

Data and Statistics

MINERAL RESOURCES OVERVIEW: Over \$1.7 billion worth of minerals were extracted in New Mexico during 2009, a 34.3 percent decrease from the 2008 record high (Table 1 and Figure 1). In response to the economic downturn, the quantity of minerals produced decreased from 2008 levels for all commodities. Production quantity is expected to decrease further in 2010 and early 2011 in response to the decreased mineral commodity demand and financial market instability.

Mineral	Production ¹	Production Rank ²	Production Value \$	Employment ³	Reclamation Employment ⁴	Payroll \$ ⁵	Revenue Generated \$ ⁶	
							State	Federal
Coal	23,952,661	12	\$ 735,930,737	1,471	136	\$ 103,442,528	\$ 38,047,817	\$ 6,978,269
Copper	121,212,422	3	\$ 289,638,095	813	98	\$ 39,583,105	\$ 2,367,623	-
Gold	465	-	\$ 452,195	54	2	\$ 1,692,321	\$ 3,509	-
Industrial Minerals ⁷	1,566,111	-	\$ 124,402,302	446	17	\$ 15,524,080	\$ 890,259	\$ 150,274
Aggregates ⁸	13,537,659	-	\$ 110,879,335	901	61	\$ 16,906,799	\$ 1,487,533	\$ -
Other Metals	28,661	-	\$ 458,188	0	0	\$ -	-	-
Molybdenum	269,302	6	\$ 3,762,149	194	8	\$ 13,907,000	-	-
Potash ⁹	602,231	1	\$ 491,276,710	1,227	28	\$ 93,757,945	\$ 3,813,265	\$ 16,780,493
Silver ¹⁰	-	-	\$ -	0	0	\$ -	\$ 76	-
Uranium ¹¹	-	-	\$ -	54	45	\$ 2,483,283	\$ 80,547	-
			<u>\$1,756,799,711</u>	5,160	395	<u>\$ 287,297,061</u>	\$ 46,690,629	\$23,909,036

¹ Production for coal, industrial minerals, aggregates, other metals and potash is in short tons; copper and molybdenum in pounds; and gold in troy ounces.

² Production rank is based on 2009 production value in relation to other U.S. states.

Sources: Metals, potash, industrial minerals and aggregates, Mineral Resources Program, United States Geological Survey (minerals.er.usgs.gov)
Coal, Energy Information Administration, United States Department of Energy (www.eia.doe.gov)

³ Employment category includes direct and contract employees.

Gold employment and payroll is for reclamation activities at closed mines and development of a new mine and mill.

⁴ Reclamation employment is included in total employment numbers.

⁵ Payroll is for direct employees and does not include contract employees. Payroll does not include benefits.

⁶ State revenue includes state trust land mineral lease royalties, rentals and bonuses; and severance, resource excise and conservation tax revenues.

Federal revenue includes 50% state share of federal royalties.

Sources: State data, the New Mexico Taxation and Revenue Department (www.state.nm.us/tax) and the New Mexico State Land Office (www.nmstatelands.org)
Federal data, Bureau of Ocean Energy Management, Regulation and Enforcement (www.boemre.gov)

⁷ Category includes brick clay, calcite, dimension stone, gypsum, humate, perlite, Portland cement, pumice, salt, and zeolite.

⁸ Category includes base course, caliche, clay and shale, crushed rock, flagstone, fill dirt, gravel, limestone, red dog, rip-rap, sand, scoria and topsoil.

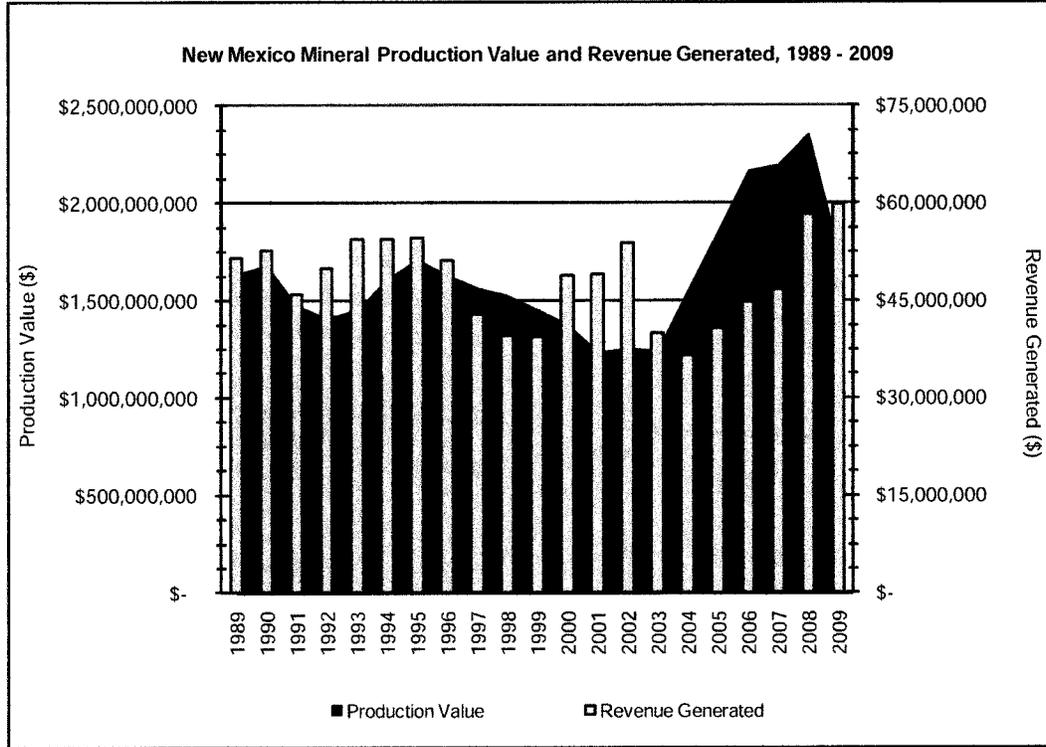
⁹ Potash production is K₂O mill production.

