



Carson River Mercury Superfund Site

Residential Soil Sampling Program – Site Update

U.S. Environmental Protection Agency | Region 9 | Carson City and Lyon and Storey Counties, Nevada | November 2023

EPA and the Nevada Division of Environmental Protection (NDEP) are sampling soil at the Carson River Mercury Superfund Site. Historical mining at this site released mercury into the environment, along with lead and arsenic in some areas. Finding and addressing mercury-contaminated soil helps protect young children. EPA and NDEP are seeking property owners who want to have the soil in their yards sampled. Soil sampling is voluntary and free for single-family homeowners within the site footprint.

If you agree to have your yard sampled, we will send crew members to evaluate your property and collect soil samples. We will then notify you of the results. If we find unsafe mercury levels, we will work with you and discuss potential cleanup options.

Frequently Asked Questions about the Residential Soil Sampling Program

How does EPA determine which residential areas will be targeted for sampling?

With help from its contractor, EPA developed an initial list by looking at areas near former mills and tailings, historical information, and risk to develop a list of properties that could potentially be within the site boundary.

How do I sign up for sampling?

Interested property owners should contact EPA or NDEP. EPA contact information can be found at the end of this fact sheet. NDEP can be contacted by calling (775) 687-9368 or by emailing CRMS@ndep.nv.gov. Be sure to include your first and last name, address, phone number, and the ages of children in your home (if any).

Who is doing the residential soil sampling? When will it start and how long will it take?

EPA and its contractors are doing the sampling. There will be a handful of people on your property for about half a day to do it. The sampling began in Summer 2023.

Who will pay for the sampling? If cleanup is needed, who pays for that?

EPA will pay for residential soil sampling work and, if needed, the cleanup for existing single-family homeowner properties.

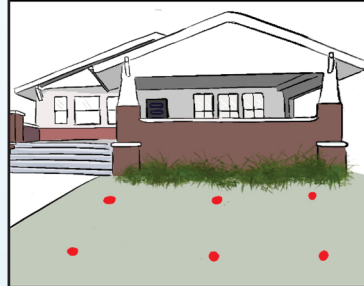
What is the soil being tested for?

EPA is testing the soil in residential yards for mercury, lead and arsenic.

How will my yard be sampled?

The outdoor spaces of your property will be divided into different areas, such as the front yard, back yard and side yards. Each specific area will then have a handful of small cups of soil removed for laboratory testing.

WHAT IS THE SOIL TESTING PROCESS?



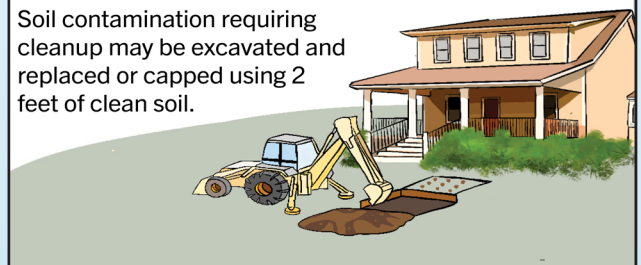
EPA staff and contractors will dig small holes in different areas in your yard. The holes will go down to a depth of about 2 feet.



The soil collected will be put in laboratory-supplied containers and sent to a lab.



Soil contamination requiring cleanup may be excavated and replaced or capped using 2 feet of clean soil.



Clean soil is placed in the excavated area, and the yard is restored to its previous landscaping.



Frequently Asked Questions (cont.)

How much soil will be removed during sampling, and what equipment will be used?

The quantity of soil removed will be minimal and all sample locations will be returned to previous grade with topsoil. After scanning for underground utilities, holes will be dug using hand tools. Portable, handheld powered equipment such as augers may need to be used in some areas if handheld tools are not effective.

How will EPA share the sampling results with me? How long will it take to get the results?

