

Midwestern Radioactive Materials Transportation Committee Meeting Summary

Madison, Wisconsin
October 31 – November 1, 2018

AGENDA ITEMS

1. Committee Business Session

- a. Co-Chair's Report: Greg Gothard (Michigan) expressed appreciation for states having opportunities to interact on a regular basis, with special thanks to the representatives of the U.S. Department of Energy (DOE) and the Tribal Radioactive Materials Transportation Committee (TRMTC) for attending. Turnover in committee membership presents both a challenge and an opportunity to get new people involved. WIPP shipments resuming, tribal engagement being a focus in FY19, plants shutting down in the Midwest, and two private storage facilities undergoing licensing will generate new interest and activity in the Midwest.
- b. Project Update: Lisa Janairo (CSG Midwest) reported that the project is in good shape overall in terms of funding and staffing. Appointments will be needed in 2019 for multiple states that will have new governors as a result of the November 2018 election. Committee assistance is needed to complete an information request received from DOE's Office of Nuclear Energy. Committee members are asked to fill in their states' information in CSG Midwest's Google sheet by November 16. The committee will review two products at the Spring 2019 meeting: new guidance for states on the transportation impacts of nuclear plant decommissioning and the draft of the 2019 edition of the Planning Guide for Shipments of Radioactive Material through the Midwestern States.
- c. Nuclear Energy Institute Working Group Update: Kelly Horn (Illinois) reported that the tabletop to test the 72-71-72 process (storage to transportation to storage) will take place on May 21 at Prairie Island in Minnesota. Representatives of Minnesota, Wisconsin, Illinois, DOE, and CSG Midwest will be invited to participate and/or observe. The scenario will involve shipments conducted by the private sector, not DOE. This is important because private shipments likely will begin before DOE shipments, so the states and Tribes need to know how their preparedness activities will be funded. The transportation tabletop is a good topic for covering at the 2019 Annual Meeting of the National Transportation Stakeholders Forum (NTSF) in Washington, DC, on June 10-13.
- d. FEMA Rad Training Focus Group: Mr. Horn reported that this group is nearing the end of its task of cataloguing training that is available to states and Tribes – from awareness to tech specialist training – and crosswalking the equivalencies to make it easier for personnel to complete their training without any gaps or duplicating content. The final call of the group will be in the spring. This topic may be a good candidate for including on the NTSF agenda or an NTSF webinar.
- e. Naval Nuclear Propulsion Program Exercise: Tiffany Drake and Taylor Grabner (Missouri) reported that the state is scheduled for an exercise in 2020, possibly in September.
- f. Co-Chair Election: Mr. Horn moved that Ms. Studer be elected to serve as committee co-chair in 2019-2020; Ms. Drake seconded. The members approved the motion unanimously.
- g. Committee Work Group Assignments and Plans:
 - i) *Committee Liaisons to the Midwestern Legislative Conference*: Mr. Horn was appointed to serve as liaison representing the gubernatorial appointees.
 - ii) *Regional Tribal Engagement Work Group*: Ms. Janairo will be the staff lead for the work group. Calls will begin in January and an outreach event is one of the proposed activities. Ms. Janairo will recruit representatives of Nebraska and TRMTC to join Mr. Gothard and Ms. Studer on the work group.

- iii) *Decommissioning Guidance Work Group*: The new policy analyst will be the staff lead for this work group. Calls will begin in late November or early December, with the goal of producing draft guidance for committee members to approve at the June 2019 meeting.
 - iv) *Planning Guide Review Work Group*: The new policy analyst will also staff this group. Calls are expected to be scheduled in January so that the committee will have a draft to approve at the June meeting.
- h. Committee Discussion – Outreach to State Officials:
- i) The Regional Outreach Work Group will consider holding a webinar or other outreach event in 2019 to inform state legislative and executive branch officials.
 - ii) Representation at other meetings:
 - (1) Melissa Bailey will attend the Northeast High-Level Radioactive Waste Transportation Task Force meeting in Providence, Rhode Island, on November 28-29.
 - (2) Mr. Schmidt will attend the WIEB High-Level Radioactive Waste Committee Meeting in San Diego on December 4-5.
 - (3) Ms. Janairo will attend the SSEB radioactive waste committees’ meeting in Austin, Texas, on December 12-13.
 - (4) Mr. Gothard and Ms. Studer are both available to attend the TRMTC meeting in Washington, DC, on January 23-25.
 - (5) Mr. Gothard may be available to attend the NEI Used Fuel Management Conference in Florida on May 7-9. Mr. Horn is available as backup.
 - i. Committee Discussion – Spring 2019 Meeting: Committee members expressed interest in hearing from TRMTC and also in exploring the question of what will happen if shipments of spent fuel by the private sector were to commence in five years.

