

RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

2018 INTERIM FINAL REPORT

LEGISLATIVE COUNCIL SERVICE 411 STATE CAPITOL SANTA FE, NEW MEXICO 87501 (505) 986-4600 WWW.NMLEGIS.GOV

TABLE OF CONTENTS

INTERIM SUMMARY

Work Plan and Meeting Schedule

Agendas and Minutes

ENDORSED LEGISLATION

INTERIM SUMMARY

Radioactive and Hazardous Materials Committee 2018 Interim Summary

The Radioactive and Hazardous Materials Committee met four times during the 2018 interim. Two meetings were held in Santa Fe and one each in Hobbs and Los Alamos.

Of particular interest to the committee during the 2018 interim was a proposed consolidated interim storage facility for spent nuclear fuel in Eddy and Lea counties. Over several meetings, the committee heard testimony and public comment about the specifics of the facility, safety and personnel training considerations for transporting radioactive materials by rail, the preparedness of the state to respond to emergency situations involving radioactive materials and research undertaken by Sandia National Laboratories on dry cask storage for spent nuclear fuel.

Other areas of inquiry during the interim included proposed changes to the federal Defense Nuclear Facilities Safety Board, updates on the operations of the Waste Isolation Pilot Plant and the management transition at Los Alamos National Laboratory (LANL). The committee also heard about the ongoing efforts to remediate the chromium plume at LANL and coordination between the federal Department of Energy and New Mexico's Department of Environment to take corrective action for releases of hazardous waste at LANL in accordance with the compliance order on consent with LANL. Among other topics, updates were presented to the committee on the Gold King Mine spill and the progress of the Carlsbad brine well remediation.

At its final meeting, the committee heard testimony on the impacts of radiation exposure on communities downwind from the Trinity nuclear testing site and endorsed a memorial urging New Mexico's congressional delegation to continue to support amendments to the federal Radiation Exposure Compensation Act to expand compensation for individuals exposed to radiation.

WORK PLAN AND MEETING SCHEDULE

2018 APPROVED WORK PLAN AND MEETING SCHEDULE for the RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

Members

Sen. Jeff Steinborn, Chair Rep. Carl Trujillo, Vice Chair Rep. Cathrynn N. Brown Sen. Carlos R. Cisneros Rep. David M. Gallegos Sen. Ron Griggs

Advisory Members

Sen. Gregory A. Baca Sen. William F. Burt Rep. Kelly K. Fajardo Rep. Stephanie Garcia Richard Sen. William H. Payne Sen. Gay G. Kernan Sen. Carroll H. Leavell Sen. Richard C. Martinez Rep. Angelica Rubio Rep. Debra M. Sariñana Rep. Larry R. Scott

Rep. Jane E. Powdrell-Culbert Sen. Nancy Rodriguez Rep. Nick L. Salazar Sen. Clemente Sanchez Rep. Jim R. Trujillo

Work Plan

The Radioactive and Hazardous Materials Committee was created in 1979 pursuant to the provisions of the Radioactive and Hazardous Materials Act. During the 2018 interim, pursuant to Section 74-4A-11 NMSA 1978, the committee proposes to review:

- 1. Los Alamos National Laboratory (LANL) safety concerns;
- 2. the management and operation of LANL by Triad National Security, LLC;
- 3. Waste Isolation Pilot Plant operations and management;
- 4. the chromium plume cleanup update, including the perspective of the Pueblo of San Ildefonso;
- 5. the Department of Environment's compliance order on consent with LANL;
- 6. consolidated interim spent fuel storage, including the Holtec International application pending before the federal Nuclear Regulatory Commission;
- 7. the Four Corners "methane hot spot", including scientific analyses of the phenomenon and perspectives of stakeholders;
- 8. a report from the Radioactive Waste Consultation Task Force;
- 9. a report from the Carlsbad Brine Well Remediation Authority; and
- 10. an update on the Gold King Mine spill and the status of environmental monitoring on the San Juan and Animas rivers.

Radioactive and Hazardous Materials Committee 2018 Approved Meeting Schedule

Date May 18	Location Santa Fe
July 19	Hobbs
August 15	Los Alamos
November 20	Santa Fe

AGENDAS AND MINUTES

TENTATIVE AGENDA for the FIRST MEETING of the RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

May 18, 2018 State Capitol, Room 307 Santa Fe

Friday, May 18

1:00 p.m.		Call to Order and Introductions —Senator Jeff Steinborn, Chair, Radioactive and Hazardous Materials Committee
1:15 p.m.	(1)	2018 Interim Work Plan and Meeting Schedule —Committee Members
1:45 p.m.	(2)	 Update on Holtec International's Application for Consolidated Interim Storage in Lea County —Dr. Stefan Anton, Vice President, Engineering and Licensing, Holtec International —Don Hancock, Director, Nuclear Waste Program, Southwest Research and Information Center
3:15 p.m.	(3)	 <u>Community Perspectives on Consolidated Interim Storage in Lea</u> <u>County</u> —John Heaton, Chair, Eddy-Lea Energy Alliance LLC —Jimmy Carlile, Health, Safety and Environment and Regulatory Supervisor, Fasken Oil and Ranch Ltd.
4:15 p.m.		Public Comment
5:00 p.m.		Adjourn

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

May 18, 2018 State Capitol, Room 307 Santa Fe

The first meeting of the Radioactive and Hazardous Materials Committee was called to order by Senator Jeff Steinborn, chair, on Friday, May 18, 2018, at 1:10 p.m. in Room 307 of the State Capitol.

Present

Sen. Jeff Steinborn, Chair Rep. Cathrynn N. Brown Sen. Carlos R. Cisneros Sen. Ron Griggs Sen. Richard C. Martinez Rep. Debra M. Sariñana Rep. Larry R. Scott

Advisory Members

Rep. Kelly K. Fajardo Rep. Stephanie Garcia Richard Sen. Nancy Rodriguez Sen. Clemente Sanchez

Absent

Rep. Carl Trujillo, Vice Chair Rep. David M. Gallegos Sen. Gay G. Kernan Sen. Carroll H. Leavell Rep. Angelica Rubio

Sen. Gregory A. Baca Sen. William F. Burt Sen. William H. Payne Rep. Jane E. Powdrell-Culbert Rep. Nick L. Salazar Rep. Jim R. Trujillo

Staff

Shawna Casebier, Staff Attorney, Legislative Council Service (LCS) Diego Jimenez, Research Assistant, LCS

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written materials are in the meeting file.

Friday, May 18

Call to Order and Introductions

Senator Steinborn welcomed members of the committee and guests to the meeting. Committee members and staff introduced themselves.

2018 Interim Work Plan and Meeting Schedule

Ms. Casebier reviewed the proposed work plan and meeting schedule, and the committee discussed additional topics and potential meeting locations. The committee discussed the need for a different July meeting date than the one proposed because of member conflicts with the National Conference of State Legislatures' Nuclear Legislative Working Group. The committee discussed holding its July meeting in Hobbs and its August meeting in Los Alamos and adding an update on the Gold King Mine spill to the work plan. The committee approved the work plan and meeting schedule as discussed, without objection.

Update on Holtec International's Application for Consolidated Interim Storage in Lea County

Dr. Stefan Anton, vice president, engineering and licensing, Holtec International (Holtec), discussed the need for an interim storage facility for used nuclear fuel (UNF) in the United States and described Holtec's plan to address that need with a facility on the border of Lea and Eddy counties. The facility would consolidate UNF from numerous sites around the country, specifically from shut-down reactor sites, into a temporary location until a permanent repository is operational.

Dr. Anton discussed two distinctly different aspects of any UNF consolidated storage project: UNF storage and UNF transport. He explained that each aspect has different agencies and organizations for regulation and execution. He said that in the storage aspect, Holtec's role is to be the licensee and operator of the facility, which will be regulated by the federal Nuclear Regulatory Commission (NRC). As to the transport aspect, Dr. Anton explained that Holtec's role is limited to manufacturing the casks, which are then transported by a shipping company. The casks are regulated by the NRC, and transportation operations are regulated by the United States Department of Transportation (DOT). During both storage and transport stages, state and local authorities are responsible for emergency response operations.

Dr. Anton reviewed the time line for Holtec's proposed plan, indicating that the NRC is slated to complete its review in July 2020. The current state of the project is focused on licensing the storage facility, and no substantial detail on transportation of UNF to the storage site has been developed. He told the committee that utilizing and extending existing rail lines is probable.

Explaining the specific details of Holtec's proposal, Dr. Anton informed the committee that the proposed site is located on 1,000 acres of dry and stable land between Carlsbad and Hobbs, approximately 35 miles from the nearest town. Infrastructure at the site is developed, including electricity, water, roads and rail, which is expected to be extended to the site. Due to

the facility's proximity to the Waste Isolation Pilot Plant and URENCO, Dr. Anton described the local workforce as robust with scientific and nuclear experience. The site layout includes a security perimeter, cask transfer station, an administrative building and the underground storage chambers where the casks are stored. Dr. Anton said operations could commence by 2023.

In discussion of the technical safety aspects of storing UNF, Dr. Anton described Holtec's multipurpose canister, stating that the seal-welded stainless steel structures are suitable for storage, transport and final repository without reopening the canister. Canisters are transported inside specifically designed transport casks using specially designed railcars. Dr. Anton told the committee that transport casks are designed and fabricated to safely confine UNF and shield workers and the public from radiation and that they are approved by the NRC.

As to the emergency planning zone, Dr. Anton stated that it extends as far as the property boundary and that under normal or accident conditions, no radiological effects would reach beyond the property boundary. He assured the committee that the parameters of this zone are consistent with emergency planning zones at other spent fuel facilities. Lastly, he provided a brief overview of the nuclear plant sites in the United States and rail routes on which the UNF could potentially be transported.

Don Hancock, director, Nuclear Waste Program, Southwest Research and Information Center, shared his concerns with the committee regarding Holtec's proposal. Mr. Hancock told the committee that 94% of operating reactors and 92% of UNF are located east of the one hundredth meridian. He expressed concern that the proposal is to house highly radioactive UNF and questioned the need for the proposed facility. Mr. Hancock discussed an already existing private fuel storage facility in Tooele County, Utah, that was granted a 20-year license in 2006 by the NRC. He told the committee that the storage facility in Utah is not used because of public and state opposition to the proposal; however, he remarked that the Utah facility was granted a license by the NRC despite objections from the governor of Utah, the Utah congressional delegation, nearby tribal members, the Utah State Legislature and Utah citizens. Mr. Hancock encouraged constituents and legislators to make their voices heard and to perform as much research on the project as possible.

