

DRAFT MINUTES
of the
SECOND MEETING
of the
RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE
July 13, 2010
State Capitol
Santa Fe

The second meeting of the Radioactive and Hazardous Materials Committee was called to order by Senator Richard C. Martinez, chair, on July 13, 2010 at 9:08 a.m.

Present

Sen. Richard C. Martinez, Chair
Rep. John A. Heaton, Vice Chair
Sen. Vernon D. Asbill
Sen. Stephen H. Fischmann
Rep. William J. Gray
Sen. Carroll H. Leavell
Rep. Antonio Lujan
Sen. John Pinto
Rep. Jim R. Trujillo
Sen. David Ulibarri
Rep. Jeannette O. Wallace

Absent

Rep. Jeff Steinborn

Advisory Members

Sen. Rod Adair
Rep. Eliseo Lee Alcon
Rep. Thomas A. Anderson
Rep. Donald E. Bratton
Sen. Dianna J. Duran
Sen. Lynda M. Lovejoy
Rep. Nick L. Salazar

Sen. Gay G. Kernan
Rep. Rodolpho "Rudy" S. Martinez
Sen. William H. Payne

Staff

Gordon Meeks
Renée Gregorio
Lacy A. Daniel

Guests and Handouts

The guest list is in the meeting file.

Handouts and written testimony are in the meeting file.

Tuesday July 13

The committee members introduced themselves.

Department of Environment (NMED): Mission, Resources and Structure

Ron Curry, secretary, NMED, and Jim Perry, director, Administrative Services Division, NMED, addressed the committee on the structure, mission and resources of the department. The secretary introduced other staff members from the department who were present in the room. The presenters handed out the department operating budget, which was broken down by general fund and other revenue sources. Mr. Perry said that only 16% of the department's budget comes from the general fund. He said that the vast majority of the department's revenues are made up of more than 100 grants from the U.S. Environmental Protection Agency (EPA). He said that the department's revenue stream is very complicated based on multiple funding sources and the purposes of those funds. The general fund appropriation in this fiscal year is less than it was in the last year of the Johnson administration. It has not grown at all over the last eight years in absolute dollars. Mr. Perry went through the budget pages in detail, explaining revenue sources and purposes. The NMED is probably the hardest department to understand because of the federal funds mixed in with state and other funds.

Secretary Curry closed by saying that the NMED has tried to provide ideas for the restructuring and rethinking of environmental policy and water resource management.

Energy Parks

Ben Cross, environmental management, U.S. Department of Energy (DOE), said the DOE is trying to reduce its footprint by cleaning up defense weapons sites. He characterized cleanup and reuse weapons sites as leveraging assets to improve returns to taxpayers on their investments. He explained that in this instance, the liabilities of contaminated weapons complex sites are tantamount to assets. By 2015, the DOE wants to reduce its footprint from 900 square miles to 90 square miles. The American Recovery and Reinvestment Act of 2009 money helped remediate many of these sites. The presence of the DOE is not necessarily going to be eliminated from these sites, it will just be a reduced presence. The Energy Park Initiative is a proposed program; it is not formal yet, although there is pending legislation in Congress to do this. Energy is fundamental. It affects everyone, and the DOE wants potentially to make assets available to private enterprise to create clean energy jobs, close carbon loopholes, reduce atmospheric emissions and enhance the competitiveness of the United States, he testified. He said that New Mexico has Sandia National Laboratories, Los Alamos National Laboratory, the Waste Isolation Pilot Plant and other DOE sites that are energy assets from a production and manufacturing standpoint. These assets constitute more than land; they include personnel, equipment, buildings and a safety culture. He also pointed out that corresponding to DOE sites, New Mexico has other assets, such as solar, geothermal and wind resources. He said that several other locations have expressed interest in the energy park concept, including in Ohio and Texas. Where the transmission grid is available, alternative liquid fuels also represent assets. He said that new transmission capacity takes 15 years to deploy, so the benefit of reusing existing facilities is advantageous. The DOE is holding workshops across the country with stakeholders in the energy community, including the EPA and its Re-Powering America, and it is also looking at former mine sites and other commercial assets as components of potential energy parks. A critical question is how to create a business environment to foster this. An energy park task force is being established to guide this effort, he said, adding that there is a need for pilot projects to demonstrate the idea, and some of those pilot sites might be in New Mexico.

