



Gowanus Canal

Perimeter Wall Installation: Air Monitoring and Sampling

Note: Data being discussed was collected by NYC under EPA oversight

Air Monitoring (CAMP)

On-site/Perimeter

- ▶ Real-time monitoring for total VOCs and PM10 collected during working hours
- ▶ Any exceedance of alert/alarm values
 - ▶ immediate investigation was undertaken to determine the source
 - ▶ appropriate measures to address the source

Air Sampling

Community

- ▶ 24-hour air samples collected near the tank site, DEC sites, and background locations using summa canisters
- ▶ Analyzed for full volatile organic list
- ▶ Focused on primary coal tar compounds: BTEX (benzene, toluene, ethylbenzene and xylene) and naphthalene
- ▶ Five samples from June 27 through July 23 at each location



Comparison Criteria: Air Monitoring

- ▶ Total VOCs - 1 ppm
(0.5 - 0.75 ppm alert, >1 ppm action)

- ▶ PM10 - 150 $\mu\text{g}/\text{m}^3$
(100 - 150 $\mu\text{g}/\text{m}^3$ alert, >150 $\mu\text{g}/\text{m}^3$ action*)



Air Monitoring Results:

- ▶ Between October 2023 and May 2024
 - ▶ 3 PM10 alerts
 - ▶ 18 TVOC alerts
- ▶ Most related to:
 - ▶ Filling gas generators
 - ▶ Vehicle emissions
 - ▶ Filling the cement silos
 - ▶ Welding activities
- ▶ All events were short duration and addressed to quickly reduce/stop emissions



Comparison Criteria: Air Sampling

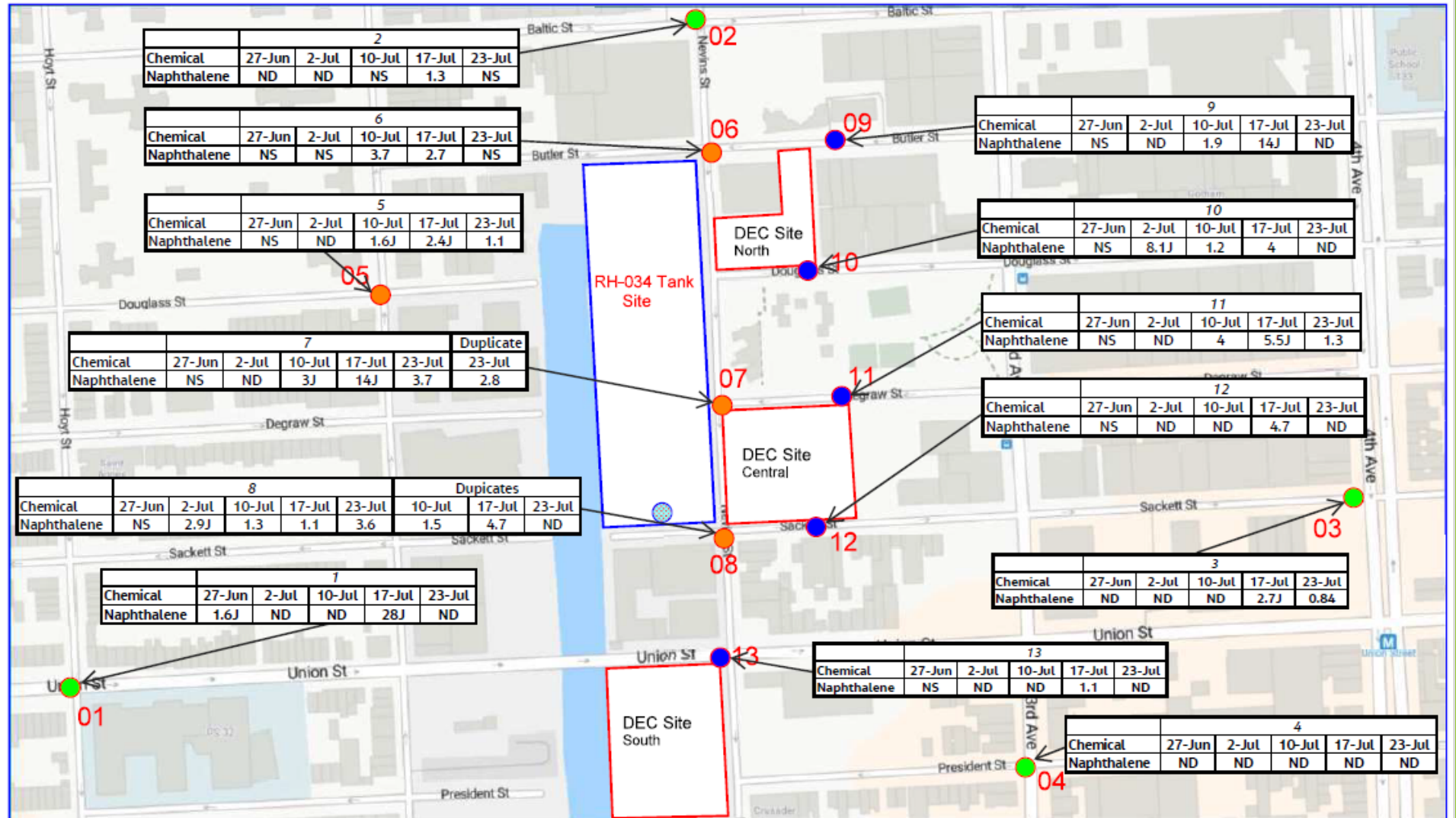
- ▶ Subchronic inhalation reference concentration (RfC)
 - ▶ an estimate of the daily inhalation exposure to a chemical that is unlikely to cause noncancer health effects during a person's lifetime (assumed to be 70 years)
 - ▶ Adjusted based on a maximum exposure duration of 7 years
 - ▶ Used at other coal tar sites in R5
 - ▶ Previous and forthcoming work combined will take far less time to complete
- ▶ Naphthalene: 30 ug/m³



DRAFT

RH34 Tank Construction - Ambient Air Naphthalene Sampling Results

Pending additional data quality review



● Tier 1 sample

● Tier 1 background sample

● Tier 2 sample

● Weather Station

Legend

All concentrations in ug/m3

ND Not detected in sample

NS Sample not collected

J Estimated value

N

Air Sampling Results - Community

- ▶ Background sample 1 - adjacent to PS-32
 - ▶ Only 1 anomaly
 - ▶ Subchronic health-protective level takes sensitive populations like school children and those with asthma into consideration
 - ▶ Data quality re-check
 - ▶ Canister pressure issue
 - ▶ 63/76 analytes rejected for this sample
 - ▶ “...it is not possible to determine whether the sample in the container was representative of the site location. Sample detections should be used with caution.”
- ▶ All naphthalene data
 - ▶ Looking into field logs and wind directions
 - ▶ Possible off-site sources of naphthalene odors:
 - ▶ Road paving
 - ▶ Vehicle exhaust
- ▶ Based on the current air sample data, we do not believe the work conducted at the site to date resulted in unacceptable risk to exposed populations.