Disputing the findings and remarks in Holtec's environmental report for the proposed facility, Mr. Hancock asserted that the federal Nuclear Waste Policy Act of 1982 allocates primary responsibility for storage of UNF to the generators and owners of the waste. Mr. Hancock also disputed the legality of the United States Department of Energy (DOE) entering into a contract for interim storage; the authority of the DOE to be responsible for transportation of UNF; and the responsibility and funding requirements for the DOE to provide emergency training along transportation routes. Mr. Hancock expressed concern regarding Holtec's plan to reject and return canisters that have unacceptable external contamination. Mr. Hancock alleged that railroads in New Mexico are not capable of carrying the weight of Holtec's transport casks and questioned who would pay for upgrades and maintenance of railroads that transport UNF.

In response to Mr. Hancock's disputation of the legality of Holtec's plan, Dr. Anton told the committee that the legal infrastructure for the DOE to take title to waste being stored on an interim basis is not currently in place and that laws, rules and regulations may need to be changed depending on the level of involvement of the DOE in the Holtec project.

Mr. Hancock discussed past NRC forums regarding Holtec's proposal and told the committee that opponents to the project have outnumbered support at each of the four meetings.

In response to questioning by members, Dr. Anton explained that:

- the 40-year license requested by Holtec is consistent with standard NRC technical licensing periods;
- the UNF could remain in New Mexico for a period exceeding 40 years;
- the benefit of having a consolidated location in New Mexico is for shorter and safer transportation to Nevada if the Yucca Mountain facility opens;
- for the first stage of storing 500 casks from decommissioned sites, approximately 100 shipments would be conducted over several years;
- the routes for transporting the UNF will be decided on a case-by-case basis when a shipment is due;
- while 40 years is a substantial amount of time, the final repository will store the materials for thousands of years;
- the facility has been planned to be large enough to hold all current waste in addition to waste that will be produced in coming years;
- many of the documents submitted by Holtec to the NRC contain proprietary information and proprietary secrets, and other redactions from the public record are normal practice in nuclear-related work;
- Holtec would prefer to use rail systems for transportation but, in theory, could use roads by taking extra precautions due to the weight and size of the containers being transported;
- while most interim storage systems are considered safe, Holtec's proposal for subsurface storage provides better protection for security;
- all of Holtec's casks are designed to NRC standards and to survive a 30-foot drop, much higher than any drop to which they would realistically be exposed; and
- Holtec can take title to the waste, and the project does not rely on the DOE taking title.

Upon further questioning, Mr. Hancock expressed concern that without a plan in place for a final repository, the waste could remain in New Mexico much longer than suggested, and he told the committee that the NRC is not supposed to issue interim storage permits in the absence of a permanent site selection.

In response to a question from the committee, Mr. Hancock explained that the Holtec proposal is currently in an NRC public comment period, adding that written comment will be accepted until July 30.

Dr. Anton told the committee that Holtec does not currently operate a facility like the one being proposed but that it owns licenses and provides canisters and support for clients that operate similar facilities. Currently, there are more than 1,000 Holtec-manufactured canisters in operation in the United States.

A legislator assured the committee that this will be an essential topic for the committee's July meeting in Hobbs and stressed the importance of input from the community on this proposal.

Community Perspectives on Consolidated Interim Storage in Lea County

John Heaton, chair, Eddy-Lea Energy Alliance LLC, discussed the background of the Eddy-Lea Energy Alliance, stating that it was formed under a joint powers agreement in 2006 to develop joint economic development projects between the cities of Carlsbad and Hobbs and Eddy and Lea counties. Mr. Heaton told the committee that following the recommendation of the Blue Ribbon Commission on America's Nuclear Future, the alliance board began to vet options for consolidated interim storage for safety and security.

Mr. Heaton told the committee that the proposed consolidated interim storage site is 1,000 acres of geologically stable, dry and elevated land with no nearby potable aquifers. There is also developed electric, water, road and rail infrastructure in this remote location between Hobbs and Carlsbad and a preestablished robust scientific and nuclear workforce.

Mr. Heaton addressed why there is a need for consolidated interim storage: by 2025, there will be 23 decommissioned facilities, with demands for a place to store UNF away from rivers, lakes, oceans, dense populations or seismically active areas. Currently, one-third of the United States population lives within 50 miles of UNF. The UNF can be stored and transported to New Mexico in the safest possible conditions with oversight from the NRC, DOT and Federal Railroad Administration. Acknowledging that some nuclear facility sites have no storage capabilities, Mr. Heaton noted that 64 interim facilities already exist in the United States and that the Holtec facility would be unique in that it would be a stand-alone storage facility not paired with a reactor. According to a 2016 study, establishing consolidated interim storage in the absence of a permanent repository will result in an economic savings of up to \$54 billion by 2060.

Mr. Heaton discussed the method used by the Eddy-Lea Energy Alliance to select Holtec as its partner to execute the proposal. He told the committee that a request for information was sent to major nuclear storage companies, from which the alliance received several presentations. Ultimately, a request for proposals was developed, and Holtec was chosen for various reasons,

including its financial stability, record for safety and utilization of a below-grade system for added security.

Mr. Heaton told the committee that benefits from executing the project with Holtec would include state and local area incentive payments, a \$2.4 billion capital investment and 240 total jobs. He told the committee that a consolidated interim storage facility will be built either in New Mexico or Texas. He said that the proposed location in Texas is geographically closer to New Mexico cities, which would leave New Mexico with emergency response obligations but none of the benefits.

Jimmy D. Carlile, health, safety and environment and regulatory supervisor, Fasken Oil and Ranch Ltd. (Fasken), shared the concerns of his employer as a company and landowner. He told the committee that Fasken is one of the largest private landowners in Texas, with ownership of approximately 200,000 acres. As a major surface owner, Fasken closely monitors vegetation, soil conditions and surface use of its properties and operates oil and gas leases in southeast New Mexico, including four that operate within five miles of the proposed Holtec site.

Mr. Carlile told the committee that the New Mexico state engineer's ground water monitoring system does not have enough data to adequately identify where ground water occurs and that the proposed site will pose significant threats of permanently contaminating ground water. He told the committee that Fasken has secured opposition letters from numerous historic ranching operations in the region that express concern for their businesses, lands and culture.

Mr. Carlile shared concerns that any release of high-level radioactive materials into the air, soil and/or ground water could have severe repercussions on oil and gas activities in the Permian Basin and that such repercussions would have a substantial effect on the regional economy. Mr. Carlile also discussed the workforce in the Permian Basin, telling the committee that Fasken and other companies struggle to attract needed talent. He said that the addition of a high-level nuclear disposal site will not be a positive attraction for individuals considering a move to the region for work.

In response to questions from the committee, Mr. Heaton explained the following reasons that a short-term storage solution is needed: (1) current interim storage is located at production plant facilities near rivers and waterways; (2) some production plants may not have the facilities to store old and new UNF; and (3) the proposed interim storage facility would bring economic benefits to New Mexico.

Mr. Heaton also noted that hazardous materials pass through New Mexico daily using transportation containers that are less safe than the ones Holtec designed and will use for this project.

In response to a question, Mr. Carlile expressed concern that if there were a leak of radioactive materials that reached as far as a large oil reserve, it could be up to 100,000 years before it would be considered safe to pump from the oil reserve.

Mr. Heaton advised that Holtec's full 2,000-page license application is available on the Holtec website.

Public Comment

Jose Villegas, board member, Southwest Inter-Tribal Emergency Managers Coalition, shared his concerns relating to the Holtec application for consolidated interim storage in Lea County. He told the committee that the most likely transportation routes for UNF will include going directly through the lands of more than a dozen federally recognized Indian tribes, exposing them to potential severe negative consequences; that the most risk-averse option for UNF storage would be for the materials to remain stored on-site; and that he believes that the eastern United States populations are given greater consideration than those of the southwestern United States and those of tribal nations in particular. Mr. Villegas recommended that if the Lea County storage plan is executed, the operating company be held responsible for ensuring a robust core capability for emergency response to a nuclear accident or spill along transportation routes, as well as at the storage site. He said that, currently, emergency response capabilities for a radioactive accident do not exist in Indian country and that first responders will have to be specially trained, equipped and prepared to execute an emergency response.

Thomas Jennings presented letters he wrote to the DOE and NRC in opposition to the proposed Lea County storage site. Mr. Jennings asked the committee to take into consideration the individuals or entities in support of the plan, noting that they are commonly students of nuclear engineering or individuals with special interest in the project.

Linda Squire, family dairy operator, discussed the dairy industry in the region, noting that it has had significant trouble finding employees with the recent success of the oil industry. She said that the dairy industry contributes an estimated \$5 billion to the New Mexico economy and provides 17,000 jobs indirectly related to dairy. Ms. Squire opposed the Holtec proposal and recommended that the committee members read two books on the subject of nuclear weapons and radiation: *The Woman Who Knew Too Much* by Gayle Greene and *Nuclear Wastelands: A Global Guide to Nuclear Weapons Production and Its Health and Environmental Effects* edited by Arjun Makhijani, Howard Hu and Katherine Yih.

Nick Maxwell, a Lea County resident, approached the committee to discuss the conduct of the Eddy-Lea Energy Alliance. He told the committee that the alliance has been unwilling or unable to provide documentation that he believes is subject to public inspection. He informed the committee that minutes from meetings of the alliance between the years 2006 and 2009 have not been made available or have gone missing. His concern for these years is because the alliance public body was making policy decisions and acquiring land for the Holtec proposal without obeying the Open Meetings Act. He told the committee that the Office of the Attorney General is investigating the alliance following complaints that it has violated the Open Meetings Act and the Inspection of Public Records Act.

Jossi Jennings, a Roswell resident, told the committee that through her higher education experience, she has had the opportunity to visit the now-defunct San Onofre Nuclear Generating Station (SONGS). She told the committee that SONGS uses the same Holtec canisters that are proposed to be used at the New Mexico site and that she does not consider SONGS to be the example of success for UNF storage that Holtec touts it to be. Ms. Jennings told the committee that the Holtec-designed canisters are subject to damage and cracks and that there is no current method to inspect the internal canisters. Ms. Jennings said that she is concerned by the proposal because the canisters currently housed at SONGS would be sent to the proposed site for interim storage and may be leaking or cracked prior to shipment. Ms. Jennings opposes the Holtec proposal, noting that even under circumstances of minimal risk, accidents do happen, and an accident involving this project at any stage could be catastrophic or fatal for many New Mexicans.