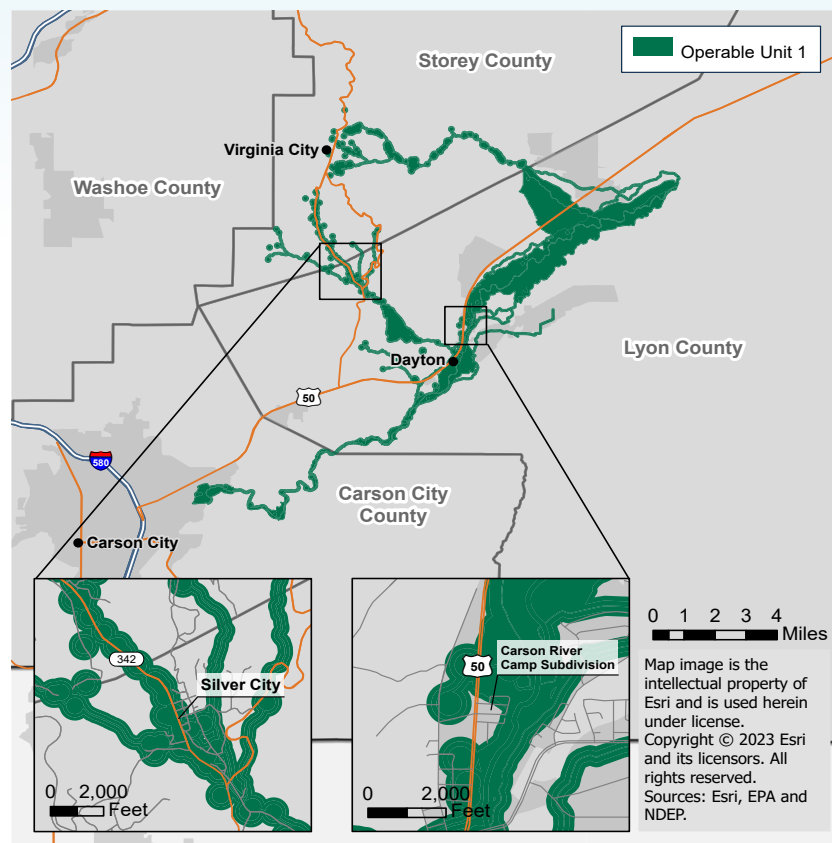
EPA will follow up by certified mail, or by email if you prefer. EPA will also be able to talk through the results with you. The results will be sent after EPA validates data from the laboratory, usually about six-to-eight weeks after the sampling.

If soil samples from my property have elevated levels of contamination, what are the next steps?

EPA will discuss your options with you. The options are usually to take no action, to place 2 feet of topsoil on your yard, or to remove the top 2 feet of soil and replace it with topsoil. EPA will also restore your yard to its previous landscaping.

How long will cleanup take? What happens after cleanup?

Should cleanup be recommended by EPA and NDEP and chosen by you, cleanup will be scheduled for a future date that works for you. Typically, cleanup takes less than one week. You will need to sign an Environmental Covenant, which will document the work. The covenant may make it easier for you to sell your home.



This map shows Operable Unit 1 (OU1), which includes areas being addressed by the Residential Soil Sampling Program.

Timeline of Site Response Events

1990: EPA added the site to the Superfund program's National Priorities List (NPL).

Early 1990s: EPA removed 10,735 cubic yards of mercury-contaminated tailings off Highway 50 near Dayton and at a park in Dayton. EPA disposed of it off site as an emergency response.

1995: EPA published the Record of Decision for part of the site (old mill sites and related tailings and surface soil). It describes how EPA cleans up and manages site contamination.

Late 1990s: EPA removed over 9,000 cubic yards of contaminated soil, disposed it off site, then backfilled the area with clean soil. In one location in Dayton, EPA did not remove or backfill soil, but placed clean soil over the contaminated area as a cap. EPA restored the previous landscaping in these areas.

