

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING & SAFETY

Department of Natural Resources

1313 Sherman St., Room 215
Denver, Colorado 80203
Phone: (303) 866-3567
FAX: (303) 832-8106



Uranium Mining in Colorado **2009** (Updated 6-22-09)

Recent Activity

The Uravan mineral belt is the oldest uranium mining area in the U.S., and historically the most productive uranium and vanadium region in Colorado. The Uravan mineral belt has about 1,200 historic mines that produced over 63 million pounds of uranium and 330 million pounds of vanadium from 1948 to 1978.

Englewood-based Cotter Corporation, a subsidiary of General Atomics Corporation of San Diego, produced uranium and vanadium ore from four mines in the Uravan mineral belt near Nucla and Naturita in Montrose County in 2005. The company ceased production at all four of these mines in November 2005, laying off 49 workers at mine sites on the Western Slope and more workers at its ore processing mill in Cañon City. The mines were idled because the company was not able to make them profitable despite high prices for uranium and vanadium. Higher energy costs and the long haulage distance (about 300 miles) from the mines to the mill played a large role in the economic difficulties of the operations. Cotter's Cañon City uranium ore mill is one of only four uranium mills in the U.S. The nearest mill outside Colorado is in Blanding, Utah, and is owned and operated by Denison Mines (USA) Corp.

The Colorado Geological Survey (CGS) estimates 2005 total Colorado uranium production to be 255,544 pounds. All this production came from the four Cotter mines. The 2005 uranium production has a gross value of \$7.3 million based on the average 2005 uranium (U_3O_8) price of \$28.52 per pound. The uranium-vanadium ore was trucked from the Western Slope mines to Cotter's mill in Cañon City where it was processed to yellowcake uranium concentrate and vanadium concentrate. The yellowcake is sold to an enrichment plant in Illinois for further processing.

Colorado ranks third among the states for uranium reserves, behind Wyoming and New Mexico.

Current Activity

There was no uranium production in 2006 based on the Cotter closures. In 2007 Denison Mines (USA) Corp., formerly International Uranium (USA) Corporation began producing from three mines and continues into 2009. Bluerock Energy Resources had begun limited production and full development at its permitted J-Bird Mine but has since transferred the J-Bird Mine back to the original permit holder Rimrock Exploration and Development who is assessing mine plans and developing an environmental protection plan to comply with Designated Mining Operation requirements. A uranium reclamation project by Nuvemco, LLC began in Mesa County but ore grade issues have suspended the project until late summer of 2009. Energy Fuels Corporation gained final BLM approvals in September of 2008 for the Whirlwind Mine in Mesa County. However on November 20, 2008 Energy Fuels announced capital preservation measures which included putting the mine into maintenance status. Energy Fuels continues to monitor and treat groundwater while maintaining the site.

The Division has 95 total uranium prospects in Weld, Summit, Fremont, Grand, San Miguel, Mesa, Montrose, and Moffat counties. 93 prospects are active, two are awaiting warranty (which means activity on the ground cannot occur), and one is under review. The Division has released eight sites for withdrawal on approved active notices where no disturb occurred. Also two sites were released after full reclamation was completed.

As of June 2, 2008 all new prospects and modifications to existing ones must meet the requirements of Senate Bill-228. The requirements are that certain aspects of the notices are not covered by confidentiality and part of the public record. To view these notices go to the DRMS website: <http://www.mining.state.co.us/> and click on the prospecting notices on the right hand banner.

There are 35 actively permitted uranium mining projects in Colorado. Only four mines are now producing ore. There is an application in the review process which was amended to a DMO application. The Division has also begun the review of six active permit for conversions from non-DMO permits to the respective 110d and 112d DMO permits. A list of permits and operators is attached. The Division of Reclamation, Mining and Safety notes that the uranium industry has been affected by the recent economic downturn. Although some projects appear to be moving forward many have been postponed at least for the immediate future.

