Fiscal impact reports (FIRs) are prepared by the Legislative Finance Committee (LFC) for standing finance committees of the NM Legislature. The LFC does not assume responsibility for the accuracy of these reports if they are used for other purposes.

Current FIRs (in HTML & Adobe PDF formats) are available on the NM Legislative Website (legis.state.nm.us). Adobe PDF versions include all attachments, whereas HTML versions may not. Previously issued FIRs and attachments may be obtained from the LFC in Suite 101 of the State Capitol Building North.

FISCAL IMPACT REPORT

SPONSOR Lo	ovejoy	ORIGINAL DATE LAST UPDATED	1/17/08 HB	
SHORT TITLE Uranium Mining Hearings, Permits & Locations			ations SB	_17
			ANALYST	Wilson
	A DDD O			

APPROPRIATION (dollars in thousands)

Appropri	iation	Recurring or Non-Rec	Fund Affected	
FY08	FY09			
\$0.1	\$0.1	Recurring	General Fund	

(Parenthesis () Indicate Expenditure Decreases)

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY08	FY09	FY10	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
Total	\$0.1	\$0.1	\$0.1	\$0.1	Recurring	General Fund

(Parenthesis () Indicate Expenditure Decreases)

Relates to HJM 2 & HB 22

SOURCES OF INFORMATION

LFC Files

Responses Received From

Economic Development Department (EDD)

Energy, Minerals & Natural Resources Department (EMNRD)

Environment Department (ED)

Indian Affairs Department (IAD)

SUMMARY

Synopsis of Bill

Senate Bill 17 amends the New Mexico Mining Act and the Water Quality Act to:

• Eliminate the exception for sites under the authority of the federal Nuclear Regulatory Commission (NRC) and Resource Conservation and Recovery Act (RCRA) from being regulated under the Mining Act by amending the definition of "mineral" and "mining".

Senate Bill 17- Page 2

- Eliminate the exemption of "minimal impact" mining sites from the public notice and hearing permitting requirements.
- Add a requirement that the Director of the New Mexico Mining and Minerals Division (MMD) shall not issue a permit for exploration drilling or a new mining operation within 1000 feet of an existing dwelling or within 1000 feet of any imaginary line extending vertically from an existing dwelling.

In addition, the Water Quality Act is proposed to be amended to add a requirement that a constituent agency of the New Mexico Water Quality Control Commission (WQCC) shall not issue a permit or shall deny the certification of a federal water quality permit if the permit is related to drilling for insitu uranium mining and if the drilling will occur within 1000 feet of an existing dwelling or within 1000 feet of any imaginary line extending vertically from an existing dwelling.

SB 17 has an emergency clause.

FISCAL IMPLICATIONS

SB 17 will expand the permitting responsibilities of the EMNRD Mining and Minerals Division (MMD) to permit mining operations currently exempted from the Mining Act and to require public notice and hearings for all small permit applications. Given the significant increase in uranium project development and the number of minimal impact applications currently received by MMD, these changes could significantly increase the workload for EMNRD. The agency has requested one additional FTE for FY 08 to handle increased permitting demands under the current law. The agency probably needs to request additional FTE's to handle the additional permits and public hearings mandated by changes in SB 17.

ED states no fiscal impacts are anticipated from the elimination of the exemption for the "minimal impact" mining sites from the public notice and hearing permitting requirements, and for implementing the setback requirements. However, SB17's provisions for MMD regulation of NRC regulated sites will result in additional ED staff time being devoted to coordinating ED existing uranium permit authority with MMD's new permit duties. The task will require significant funding and staff resources. Appropriation of funds is not included and ED does not have the resources to accomplish this task.

SIGNIFICANT ISSUES

EMNRD provided the following:

Currently, "conventional" uranium mines (underground and open pit) and exploration projects are required to be permitted by MMD under the Mining Act. Uranium in-situ leaching operations and uranium mills are exempted from the Mining Act but are required to obtain a license from the NRC and water quality permits from the Environment Department. By requiring a Mining Act permit for these uranium facilities, State oversight of these uranium facilities would be increased somewhat and public involvement will be increased. However, the industry will argue that the regulatory goals of the Mining Act are largely covered by the NRC licensing process and, therefore, Mining Act permitting would be duplicative. They may also argue that the State is preempted by the Atomic Energy Act.

