

# WHAT'S IN THE AIR: Parcels D-2, UC-1, UC-2, and UC-3

A Summary of Air and Dust Monitoring During Environmental Cleanup at Hunters Point Naval Shipyard January—March 2025



Parcels D-2, UC-1, UC-2, and UC-3

Dust is a common air pollutant generated by many different sources and activities. It occurs naturally all around us and may be worsened by activities like construction, excess buildup of dirt on roadways, and weather conditions.

At HPNS, the Navy performs dust monitoring in real-time, giving the Navy results of current conditions as they are happening.

The Navy also collects air samples on filters. They are sent to an off-site laboratory for chemical analysis. It takes several weeks to get air sample results back from the laboratory.

# RESOURCES FOR MORE INFORMATION ON DUST

United States Environmental Protection Agency

www.epa.gov/air/



scan to link



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California Environmental Protection Agency Air Resources Board

www.arb.ca.gov

Bay Area Air Quality Management District

www.baagmd.gov



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San Francisco Department of
Public Health
www.sfdph.org

City of San Francisco Department of Public Health Asthma Task Force



www.sfgov.org/asthma scan to link

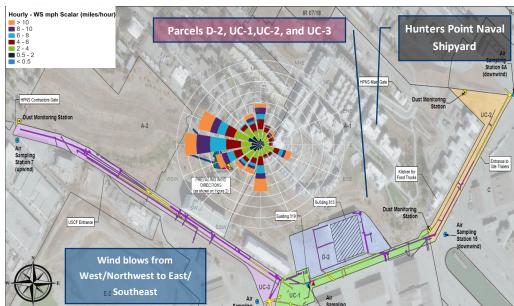
Wind Rose Diagram, January through March 2025

**Overview** 

The Navy performs air quality monitoring during environmental cleanup field work at Hunters Point Naval Shipyard (HPNS) for on-site worker safety and protection of the surrounding community. At Parcels D-2, UC-1, UC-2, and UC-3, air quality monitoring includes real-time dust monitoring and filter-based air sampling. In general, air monitors are running when work is being performed. Air monitors may not operate during rain, equipment maintenance, or when workers are not on-site. This fact sheet provides a summary of Parcels D-2, UC-1, UC-2, and UC-3 dust and air sampling data from January through March 2025. During this quarter, no site activities occurred before January 29, 2025 and after March 27, 2025; therefore, no filter-based air monitoring data were reported.

#### **Tracking Dust During Fieldwork**

The Navy uses a "wind rose" to visualize wind direction and speed over a period of time. It provides information on how field work at HPNS may affect the community. The image below maps hourly wind data. It shows that most high-speed winds (orange/purple/blue) were from the West/Northwest, blowing across HPNS towards the San Francisco Bay. Speed and duration of winds from other directions did not have a significant impact on HPNS.



Ref: General Wind Rose Counts by Wind Direction for January through March 2025

Summary of Air Sampling Data (January—March 2025)



#### **Real-time Dust Monitoring at HPNS**

The Navy collects data for dust using real-time monitors (see map, above). Daily concentrations of dust (measured as particulate matter that is 10 microns or less in diameter [PM10]) for the current period are provided in the graph on Page 3. The dust results reflect the real-time concentrations and are compared to action levels established by the Navy, U.S. Environmental Protection Agency (EPA), and the California Department of Toxic Substances Control (DTSC). External factors that are unrelated to HPNS construction activities (e.g. smog, weather, fires, or other construction in the area) are considered in the evaluation of dust results at HPNS.

#### **Laboratory-confirmed Results at HPNS**

High- and low-volume air samplers measure dust and other contaminants of concern (COCs) at HPNS. Analysis of the raw data from air sample filters by an offsite laboratory typically takes about 2 months.

A Navy review of lab analytical results and other external factors, determined that dust levels at HPNS during the current period were within approved limits.

