

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

**July 14, 2021
1500 University Drive, Room 103
New Mexico State University-Carlsbad
Carlsbad**

The second meeting of the Radioactive and Hazardous Materials Committee was called to order by Senator Jeff Steinborn, chair, on July 14, 2021 at 10:06 a.m. at New Mexico State University-Carlsbad in Carlsbad.

Present

Sen. Jeff Steinborn, Chair
Rep. Christine Chandler, Vice Chair
Rep. Eliseo Lee Alcon
Rep. Cathrynn N. Brown
Rep. Joanne J. Ferrary
Sen. David M. Gallegos
Sen. Gay G. Kernan
Rep. Stefani Lord
Sen. Shannon D. Pinto
Sen. Nancy Rodriguez
Rep. Debra M. Sariñana

Absent

Sen. Brenda G. McKenna

Advisory Members

Sen. Ron Griggs
Sen. Harold Pope
Sen. Joshua A. Sanchez
Sen. Gregg Schmedes
Rep. James G. Townsend

Staff

Shawna Casebier, Legislative Council Service (LCS)
Sara Wiedmaier, LCS

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written testimony are in the meeting file and posted on the legislature's website.

Wednesday, July 14

Welcome and Introductions

Senator Steinborn welcomed the committee and audience members and invited members of the committee and staff to introduce themselves. Dr. Andrew I. Nwanne, interim president, New Mexico State University-Carlsbad, welcomed the committee to the campus, and Dale W. Janway, mayor, City of Carlsbad, welcomed the committee to Carlsbad.

Proposed Consolidated Interim Storage in Southeastern New Mexico

Ed Mayer, program director, Holtec International, provided the committee with an update on Holtec's storage technology; transportation logistics of shipping spent nuclear fuel canisters from around the country by rail; the company's ongoing public outreach initiatives throughout the state; and the time line of the license application process before the United States Nuclear Regulatory Commission (NRC). He noted that if Holtec is issued a license to construct and operate the consolidated interim storage facility in 2022, the company expects to be operational by the fall of 2024. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%201%20Consolidated%20Interim%20Storage.pdf>.

Bruce Baizel, legal director, Department of Environment (NMED), and Ari Biernoff, general counsel, State Land Office, discussed the progress of the environmental impact statement (EIS) review process for the proposed consolidated interim storage facility and the scope of work of the NMED under a memorandum of understanding with the NRC and concerns raised by the State Land Office with regard to the facility. Mr. Baizel noted many concerns that the NMED submitted in the EIS, as well as a complaint filed in federal court by the Office of the Attorney General and other lawsuits filed against the NRC that allege that review of the Holtec application violates the federal Nuclear Waste Policy Act of 1982. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%201%20New%20Mexico%20Department%20of%20Environment.pdf>.

Leona Morgan, coordinator, Nuclear Issues Study Group, discussed nuclear colonialism, environmental racism and the environmental injustice of the proposed Holtec consolidated interim storage facility and highlighted the principles of the federal Nuclear Waste Policy Act of 1982. Ms. Morgan provided maps of the many nuclear facilities across the United States showing the two proposed storage facility sites and listed local, state and national opposition to the approval of an interim storage facility. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%201%20Nuclear%20Issues%20Study%20Group.pdf>.

Responses to questions and comments from committee members included the following:

- the state requires a separate permit beyond the NRC process to ensure that the quality of surface and ground water is not affected;
- a main source of concern for the State Land Office and the NMED is that New Mexico's property interests are not being properly accounted for in the NRC review process;
- the NRC has the authority to review the impact on public health and safety of nuclear facilities and the effect of the facility's operations on the environment under the National Environmental Policy Act of 1969;
- Holtec will still be required to follow New Mexico environmental and safety regulations after being licensed by the NRC;
- the NRC required a review of all surrounding oil and gas wells, and the proposed Holtec site will not affect these operations;
- a long-term nuclear waste repository has been proposed for Yucca Mountain in Nevada or possibly another site, a proposal that was reaffirmed by the Blue Ribbon Commission on America's Nuclear Future under President Obama;
- Holtec has no plans to store any nuclear waste from other countries;
- Holtec's storage technology is detailed in the NRC license application, and its casks are designed to last hundreds of years;
- Holtec will be responsible for mitigating effects on the public and environment, and there is a national imperative to clean up uranium waste, especially from coastal areas that are more prone to flooding; and
- funding exists under the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act to train emergency response units.

Permit Modifications and the Future of the Waste Isolation Pilot Plant (WIPP)

Reinhard Knerr, manager, Carlsbad Field Office, United States Department of Energy, provided the committee with a review of the mission and scope of the WIPP under the federal Waste Isolation Pilot Plant Land Withdrawal Act requirements. Mr. Knerr noted that receiving shipments from Los Alamos National Laboratory is still a main priority for the WIPP, and it plans to continue to increase shipments. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%202%20DOE-EM%20WIPP.pdf>.

Christopher S. Catechis, acting director, Resource Protection Division, NMED, updated the committee on the permit renewal process for the WIPP and a permit modification that, if approved by the NMED, would allow construction of two new panels. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%202%20New%20Mexico%20Department%20of%20Environment.pdf>.

