



City of Seattle

Gregory J. Nickels, Mayor

Seattle Public Utilities

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South Park Streets Fact Sheet

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Background

The City of Seattle conducts source control work in areas draining to the Lower Duwamish Waterway Superfund site and its early action cleanup areas. In 2004, the City found PCBs (polychlorinated biphenyls) in dirt on streets, at a storage lot, and in two residential yards generally in the area of Dallas Avenue South, 17th Avenue South and 16th Avenue South. The City did an interim cleanup of the PCBs – removing some contaminated dirt and covering up other areas so that people could not come into contact with the chemicals (see map). This area will be cleaned up permanently as one of three areas of the overall EPA regulated cleanup site known as Terminal 117.

In its continuing effort to analyze sampling and monitoring information of the streets area, the City of Seattle has now confirmed that chemicals called dioxins were in dirt that was scraped from a road shoulder on the north side of 16th Avenue South at Dallas Avenue South (see map). Though the sample area has been cleaned up as part of the interim effort, more sampling will be done to make sure that no dioxin remains in the area that could pose a health risk.

How Much Dioxin Was in the Dirt Sample?

The street sample had a dioxin level of 90 parts per trillion. The state standard for unrestricted land use is 11 parts per trillion. Dioxin is commonly found in our environment.

The dirt sample was originally collected and analyzed for PCBs in 2005 after the City found out that some dirt on street surfaces and shoulders, and soil in two residential yards and a storage lot contained PCBs. The City analyzed the sample for dioxin several months later because it wanted to see if dioxin was a common chemical in areas around the Duwamish River. The 16th Avenue South sample was one of two dirt samples analyzed for dioxin in the area. The other sample, collected from an underground oil-water separator in a fenced area of Basin Oil along Dallas Avenue South contained 15 parts per trillion of Dioxin. The oil-water separator is no longer in operation.

Shortly after the City found the PCBs, it cleaned up the streets and shoulders in the area by digging out some soil and replacing with clean soil and gravel, and paving over other areas to protect people from coming into contact with the dirt. The dirt where the dioxin sample was found was also removed and covered with clean gravel so it does not present a health risk to anyone.

Under direction from EPA, the City will conduct additional sampling to ensure there is no remaining dioxin that could be a health risk to people or the environment. We expect to complete the sampling and get results as soon as possible and we will share the information with the South Park community.

Dioxin Facts (for more details, please see the ATSDR fact sheet or visit www.atsdr.cdc.gov/tfacts104.html)

Chlorinated Dibenzop-dioxins (CDDs, commonly known as dioxins) are a family of 75 chemically related compounds commonly known as chlorinated dioxins.

Dioxins can be produced during activities such as combustion and incineration, brush and forest fires, pulp and paper manufacturing, leaded fuels in vehicles, drinking water chlorination, wastewater treatment processes, and other industrial processes. While current rules limit the amount of dioxins that are released into the air, in the past, dioxins routinely contaminated the environment. Dioxins take many years to break down, and scientists believe that every single person on earth has likely been exposed to some amount of dioxin.

Can Dioxin Cause Health Problems?

Health effects of exposure depend on level of exposure, timing, duration and frequency. It is known that people exposed to large amounts of dioxin can develop a severe skin rash called chloracne. Other skin effects include rashes, discoloration, and excessive body hair. Exposures to high concentrations may have long-term effects in humans. Several studies suggest increased cancer risk in humans exposed to certain dioxins.

Animals have been shown to have health effects from dioxin exposures including weight loss, liver damage, reproductive problems, birth defects, weakened immune systems, cancer and, in some cases, death.

How Am I Exposed?

People are most often exposed to dioxins by eating fish, meat, and dairy products that have these chemicals. You can also be exposed to dioxins by touching or breathing in contaminated dirt, pesticides, herbicides, or drinking contaminated water. Living or working near an uncontrolled hazardous waste site, incinerators, or industries that produce dioxin byproducts can also increase your risk of exposure.

How Can I Reduce My Risk?

- Avoid working or playing in soils near hazardous waste sites.
- Keep children from eating dirt or putting toys or other objects in their mouths.
- Wash hands and toys frequently when playing or working around soil.
- Use raised gardening beds filled with clean soil if you grow and eat your own produce.
- Do not eat foods grown near contaminated areas.
- Keep pets away from hazardous waste sites.
- Keep pets clean. Brush and wipe paws before letting pets in the house.
- Have pets sleep in their own beds.
- Remove your shoes when you enter your house.
- Sweep and vacuum often with a HEPA filter vacuum.
- Use a damp cloth to clean dust and dirt from hard surfaces.

More Information

- For questions about the residential street cleanup and sampling, please contact Tom Meyer, 206.386.9168 or tom.meyer@seattle.gov
- For questions about the cleanup of the soils on the former Malarkey property (now Terminal 117) and adjacent waterway sediment within the Terminal 117 general early action cleanup area, please contact Roy Kuroiwa, Port of Seattle, 206.728.3814 or kuroiwa.r@portseattle.org
- For questions about the Terminal 117 and area streets cleanup, contact Piper Peterson Lee, EPA, 206.553.4951 or peterston-lee.piper@epa.gov

- For questions about risks from dioxin exposure, contact Lenford O'Garro, Washington State Department of Health, 360.236.3376 or lenford.o'garro@doh.wa.gov; OR Lee Dorigan, Public Health-Seattle and King County, 206.263.8494 or lee.dorigan@kingcounty.gov
- Visit www.atsdr.cdc.gov/tfacts104.html for more information about dioxin
- Visit www.T117.com for general T117 cleanup information
- Visit www.seattle.gov/util/southpark for information about the 2004 interim streets cleanup