

Homestake-King Mill, Death Valley National Park Engineering Evaluation/Cost Analysis Fact Sheet

Overview

The National Park Service (NPS) is investigating the abandoned Homestake-King Mill Site (Site) in Death Valley National Park to evaluate cleanup options. The Site covers approximately 5 acres and consists of the remnants of the Homestake-King Mill (Figure 1), including a series of five reinforced-concrete foundations that are between 66 and 100 feet long, 3 feet thick at the base, and up to 16 feet high. The structures are located on a steep slope. Floors of the mill rooms, machinery, vat foundations,



Figure 1 - View of Homestake Mill looking west.

and building debris remain on Site. The mill tailings are visible near the mill and several locations downslope from the mill. The Site is located in the Bullfrog Hills, in the Nevada portion of Park known as the "Nevada Triangle". Access to the Site is via Pioneer Road, off of Highway 374 (Figure 2).

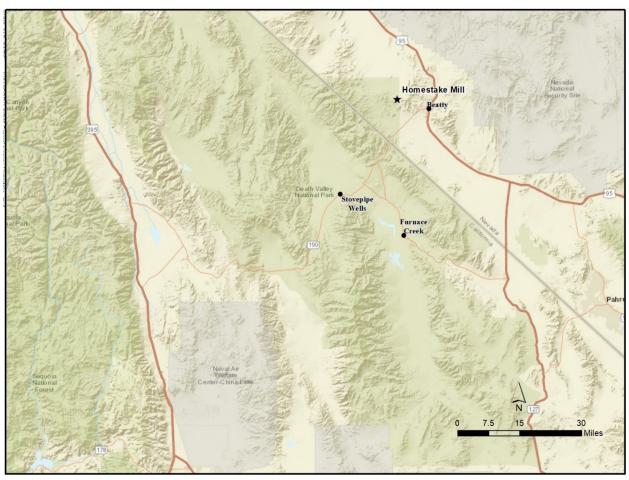


Figure 2 – Site Location Map



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History of Homestake-King Mill

The Site claims (the Homestake, Homestake No. 1, and Homestake No. 2, M.S. 2570) were located in 1904 and were patented in 1908. These claims were privately owned until the property was conveyed to the U.S. Government in 1973. The mill operated only from 1908-1909 and treated gold ore by plate amalgamation and cyanide. At the time, Homestake-King Mill was described as "well-equipped" with up to 30 stamps. The Homestake-King Mine was the largest-producing Bullfrog Mining District producer that is now in the park.

Environmental Investigations at Homestake-King Mill Site

Contaminants of Concern

The milling operations left behind hazardous materials at Homestake-King Mill Site, such as mill tailings. The NPS is investigating Homestake-King 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 Homestake-King 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, selenium, silver, thallium, vanadium, 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 Homestake-King 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 Homestake-King 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/Homestake-King
- 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