¹⁰ Silver production data is not available for calendar year 2009.

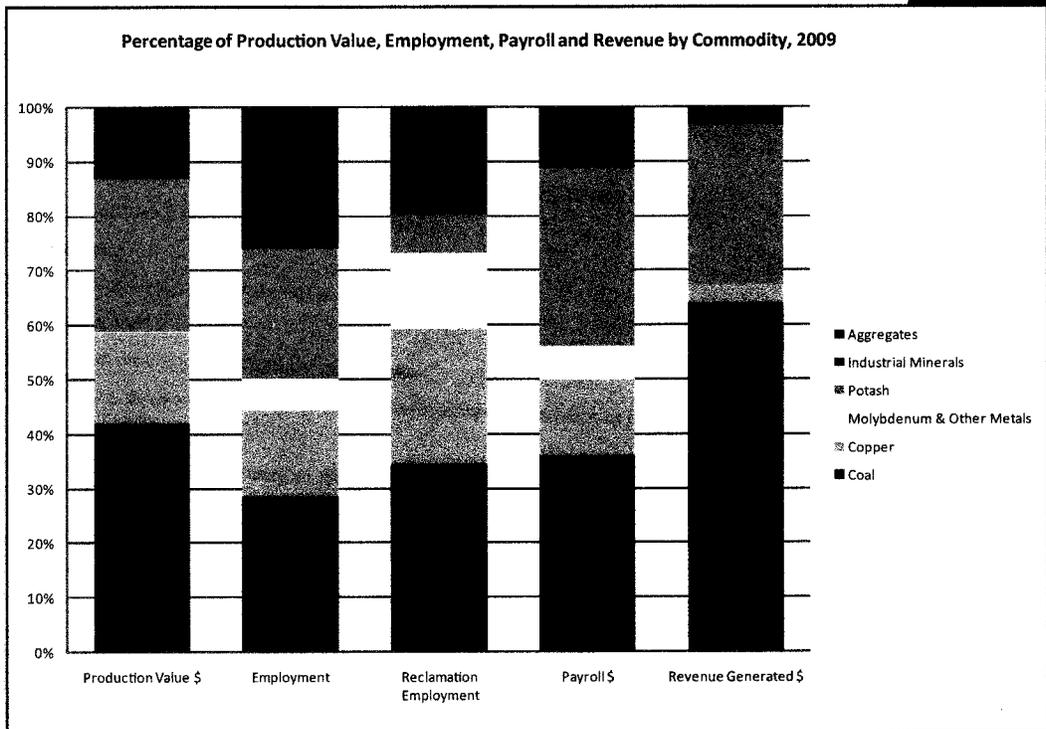
¹¹ Employment and payroll numbers are for licensing and permitting at proposed uranium mines, and reclamation activities and maintenance at closed mines and mills.

Table 1

New Mexico remains a leading United States mineral producer, ranking first in potash, perlite and zeolite; third in copper; sixth in molybdenum; and twelfth in coal production. The principal minerals, in descending order of value, are coal, potash and copper. According to the U.S. Geological Survey, New Mexico ranked twentieth in 2009 when ranking states by the production value of non-energy minerals. Our state produces 1.7 percent of the total U.S. non-energy minerals production value.