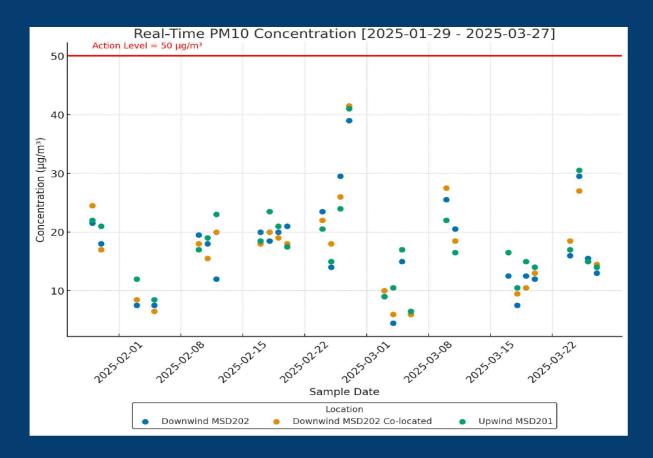
For more information on air sampling at HPNS, visit the "Air Monitoring" section of the Documents page of the Navy's website at <a href="https://www.bracpmo.navy.mil/hpns">www.bracpmo.navy.mil/hpns</a>

You may also request a copy of an HPNS report by sending an email to info@sfhpns.com

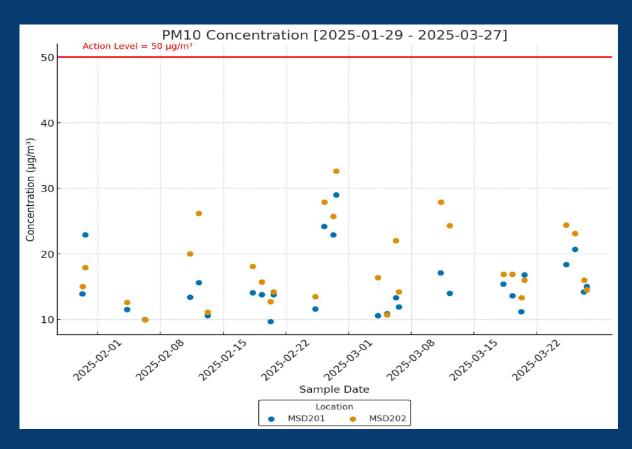
scan to link to Navy's website

## **Summary of Dust and Air Sampling Data (January—March 2025)**

#### Real-time Dust Monitoring at Parcels D-2, UC-1, UC-2, and UC-3



#### Laboratory Analysis of Air Monitoring Results at Parcels D-2, UC-1, UC-2, and UC-3



#### Summary of Air Sampling Data (January—March 2025)

#### **Contaminants of Concern (COCs)**

The Navy tests for several COCs at HPNS that are present in soil from both natural sources and historic shipyard activities. For the safety of shipyard neighbors, the Navy monitors air for COCs upwind and downwind of active construction sites. As with dust, COCs are collected on filters over 24 hours and sent to an offsite laboratory for analysis. COCs include asbestos, lead, manganese, PM10, and total suspended particulates (TSP). The highest measured results of COCs for the current period are provided below. The results are compared to action levels defined in Navy Work Plans as approved by EPA and DTSC.

#### Radionuclides of Concern (ROCs)

A radionuclide is an atom (element) with an unstable nucleus (core). The Navy tests for ROCs at Parcels D-2, UC-1, UC-2, and UC-3. These ROCs are present in soil due to minerals in the Earth, nuclear fallout, and historical shipyard activities. To ensure the safety of shipyard neighbors, the Navy monitors air for ROCs upwind and downwind of active construction sites. Air samples are collected on filters over 24 hours. The air sample filters are sent to an offsite laboratory for analysis.

The ROCs include cesium-137, radium-226, and total strontium. The results are compared to action levels defined in Navy Work Plans as approved by EPA and DTSC. The highest measured results of ROCs for the current period are provided below. There were no exceedances of ROCs during this reporting period.

| Contaminant of Concern                     | Unit           | Action Level                          | Highest Measured Result during Reporting Period | Action Level Exceedance?       |
|--|----------------|---------------------------------------|---|--------------------------------|
| PM10 (by air sampling laboratory analysis) | μg/m³<br>μg/m³ | 5,000 <sup>a</sup><br>50 <sup>b</sup> | 32.6  | No<br>No (see graph on Page 3) |
| TSP  | μg/m³          | 500                                   | 63.4  | No                             |
| Lead                                       | μg/m³          | 0.15 <sup>c</sup><br>50               | 0.02  | No                             |
| Manganese                                  | μg/m³          | 200                                   | < 0.04  | No                             |
| Asbestos                                   | fibers/cc      | 0.1                                   | 0.001   | No                             |
| Cesium-137                                 | μCi/mL         | 4.0 x 10 <sup>-11</sup>               | 2.8 x 10 <sup>-15</sup>                         | No                             |
| Radium-226                                 | μCi/mL         | 1.8 x 10 <sup>-13</sup>               | 2.0 x 10 <sup>-14</sup>                         | No                             |
| Total Strontium                            | μCi/mL         | 1.2 x 10 <sup>-12</sup>               | 2.3 x 10 <sup>-14</sup>                         | No                             |

#### **Table Notes:**

μCi/mL = microcurie per milliliter μg/m³= microgram per cubic meter fibers/cc = fibers per cubic centimeter

<sup>&</sup>lt;sup>a</sup> California Occupational Safety and Health Administration permissible exposure limit for particulates not otherwise regulated (respiratory) used for PM10.

