

ENVIRONMENTAL SOIL TESTING (Heavy Metals, Chemicals, Pathogens)

Environmental testing of soil is recommended when establishing a new food garden, importing garden soil or compost, or assessing the health of an existing garden.

Environmental testing of garden soils can be expensive. It would be cost prohibitive to test for every potential contaminant, toxin, or chemical we humans might have introduced during the past or which may be present naturally in the environment. So, researching the history and land use of your site is critical to selecting the tests considered the most appropriate. Knowing the history of your site should save you money, as your research may highlight certain toxins, chemicals, or contaminants that might be present. What are potential questions to investigate as you research your site?

- Is your site located in an urban area (e.g., volatile organic chemicals may indicate concentrations of petroleum products, asbestos, lead)?
- Is your site in the heart of a commercial farming area (e.g., pesticide residues; orchards at one time used lead arsenate)?
- Was your site historically or currently used for industrial or commercial purposes (e.g., VOC – volatile organic carbon)?
- Is your site a brownfield or superfund site?
- Have “biosolids” (sewage) been added to your soil (e.g., potential chemicals from the medical and cleaning industry)?
- Are you considering growing food within a few feet (inside the drip line) of a structure built before the 1970s (e.g., lead)?
- Is there currently or in the past, evidence in your landscape of creosote soaked timbers (e.g., polycyclic aromatic hydrocarbons) or treated lumber (arsenic)?

A simple title search and interview of neighbors may be a good place to start researching your garden site.

- Testing for the eight heavy metals¹ regarded as toxic in even small concentrations listed under the Resource Recovery and Conservation Act (RCRA) is typically under \$100.
- Testing for volatile organic chemicals (VOC), other contaminants in the soil, or pathogenic microbes can be more expensive or challenging.

¹ arsenic (As), barium (Ba), cadmium (Cd), chromium (Cr), lead (Pb), mercury (Hg), selenium (Se) and Silver (Ag)

Again, researching the land use history of your garden site should help identify any likely potential soil contaminants. For questions about potential garden, landscape, urban or farmland hazards or mitigation, contact Hazardous Waste, Spokane Regional Health (509) 324-1574.

Local Labs Providing Environmental Soil Testing

Several local commercial firms conduct environmental soil testing. We recommend selecting accredited laboratories only.

Anatek Labs – Spokane
504 E. Sprague Ave #D
Spokane, WA 99202
509-838-3999
<http://www.anateklabs.com/>

Kuo Testing Labs – Main Office
337 1st Avenue
Othello, WA
(509) 328-0112 (Toll Free)
<http://www.kuotestinglabs.com/>

Test America Laboratories Inc
11922 E 1st Ave
Spokane Valley, WA 99206
(509) 924-9200
<http://www.testamericainc.com/>

Soil Test Farm Consultants, Inc.
2925 Driggs Dr.
Moses Lake, Wa 98837
(509) 765-1622
<http://www.soiltestlab.com/>