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## FISCAL IMPACT REPORT

ORIGINAL DATE 03/19/09

SPONSOR SEC LAST UPDATED \_\_\_\_\_ HB \_\_\_\_\_

SHORT TITLE Uranium Legacy Cleanup Act SB 736/SECS

ANALYST White/Woods

### APPROPRIATION (dollars in thousands)<sup>1</sup>

Appropriation			Recurring or Non-Rec	Fund Affected
FY09	FY10	FY11		
NFI	Indeterminate but Substantial Increase	Indeterminate but Substantial Increase	Recurring	Uranium Legacy Cleanup Fund
NFI	Indeterminate but Substantial Decrease	Indeterminate but Substantial Decrease	Recurring	General Fund Capital Outlay

(Parenthesis ( ) Indicate Expenditure Decreases)

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)<sup>1</sup>

	FY09	FY10	FY11	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
<b>Total</b>	NFI	\$ 0.1	\$ 0.1	\$ 0.1	Recurring	General Fund

(Parenthesis ( ) Indicate Expenditure Decreases)

Duplicate of HB749/HBICS

Relates to HB 84, HJM 6, SB 188, SB 223, SB 224, SJM 15, and SJM 46

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From<sup>2</sup>

Energy, Minerals and Natural Resources Department (EMNRD)

Environment Department (NMED)

Taxation and Revenue Department (TRD)

Department of Health (DOH)

### SUMMARY

#### Synopsis of Bill

Senate Education Committee Substitute for Senate Bill 736, the “Uranium Legacy Cleanup Act” (Act), establishes a “Uranium Legacy Clean Up Fund” (Fund). The Fund is to provide financial

<sup>1</sup> See Narrative

<sup>2</sup> As taken from responses to duplicate bill (HB749/HBICS)

Assistance for qualified projects to eliminate or reduce actual or potential exposure of persons to contamination that may have resulted from uranium mining or milling activities that occurred prior to July 1, 2009.

The SEC Substitute provides that the Fund will receive an annual appropriation of at least 10% of the general fund used for capital outlay projects until 2020. The funding mechanism is repealed on January 1, 2020, but the remainder of the bill continues.

The SEC Substitute also establishes a Committee that will review and approve applications for funding from the Fund.

Additional Detail:

Section 3 establishes the Uranium Legacy Cleanup Committee ("Committee") which consists of 9 voting and 5 non-voting members. The voting members include 3 state agency heads and 6 members appointed by the Governor who will include 2 tribal members and various persons with expertise in public health, uranium mining, and site remediation. The Committee is granted the authority to review and approve or deny applications for financial assistance from the Fund, to recommend proposed rules and to review the projects funded through the Fund.

Section 4 establishes the Fund which may also receive other money that is appropriated or donated to it. The Fund is appropriated to and administered by the Energy, Minerals and Natural Resources Department (EMNRD) which shall adopt rules and procedures for the Fund and for grants and loans for approval by the Secretary of EMNRD.

Section 5 establishes the duties of the EMNRD Secretary, which include adopting rules, after considering Committee recommendations, for applying for financial assistance from the Fund and for establishing priorities for projects. Funds may be used only for federal, state or tribal lands. Funding goes to "qualified projects" as determined by the Secretary, which are directed at eliminating or reducing "actual or potential exposure of persons to contamination that may have resulted from uranium mining or milling prior to July 2009". Section 4 lists 11 priorities for approving qualified projects:

1. protection of public health, safety and welfare,
2. protection of environment from contamination,
3. ability to leverage additional funds from other sources,
4. adequacy of funding,
5. size of the area to be addressed,
6. number of people affected,
7. level of radiation exposure,
8. potential for contamination to grow,
9. lack of potential responsible parties obligated under federal state or tribal law,
10. use of site following cleanup, and
11. legal authority to conduct cleanup.

The SEC Substitute provides that projects must be located within the state of New Mexico and be on federal, state or tribal land. Projects can be conducted in collaboration with other public entities including federal and tribal governments.

Section 6 provides for an annual report by the EMNRD Secretary to an interim committee on expenditures and projects under the Act.