Senate Bill 17- Page 3

This bill will require public notice and hearings for each application for small exploration and mining operations that fall under the "minimal impact" category. Currently, the Act provides that these operations will be permitted "without notice and hearing". This change will increase the ability of the public to learn about and comment on small mining operations. However, the new language seems to mandate a public hearing for all small mining operations, whereas for larger operations, the Act only mandates an "opportunity for a public hearing". As a result, EMNRD will need to conduct a public hearing for every minimal impact application regardless of whether there is any public interest in the application. Unlike the other changes in SB 17 which apply only to uranium operations, this change applies to all minimal impact operations.

This bill will prohibit uranium mining and exploration drilling that may occur within 1000 feet of a residence under both the Mining Act and the Water Quality Act. The Act currently has no setback requirements. Most hard rock mining occurs away from residences, however, in the past, there has been some uranium mining and exploration near residences. Last year, MMD did receive a uranium exploration application which was located within the community of Crownpoint. That application was denied for other reasons.

ED provided the following information:

Uranium mining and processing was extensive in New Mexico from the 1950s to the 1970s. Those operations were mainly conducted prior to the enactment of state and federal regulations that protect human health and the environment. Therefore, many of those operations resulted in significant environmental impacts, including water pollution. At this time, there are no active conventional or insitu uranium mines in New Mexico. However, due to the increase in the price of uranium, mining companies have expressed interest in new mining, and there has been some recent exploratory drilling for uranium resources.

Current state water quality regulations are designed to prevent future water pollution at any new uranium mining and processing facilities that fall under the state's jurisdiction. Since 1978, pursuant to the Water Quality Act, uranium operators have been required to obtain groundwater discharge permits under the WQCC Regulations to prevent ground water contamination. Requirements for financial assurance to ensure mine sites are adequately closed following cessation of operations, and requirements to abate any soil, groundwater, or surface water contamination that may occur are also in place.

The proposed amendment to the definition of "mineral" and "mining" has the effect of making all NRC regulated sites such as uranium mills and insitu uranium extraction wells subject to a permit from the MMD. Currently, these activities are not regulated by MMD, but are regulated by the state under ground water discharge permits issued by ED pursuant to the Water Quality Act as discussed above. The proposed inclusion into the Mining Act of facilities regulated by NRC could be viewed as redundant and creates multiple state regulation of the same activity, which is already occurring under ED permits. It will provide little additional environmental benefit to New Mexico.

Under this amendment there will be extensive new coordination activities involved on the part of ED and MMD in addition to those already existing between ED and the NRC.

Senate Bill 17- Page 4

This would appear to conflict with existing portions of the Mining Regulations which seek to avoid duplicative and conflicting requirements, as well as, existing portions of the Mining Regulations where the Director of MMD is required to consult with the staff of other federal and state agencies responsible for the review of mining operations for compliance with other applicable laws and the issuance of permits for the mining operations, for the purpose of avoiding duplication and conflicting requirements with the Mining Act and Mining Regulations.

There are already potential jurisdictional problems between the ED and NRC which could become exacerbated with this amendment. In 2001 the NRC made some changes to their "Uranium Recovery Policy" which ED disputed. The changes basically indicated that non-agreement states, of which New Mexico belongs, had no authority over the regulation of mill tailings and that there should be no concurrent state jurisdiction. The issue was never formally resolved but NRC and ED staff worked around this issue, so far, to the extent that NRC is tacitly accepting ED's permitting role for protection of ground water quality and public health. However, if MMD is given additional and possibly duplicative regulatory authority, NRC could attempt to block the state out of having a regulatory role at these sites.

In regards to insitu uranium extraction wells it is not clear what MMD will regulate. Insitu uranium extraction wells involve wells drilled into uranium bearing formations at depth under the ground. Oxygenated water is injected into the formation in one well and is circulated to another well where the water is pumped to the surface where the uranium is extracted in a processing facility and the water is then recirculated through the subsurface formation for additional uranium extraction. The subsurface injection is subject to state underground injection permits and ground water discharge permits pursuant to the WQA and WQCC regulations in accordance with ED's primacy grant from EPA for the federal Underground Injection Control (UIC) Program under the federal Safe Drinking Water Act. If MMD is involved in this aspect of the uranium mining then it could affect ED's UIC primacy grant.