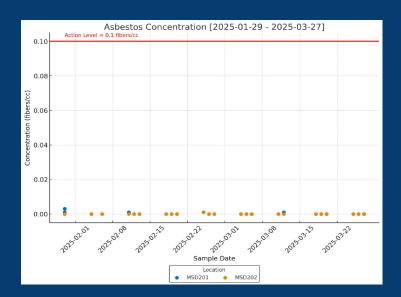
<sup>&</sup>lt;sup>b</sup> The DTSC Human and Ecological Risk Office action level is based on the CSAAQS (California State Ambient Air Quality Standard). The CSAAQS is designed to protect the general public from airborne particulates generated in the urban, suburban, and rural environments. The CSAAQS is not meant to be applied to general project-specific construction actions and related air quality. Rather, the standard is used to attain city- or regional-wide ambient air quality goals for the benefit of the general public. The current CSAAQS for PM10 is 50 μg/m³ average per 24-hour day. The City and County of San Francisco is currently a non-attainment area for the CSAAQS for PM10.
<sup>c</sup> Federal lead NAAQS (National Ambient Air Quality Standard) action level. Provided for information only.

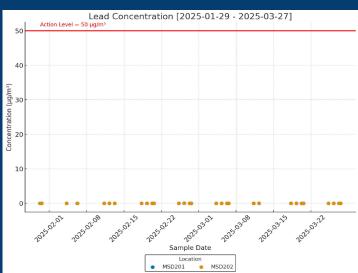
#### **Summary of Quarterly Air Sampling Data: Contaminants of Concern**

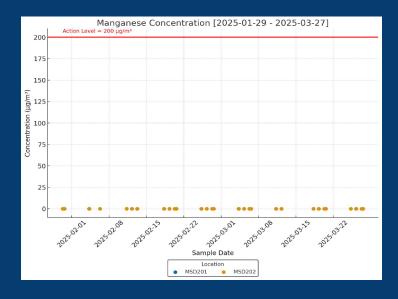
The following graphs presented below summarize air monitoring data at HPNS during January through March 2025 for four identified COCs. These COCs include asbestos, lead, manganese, and TSP.

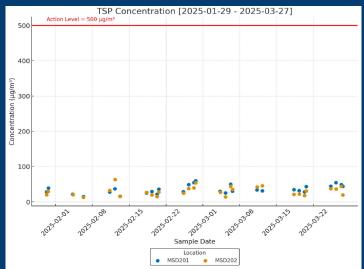
There were no exceedances in COCs in air during January 29 through March 27, 2025. Note that in the graphs below, concentrations not detected at or below the reporting limit are graphed as being equal to zero. During this reporting period, no air samples were collected prior to January 29, 2025 and after March 27, 2025 as no site work was performed on those days.

For more information on air sampling and radiological cleanup at HPNS, visit www.bracpmo.navy.mil/hpns.









<sup>\*</sup>Radionuclides of concern are provided on Page 6 of this summary report.

## **Summary of Quarterly Air Sampling Data: Radionuclides of Concern**

The following graphs provided below summarize air monitoring results at HPNS during January 30 through March 27, 2025 for three identified ROCs. These include cesium-137, radium-226, and total strontium. No exceedances in ROCs in air were reported at HPNS during this reporting period. Note that in the graphs below, concentrations not detected at or below the reporting limit are graphed as being equal to zero. Negative concentrations occur when the measured value, after subtracting background radiation, is below zero due to normal statistical variation at very low concentrations. This does not mean the radionuclide is present in a negative amount—it simply indicates the result is below detection limits and consistent with zero. During this reporting period, no air samples were collected before January 30, 2025 and after March 27, 2025 as no site work was performed on those days.

For more information on air sampling an radiological cleanup at HPNS, visit www.bracpmo.navy.mil/hpns.

