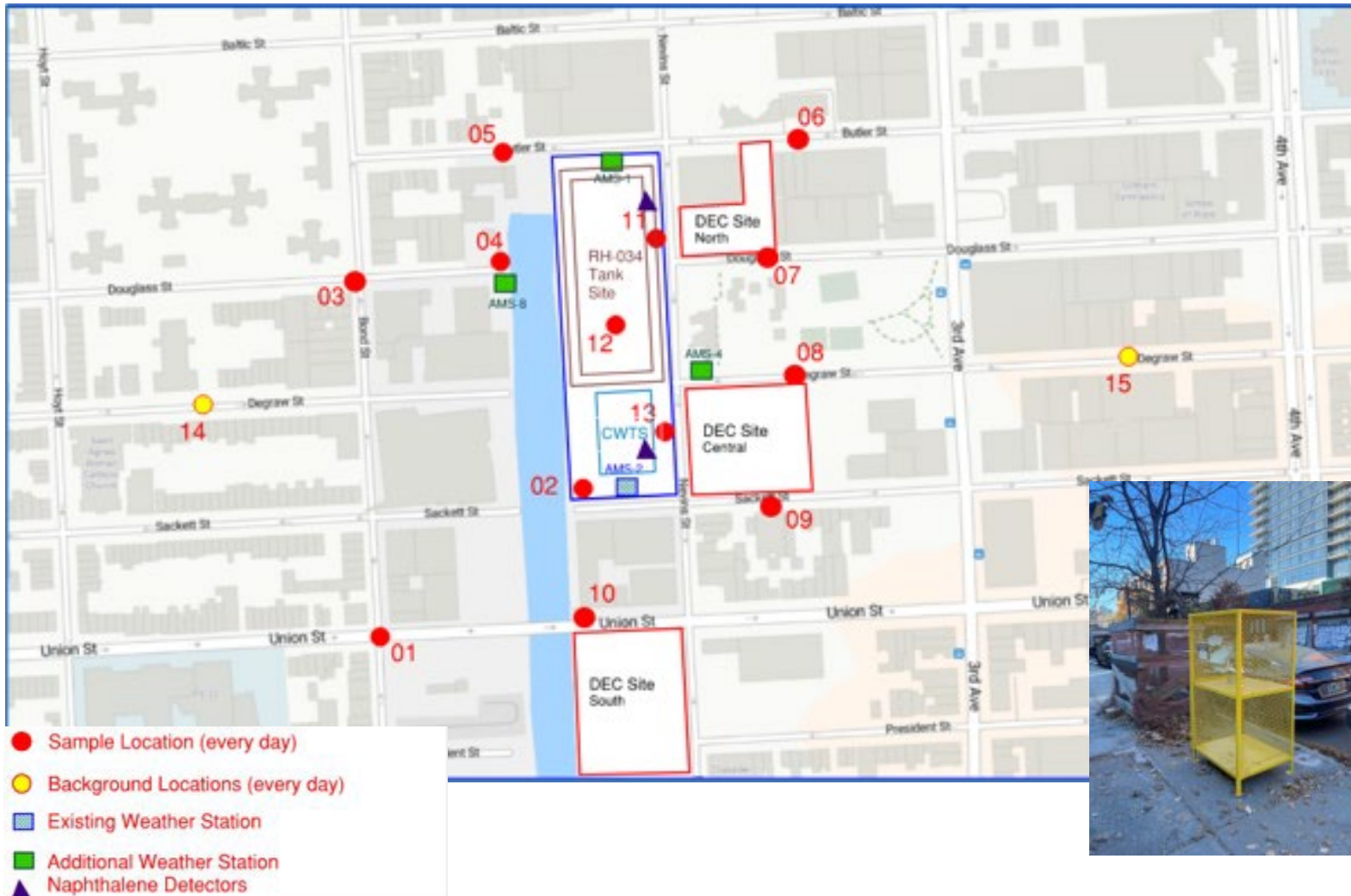
Increased Air Monitoring Requirements

Multi-layered monitoring network to make operational changes faster and better understand site-related impacts to the community

- 1-hour (TAGA bus, when available, and NaDos sensors)
 - Work Zone- 700 $\mu\text{g}/\text{m}^3$
 - Site Perimeter – 60 $\mu\text{g}/\text{m}^3$
 - Community – 20 $\mu\text{g}/\text{m}^3$
- 24-hour (Summas) – 20 $\mu\text{g}/\text{m}^3$
 - Optimized previous network
- Project duration (Summas) – 3 $\mu\text{g}/\text{m}^3$