Patricia Cardona, a representative of the Sierra Club, told the committee that the Sierra Club opposes the proposed Lea County facility. She told the committee that the Sierra Club's position is for UNF to remain in place until a permanent storage facility becomes available.

Scott Kobach, Nuclear Watch New Mexico, told the committee that Holtec's proposal is a regional development issue. He asked the committee to take into consideration that New Mexico residents will face risk while out-of-state entities will profit from this project.

Susan Gordon, Multicultural Alliance for a Safe Environment, told the committee about her experience working with waste storage projects. She told the committee that generally safe principles indicate that UNF should be stored as safely and as close as possible to the generation site.

Leona Morgan, Nuclear Issues Study Group, told the committee of her background studying uranium mining issues for over a decade. Ms. Morgan notified the committee that although Holtec's application is on its website, sections of the document have been redacted. She expressed to the committee that UNF is safest in its current location and that if facilities reach their own storage capacities, they should stop creating new waste.

Cody Slama, Nuclear Issues Study Group, discussed environmental justice and his belief that this project is being executed due to the high number of Hispanics and Native Americans in the region. He discussed a 1987 report from the United Church of Christ stating that race is a large determinant in deciding locations for toxic waste storage.

Karen Hadden, Sustainable Energy and Economic Development Coalition, shared her concerns regarding the path that UNF would take en route to the interim storage facility. Ms.

Hadden is from Texas and told the committee that much of the route would pass through areas that have subsurface water as close as 35 feet below the surface.

Steve Zappe told the committee that he has known Mr. Heaton and Mr. Hancock for two decades. He believes that the license will be granted for the Holtec facility but warned the committee that other license holders have had to sue the DOE to secure payments. Mr. Zappe also requested that the committee take into consideration the economics of the project, including who pays for shipping and decommissioning of the site after the facility is no longer needed.

Theresa Seamster, a concerned citizen, told the committee that she has been conducting health impact assessments on communities near the San Juan Basin and that she could provide information to the committee on ailments and radioactive exposure of residents and employees. Ms. Seamster asked how waste is handled on site where fuels are used, and she discussed Japanese and Chinese examples where various methods are used for on-site recycling.

Adjournment

There being no further business before the committee, the committee adjourned at 5:40 p.m.

- 9 -

TENTATIVE AGENDA for the SECOND MEETING of the RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

July 19, 2018 CORE Center of Recreational Excellence 4827 N. Lovington Hwy. Hobbs

<u>Thursday, July 19</u>

9:00 a.m.		Call to Order and Introductions —Senator Jeff Steinborn, Chair
9:10 a.m.		Welcome —Sam Cobb, Mayor, City of Hobbs —Dr. Kelvin Sharp, President, New Mexico Junior College
9:20 a.m.	(1)	 <u>Report from the Radioactive Waste Consultation Task Force</u> —Ken McQueen, Secretary, Energy, Minerals and Natural Resources Department (invited)
9:40 a.m.	(2)	 Rail Transportation of Radioactive Waste —Scott Palmer, Nuclear Policy Analyst, Brotherhood of Locomotive Engineers and Trainmen —Don Gallegos, New Mexico State Legislative Director and Secretary/ Treasurer, Local 1687, International Association of Sheet Metal, Air, Rail and Transportation Workers —TBD
11:15 a.m.	(3)	 Emergency Preparedness Training and Funding —M. Jay Mitchell, Secretary, Homeland Security and Emergency Management Department (invited) —Lorenzo Velasquez, Director, Emergency Management, Lea County —Jennifer Armendariz, Emergency Manager, Emergency Management, Eddy County (invited)
12:15 p.m.		Lunch
12:45 p.m.		Public Comment
2:45 p.m.		Adjourn

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

July 19, 2018 Center of Recreational Excellence Hobbs

The second meeting of the Radioactive and Hazardous Materials Committee was called to order by Senator Jeff Steinborn, chair, on Thursday, July 19, 2018, at 9:20 a.m. in the conference room of the Center of Recreational Excellence in Hobbs, New Mexico.

Present

Sen. Jeff Steinborn, Chair Rep. Cathrynn N. Brown Rep. David M. Gallegos Sen. Ron Griggs Sen. Gay G. Kernan Sen. Richard C. Martinez Rep. Angelica Rubio Rep. Debra M. Sariñana Rep. Larry R. Scott

Advisory Members

Rep. Jane E. Powdrell-Culbert Sen. Nancy Rodriguez Absent Rep. Carl Trujillo, Vice Chair Sen. Carlos R. Cisneros Sen. Carroll H. Leavell

Sen. Gregory A. Baca Sen. William F. Burt Rep. Kelly K. Fajardo Rep. Stephanie Garcia Richard Sen. William H. Payne Rep. Nick L. Salazar Sen. Clemente Sanchez Rep. Jim R. Trujillo

Guest Legislator

Rep. Debbie A. Rodella

Staff

Shawna Casebier, Staff Attorney, Legislative Council Service (LCS) Sara Wiedmaier, Research Assistant, LCS

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written materials are in the meeting file.

Thursday, July 19

Call to Order and Introductions

Senator Steinborn welcomed the committee and guests to the meeting and invited committee members and staff to introduce themselves.

Welcome

Sam Cobb, mayor, City of Hobbs, and Kelvin Sharp, president, New Mexico Junior College (NMJC), welcomed the committee to Hobbs. Mayor Cobb noted the benefits of the recently opened Center of Recreational Excellence, a \$65 million economic development collaboration between the City of Hobbs, NMJC, the Hobbs Municipal League and Lea County.

Rail Transportation of Radioactive Waste

Scott Palmer, nuclear policy analyst, Brotherhood of Locomotive Engineers and Trainmen, and Don Gallegos, New Mexico state legislative director and secretary/treasurer, Local 1687, International Association of Sheet Metal, Air, Rail and Transportation Workers, discussed infrastructure and safety and regulatory concerns regarding the proposed rail transportation of radioactive waste to an interim storage facility located in southeastern New Mexico between Carlsbad and Hobbs, approximately 35 miles from the nearest town. Mr. Palmer stated that his main concern is the lack of protections in place for engineers and trainmen regarding exposure to radiation and a lack of training for railroad employees who handle radioactive waste.

Mr. Palmer shared his view that the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA), which is the principal authority that regulates the working conditions of railroad employees during transport, does not currently have adequate protections for locomotive engineers and workers who may be exposed to radioactive material; for example, under the OSHA regulations, there is no radiation limit for pregnant workers. He noted that while OSHA sets the exposure limit during transport, it is the Federal Railroad Administration under the federal Department of Transportation (DOT) that regulates the engine yard and waste site. He compared these standards to the more restrictive standards set by the U.S. Department of Energy (DOE), the regulatory authority for exposure of the public to radioactive and hazardous materials, noting that shipments of used nuclear fuel (UNF) surpass the dose limit allowed for the public.

Mr. Palmer described the extent of safety procedures currently in place as insufficient and behind the times, stating that railroad employees are only required to be able to recognize and locate hazard warning signs and OSHA hazard communication pictograms but are under no obligation to track their exposure to radiation — an oversight that could potentially lead to legal recourse against the railroads rather than the owner of the hazardous material being transported.

He said that the railroads currently follow the "as low as reasonably achievable" method (ALARA) to regulate worker exposure to irradiation through the approaches of time, distance and shielding. ALARA principles are utilized by the DOE and the entire nuclear industry to mitigate exposure.

Both Mr. Palmer and Mr. Gallegos expressed concern that regulations and safety measures in place for railroad workers are insufficient to protect those workers from intermittent exposure to radioactive materials, as the effects of exposure are cumulative. They noted that the trains lack dosimetry equipment, technology that was used by the U.S. Navy 30 years ago, to detect any irradiation.

Another major issue discussed was how to train the roughly 100,000 railroad employees on hazardous material response and procedures. Other logistical, infrastructure and safety concerns include: the glazing on windows; no locks inside the train cars in the event of an attack on the shipments; the distance of railroad police being five hours away on average; speed capacity on more outdated railway routes, including the portion connecting Carlsbad and Clovis; and the lack of testing in real-world conditions of the cask technology that will be used to contain the UNF.

Mr. Gallegos further emphasized the disparity between safety regulations during his experience working with nuclear waste in the Navy and the current standards in place for railroad workers today. He voiced the opinion that current regulations are nowhere near the level needed to safely and responsibly transport spent nuclear fuel. He also noted that there are three railroads in New Mexico that would be utilized within the state for transport of the casks. Burlington Northern Santa Fe (BNSF) Railway and Union Pacific Railroad are more modern systems, supporting travel up to 70 miles per hour (mph), but the Southwestern Railroad (acquired by BNSF in 2017) that runs between Carlsbad and Clovis can only safely operate at 35 mph. He noted that track conditions and speed restriction pose a threat to worker safety, prolonging exposure and over-extending the usual 12-hour shift limits for crew members that are accustomed to local shipments, typically of oil.

In response to questions from the committee, Mr. Palmer confirmed that nuclear materials are currently being shipped via railroad, but this would be the first shipping campaign to transport spent nuclear fuel. He acknowledged that this material is safely transportable, with appropriate training, and he expressed concern that training has not been implemented in the last 40 years and is still not required for the close to 100,000 railroad workers.

Mr. Gallegos suggested that all trains need to be equipped with Positive Train Control and electronically controlled brakes, implementations that are many years behind due to a lack of infrastructure investment. He also noted that hazardous materials first-response training must be provided to all local entities surrounding the transportation route. Mr. Palmer added that safety training exercises for employees are likely stalled due to the uncertainty around whether there will be a permanent spent fuel storage site at Yucca Mountain in Nevada and the assumption that the interim storage facility will not be operational in the near future.

In response to a question regarding alternative transportation methods, Mr. Palmer expressed confidence that railroads would be the best option. Regarding licensing, the Nuclear Regulatory Commission (NRC) works with the DOT but is the final regulatory authority for licensing, while the DOE plans the shipments.

