EPA
United States
Environmental Protection
Agency
Region 10

Rainier Commons: Indoor PCB sampling results are now available

Seattle, WA

March 2011

The U.S. Environmental Protection Agency (EPA) sampled indoor spaces at Rainier Commons to see if there were levels of PCBs (**polychlorinated biphenyls**) that could potentially be unhealthy.

- The sample results show that the PCB levels in residential living and office spaces are of limited concern. It is still a good idea to follow the Washington Department of Health's recommendations (attached) to minimize your exposure to PCBs.
- The Building 6 stairwell has high levels of PCBs in paint and dust which must be removed.
- We know from past sampling that much of the paint on the outside of the building contains PCBs over the regulatory limits. That paint will be removed. In the meantime, you can reduce the possibility of tracking PCB dust into your home or office by wiping your shoes off on a door mat or removing them before entering. Regular vacuuming also will reduce PCBs tracked inside the building.

Sampling Results

High levels of PCBs are in the paint on the outside of the Rainier Commons buildings. From June through September 2010, EPA sampled for PCBs inside the building. Paint, air and dust were sampled. Paint was sampled because it could be the source of PCBs. Air and dust were sampled, since people are likely to be exposed to them and they could contain PCBs from the paint.

Air: The air results from inside the buildings showed no threats to human health because no PCBs or barely detectable levels of PCBs were found.

Paint: Paint with PCBs above regulatory limits was found in some areas. Rainier Commons LLC conducted more sampling under EPA guidance. Rainier Commons LLC will develop a plan to remove the paint once the new sampling results are available. EPA will review and approve the plan and share it with building tenants.

Dust: Dust results showed low levels of PCBs, and it would be difficult for people to breathe or touch enough dust at Rainier Commons to cause health problems. Dust samples in homes and offices at Rainier Commons range from 1.4 to 15.6 parts per million (ppm). EPA looked at health guidelines and specific conditions at Rainier Commons when considering these results.

- PCB levels found in dust are close to the EPA guidelines to protect adults and slightly above the guidelines for children. EPA Region 10 guidelines for PCBs in dust are 10 ppm for adults and 1 ppm for children. EPA believes these guidelines are health protective with an ample margin of safety. The adult guideline assumes a person would live in the same space all year for 30 years. The child guideline assumes a child would live in the same space all year long for six years. PCB levels slightly above the guidelines are not likely to cause health problems.
- PCBs are found in almost all indoor and outdoor environments. Typical background levels of PCBs of 0.25 ppm to 2 ppm are seen in studies of house dust.
- EPA had to vacuum large areas to obtain enough dust to analyze. It would be difficult for either adults or children to come into contact with enough dust to cause health problems.

Dust sample results

Rainier Commons homes and offices	Typical background levels in other indoor locations	EPA protective guidelines
1.4 – 15.6 ppm PCBs	0.25 – 2 ppm PCBs	10 ppm PCBs adult, 30 yr exposure 1 ppm PCBs child, 6 yr exposure

What happens next?

Building 6 Stairwell

The Building 6 stairwell used to be on the outside of the building and was enclosed as part of the redevelopment of Rainier Commons. The paint in this stairwell is similar to that on other parts of the outside of Rainier Commons and the dust contains high levels of PCBs (476 ppm).

Rainier Commons LLC has posted signs on the stairwell doors requesting that tenants do not use it. The stairwell paint will be removed and the stairwell will be vacuumed to remove dust.

Homes and Offices:

- **Dust**: Avoid tracking outside contamination inside by removing shoes or wiping shoes before entering homes. Regular vacuuming and wet mopping also will help reduce PCBs in dust. These practices are particularly important in spaces where children live.
- **Paint**: Two spaces were found with paint above the regulatory limit. Additional sampling by Rainier Commons LLC will be helpful in determining how best to deal with that paint. As long as the paint is not flaking or peeling, the PCBs in the paint are unlikely to be a health threat.

Storage areas

Dust in storage/warehouse areas in Building 14 were measured at 16.1 and 36 ppm PCBs. The dust sample from Building 15 contained 3.4 ppm PCBs. It is likely that the dust in Building 14 is the result of tracked in dust from flaking paint outside the building. Vacuuming probably will reduce the PCB levels.

