MINUTES
of the
SECOND MEETING
of the
RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

July 21, 2005
Pecos River Village Conference Center
Carlsbad

July 22, 2005
New Mexico Junior College
Hobbs

The second meeting of the Radioactive and Hazardous Materials Committee was called to order at 10:05 a.m. on Thursday, July 21, 2005, by Representative John A. Heaton, vice chair.

Present
Rep. John A. Heaton, Vice Chair
Sen. Vernon D. Asbill
Rep. Donald E. Bratton
Rep. Manuel G. Herrera
Sen. Gay G. Kernan
Sen. Carroll H. Leavell
Rep. Antonio Lujan
Rep. Richard C. Martinez
Rep. Jim R. Trujillo

Absent
Sen. Phil A. Griego, Chair
Sen. John T.L. Grubesic
Rep. Jeannette O. Wallace

Advisory Members:
Rep. Thomas A. Anderson
Sen. Mary Jane M. Garcia
Sen. Clinton D. Harden, Jr.
Sen. William H. Payne
Sen. John Pinto
Rep. Avon W. Wilson

Staff
Evan Blackstone
Gordon Meeks
Jeret Fleetwood

Guests
The guest list is in the original meeting file.

<u>Thursday, July 21</u>- Pecos River Village Conference Center, Carlsbad

Representative Heaton began by providing members of the committee and the audience with a brief history of the committee and asked the members of the committee and staff to introduce themselves.

Waste Isolation Pilot Project (WIPP): Status, Permits, Upgrades

Roger Nelson, chief scientist at WIPP, provided the committee with an update on the workings of the facility. He discussed waste shipments received and placed in storage by WIPP in underground disposal panels. Mr. Nelson described that once a panel is halfway full, WIPP begins to mine a new panel and seals a panel when it is completely full. WIPP currently is conducting activities in four disposal panels, and Mr. Nelson updated the committee on the fill status of the panels.

Mr. Nelson explained that under WIPP's current permits, it can only manage, store and dispose of contact-handled transuranic mixed waste. However, he noted that WIPP has a permit modification request pending with the New Mexico Department of Environment (NMED) for approval to accept and store shipments of remote-handled waste, which requires significantly more care in handling. Mr. Nelson clarified that waste storage plans dictate that remote-handled waste must be placed at the back of a storage room and that contact-handled waste is then placed in front of it. He also pointed out that it would be helpful if the application to receive remote-handled waste is approved by NMED in the near future to allow WIPP staff to place the remote-handled waste in the rooms of the panel they are currently mining. Mr. Nelson also stated that WIPP has also applied for a number of other permit modifications, including modification requests for hazardous waste disposal units and air monitoring systems.

Finally, Mr. Nelson discussed incoming shipments to the facility from other sites. He stated that the Department of Energy (DOE) facility in Idaho currently sends the largest number of shipments. He also specified that since shipments from the Idaho facility require the use of most of the trucks designed to transport WIPP shipments, transportation resources are scarce to make shipments from other sites such as Los Alamos National Laboratory (LANL).

Questions and comments focused on:

- the definition of "planned exposure to radiation";
- the security plan in place for the WIPP facility;
- high-level waste at LANL, which will never find its way to WIPP;
- the differences between high- and low-level waste;
- the reason for empty drums stacked on top of drums full of waste; and
- the safety of the facility from natural disasters.

NMED: WIPP Status, Permits, Upgrades

Ron Curry, secretary of environment, Cindy Padilla, NMED Water and Waste

Management Division director, and James Bearzi, NMED Hazardous Waste Bureau chief, provided the committee with a summary of the status of WIPP's request for permit modifications. They explained that WIPP must obtain permits from many separate NMED bureaus and that WIPP has submitted 78 separate permit modification requests (PMRs). Secretary Curry stated that NMED dedicates a significant amount of time and resources to the WIPP project on an annual basis.

Mr. Bearzi gave an overview of the NMED hazardous waste permitting process and discussed several of the PMRs received from the DOE regarding WIPP. He noted that a number of the PMRs for remote-handled waste that had been returned by NMED to the DOE for deficiencies has been consolidated into one large PMR that is currently in the public comment period of the permitting process. He also explained that NMED is not directly involved with the facilities sending shipments to WIPP. Instead, WIPP conducts audits at the waste production sites and NMED observes those audits. Mr. Bearzi went on to explain that most of WIPP's PMRs have been addressed in an attempt to devote more resources to Section 311 of the WIPP permit, which would allow the facility to receive remote-handled waste.

Finally, NMED staff discussed waste issues at LANL, noting that some high-level waste in old dumps still exists at the laboratory, as well as a significant amount of low-level waste.

Questions and comments included:

- whether consolidating PMRs expedites the process; and
- the nature of state authority over WIPP and LANL.

