

Telluride Valley Floor (TVF)

Questions & Answers to Frequently Asked Questions

- 1. What are the contaminants posing a risk at the site? How high are the concentrations? How do these levels compare to any EPA standards or thresholds?**

This action involves the cleanup and disposal of lead and arsenic-contaminated soil and mine tailings along the San Miguel River on Federal and private land. EPA has determined the concentrations of lead and arsenic to be potentially harmful to human health and the environment.

EPA has not set a cleanup standard at this time. Our initial objectives are to keep the waste from migrating into the river and to remove the tailings from this site. Initial testing found that concentrations vary greatly across the site area and are mixed together at varying concentrations across the site. It is important to note, however, that testing found lead concentrations as high as 100,000 parts per million (ppm), which is orders of magnitude higher than levels generally considered safe.

- 2. These tailings have been in place for decades, why did it take so long to evaluate and address them? Why are you dealing with them now?**

The U.S. Forest Service (USFS) referred the site to EPA in the fall of 2020, after USFS sampling found mine tailings containing high levels of lead and arsenic. A subsequent site visit found tailings along the bank visibly sloughing into the San Miguel River; and hiking and biking paths located on tailings piles where dust was being stirred up by visitors. In response to the sample and site visit observations, EPA initiated emergency response actions last fall to stabilize areas of highest concern. The current work builds on last year's emergency work, with a more permanent, comprehensive cleanup.

- 3. What is your message for those who have hiked/biked/visited this area in the past? Are they at risk for health impacts, concerns?**

Due to potentially harmful levels of lead and arsenic, the USFS has re-routed trails around the site.

To learn more about exposure routes, long term effects and ways to mitigate exposure, please visit the Centers for Disease Control and Prevention's Agency for Toxic Substances and Disease Registry's ToxFAQs website at:

<https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsLanding.aspx>.

4. How have fish and aquatic life been impacted? What's the best source of data and information on mine contaminants and aquatic life, water quality impacts in the San Miguel River?

All concerns and questions regarding impact to fish and aquatic life should be directed to Colorado Parks and Wildlife. You can submit questions online via CPW's ["Ask CPW"](#) form or by calling the Ridgeway State Park Office at: 970-626-5822.

5. Where are the tailings being disposed? How was the disposal location chosen? What safeguards are/will be in place to ensure there will be no future human exposure or impacts to the environment at this location?

The tailings will be loaded in haul trucks that will be operated and inspected to ensure contaminants do not spread during transportation. The inspection includes sweeping off tail gates and anywhere debris can collect, washing off truck tires before driving on clean soil and streets, and placing a tarp over the tailings before transported. The tailings will also be sprayed with water to ensure they are not carried away by wind.

Contaminated tailings and soil are being placed on Newmont/Idarado property, east of the Town of Telluride and approximately 2 ½ miles from the removal site, in a state-regulated repository known as tailings piles 5/6. This repository was previously established, and is currently being managed by, Newmont/Idarado for similar mine waste materials previously cleaned up in the area.

The EPA disposal plan represents an efficient and effective way to complete removal activities before winter with the least risk to the community.

6. Who is responsible for the contamination?

EPA does not comment on potentially responsible parties in current enforcement cases.

7. What's the estimated cost of the cleanup?

EPA estimates removal activities included in the current workplan will cost approximately \$2 million. However, any changes to the existing workplan, which would be highlighted in Site updates, could change this estimate .

8. This is a busy time in Telluride, with lots of visitors and traffic. How will the transport of the tailings be handled to minimize disruptions to Town? How will the transport process address any exposure risks with the tailings as they move through Town?

EPA's approach represents an efficient and effective way to complete removal activities before winter with the least risk to the community.

EPA is reducing impacts on traffic by increasing hauling during non-peak business hours. Haul beds are being covered and truck tires cleaned before haul trucks leave the site to reduce dirt and prevent any migration of material off-site. To minimize noise, no engine brakes (aka Jake Brakes) are being used during the removal activities. In addition, haul trucks have had rubber liners/gaskets installed in the tailgate seams to help prevent tailings material from escaping and to further reduce noise.