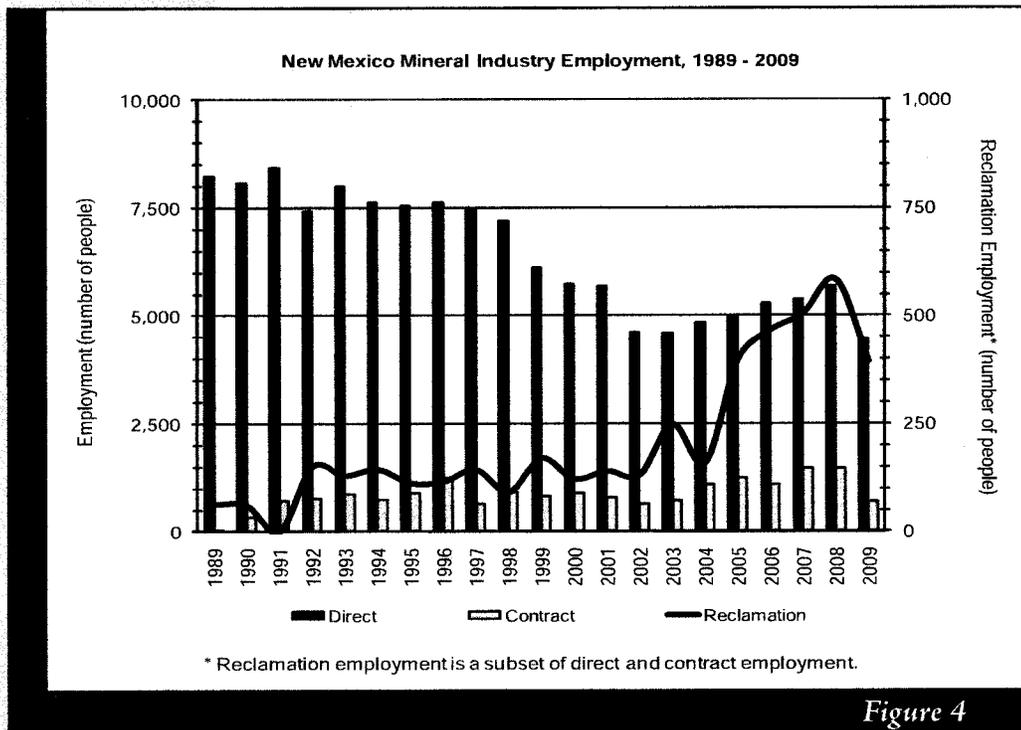
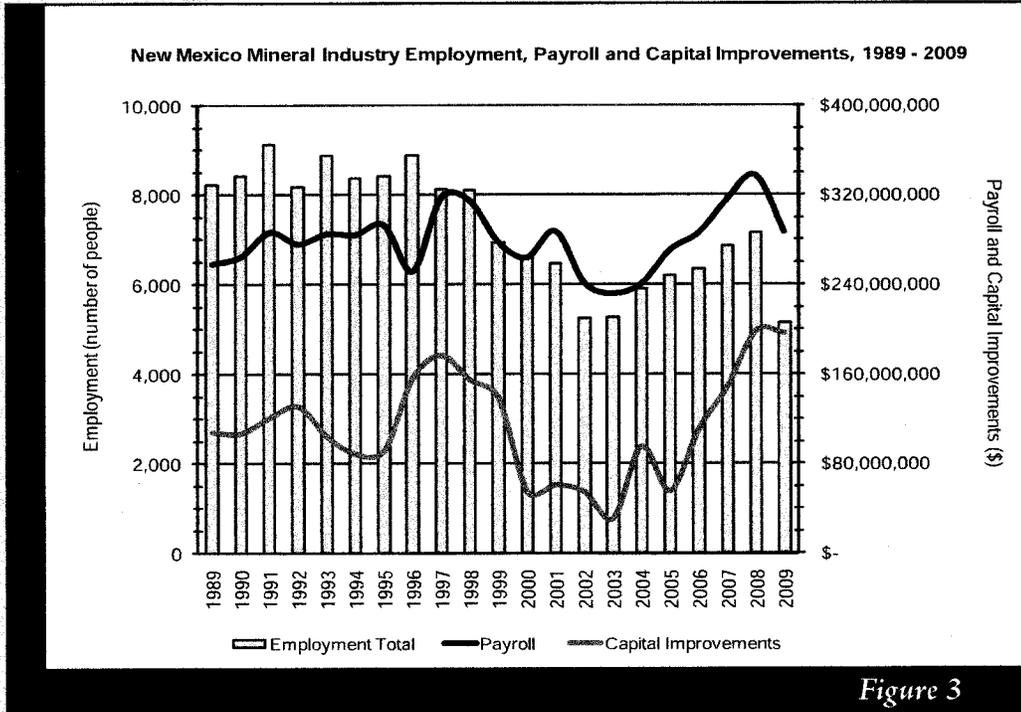
In 2009 coal reclaimed the top spot for production value and remained the leading commodity for revenue generation and payroll (Figure 2). Total revenues generated by mineral production in New Mexico reached an all time high of \$70.9 million in 2009. The record revenue can be attributed to increased state revenues from new potash leases in Lea County.



Mining sector employment and payroll figures decreased in 2009. Mineral industry payroll exceeded \$287.2 million, a 17.6 percent decrease from 2008 (Figure 3). Coal was the largest employer in New Mexico's mining industry, followed by potash and aggregates. Many mining companies suspended contract workers and reduced the number of direct employees in early 2009 in response to plummeting commodity prices. The total number of employees in the mining industry in 2009 was 5,160, a 38.5 percent drop.

Direct employment decreased 27.3 percent to 4,469 employees. Reclamation employment decreased 48.1 percent to 395 workers. Contract employment was cut in half to 691 workers (Figure 4). While commodity prices had rebounded by December 2009, many mines remained on reduced production schedules that required fewer workers.

Capital improvement expenditures remained stable between 2008 and 2009. New Mexico mining companies spent \$197.2 million on capital improvements and equipment in 2009.



There were 207 registered active mining operations in New Mexico in 2009. These operations included five coal mines; three potash mines, five potash refineries and one potash compaction plant; one molybdenum mine and one molybdenum mill; one copper mine and two solvent extraction/electro-winning (SX/EW) plants; 17 industrial mineral mines and 16 industrial mineral mills; and 154 stone and aggregate operations (Figure 5).

