

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND SITE STRATEGY RECOMMENDATION - REGION 06



Site Name: Moe No.4 Mine - NM0168 CERCLA ID#: N/A

Alias Site Name: Section 32

Address: 35.313781 N, 107.813667 W

City/County or Parish/State/Zip: McKinley County, New Mexico

Report Type: Pre-CERCLA Screening / File Review Date: July 2024 Author: EPA

RECOMMENDATION/MISC:

<input type="checkbox"/> 1. No Further Remedial Action Planned Under Superfund (NFRAP)	<input type="checkbox"/> 2. Further Investigation Needed Under Superfund
	<input type="checkbox"/> PA <input type="checkbox"/> HRS Priority: <input type="checkbox"/> High <input type="checkbox"/> SI <input type="checkbox"/> RI/FS <input type="checkbox"/> Low <input type="checkbox"/> ESI <input type="checkbox"/> RA <input type="checkbox"/> Other: _____ To be performed by: _____
<input checked="" type="checkbox"/> 3. No further assessment (i.e., not a valid CERCLA site)	
<input type="checkbox"/> 4. Action Deferred to: <input type="checkbox"/> RCRA <input type="checkbox"/> NRC	
<input type="checkbox"/> 5. Site Being Addressed Under the State Voluntary Cleanup Program (VCP)	
<input type="checkbox"/> 6. EJScreen analysis for the site area shows one or more EJ Indexes is at or above the 80 th percentile in the nation.	

NOTIFY AUTHORITY:

<input type="checkbox"/> Removal	<input type="checkbox"/> RCRA	<input type="checkbox"/> TSCA	<input type="checkbox"/> CAA	<input type="checkbox"/> SMCRA
<input type="checkbox"/> Remedial	<input type="checkbox"/> State/Tribe	<input type="checkbox"/> NPDES	<input type="checkbox"/> NRC	<input type="checkbox"/> Resource Trustee: _____
<input type="checkbox"/> CERCLA Enforcement	<input type="checkbox"/> Federal Facility	<input type="checkbox"/> UIC	<input type="checkbox"/> SPCC	<input type="checkbox"/> Other: _____
SEND SSSR COPIES TO: <input type="checkbox"/> SEDAE <input type="checkbox"/> WDDG <input type="checkbox"/> ATSDR <input type="checkbox"/> State Agency <input type="checkbox"/> Tribal Agency				

DISCUSSION:

The U.S. Environmental Protection Agency (EPA), Superfund, Site Assessment Program prepared an initial Pre-CERCLA screening report for the Moe No.4 Mine in March 2011 using information collected during a site assessment conducted in January 2008 by the New Mexico Energy Minerals and Natural Resources Department, Mine and Minerals Division (MMD). Information from both the EPA March 2011 and MMD January 2008 report were reviewed for this Pre-CERCLA screening.

The Moe No.4 Mine (Site) is one of 97 legacy uranium mines within the Ambrosia Lake mining district of the Grants mineral belt and is located approximately three miles southwest of the junction of State Highways 509 and 605. The Site is one-half mile east of State Highway 605 on New Mexico State Trust Land. Access to the Site is through private property.

The Site operated as a wet mine from 1961 to 1963. L. Sutton and E.P Moe are listed as Site operators from 1959 through 1963. The State Mine Inspector's Office last registered the mine in June 1962 with the operator listed as Llyod Sutton. The Site is a small underground mine situated on approximately three acres which immediately adjoins the San Mateo Creek. Ruth Mining and Drilling Co. sunk the mine shaft in 1961. The Site produced 2,407 tons of ore that produced 9,746 pounds (lbs.) of uranium oxide and 21,628 lbs. of vanadium oxide.

During the January 2008 field reconnaissance MMD observed a decline that collapsed into mine workings approximately 10,000 square feet by 12 feet deep. The mine Site is not reclaimed and includes approximately 45 small waste rock and ore piles spread throughout the Site. The Site has a small 10-foot-high wooden headframe that is visible from State highway 605.


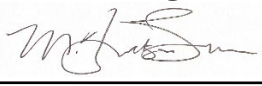
Based on the New Mexico Office of the State Engineer (OSE), Water Rights Reporting System database, from a total of 63 well records, 25 private/domestic wells are within a 4-mile radius of the Site. The nearest domestic well is located approximately 0.25 miles west of the Site with depth to groundwater approximately 35 feet below ground surface. No residential structures are noted within one mile of the Site and the area surrounding the Site is predominately range land. In March 2009 NMED staff sampled wells located within a 4-mile radius of the Site. Results indicated groundwater concentrations for uranium and selenium exceeded EPA Maximum Containment Levels (MCLs) and the New Mexico Water Quality Control Commission (NMWQC) groundwater standards. Eighteen monitoring wells are located within the 4-mile radius of the Site.

A radiological survey in 2008 for measurements taken at the Site at the ground surface showed a maximum of 1,100 micro-Roentgen per hour ($\mu\text{R/hr}$) and a minimum of $12\mu\text{R/hr}$. Measurements at a 4-foot elevation showed a maximum of $1,000\mu\text{R/hr}$ and a minimum of $14\mu\text{R/hr}$. The ground surface at the headframe had readings of $1,100\mu\text{R/hr}$. The background radiation level was approximately $15\mu\text{R/hr}$.

An Environmental Justice (EJ) Screening was completed using the EPA's Environmental Justice Screening Mapping Tool. According to the information provided by the screening, an EJ screen chart or report cannot be generated within a one-mile radius of the Site due to the area being too small or sparsely populated, or the data are not available in the national dataset.

Although impacts from the legacy of the Moe No. 4 Mine Site to the groundwater system has not been determined, at this time EPA recommends that the Moe No.4 Mine receive a designation of no further remedial action planned in the SEMS database. A generalized investigation of potential groundwater impacts from former uranium mines within the Grants Mineral District is being conducted by EPA as part of the regional groundwater quality characterization. EPA will review new data as it becomes available and incorporate it into the conceptual model for the Grants Mining District. EPA may revisit this recommendation should additional information become available that indicates that an imminent threat to human health or the environment exists such that further action under CERCLA is warranted.

APPROVALS:

Report Reviewed by: <u>Karen Berez</u> (Site Assessment Manager)	Signature: 	Date: <u>07/31/2024</u>
Disposition Approved by: <u>Michelle Delgado-Brown</u> (Acting Section Supervisor - SEDAS)	Signature: 	Date: <u>07/31/2024</u>