

IVY CITY AIR MONITORING PROJECT CLEAN AIR ACT / AIR TOXICS EPA MID-ATLANTIC REGION 3

February 2025

Project Overview

On May 5, 2022, the District of Columbia (DC) Department of Energy & Environment (DOEE) sponsored a walk in the Ivy City community (historically black community in northeast Washington, DC). It was then that the community identified odor concerns to EPA and raised possible environmental issues from a facility in the neighborhood, National Engineering Products (NEP). The neighborhood also has several industries in the surrounding area that could contribute to odors and emissions in the community. As a result, DOEE conducted a short-term sample study in the summer of 2022 to determine what compounds were present that



Figure 1: Ivy City Washington, DC map

might affect the community. DOEE's monitoring effort was limited to two sampling events when NEP processed two products, Copaltite and Nepseal. EPA received and reviewed DOEE's final report and determined that a more comprehensive monitoring project was needed.

EPA's Air Monitoring Process

EPA offered to conduct expanded community air quality monitoring in Ivy City. EPA engaged with DOEE in the sample design effort to allow for a more extensive monitoring project. EPA Region 3's Laboratory agreed to provide data analysis support on volatile organic compounds. EPA decided to conduct six sampling episodes to best provide trends, identify and compare significant concentrations of pollutants, and identify emission sources contributing to any community exposure. Sampling would be conducted at both residential and non-residential areas. EPA held a virtual meeting with the Ivy City community on April 27, 2023 (recording - https://youtu.be/fyPU8kMFcDc), to inform all interested parties of EPA's Air Monitoring Project and to solicit homeowners for sampling outside residences. After





explaining the structure of the air monitoring study, how the study would be implemented, and expectations during the sampling study, EPA moved forward with scheduling the first round of sampling in Ivy City which commenced July 2023. The sampling of residential homes required a signed access agreement from homeowners whose residence had no obstructions (e.g., trees, bushes, fences). EPA staff then secured a canister to the homeowner's porch for 8-hours, 3-days in a week (a production day at NEP, a nonproduction day at NEP, and a weekend day) which encompassed the sampling period. It was requested that there be no smoking, cleaning with solvents, and/or cooking outdoors during the sample time. EPA staff returned to remove the canister at the end of each 8-hours during sample day. The canisters with collected samples were sent to EPA's laboratory for analysis and results. The second round of EPA sampling consisted of non-residential areas (completed August 31 – September 2, 2023). The third round of EPA sampling consisted of residential areas (completed December 2023). The fourth round of EPA sampling consisted of non-residential areas (completed January 2024). The fifth round of EPA sampling consisted of residential areas (completed March 2024). The air monitoring plan, consisted of sampling during the production day, a non-production day, a weekend day, and background sampling on all 3-days (with no sources present located in Beltsville, MD). By doing a more comprehensive sampling, we hope to see if there would be a difference in ambient air and to see if there are other sources of emissions contributing to community exposure. The first, second, third, fourth, fifth, and sixth rounds of sampling results can be found here as well as the Ivy City Non-Residential Monitoring Locations, Trip 1-Final Analytical Lab Report, Trip 1-Analytical Lab Report Summary, Trip 2-Final Analytical Lab Report, Trip 2-Analytical Lab Report Summary, Trip 3-Analytical Lab Report Summary, Trip 3-Final Analytical Lab Summary-Part 1, Trip 3-Final Analytical Lab Summary-Part 2, Trip 4 Analytical Lab Report Summary, Trip 4-Final Analytical Lab Summary-Part 1, Trip 4-Final Analytical Lab Summary-Part 2, Trip 5-Analytical Lab Report Summary, Trip 5-Final Analytical Lab Summary-Part 1, Trip 6-Final Analytical Lab Summary-Part 2 and Trip 6-Analytical Lab Report Summary. On July 11, 2024 EPA held an in-person meeting with the Ivy City community to present air monitoring data taken up to that time (recording - https://www.youtube.com/watch?v=3JyPzQAZVYo). Responses to questions received virtually in the chat can be found here. Sampling results for formaldehyde, phenol and cresols can be found here: Trip 1-Formaldehyde, Trip 1-Phenol & Cresols, Trip 2-Formaldehyde, Trip 2-Phenol & Cresols, Trip 3-Formaldehyde, Trip 3-Phenol & Cresols, Trip 4-Formaldehyde, Trip 4-Phenol & Cresols, Trip 5-Formaldehyde, and Trip 5-Phenol & Cresols.

Project Time Line

May	Summer	February	June	August	December	January	March	July	July	September	October	November	Dec (2024)
(2022)	(2022)	(2023)	(2023)	(2023)	(2023)	(2024)	(2024)	(2024)	(2024)	(2024)	(2024)	(2024)	Jan (2025)
DC DOEE Ivy City Walk	DOEE conducts short-term sample study	EPA received DOEE Final laboratory report	EPA- 1 st round of sampli ng- resider tial	EPA- 2 nd round of sampling non- residentia	EPA- 3 rd round of sampling- residential	EPA- 4 th round of sampling non- residentia	EPA- 5 th round of sampling- residential	Mid- point Public Meeting	Formaldehyde Phenol, Cresols- sampling non- production (weekday & weekend)	EPA- 6 th round of sampling- non- residential	Formaldehyde Phenol Cresols- sampling production & non- production weekday)	Formaldehyde, Phenol Cresols sampling (two weekend days)	Formaldehyde Phenol Cresols sampling (weekend & weekday sampling)

Data Analysis

EPA uploaded sampling data to its Internet website (<u>https://www.epa.gov/dc/ivy-city-air-monitoring-project</u>) as the sampling progressed. Interim and final sampling results will be shared with the Ivy City community and DOEE. Final public health analysis of the data will also be available on EPA's webpage. In addition, EPA plans to host an interim and final meeting with all interested parties to discuss results of air monitoring analysis (date to be determined).

EPA Region 3 Contacts

Alice Chow Air Quality Analysis Branch Chief 215-814-2144 chow.alice@epa.gov Howard Schmidt Air Quality Analysis Branch 215-814-2133 schmidt.howard@epa.gov Karl Markiewicz Air Quality Analysis Branch 215-814-5741 markiewicz.karl@epa.gov