Joy Russell, chief communications director, Holtec International (Holtec), then joined the panelists to address further questions. She explained that the NRC will issue an operating license for the facility for 40 years, and if no permanent site has been selected, the NRC will reissue the license for another 40 years. Holtec is confident that the design life and service life of its cask technology will exceed several hundred years and that its aging management program, as stipulated by the NRC license, will ensure the safety of the site throughout the initial 40-year license and beyond.

Mr. Palmer stated that implementation of hazardous material training must occur concurrently with a radiation protection program that should include dosimetry technology to monitor casks. He said that the railroads are already shipping radioactive materials that exceed public limits, but under OSHA, railroad workers are allowed a higher level of exposure, yet exposure is not required to be tracked.

In regard to the specific cask technology and safety features, Mr. Palmer stated that the NRC conducted four tests to verify the safety of this technology but that these tests are not conducted on every individual cask. Ms. Russell elaborated that the casks have undergone four types of physical and simulated tests, and if a leak is detected, the cask is sealed into an "overpack" container for transport back to the customer. The simulations have included a missile attack on the site, and the casks withstood the simulated impact without leaking. She highlighted the four layers of protection in place: the spent fuel is in pellet, not liquid, form and pellets are then stored inside of fuel rods, which are housed in the casks and then placed in overpacks.

Based on projections by BNSF, Mr. Gallegos stated that an additional 80 trains will be needed to meet shipping requirements between Clovis and Carlsbad. He also noted that the tracks between Clovis and Carlsbad will need improvements to support the 12-axle trains that are able to support loads of over 200 tons.

A committee member stated that the Radioactive and Hazardous Materials Committee is required under statute to monitor radioactive materials and nuclear sites and to ensure appropriate emergency response, which means that the state should have a role in the permitting phase of the project.

Ms. Russell clarified that the NRC is responsible for regulating radioactive material from point A to point B, including during shipment. She stated that emergency preparedness training

currently exists in Lea and Eddy counties but has not yet been expanded to communities along the route of the shipments.

Mr. Palmer estimated that about 10,000 casks will need to be shipped over many years, as the proposed interim storage facility will house all of the country's UNF. Ms. Russell added that Holtec intends for the site to house all current inventory plus future projections. Holtec has produced 1,100 systems around the world and approximately 90% of the casks in the United States, with the oldest cask dating to 2000. She noted that since the first cask, there was one incident of a canister with a broken pin, but no degradation or malfunction occurred and all casks were recalled while the issue was addressed.

Mr. Palmer emphasized the historic nature of this shipping campaign, stating that there have been no other campaigns of this magnitude anywhere in the world. He shared his belief that support for the project should be withheld until safety and response training and dosimetry are required for all crews and train cars.

Some committee members expressed hesitation about overregulating and stifling economic development in the state, noting that everything in life comes with inherent risks and that this project poses less than a one in a billion chance of a leak and is as close to no risk as possible.

Emergency Preparedness Training and Funding

Lorenzo Velasquez, director, Emergency Management, Lea County, expressed confidence in the emergency preparedness of the first responders in Lea County. Through regular interagency training exercises and table tops, Mr. Velasquez stated that the county is prepared to respond to any accident within Lea County or Eddy County. Since 2013, 59 training exercises have been conducted to prepare for emergency responses to issues raised by, for example, the Waste Isolation Pilot Plant (WIPP). The county has received \$6.4 million from the federal government for first responders, emergency preparedness training and emergency response systems. Mr. Velasquez stated his belief that there is a lot of emergency preparedness support for the area because of the many industries present.

Jennifer Armendariz, emergency manager, Emergency Management, Eddy County, stated that she would like to see similar initiatives in Eddy County and has been in contact with Mr. Velasquez for direction. Although Eddy County has also provided agency-wide training exercises for sinkhole preparedness and oil field emergency response through federal grants and Federal Emergency Management Agency funding, Ms. Armendariz expressed concern that Eddy County is not as prepared as Lea County first responders in the event of a nuclear leak or accident. She noted that during a collaborative meeting with Holtec, the company agreed to address any issues that arise.

Richard Lopez, chief, Carlsbad Fire Department, acknowledged that accidents can never be fully mitigated and stated that his department is prepared to manage risk day to day, as it has done with WIPP. He expressed confidence in the design and infrastructure of the storage site, but was more concerned with the potential for incident during transport via railway.

In response to a question from a committee member, Mr. Velasquez stated that, currently, no training exercises focus on rail systems and that derailment response exercises should be implemented.

In the event that an interim storage site in Texas is approved by the NRC, Mr. Velasquez stated that Lea County would dispatch first responders to the surrounding area, meaning that they would be assuming all of the risk with none of the economic reward of the storage site being located in New Mexico.

In response to questions regarding concerns from the emergency management standpoint, Chief Lopez stated that he believes there is much greater risk in his line of work than in radiation exposure from spent nuclear fuel and that there is likely more exposure to an individual during an X-ray. He said that the best approach would be to monitor for leaks and prepare for a timely response. Ms. Armendariz added that her department "plans for the worst and hopes for the best", and Mr. Velasquez reiterated that there is risk in everything and that his department trains to handle any emergency situation that may arise because it is the department's duty to protect the community.

Mr. Velasquez said that Holtec has been in communication with the counties and has expressed great willingness to work with communities. Although the proposed storage site is very isolated, he stated that any community along the route of transport should also be consulted. He stated his own willingness to extend this training and share his knowledge with those potentially affected communities. Ms. Armendariz stated that through collaboration with other agencies and areas, training and equipment could be shared.

Public Comment

Ron Black, Lea County Commission, expressed his support for the project. He stated reasons such as tax revenue and a need to diversify the economic portfolio of New Mexico so the state will not be so dependent on one industry. He cited the nuclear history of the area and the URENCO site as reasons to believe that agencies and individuals in the area are more equipped to handle an incident than other areas. He stated that he is 100% convinced of the safety of the project and that there would be virtually no pollution or chance of water contamination. He argued that if the Holtec proposal is rejected, then the NRC will move forward with the interim storage site in Texas, which would mean that New Mexicans would still assume much of the risk but would receive none of the reward.

Mayor Cobb expressed support for the project, also citing the nuclear history and knowledge base of the area and the need for the state to diversify revenue sources. He shared his view that the interim storage facility will happen regardless of public dissent and that the Southwest is the most viable site. He added that the NRC is currently considering two applications — the Holtec site in New Mexico and the Waste Control Specialists (WCS) site just across the border in Texas. He shared his concern that if the NRC decides to move forward with the WCS site and not the Holtec site, it would mean storage of UNF in a less secure facility that would actually be in closer proximity to New Mexico residents and would bring no financial benefit to the state.

Nicolas Maxwell, a Lea County resident, cited violations of the Open Meetings Act and Inspection of Public Records Act by the Eddy-Lea Energy Alliance.

Ed Hughs averred that an interim storage facility would change the way of life in the area and raised concern that if the storage facility is approved that it would be difficult for landowners to get insurance. He questioned why, if the project was a great economic idea, other communities do not want it.

Gene Harbaugh, a Carlsbad resident, shared his view that allowing construction of an interim storage facility for the nation's spent nuclear fuel is a justification for perpetuating toxic nuclear waste, giving a free pass to the nuclear generating companies to continue to produce waste without having to take any responsibility for that waste.

Nick King, a Carlsbad resident, voiced his concern that the area is becoming a nuclear waste dump and noted that the Holtec facility is a temporary solution to a permanent problem. He argued the need for permanent solutions in his opposition to the Holtec proposal and questioned who would be responsible for decommissioning the site after Holtec, a private company, leaves the state.

Melanie Beckham, councilor, City of Jal, voiced concern for the lack of information and community involvement around the project. She expressed skepticism for the claim by Holtec that there is a one in a billion chance for a leak or accident when there has never been a shipping campaign of this magnitude before. Although she did not state complete opposition to the Holtec proposal, she did state that the project should be considered with great caution and that Holtec should fund emergency response training exercises in all communities that may be affected.

John Heaton, chair, Eddy-Lea Energy Alliance, approached the committee to clarify some technical and logistical aspects of the project. He expressed confidence in the canister design being utilized by Holtec that will provide four layers of confinement to prevent any leaks or exposure. The number of cars per train will be limited to between seven and 10, the number of shipments will be limited to one per month, the number of canisters per shipment will be limited to about 10 and every shipment will be tracked by satellite and physically guarded. He said that the UNF is classified as Category 7 waste and therefore the trains transporting the spent fuel will be restricted to 50 mph, and even slower speed limits will be enforced if the track is degraded. He informed the committee that 1,300 spent fuel transports have been conducted in the U.S. without incident, about 30,000 worldwide, and despite 12 accidents that occurred around WIPP, there were no incidents of a leak in the nearly 12,000 transports of waste to site.

Karen Hadden, a resident of Texas and member of the SEED Coalition, told the committee that she is concerned for the impact to her community across the border that is located on the proposed transportation route. She cited the NRC as reporting that this waste is so toxic that any exposure within three feet will result in death in as little as one week. She questioned the need to transport the waste so far from the sites of production rather than keeping it on-site or, if located near water sources, moving the waste minimal distances.

Margo Hobbs, a resident of Amarillo, cited a significant occurrence of glioblastoma (a type of brain cancer) in Lea County. She also mentioned that WIPP was in operation for 14 years before a leak occurred, causing the site to cease operations, and despite not addressing its violations, the Trump Administration has proposed to increase funding to WIPP to \$403 million, an increase of \$79 million, as part of the overall federal budget proposal for the DOE. She concluded that, in her opinion, this is just another project that will make a profit for board members at the expense of community members.

Rose Gardner, Alliance for Environmental Strategies, told the committee that she feels disgruntled by the short window for public comment to the NRC. She stated that local consent should be considered, especially when railroad workers and first responders in the area will be at the greatest risk for exposure. She offered the suggestion that the state should instead be working toward increasing energy production from solar and wind.

Leona Morgan, Nuclear Issues Study Group, informed the committee that there is a law against uranium mining or transport of radioactive materials through the Navajo Nation but that the Navajo Nation does not have jurisdiction over the railroads. She also mentioned that Holtec has a business endeavor with SNC-Lavalin to work on decommissioning, which will mean economic benefit to the company rather than to New Mexico. She expressed concerns that interim storage is a mechanism to reprocess the waste, which will only create more waste, and noted that she was relieved that legislation did not pass in New Mexico to redefine nuclear energy as a renewable source, which would have made reprocessing easier to do.