Since the early 2000s: EPA and NDEP have been working with local developers to sample residential areas, while continuing to communicate with counties and cities on the site. Some investigations resulted in removing and/or capping contaminated soil. EPA is currently ramping up residential sampling for existing single-family homeowner properties within the site boundary. For more information on additional current site activities, please visit:

epa.gov/superfund/carsonrivermercury

History of the Carson River Mercury Superfund Site

In 1859, miners discovered gold and silver in Virginia City and Dayton, Nevada. From about 1860 to 1890, miners used mercury to separate gold and silver from ore. This process released 14 million pounds of mercury, which got into:



Soil



Waterways



Sediment (earthen materials that settle to the bottom of a water body)



Fish and wildlife

The Carson River Mercury Superfund Site includes old mill sites and related tailings and the surface soil they have contaminated. It also includes the Carson River and adjacent floodplains from the Mexican Dam in Carson City to the terminal lakes and wetlands south, northeast and east of Fallon. The area is used for:



Recreation



Commercial and residential development



Conservation

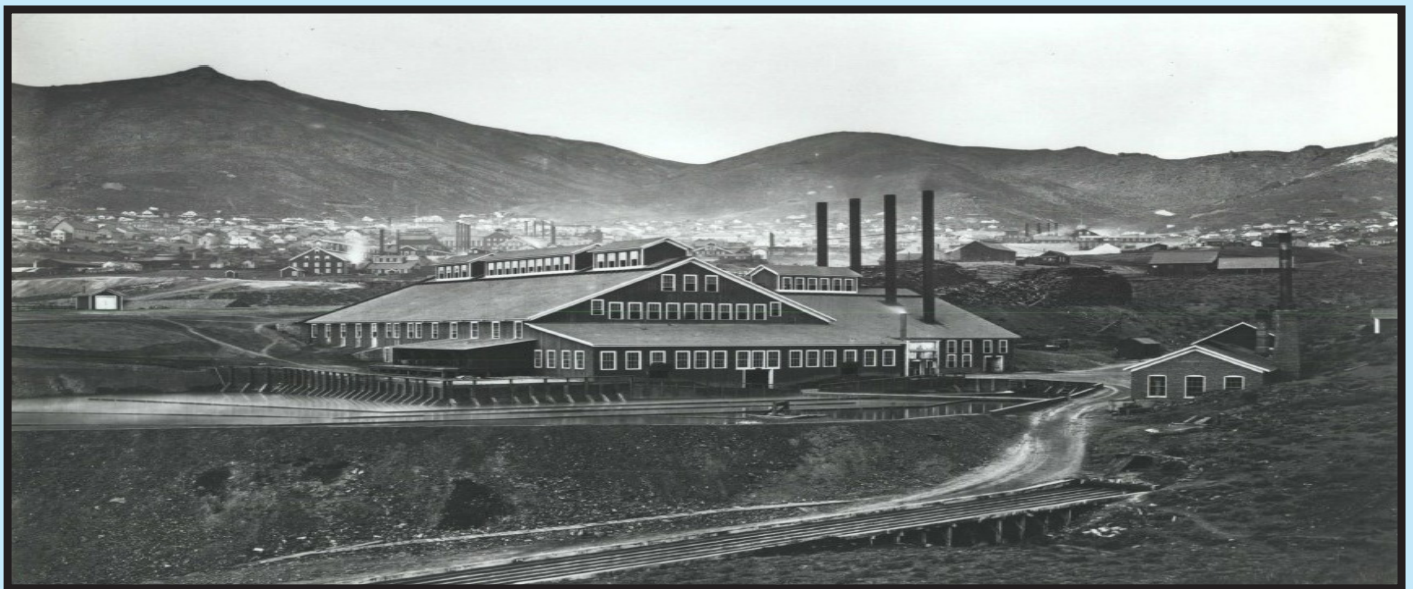


Wildlife habitat



Farming

Most people live near the site in Dayton, Silver Springs, Fallon, and the Fallon Paiute Shoshone Reservation. Development near historic mill sites can release mercury into the environment and floodplain. Polluted soil and sediments can also be found in the Carson River, with most of the pollution found in and between Six Mile Canyon and the Lahontan Reservoir Dam.



California Pan Mill in Virginia City.

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San Francisco, CA 94105
Attn: Laura Hall (3/2023)

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EPA Community Involvement

EPA works with communities every day to improve the health of American families and protect the environment. The more communities are informed and involved in environmental decision making, the better.

EPA has long recognized the importance of early and meaningful stakeholder participation. We will continue to enhance community and stakeholder engagement to promote transparency, community support and timely cleanup decisions.

EPA Contact Information

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Carson River Mercury
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