Due to the closure of the McKinley Mine and completion of reclamation activities at La Plata Mine, coal employment and payroll decreased in 2009. Direct coal employment decreased 11.1 percent to 1,324 workers. The number of contract employees decreased 38.8 percent to 147 workers. Payroll decreased 11.1 percent to \$103.4 million. Coal reclamation activities involved 105 employees (direct and contract).

The primary customers for New Mexico's coal are coal-fired power plants in the Four Corners region. Both BHP operations provide coal to "mine-mouth" power plants: the San Juan Mine feeds PNM's San Juan Generating Station in Waterflow, and the Navajo Mine feeds Arizona Public Service Company's Four Corners Generating Plant in Fruitland. A mine-mouth power plant is a power plant located in close proximity to the mine that provides the coal. Coal from the McKinley Mine was shipped via rail to Arizona Public Service Company's Cholla Power Plant in Joseph City, Arizona. Lee Ranch and El Segundo mines provide coal to Tri-State Generation & Transmission Association's Escalante Generating Station in Prewitt, New Mexico. Lee Ranch and El Segundo also ship coal to the Cholla Power Plant, replacing the former supply from the McKinley Mine.

In November 2010, Arizona Public Service Company announced plans to close part of the Four Corners Power Plant and seek majority ownership of the plant's remaining two generating units from Southern California Edison. The decision is being driven by new federal proposals aimed at lowering emissions and California laws prohibiting utilities from investing in coal-fired power plants. Arizona Public Service Company projects that coal sales will decrease by 30 percent at the adjacent Navajo Mine.

The proposed 1,500-megawatt Desert Rock Generating Plant, located on the Navajo Nation near Farmington, currently has no final permits in place. The draft Desert Rock Environmental Impact Statement was completed in 2007, and the final air permit was issued in July 2008 by the U.S. Environmental Protection Agency (USEPA). However, in 2009 the USEPA withdrew the air permit for the proposed plant because the plant plans did not address carbon dioxide emissions limitations and did not include best available pollution control systems. Desert Rock developers also failed to complete a required consultation with the U.S. Fish and Wildlife Service regarding two endangered fish. The Bureau of Indian Affairs withdrew its biological opinion in support of the plant acknowledging significant concerns about the impact of the plant's potential mercury and selenium discharges on San Juan River fish.

The Coal Mine Reclamation Program focuses on promoting successful and innovative approaches to reclaiming areas disturbed by coal mining. Geomorphic reclamation projects are also ongoing at the McKinley and San Juan mines. Chevron continues to perform maintenance projects at the York Canyon mines in Colfax County.



Photo by: James O'Hara

The geomorphic reclamation at La Plata mine was nationally recognized with a 2009 Excellence in Surface Coal Mining Reclamation Award. The reclaimed area underwent a Phase I bond release in 2010.

Copper employment decreased 58.7 percent to 813 workers and payroll decreased 41.4 percent to \$39.5 million. The decrease in copper employment and payroll can be attributed to the declining copper spot prices and resulting mine layoffs. Copper spot prices tumbled from \$3.63 per pound in September 2008 to \$1.49 in December 2008. Freeport-McMoRan announced in December 2008 it would suspend open pit mining and concentrator activities at Chino, while continuing copper production from its SX/EW plant. The Chino mining suspension resulted in the layoff of approximately 600 workers in February 2009. Freeport also reduced mining at Tyrone by 50 percent in early 2009. The last layoff of this magnitude at New Mexican copper operations occurred in 2001-2002.

Because of world-wide mine suspensions and closures, international copper supplies decreased as production stalled. The copper market tightened and prices began to recover in 2009, rising to \$2.75 per pound in fall 2009 and \$3.33 per pound in December 2009. By the end of 2009, Tyrone was operating at 80 percent of capacity. Because of improved market conditions, Freeport plans to restart mining operations at Chino in early 2011.

Reclamation activities have continued at the copper mines during the economic downturn. Despite ongoing reclamation projects at Tyrone, Chino and Continental, reclamation employment in the copper sector decreased 59.8 percent to 98 workers. Freeport-McMoRan completed engineering designs and work plans for the reclamation of the majority of the inactive tailings impoundments at the Chino Mine. Reclamation of the tailings is scheduled to be completed in the summer of 2011. Freeport has been approved to extend the Groundhog No. 5 Stockpile reclamation completion date from 2009 to 2011. Reclamation activities at Tyrone have focused on the grading, cover and drainage reclamation work at the tailing impoundments.

In 2009 there were two copper exploration projects permitted by the Mining Act Reclamation Program in Grant County: Galway Resources' Lone Mountain Project and New Mexico General Minerals' Gold Lake Project. New Mexico Copper Company was granted an exploration permit for the Copper Flat Project in Sierra County in November 2009. In September 2010, New Mexico Copper initiated the new mine permitting process with the submission of a Sampling and Analysis Plan for the Copper Flat Mine.

MOLYBDENUM: New Mexico remains a major producer of molybdenum, ranking sixth in domestic molybdenum production. The state's primary molybdenum producer is Chevron Mining Company's Questa Mine and Mill in Taos County. The Questa operation, an underground gravity block cave mine, produces molybdenite concentrate (MoS₂) and is one of three primary-producing molybdenum mines in the U.S. Molybdenum is also produced as a by-product of copper production at Freeport-McMoRan operations.