Section 7 establishes that no law providing general fund appropriations for capital outlay projects can be enacted without containing an appropriation at least ten percent of the total amount for the Fund. Section 8 repeals Section 7 on January 1, 2020.<sup>3</sup>

**FISCAL IMPLICATIONS**

The proposed legislation will have an indeterminate but significant impact on general fund capital outlay appropriations until FY2020. General fund capital outlay appropriations occur at the Legislature’s discretion in fiscal years with a substantial budget surplus. The substitute would earmark 10 percent of any general fund capital outlay appropriations made until FY2020.

**Table 1: Annual General Fund Capital Outlay Since FY1994<sup>4</sup>**

Fiscal Year	GF Capital Outlay	Ten Percent
1994	\$ 143,187,718	\$ 14,318,772
1995	\$ 39,861,731	\$ 3,986,173
1996	\$ 18,062,910	\$ 1,806,291
1997	\$ -	\$ -
1998	\$ 6,375,000	\$ 637,500
1999	\$ 4,000,000	\$ 400,000
2000	\$ 25,385,000	\$ 2,538,500
2001	\$ 108,552,000	\$ 10,855,200
2002	\$ 74,941,684	\$ 7,494,168
2003	\$ 36,910,100	\$ 3,691,010
2004	\$ 162,560,851	\$ 16,256,085
2005	\$ 238,591,648	\$ 23,859,165
2006	\$ 454,649,250	\$ 45,464,925
2007	\$ 464,861,244	\$ 46,486,124
2008	\$ 122,996,335	\$ 12,299,634

Table 1 shows the amount of general fund capital outlay appropriations made since 1994. The far right column of the table shows what 10 percent of those appropriations would have been if the proposed legislation had been in place then. In years with significant budget surpluses, such as FY2006 and FY2007, these appropriations would have been extremely significant. Due to the state’s current budget situation it is highly unlikely that any general fund capital outlay appropriations will be made in upcoming fiscal years. However, if the budget situation should improve this legislation could necessitate the appropriation of substantial amounts of general fund money to the Uranium Legacy Cleanup Fund.

EMNRD states, “HB 749 provides no cost allocation for administration or oversight of projects implemented through the Fund. As HB 749 is proposed, EMNRD would be required to use existing staff and resources to establish rules, support the Committee, and oversee the uranium legacy cleanup projects.”

<sup>3</sup> Excerpted from EMNRD response dated 3-10-09.

<sup>4</sup> Source: LCS

NMED adds that this legislation, "...requires that the Energy, Minerals and Natural Resources Department, after considering recommendations from the Uranium Legacy Cleanup Committee, adopt rules for applying for financial assistance from the Uranium Legacy Cleanup Fund and for establishing priorities for qualified projects to receive expenditures from the fund. The priorities must be based on a list of factors, including the size of the area, number of people affected, level of radiation exposure, potential for migration of the contamination, the lack of a responsible party, ability to leverage other funding and protection of health and the environment. The Uranium Legacy Cleanup Committee would also review and approve or deny applications for qualified uranium cleanup projects. Under the Water Quality Act and Water Quality Control Commission (WQCC) regulations, NMED is the regulatory agency responsible for assessing and overseeing the cleanup of sites in New Mexico potentially contaminated by uranium mining. As such, NMED will be required to aid ENMRD in the determination of priorities, and to review and provide input on cleanup applications submitted to the Uranium Legacy Cleanup Committee. At least one additional full time employee would be needed to manage that effort. Appropriation of funds is not included for NMED to implement the tasks that would be required. By deleting the strict liability provisions in section 6 of the original bill, sites with a viable responsible party may qualify for assistance funding, which would deplete the Uranium Legacy Cleanup Fund more quickly."