Environmental Position on Uranium Mining

Eric Jantz, New Mexico Environmental Law Center, and Nadine Padilla, Multicultural Alliance for a Safe Environment, testified that from the 1940s to the 1980s, mines in the uranium belt provided most of the nation's nuclear fuel and bomb materials. In 1979, waste broke through a tailings dam, affecting the drinking water of Navajo communities. The Church Rock spill was a bigger environmental disaster than Three Mile Island, but no one has heard of it, they said. There have been no studies, but locals have reported a higher incidence of disease. The in situ leach mining method involves injection of chemicals in rock to extract uranium. Two proposed mines are near 15,000 Navajos who may be adversely affected. Local communities oppose these mines, Ms. Padilla said.

The State of New Mexico has jurisdiction for permitting mines. Instead of these mines, the community needs investment in clean jobs for economic development as compared to uranium, which is a boom-and-bust market that does not create a reliable long-term sustainable economic base, according to Ms. Padilla. She asked for health studies, environmental justice studies and continued funding of regulatory actions by the NMED and the Energy, Minerals and Natural Resources Department. She asked the committee to consider the unfunded costs from contamination and health effects.

Joint Meeting with the Indian Affairs Committee

Multi-Agency Five-Year Plan for Uranium Legacy Cleanup

John C. Meyer, Superfund Division, Region 6, EPA, informed the committees of the progress and activities underway with respect to the multi-agency five-year plan his agency is spearheading. Mr. Meyer explained that approximately 500 acres have been looked at and characterized according to gamma and radon levels, among other markers. He noted that the instruments used to detect radiation contamination can only read up to five feet, but the entire property is tested. Mr. Meyer also explained that the five-year plan addresses water contamination. He stated that there are treatment solutions and equipment available. If the water in a family well is contaminated, the homeowner can dig the well deeper to avoid the contaminated water. If the contamination has extended beyond that area, more data are necessary to know how to fix the problem.

In order to add a property to the Superfund list, the EPA gathers information and follows the hazard rankings for the site. If a property ranks high enough to be put on the national priority list and the government agrees with the ranking, the property goes through a rulemaking procedure. If it survives the year- to year-and-a-half-long process, it gets on the Superfund list. The five-year plan aims to identify all the contaminated sites before cleaning them up. Working with other agencies ensures that the problems are tackled effectively.

Upon an inquiry from a committee member, Mr. Meyer clarified that his agency cannot commit to do something it is not funded to do. He also clarified that environmental cleanup is a long process. The average time for cleanup is 15 years, and the hardest part of the cleanup is to understand the problem before any action on cleanup is done. According to the EPA, it cannot inject anything into an aquifer without being licensed by the Nuclear Regulatory Commission. Aquifer exemption is granted upon request and after a state underground injection control permit is issued.

In Situ Leaching, Uranium Mills and Ground Water

Bill Olsen, bureau chief, and Jerry Schoeppner, Ground Water Quality Bureau, NMED reported that prior to the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), screen data of Poison Canyon's 26 mines were screened. The mines were prioritized based on physical hazards, such as open shafts, vent holes, adits, declines, high walls in pits, environmental hazards and potential contamination of sewers and surface and ground water. Twelve mine sites were proposed for consideration for emergency response due to physical hazards, and nine mine sites were proposed for consideration for removal action due to ongoing radiological releases.

