



How is diesel exhaust regulated in Seattle?

- The U.S. EPA regulates the allowable levels of six common air pollutants, also known as “criteria pollutants.”
 - Four of these pollutants are found in diesel exhaust (particulate matter, nitrogen dioxide, carbon monoxide, and sulfur dioxide).
 - Levels of 1-Nitropyrene and LAC are not currently regulated by the EPA
- Seattle is currently in compliance with national standards for these common air pollutants.
- The U.S. EPA also sets diesel exhaust emissions standards for trucks, trains and marine vessels.

Have Questions? Want to learn more?

Come to a community workshop!

To get more information: Call **Sam Keller** at 206.568.5000 x 29 or email at sam@pugetsoundsage.org.

Visit our website: www.duwamishdiesel.org

For questions about the research study design contact Julie Fox UW DEOHS at 206.685.8062 or email at richmanj@uw.edu

EASY ACTIONS - BUILD KNOWLEDGE - POWERFUL CLEAN AIR OUTCOMES
Diesel Exhaust Exposure in the Duwamish Study (DEEDS)



SCHOOL OF PUBLIC HEALTH
UNIVERSITY of WASHINGTON



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Department of Environmental and Occupational Health Sciences (DEOHS) & Puget Sound Sage

RESULTS NEWSLETTER



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Your neighbors in Georgetown and South Park collaborated with the University of Washington’s Department of Environmental and Occupational Health Sciences and Puget Sound Sage to study diesel exhaust exposure in the Duwamish (DEEDS). Together we:



- Educated fellow community members about diesel exhaust through public meetings and home visits.
- Conducted 600 neighborhood surveys which identified trucks as the primary source and residential areas as the priority locations to monitor.
- Hosted home monitors throughout the neighborhoods.
- Monitored air in August and December throughout South Park and Georgetown.
- Created a way to understand differences in diesel exposure across the neighborhoods.

This newsletter is the first step to understanding complicated results.

Why Diesel Exhaust?

Reasons why more information about diesel exhaust is important to the community:

1. The World Health Organization classifies diesel exhaust as a “known carcinogen” and a cause of lung cancer, and the U.S. EPA states that diesel exhaust is “likely to be carcinogenic”.
2. Pollution from traffic, including diesel exhaust, is linked to asthma and can worsen asthma attacks.
3. There is increasing evidence that pollution from traffic is associated with heart disease.



COMPARISON DATA

Georgetown & South Park vs. Beacon Hill & Queen Anne?