Photo by: Freeport-McMoRan Gold and Copper, Inc.

Over 4,000 acres have been reclaimed at Tyrone since reclamation activities started in 2003.

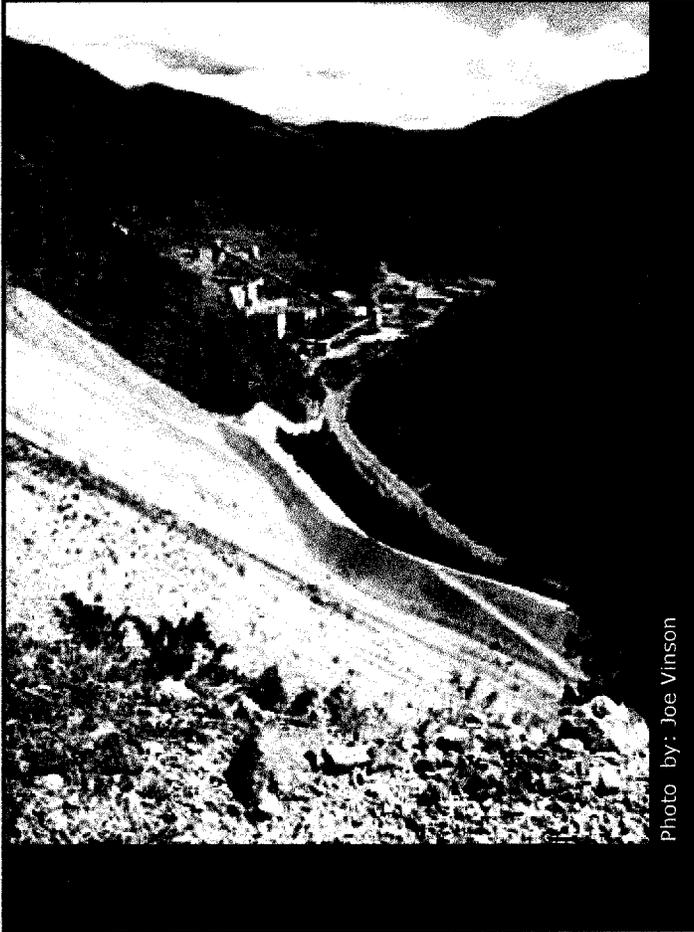


Photo by: Joe Vinson

New Mexico molybdenum production decreased 93.8 percent to 0.2 million pounds and production value dropped to \$3.7 million, a 96.7 percent decrease from 2008 levels. Molybdenum is used as an alloying element in construction and stainless steel. The 2009 decrease in production quantity and value can be attributed to plummeting molybdenum prices and demand. Molybdenum prices averaged a record high of \$33 per pound until September 2008. Prices dropped rapidly to a low of \$9 per pound in December 2008. The price of molybdenum rebounded to \$13.95 a pound in fall 2009.

Due to declining molybdenum prices, Chevron Mining announced in February 2009 that it had let go of all contract workers and that it would lay off half of the Questa workforce. Molybdenum-related employment decreased 63.3 percent to 194, payroll decreased 38.3 percent to \$13.9 million, and reclamation employment decreased 60.0 percent to 8 employees in 2009. The 90-year-old mine did not close and has continued operations with approximately 190 employees.

Chevron is currently revising the Questa Mine Closeout Plan, a particularly involved process because of the need to coordinate reclamation plans with the U.S. Environmental Protection Agency Remedial Investigation and Feasibility Study, conducted under the Comprehensive Environmental Response,

Compensation, and Liability Act (CERCLA). Submittal of the Revised Closeout/Closure Plan for the Questa Mine will be finalized after the issuance of USEPA Record of Decision (ROD), regarding the remediation steps to be taken at the site. The ROD is due to be issued in late 2010 or early 2011.

In February 2010, Chevron announced the planned construction of a one megawatt concentrating photovoltaic solar facility on 20 acres of inactive tailings at the Questa Mine. The demonstration project will be the largest concentrating solar photovoltaic installation in the U.S. The project will be implemented in conjunction with an evaluation of various soil depths for closure of the tailing facility at the end of mining operations.

In 2009 there was one other company interested in molybdenum, Galway Resources, which had an active molybdenum exploration project at Victorio Mountain in Luna County.

URANIUM: According to the Energy Information Administration, New Mexico ranks second, behind Wyoming, in domestic uranium reserves with 179 million pounds of U_3O_8 at \$50 per pound, and 390 million pounds at \$100 per pound. Rising market prices have led to renewed interest in uranium production. Spot prices rose from a low of \$6.50 per pound in 2000 to \$60.50 per pound in December 2010.

Uranium recovery in New Mexico ceased in December 2002. Currently, uranium activity in New Mexico has been focused on exploration and the reclamation of the mines and mills left over from the boom years. Rio Algom's Ambrosia Lake Mill, United Nuclear Corporation's Church Rock Mill and Homestake Mining's Milan Mill are all undergoing reclamation.