### **SIGNIFICANT ISSUES**

EMNRD advises that there is a need to fund the cleanup of abandoned uranium mine sites in New Mexico. During the uranium "boom" from the 1950s to the early 1980s, New Mexico was the largest producer of uranium in the world. However, at the time, there were few, if any regulatory controls that required uranium mines and mills to be reclaimed. EMNRD's Mining and Minerals Division has begun to inventory and to assess abandoned uranium mines and the extent of the potential hazards that they pose to the public. EMNRD has identified approximately 260 mines where uranium production occurred. Of these mines, more than half have no records of any reclamation having been conducted. In addition, EMNRD estimates another 400 to 500 sites that involved with uranium mining activity where there is no record of production. Most of the mines occur in the area of the "Grants uranium belt" north of I-40, between Gallup and Grants. EMNRD has just begun to conduct fieldwork to assess the amount of work necessary to reclaim the inventoried sites. EMNRD further indicates that:

- Estimating the cost of cleaning up these sites is difficult. Current cleanups at large mines and mills have sometimes cost in the tens of millions and, rarely, the hundreds of millions. On the other hand, many of the unreclaimed mines identified by EMNRD are smaller and may cost less than \$1 million each to reclaim assuming there are no groundwater contamination issues and the mine waste could be reclaimed in place.
- HB 749 has a broad definition of how the funds can be expended. "Qualified project" is defined in Section 2 to mean a project selected by the Secretary of EMNRD according to the priorities set forth in Section 4 and, under Section 4, must be directed at eliminating or reducing actual or potential exposure of persons to contamination that may have resulted from past uranium mining or milling.
- The HBIC Substitute limits the funding for projects located on federal, state and tribal land. That prohibits the use of funds for uranium sites on private land. The inventory conducted by EMNRD found that about 30 % of the uranium mines in New Mexico were located on private land.

NMED notes that the legislation, “...would no longer hold responsible parties strictly liable for the costs associated with the release of contaminants from uranium mining operations conducted during or after 1900. The state and taxpayers may end up paying the costs of cleaning up sites where there is a viable responsible party that can conduct cleanup activities and pay for those costs.”

As background, DOH notes the following:

Beginning in the 1950s and 1960s and continuing through the 1990s, a number of private companies began extensive exploration, mining, and milling of the uranium deposits in New Mexico. These activities took place on private, state, federal, and tribal lands. Over one hundred seventy-five thousand tons of uranium ore were mined and milled from the uranium deposits located on New Mexico lands. As a result of these uranium mining and milling activities, hundreds of abandoned, un-remediated uranium mines exist in New Mexico communities, including a large number of Native American communities. State and federal studies have shown that surface water, groundwater, soils, and biota remain substantially contaminated by past uranium mining and milling activities.

Mining and milling processes remove uranium and other constituents in the ore from their relatively safe natural deposits and convert them to a fine sand, then sludge, whereby the potentially hazardous materials become more susceptible to erosion and dispersion into the environment. Additionally, various acid-leaching processes caused a continuous leaching of substances and their increased migration into the environment; including groundwater, surface water, soil and biological organisms.

As a result, uranium mining and milling processes produced a substantial quantity of radioactive waste that can create exposure pathways to the natural environment potentially threatening the health of nearby residents. These radioactive materials, including uranium, radon gas, radium, and thorium present a long-term radioactive hazards. In addition to the radioactive hazards, hazardous concentrations of toxic chemicals from the piles of ore and tailings were widely dispersed over large areas and got into the human environment.

The unremediated radioactive and hazardous waste piles from past uranium exploration, mining, and milling activities continue to present a threat to the health and well-being of residents of northwestern New Mexico through multiple exposure sources and pathways, including drinking contaminated water, breathing contaminated air, and eating contaminated agricultural crops, produce and livestock.

Long-term exposures to elevated levels of uranium and other metals can result in kidney damage, neurological impairment and may contribute to the increased occurrence of chronic diseases such as diabetes. Kidney damage is the primary health effect of ingested high uranium levels over long periods of time, such as several months or years. Neurotoxicity of both the peripheral and central nervous systems can result from even low levels of human exposure to metals associated with uranium processing including lead, manganese, and arsenic. Neurobehavioral and developmental effects in children have been associated with very low levels of exposure to these metals (Casarett and Doull's, Toxicology: the Basic Science of

Poisons / editor, Curtis D. Klaassen, editors emeriti, Mary O. Amdur, John Doull New York: McGraw-Hill, Health Professions Division, 1996 Edition 5th edition ATSDR; Casarett and Doull).

