The Bellwether District
AN HRP PROJECT

Environmental Update

Hilco Redevelopment Partners (HRP) is dedicated to taking the relics of the old economy and repurposing them to usher in a more sustainable future for our environment, economy, and community. The Bellwether District will write a new legacy for the South Philadelphia area, transforming the 1,300 acres former PES refinery into an economic engine for the region.

The process to safely tear down and reuse a 150-year-old property like the former refinery isn't quick or easy. But when it's complete, Philadelphia will be cleaner, with 19,000 additional permanent jobs, and well positioned for future growth in the neighborhood.

As part of the demolition process, HRP has implemented safe and efficient remediation technologies to address historic pollution, such as soil vapor extraction, to remove petroleum hydrocarbons that were spilled below ground during the operation of the refinery.

Due to our work, the former refinery is more than half dismantled and can no longer refine oil. 99% of the leftover petroleum product from the refinery has been removed and onsite demolition activity is approximately 93% complete.

Benzene

Benzene is a chemical found in the air from emissions from a variety of sources, including burning coal and oil, refining oil, gasoline, and motor vehicle exhaust. More information can be found on the EPA's website.[1]

In 2018, the Environmental Protection Agency's (EPA) Refinery Sector Rule[2] went into effect, requiring refineries to monitor the concentration of benzene at their fence lines. The purpose of measuring benzene concentrations in outdoor air at operating refineries is to use data patterns over time to identify sources, like leaky pipes or other equipment, that may be impacting air quality so that actions could be taken to address those sources.

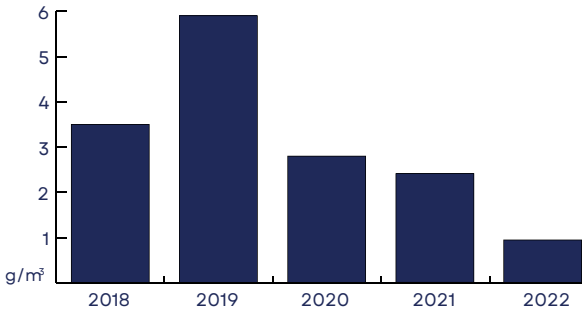
Benzene Monitoring

Benzene air monitoring and sample collection occurs continuously over two-week periods at approximately 30 locations around the perimeter of the site. Samples of the outdoor air surrounding the site are collected by HRP, submitted to EPA quarterly and posted online to The Bellwether District website.

In October 2021, the EPA and the City of Philadelphia recognized the end of refining operations at The Bellwether District. Starting in January 2023, HRP is no longer required to monitor benzene levels on the property following the closure of refining operations. However, the company currently continues to maintain testing sites and conduct sampling at regular intervals.

Interpreting Benzene Samples

The former PES refinery's benzene concentrations in outdoor air at the site are consistent with concentrations in other areas of Philadelphia and in other urban areas around the country.



The average benzene concentration at the perimeter of the property in 2022 was 1.2 micrograms per cubic meter (µg/m3), which is lower than the average concentrations detected in 2021 (2.4 µg/m3), 2020 (2.8 µg/m3), 2019 (5.9 µg/m3), and 2018 (3.5 µg/m3).

Consistently elevated benzene concentrations in outdoor air are not observed in the samples collected from the perimeter of the property.

1 - https://www.epa.gov/sites/default/files/2016-09/documents/benzene.pdf

2 - https://www.epa.gov/stationary-sources-air-pollution/petroleum-refinery-sector-rule-risk-and-technology-review-and-new