2. State and Regional Roundtable

- a. Illinois: Mike Stead of the Illinois Commerce Commission will be retiring at the end of 2018.
- b. Indiana: Ms. Studer is now the Radiation Programs Director of the Indiana Department of Homeland Security. Jason Kephart is the new Radiation Transportation Manager. Ms. Studer will share information on the training Indiana will be conducting in 2019 (two full MERRTT trainings, five condensed MERRTTs, and possibly one Rad Specialist training).
- c. Iowa: Christopher Boswell reported that Dean House is retiring at the end of the year. Iowa will be conducting training soon along all major highway and rail routes in the state.
- d. Kansas: Shipments of low-level radioactive waste affect Kansas once in a while. The Wolf Creek Generating Station will be implementing new dry storage soon.
- e. Michigan: Mr. Gothard is hoping to schedule TEPP training in 2019, possibly along the route in southwestern Michigan that may be used for shipments from Palisades Nuclear Plant, which is scheduled to shut down in 2022. Ms. Studer said Michigan may be able to take advantage of training that will take place in La Porte, Indiana.
- f. Minnesota: Kevin Leuer reported by phone that Minnesota had been inundated by storms, with one presidential declaration in effect and another expected soon. A hurricane-like event had produced 100 mph winds and a storm surge that flooded the Canal Park area of Duluth, causing \$25 million in damage. The state had experienced 14 HRCQ shipments that were coming north to avoid states with shipment fees, despite federal regulations requiring direct routes for the purpose of safety and security. When the new administration in Minnesota takes office, the state will likely review its fee and escort law. Minnesota is working on radioactive shipment tracking “board” to streamline information-sharing with the affected local governments.

- g. Missouri: Ms. Drake reported that she and Ms. Studer had been coordinating on trying to track HRCQ shipments in their states. Shippers often try to avoid these states and Iowa because they charge fees on HRCQ shipments. Nordion has started shipping through Canada in the summer months, which led to a dramatic drop in the number of shipments coming through Missouri. This practice has resulted in a reduction in revenue for Missouri's training program. It is not clear whether North or South Dakota are affected by Nordion's routing practices. With winter coming on, Nordion is shipping through Indiana and Missouri more often now. Missouri is interested in DOE's reclassification of "high-level radioactive waste" to base the classification on radioactivity instead of origin. There may be potential impacts on the states as a result. Ms. Janairo will share the Federal Register notice and the committee will consider whether to submit comments.
- h. Ohio: Michael Snee reported that Dan Fisher had retired from the Public Utilities Commission of Ohio. First Energy has filed for bankruptcy and is shutting down four nuclear units, including two plants in Ohio (Davis-Besse and Perry). Legislation to subsidize the continued operation of the Ohio plants is opposed by Governor Kasich and the Ohio Legislature. The new governor, however, may be more willing to consider assisting the utility. The shutdown of the plants will reduce funding to the state for emergency preparedness, directly impacting five FTEs and the state's nuclear calibration laboratory.
- i. Wisconsin: Adam Davenport reported that the state is experiencing Nordion shipments. Paul Schmidt acknowledged and thanked the speakers from SHINE and NorthStar and cited recent special articles in the Wisconsin State Journal regarding [SHINE](#) and [NorthStar](#). Wisconsin is one of the regulators of the companies' facilities in the state.
- j. New Jersey: Jerry Humphreys reported that Oyster Creek nuclear plant just went into decommissioning status. Exelon will sell the plant to Holtec, which indicates it can complete decommissioning in eight years. Hope Creek, also in New Jersey, is the second-largest operating nuclear facility in the country. Help from the state would make it possible for the plant to continue operating.
- k. Prairie Island Indian Community: Heather Westra reported that Exelon just had a decommissioning filing with the NRC. PIIC said the Prairie Island plant should be ordered to look at third party decommissioning similar to what will happen for Hope Creek. It appears that Holtec may move the spent fuel from decommissioned plants to its facility in New Mexico, if constructed. Ms. Westra added that, in October, TRMTC hosted a well-attended NTSF webinar on the role and authority of Tribes in radioactive waste transportation. A paper on the same subject is in the works for the 2019 Waste Management Conference. TRMTC is also considering developing a planning guide similar to the Midwest's. Ms. Westra concluded by highlighting the value of state and tribal interaction that takes place at the regional meetings and at the TRMTC meetings.
- l. Omaha Tribe: Tim Grant acknowledged two tribal council members who were attending with him. He cited an ongoing need for training, otherwise it would not be a good idea to ship radioactive materials through the reservation.

