



Frequently Asked Questions

More information

Dirt Alert Program:

<https://ecology.wa.gov/DirtAlert>

Former Orchard Lands:

<https://ecology.wa.gov/FormerOrchards>

Seller Disclosure Statement, Form 17:

<http://apps.leg.wa.gov/rcw/default.aspx?cite=64.06.020>

Contact information

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Special accommodations

To request Americans with Disabilities Act (ADA) accommodation, or printed materials in a format for the visually impaired, contact the Ecology ADA Coordinator at 360-407-6831 or ecyadacoordinator@ecy.wa.gov, or visit ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Sampling for Lead and Arsenic Soil Contamination in Former Orchard Lands

The Washington Department of Ecology's goal is to protect people from health risks caused by exposure to lead and arsenic in soil. We are here to help current and prospective property owners, local governments, and developers understand and mitigate those risks.

Health effects and preventing exposure

How can arsenic and lead affect someone's health?

Lead and arsenic in soil do not pose an immediate health risk. However, long-term exposure increases the risk of certain health problems.

In children, lead can cause behavioral problems such as hyperactivity, permanent learning difficulties, and reduced physical growth. In adults, lead can increase blood pressure, affect memory, and contribute to other health problems.

Arsenic can cause a variety of health problems, including heart disease, diabetes, and cancer of the bladder, lung, skin, kidney, liver, and prostate.

Learn more on [Ecology's Dirt Alert – Health Effects web page](#) that includes links to more information from the Washington State Department of Health, Agency for Toxic Substances and Disease Registry, and other agencies.

What can people do to reduce their exposures to soil contamination?

Visit [Ecology's Dirt Alert – Healthy Actions web page](#) to learn simple things you and your family can do to decrease contact with lead and arsenic in soil. Young children are more vulnerable to these risks than adults are.

Sampling for local government and developers

What are the environmental requirements for new developments?

Increasingly, former orchard lands are transitioning to new uses. If lead and arsenic soil contamination is not addressed during redevelopment, people who live and work in these areas may come into regular contact with contaminated soil.

As part of the State Environmental Policy Act process, Ecology reviews project proposals to verify that they will not adversely affect human health or the environment. Our goal is to help local governments and developers mitigate potential health risks during the planning phase of redevelopment.

This protects construction workers and prospective homeowners, especially children, from exposure to lead and arsenic. To advance this effort, Ecology is requiring soil sampling before new development occurs, a service we provide at no cost.

Do state laws require this cleanup?

Under [Washington law](#) (70.105D.040 Revised Code of Washington [RCW]), developers are responsible for potential contamination on properties they purchase, develop, and resell. Redevelopment is contingent upon cleaning up a site to standards that protect human health and the environment.

Sampling for homeowners

What can homeowners who live in former orchard lands do?

Current homeowners are not required to sample their soil. At your request, Ecology will sample your soil for free, based on staff availability. We will help you understand the results and associated health risks, if any. If lead and arsenic levels are elevated, we won't require you to take action; however, we can help you plan to reduce your family's exposure potential. Ultimately, excavating or covering contaminated soil are the best solutions.

Can I sample soil myself?

Yes. Visit [Ecology's Dirt Alert – How to Sample Your Soil web page](#) for a quick overview of the process. From there, you can download our [Soil Sampling Guidance](#) (Ecology Publication 06-09-099) for step-by-step instructions on planning, gathering, and submitting samples for laboratory analysis.

Real estate transaction requirements

What is required of sellers?

Sellers and realtors must comply with real estate disclosure law. [Chapter 64.06 RCW](#) creates seller disclosure forms with questions about the property being sold. Real estate transactions include a seller disclosure statement, known as Form 17. You can get this form from your real estate agent, or copy the questions from [RCW 64.06.020](#). Form 17 asks if the seller knows of any soil contamination. If you live on former orchard land and soil sampling has confirmed lead and arsenic contamination, you must disclose

that on Form 17. Sellers also are required to disclose "adverse material defects," which could include soil contamination. The disclosure requirements apply to both improved and unimproved properties, with some exceptions. If you have questions about Form 17, please seek legal advice.

What should prospective buyers do?

Check the seller disclosure form. Unless the buyer expressly waives the right to receive the disclosure statement, the seller must provide Form 17 ([RCW 64.06.020](#)). A buyer cannot waive the right to Form 17 if the answer to any of the questions in the Environment section are "yes." The buyer can ask the seller and realtor if they are aware of any soil testing on or near the property.

If soil sampling hasn't been done, ask the seller if you may test the soil. [Ecology's Dirt Alert website](#) has [guidance](#) about sampling soil, or you can contact us to request free soil sampling, based on staff availability. If you buy a contaminated property, you become liable for cleaning up that contamination. Sampling soil before purchasing property protects you from liability as well as health impacts.

Historic lead-arsenate pesticide use

How did lead and arsenic get in the soil?

From about 1905 through the 1940s, lead-arsenate pesticide was commonly used in central Washington orchards. That pesticide settled into the soil, leading to large areas of contamination (known as "area-wide" contamination). Lead- and arsenic-based pesticides remain in soil for a long time without breaking down into less harmful compounds.

Which residential areas are located on former orchard lands?

Ecology's [Former Orchard Lands web page](#) includes maps of potentially affected areas based on land use and based on aerial photographs from 1947. You can also review property records to identify if your land is in an area of potential contamination.

As we gather sampling data, we will update our [Dirt Alert map application](#) with property-specific details, including whether a property was sampled, the results, and if it was cleaned up.