

NPL Site Narrative for Midnite Mine

MIDNITE MINE

Wellpinit, Washington

Conditions at Proposal (February 16, 1999): The Midnite Mine is an inactive open-pit uranium mine on the Spokane Indian Reservation. The mine, located about eight miles from Wellpinit, Washington, was developed and operated by Dawn Mining Company (Dawn). Dawn is a subsidiary corporation 49 percent owned by Midnite Mines, Inc., a publicly held Delaware corporation originally incorporated by Spokane Tribal members and others. The remaining 51 percent of DMC is held by Newmont Gold, Inc. The property is leased by Dawn from the Spokane Tribe and individual tribal members, and the leases are administered by the Bureau of Indian Affairs (BIA).

Mining operations began in 1955 and continued until 1981, excluding a four year period in the late 1960s. During mine operations, uranium ore was transported from Midnite Mine to Dawn's mill in Ford, Washington, located 25 miles east of the mine, just outside the reservation boundary. Mining operations produced approximately 2.9 million tons of ore averaging 0.2 percent uranium oxide. Left behind are some 2.4 million tons of stockpiled ore (containing approximately 2 million pounds of uranium oxide) and 33 million tons of waste rock. Of the six pits excavated, two are still open and are partially filled with water from inflow, precipitation, and collected seeps. The other four pits have been back-filled with waste rock from the mine.

Exposed surfaces of rock in ore piles, waste rock piles, and forming pit walls generate acid rock drainage in groundwater, seeps, and surface water. Surface water from the mine's drainage basin flows to three drainages which empty into Blue Creek. Blue Creek is a fishery and a spawning and nursery area for fish and provides habitat for a fish species of special concern to the State of Washington. Blue Creek flows into Lake Roosevelt about 3 miles from the mine and is also associated with palustrine wetlands.

Pursuant to a Bureau of Land Management order, in 1992 DMC started collecting water from discrete seepage points, pumping it to one of the pits, and treating it in an on-site treatment system. Treated water is discharged to surface water on site subject to NPDES permit limits. The resulting semi-solid filtercake is transported by truck to the Dawn mill, where it is processed to extract marketable uranium and disposed of in the mill's licensed tailings disposal area.

Samples taken by the U.S. Bureau of Mines and the U.S. Geological Survey indicate that seeps, ground water and pit water at Midnite Mine are contaminated with heavy metals and radionuclides. Contamination of Blue Creek with metals and radionuclides has been documented. In April 1998, EPA conducted an Expanded Site Inspection (ESI). Elevated levels of metals and radionuclides were detected in numerous on-site sources. Several ground water seeps containing elevated levels of metals and radionuclides were observed to be flowing into nearby surface water drainages. Surface water and sediments of Blue Creek were also found to contain elevated levels of metals and radionuclides. Samples from the wetland in the East Drainage on site indicated chromium levels above the Ambient Water Quality Criteria.

Status (May 2000): Since the proposed listing of Midnite Mine in February 1999, EPA has completed a first phase of RI/FS field sampling which addresses potential off-site impacts and background conditions for sediments, surface water, and ground water. The decision to initiate an EPA-funded study followed

unsuccessful negotiations with DMC for conduct of the RI/FS. EPA is now assessing data reported by the PRP during 1999 and is scoping additional work needed to support the human health and ecological risk assessment and the evaluation of site remedial options.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.