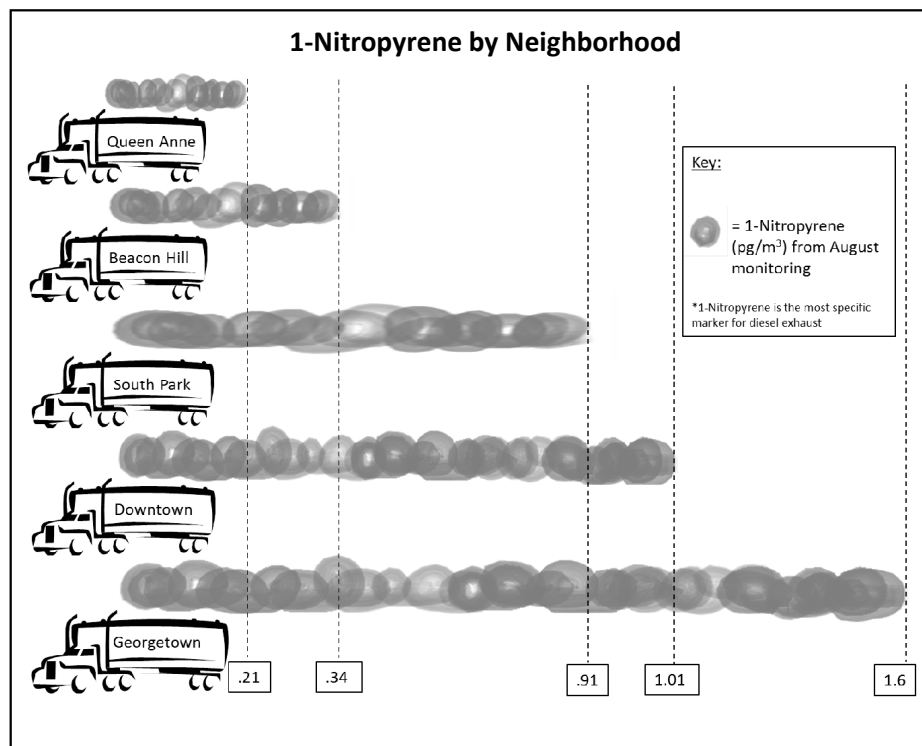
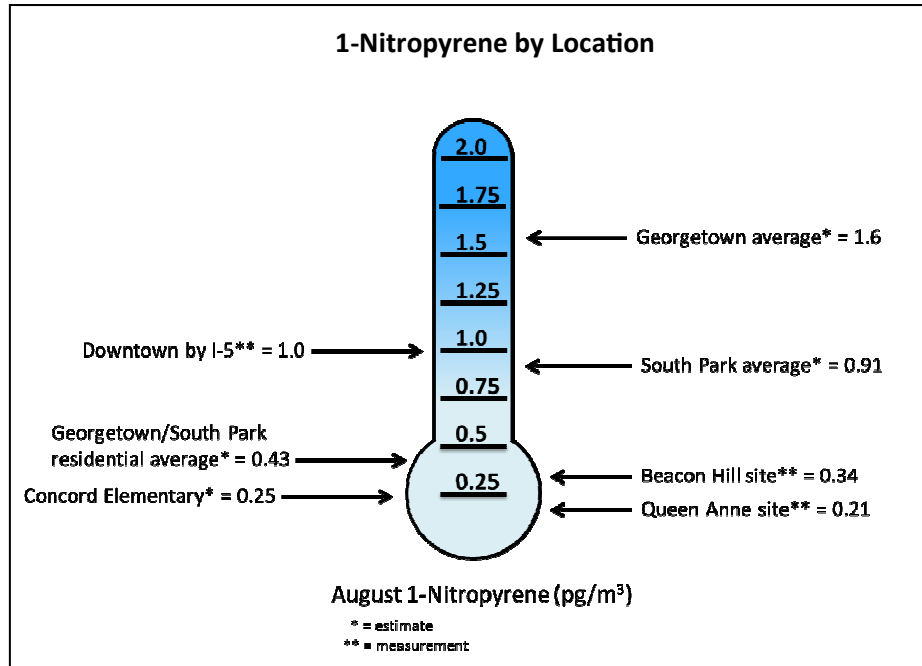
Our study found wide differences in pollution levels within Seattle. **These figures demonstrate the disproportionate impact of diesel exhaust on the neighborhoods of Georgetown and South Park** compared to the measured sites in Queen Anne, Beacon Hill, and Downtown at Boren and Olive. These figures represent only relative pollution levels within Seattle and do not reflect comparisons to national standards or to other areas.

- The most specific marker for diesel exhaust is 1-Nitropyrene (1-NP). The average estimate of 1-NP in the Duwamish Valley in summer is more than 3 times the level we measured at Beacon Hill and more than 5 times the level we measured at Queen Anne.

- Residential areas have lower diesel pollution estimates than industrial or commercial areas in South Park and Georgetown, but they are higher than the Queen Anne and Beacon Hill residential comparison sites.

- The top three areas for diesel pollution from our models of South Park and Georgetown are E. Marginal Way S in Georgetown, the 1st Avenue bridge, and the Georgetown commercial district.

Note: These figures show August data, for more information about winter data and other graphs, see our technical report at: duwamishdiesel.org



AVERAGE POLLUTION SCORE MAP

Where are diesel pollutants throughout my neighborhood?

The map below shows the concentrations of diesel exhaust pollutants we measured throughout the Georgetown and South Park neighborhoods. The pollution score includes Light Absorbing Carbon (LAC, "soot"), Nitrogen Oxides (NO_x), and 1-Nitropyrene (1-NP), which are averaged over both seasons.