Residents with any questions or concerns are encouraged to contact the EPA Public Information Officers for this site, Laura Jenkins at Jenkins.Laura@epa.gov and 720-519-5504; and Chris Wardell at Wardell.Christopher@epa.gov and 303-312-6062.

9. What alternatives for addressing the tailings were considered?

Representatives of the Town of Telluride suggested not hauling until October, which was considered. However, this would have required the on-site storage of tailings approximately 20 feet high along an entire acre of land adjacent to the San Miguel River, which was not feasible given the small size of USFS property available to EPA for storage. In addition, leaving excavated tailings and soil exposed would have significantly increased the potential for adverse human health and environmental impacts due to the increased volume of contaminated materials exposed.

10. How will public access in and through the TVF site be impacted? What will the area look like when work is completed?

Trails have been re-routed around work areas and both traffic and pedestrian flaggers have been assigned to areas where needed. The Site will be restored similar to its original condition; however, vegetation is likely to take 1 – 2 years to fully re-establish.

11. How has EPA worked with the Town/USFS to coordinate this effort?

USFS and EPA entered a Memorandum of Understanding and issued a joint action memo to address the environmental concerns located on the Site.

During the 2020 emergency removal action, as well as during the planning stages of this time-sensitive removal action, EPA and USFS conducted outreach to representatives from the Town of Telluride and San Miguel County. USFS also consulted with Trout Unlimited on the restoration effort that will follow EPA's removal action.

12. How will you share information as work progresses?

EPA developed the [TVF Site Profile](#) to share information on this removal action. This Profile is updated regularly and provides the latest information on removal activities at the TVF Site.

In addition, regular updates are being posted to the [EPA Region 8 FaceBook](#) and [EPA Region 8 Twitter](#) accounts.

On July 12, 2021, EPA issued a press release to announce the launch of the removal action and will continue to issue updates throughout the effort. EPA is also offering interviews with federal OSCs to local media during strategic points throughout the effort.

EPA also held four public meetings during the week of July 19th and will hold additional meetings through October to provide updates as removal work progresses. The dates and times for these meetings will be posted on the [TVF Site Profile on Response.gov](#). We will also publish notices in the Telluride Daily Planet throughout the removal to update the community on our progress.

13. How will this cleanup make Telluride a better place?

EPA will remove and dispose of contaminated soil and mine tailings on public land, as well as a small portion of bordering private land, located within a 34-acre site outside of Telluride, Colorado along the San Miguel River. Due to the presence of lead- and arsenic-contaminated soil and tailings, with concentrations ranging from 1,000 to 100,000 ppm, timely removal is needed. Metals concentrations are a current source of harmful exposure to human health and the environment.

Limited clearing of trees and vegetation will be required; however, stormwater and erosion control management plans are being implemented to mitigate the impacts of the tree and vegetation removal. Stream restoration to re-establish aquatic habitat and mitigate bank erosion will also be completed.

Trails have been re-routed around work areas until work is completed and the area has been restored similar to its original conditions, reducing risk of human exposure.

14. How is EPA approaching the excavation of tailings?

An assessment previously performed by USFS and the Responsible Party (Idarado/Newmont Mining) provided a series of soil boring data with lead and arsenic concentrations. EPA took that data and identified excavation areas along the river corridor as shown in the GIS viewer on [TVF Site Profile](#). These areas are being excavated, with additional soils removed, based on the visual observations. Soils exhibiting two or more of the following characteristics will be excavated, with spot checks to verify that elevated lead/arsenic levels are present in excavated waste.