Carlsbad Environmental Monitoring and Research Center Report

Jim Conca, director of the Carlsbad Environmental Monitoring and Research Center (CEMRC), provided the committee with an overview of the programs and goals of the center. He explained that the CEMRC mission was originally to implement an independent health and environmental monitoring program in the WIPP vicinity. The goals of the program are to detect releases from WIPP that are below compliance levels and to evaluate potential sources of exposure to the public. Mr. Conca stated that from the scientific data of the program, the CEMRC has concluded that there has been no detectable radiological effects or detrimental public health impact from the WIPP project.

Mr. Conca also gave the committee an overview of the CEMRC's current homeland security program that researches the effects of "dirty bombs" and the need for emergency response. He noted that the CEMRC is ideally suited to handle the scientific and training issues associated with dirty bombs. The CEMRC provides dirty bomb training for military and civilian first responders and has a dirty bomb test center.

Questions and comments focused on:

- which entities pay for first responder training;
- whether materials from WIPP could ever be used to construct a dirty bomb;

- the relationship of CEMRC to New Mexico State University; and
- the emotional issues associated with dirty bombs and radioactivity in general.

Center for Excellence for Hazardous Materials Management Report

William T. Bartlett, executive director of the Center for Excellence for Hazardous Materials Management (CEHMM), provided the committee with an update on the center. He explained that the CEHMM was founded with the intention of becoming a national and international leader in the field of managing hazardous waste, but that CEHMM also conducts various other kinds of research projects. Mr. Barlett discussed the objectives and funding and gave an overview of some of CEHMM's current projects, such as a captive breeding program for the lesser prairie chicken that is intended to help keep the bird off the endangered species list. Finally, Mr. Bartlett discussed a number of proposed projects involving the CEHMM in the fields of education, information technology, air monitoring standards, environmental and occupational toxicology and water.

Questions and comments focused on:

- how the community of Carlsbad has used cluster-based economic development and the presence of the WIPP site to build an industry based on hazardous material management.

Potash Mining in Carlsbad: Overview, Solution Mining and Environmental Impacts

Scott Vail, manager of safety and environment at Mosaic Potash Carlsbad, Inc., and David Waugh, also a representative of Mosaic Potash, provided the committee with an overview of potash mining in southeastern New Mexico. Mr. Waugh emphasized the importance of potash mining as providing a valuable mined commodity as well as an industry that employs a large number of people in southeastern New Mexico. He also pointed out that New Mexico accounts for more than 70 percent of the potash production in the United States. Mr. Waugh noted that a concern is that increased oil and gas drilling has made potash mining in rapidly expanding areas impossible. He stated that potash must be mined before oil and gas holes can be drilled and the potash industry faces a challenge because of this conflict.

Mr. Vail also commented on the importance of the potash mining industry as a producer of a valuable commodity, as an employer of a large work force and as a good corporate citizen of New Mexico. He also discussed the potential assumption of primacy by NMED over the federal Clean Water Act. He emphasized that if the legislature were to consider allowing NMED primacy over the enforcement of the federal Clean Water Act, close attention would have to be paid to the wording of such legislation to ensure that industries such as potash mining would not be adversely affected.

Randy Foote, general manager of Intrepid Mining NM, LLC, Hugh Harvey, also with Intrepid, and Steve McCutcheon, Potash Association of New Mexico, discussed the benefits of solution mining for potash in New Mexico. He explained that conventional mining techniques require that large deposits of potash remain in the mine to prevent it from collapsing and that

solution mining consists of flooding old mines with water to dissolve those deposits and pumping the water into shallow lakes and allowing it to evaporate, leaving behind potash that would otherwise be unreachable.

Questions and comments focused on:

- the value of potash mining to the Carlsbad community;
- the economics of conventional versus solution mining;
- the compatibility of solution mining with the oil and gas industry;
- byproducts of solution mining;
- whether the legislature can help with the conflict between the potash mining industry and the oil and gas industry;
- types of NMED permits required for solution mining; and
- whether produced water from oil and gas mining can be used for solution mining.

Mercury Emissions Standards in New Mexico

Jim Norton, director of NMED's Environmental Protection Division, provided the committee with an overview of levels of mercury emissions in New Mexico and public health concerns. He explained that coal-fired power plants in New Mexico emit more mercury than those in any other western state and that those emissions could lead to increased mercury levels in New Mexico's waterways. Mr. Norton pointed out the amount of mercury in fish in New Mexico's lakes can be an indicator of levels of mercury in the air. To illustrate, he presented graphs showing the mercury levels in various species of fish caught in a number of lakes across the state, many of which are significantly higher than the Environmental Protection Agency's (EPA) health threshold for mercury. Mr. Norton also informed the committee that coal-fired power plants in New Mexico are not the only ones emitting high levels of mercury. He also stated that while power plants in the Navajo Nation also emit very high levels of mercury, emissions from power plants in China can also find their way to New Mexico.

Mr. Norton went on to discuss plans to address high mercury emissions, particularly the EPA's cap and trade process, which would allow plants with low mercury emissions to sell credits to those with higher ones. He noted that the cap and trade process has been heavily criticized and that some states have sued the EPA over the cap and trade issue.