3. **SHINE Medical Technologies Presentation**

- a. Katrina Pitas provided an overview of the company SHINE Medical Technologies; the importance of technetium-99 (a daughter product of molybdenum-99) for diagnosing heart and other medical conditions worldwide; the need for domestic production in the U.S.; and the safety and cost benefits of SHINE's process using an accelerator instead of a reactor to produce Mo-99. The company obtained a construction license from the NRC and the first production at the new facility in Janesville, Wisconsin, is scheduled to begin in late 2020/early 2021.
- b. In terms of transportation impacts, low-enriched uranium (LEU) will come up to Janesville from Y-12 at Oak Ridge National Laboratory in exclusive use truck shipments. Multiple shipments are expected the first year of operations, with one shipment per quarter beginning in late 2020. Shipments of products will take place by private jet from Southern Wisconsin Regional Airport, with truck as a backup option. International shipments will travel first by truck to O'Hare International Airport, then

by plane. LLW (Class C or lower) will be shipped by truck in solid form, at a rate of approximately 22 shipments per year. Options for disposal facilities include WCS in Texas, Energy Solutions in Utah, and Diversified Scientific Services in Tennessee. Some LLW will be stored onsite temporarily to allow radiation levels to decrease.

- c. Ms. Pitas's presentation is available here: <https://www.csgmidwest.org/MRMTP/documents/2018-RMT-KatrinaPitas.pdf>
- d. Chapter 19 of the Environmental Review for SHINE addresses the impacts of the facility, including transportation impacts. The chapter is available here: <https://www.nrc.gov/docs/ML1525/ML15258A415.pdf>.

4. U.S. Department of Energy Program Reports and Committee Discussion

a. Carlsbad Field Office

- i) Bobby St. John reported that WIPP is experiencing a temporary "Safety Pause" because not enough airflow is available underground. Shipments are arriving at WIPP at a rate of eight to 10 shipments per week, and DOE is still hoping to make shipments from Argonne National Laboratory later this year. Upgrades to the WIPP site include a new air ventilation system to increase airflow underground; a new filter building with a higher capacity than the current one; and a highway bypass of the original site bypass due to excessive use by the booming oil and gas industry.
- ii) Mr. St. John's presentation is available here: <https://www.csgmidwest.org/MRMTP/documents/2018-RMT-StJohn.pdf>.

b. Report on WIPP Road Show and Tour; Discussion

- i) Mr. Boswell reported on the WIPP Road Show that took place in the Midwest on August 20-23, 2018. Attendance was reasonably good. Attendees in Iowa had asked questions about how the states would be involved in assuring safety and security, as well as about the potential radiation hazard.
- ii) Mr. Horn reported on the WIPP tour that took place on October 16, 2018. Attendance was low due to the upcoming election as well as travel problems on the day before the tour. The attendees learned about WIPP, toured the underground and surface facilities, were briefed on the committee and the federal waste management program, and heard a presentation about Holtec's proposed spent fuel storage facility to be located in southeastern New Mexico.

c. Office of Packaging and Transportation

- i) Ellen Edge reported on the transportation and site cleanup activities of DOE's Office of Environmental Protection. She addressed DOE's public comment period on the interpretation of "high-level radioactive waste;" the recent release of an environmental assessment related to the disposal of Greater-than-Class-C (GTCC) low level radioactive waste; a new dynamic map of possible shipping routes; DOE's depleted uranium hexafluoride (DUF6) conversion project; and the internal restart of the process of converting DOE's Radioactive Material Transportation Practices Manual into an attachment to DOE Order 460.2A.
- ii) Ms. Edge's presentation is available here: <https://www.csgmidwest.org/MRMTP/documents/2018-RMT-Edge.pdf>.