Mine permitting and regulations have changed significantly since the last uranium boom in the 1970's. The Division's rigorous permitting and bonding requirements (which have changed significantly since some of these uranium mining operations were previously in production) could be controversial and cause some concern with potential uranium mine operators. Environmental groups are monitoring mining activities and permitting also.

Regulatory Oversight

There are more than 1,700 active mines that affect more than 110,000 acres in the state. The Colorado Mined Land Reclamation Act requires that anyone who plans to conduct prospecting or mining operations in Colorado file for a reclamation permit with the Mined Land Reclamation Board. The Board was created in 1976 to carry out the mandates of the Mined Land Reclamation Act. The Board works with the Division of Reclamation, Mining and Safety to enforce reclamation laws. The Division holds over \$400 million in bonds and sureties for these sites.

Ronald W. Cattany, Director

Active Uranium Mining Permits in Colorado
June 22, 2009

<u>Permit</u>	<u>Operator</u>	<u>Site Name</u>	<u>County</u>	<u>Status</u>
M1977004	Homestake Mining Company	Pitch Project	Saguache	In reclamation
M1977248	Gold Eagle Mining, Inc.	C-JD-5	Montrose	active
M1977284	Cotter Corporation	Mineral Joe Claims	Montrose	active
M1977285	Denison Mines (USA) Corp.	Sunday Mine	San Miguel	in ore production
M1977288	Umetco Minerals Corporation	Deremo-Snyder	San Miguel	In reclamation
M1977293	Nuvmco, LLC	Monogram-Jo Dandy	Montrose	active
M1977297	Gold Eagle Mining, Inc.	Burros Mine	San Miguel	active
M1977300	Cotter Corporation	Schwartzwalder	Jefferson	In reclamation
M1977305	Cotter Corporation	C-LP-21 Mine	Montrose	reclaimed
M1977306	Cotter Corporation	JD-9 Mine	Montrose	active
M1977307	Cotter Corporation	CM-25 Mine	Montrose	reclaimed
M1977308	Cotter Corporation	C-JD-7	Montrose	active
M1977310	Cotter Corporation	JD-6 Mine	Montrose	active
M1977311	Cotter Corporation	SR-13A Mine	San Miguel	active
M1977416	Denison Mines (USA) Corp.	Carnation Mine	San Miguel	active
M1977417	Sutherland Drilling	Sego Mine	San Miguel	active
M1977451	Cotter Corporation	Ike No 1 Mine	San Miguel	reclaimed
M1977477	Umetco Minerals Corporation	Club Mines	Montrose	reclaimed
M1977500UG	Bluerock Energy Corp.	Tramp Mine	Montrose	active
M1978039HR	Denison Mines (USA) Corp.	St. Jude Mine	San Miguel	in ore production
M1978116	Cotter Corporation	SM-18 Mine	Montrose	active
M1978222UG	Nuvmco, LLC	Monogram Mines	Montrose	DMO conversion Approved 5/22/09
M1978311	Gold Eagle Mining, Inc.	Hawkeye Mine	San Miguel	active
M1978342	Gold Eagle Mining, Inc.	Ellison Mine	San Miguel	active
M1979094HR	Cotter Corporation	JD-7 Pit	Montrose	active
M1979118HR	Cotter Corporation	Wright Group	Montrose	active
M1980055HR	Denison Mines (USA) Corp.	Topaz Mine	San Miguel	in ore production
M1981021	Denison Mines (USA) Corp.	West Sunday	San Miguel	in ore production
M1984014	Cotter Corporation	C-JD-8	Montrose	active
M1989068	B-Mining Company	Centennial	San Miguel	active
M1997032	Denison Mines (USA) Corp.	Van 4 Shaft	Montrose	active
M2005050	Rimrock Exploration & Development	J Birds	Montrose	Active
M2007044	Energy Fuels Resources Corporation	Whirlwind Mine	Mesa	active
M2008012	Nuvmco LLC	Last Chance #3 & #4	Montrose	DMO permit review
M2008050	Nuvmco. LLC	October Ore Pile Reclamation	Mesa	active