JACKPILE-PAGUATE URANIUM MINE SUPERFUND SITE Laguna Pueblo, New Mexico Paguate, Cibola County EPA Region 6 Congressional District 2

EPA ID# NM0000607033Site ID: A6T3Contact:Petra Sanchez - 214-665-6686Last Updated:July 2015



Current Status: EPA will employ its "enforcement-first" policy prior to initiating the Remedial Investigation/ Feasibility Study.

Background

The Jackpile-Paguate Uranium Mine site is located near the town of Paguate, Cibola County, New Mexico. Paguate is located in the Pueblo of Laguna reservation approximately 40 miles west of Albuquerque. At the time of site listing onto the National Priorities List (NPL) the site coordinates were identified as the following:

Latitude: 35° 8' 1.42" North (35.133728 UTMEasting) Longitude: 107° 20' 50.54" West (107.347372 UTMNorthing) Latitude and Longitude coordinates were measured at the point of convergence of Rio Paguate and Rio Moquino near the center of the former mine and were determined using a scaled aerial photograph and ESRI Arc Map software.

Population and Setting:

The site is located in an area of canyons and arroyos to the east of the village of Paguate. The town is located adjacent and west of the mine property with a population of approximately 492, according to the 2000 census. The remaining surrounding area is mainly undeveloped, and a varied topography that contains wildlife consisting of elk, antelope, goats, and mule deer. A population of approximately 1,500 domesticated cattle on the Laguna Pueblo is also present. The former uranium mine facility encompasses approximately 7,868 acres and includes open pits and waste dumps. Overburden and ore-associated waste was stockpiled within the mine area, stockpiled in the adjacent Rio Moquino floodplain, or placed in the mined-out areas of the pits as backfill. The sources of hazardous substances that have released into the surface waters of the Rio Paguate, and Rio Moquino via the surface water pathway at the site include open pits and the waste dumps. The current site boundaries are defined as approximately 2,656 acres of the facility which were disturbed and contained three open pits that were between 200 to 300 feet deep, 32 waste dumps and 23 protore stockpiles.

Site History:

The mine was operated by Anaconda Minerals Company, a division of Atlantic Richfield Company. Mining operations were conducted from 1953 through early 1982 from three open pits, Jackpile, North Paguate, and South Paguate. Open pit mining was conducted predominately with large front-end loaders and haul trucks. The mine was closed because of depressed uranium mining conditions. During the 29 years of mining, approximately 400 million tons of rocks were moved within the mine area and approximately 25 million tons of uranium ore were transported via the Santa Fe Railroad from the mine to Anaconda's Bluewater Mill, approximately 40 miles west of the property. Mining operations were conducted from 1953 through early 1982

Hydrology:

The perennial Rio Moquino and Rio Paguate flow through the site boundary and the two rivers merge near the center of the site. The Rio Moquino flows southeasterly into the Rio Paguate within the site and the Rio Paguate continue to flow south of the site through the Paguate Pueblo where it then becomes the Rio San Jose.

Site Contaminants: The primary site contaminants include uranium (U-234, U-235 and U-238), arsenic, barium, chromium, cobalt, copper, lead, manganese, vanadium, selenium and zinc. There are high concentrations of U-238 in surface water immediately downstream of the former mine facility. Surface waters of the Rio Paguate and in the Paguate reservoir contain elevated levels of isotopic uranium.

Response Activities to Date: The Pueblo of Laguna, the Bureau of Land Management, the Bureau of Indian Affairs and Anaconda/ARCO entered into an agreement for site cleanup in 1986. In December 1986, under a series of agreements between the Bureau of Indian Affairs (BIA) and the Pueblo of Laguna, it was agreed that the Pueblo of Laguna would perform the management, coordination, and administration of the Jackpile-Paguate Reclamation Project in

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accordance with the requirements set forth in the Jackpile-Paguate Environmental Impact Statement (EIS) and the associated Record of Decision (ROD).

To date, reclamation has been primarily the covering of mine waste and contouring. In June, 1995, the Jackpile Reclamation Project was officially completed by Laguna Construction Company. In September 2007, a Record of Decision (ROD) Compliance Assessment for Jackpile-Paguate Uranium Mine was performed, along with an Addendum to the Report in November, 2011, to determine if the post-reclamation had met the requirements of the Environmental Impact Statement and Record of Decision. The reports concluded that the reclamation of the mine was incomplete.

National Priorities Listing (NPL) History:

Site hazard Ranking System Score:	50.00
Air Pathway:	Not Scored
Ground Water Pathway:	Not Scored
Soil Exposure Pathway:	Not Scored
Surface Water Pathway	100.00

NPL Proposed Date: March 15, 2012 NPL Final Date: December 12, 2013

Benefits: Although some reclamation work has been conducted in the past, the site can now undergo remediation through the CERCLA process using risk-based analysis of the site conditions.

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