In response to a committee inquiry, Mr. Olsen stated that, pursuant to federal law, the public water utility systems are tested for levels of contamination every three years, including in the Village of Milan. He mentioned that the Department of Environment asked the Village of Milan to test its public water utility system every year. Thus far, the tests of the Milan public water utility system have indicated that the water is safe to drink. Mr. Olsen informed the committees that the public will be alerted if contaminants are found to exceed safe levels. He noted that the state cannot stop individuals from drinking water from their own private wells. While the Homestake Mining Company (Barrick Gold Corp.) will pay people to abandon their wells, individuals cannot be forced to abandon use of well water.

Uranium Mining Safety Standards

Rick Van Horn, Uranium Resources, Inc., and Juan Velasquez, Strathmore Minerals Corp., informed the committees that they own a mine that is not on Indian land, so they need to seek a permit from the State of New Mexico. Mr. Van Horn stated that the company purchased the land more than 20 years ago and has spent \$23 million on the mine, but it has yet to begin mining.

In response to an inquiry regarding previous legislation, Mr. Van Horn affirmed that a surtax on uranium production has been and will remain on the table for consideration and support from the uranium industry. He highlighted that an in situ leaching mine creates approximately 120 jobs, a mill creates 70 to 80 jobs and an underground mine creates about 400 jobs. He concluded that mine safety is much more important and protocols are strictly followed nowadays, which protects the well-being of the mine workers.

Upon an inquiry from a committee member, Mr. Velasquez elaborated on reclaiming water to return it to its original contamination levels. For example, if the water supply was of irrigation quality, it would be irrigation quality after remediation, and if the water was of livestock drinking quality, it would be of livestock drinking quality once again. He explained that salt levels shoot up during the mining process; reverse osmosis is used during remediation to clean it up afterward. It is important to keep in mind that this was not drinking water to begin with, but it will be as good as before.

Uranium Mine Inventory — Status Update

Bill Brancard, general counsel, Energy, Minerals and Natural Resources Department, told the committees that there are many mines for which there is no record of reclamation. He stated that 79 mines were assessed, and they provided a better understanding of the uranium legacy. Mr. Brancard reminded the committees that just a few years ago, no one was addressing the cleanup of abandoned uranium mines, and the legislature decided that his department would initiate a uranium mine inventory project to assess and prioritize reclamation of abandoned uranium mines. He informed the committees that with the involvement of the federal government and the multi-agency five-year plan that the EPA is spearheading, his department is

taking a more discreet role in addressing uranium legacy cleanup. The Bureau of Land Management has allocated federal money that his department can use for cleanup of a limited number of abandoned mines. Of highest priority are the uranium mines near Silver City that are very close to residential areas. The abandoned mine program focuses on public safety, and funds for this program were pulled from different sources in order to accomplish this work.

Hydrogen Production in New Mexico

Henry Herman, chief executive officer of Jetstream Wind, Inc., explained to the committee that Jetstream is in the business of hydrogen renewable energy development technology. He said the public is not very familiar with hydrogen, and there is a misconception about its safety. The Jetstream process to create hydrogen fuel breaks down water into its components of hydrogen and oxygen. Jetstream set up shop in New Mexico to produce hydrogen. Jetstream's patented pyrolysis method uses an electric charge to produce hydrogen at 100 times the volume of conventional methods. The film industry uses a lot of diesel fuel for electric power on location shoots, so Jetstream has built a truck that produces power for remote location filming, which is less expensive than their conventional generators.

Mr. Herman said that one million watts of power can be generated from Jetstream's technology. He said that he is in discussions for a potential joint venture with Cummins Engine for devices that can be dropped anywhere in the world in response to emergencies. The technology lends itself to conversion of natural gas-fired plants and coal-fired plants to generate hydrogen power. Oil refining is a little more complicated, but it uses a lot of energy that could come from his company's hydrogen technology. Jetstream is working with Lawrence Livermore Laboratory's National Ignition Facility on a method for breaking down nuclear waste with lasers to power the system to reduce nuclear waste to its minimum volume. He concluded that by saying that Jetstream is constructing a hydrogen power plant at Spaceport America.

Minutes

The minutes of the May 2010 meeting were approved.

Adjournment

There being no further business before the committee, it adjourned at 5:20 p.m.