d. NTSF-related Reports

- i) *Planning Committee:* Ms. Studer reported that webinars on WIPP Road Shows, the GTCC environmental assessment, and the ATLAS rail car are in the works. During the process of revising the NTSF charter, the West had expressed some concerns regarding the exclusion of local governments, specifically the "affected units of local government" near the Yucca Mountain site. DOE ultimately decided not to include the AULGs as NTSF members at this time.

- ii) *Communications*: Ms. Edge reported that the ad hoc working group recently held a conference call and decided to develop transportation fact sheets.
- iii) *Management Plan*: Ms. Edge reported that the plan is in good shape and will be updated once the revised charter is finalized.
- iv) *Spent Nuclear Fuel Rail/Routing*: Mr. Stead reported that this ad hoc working group had resumed its activities in September after an extended period of inaction. The group's main task is to work with the Federal Railroad Administration and the Association of State Rail Safety Managers to develop a reciprocal rail inspection program. The group will likely start from scratch instead of picking up the work done by DOE, the FRA, and the states previously in anticipation of shipments to Yucca Mountain.
- v) *NTSF Annual Meeting*: Ms. Clairmont and Kim Tyrrell reported that the Agenda Planning Committee had a rough agenda for the 2019 meeting. A Google document is available online for collecting ideas for sessions.

5. Commercial Vehicle Safety Alliance (CVSA) Report

- a. Mr. Horn provided an overview of CVSA; the North American Standard Level VI inspection program, including training, inspection procedures, data collection and reporting; program impacts on shipment safety; and the 2018 Inspection Report.
- b. Mr. Horn's presentation is available here: <https://www.csgmidwest.org/MRMTP/documents/2018-RMT-Horn.pdf>.

6. Association of State Rail Safety Managers Report

- a. Mr. Stead emphasized the importance of developing a relationship between the state regional groups and the Association of State Rail Safety Managers. The association's leadership will change significantly at the next meeting. A total of 31 states now belong to the association, with another three possibly joining in the next two or three years. Public safety is the highest priority, and state inspectors are as highly trained and qualified as the FRA inspectors. Chicago is the nation's largest rail hub, but California has the nation's largest rail safety program with over 40 inspectors.
- b. Mr. Stead's presentation is available here: <https://www.csgmidwest.org/MRMTP/documents/2018-RMT-Stead.pdf>.

7. Cooperative Agreement Group Reports

- a. TRMTC: Ms. Clairmont provided the report. Her presentation is available here: <https://www.csgmidwest.org/MRMTP/documents/2018-TRMTC.pdf>.
- b. Northeast Task Force: Uldis Vanags provided the report. The Task Force is still affected by shipments from Canada.
- c. SSEB: Christopher Wells provided the report. The South has held two WIPPTREXes in 2018 and will hold two more in 2019 (Georgia and Louisiana).
- d. WGA: Kevin Moss provided the report. Beginning in January, Mr. Moss will be the new staff person for the WGA WIPP Technical Advisory Group. WGA is working on an NTSF webinar on the WIPP Road Shows.
- e. WIEB: Melanie Snyder provided the report. WIEB board approved five policy papers in 2017 and is expected to approve four more this year. The committee is also trying to engage the rail industry.

8. NorthStar Medical Radioisotopes Presentation

- a. Thomas Mohaupt provided an overview of the company, headquartered in Beloit, Wisconsin, and its innovative method for producing Mo-99. The project was incentivized through the American Medical Isotope Production Act of 2012, by which Congress sought to establish a reliable domestic supply of Mo-99 and provide financial assistance for new technologies. NorthStar's RadioGenix system does not

rely on the irradiation of high enriched or low-enriched uranium. Missouri University Research Reactor (MURR) will irradiate enriched Mo, transport it to Beloit in a Type B cask, and the RadioGenix process will use accelerator irradiation to convert Mo-100 into Mo-99 for shipment to customers in Type A containers. This technology is potentially applicable to other medical isotopes. Shipments are expected to begin in 2019.