Don Hancock, director, Nuclear Waste Program, Southwest Research and Information Center, provided a brief history of the WIPP and the Southwest Research and Information Center. Mr. Hancock discussed public opposition to the expansion and long-term operation of the WIPP; violations of the federal Waste Isolation Pilot Plant Land Withdrawal Act and the federal Nuclear Waste Policy Act of 1982; and mismanagement of the WIPP. He noted that the new panels being requested by the WIPP and the United States Department of Energy in the permit modification would require prior approval by the United States Environmental Protection Agency and that rulemaking could take at least two years, but the United States Department of Energy is already making plans to excavate for the expansion. The presentation documents can be found here:

<https://www.nmlegis.gov/Committee/Handouts?CommitteeCode=RHMC&Date=7/14/2021&ItemNumber=2>.

Responses to questions and comments from committee members included the following:

- no national solution yet exists to store transuranic waste, and each state should be responsible for its own waste;
- the NMED is almost finished with the review process for the WIPP permit modification, and a decision is expected by fall of this year;
- the permit modification is not exactly an expansion because the WIPP is just building out the original design intended by Congress; and
- to prevent future accidents, the WIPP is engaging in more front-end inspection and robust reviews, including X-ray of containers and flammable gas testing.

Carlsbad Environmental Monitoring and Research Center (CEMRC) Research Projects and Monitoring of WIPP

Dr. Punam Thakur, technical director and research scientist, CEMRC, New Mexico State University, discussed the importance of the CEMRC for community safety and transparency and highlighted recognition of the center by the Blue Ribbon Commission on America's Nuclear Future as a model relationship between industry and a host community. Dr. Thakur detailed the monitoring activities and unique capabilities of the CEMRC in radionuclide detection in air, water and soil, as well as lung and whole-body counting for employees and residents in the area surrounding the WIPP. She mentioned that the CEMRC was the first entity to detect a radioactive release from the 2014 WIPP accident. Dr. Thakur also discussed monitoring of radioactive contamination of soil and water from oil and gas activity and shared some future goals for the CEMRC. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%203%20Independent%20Monitoring%20of%20WIPP.pdf>.

Responses to questions and comments from committee members included the following:

- air sampling occurs every day to ensure no radioactive releases;
- the CEMRC began collecting soil and water samples surrounding oil and gas operations to get a better understanding of types of contamination in the area; and

- there is only one other organization that conducts monitoring of the WIPP, and some testing is contracted out to other companies.

Approval of Minutes

On a motion made, seconded and duly passed, the minutes of the June 7, 2021 meeting were approved as submitted.

Produced Water Issues In and Out of the Oil Field

Adrienne Sandoval, director, Oil Conservation Division (OCD), Energy, Minerals and Natural Resources Department (EMNRD), highlighted new reporting requirements and changes to OCD rules that were implemented in 2020 to comply with the Produced Water Act, passed in the 2019 legislative session. Ms. Sandoval noted that over one-half of the water used in oil and gas operations is recycled produced water and that only about six percent is fresh water. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%204%20OCD%20Produced%20Water%20Management.pdf>.

Mr. Baizel discussed the expanded scope of the NMED's jurisdiction over the treatment and use of produced water outside of oil and gas operations as a result of the Produced Water Act. He outlined the work being done by the New Mexico Produced Water Research Consortium to evaluate treatment and reuse options for produced water through a memorandum of understanding with New Mexico State University. The results of the consortium's research will inform future regulations by the NMED to ensure that fresh water is protected. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%204%20New%20Mexico%20Department%20of%20Environment.pdf>.

Mike Hightower, program director, New Mexico Produced Water Research Consortium, further elaborated on the background, goals and current work of the consortium. Mr. Hightower discussed some of the treatment options being explored and stated that treatment and reuse of produced water is safe and more cost-effective than disposal options. He noted that more oil-producing states are investing in produced water reuse technology through partnerships among government, industry and universities. He added that the consortium is one of the two entities leading national efforts to treat and reuse waste waters to supplement fresh water supplies as part of the United States Environmental Protection Agency's National Water Reuse Action Plan. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%204%20NM%20Produced%20Water%20Research%20Consortium.pdf>.

Camilla Feibelman, director, Rio Grande Chapter, Sierra Club, discussed the impact of hydraulic fracturing on the air, water and health of New Mexico's communities and the overall climate disruption by the oil and gas industry. She talked about the importance of safely managing the large volume of produced water being generated in the Permian Basin and

emphasized that produced water should not be used for any purpose outside of oil field operations due to gaps in the scientific understanding of the toxicity and detection of the potential chemicals present in the wastewater. She expressed concerns over inadequate staffing and funding for the OCD and the NMED and highlighted urgent needs for the state to act to protect New Mexico's water resources. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%204%20Sierra%20Club.pdf>.