Nitrates and sulfates substantially contaminate drinking water sources near most of the uranium mill tailings' sites. Nitrate contamination of drinking water sources may result in a life-threatening health condition known as methemoglobinemia or "a blue baby syndrome", if high-nitrate water is used for drinking water particularly for baby formula and by young children. Consumption of drinking water with high levels of sulfate can cause strong laxative effects and diarrhea. Dehydration is a common serious consequence of persistent diarrhea following ingestion of large amounts of sulfates.

DOH concludes that, "HB749s would provide a mechanism for evaluation and cleanup of uranium mining and milling sites potentially reducing ongoing and future exposures in these communities. In addition, HB749s would allow for the issuance of severance tax bonds to pay for the activities of uranium legacy cleanup projects."

### **PERFORMANCE IMPLICATIONS**

NMED's indicates that its ability to meet legislatively mandated performance and accountability measures to prevent pollution, and conduct permit compliance and enforcement actions would be reduced if the added duties of the Substitute are created for NMED, as discussed above, without concurrent additional funding to support the activities.

DOH states, "The service population most likely impacted by HB749s includes Native Americans, Hispanics, and those who are of low to moderate socio-economic status. Communities with the greatest number of uranium mining and milling operations have more Hispanic, Native American, and low income residents."

### **ADMINISTRATIVE IMPLICATIONS**

EMNRD states that their department "...is required to administer the Fund, to establish rules and procedures, to hold and disburse funds and to provide oversight of approved projects. Since the number of potential projects is large, the workload for EMNRD would be substantial."

NMED advises that – as noted in its response under Fiscal Issues (above) – their department would need at least one additional full time employee to ensure that cleanup actions are conducted in accordance with applicable statute, rules and regulations for protection of public health, water quality, and the environment.

DOH states that the legislation, "...would require the Secretary of the DOH or the Secretary's designee to serve as a voting ex-officio member on the Uranium Legacy Cleanup Committee. Therefore, the Secretary of the DOH could designate a staff member from the Environmental Health Epidemiology Bureau (EHEB). If this occurred, EHEB would need to designate 0.5 FTE towards this role."

## **CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP**

NMED suggests the following:

The [SEC Substitute] is related to but conflicts with HB 84. The amended language of SB736/SECS brings the bill more in line with HB 84 by deleting the section on strict liability for owners and operators of uranium mining operations. However, HB 84 funds the Uranium Legacy Cleanup Fund through a surtax on uranium production whereas SB736/SECS funds it through receipt of 10% of the General Fund Capital Outlay appropriations

[SB736/SECS] is also related to HJM 6 – Uranium Mining Task Force; SB 188 – Study Uranium Mining Effects on San Mateo Basin Aquifers, SB 223 – Uranium Mining and Milling Contamination Study, SB 224 – Abandoned Uranium Sites Inventory Completion, SJM 15 – Uranium Mine Cleanup, and SJM 46 – Uranium Health-Profile Study and Database.

## **TECHNICAL ISSUES**

NMED indicates that, Section 3.D.6 on page 3 mandates that one voting “Uranium Legacy Cleanup Committee” member be a resident of New Mexico from the federal Department of Energy (DOE) Waste Isolation Pilot Project, and Section 3.E.1 and 2 on page 3 mandates that two EPA Regions participate on the “Uranium Legacy Cleanup Committee” as non-voting members. To this language, NMED states, “... the question remains whether state legislation can mandate participation on the committee by a federal agency.”

## **WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL**

EMNRD states, “State agencies will continue to seek funding and resources elsewhere to address abandoned uranium mines and other contamination related to uranium mining that poses an ongoing health hazard to the public.”

NMED adds, “The lack of a funding mechanism to clean up former uranium mining and milling sites will limit the ability of the state to identify and clean up hazards to public health from windblown radionuclides, surface water runoff, and leaching of contaminants into state water resources. Abandoned, contaminated uranium mine and mill sites may continue to remain in place as they are today. Consequently, the lack of cleanup actions at abandoned sites will compromise the ability of the state to protect public health and could potentially hinder economic growth and future population in the area due to public fears of unknown health threats related to uranium mining and milling activities.”

## **AMENDMENTS**

None.

BW/mt:svb