There are four inactive uranium mine operations in New Mexico currently permitted by MMD: Rio Grande Resources' Mt. Taylor Mine, United Nuclear Corporation's Section 27 Mine, Rio Tinto's JJ No. 1 Mine and Rio Algom's Old Stope mining properties. The Mt. Taylor Mine, a flooded underground mine that has been inactive since January 1990, remains on standby status and must revise its permits with MMD and New Mexico Environment Department before mining can commence. Rio Grande Resources filed an application in summer 2010 to renew the mine's standby status; standby status was originally approved in 1999, and renewed in 2005.

The Section 27, JJ No. 1 and Old Stope mines are closed and undergoing reclamation. Rio Algom finished reclamation at the Old Stope leach properties and is awaiting the twelve-year final bond release. In October 2009, both United Nuclear and Rio Tinto received final reclamation permit approval for the Section 27 and the Sohio JJ No. 1 mines. Both companies provided financial assurance to the state for the cost of the reclamation. Rio Tinto began reclamation at the JJ No. 1 site during the fall of 2009. Final reclamation of the JJ No. 1 was completed in summer 2010 and involved the closure of 11 vent shafts, regrading, topsoil application and revegetation. Reclamation of the shafts, vents and rock piles was completed in August 2010 at the Section 27 Mine. Reclamation work included sealing the shafts and vent holes, encapsulating non-economic ore piles, regrading and covering old rock piles, revegetation with native plants and addressing radiation hazards at the mine site. United Nuclear Corporation continues work toward approval of closeout and reclamation plans, as required by the New Mexico Mining Act, for the St. Anthony Mine. Reclamation activity at the Northeast Church Rock Mine continues under the jurisdiction of the Navajo Nation and U.S. Environmental Protection Agency.

Since January 2006, 31 uranium exploration applications have been submitted to MMD. As of November 2010, 12 applications have been approved, five are pending, one is on hold and 13 have been denied or withdrawn (Table 2).

Uranium Permit Applications, 2006 - 2010 *				
Approved Exploration Applications				
Project Name	Operator	Surface Ownership	Number of Holes	Drilling Completion
Ambrosia Lake	Neutron Energy		6	summer 2007
Armijo	Grants Ridge Joint Venture	Private	60	winter & spring 2010
Elizabeth	Neutron Energy, Inc.	Private	28	planned 2011
F-33	Grants Ridge Joint Venture	Bureau of Land Management	18	winter 2010
La Jara Mesa	Laramide Resources	U.S. Forest Service	10	fall 2006, winter 2007
Lily	Uranium Company of New Mexico	Bureau of Land Management	10	fall 2007
Marquez Canyon	Neutron Energy	Private	44	planned 2011
Riley	Max Resources	U.S. Forest Service	14	spring 2007
Riley No. 2	Max Resources	U.S. Forest Service, Private	5	summer 2008
Roca Honda	Strathmore Mineral Resources	State	4	summer & fall 2007, spring 2008
Section 13 ISR	Uranium Resources, Inc.	Private	3	fall 2010
Treeline	Western Energy Development	Private	6	summer 2006
Pending Exploration Applications				
Project Name	Operator	Surface Ownership	Number of Holes	
Baca	Red Basin LLC	U.S. Forest Service	25	
Cebolleta Exploration Project	Neutron Energy	Private	84	
Rio Puerco	Uranium Company of New Mexico	Bureau of Land Management	20	
White Mesa	Red Basin LLC	U.S. Forest Service	25	
Pending Mine Applications				
Project Name	Operator	Surface Ownership	Acreege	
La Jara Mesa Mine	Laramide Resources	U.S. Forest Service	77	
Roca Honda Mine	Roca Honda Resources	U.S. Forest Service, State Land Office	183	
* Status current as of November 15, 2010				

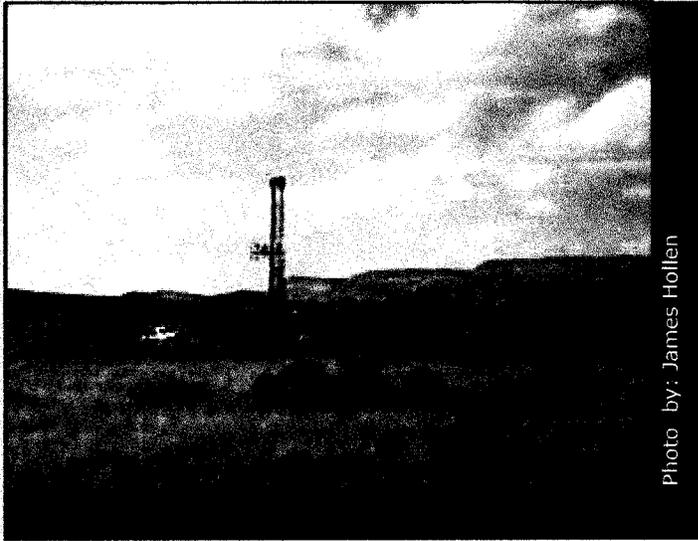


Photo by: James Hollen

Two new conventional uranium mines are being proposed in New Mexico: Roca Honda Resources' Roca Honda Mine and Laramide Resources' La Jara Mesa Mine. The proposed Roca Honda Mine is located in McKinley County on Cibola National Forest and state trust lands. Roca Honda has submitted both the Sampling and Analysis Plan and the Permit Application Package to MMD. The Roca Honda application indicates that the mine site and surface facilities will consist of approximately 183 acres of surface disturbance. Roca Honda Resources has also submitted a Mining Plan of Operations to the U.S. Forest Service, which is being reviewed through a Forest Service National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS).