- b. Mr. Mohaupt's presentation is available here:
<https://www.csgmidwest.org/MRMTP/documents/2018-RMT-ThomasMohaupt.pdf>.

9. National and Regional Developments in the Nuclear Industry

a. Nuclear Energy Institute

- i) Rod McCullum reported on the status of the nuclear power industry, which provides 56% of the emissions-free electricity in the U.S. Improvements in efficiency have driven total generating costs down by 19%. Plants are shutting down, however, due to cheap natural gas. The trend in the industry is prompt decommissioning, which means getting spent fuel off site whether or not DOE comes to pick it up. Mr. McCullum offered two takeaways: 1) more low-level waste will be moving due to decommissioning, and 2) spent fuel shipments will move in five years. Given this projection, it is especially important for states and Tribes to be involved in transportation, because that is the subject around which opponents are organizing. Mr. McCullum said the states will likely be called upon to answer some of the questions regarding transportation. NEI is developing a transportation tabletop to demonstrate the process and is also developing the resources to support effective public communications.
- ii) Mr. McCullum's presentation is available here:
<https://www.csgmidwest.org/MRMTP/documents/2018-RMT-McCullum.pdf>.

b. Decommissioning Plant Coalition

- i) Brian Rude of Dairlyand Power Cooperative reported on the failure of the federal government to manage the nation's radioactive waste management program for commercial spent fuel. The nation has directly spent \$15 billion on Yucca Mountain, with another \$6 billion paid in damages to utilities and a projected \$25 billion in future liabilities. The current administration has not made any progress and actually created confusion by issuing contradictory statements that support both Yucca Mountain and Nevada's opposition to the repository. The coalition still wants to see a repository developed but believes consolidated interim storage will be faster and less expensive than Yucca Mountain. Mr. Rude said the loss of productive power plants makes no sense in an area of climate concern. He echoed Mr. McCullum's comments about the importance of state involvement in transportation because the public needs to understand how safe shipments are.
- ii) Mr. Rude's presentation is available here:
<https://www.csgmidwest.org/MRMTP/documents/2018-RMT-Rude.pdf>.

ATTENDEES

Committee Members:

Christopher Boswell, Iowa
Adam Davenport, Wisconsin
Tiffany Drake, Missouri (via telephone)
Greg Gothard, Michigan
Taylor Grabner, Missouri (for Tiffany Drake)
Kelly Horn, Illinois
Swapan Saha, Kansas (for Jonathan York)
Paul Schmidt, Wisconsin
Michael Snee, Ohio
Kaci Studer, Indiana

Other State Attendees:

Charles W. Adams, III, Wisconsin Department
of Health Services
Dwight Field, Wisconsin Emergency
Management
Jerry Humphreys, New Jersey Bureau of
Nuclear Engineering and Co-Chair,
Northeast Task Force
Jason Kephart, Indiana Department of
Homeland Security
Jerry Lee, Wisconsin Department of Health
Services
Larry Legro, Wisconsin Department of Health
Services
Joseph Ross, Wisconsin Department of Health
Services

Tribal Representatives:

Tim Grant, Omaha Tribe of Nebraska
Alan Harlan, Omaha Tribe of Nebraska
Heather Westra, Prairie Island Indian
Community

Speakers:

Tanksi Clairmont, National Conference of
State Legislatures
Ellen Edge, U.S. Department of Energy
Rod McCullum, Nuclear Energy Institute
Thomas Mohaupt, NorthStar Medical
Radioisotopes, LLC
Kevin Moss, Western Governors' Association
Katrina Pitas, SHINE Medical Technologies
Brian Rude, Dairyland Power Cooperative
Melanie Snyder, Western Interstate Energy
Board
Bobby St. John, Waste Isolation Pilot Plant
Michael Stead, Illinois Commerce Commission
Uldis Vanags, CSG Eastern Regional
Conference
Christopher Wells, Southern States Energy
Board

Other Attendees:

Daniel J. De Dries, NorthStar Medical
Radioisotopes, LLC
Tony Dimond, Brotherhood of Locomotive
Engineers & Trainmen
Lisa Janairo, CSG Midwest
Marc M. Kuney, NorthStar Medical
Radioisotopes, LLC
Kim Tyrrell, National Conference of State
Legislatures

ACTION ITEMS

States:

