Innovative Mine Waste Remediation



CJK Milling is re-imagining mine waste cleanup. Our Colorado company has developed an innovative approach to remove mine waste, extract minerals for beneficial reuse and then restore the land where the mine waste was located. The Leadville Mill was built in 1989 and has had an active permit to operate since 1990. The current permit allows processing of 70,000 tons of material per year using a flotation method of extraction.

Homes were subsequently built near the Leadville Mill when it had a continuously active permit to operate. CJK currently has an application under review to amend the existing permit to allow for 140,000 tons of material per year using a cyanide method of extraction. Testing has shown the flotation method of extraction to be ineffective.

The permit amendment will allow CJK to remove approximately 500,000 tons of acid-generating mine waste in and around California Gulch in Leadville. While considered uneconomic by miners at the time, the mine waste material still contains economically viable quantities of gold and silver. CJK's cleanup plan removes historic mine waste from the environment, processes it to recover gold and silver at the mill, then places the detoxified tailings in a double-lined storage facility where it can no longer contaminate the environment. The minerals are beneficially reused, and the land is restored to pre-mining conditions. This will improve the water quality in rivers and streams.

Unfortunately, there has been misinformation communicated to the public. CJK believes its important the community knows the facts. The following addresses these false claims:

Fiction vs. Fact on CJK Operations



FICTION: The use of cyanide cannot be done safely or in an environmentally responsible way.



FACT: If this claim were true, cyanide would be banned and it is not. Cyanide is strictly regulated to protect human health and the environment. Cyanide has been used safely and effectively for more than 125 years around the world for the extraction and recovery of gold and silver. Cyanide is used in everyday applications (i.e., metal processing, plastics, photographic). The mill will transport and process cyanide using well-understood, proven processes currently implemented in the US and Colorado to ensure the environmental safety of its operations.

A Colorado Department of Public Health and Environment Representative has stated, "The department does not foresee any issues as long as CJK uses the chemical as intended."



FICTION: There is a possibility cyanide could impact water.



FACT: The Leadville mill is located downstream of all water and sewer facilities. Further, the mill will operate as a zero-discharge facility backed by an emergency containment sump, which makes downstream contamination physically impossible.

Zero-discharge means all water and waste materials are recycled onsite and no liquids or solids are ever discharged from the mill into the environment.



FICTION: Mill water consumption could limit Parkville Water District serving new customers.



FACT: The general manager of the Parkville Water District has confirmed the water district has more than an adequate supply of water and production capacity to provide the water needed for milling operations. The water supplied to the mill will not have any negative impact on their current or future water customers, or impact future development in any way.

¹ Society for Mining, Metallurgy and Exploration

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FICTION: Cleanup of historic mine waste will not benefit Leadville.



FACT: Removal of historic mine waste improves the water quality at the headwaters of the Arkansas River, restores natural areas, benefits wildlife habitat and enhances recreational amenities in the California Mining District. Economic benefits include creating well-paying jobs and increased tax revenue for Leadville and Lake County.



FICTION: Transporting materials may result in more trucks in downtown Leadville.



FACT: The 400-ton-per-day operation will require about 20 trucks per day (about 1 truck every 35 minutes during daylight hours only). The proposed route circumvents all but a small portion of Leadville (south of Monroe St). CJK is working with all stakeholders who may be impacted by the transportation route to discuss ways to avoid or mitigate impacts.

As a company, CJK has agreed to pay a \$1-per-ton fee from slag material sales at its Arkansas Valley Slag Project that will remove the slag piles south of town to help fund Lake County's contemplated highway bypass project. A highway bypass would greatly reduce truck traffic through downtown Leadville.



FICTION: Transporting materials could impact air quality.



FACT: The Colorado Department of Public Health and Environment tightly regulates remediation of historic mine waste dumps, as well as the transportation and handling of this material at the mill. Dust mitigation measures like those currently in place at large mining operations, such as at the Climax Mine, will be implemented at our operations.

CJK will install dust monitors to confirm mitigation measures protect the air.



FICTION: Operations could result in seismic disturbances to neighbors.



FACT: Analysis has shown that seismicity from operations will be negligible. CJK will have a seismic monitor installed to confirm that the adjacent sewer line and other structures are not impacted by operations.

CJK has an open door policy. We are happy to provide tours, answer questions and clarify misinformation. We endeavor to be a positive contributor to the Leadville community and help advance mine reclamation.