

**Johnny M Mine/ Rancher's Johnny M Mine Site**  
**Ambrosia Lake District, Section 7 and E1/2 Section18, T13N, R. 8W**  
**McKinley County, New Mexico**  
**Source Material License SUA – 1472; Docket No. 040-8914**

**Summary**

- Johnny M Mine located at the eastern-end of the Ambrosia Lake District, Section 7 and E1/2 Section18, T13N, R. 8W McKinley County.
  - Area is part of the San Juan Basin
  - No surface waters or wells are reportedly utilized for domestic or commercial use within 1 km radius of the site.
- Mine actively operated for over ten (10) years (1972 until early-1982) until ore reserves were exhausted.
  - Ranchers Exploration and Development Corporation, a lessee, commenced operations in 1972.
  - Operation consisted of only ore removal
  - Ore milling was not conducted at the mine nor were any ore milling facilities on-site
  - Ore was shipped off-site to the Kerr McGee (now Quivira Mining Co.) Ambrosia Lake Facility.
- Approximately 286,000 tons of tailings sands from the Kerr McGee Mill was used to backfill mine stopes at depths ranging from 1134-1148', 1162 – 1183' or 1100-1300' depending on terrain
  - Backfilling of tailings at that time was innovative process employed to prevent caving and reducing the vulnerability of possible breaks in the Dakota aquifer located above the mine.
  - Backfilling of mine stopes occurred between the Dakota Formation and Westwater Canyon Member of the Morrison Formation. The area in question totaled approximately two (2) acres.
  - Both aquifers are separated vertically by 80 vertical feet of shale
  - 8000 tons of tailings per month transported from Kerr McGee/Quivira Mine to Johnny M. Mine site.
- Backfilling operations occurred for 5 years (August 1977 to January 1982)
- New Mexico began licensing the Johnny M Mine site in 02/1978 in response to the request from Ranchers Exploration and Development Corporation to backfill mine stopes with by-product material from the Kerr McGee/Quivira Mine
- Between 1978 and1984, fourteen (14) license amendments issued by NMEID after NM-RED-MB-00
- 1982 - 1987. Reclamation of mine property began under New Mexico's jurisdiction. This included backfilling of mine out area with tailings material and as result of this operation two (2) small surface locations were required for the storage of the backfill material.
- 1984. Ranchers Exploration and Development Corporation merged with Hecla Mining Co.
- 1986. Licensing authority for the extraction/concentration of source material and disposal of the resulting by-product material was returned to the NRC. However the State's license remained in effect until the NRC had an opportunity to evaluate the license for regulatory compliance.
- 1987. NRC met with Hecla Mining to discuss site surveys and cleanups.
- 1988. NRC issued a source material license SUA-1482 to Hecla Mining Co. for the Johnny Mine Site
- 1987 -1992. NRC approved reclamations plans, and oversaw removal activities.

- 1991. NRC deliberated terminating the Johnny M Mine source material license SUA-1482. Hecla Mining was instructed to annotate in the public record that licensable by-product material remained on-site buried at depth and that no surveillance would be required once release standards were met.
- 1993. NRC terminated Johnny M Mine Site Source Material License under Amendment No. 4.

### Synopsis of Ownership for the Johnny M Mine Site

Docket No. 040-8914	Mine Operators Lessee	Property Owners/ Surface Owner	Mineral Estate Owner /Subsurface	Mineral Interest
Johnny M Mine Site Section 7, T13N, R. 8W McKinley County.  & E ½ Section 18, T13N, R. 8W McKinley County.	<p>Ranchers Development &amp; Exploration Co. leased mineral rights from Cerrillos Land Co.</p> <p>Mine operated circa 1972 – 1982</p> <p>Backfilling operations 1977 - 1982</p> <p>Ranchers Development &amp; Exploration Co. issued notice of intent to vacate premises - 01/1982</p> <p>01/16/1982. NMEID concurred on general mine cleanup plan.</p> <p>05/1982 thru 09/1982. Reclamation activities were implemented and NMEID conducted several independent surveys.</p> <p>Ranchers Development &amp; Exploration Co. issued termination report to NMEID 08/23/1983</p> <p>01/03/1984. NMEID recommended license termination after reseeding/vegetation.</p> <p>1984 Ranchers Development &amp; Exploration Co. merged with Hecla Mining Co.</p>	<p>Fernandez Company Ltd. – holds surface rights Section 7, T13N, R. 8W McKinley County.</p> <p>&amp;</p> <p>E ½ Section 18, T13N, R. 8W McKinley County.</p>	<p>Santa Fe Pacific Railroad Co. – holds mineral estate under Section 7, Township 13N, Range 8W</p> <p>&amp;</p> <p>Federal government. – holds mineral estate under E1/2 Section 18, Township 13N, Range 8W</p>	<p>Cerrillos Land Co. leased mineral interest to mine Ur ore in Section 7, T13N, R. 8W.</p> <p>Cerrilos Land Co letter 09/13/1991to NRC . As owner of all mineral rights at Johnny M Mine Site, they were unwilling to sell or sever the mineral rights to Hecla</p>
	<p>Hecla Mining Company leased mineral rights at Johnny M Mine (date?)</p> <p>05/1996. NMEID notified Hecla that NRC will assume licensing authority.</p> <p>06/01/1986. NRC assume jurisdiction over the Johnny M Mine site.</p> <p>10/1987. Hecla submit to NRC-URFO a Work Plan for Site Survey &amp; Cleanup – Oct. 17, 1987</p> <p>09/1988. Hecla submit <i>Reclamation Plan</i> – Sept. 26, 1988 to NRC-URFO</p> <p>May 4, 1990. Hecla requested an NRC License Amendment and review of the <i>Reclamation Plan, Revision No. 1, February 15, 1990.</i></p> <p>10/1990. NRC –URFO approved Hecla's revised reclamation plan.</p> <p>05/1993 NRC letter to Hecla terminated Johnny M Mine Source Material License OSUA-1482 –Amendment No. 4.</p>	<p><b>Deed Annotated by Hecla Mining</b></p> <p>03/1991. Letter from Fernandez Co. Ltd to NRC. Johnny M Mine site is not for sale</p> <p>03/1991. Hecla letter to NRC. Federal gov. holds mineral estate under E1/2 Section 18, Township 13N, Range 8W.</p> <p>Santa Fe Pacific holds mineral estate under Section 7, Township 13N, Range 8W</p> <p>05/1991 Cerrillos Land Co. notified NRC-URFO that in Section 7, T13N, R. 8W. Company does not wish to transfer mineral rights to the Fed</p> <p>09/1991. Hecla revised annotation to public record for the legal property boundary Section 7, T13N, R. 8W &amp; E ½ Section 18, T13N, R. 8W McKinley. "...byproduct material through mine backfilling was buried deep. NRC will require no ongoing surveillance. By product is licensed under 10 CR Part 40 by NRC.."</p>		