



What air testing is being done?

What type of testing has been done to determine the potential of exposure through air?

Indoor:

Due to the potential for contaminants to vaporize and enter indoor air, Boeing has collected samples from air spaces between soil particles, as well as air inside some homes and commercial buildings. Tier 1 Vapor Intrusion testing involves the testing of air in soil particles (called soil gas or soil air testing). This was done in areas above shallow contaminated groundwater. If vapors are detected in the air, then Tier 2 Vapor Intrusion testing is performed to make sure the chemicals are not making their way inside buildings. Tier 2 testing involves sampling indoor locations such as homes and workplaces, for contaminants in the air.



An image of how contaminants in shallow groundwater might enter buildings as vapors.

Outdoors:

The air above surface water (such as the Chicago Avenue ditch) has also been tested on warm and calm days to determine if vapors might be migrating into outdoor air. The chemicals were not found in the air above Chicago Avenue ditch.

What is Vapor Intrusion?

When contaminants found in shallow groundwater evaporate, they become vapors that can enter buildings through cracks or holes in the structure's foundation. Once in the building, these vapors have the potential to affect air quality and, consequently, occupants' health. This movement from air spaces in soil to indoor air is known as vapor intrusion.

Why have only these areas been tested?

The properties most likely to experience vapor intrusion are areas in which higher levels of contamination has been found close to the ground surface. The properties chosen for vapor intrusion testing overlie the shallow contaminated groundwater. In northeast Algona, 24 homes were selected for testing, of which 14 agreed to participate. In those homes the living spaces, basement (if present), crawlspaces, soil gas beneath concrete slabs and outdoor air were tested for chemicals.

What did the testing find?

Vapor Intrusion was not found to be occurring in the tested homes. If vapor intrusion is not occurring in these homes it is unlikely that it is occurring in others as they are further away from the groundwater contamination and vapors do not migrate side to side (they only move upwards).

The air above surface water was tested at Chicago Avenue ditch and no contaminants were found.



Photo courtesy of US EPA

Some air samples were collected using Summa canisters during the Boeing Auburn Remedial Investigation.

What do we know about the impacts of plume contaminants on air quality?

- 2 phases of home air samples were done in the Summer-Fall of 2013 and Winter-Spring of 2014 in 14 homes above the shallow contaminated groundwater. The Washington State Department of Health concluded that the air found in the homes was not expected to cause health effects and that vapor intrusion was not occurring.
- At this time, no further residential vapor intrusion testing is scheduled.
- The data thus far shows that in nearly all of the air samples collected, the soil air and indoor air did not contain chemicals at levels above detection limits.

For more information please contact Jeanette Ordonez or visit us online

(253) 347-0460 | www.wa-apac.com
Algona/Auburn Public Awareness Coalition

