

# **250 Water Street and the New York State Department of Environmental Conservation Brownfield Cleanup Program**

## **BCP Working Group Meeting**

250 Water Street, New York, New York

NYSDEC BCP Site No. C231127

June 9, 2022

# Early Foundation Work Summary

- April 21, 2022 - May 27, 2022
- Installed perimeter construction fencing and removed former parking lot structures
- Installed four drilled piles to about 85 feet below grade surface
- Installed steel sheeting for support-of-excavation during pile cap construction
- Excavated and removed contaminated soil/fill to about 8 feet below grade surface (bgs) in the early foundation work area

# Early Foundation Work Summary

- Excavated and removed contaminated soil/fill to about 20 feet bgs for pile cap installation in a localized area
- Installed a pile cap atop the four drilled piles
- Backfilled the excavation area with 2.5-inch stone underlain by geotextile fabric
- Treated and discharged groundwater from dewatering activities during pile cap installation

# CAMP Summary - Early Foundation Work

- No exceedances of 15-minute time-weighted average (TWA) CAMP thresholds for mercury vapor or total volatile organic compounds in the work zone
  - Exceedances of PM10 were observed in the work zone on 5/21. Work was halted and dust suppression was implemented
    - Background conditions were generally higher on 5/20 and 5/21 due to poor air quality in New York City
    - 15-minute TWA exceedances of PM10 were not observed in the off-site CAMP station
- No exceedances of 15-minute TWA CAMP thresholds for mercury vapor during continuous screening of the work zone and ambient air across the site using the handheld Jerome® J505 unit
- No breaks in continuity in CAMP monitoring
- Out of an abundance of caution, proactive measures were implemented upon notification of a mercury vapor detection at a perimeter station

# CAMP Summary – Early Foundation Work

## Perimeter Exceedances

Two perimeter mercury vapor exceedances of 15-minute TWA CAMP thresholds were observed on 5/16 and 5/19.

5/16/22

- No on-site source of mercury vapor was identified with the Jerome® J505 unit.
- No ground-intrusive activities were ongoing and the contractor was in the process of covering exposed soil/fill.
- Based on an evaluation of the previous data from the Jerome® J405 unit, this unit was replaced.

5/19/22

- Work was halted upon notification of a mercury vapor detection
- Mercon-X® was applied to exposed soil/fill out of an abundance of caution
- The Jerome® J505 unit confirmed that the mercury vapor detections were erroneous
- Water damage was identified in the perimeter Jerome® J405 unit
- The Jerome® J505 unit was used at the perimeter station during equipment replacement

# Mercury Vapor Detections

## Upon notification of mercury vapor detections:

- One or more of the following activities is performed:
  - Mercon-X® applied as a proactive measure
  - Exposed soil/fill, stockpiles and containers covered to the extent practical
  - Supplemental screening of the work zone with the Jerome® J505 unit
  - Screening of the CAMP station with the Jerome® J505 unit





# Mercury Vapor Detections

## Upon notification of mercury vapor detections:

- If reading does not appear valid per work zone and CAMP screening with Jerome® J505 unit, recalibrate equipment, switch out battery, adjust wiring or perform other troubleshooting activities while continuously screening with the Jerome® J505 unit
- Confirm that the units are operating properly (battery full, etc.) and are actively transmitting data via telemetry prior to resuming work



# Additional Measures

## Additional Measures to be Implemented During Next Phase of Work

- Proactive Application of Dust/Vapor Suppressing Foam and Mercon-X®
- Placement of CAMP Stations Across the Street When There is Exposed Soil within 20 Feet of the Fence Line
- Use of Perimeter Sleeves for Odor Neutralization
- Provide Spare Equipment
- Prior to Shutting Down CAMP:
  - Apply a Daily/Overnight Cover, consisting of polyethylene sheeting and/or Atmos® AC-645 Long-Duration Foam, to exposed soil/fill
    - Application of Mercon-X® prior to the temporary cover in the mercury-impacted hotspot
  - Confirm Perimeter and Work Zone Concentrations are at or Below Background Conditions with the Handheld Jerome® J505 Units.