Matthias Sayer, senior vice president, legal, NGL Energy Partners LP, provided the committee with an overview of the company, as well as its specific operations and oil and water pipeline infrastructure in and around New Mexico. Mr. Sayer detailed the company's processes for disposing and recycling of produced water. He noted the importance of research and investment in treatment technology, especially in New Mexico, as the state is under the highest level of water stress in the country. He compared regulatory and cost barriers in New Mexico, Wyoming and Texas and stated that New Mexico is not prepared to certify National Pollutant Discharge Elimination System permits at this time. He also acknowledged the company's investment in water research initiatives, including a \$1 million commitment to the New Mexico Produced Water Research Consortium. The presentation can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%204%20NGL%20Energy%20Partners.pdf>.

Responses to questions and comments from committee members included the following:

- penalties related to oil and gas operation inspections by the OCD will not be issued retroactively;
- there will not be any major changes to OCD standards because of the new NMED jurisdiction; the OCD will still conduct daily inspections of reuse of water within oil and gas operations and monitoring spills;
- under the Produced Water Act, produced water is the property of the treatment company until it is sold and used for a new application by the state or industry;
- the OCD is currently reviewing its budget and will likely be requesting additional funding from the state;
- the OCD conducts inspections of casing design of wells to ensure that chemicals in produced water do not contaminate fresh water;
- the New Mexico Produced Water Research Consortium has equipment to detect and analyze organic and inorganic contaminants in water;
- companies can be exempted from disclosure of chemicals in produced water if those chemicals are deemed proprietary;
- the OCD updated reporting requirements to include the type of water being used; and
- the initial phase of rulemaking by the NMED does not allow any discharge of produced water outside of oil field operations.

Updates on Remediation of the Carlsbad Brine Well

Jim Griswold, chief, Environmental Bureau, OCD, EMNRD, shared some history and provided an update on the stabilization of the brine well in Carlsbad. He mentioned that due to

cost concerns, the backfilling material was switched from grout to sand, but injection was paused last year because available funding was insufficient to complete the project. Mr. Griswold stated that the southern portions of the cave were successfully stabilized, ensuring the safety of the main communities and infrastructure of concern above the brine well, but an additional void was discovered in the northern portion of the cave. He discussed the current estimate of sand still needed, the projected cost to complete the project and the balance of remaining funds. He shared that the goal is to resume sand injections in August 2021 in order to complete the project by spring of next year. The presentation documents can be found here:

<https://www.nmlegis.gov/handouts/RHMC%20071421%20Item%205%20Carlsbad%20Brine%20Well%20Stabilization%20Update.pdf>.

John Heaton, City of Carlsbad designee, Carlsbad Brine Well Remediation Authority, highlighted the significant financial contribution by the state to the region to address the brine well issue. Steven McCutcheon, commissioner, Eddy County Board of County Commissioners, expressed the community's desire to have this project completed as soon as possible.

Responses to questions and comments from committee members included the following:

- there remains a large volume of the brine well to be filled because it was hard to know initially how large the problem really was; and
- current projections of remaining materials and funding needed are not likely to change much, but there are always unexpected issues that arise.

Public Comment

Comments from members of the public included the following:

- the New Mexico Produced Water Research Consortium works closely with the NMED as a technical advisor, but the NMED is responsible for coordinating governmental reviews;
- Holtec has a lot of transport experience and no nuclear releases worldwide, its canister technology is flood and fire proof and spent nuclear fuel gets cooler and less toxic every day;
- the New Mexico Produced Water Research Consortium works with the United States Environmental Protection Agency on research in many areas, including molecular effects on vertebrates, chemical contamination of waterways, gene expression and bioaccumulation of toxins;
- Holtec should not be a major issue for the state, and there are many more water issues and energy issues that should take priority; and
- it is safer to store the spent fuel here than on the coasts with more tectonic activity.

Briefing: *State of New Mexico v. United States Nuclear Regulatory Commission*

Matt Baca, chief counsel, Office of the Attorney General, discussed the ongoing lawsuit between the state and the NRC regarding concerns over the transport and temporary storage of nuclear waste from across the country. He outlined some of the requirements laid out by the federal Nuclear Waste Policy Act of 1982, such as the requirement for the NRC to license a

permanent storage facility before approving an interim site. However, he said that the NRC has predetermined approval of the temporary license before appropriate reviews have been conducted or a permanent site selected. Mr. Baca described the potential Holtec license as an unconstitutional federal mandate on the state regarding storage of national spent nuclear fuel and noted that the NRC is unjustly placing the cost for first responder training on the state. He noted that the NRC and the United States Department of Justice have moved to dismiss the lawsuit based on procedural technicalities. He also stated that Holtec moved to intervene on behalf of the NRC.

Responses to questions and comments from committee members included the following:

- Texas has raised many of the same concerns as New Mexico regarding the licensing of a temporary repository;
- this lawsuit will not force congressional action but will clarify federal legislation;
- the current system of leaving spent nuclear fuel to be stored at each site of production is not ideal but is legal, whereas the NRC legally cannot approve an interim storage site without first approving a plan for a permanent site; and
- the proposed site in Utah was an example of federal overstepping of states' rights.

Adjournment

There being no further business before the committee, the meeting adjourned at 4:00 p.m.