The proposed La Jara Mesa Mine is located in Cibola County on Cibola National Forest land on the edge of the Mt. Taylor Traditional Cultural Property. Laramide Resources has submitted a permit application to the U.S. Forest Service for the proposed mine, which will be handled through the Forest Service EIS process. Laramide Resources has also initiated the permitting process with MMD by submitting a Sampling and Analysis Plan. The La Jara Mesa Mine application proposes a total of about 16 acres of surface disturbance.

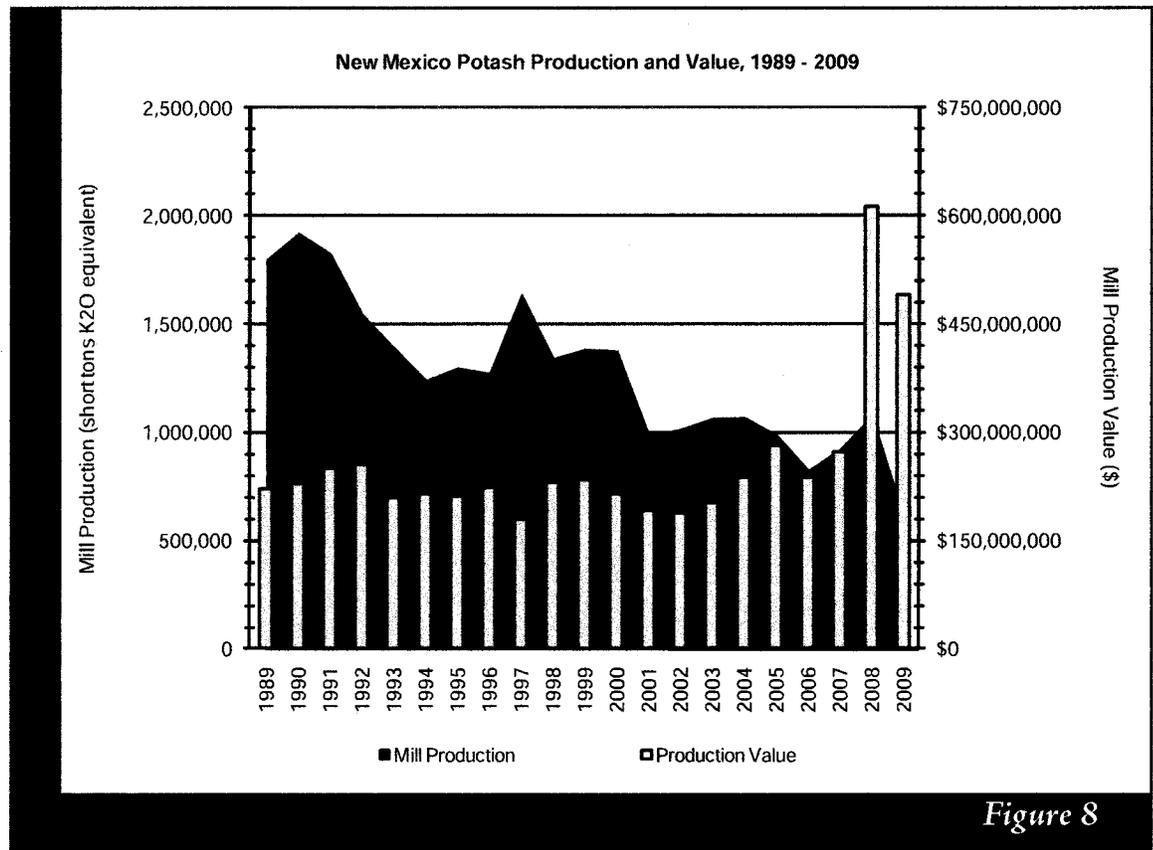
While uranium mining companies are eager to move forward, several significant challenges lay in the path of large-scale uranium development in the near future. First, all of New Mexico's uranium mills have been demolished and new milling infrastructure is needed. Second, the Navajo Nation, which overlays a major portion of the Grants Mineral Belt uranium deposits in New Mexico, declared a moratorium on uranium production in Navajo Indian Country in April 2005. Third, the New Mexico Cultural Properties Review Committee listed Mt. Taylor on the State Historic Registry as a Traditional Cultural Property in June 2009. The U.S. Forest Service determined that the Mt. Taylor Traditional Cultural property was eligible for listing on the National Register of Historic Places. The protected area includes approximately 344,000 acres.