Outside paint

Rainier Commons LLC is developing plans for addressing PCBs in paint above the regulatory limits — both inside and outside the buildings. Dealing with the inside of the building (Building 6 stairwell) is the first priority. Until a final solution to the issue of PCBs in building exterior paint is in place, Rainier Commons LLC has arranged for regular cleaning of flaked paint chips outside the building, which will help minimize the potential to track additional PCBs in to the building interior and living spaces.

For More Information...

If you have any questions or concerns, please contact:

☎ Renee Dagseth, EPA at 206-553-1889 or
dagseth.renee@epa.gov

☎ Tristen Gardner, EPA at 206-553-6240
gardner.tristen@epa.gov

Environmental contaminants
PCBs

Washington State Department of Health

DOH 334-231 May 2010

Environmental contaminants can affect any community. They are chemicals found in the environment in amounts higher than what would be there naturally. They come from industrial or commercial sources and can be in the things that people are in contact with everyday like soil, water, and air.

Polychlorinated biphenyls — PCBs

PCBs are a mixture of several man-made organic chemicals. They were often used in electrical transformers, plasticizers, paint additives, adhesives, inks and carbonless paper, lubricants, and hydraulic fluids. PCBs were banned in 1977 because evidence showed that they could build up in the environment and may harm human health.

Small amounts of PCBs can be found in almost all outdoor and indoor air, soil, sediments, surface water, and animals. They build up in the food chain and are stored in fat tissue. The major dietary source of PCBs for people is fish, but PCBs are also found in meat and dairy products.

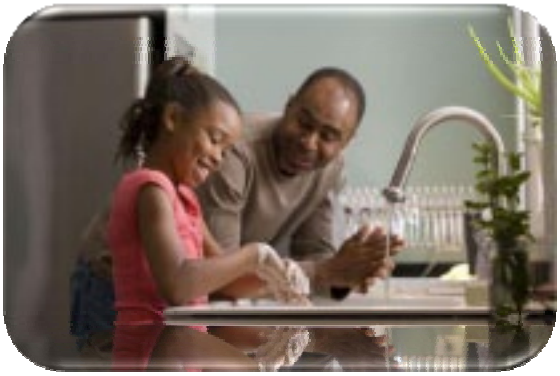
Exposure to contaminants

Direct exposure to contaminants can occur by eating, breathing in, or contact with the skin. Potential health effects from contaminant exposure depend on several things:

- The **type** of contaminant (examples: PCBs, dioxin, lead, arsenic.).
- **How long** a person is exposed to the contaminant.
- **How much** of the contaminant a person is exposed to.
- **How a person is exposed** to the contaminant (breathing in, eating, or skin contact).
- **Site conditions** where the contaminant is found and how people use that site (example: surface sediment in a recreational area compared to sediments under water, or covered by pavement).
- A **person's size and current health condition** may influence the potential health effect from contaminant exposure.

Minimize your exposure

It's a good idea to avoid or reduce your exposure to contaminants. Here are some simple steps you can take to minimize your risk of exposure:



- Clean frequently to reduce dust and residue inside buildings.
- Use a wet or damp cloth or mop to clean surfaces.
- Use vacuums with high-efficiency particulate air (HEPA) filters.
- Do not sweep with dry brooms; avoid using dusters.
- Wash children's hands with soap and water often, particularly before eating.
- Wash children's toys often.
- Wash hands with soap and water after cleaning, and before eating or drinking.
- Remove shoes before entering your home to avoid tracking soil into your house.

Have additional health questions? Contact Washington State Department of Health, toll-free 1-877-485-7316.

Rainier Commons
Indoor PCB sampling results
Availability Sessions

Tuesday, March 8, 4 – 7 p.m.
Rainier Commons

Urban Storage Building
Room 1006
3100 Airport Way S. – Seattle

Meet with representatives from the Environmental Protection Agency, the Washington Department of Health, and Rainier Commons LLC. This is an informal opportunity to discuss the results of PCB sampling.