Steve Vierck, Economic Development Corporation of Lea County, said that he had worked closely with URENCO and expressed support for the interim site being located in New Mexico. He stated his belief that the NRC will do a thorough evaluation moving forward and that this area of the state has a highly educated workforce to handle radioactive materials. He told the committee that between the two applications being considered by the NRC, the Holtec site in New Mexico and the WCS site in Texas, if the WCS site is selected, it will mean utilization of inferior containment technology and a buffer of only five miles from New Mexico residents in Eunice, as opposed to 35 miles if the Holtec proposal is approved.

Tom Smith, a member of Public Citizen group, told the committee that his biggest concern is the potential for the interim site to become permanent and asked who would be responsible for maintaining the site in the long term, as the federal government has been looking for a permanent repository for the past 50 years without success. He mentioned that typically, or with one exception, these storage sites leak and that a single leak can contaminate an area of up to 42 miles. He informed the committee that the proposed railroad route is directly over the brine well sinkhole in Carlsbad.

Al Squire, a family dairy operator in Hagerman, shared his concern for the impact of the project on the dairy industry in the region. He reminded the committee that dairy production was also introduced as an economic development idea for southeastern New Mexico, now providing the area with more than 17,000 jobs indirectly related to dairy and over \$5 billion in state revenue. He said if the Holtec proposal is approved, it could adversely affect the dairy industry. He stated concern for the contamination of feed and wondered who would be held financially responsible if the dairies are affected. He told the committee that it seems more logical for Holtec to sell its containment technology to the generators so that the waste may be kept at the origin.

Carol Levine, a resident of Hobbs, told the committee that it seems irrational for the NRC to license Holtec before transportation and logistical issues are addressed. She stated her belief that New Mexico has already done a lot for the country and taken a lot of risks regarding nuclear activity since World War II, citing examples such as Los Alamos National Laboratory, the Trinity Site, plutonium experiments and WIPP. She reiterated prior suggestions that the waste be kept at the sites of production.

Richard Doss expressed his personal support for the project as well as for the Eddy-Lea Energy Alliance. He acknowledged that it is important for the country to move nuclear waste away from water sources and populous areas and that the proposed Holtec site is the perfect location because it is safe, dry and remote and would provide a great economic opportunity for New Mexico. However, he did emphasize the need to expand training to more local and statewide first responders in potentially affected areas.

Mike Orr, councilor, City of Jal, expressed opposition to the proposed interim storage facility. He cited the Jal City Council resolution that also expresses opposition to the project. He reiterated that, if the Holtec cask technology is really so safe, then why not contain the waste and leave it where it is.

Clay Pearson, a sixth-generation rancher in Lea County, implored the committee to consider the well-being of residents first. He voiced concerns about the devaluation of land and local businesses, which he believes will lead to an influx of out-migration and a decline in tourism.

Jimi Gadzia, a Roswell pecan farmer, told the committee that waste is not a good economic development strategy because no value is added by the storage of waste, as it will only create long-term liability. She expressed frustration that the east coast states are not taking responsibility for the waste from these reactors that they have benefited from for the past 70 years. She also noted that there are oil and gas sites all around the proposed Holtec site.

Daniel Johnson noted that, by his count, so far there were roughly seven opinions for and 14 against the proposal. He suggested that the residents who will be directly affected should be allowed to vote on the matter, since this project has been discussed for the past 10 years without any public input. He said that politicians and business people consider residents in sparsely populated areas to be expendable and argued that a 40-year license to operate does not seem "interim" or temporary for any of the people present.

Douglas Lynn, a former teacher at Carlsbad High School, stated that if all possible precautions are taken to protect people, wildlife and environment, then Lea County is the most logical location for the interim facility because of the low population and "high radiological IQ" of the workforce. He mentioned species of concern in New Mexico, such as the prairie chicken, and stated that the proposed site would not disrupt any species.

Russell Hardy, Carlsbad Environmental Monitoring and Research Center, expressed support for the project from a research potential standpoint. He told the committee that with proper monitoring and maintenance, the site would be safe, as the facility will be located 30 feet underground and fortified with concrete. He said that it would provide many research opportunities for students at the New Mexico Institute of Mining and Technology and New Mexico State University, giving the example of a heat pilot project, in which heat generated by the UNF could be harnessed for desalination to repurpose water from oil and gas operations.

Lorraine Villegas questioned how isolated the site is if it is only 35 miles from Carlsbad and Hobbs and if this area of the state continues to grow and experience more and more traffic from the increase in oil and gas production. She expressed concern that the purpose of the facility is for reprocessing and that the vision for the area is to erect small modular reactors.

Trace Hicks stated that after reviewing the engineering, designs and safety procedures laid out by Holtec, he is in favor of the project and believes that Holtec's technology will keep the population safe. He also said that relocating UNF here will mitigate the risk to large populations around the country.

Russ Doss, Economic Development Corporation of Lea County, told the committee that he supports the project because it will expand and diversify the economy in Lea County, providing 100 long-term jobs and generating \$2.4 billion in property taxes. However, he added, no economic development is beneficial if it puts the community at risk and that the 35-mile buffer zone seems reasonable. Citing that Holtec provides its technology to 60% of nuclear facilities worldwide, he feels confident that it is knowledgeable and equipped to handle the interim storage facility.

Denise Brown, Nuclear Issues Study Group, informed the committee that 1,303 letters in opposition to the project have been sent to the NRC. She encouraged the committee members to speak to their constituents because many people are highly concerned.

Mr. Heaton stated that the high-efficiency particulate air filter system at WIPP was installed with the expectation that it would prevent radioactive release and that accidents are not unanticipated.

Ms. Levine suggested that for future meetings, more citizens would be present if there was more media attention and notice given prior to the meeting.

Ms. Hadden asked the committee to consider that the area is not seismically stable and the potential impact on the potash industry.

Leona Morgan mentioned to the committee that legislation was considered that would file a contention with the NRC to extend the public comment period to September 14, sponsored by Representative Garcia Richard in the house and by Senator Cisco McSorley in the senate. She also requested that the minutes of the NRC government-to-government meeting be available to the public.

Gerges Scott from Albuquerque advised that the University of New Mexico Cancer Center has not found a cancer cluster in Lea County.

Adjournment

There being no further business, the committee adjourned at 2:43 p.m.

- 11 -

TENTATIVE AGENDA for the THIRD MEETING of the RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

August 15, 2018 University of New Mexico-Los Alamos Wallace Hall, 4000 University Drive Los Alamos

Wednesday, August 15

9:00 a.m.		Call to Order and Introductions —Senator Jeff Steinborn, Chair
9:05 a.m.		Welcome —Dr. Cynthia J. Rooney, Chief Executive Officer, University of New Mexico-Los Alamos
9:10 a.m.	(1)	Los Alamos National Laboratory (LANL) Safety Concerns —Craig Leasure, Principal Associate Director of Operations and Business, LANL
10:10 a.m.	(2)	 <u>Defense Nuclear Facilities Safety Board</u> —Jonathan Plaue, Resident Inspector, Defense Nuclear Facilities Safety Board
11:10 a.m.	(3)	Production Expectations Versus Site Realities and Worker Safety at LANL —Greg Mello, Executive Director, Los Alamos Study Group
12:10 p.m.		Approval of Minutes
12:15 p.m.		Lunch
1:00 p.m.	(4)	 Thermohydraulic Research and Development for Dry Storage Casks at Sandia National Laboratories (SNL) —Dr. Evaristo J. Bonano, Senior Manager, Advanced Nuclear Energy Programs Group, SNL

2:00 p.m.	(5)	 <u>Chromium Plume Cleanup Update</u> —Dane Andersen, Environmental Scientist and Specialist, Hazardous Waste Bureau, Department of Environment (NMED) —Doug Hintze, Manager, Environmental Management, Los Alamos Field Office, U.S. Department of Energy (DOE) —Perry Martinez, Governor, Pueblo of San Ildefonso
3:15 p.m.	(6)	 NMED Compliance Order on Consent with LANL Update —Jennifer Hower, General Counsel, NMED —Doug Hintze, Manager, Environmental Management, Los Alamos Field Office, DOE
4:30 p.m.		Public Comment
5:00 p.m.		Adjourn

MINUTES of the THIRD MEETING OF THE 2018 INTERIM of the RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

August 15, 2018 University of New Mexico-Los Alamos Wallace Hall, 4000 University Drive Los Alamos

The third meeting of the 2018 interim of the Radioactive and Hazardous Materials Committee was called to order by Senator Jeff Steinborn, chair, on August 15, 2018 at 9:22 a.m. at the University of New Mexico-Los Alamos (UNM-LA).

Present

Sen. Jeff Steinborn, Chair Rep. Carl Trujillo, Vice Chair Sen. Carlos R. Cisneros Rep. David M. Gallegos Sen. Richard C. Martinez Rep. Angelica Rubio

Advisory Members

Sen. Gregory A. Baca Rep. Kelly K. Fajardo Sen. Nancy Rodriguez Rep. Jim R. Trujillo

Absent

Rep. Cathrynn N. Brown Sen. Ron Griggs Sen. Gay G. Kernan Sen. Carroll H. Leavell Rep. Debra M. Sariñana Rep. Larry R. Scott

Sen. William F. Burt Rep. Stephanie Garcia Richard Sen. William H. Payne Rep. Jane E. Powdrell-Culbert Rep. Nick L. Salazar Sen. Clemente Sanchez

Staff

Shawna Casebier, Staff Attorney, Legislative Council Service (LCS) Anthony Montoya, Drafter, LCS

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written testimony are in the meeting file.

Wednesday, August 15

Welcome and Introductions

Senator Steinborn welcomed members, staff and guests. He asked the committee members and staff to introduce themselves.

Welcome

Dr. Cynthia J. Rooney, chief executive officer, UNM-LA, thanked the committee for its attendance and welcomed it to the campus.

Los Alamos National Laboratory (LANL) Safety Concerns

The committee welcomed Dr. Craig Leasure, principal associate director for operations and business, LANL. Dr. Leasure provided a brief overview of his time working for LANL and discussed the upcoming Triad National Security, LLC (Triad) management and operating contract transition. He then provided the committee with a breakdown of the physical property on which LANL is located, to reinforce the complexity of managing the laboratory. LANL is located on nearly 40 square miles of land, and there are over nine million square feet of building space, 268 miles of road and a large workforce.

