

Monte Cristo Mining Area Removal Action

The Monte Cristo Mining Area (MCMA) includes abandoned gold mines, processing facilities, and haulage ways that primarily operated from about 1893 to 1907 in a remote area of the northern Cascade Range in Washington. Lands in the MCMA are a patchwork of Forest Service-administered lands, patented claims, Inventoried Roadless Areas (IRA), and the Henry M. Jackson (HMJ) Wilderness. Abandoned mines and processing operations resulted in elevated concentrations of metal contaminants, primarily arsenic and lead, along a 9.5-mile stretch of the South Fork Sauk River and tributaries.

The Forest Service, in conjunction with the Washington Department of Ecology, pursued cleanup of the MCMA and impacted waterways with funds appropriated from the American Smelting and Refining Company (ASARCO) bankruptcy settlement. A Removal Action (RA) was conducted by Cascade Earth Sciences in 2015 to address physical and chemical hazards associated with a mill, assay shack, mines, ore collection terminals, and haulage ways. Removal of approximately 2,000 yards of waste rock from the Pride of the Woods Mine (located within the HMJ Wilderness) necessitated the use of a Vertol 107-II

heavy-lift helicopter to both transport excavators to the remote location, and to transfer material to the repository. Due to the sensitive nature of cultural resources and threatened and endangered species in the area, continuous archaeological and biological monitoring was required. Following consolidation, the repository was lined with 60-mil high density polyethylene (HDPE) and covered with a three-foot soil cap to promote establishment of early seral vegetation.



Columbia Vertol 107-II helicopter approaching Pride of the Woods waste rock pile. Wilmans Peaks are in the background.



Log-stringer bridge construction along the access route



Placement of 60-mil liner on the repository



United Companies Concentrator during operation (ca. 1894)



Stone foundations of the United Companies Concentrator following cleanup



Pre-cast concrete dam and HDPE pipeline for diversion of Justice Mine adit discharge off of waste rock pile.