- All: By November 16, provide information on requirements for HRCQ shipments in the appropriate tab of the [Midwest's Google sheet](#) (DOE information request).
- All: Mark calendars for June 10-13, the dates of the National Transportation Stakeholders Forum Annual Meeting and the committee's spring meeting. The meeting will take place at the Westin Crystal City near Washington, DC. The committee meeting agenda may include:
 - A presentation by one or more representatives of the Tribal Radioactive Materials Transportation Committee (TRMTC) regarding ongoing activities and opportunities for interaction between the two committees.
 - A discussion of what the impact will be on states and how they will manage if the private sector is able to begin shipping spent fuel in the next five years.
- All: Consider whether to comment individually and/or as a committee on [DOE's interpretation of the definition of high-level radioactive waste](#).
- Kaci Studer will serve as Co-Chair in 2019-2020.
- Kevin Leuer will succeed to the position of Immediate Past Chair in 2019.
- Kelly Horn will be the Committee Liaison (Gubernatorial) to the Midwestern Legislative Conference and will plan to attend the MLC Executive Committee meeting in Chicago on July 21.
- Paul Schmidt will represent the Midwest at the WIEB High-Level Radioactive Waste Committee's Fall 2018 meeting in San Diego on December 4-5.
- Greg Gothard and Kaci Studer are both available to attend the TRMTC meeting on January 23-25 in Washington, DC.
- Greg Gothard and Kelly Horn will attend the Nuclear Energy Institute's Used Fuel Management Conference in West Palm Beach, Florida, on May 7-9.
- Kelly Horn will share the NEI Transportation Tabletop scenario and coordinate with Minnesota, Wisconsin, and CSG Midwest regarding attendance at the tabletop at Prairie Island on May 21.

Speakers:

- ✓ Katrina Pitas will send Lisa the link to the environmental assessment for the SHINE facility.
- Ellen Edge will provide Lisa with a contact to receive any correspondence related to DOE's revision of Order 460.2B and the accompanying Attachment of Transportation Practices (formerly the Radioactive Material Transportation Practices Manual).
- Ellen Edge will share the link to DOE's new "Possible Routes" interactive map.
- Rod McCullum will send Lisa the NEI fact sheet when it is available.
- ✓ Mike Stead will send Lisa information on the new leadership team for the Association of State Rail Safety Program Managers after its annual meeting.

Staff:

- ✓ Lisa will arrange for all meeting files and follow-up information to be posted on the committee's web site.
- ✓ Lisa will prepare and circulate the meeting summary before November 30.
- Lisa will circulate and/or post information provided by the speakers.
- ✓ Lisa will coordinate with staff from the other regions and TRMTC regarding a possible letter to DOE's Order 460.2B Working Group.

- Lisa will relay NTSF meeting and webinar suggestions to TRMTC and the NTSF Planning Committee:
 - WIEB Policy Papers
 - FEMA Rad Training Focus Group Catalog
 - NEI Transportation Tabletop
 - HLW Interpretation
 - State and Tribal Preparedness for Near-Term Private Spent Fuel Shipments
- ✓ Lisa will send the Greater-Than-Class-C notice to the committee.
- Lisa will lead the committee's Regional Tribal Engagement work group:
 - Recruit representatives of Nebraska and TRMTC.
 - Schedule calls beginning in January.
- Lisa will lead the committee's Regional Outreach work group:
 - Schedule calls beginning in February.
 - Circulate information on the legislative sessions for the purpose of scheduling a webinar.
- The new policy analyst will lead the committee's Decommissioning Guidance work group:
 - Recruit a Nebraska representative.
 - Schedule calls beginning in November/December.
 - Complete the draft guidance for committee approval at the June 2019 meeting.
- The new policy analyst will lead the committee's Planning Guide work group:
 - Schedule calls beginning in January.
 - Coordinate with TRMTC to update the tribal information.
 - Work with the states to develop a revised draft for committee approval at the June 2019 meeting, with publication of a new print edition to follow in July.
- In January, Lisa will seek new legislative appointments and new gubernatorial appointments for any states that elect new governors in 2018.
- ✓ Lisa will send Paul an invitation to attend the WIEB meeting.
- Lisa will contact the Office of Secure Transport regarding Wisconsin's interest in an outreach event.