Dr. Leasure assured the committee that LANL has been focused on continuously improving safety and operational effectiveness. He explained that LANL currently employs 210 safety officers and has received the Voluntary Protection Programs, or VPP, Star status rating, the highest possible U.S. Department of Energy (DOE) rating. He also emphasized that LANL has to deal with virtually every hazard imaginable, but current operations allow for the mitigation of risk. Dr. Leasure then provided the committee with statistics related to injury and illness rates at LANL. He explained that currently, LANL is experiencing historically low injury and illness rates. Of the injuries that do occur, he described most as slip, trip or fall injuries.

Dr. Leasure stated that LANL's budget has continued to grow over recent years. He stated that LANL currently employs over 12,000 people in a wide variety of occupations, emphasizing that research and development only account for 2,300 employees. He explained further that 41% of current employees were born in New Mexico and, with LANL's attrition rate being driven by retirements, hiring rates have remained steady. Dr. Leasure then said that LANL makes an effort to use New Mexico-based businesses for procurement. He reiterated the importance of hiring individuals from the area, explaining that the student pipeline is crucial in training and preparing new hires. In 2017, 45% of student employees were native New Mexicans. He stated that training and providing scholarships to local students have fostered and will continue to foster homegrown employee development.

Responding to questions from the committee, Dr. Leasure explained that:

• safety protocols are in place to ensure a safe transition related to the Triad contract;

- the student pipeline for New Mexico residents is important to LANL and it is important to get students involved as early as possible to increase the technical skills necessary to work for LANL;
- the improvement of the safety culture at LANL has been key to the decreases in incident rates. Self-reporting and preemptive identification of safety issues have been crucial to the development of this culture;
- LANL publishes data related to its creation of hazardous waste and allows independent boards to sample the air and water in the area to dispute or confirm LANL's findings;
- LANL procures products from all over the country and the world. It must follow federal competitive procurement rules; however, LANL does actively seek to purchase within the state whenever possible; and
- plans are being developed to ensure that the increase in plutonium-related production is done safely and in a timely manner. LANL will not operate outside of current safety procedures to meet production, but it believes that, with increased funding and employees, production numbers can be met.

Defense Nuclear Facilities Safety Board

Jonathan Plaue, resident inspector, Defense Nuclear Facilities Safety Board (safety board), provided the committee with an overview of the safety board's oversight at LANL. In providing a brief history, Mr. Plaue explained that the safety board was established by Congress in 1988 to provide independent analysis to the DOE to facilitate the department in providing adequate health and safety protections at nuclear defense facilities. The safety board is made up of five presidentially appointed individuals who provide this analysis and advice to the secretary of energy. Relating to LANL, the safety board provides oversight of the plutonium facilities. Mr. Plaue stated that the safety board reviews the design, construction and maintenance of the facility. He explained that these reviews are done in a public manner and the safety board can obtain permission from the DOE to conduct public hearings if necessary.

Mr. Plaue then walked the committee through multiple letters that the safety board has drafted and sent to the DOE in the last year and the substance of two public hearings held in Santa Fe in the last two years. Mr. Plaue concluded his presentation by discussing the safety board's current areas of focus at LANL, including: (1) the seismic performance of the plutonium facility; (2) the nuclear criticality safety program; (3) the conduct of operations in the plutonium facility; and (4) the safety basis for resuming transuranic waste operations.

Responding to questions from the committee, Mr. Plaue clarified some of the duties and responsibilities of the safety board. He stated that facility security is outside of the scope of the safety board, that the safety board has never been denied access to a site and that the safety board's primary focus is nuclear safety, which can range from seismic activity to worker safety. Mr. Plaue clarified that while the safety board is appointed by the president, the members are statutorily required to be recognized experts in fields related to nuclear safety. Further questions were raised as to the recent DOE order limiting information that nuclear facilities can provide to

the safety board. Mr. Plaue said that the National Nuclear Security Administration (NNSA) has not yet put the order into the contract governing LANL, that the safety board is working on assessing the effect the order will have on its oversight responsibilities and that public meetings will be held to gain public input on the order.

Production Expectations Versus Site Realities and Worker Safety at LANL

Greg Mello, executive director, Los Alamos Study Group, began his presentation by providing the committee with his analysis of production expectations and site realities for the expansion of plutonium warhead core production. Mr. Mello stated that he believes that the proposal to produce more plutonium warhead cores would not be feasible without production becoming unsafe. Mr. Mello then provided the committee with an overview of the layout of LANL. He stated that, in the past, LANL's mission included low-cost operations and only held a moderate level of risk. However, in 2015, an increase in industrial production of warhead cores was codified in law through the National Defense Authorization Act (NDAA). Mr. Mello contested the value gained by the increase in production, which would raise the cost and the risk of operations at LANL. In support of his points, Mr. Mello discussed a 2017 study by the NNSA that characterized LANL's production capacity as far below the projected production goals. Mr. Mello stated that the NDAA mandate requires LANL to implement surge efforts that exceed LANL's production capacity and requires the NNSA to use multiple labor shifts until underground modular storage is completed.

Mr. Mello explained that there are several factors as to why increased industrial production of the warhead cores at LANL is unfeasible. Mr. Mello concluded by stating that the site's isolation significantly increases costs and safety concerns, the topography of the area significantly limits construction capabilities and LANL has historically held a culture of research and development as opposed to being a high-hazard industrial facility.

Responding to questions from the committee about the Los Alamos Study Group, Mr. Mello explained that it is a nonprofit think tank that emphasizes and lobbies for disarmament and worker safety nationwide. Questions were raised regarding production plans across the country, safety and the safety board's role. Mr. Mello stated that there are no other sites in the nation currently planning a production increase on the scale of LANL. He clarified that, at this time, he does not believe the pressure to increase production is compromising safety, but he does believe that this will occur in the future. He also stated that he believes that the safety board has played a vital role in advancing safety; however, because the safety board has no regulatory power, it is a compromise to true regulation, which Mr. Mello believes would be preferable.

Thermohydraulic Research and Development for Dry Storage Casks at Sandia National Laboratories (SNL)

The committee welcomed Dr. Evaristo J. Bonano, senior manager, Advanced Nuclear Energy Programs Group, SNL. Dr. Bonano began by explaining a simplified nuclear fuel cycle process, ending with the removal of the fuel rod. He then explained the construction of a fuel rod, stating that uranium pellets within the fuel rod are the material to be stored in dry cask storage. Dr. Bonano explained that, in 2006, the country started to reach its spent nuclear fuel capacity. In response, in 2008, the Yucca Mountain storage facility application was submitted. Currently, the country still stores the majority of spent nuclear fuel in pool storage; however, Dr. Bonano stated that this trend is changing and that all spent fuel will be stored in dry storage eventually.

Dr. Bonano then discussed current testing done by SNL related to dry cask storage and the transportation of those casks. The testing includes vertical facility testing using simulated canisters and fuel rods. This testing is ongoing and, Dr. Bonano explained, in order to have confidence in the current predictive models, more research must be conducted for both vertical and horizontal storage configurations.

The committee raised numerous questions related to safety and the integrity of the canisters during transport. Dr. Bonano explained that:

- the canisters are completely sealed and multilayered, so air never comes into contact with radioactive material;
- the possibility of a leak is highly unlikely. Some casks have been around for decades and there is no data showing cracking or leaking of these containers;
- there are no ongoing or new chemical reactions occurring once the fuel rods have been removed and stored;
- the environment, topography and weather of an area is taken into account during testing for the storage of the canisters;
- fuel rods have been transported across the country for over 60 years; and
- under the continuous storage rule, canisters will be repackaged every 100 years.

Dr. Bonano clarified that projections are never without uncertainty, but due to his testing, he is confident in the integrity and safety of dry cask storage. He stated that, recently, a 14,000-mile experimental trip was undertaken to study the transport of the casks. He is hoping that the extensive report on the results of the transport study will be made available soon.

Chromium Plume Cleanup Update

Dane Andersen, environmental scientist and specialist, Department of Environment (NMED), discussed the background of the chromium plume cleanup effort. He explained that the site is located between Los Alamos and the Pueblo of San Ildefonso. The chromium plume is currently 1.7 miles long and .7 miles wide and is located nearly 1,000 feet below the ground. Mr. Andersen stated that the chromium plume has held the highest priority at the NMED over the past year. He explained that the NMED's latest evaluation report recommended extraction of the chromium due to LANL's ground water model. To prevent migration of the plume, the NMED has approved the conversion of the current chromium, Cr(VI), into Cr(III). He stated that the Cr(III) chromium is much less mobile and less toxic and, due to the water flow in the area, the Cr(VI) form of chromium could theoretically enter the geological water flow and spread.

Mr. Andersen discussed the current monitoring of well locations and the location for the injection site to convert the chromium. A new well will be drilled within the year to perform further testing to determine the success of the conversion and whether the plume has migrated. He then discussed the process of conversion, stating that amendments will be injected into the aquifer that will cause a chemical reaction converting Cr(VI) into Cr(III). There are two primary amendments being tested, sodium dithionite and molasses. He stated that long-term viability of the amendments is still being evaluated.

Douglas Hintze, manager, Environmental Management, Los Alamos Field Office, DOE, briefly explained that the DOE has worked closely with the NMED and the Pueblo of San Ildefonso to ensure that the chromium cleanup is efficiently and quickly completed. He explained that pushing contamination to the north, which could be caused by injection of amendments, is a scenario that the entities want to avoid. He stated that extraction from the northern wells could prevent the plume from moving further north and is the desired course of action at this time.

Governor Perry Martinez, Pueblo of San Ildefonso, provided brief comments that the NMED and the DOE have been in constant contact and that the pueblo is aware of the issues and potential risks. He stated that the pueblo is seeking a monitoring well to be drilled on tribal land to ensure that the plume has not migrated toward its water supply. However, the pueblo has been unable to obtain a monitoring well at this time.

Members of the committee raised questions relating to the funding of the cleanup and the growth of the plume. Mr. Hintze stated that funding for the cleanup comes from the \$200 million provided to LANL for waste cleanup. He stated that this cleanup is currently the top priority. Mr. Andersen stated that the plume has not grown over the last year; rather, new exploration wells have been drilled and new data regarding the plume's location have been gathered.

