



2025 Annual Report to the Legislature

High-level radioactive waste transportation emergency response
plan status and the state's accident response capability

February 1, 2026

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Legislative requirement

Minnesota Statute, section 116C.731, requires the commissioner of the Minnesota Department of Public Safety (DPS) to report annually to the legislature on the status of the plan for emergency response to a high-level radioactive waste transportation accident and the ability of the state to respond adequately to an accident.

DPS' Homeland Security and Emergency Management (HSEM) division updates the Minnesota Emergency Operations Plan (MEOP) annually. HSEM coordinates this task with all state agencies represented on the Minnesota Emergency Preparedness and Response Committee. The MEOP addresses response to all hazards, including high-level radioactive waste (HLRW).

HSEM contacts the Minnesota State Patrol, the Minnesota Department of Health (MDH) and the Minnesota Department of Transportation (MnDOT) annually to solicit specific comments regarding the status of HLRW transportation aspects of the MEOP. The Minnesota Pollution Control Agency (MPCA) no longer has accident assessment responsibilities with respect to radioactive materials.

This year, several agencies forwarded changes pertaining to the content of the MEOP. Those changes were incorporated into the plan.

Minnesota Department of Health (MDH)

To ensure sufficient personnel are available for all types of radiological responses, including HLRW accidents and incidents, nine MDH staff members attended a Nuclear Regulatory Commission Federal Radiological Assessment System for Consequence Analysis (RASCAL) training on the computer code for making dose projections for atmospheric releases during a radiological emergency.

MDH continues to partner with Minnesota Responds Medical Reserve Corps in maintaining and expanding a registry of radiation professionals willing to assist during a radiological event. Minnesota Radiation Emergency Volunteers (MREV) currently has 89 members throughout the state. Trainings and exercises for these volunteers are coordinated through MDH in conjunction with Department of Human Services (DHS).

In 2024, MDH became active in the FEMA Office of Emergency Threats Radiological Operations Support Specialist (ROSS) program. A ROSS is a radiological/nuclear incident subject matter expert (SME) who acts as a state and local resource to assist emergency managers and first responders in navigating the unique challenges of radiological incidents and emergencies. MDH's radiation control program serves as the Minnesota State ROSS Coordinator (SRC). There are currently three ROSS programs in Minnesota and more than 600 ROSS programs nationwide. In the past calendar year, Minnesota's ROSS program participated in the national Cobalt Magnet nuclear power plant exercise, a national nuclear weapon detonation exercise, and advised Michigan on a radiological dispersal device response. This was in addition to the state's annual FEMA-evaluated nuclear power plant drill.

MDH also attended DPS' State Fire Marshal (SFM) division's Emergency Response Team annual training for radiological transportation response.

Minnesota Department of Transportation (MnDOT), Office of Freight and Commercial Vehicle Operations (OFCVO)

MnDOT OFCVO currently has no hazardous materials specialists.

The U.S. Department of Transportation (USDOT), Federal Motor Carrier Safety Regulations (FMCSR) require a Commercial Vehicle Safety Alliance (CVSA) level six pre-trip inspection be completed on each vehicle carrying highway route-controlled quantities (HRCQ) of radioactive materials. In 2025, there were no shipments of HRCQ radioactive materials identified as originating in Minnesota. Thus, there were no level six inspections needed.

As of Jan. 1, 2026, OFCVO will no longer be on-call 24 hours a day, seven days a week, through the Minnesota Duty Officer, for any incident where hazardous materials, including radioactive materials, is being transported. MnDOT hazardous materials specialists no longer review HLRW pre-shipment notices.

Carriers transporting HRCQ (Highway Route Controlled Quantities) of radioactive materials must possess a hazardous materials safety permit from USDOT. To maintain the safety permit, carriers must hold a satisfactory safety rating with USDOT. Carriers with less-than-satisfactory ratings, or high crash or out-of-service inspection rates, are not issued safety permits or will have existing permits suspended.

Minnesota State Patrol

The Minnesota State Patrol currently has three commercial vehicle inspectors certified to conduct CVSA level six radioactive inspections (two in the Twin Cities Metro Area and one near Detroit Lakes). They will perform specialized inspections on transuranic and HRCQ (Highway Route Controlled Quantities) radioactive materials entering Minnesota from another country and HLRW (High Level Radioactive Waste) shipped through Minnesota. At this time no shipments requiring level six inspections have come into Minnesota from Canada. State Patrol receives notification from HSEM on all shipments of transuranic and HRCQ radioactive materials and HLRW passing through Minnesota.

Minnesota Department of Public Safety's Homeland Security and Emergency Management (HSEM) division

HSEM coordinated the collection and dissemination of information to state and federal agencies on the shipments of high-level radioactive materials in Minnesota. No shipments of high-level radioactive materials occurred in 2025.

Minnesota Department of Public Safety's State Fire Marshal (SFM) division

SFM maintains an on-call hazardous materials response person 24 hours a day, seven days a week.

Long-term spent fuel storage update

The U.S. Department of Energy (DOE) is charged with taking all actions necessary to permit the future shipment of HLRW and spent nuclear fuel to a federal repository. A new location for a repository remains under review.

The Nuclear Regulatory Commission is evaluating the licensing for onsite dry-cask storage on an ongoing basis and is expected to extend these licenses until interim or long-term storage facilities are available. The Monticello and Prairie Island Nuclear Generating Plants continue to add capacity to their onsite dry cask storage facilities and will need to continue expanding capacity until a federal repository is established and spent fuel can be shipped.

Note: Substantial planning, training and exercising will be needed in Minnesota in advance of any spent nuclear fuel shipment campaigns.

Transportation fees

An ongoing concern is the availability of funding for state agency HLRW transportation accident and incident preparedness, security escorts and response activities.

Minnesota Statute 116C.731, subdivision 3, requires shippers to pay a \$1,000 fee for each vehicle carrying HLRW through the state of Minnesota. This fee applies only to spent nuclear fuel shipments and does not offset the true cost of inspection and escort. Fees charged by other states include HRCQ of radioactive materials and radioactive material in quantities of concern (RAMQC), and vary from \$2,500 per truck to \$3,100 per cask, with some trucks carrying as many as six casks in a single shipment.

Minnesota statute does not require fees for HRCQ of radioactive materials or RAMQC, although HRCQ shipments require higher level inspections and may require security escorts in the future. There were no fees collected in Minnesota last year because no radioactive material shipments contained spent nuclear fuel.

The statute also mandates the fees be deposited in the state's general fund, not a dedicated revenue fund for transportation security, preparedness and response, making them inaccessible to the state agencies incurring expenses to prepare for, escort and respond to HLRW shipment emergencies. This seems to conflict with the federal law, which requires the fees to be used exclusively for the costs associated with safe radioactive material transportation or response to a radiological incident.

Because the two Minnesota nuclear generating plants are owned by a private company, future spent nuclear fuel shipments to a repository from the plants may not be subject to the provisions of section 180(c) of the U.S. Nuclear Waste Policy Act. As a result, the state of Minnesota may not be eligible to receive DOE funding to cover the cost of planning, training and exercising necessary to adequately prepare for the shipments. Nor will federal funding be available to purchase additional radiation detection and protection equipment, should Minnesota determine such equipment would be beneficial. Because the starting date and number of potential Xcel Energy shipments to a repository each year can only be estimated at this time, planning for them is extremely difficult.

2025 radioactive material shipments

Minnesota saw a decrease in the number of shipments of radioactive materials (cobalt 60) in the last year. In 2025, there were no HLRW shipments and no HRCQ shipments transited.

In the coming year, HSEM will continue to track HLRW issues that may impact the state.