Frequency of Summa samples will be daily and include weekends

Comprehensive Air Monitoring Program

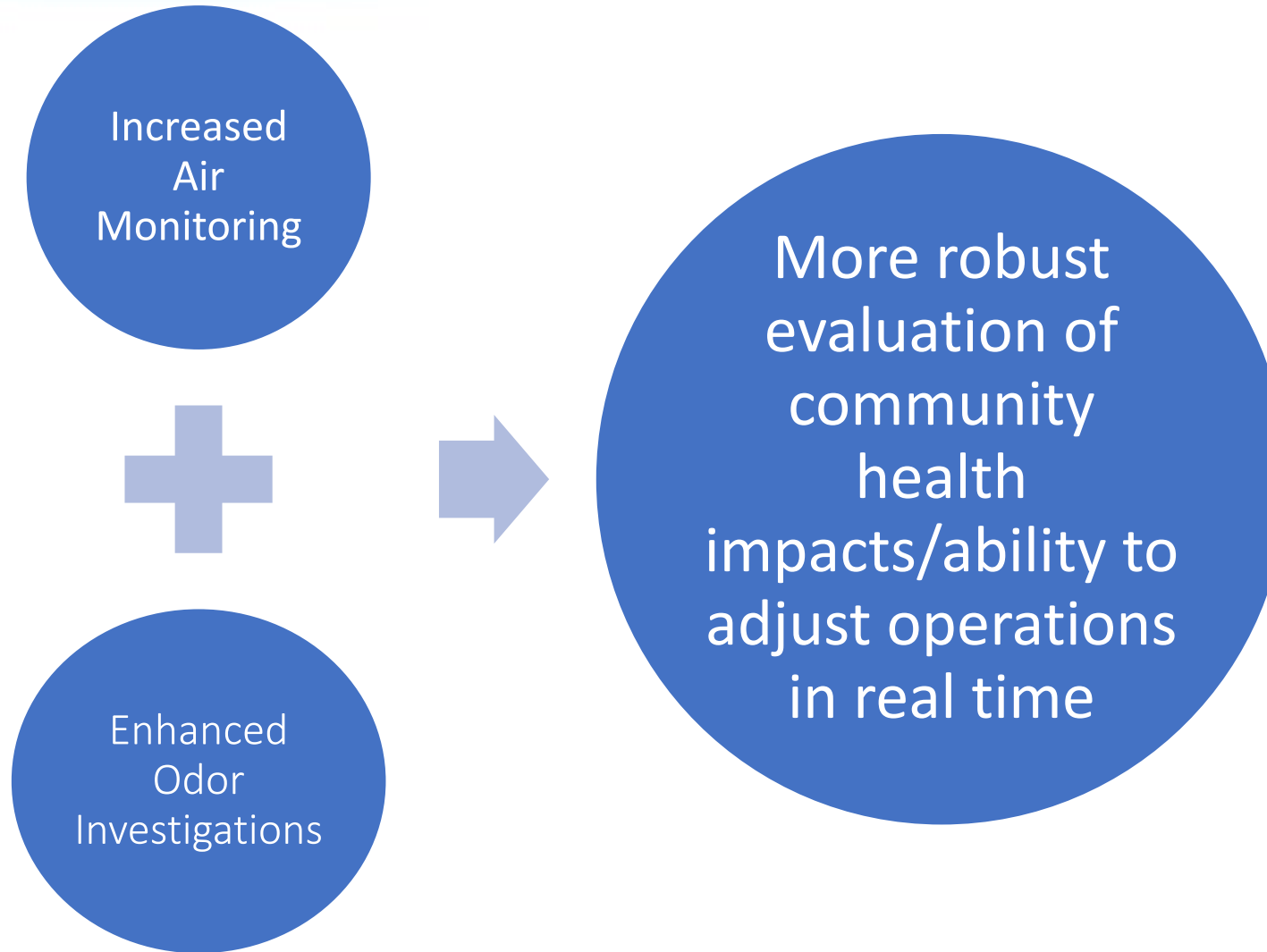


- The Community Air Monitoring Program (CAMP) will remain in place and monitor for TVOCs with a Response Level of 0.75 ppm and an Action Level of 1.0 ppm. Work will be paused if these are exceeded.
- Summa Canister sampling will be taken daily at locations 1 through 15 including 2 background locations. The Community Action Level for naphthalene is $20 \mu\text{g}/\text{m}^3$ over 24 hours or running average of $3 \mu\text{g}/\text{m}^3$. Work will be paused if these are exceeded.
- Meteorological data including wind direction is collected from four on/near-site locations to aid in determining the source(s) of any odors or emissions.



New Odor Investigation Protocol

- Odor walks will continue
- All odor complaints will be received by NYCDEP via phone/email
- Investigated as soon as possible
- NYCDEP, as well as EPA, will have dedicated staff to investigate
 - Complete standardized form to include date/time, location, wind direction, reading from near real time instrument
 - Determination of source of odor will be made
 - If site-related or undetermined, work practices will be adjusted or paused until odor dissipates
 - If not site-related, state/local governing bodies will be notified to investigate



Q & A

Option 1: Use the chat function to submit your question

EPA Zoom support staff will read your inquiry to the presenters for response.

Option 2: Use the Zoom react function to raise hand

You will be called on in order. PLEASE NOTE WE ARE LIMITING QUESTIONS/STATEMENTS TO 1 MINUTE PER PERSON.