



Starr Mill, Death Valley National Park Engineering Evaluation/Cost Analysis: Fact Sheet

Overview

The National Park Service (NPS) is investigating the abandoned Starr Mill Site in Death Valley National Park to evaluate cleanup options. The Site covers less than 0.5 acre and consists of the remnants of an old mill (Figure 1), including four terraced, in-ground process pools and/or tank foundations with stacked rock walls or “dug-in” perimeters, and a concrete grout interior liner. The Site currently has concrete foundations from a few of the cyanide tanks and a mound of tailings on bedrock above the road. Access to the Site is via Emigrant Canyon Road (Figure 2).



Figure 1 - View of Starr Mill looking to the north.

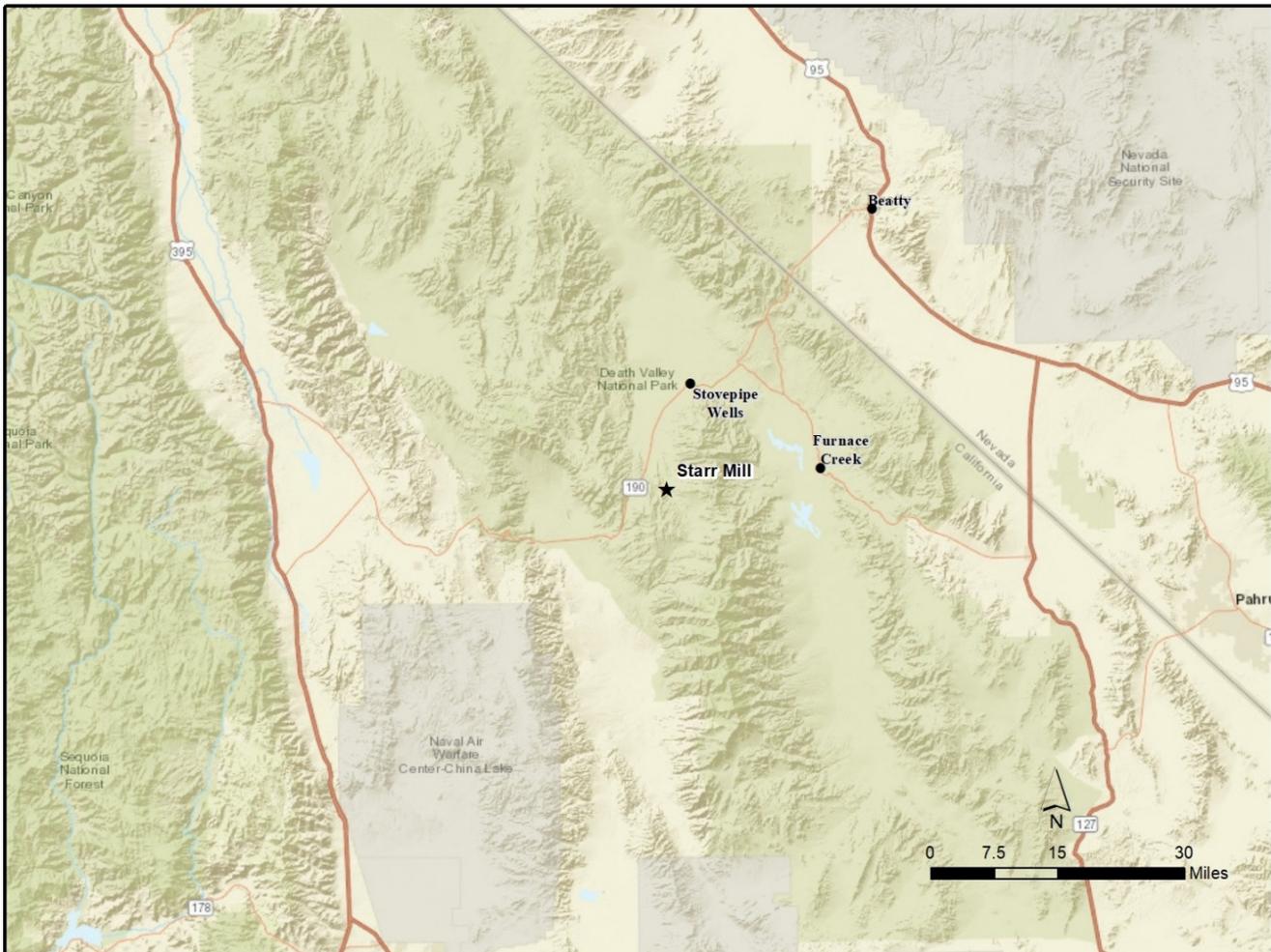


Figure 2 – Site Location Map



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History of Starr Mill

Mr. Starr and Walter M. Hoover operated the Starr Mill for only a few months in 1935, using cyanide. They used the Site to process ore from Nemo Canyon. The Site was later cleaned up by NPS personnel (sometime prior to 1940).

Environmental Investigations at Starr Mill Site

Contaminants of Concern

The milling operations left behind hazardous materials at Starr Mill Site, such as mill tailings. The NPS is investigating Starr Mill Site to evaluate cleanup options, pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Congress enacted CERCLA, also known as Superfund, in 1980 to address releases and threatened releases of hazardous substances into the environment.

A preliminary assessment of the Starr Mill Site Mill Site was conducted in 2014. Based on operational history and information gathered during the preliminary assessment, the chemicals of concerns were cyanide and metals. During a site inspection in 2016, soil samples were collected and analyzed for metals, cyanide, and pH. Soil samples were analyzed for acid-base accounting, a measure of the potential for acid mine drainage from the Site.

Concentrations of several metals—including antimony, arsenic, beryllium, cadmium, copper, lead, mercury, molybdenum, selenium, silver, thallium, and zinc exceeded the background levels. Several metals exceeded regulatory levels that require further human and ecological risk evaluations. Acid mine drainage is not considered a concern at the Site.

Upcoming Investigations and Cleanup

The NPS has determined that preparation of an engineering evaluation/cost analysis (EE/CA) is appropriate for Starr Mill Site, based on the chemicals of concern found there. The EE/CA is being prepared to evaluate associated potential risks to human health, safety, and the environment; identify relevant cleanup requirements; and develop a range of cleanup alternatives for the Starr Mill Site.

Once the range of cleanup alternatives are identified, NPS will request public feedback during a public comment period.

Further Information:

- **Online:** <https://parkplanning.nps.gov/StarrMill>
- **Contact:** Abby Wines, Public Information Officer, 760-786-3221 or abby_wines@nps.gov
- **Full Documents Available to View:** [at Furnace Creek Visitor Center and Stovepipe Wells Ranger Station](#)