

# Community Update

## Kennecott Mines and Mill Town Site

National Park Service  
U.S. Department of the Interior  
Wrangell-St. Elias National Park  
and Preserve



July 2020

### BACKGROUND

The Kennecott Mines and Mill Town Site (Site) is a historic mining and milling area located within the Wrangell-Saint Elias National Park and Preserve near McCarthy, Alaska. Currently, much of the Site is owned by the United States Government and managed by the National Park Service (NPS), with numerous private properties dispersed within and around the Site.

The Kennecott mines, mill, and related facilities were developed and operated by the Kennecott Copper Corporation between 1906 and 1938. The Mill Building, and later the Leaching Plant, received and concentrated ore from the nearby mines. Today, the Mill Town primarily consists of historic buildings and other structures that were used to support the copper ore processing operations. These historic structures contained lead- and arsenic-based paint as well as asbestos used as insulation. Since acquiring the Site in 1998, NPS has been stabilizing and rehabilitating the historic structures. While several of the historic buildings have been rehabilitated, others still have peeling lead- and arsenic-based paint. In addition, dust that may contain heavy metals associated with historical operations accumulates on surfaces throughout the Site. NPS's rehabilitation work and inspections previously conducted at the Site indicate that heavy metals from paint and mill tailings, as well as other potential contaminants such as asbestos and petroleum-related compounds remaining on Site from historical operations, could be present in indoor and outdoor air and dust.



### KENNECOTT MILL TOWN AIR EXPOSURE ASSESSMENT

NPS conducted sampling in September 2019 to evaluate potential airborne contamination and fugitive dust exposures to both park employees and park visitors (fugitive dust is dust that becomes airborne from disturbances such as foot traffic or wind). Personal exposure sampling was performed on several park employees while the employees were performing routine park work tasks throughout the Mill Town (e.g., indoor/outdoor cleaning, light construction work, and Mill Town walks and tours). Personal exposure sampling was also conducted to simulate potential visitor exposure during a guided Mill Building tour. Area air samples were collected in visitor- and employee-occupied locations inside and outside of buildings.



Personal and area air samples were analyzed for airborne metals (e.g., arsenic, lead, mercury), respirable crystalline silica, asbestos fibers, total and respirable dust, and, within the Power Plant Building, volatile organic compounds and polyaromatic hydrocarbons.

All personal exposure air sampling of employees and all area air sample results for each of the contaminants evaluated were below applicable occupational exposure

limits. Although there are no exposure limits established for the contaminants evaluated for the general public, the sampling results of the simulated visitor tour were also well below applicable occupational exposure limits for workers and thus the detected concentrations are not expected to present an airborne hazard to either child or adult visitors to the park. Further, relative to a worker's exposure, the short-term airborne exposure for an occasional visitor who may be present at the park for only a day or two is expected to be very low.

Based upon these data, air quality at locations inside and outside of buildings throughout the Mill Town is safe and not expected to present a hazard to visitors or park workers. However, because area soils and dust on surfaces both inside and outside of Mill Town buildings contain contaminants such as lead, arsenic, and asbestos, NPS recommends that all park visitors and other members of the public practice good personal hygiene when in the Mill Town area by keeping hands away from the nose, eyes, and mouth until they can be washed with soap and water. To encourage this, NPS has supplied and maintains hand-washing stations at key locations within the Mill Town, including at the bottom of the Mill Building (where guided tours exit the building). NPS also maintains signage at several locations within the Mill Town to warn visitors to avoid contact with area soils due to the presence of remaining on-Site contaminants.

## **NEXT STEPS - ENVIRONMENTAL INVESTIGATIONS**

Because hazardous substances that may pose a threat to public health or welfare or the environment remain on Site, NPS, pursuant to its authority under the Comprehensive Environmental, Response, Compensation, and Liability Act (CERCLA) (commonly known as Superfund), is proceeding with a Remedial Investigation/Feasibility Study (RI/FS). The RI/FS is a comprehensive investigation at the Site that will include sampling of various environmental media (e.g., soil, surface water and sediment, groundwater, and air) and potential source areas to fully characterize Site contamination; an assessment of potential human health and ecological risks associated with exposure to hazardous substances that may be present; and, evaluation of remedial alternatives to address identified risks. NPS is currently preparing planning documents (e.g., a Sampling and Analysis Plan) that will guide on-Site RI data collection efforts planned for 2021. Data and information collected as part of the Air Exposure Assessment will be incorporated into the planning and development of the Site-wide RI/FS.

## **COMMUNITY INVOLVEMENT**

Community involvement is an important part of the NPS CERCLA process. Prior to implementation of field investigation activities planned for 2021, NPS will issue a Community Involvement Plan and establish the Administrative Record file for the Site. The Community Involvement Plan will guide public involvement during the RI/FS process. The Administrative Record file will contain all the documents and information relied upon during selection of the response action (e.g., planning documents, investigation reports, etc.). Information repositories will also be established at a location open to members of the general public where a collection of documents (including the Administrative Record file) relevant to the Site will be made available for public viewing and copying.

## **FOR MORE INFORMATION**

If you have questions concerning the information contained in this Community Update, please contact Mark Miller, Team Lead for Resource Stewardship and Science, via email at [memiller@nps.gov](mailto:memiller@nps.gov) or by phone at 907-822-7212.