BUCKSKIN & MCCORMICK GROUP MINE/MILLSITES: HUMBOLDT TOIYABE NATIONAL FOREST

The Buckskin National and McCormick Group mines (the Site) are located in Sections 11, 12, 13, and 14 of Township 45 N, Range 39 E, in northern Humboldt County, Nevada. The general physical location of the Site is on Buckskin Mountain, Santa Rosa Mountains, in the North Fork of the Little Humboldt River drainage.

The McCormick Group Mine, near the top of Buckskin Mountain, was in operation the first half of the 20th century, for an unknown period. Between 1922 and 1928, while prospecting for gold and silver. Chalmers McCormick located 18 unpatented claims covering a mercury "quicksilver" deposit. Mercury production totaled approximately 130 flasks. In 1932, mercury was recovered with a pan retort. A 64-foot rotary furnace was installed and produced 70 flasks of mercury before it was dismantled and removed from the property in 1941.

The McCormick Group was a smaller mercury mine and consists of a mercury retort, rock crusher, and three waste dumps. The soils surrounding the retort, in the dump's surface and several feet below were found to contained elevated levels of mercury.

The Buckskin National mining claims were first located in 1906 by W.J. Bell and G.B. Ward. The Buckskin National property was mined intermittently from 1906 to 1941 with total production of 24,000 ounces of gold and 300,000 ounces of silver. The site consisted of extensive workings covering 20 acres, including a tailings pile and dam, waste rock dumps, six adits, eroding structures, and abandoned process residuals. Between one and 53 gallons per minute of acidic, metal laden water flows from the main, Hatch adit. In turn, the adit entered the tailings and flowed out from the base. Dissolved metals present in both the adit discharge and tailings leachate flowed directly into the North Fork of the Little Humboldt River. Sediment from tailings erosion also entered and were transported down the river.

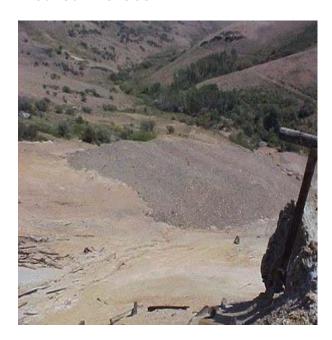
In July of 1979 some drums of wastes/chemicals were discovered and removed from the sites by

contractors of the Forest. Also, in 1990, four cattle were reported to have died from ingestion of cyanide later found at the Buckskin site. At that time, a CERCLA removal action was initiated, followed by a Site Inspection report and **Engineering Evaluation/Cost** Analysis defining alternatives for cleanup. The preferred alternatives selected were, in general, to remove tailings material from the flood plain, terrace, and cap the tailings, remove drums, reroute the Hatch adit discharge, and control surface run-on. For the McCormick Group Mine, the preferred alternative was to cap the retort and surrounding soils with cap material and vegetation.

The goals and objectives of this removal action were to improve the waters of the North Fork of the Little Humboldt River by decreasing dissolved metal concentrations and sediment loading to the river; and reduce human, wildlife, and livestock surface exposure to cyanide in drummed waste at the Buckskin Mine and mercury at the McCormick Group Mine. After the removal actions were conducted in the mid-1990's, the tailings confluence site was consistently monitored and shows that water quality in the North Fork of the Little Humboldt River has improved as a result of the removal actions, with a

38% reduction in arsenic, 98% reduction in iron, and 43% reduction in zinc concentrations. Water quality standards are still, , exceeded for pH, aluminum, cadmium, iron and zinc There is little aquatic life in the North Fork of the Little Humboldt River for about 2 miles below the site. Water quality continues to be severely impaired and, therefore, additional removal actions will be taken at the site when funds become available. Congress.

District: Nevada 2



Tailings (foreground) and waste rock dump (background) at Buckskin Mine.



Hatch adit mine drainage.



View of millsite and North Fork of Little Humboldt River valley.