# Community Notification

## Community Notification Requirements

- Per the RAWP, community notification is required when there is a Significant Vapor Release that requires calling emergency response coordinators (ie. 911).
  - No such event has occurred since the start of work.
- Community notification is not required by the RAWP/CHASP when an exceedance of the action level occurs or mitigation measures are implemented.

## Project Information and Construction Hotline for Construction-Related Inquiries

- **For Calls and SMS Messages:** (917) 962-8166
- **For E-mails:** [info@250wsconstructionhotline.com](mailto:info@250wsconstructionhotline.com)
- **Website:** [www.250bcp.com](http://www.250bcp.com)

# Remediation Schedule Update

- Mercury-impacted hotspot and UST removal delayed until schools are closed for the summer
- Remedial activities are anticipated to resume on June 28, 2022.
- Anticipated work prior to June 28, 2022 will include:
  - Bumping out of perimeter construction fencing
  - Installation of a test pile on Saturday, June 11, 2022
  - Additional soil borings for waste disposal on Saturday, June 11, 2022

# Construction Noise Predictions

- Project EIS included exhaustive analysis of construction noise, including predictions for individual receptors during specific construction activities.
- The analysis predicted that noise levels would be highest during impact pile driving (occurring over the course of approximately 6 months) and the overlap of foundation construction with superstructure concrete operations (approximately 3 months).
- Interior noise levels at surrounding receptors (windows closed) during these periods were conservatively estimated in the high 50s dBA, which is comparable to typical conversation or slightly louder than ambient noise in a typical office.
- The study included development and evaluation of construction noise reduction measures resulting in commitments through the environmental review process.

# Commitment to Reduce Construction Noise

## NYC Noise Control Code Compliance

### Construction Noise Mitigation Plan:

- Equipment noise emission limits
- Use of grid power as early as possible
- Configure construction site to minimize vehicle backups, minimizing backup alarms
- Limit truck engine idling to 3 minutes
- Site-perimeter construction fence
- Use of impact cushion on piles (if impact pile driving is used)
- Impact noise (e.g., jackhammering, pile driver) < 15 dBA over ambient
- Non-impact noise (e.g., excavation, concrete operations, etc.) < 85 dBA at 50 feet

# Commitment to Reduce Construction Noise

## Project-Specific Commitments - Part of FEIS and Restrictive Declaration

- Lower equipment noise emission limits for select equipment (e.g., hoist, chipping gun)
- Site-perimeter noise barriers topped with 2-foot cantilever
- Concrete trucks located inside noise barriers during pouring and wash-out (noisiest activities for concrete operations)
- Provision of storm windows for impacted receptors without insulated glass windows
- Provision of window air conditioners for impacted receptors without air conditioning

# Additional Noise Reduction Measures Under Consideration

## Over-and-Above Commitments in FEIS and Restrictive Declaration

- **Noise barrier absorption:** absorptive material (i.e., “sound blankets”) on inner face of noise barriers reduces reflected noise
- **Higher noise barrier** (construction fence combined with sidewalk bridge) throughout building construction – will better shield at-grade receptors, including Peck Slip play area, from at-grade or below-grade construction activity (e.g., concrete operations)
- **No pile driving:** Drilled pile installation rather than impact-driven pile installation will result in reduced noise levels, less disruptive sound character



# Construction Vibration Protection

- Construction vibration monitoring to evaluate whether construction produces vibration that could potentially cause damage to adjacent buildings.
- Vibration monitors (i.e, seismographs) installed at 11 locations surrounding the construction site
- Continuous monitoring throughout on-site subgrade construction
- Not-to-exceed level of 0.5 inches per second in compliance with NYCDOB regulations
- Warning level of 0.25 inches per second to help construction team avoid reaching the not-to-exceed level
- Instant alerts to on-site construction team upon any threshold exceedance; upon alert, evaluate source of vibration and alter means/methods as necessary to avoid exceedance