Finally, Mr. Norton pointed out that the Public Service Company of New Mexico (PNM) has voluntarily placed state-of-the-art mercury controls on its San Juan generating plant, which could result in an 85 percent reduction in that plant's mercury emissions.

Questions and comments focused on:

- ways of forcing the power plants on the Navajo Nation to lower their mercury emissions;
- health effects of mercury on children; and
- sources of mercury other than power plants.

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National Enrichment Facility Status: Report from Louisiana Energy Services

Marshall Cohen, vice president of Louisiana Energy Services (LES), provided the committee with an update on the proposed national uranium enrichment facility to be built outside of Eunice, New Mexico. He explained that enriched uranium is an essential component of commercial nuclear power plants and gave the committee a brief overview of how the uranium enrichment process works.

Mr. Cohen went on to discuss the proposed National Enrichment Facility (NEF), an 80,000-square-foot structure that will cost $1.4 billion to construct. He stated that Lea County provides the stable seismic environment, property size, moderate climate, power supply access and skilled work force that construction of the site would require. Mr. Cohen also discussed regulation of the NEF, explaining that while the United States Nuclear Regulatory Commission (NRC) would be responsible for licensing the NEF, NMED would also play a significant role in providing the facility with several required permits, such as ones for ground water, X-rays, hazardous materials and storm water pollution prevention. He pointed out that LES had submitted its application to NMED to operate the NEF in December 2003 and is hopeful it will obtain its license by spring 2006.

Mr. Cohen also discussed the estimated time line for construction of the facility, noting that architects were currently designing plans for the facility, with actual construction to begin in August 2006 and enrichment to begin near the end of 2008. He noted that, by 2013, the facility should reach its capacity for centrifuges. Mr. Cohen further explained that the recently released final environmental impact statement for the facility concluded that the NEF would have minimal environmental impact on the region. Mr. Cohen also informed the committee that a safety evaluation report for the NEF concluded that facility operations will not pose a risk to worker safety. Mr. Cohen emphasized that a large number of various construction jobs would be available to local citizens during the construction of the NEF and that the facility would also require operators once it was completed and functional.

Finally, Mr. Cohen discussed elements of a settlement agreement between LES and NMED regarding the on-site storage of cylinders containing uranium byproduct. He explained that the settlement agreement contains the number of cylinders that LES can store at the facility, the length of time the cylinders can remain at the site and the method of disposal.

NMED: New Mexico's Agreement with LES

Secretary Curry, Cindy Padilla, Bill Olsen, bureau chief of NMED's Ground Water Quality Bureau, and Tannis Fox, NMED's Office of General Counsel, participated in NMED's presentation to the committee regarding the NEF. Secretary Curry emphasized that the NMED has continued to request that LES be transparent during the permitting process and that LES be committed to the state of New Mexico.

Mr. Olsen stated that numerous NMED permits would be required for LES to operate its facility, and he provided the committee with a brief overview of the NMED permitting process. He informed the committee that a permit is pending with NMED for ground water discharge. That permit has four major components that include a storm water detention basin, a uranium byproduct cylinder, a treated effluent evaporated basin and six septic tank leachfields. He also pointed out that without NMED primacy over some permits, such as storm water runoff permits for construction and discharge permits, LES would have to also seek permits from the EPA Region 6 Office in Dallas.

Secretary Curry also stated that there are remaining issues that have not been settled between NMED and LES regarding the NEF. He explained that there is some disagreement regarding how many uranium byproduct cylinders would be stored at the facility and how long those cylinders would be stored. Secretary Curry again emphasized the need for LES to be transparent during the negotiating process.

Questions and comments focused on:

- EPA Region 6 permitting for surface water;
- acreage of ponds located at the NEF facility;
- public notice periods for NMED permitting and public hearings;
- New Mexico's involvement in the Rocky Mountain Low-Level Waste Compact;
- issues regarding disposal of LES waste;
- NRC approval required of the agreement between New Mexico and LES;
- the ability of NRC to enforce provisions in the agreement;
- the definition of "significant public interest"; and
- the importance of the LES facility to southeastern New Mexico.

Waste Control Specialists Report

Dean Kunihiro, senior vice president for licensing and regulatory affairs at Waste Control Specialists (WCS), provided the committee with an overview of WCS's operation. He explained that the WCS facility is located in Texas close to the New Mexico border. He stated that permits obtained by the company from the state of Texas and the EPA allow it to store, treat and dispose of radioactive materials. Mr. Kunihiro noted that while WCS is not currently permitted to handle low-level radioactive materials, the permitting process to do so is underway and the facility is already receiving some shipments from a DOE facility in Ohio.

Mr. Kunihiro went on to discuss the WCS facility itself, noting that the region's climate, geology and location make it well-suited for its purpose. He also pointed out that the WCS facility receives a tremendous amount of community support.

Questions and comments focused on:

- low-level waste storage at the WIPP site and the WCS facility;
- the difference between low-level waste and transuranic waste; and
- the possibility of the WCS facility handling deconverted waste from the LES site.

There being no further business, the committee adjourned at 11:35 a.m.