



Ward Transformer NPL Site Health Consultation

March 30, 2017

Background

The Ward Transformer National Priorities List (“Superfund”) site is located on Mount Herman Road in Raleigh, Wake County, North Carolina. A former transformer recycling facility was in operation on the site from 1964 to 2006. Polychlorinated biphenyls (PCBs) were used in transformer oil until 1977, when their use was banned. Before the ban, PCBs contaminated soil on the site and were washed away from the site in runoff into an unnamed stream on the southern end of the property.

Prior investigations have identified PCBs from the site in sediment, soil, surface water, and fish downstream from the site. Current investigations at the site aim to find out where PCB contamination has spread downstream from the former facility. The streams evaluated are divided into four sections: Reach B, Reach C, Reach D and Lower Brier Creek. A map of the area under investigation is included below.



Purpose of the Health Consultation

To determine if exposure to stream sediment and floodplain soil poses a current health hazard to recreational users of the downstream areas.

How was the Health Consultation conducted?

DPH evaluated stream sediment and floodplain soil samples collected by contractors for the potentially responsible parties in 2014 throughout areas downstream from the former facility.

Conclusions

- Children who contact floodplain soil in **Reach B** during recreational activities in the stream may be at risk for harmful effects, particularly younger children.

Reason: Concentrations of PCBs are elevated in **Reach B** soil and sediment. Younger children are assumed to have more contact with soil during play.

- People who contact sediment and floodplain soil in **Reach C, Reach D, and Lower Brier Creek** during recreational activities are not expected to be at risk for adverse health effects.

Reason: The estimated doses of PCBs for children and adults that play or wade in **Reach C, Reach D, and Lower Brier Creek** sediment and soil are at levels not expected to cause adverse non-cancer health effects or result in an elevated cancer risk.

Chemicals associated with this site and potential health effects

PCBs are a group of synthetic chlorinated compounds. PCBs have no known smell or taste and can remain in the environment for long periods of time. Exposure to high levels of PCBs can cause skin conditions (i.e. acne and rashes),

liver damage or liver and biliary tract cancer. These levels are much greater than those found at the Ward Transformer site. Lower level, long-term exposures can affect the eyes, skin, liver and immune system. Additionally, these exposures could lead to changes in behavior.

The NC Division of Public Health recommends that:

- people who spend time in Reach B thoroughly wash with soap and water hands, feet, and any skin or clothing that comes in contact with the sediment or soil.
- the local health department post advisory signs in the **Reach B** area where the stream may be accessed and inform and educate the community of health risks.
- the EPA focus initial clean-up efforts on the **Reach B** portion of the site and continue monitoring sediment and floodplain soil in the contaminated streams yearly throughout the clean-up process.
- the Potentially Responsible Party and/or EPA contractors use congener analysis instead of Aroclor analysis in future sampling to allow for a more accurate assessment of human health risk.

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Additional Information

N.C. Public Health: Health Assessment, Consultation and Education Program

http://epi.publichealth.nc.gov/oee/hace/by_site.html#W