In addition, the main purpose of the Mining Act is to assure reclamation of mine sites towards some sort of post mining land use (PMLU). For uranium sites, final closure of the site is dictated by NRC. Following closure, all uranium mill sites are transferred to the Department of Energy (DOE) for long term stewardship and not a PMLU. ED has worked around these issues with the existing ground water discharge permits to ensure that state closure requirement are met prior to site transfer. The Mining Act does not contemplate sites such as these that have such complex federal jurisdictional issues. For instance, MMD requires financial assurance for all mine sites. ED has allowed the federal government to hold the financial assurance on mill sites because the federal government was considered a safe financial risk. NRC would not want to have joint bonding with MMD.

EDD believes that the economic development impact for Senate Bill 17 will put a hold on or greatly lengthen the delay of the implementation of insitu leach mining activities and the expanded uranium mining industry in Cibola and McKinley Counties. Recently, Uranium Resources announced the purchase of a Nuclear Regulatory Licensed Mill Site near Ambrosia Lake that will create 200 new jobs with over a \$1 billion in investment over the project timeline. Other mining interests are located near Crownpoint, New Mexico. In addition to in situ mining, conventional mining will also be required in certain situations.

ADMINISTRATIVE IMPLICATIONS

ED and EMNRD claim additional full time employees will be needed to manage this coordination effort in order that duties mandated by statute are not compromised.

RELATIONSHIP

SB 17 relates to HB 22, Uranium-related Health Study and HJM 2, Superfund for Uranium-Contaminated Sites.

OTHER SUBSTANTIVE ISSUES

IAD noted the following:

Uranium is widely found in the United States, but New Mexico has a high concentration which makes it particularly attractive to those who seek to mine it. Estimates are that 600 million pounds of uranium lie under New Mexico's sandy soil. And the energy produced by a pellet of uranium the size of a fingertip is equal to that produced by nearly a ton of coal.

From 1944-1986, nearly 4 million tons of uranium ore were mined in and around the Navajo Nation for energy and nuclear weapons production. When these mines ceased operation, many of them were left abandoned and often left poorly contained without reclamation. Today, the abandoned uranium mines are proving to present a variety of health and environmental risks to New Mexico's citizens and environment.

Over the years, scientists have scientifically linked uranium and other chemicals produced during the process of uranium milling with serious health risks. These chemicals, including radon, radium, and arsenic, have been associated with cancer, kidney disease, birth defects, neurotoxicity, neuropathy, hyperpigmentation and hyperkeratosis of the skin. In animals, exposures to these substances through water contamination have been documented to cause birth and genetic defects.

In 2005, the Navajo Nation passed the Diné Natural Resources Protection Act, banning uranium mining on tribal lands and citing among other reasons the connections between uranium mining and milling and health risks to its people. This law states that there is a reasonable potential of injury to humans, both to health and economic wellbeing, from uranium mining that the Navajo Nation deems unacceptable. The Navajo Nation is currently lobbying Congress for a federal moratorium on uranium mining both within the reservation's boundaries and beyond in what's commonly referred to as a checkerboard of Indian and non-Indian land.

In situ mining has also raised concerns in New Mexico regarding potential ground water contamination, especially among New Mexico's Tribes, Nations and Pueblos. A 2007 article from the Albuquerque Tribune stated that, insitu leaching sites in New Mexico are close to Navajo Nation and Laguna and Acoma Pueblo lands and aquifers. The article further states that in-situ leaching has a "reputation outside the uranium and nuclear industries as a dirty process with potentially great public hazards. Problems involve: leaching chemicals that invade freshwater; high accumulations of radium and radon; the

Senate Bill 17– Page 6

dissolving not only of uranium but also of other radioactive materials and heavy metals, such as radium, lead and cadmium; disposing of wastewater and guarding for leaks; and the practice of diluting wastewater with clean water and injecting it into the aquifer."

According to the Cibola National Forest, "Mt. Taylor is located on the eastern end of the Grants Uranium Belt, one of the richest known reserves of uranium ore in the country. There have been two historical uranium 'mining booms' in the area in the 1950's and again in the 1970's. "Current high demand for uranium mining is being fueled by

- 1) dwindling uranium stockpiles from existing sources, and
- 2) new orders for a large number of nuclear-fueled power plants worldwide.

These factors have created an all time high price for uranium that is expected to rise even higher into the foreseeable future. That demand has resulted in a new interest in mining uranium on the Cibola National Forest as well as on other public and private lands in the Grants area."

DW/bb