

HEALTH INFORMATION ABOUT PCBs AND DIOXINS

TERMINAL 117 SUPERFUND SITE, SOUTH PARK



U.S. Environmental Protection Agency, Region 10

Spring 2010

What are PCBs?

Polychlorinated biphenyls (PCBs) are mixtures of up to 209 individual chemicals. There are no known natural sources of PCBs. PCBs have been used as coolants and lubricants in transformers and other electrical equipment because they don't burn easily and are good insulators. PCBs are also produced by combustion of PCB laden oils. PCBs were banned in the U.S. in 1977 because of evidence they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils. PCBs do not break down easily in the environment, and as a result, are found everywhere.

Can PCBs cause health problems?

The potential health effects from exposure to PCBs depend on a variety of things:

- How much a person is exposed to PCBs.
- How long and how often a person is exposed.
- How a person is exposed (breathing in, eating, or touching).

People exposed to PCBs may have increased risk of cancer, liver damage, reproductive problems, birth defects, and weakened immune systems. There are low levels of PCBs in soils in some of the streets and residential yards at Terminal 117 in South Park. The Washington Department of Health is preparing a public health consultation to look at the potential health threat from exposure to PCBs (and dioxins) in the streets and residential yards at Terminal 117. Though still undergoing review, the final draft of the health consultation will conclude that the low levels of PCBs found here do not pose a health threat to the community of South Park.

How can you be exposed?

You could be exposed to PCBs if you live or work near a contaminated site like Terminal 117 in South Park, or near other incinerators or industries that used PCB byproducts. You can also be exposed to PCBs by eating fish, meat and dairy products that have these chemicals or by touching, eating or breathing in contaminated dirt, some lubricants, or some caulking.

How can you protect yourself?

- Keep your children from eating dirt or putting toys or other objects in their mouths.
- Wash your hands and toys after playing or working in soil.
- Use raised gardening beds or containers filled with clean soil for growing fruits and vegetables. Wash and scrub fruits and vegetables before eating.
- Keep your pets clean. Brush and wipe paws before letting pets in the house and have pets sleep in their own beds.
- Remove your shoes when you enter your home.
- Use a damp mop on non-carpeted floors and vacuum carpets often.
- Use a damp cloth to clean dust and dirt from hard surfaces in your home.

What are dioxins?

Dioxins are a family of chemicals with similar chemical structures and health effects. Dioxins can be formed during industrial processes such as burning wood for fuel, pulp and paper manufacturing, and certain types of chemical manufacturing.

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Dioxins can also come from local sources like burning wood in fireplaces, wood stoves, ash in yards and burn barrels, as well as natural events such as brush and forest fires. Dioxins do not break down easily so they stay in the environment and can be found in animals, sediments, and soils. Most people have probably been exposed to some amount of dioxin.

Can dioxins cause health problems?

The potential health effects from exposure to dioxins depend on a variety of things:

- How much a person is exposed to dioxins.
- How long and how often a person is exposed.
- How a person is exposed (breathing in, eating, or touching).

People exposed to dioxins may have increased risk of cancer, liver damage, reproductive problems, birth defects, and weakened immune systems. There are low levels of dioxins in soils in some of the streets and residential yards at Terminal 117. The Washington Department of Health is preparing a public health consultation to look

at the potential health threat from exposure to dioxins (and PCBs) in the streets and residential yards at Terminal 117.

Though still undergoing review, the final draft of the health consultation will conclude that the dioxin levels found here site do not pose a health threat to the community of South Park.

How can you be exposed?

You could be exposed to dioxin if you live or work near a contaminated site like Terminal 117 in South Park, or near incinerators or other industries that produce dioxin byproducts.

You can also be exposed to dioxins by eating fish, meat and dairy products that have these chemicals or by touching, eating or breathing in contaminated dirt, pesticides, or herbicides.

How can you protect yourself?

You can reduce your risk from dioxins at Terminal 117 by following the same precautions recommended for PCBs on the front page of this Fact Sheet

WHERE CAN YOU GET MORE INFORMATION?

For questions about health risks from PCBs or dioxin/furans, contact:

Elmer Diaz, Washington Department of Health, (360) 236-337, elmer.diaz@doh.wa.gov

Erin Kochaniewicz, Washington Department of Health, erin.kochaniewicz@doh.wa.gov, (360) 236-3358

Bill Lawrence, Public Health Seattle/King County, (206) 263-8467, bill.lawrence@kingcounty.gov.

For more information about PCBs or dioxins, visit

www.atsdr.cdc.gov/toxfaqs/index.asp.

For questions about the Terminal 117 cleanup, contact:

Piper Peterson Lee, EPA, (206) 553-4951, or peterston-lee@epa.gov

Suzanne Skadowski, EPA, (206) 553-6689, or skadowski.suzanne@epa.gov.



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