NMED Compliance Order on Consent with LANL Update

Jennifer Hower, general counsel, NMED, and Mr. Hintze provided the committee with an update on the NMED's compliance order on consent with LANL. Ms. Hower explained that the consent order was signed in 2016 and provides for the enforcement of corrective action for the release of hazardous waste or materials at LANL. She stated that corrective action is organized using risk-based analysis and that every year the DOE identifies and the NMED approves the list of milestones for the year. These milestones are tentative targets based on the necessity of the project for that year. Ms. Hower stated that milestones are enforceable and failure to meet the deadlines can result in penalties. However, there is flexibility to allow for updating of the plan so that, as new information is gained, deadlines can be shifted appropriately. Ms. Hower discussed briefly some current milestones, including the chromium cleanup projects. She stated that the current estimated completion date for the consent order is 2036, but as new items are added and existing projects are updated, this date will change.

Mr. Hintze briefly reiterated that the DOE and the NMED work closely on ensuring that the consent order is up to date as new information is gained. He used an example from the chromium plume cleanup regarding issues with a well that required the drilling of an entirely new well. He explained that these types of unforseen issues can cause a delay in meeting milestones, but the NMED and the DOE ensure that the milestones are updated appropriately.

Responding to a question from members of the committee, Ms. Hower stated that the plan is updated annually. She stated that the proposed changes are created through close collaboration between the DOE and the NMED and that every project is updated annually to provide anticipated end dates.

Public Comment

Scott Kovac of Nuclear Watch New Mexico thanked the committee for holding a discussion on the operations of the Defense Nuclear Facilities Safety Board and stated that reclassification of the hazard level at certain buildings at LANL will remove operations in those buildings from the oversight of the safety board. Noting that plutonium pit production is capped at 20 pits per year per the federal National Environmental Policy Act of 1969 and that LANL only made 11 pits in 2012, he questioned if plutonium pit production was of great importance and why LANL had not produced a pit since 2013. As to the consolidated interim storage facility planned for Eddy and Lea counties, he raised the concern that, though touted as a regional economic development project, the project represents a huge corporation making a profit, while few jobs are actually created.

Joni Arends, co-founder and director of Concerned Citizens for Nuclear Safety, raised three issues with the committee. First, she urged protection of the waters surrounding Los Alamos, noting that three times the amount of waste that will be stored at the Waste Isolation Pilot Plant was buried without appropriate liners at Los Alamos after the Cold War and that these dump sites remain unremediated and pose an ongoing threat to the regional water systems. Second, she raised a concern that the new compliance order on consent has fewer possibilities for public input on the remediation plans than the old order and averred that certification of remediation goals and discrepancies in documents should be open to public hearing. Third, she underscored the necessity of public access to historic documents about the operations of LANL, noting that Building D, where the Los Alamos Inn currently stands, had emissions during the 1950s that were greater than the plutonium from the Hanford, Rocky Flats and Savannah River sites combined.

Beata Tsosie of Tewa Women United spoke of the need to honor the ancestral energies of the land in and around Los Alamos and raised concerns about the rights of indigenous people to have access to the sacred sites occupied by LANL. She urged a change of perspective from continuing with toxic releases into the environment, necessitating billions of dollars for cleanup, to honoring life and water. She raised concerns that the standards for the cleanup efforts do not take into consideration those who have a land-based existence in the region and are thus the most

vulnerable to the effects of the contamination. She urged a shift from the weapons and war economy to a focus on taking care of people who live there.

Adjournment

There being no further business before the committee, the committee adjourned at 4:22 p.m.

- 8 -

TENTATIVE AGENDA for the FOURTH MEETING of the RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

November 20, 2018 State Capitol, Room 309 Santa Fe

Tuesday, November 20

9:00 a.m.		Call to Order and Introductions —Senator Jeff Steinborn, Chair
9:15 a.m.	(1)	Current Issues of the Radioactive Waste Consultation Task Force —Ken McQueen, Secretary, Energy, Minerals and Natural Resources Department (EMNRD)
10:15 a.m.	(2)	Status Update on the Remediation of the Carlsbad Brine Well —Ken McQueen, Secretary, EMNRD
11:15 a.m.	(3)	 Supporting Amendments to the Federal Radiation Exposure Compensation Act to Include the People of New Mexico —Tina Cordova, Co-Founder, Tularosa Basin Downwinders Consortium (TBDC) —Mary Martinez White, Member, TBDC
12:15 p.m.		Approval of Minutes
12:30 p.m.		Lunch
1:30 p.m.	(4)	Gold King Mine Spill and Other Superfund Site Cleanup Issues —Dennis McQuillan, Chief Scientist, Department of Environment (NMED) —Michaelene Kyrala, Director, Strategic Initiatives and Policy, NMED
2:30 p.m.	(5)	Waste Isolation Pilot Plant Operations and Management —John Kieling, Program Manager, Hazardous Waste Bureau, NMED
3:30 p.m.	(6)	 Management Transition at Los Alamos National Laboratory —Dr. Thomas Mason, President and CEO, Triad National Security, LLC; Director, Los Alamos National Laboratory
4:30 p.m.		Public Comment
5:00 p.m.		Adjourn

MINUTES of the FOURTH MEETING OF THE 2018 INTERIM of the RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE

November 20, 2018 State Capitol, Room 309 Santa Fe

The fourth meeting of the 2018 interim of the Radioactive and Hazardous Materials Committee was called to order by Senator Jeff Steinborn, chair, on November 20, 2018 at 9:05 a.m. in Room 309 of the State Capitol in Santa Fe.

Present

Sen. Jeff Steinborn, Chair Rep. Carl Trujillo, Vice Chair Rep. Cathrynn N. Brown Sen. Carlos R. Cisneros Rep. David M. Gallegos Sen. Gay G. Kernan Sen. Richard C. Martinez Rep. Debra M. Sariñana Rep. Larry R. Scott

Absent

Sen. Ron Griggs Sen. Carroll H. Leavell Rep. Angelica Rubio

Advisory Members

Sen. Gregory A. Baca Rep. Kelly K. Fajardo Rep. Stephanie Garcia Richard Sen. Nancy Rodriguez Sen. William F. Burt Sen. William H. Payne Rep. Jane E. Powdrell-Culbert Rep. Nick L. Salazar Sen. Clemente Sanchez Rep. Jim R. Trujillo

Staff

Shawna Casebier, Staff Attorney, Legislative Council Service (LCS) Anthony Montoya, Staff Attorney, LCS

Minutes Approval

Because the committee will not meet again this year, the minutes for this meeting have not been officially approved by the committee.

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written testimony are in the meeting file.

Tuesday, November 20

Welcome and Introductions

Senator Steinborn welcomed members, staff and guests and asked the committee members and staff to introduce themselves.

Current Issues of the Radioactive Waste Consultation Task Force

The committee welcomed Ken McQueen, secretary, Energy, Minerals and Natural Resources Department (EMNRD). Secretary McQueen provided the committee with an overview of the Radioactive Waste Consultation Task Force and the statutory authority for the task force found in Article 4A of Chapter 74 NMSA 1978, including the duties and powers of the task force. He stated that a recent meeting was held by the task force on October 30, 2018. At the meeting, the task force adopted a resolution that would require the task force to comply with certain sections of the Open Meetings Act. The task force also reviewed planned training drills. Secretary McQueen stated that one drill has been planned and that there is a possibility of an additional drill. He also noted that the minutes for the meeting and the resolution could be found on the EMNRD website.

Secretary McQueen introduced Eletha Trujillo, program coordinator, Waste Isolation Pilot Plant (WIPP) Transportation Safety Program, EMNRD, to the committee. Ms. Trujillo spoke about the extensive training exercises and the work being completed on the Raton and Colfax County WIPP transportation program. She stated that training had been conducted in Roswell in September and that hazardous materials training programs for law enforcement and first responders were being developed.

Responding to questions from the committee regarding the options for the WIPP transportation route, Ms. Trujillo stated that she would provide the federal regulation relating to the United States Department of Transportation's authority to designate routes. She also stated that training is currently done in coordination with the United States Department of Energy (DOE). Ms. Trujillo clarified that the transportation of hazardous materials not related to WIPP occurs regularly in the Carlsbad area. Ms. Trujillo stated that as shipments increase, so will the need for funding. The EMNRD plans to request more funding in the near future.

Responding to further questioning regarding the duties of the task force, Secretary McQueen stated that the statutes require the task force to report its findings regularly. He stated that this was open for interpretation but that the task force typically only meets when it is determined to be necessary and then reports on those meetings. Additionally, Secretary McQueen stated that there is currently over \$1.5 million in funding available through a federal and statewide cooperative agreement based on the project work plan for WIPP.

Status Update on the Remediation of the Carlsbad Brine Well

Secretary McQueen provided the committee with an update on the Carlsbad brine well. He stated that the brine well was used to produce brine water for oil and gas development for over 30 years. The well ceased production in 2008 due to concerns about a potential collapse. Secretary McQueen explained that the well is located in a high-traffic area and that the current remediation project aims to mitigate the potential dangers of the subsurface cavity caused by the well.

He stated that in 2017, the EMNRD submitted a request for proposals. Ultimately, the contract for the remediation project was awarded to Wood Environment and Infrastructure Solutions, Inc. The project is currently in the planning and design phase, the brine well property has been fenced and detour routes have been constructed. Secretary McQueen provided the committee with a map of the area and described the site in detail.

Approval of Minutes

Upon a motion made and seconded without any objections, the committee approved the minutes for the May 18, July 19 and August 15, 2018 meetings.

Supporting Amendments to the Federal Radiation Exposure Compensation Act (RECA) to Include the People of New Mexico

The committee welcomed Tina Cordova, co-founder, Tularosa Basin Downwinders Consortium (TBDC), and Mary Martinez White, member, TBDC. Ms. Cordova began her presentation by providing an overview on the TBDC. She stated that the TBDC was founded in 2005 to bring attention to the negative health effects caused by the radioactive fallout from the Trinity test site detonation, the first plutonium-based detonation, which occurred on July 16, 1945 in southern New Mexico. Ms. Cordova explained that after the explosion, a cloud of dust, ash and other particles spread and settled in surrounding communities. She stated that the United States government described the area chosen for the test site as uninhabited; however, there were numerous populated communities within a 50-mile radius.

Ms. Cordova stated that the TBDC has applied for numerous grants to perform health impact assessments. She stated that the purpose of these tests was to show the impact of the nuclear testing on the surrounding communities. She explained that the RECA has excluded New Mexicans from applying for the benefits offered under that act. Last year, the TBDC was offered a chance to testify in Congress relating to a bill that would make New Mexicans eligible for RECA compensation.