- Well sorted and uniform fine-grained material*
- Material with a yellow or orange color*

- *Fine grained/slime textured material*
- *Material with a lack of organic material*
- *Brown and grey clay lenses beneath the above items.*

This list is based on both experiences shared by CDPHE from other projects on the Valley Floor, as well as XRF field screening of initial excavations when EPA began the TVF removal effort.

15. What is an XRF?

An XRF is a unit that utilizes a low-level X-Ray to accurately measure the concentrations of hazardous metals in soil. EPA uses these devices to screen soil and soil samples to guide excavation in real time, limiting excavation to only the material that is contaminated.

16. Is this considered hazardous waste?

No. This type of mining waste is excluded from being a hazardous waste by Federal and State laws. So, while it is hazardous to human health and the environment, it is exempted due to the Bevill Amendment. See EPA's website on [special wastes](#) for more information.

Regardless of this distinction, the waste is, and will continue to be, handled and disposed of in ways that are protective of human health and the environment. For more information on hazardous waste, please check out EPA's ["Learn the Basics of Hazardous Waste"](#) page.

17. What are the lead and arsenic levels currently in the Idarado repository?

According to the Colorado Department of Health and Environment (CDPHE)'s Idarado Mine Cleanup page, the tailings piles contain elevated lead levels (1,300 to 10,000 ppm).

18. What do we know about blood lead levels in the community?

There is little current data on blood lead levels in the community. A 1986 study, financed by Idarado Mining Co., found 7% of the children tested had blood lead levels above 10 ug/dL and the average was 6.1 ug/dL. The Centers for Disease Control and Prevention (CDC) had established 5 ug/dL as the blood lead level of concern for children. In a communitywide study, nine to 21 children were tested for blood lead each year from 1993 to 1997. The average blood lead concentration each year was 4.2 ug/dL.

19. Is there a compounding effect by adding more wastes to the repository?

No. The repository, which is managed by Newmont under the oversight of CDPHE, has a designed capacity. The waste EPA is transporting to the repository is both physically and chemically similar to material already being managed there, and Newmont is incorporating the waste into the repository as it would other wastes.

20. What are the current air monitoring plans/location of monitors?

The TVF Profile on Response.gov includes a map showing [locations of monitors and real-time particulate monitoring results](#). EPA deployed three air monitoring stations: one on the TVF site, a second along Main Street in downtown Telluride, and a third at the Idarado repository.

21. Where are trucks being washed—is/how is that water being collected and treated?

Haul trucks are being washed down prior to leaving the TVF removal site. Wash water is generally directed into the excavation area where it will be removed with other contaminated soil.

22. Current health and safety plans/contingency plans in place if a truck were to have a spill/accident?

Environmental Restoration (ER), EPA's contractor on the TVF site, developed a Site Health and Safety Plan (SHSP) in accordance with OSHA 29 CFR 1910. The SHSP includes 13 discrete sections on health and safety-related matters, including the following: Site Control and General Field Safety Rules, Decontamination Procedures, Hazard Communications, Emergencies/Incidents/Injuries, and Emergency Response Contingency Plan.

23. When did the removal action officially start—2020 or 2021?

EPA conducted an emergency response action in the fall of 2020 to stabilize tailings and prevent further bank erosion/degradation. The stabilization work and action details may be found under the [documents section](#) or under previous notices.

In order to address the remaining tailings and threats not addressed during the emergency response action during the fall of 2020, EPA, along with USFS, initiated a time-critical removal action (TCRA) in the summer of 2021. The TCRA is scheduled to begin July 19, 2021 and go through the fall of 2021. Due to the scope and urgency of the project, EPA and EPA contractor crews will need to start work as soon as possible to remove the contamination effectively and safely before any adverse weather impacts the safety of the removal operations.

24. Where can I find more info on the repository, e.g., how its regulated, how it operates, how leaching water is collected, etc.?

The Colorado Department of Health and Environment regulates the Idarado repository. Information on their efforts can be found on the [State's Idarado Mine Cleanup](#) and [Idarado Mine Restoration](#) pages.