HRI Energy continues to pursue permitting and licensing from the Nuclear Regulatory Commission (NRC) and the New Mexico Environment Department to mine uranium by in-situ leach at locations in Church Rock and Crownpoint. These permits were the subject of lengthy litigation in federal courts. The Tenth Circuit Court of Appeals upheld the NRC license and determined that a portion of the mine site was not Indian Country and therefore subject to State of New Mexico jurisdiction. The U.S. Supreme Court refused to hear further appeal of the NRC license in fall 2010

GOLD, SILVER AND OTHER METALS: New Mexico production of gold and silver peaked in the 1980s and has steadily declined since that time. In 2009 the only gold and silver produced in New Mexico was a byproduct of copper processing at Freeport-McMoRan operations in Grant County. Due to suspension of

POTASH: Potash is a mined salt containing water-soluble potassium. The Carlsbad potash district represents 2 percent of worldwide potash production and more than three-quarters of all domestic potash production. Both sylvite (KCl) and langbeinite ($K_2Mg_4(SO_4)_4$) are mined by underground methods near Carlsbad. New Mexico-produced sylvite is used primarily as an agricultural fertilizer, animal feed supplement, drilling mud additive, de-icing ingredient and water softener regenerant. Potassium helps regulate plants' physiological functions and protects crops from drought, disease, parasites and cold weather. Langbeinite products have a high potassium, magnesium and sulfur content and are marketed as a special-use fertilizer to chloride sensitive crops such as tobacco, citrus fruits, vegetables and palm trees. Farmers in nearby states use most of the New Mexico-produced potash; approximately a quarter is exported to Central and South America, the Caribbean and Asia.

New Mexico ranks first in the nation in potash production. The 2009 production value decreased to \$491.2 million, a 19.2 percent drop from the 2008 record high (Figure 8). Potash mill production increased 44.0 percent to 0.6 million pounds K_2O equivalent. Potash production and value increased as a result of rising consumption and pricing.



Two companies operate three mines, five refineries and two compaction plants in Eddy and Lea counties in southeastern New Mexico. Intrepid Potash, Inc., operates the Intrepid East, Intrepid West and Intrepid North facilities. The East facility consists of an underground mine, a sylvite/langbeinite refinery and a compaction plant. The West facility includes an underground mine and a sylvite refinery. The North facility houses a compaction plant. Intrepid held an initial public offering of common stock on April 25, 2008. The second New Mexico potash producer, Mosaic Potash Carlsbad, Inc., operates an underground mine, a sylvite refinery, a langbeinite refinery and a compaction plant.

Potash demand and prices fell at the end of 2008 and continued to decrease through 2009. Beginning in the third quarter of 2008, the global financial crisis resulted in rapid declines in the price of corn and several other crops. Lower agricultural commodity prices, volatile material costs and the uncertainty of agricultural revenue potential due to the economy caused farmers to delay their fertilization decisions heading into the 2009 planting season. This uncertainty led to a declining demand for all fertilizers as farmers waited to see how the commodity markets would unfold prior to making their 2009 planting decisions. Many farmers delayed fertilized delivery into spring 2009, leading to high potash inventory at the mines in spring 2009.

As a result of high inventories, Intrepid and Mosaic reduced operations in 2009. Potash employment was 1,227 workers in a 2009, a 2.2 percent decrease from 2008. Payroll decreased 10.3 percent to \$93.7 million. Reclamation employment in the potash sector reached a record high of 28 employees due to the reclamation of the old U.S. Potash property by Mosaic Potash Carlsbad and demolition of part of the Eddy Potash facility by Intrepid Potash.

Intrepid Potash is working on opening parts of the old Eddy Potash Mine as a solution mine. Intrepid projects the HB Solar Solution Mine project will annually produce 150,000 to 200,000 tons of potash over a 28-year mine life. The reopened mine is projected to add 44 full-time jobs. In January 2009 the BLM determined that an EIS will be required to evaluate the environmental impacts of the proposed solution mine; it is expected to take two years to complete the EIS. Potash production should start approximately one year after regulatory approvals are obtained from the BLM and New Mexico Environment Department. Intrepid estimates that the total costs of designing, permitting and constructing the solution mine will total approximately \$95 to \$115 million. Intrepid Potash, Inc., is also preparing a feasibility and design study for reopening the North mine, idle since 1982.

Intercontinental Potash Corporation, of Toronto, Canada, has started development work on a potash mine on state and federal lands in Lea County. This proposed mine, the Ochoa Sulphate of Potash Project, consists of over 100,000 acres of federal subsurface potassium prospecting permits and State of New Mexico potassium mining leases. Exploratory drilling work was completed in 2009 and 2010. Intercontinental expects production to commence in 2014. The mine and processing facilities are projected to employ 450 workers.

INDUSTRIAL MINERALS: Industrial mineral resources are widely dispersed across the state. In New Mexico, the more commonly mined industrial mineral resources include gypsum, perlite, salt, limestone, dimension stone, humate, pumice and zeolite. In 2009, there were 17 mines and 16 mills producing industrial minerals in the state. Table 3 details location, employment and the production rank for industrial mineral commodities in the state.

Industrial mineral production value fell 21.1 percent to \$124.4 million in 2009 (Figure 9). Industrial mineral production decreased 25.7 percent to 1.5 million short tons, employment decreased 11.8 percent to 446 workers and payroll decreased 24.6 percent at \$15.5 million. Reclamation employment dropped to 77 workers. The decrease in production value is related to decreased demand for construction-related materials like gypsum wallboard, Portland cement and scoria/pumice masonry blocks.