Ms. Martinez White discussed her personal experience with the effects of radiation exposure in the Tularosa Basin. She stated that of her family of seven people at the time of the test, six family members developed either a form of cancer or a degenerative disease later in life. She explained that this is not uncommon for families living in the area at the time and provided the committee with similar stories of other families living near the test site.

The committee requested that a letter be drafted endorsing eligibility for RECA benefits for New Mexicans. Members of the committee encouraged further study of the effects of nuclear testing and the areas that were affected.

Gold King Mine Spill and Other Superfund Site Cleanup Issues

The committee welcomed Dennis McQuillan, chief scientist, Department of Environment (NMED). Mr. McQuillan discussed the Gold King Mine incident of 2015, which was a blowout of contaminated water from the mine due to a collapsed tunnel caused by an excavation by the United States Environmental Protection Agency (EPA). He stated that the water contained numerous sediments and heavy metals, such as arsenic, zinc, gold and lead. The water discharged into the Animas River and eventually settled in Lake Powell. Mr. McQuillan stated that most of these contaminants have now settled in Lake Powell. He discussed the ongoing issues faced by the Animas River watershed system. He noted that the NMED is working to monitor the different sources of elevated metals and bacteria and the uses of affected water.

Mr. McQuillan then discussed the lawsuit against the EPA and some corporate entities responsible for the Gold King Mine. New Mexico and the Navajo Nation have consolidated their individual lawsuits. The state is requesting around \$2 million for litigation and has requested funding through the federal Water Infrastructure Improvements for the Nation Act to track and study the affected waterways. Mr. McQuillan provided the committee with a brief overview of common water contaminants and the baseline levels around the Animas River. He stated that the soil in the area is safe and that a public relations campaign is needed to increase public awareness that crops grown in the area are safe. Mr. McQuillan stated that the NMED is actively monitoring sondes installed throughout the river to collect data on the river. He explained that the NMED is in need of funding to equip the river with more sondes. The committee approved a letter to be sent to the Legislative Finance Committee in support of funding for sondes for monitoring the Animas River.

The committee then welcomed Michaelene Kyrala, policy director, NMED. Ms. Kyrala discussed the history of the federal Comprehensive Environmental Response, Compensation, and Liability Act, which provides for the designation of sites contaminated by hazardous waste as Superfund sites. Ms. Kyrala explained that without the proper management and remediation of these sites, they can contaminate nearby land, air and water and harm human health and the environment.

Ms. Kyrala explained the cleanup process of a designated Superfund site that has been placed on the national priorities list. The EPA oversees the process and can either require the landowners to perform the cleanup, or the EPA may perform the cleanup and require the landowners to reimburse the EPA. Ms. Kyrala discussed the numerous Superfund sites located in New Mexico and the current status of those sites. She then discussed the current financial needs for the cleanup process and the cost-sharing requirements among the EPA, the state and landowners.

WIPP Operations and Management

John Kieling, program manager, Hazardous Waste Bureau, NMED, introduced himself to the committee. Mr. Kieling began by providing the committee with background on the WIPP project. He stated that in early 2014, there was a salt hauler fire, leading to a drum breach and radiation release shortly thereafter. The WIPP facility suspended operation in 2014. In 2016, a settlement agreement and final order was signed, the NMED inspected the site and operations were approved to resume. In 2017, WIPP began receiving hazardous waste and has continued to do so. Mr. Kieling explained that WIPP has complied with audit requirements, and the current hazardous waste permit under which WIPP operates is effective until 2020. He stated that in the meantime, there are planned modifications to the site, including redesigning panel closures, increasing the capacity of surface storage and reviewing how waste volume of record is determined.

The committee allowed public comment on the presentation. Scott Kovak, Nuclear Watch New Mexico, stated that he respectfully requests the committee to support adequate funding for the NMED and the Hazardous Waste Bureau. He stated that he had concerns about plans to modify the waste volume of record calculations and stated that there has not been enough time to provide final comments on the rule change and requested five additional days. Mr. Kieling agreed that five days was adequate.

Motion

The committee, after receiving and reviewing a joint memorial, voted to endorse the legislation. The joint memorial requests that the New Mexico congressional delegation continue to support amendments to expand compensation under the RECA for individuals exposed to radiation in New Mexico.

Management Transition at Los Alamos National Laboratory (LANL)

The committee welcomed Dr. Thom Mason, president and chief executive officer, Triad National Security, LLC, and director, LANL. Dr. Mason explained that LANL has established a new organizational structure. He stated that after the transition to new management, LANL extended more than 10,200 job offers to current employees to continue working. Over 98 percent of workers accepted the offers. Dr. Mason provided his observations of the current workforce and praised their hard work and professionalism. He noted that the current mission of LANL requires full engagement by the laboratory and all personnel. The mission includes excellence in: 1) nuclear security; 2) mission-focused breakthroughs in science, technology and engineering; 3) needs-based mission operations planning; and 4) community partnerships and relations. Dr. Mason provided the committee with his credentials and personal background.

Responding to questions from the committee, Dr. Mason discussed his support of the instate employee pipeline. Specifically, he referenced his opportunities to visit with institutions of higher learning across the state and plans to create partnerships with these institutions. He stated that the pipeline would be well-served by any assistance the legislature could provide in advancing training opportunities for students in relevant fields. Dr. Mason also provided clarification on the tax structure of Triad National Security and how it affects revenue generated by the state's gross receipts taxes.

Public Comment

Joni Arends, Concerned Citizens for Nuclear Safety, thanked the committee for the hearing. She provided a brief background of the citizen group to which she belongs and expressed her concern for the number of criticality experts at LANL. She provided a reminder that the Defense Nuclear Facilities Safety Board would be meeting later in the month and included copies of the agenda.

Jay Coghlan, Nuclear Watch New Mexico, discussed his interpretation of a recent DOE order that permits laboratories to decide what access to provide to the Defense Nuclear Facilities Safety Board. He also raised concerns about the NMED's enforcement of the compliance order on consent with LANL. George Jones, Nuclear Safety Advocates Group, rose to express concern regarding the DOE's order and a lack of public awareness.

Jose Villegas, member, Texas Band of Yaqui Indians, rose to express his concern for the proposed Holtec interim nuclear fuel storage project and the lack of tribal communication and consultation.

Anna Hansen, commissioner, Santa Fe County Board of County Commissioners, also expressed concern regarding the Holtec project. She cited a recent resolution passed in Santa Fe County that prohibits the transfer of high-level waste through the county and expressed her desire for the project to be halted.

Eileen Shaughnessy and Leona Morgan, Nuclear Issues Study Group, provided a brief background on the group's grassroots organization and an update on its recent activities. They presented their concerns and opposition to the Holtec project and discussed a mixed-waste landfill in Albuquerque. Ms. Morgan asked the state to ensure that Native American tribes be consulted in further planning of the project.

Patricia Cardona, Sierra Club, and June Ferrill, Nuclear Safety Advocates Group, also expressed opposition to the Holtec project.

Adjournment

There being no further business before the committee, the committee adjourned at 5:05 p.m.

- 6 -

ENDORSED LEGISLATION

1	SENATE JOINT MEMORIAL
2	54TH LEGISLATURE - STATE OF NEW MEXICO - FIRST SESSION, 2019
3	INTRODUCED BY
4	
5	
6	
7	
8	FOR THE RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE
9	
10	A JOINT MEMORIAL
11	REQUESTING THE NEW MEXICO CONGRESSIONAL DELEGATION TO CONTINUE
12	TO SUPPORT AMENDMENTS TO EXPAND COMPENSATION UNDER THE FEDERAL
13	RADIATION EXPOSURE COMPENSATION ACT FOR INDIVIDUALS EXPOSED TO
14	RADIATION.
15	
16	WHEREAS, from 1945 to 1962, the United States government
17	implemented a massive program of conducting hundreds of
18	atmospheric nuclear weapons development tests; and
19	WHEREAS, to provide uranium for the atmospheric nuclear
20	testing being carried out, the United States undertook uranium
21	mining and processing in many areas, especially in New Mexico,
22	Arizona, Colorado, Montana, Nevada and Utah; and
23	WHEREAS, individuals in New Mexico, Arizona, Colorado,
24	Montana, Nevada, Utah and elsewhere were hired to work in the
25	uranium mines and in uranium processing; and
	.211749.1

<u>underscored material = new</u> [bracketed material] = delete WHEREAS, large uranium deposits were found on or near the Navajo Nation, and many Navajo people were employed to work in the mines; and

WHEREAS, many thousands of individuals have been exposed to radiation in large doses through atmospheric nuclear weapons testing or through employment in uranium mining and processing; and

WHEREAS, radiation exposure has been linked to a number of serious illnesses in exposed individuals, including cancers; gastrointestinal, neurological and blood disorders; and other conditions leading to the debilitation or death of individuals exposed to radiation; and

WHEREAS, in 1990, the United States congress passed the Radiation Exposure Compensation Act; and

WHEREAS, the federal Radiation Exposure Compensation Act was designed to provide some compensation to those exposed to radiation through certain atmospheric nuclear weapons tests and uranium mining and processing operations; and

WHEREAS, the federal Radiation Exposure Compensation Act designated certain areas of Arizona, Nevada and Utah that were deemed to have been downwind of atmospheric nuclear weapons testing as official downwind areas for which compensation would be provided; and

WHEREAS, the federal Radiation Exposure Compensation Act limited compensation for uranium miners, millers and haulers to .211749.1

<u>underscored material = new</u> [bracketed material] = delete 1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

those workers whom the uranium industry employed before January 1, 1972; and

WHEREAS, under the strict guidelines of the federal Radiation Exposure Compensation Act, many individuals who have lived downwind from test sites in New Mexico or who worked in the uranium industry have been left with no remedy for their radiation exposure; and

WHEREAS, members of New Mexico's congressional delegation have sponsored bills to expand and improve compensation for individuals in New Mexico exposed to radiation;

NOW, THEREFORE, BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF NEW MEXICO that the New Mexico congressional delegation be requested to continue to support federal legislation to expand and improve compensation under the federal Radiation Exposure Compensation Act; and

BE IT FURTHER RESOLVED that copies of this memorial be transmitted to members of the New Mexico congressional delegation.

- 3 -

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

.211749.1



Legislative Council Service Santa Fe, New Mexico