

RADIOACTIVE MATERIALS TRANSPORTATION ACCIDENT PLAN (RAMTAP)

I. AUTHORITY

The Nebraska Radioactive Materials Transportation Plan (RAMTAP) is adopted pursuant to the Nebraska Emergency Management Act (sections 81-829.36 to 81-829.75) and the Radiation Control Act (sections 71-3501 to 71-3520). For this plan, “radioactive material” means any material having a specific activity greater than 0.002 microcuries per gram ($\mu\text{Ci/gm}$) [49 CFR 173.403(y)(1)].

II. PURPOSE

It is the purpose of this plan to:

- A. Serve as a guide for state agencies and to provide guidelines to assist local planners.
- B. Provide an effective means for state agencies to interface with local governments in response to any transportation accident involving radioactive material (i.e., high level radioactive waste, low-level radioactive waste, nuclear weapons, etc.), which is transported through Nebraska.
- C. Provide reasonable assurance that government efforts will be directed towards mitigating the consequences of such accidents and appropriate measures will be taken to protect health and safety as well as to prevent damage to property.
- D. Delineate responsibilities and provide for cooperation and coordination of State agencies with local governments and their agencies, to include coordination with other states in an effective response to accidents involving radioactive materials throughout Nebraska.

III. RESPONSIBILITIES

The responsibilities of the shipper/carrier/licensee, responsible political sub-division, state and federal governments are listed in Attachment 1.

IV. CONCEPT OF OPERATIONSA. Command and Control1. Responsible Political Sub-division

An incident commander is designated at any radioactive material transportation accident following the Incident Command System and established procedures of the responsible political sub-division in whose jurisdiction the accident occurs.

2. State

- a. The state's initial response actions will be based on the priority needed to rapidly begin health hazard assessment by the Nebraska Department of Health and Human Services (DHHS), Division of Public Health and the Department of Environmental Quality (DEQ), as required. DHHS, Division of Public Health will make early recommendations as to the potential scope of the initial State response operation and will coordinate support requirements with the Nebraska Emergency Management Agency (NEMA). Much will depend on the incident, radioactive material and/or radiation release, and travel time to the scene. Thus a wide range of response/increased readiness measures could be applied. The level of response effort must be adjusted to meet the urgency of the situation.
- b. On receipt of information indicating the need for state response, the State Emergency Operations Center (EOC) may be activated and a state emergency proclamation may be made by the governor. State agencies having responsibilities under this plan will be notified and kept informed of the progress of the incident.
- c. When the SEOC is activated, agency representatives, as required, will relocate to the SEOC and establish contact with their personnel in the field. If the decision is made to send the state field liaison team to the incident/accident scene, the SEOC will coordinate needed support arrangements. A governor's authorized representative (GAR) may relocate to the incident/accident scene, and operate with the state field liaison team. If relocated, the GAR will coordinate state agency activities responding to the emergency. The GAR will also be a point of decision for implementation of protective actions as recommended by scientific/technical advisors. While the SEOC will maintain close coordination with the state field liaison team to ensure exchange of information, it will be the principle point of contact with the state EOCs of adjacent states. Throughout the duration of the emergency, the SEOC, the state field liaison team, and the responsible political sub-division EOCs will be points of coordination

for governmental operations. The SEOC or if operational, the state field liaison team, will be the focal point for coordination of outside assistance to the responsible political sub-division's EOC.

- d. Early efforts will be made to initiate coordination with the emergency organization and management of the carrier (whether air, motor, or railroad) concerned. DHHS, Division of Public Health, and if required, Department of Environmental Quality (DEQ) personnel, will work with the responsible political sub-division, and shipper/carrier representatives in order to begin orderly planning for the eventual clean-up, decontamination, and re-entry.

B. Radiological Assessments

1. Initial assessment will be conducted by the local agencies involved. If radiological assessment is beyond the capabilities of local agencies, the Nebraska Emergency Management (NEMA), based on the requirements of the responsible political sub-division, will contact the DHHS, Division of Public Health, and other agencies as necessary, to complete a radiological survey the scene. After the survey, DHHS, Division of Public Health may declare that a radiological hazard exists and may direct that a control zone be established and maintained until the hazard is removed.
2. Responsible political sub-division agencies are responsible for the control of radiation exposure to the general population, emergency workers; and for assistance to emergency medical personnel regarding any possible radiation hazards. DHHS, Division of Public Health will provide assistance.

C. Containment

1. Containment actions are those initial actions necessary to protect the public health, safety, welfare, and the environment. Such actions include:
 - a. Providing first aid to the injured.
 - b. Securing the area, keeping all unauthorized personnel away from the incident to the extent possible.
 - c. Staying upwind of the accident scene.
 - d. Obtaining the names, addresses, and telephone numbers of all persons involved.
 - e. Detaining non-injury persons involved with the incident until monitored for and found free of any contamination.

- f. Building coffer dams to prevent possible run-off of radioactive materials.
 - g. Determining if other hazardous materials are present, which hazards are greater, and taking such actions as necessary to reduce the dangers and damage presented by the greater hazards.
2. If it is determined that a radiological hazard exists and based on a request from the chief executive of the responsible political sub-division, DHHS, Division of Public Health will oversee and coordinate all activities necessary to minimize or eliminate the hazard.
 3. Containment actions shall be performed by personnel of the carrier and shipper or their contractors under the direction of the responsible political sub-division and with the consent of DHHS, Division of Public Health, and the Department of Environmental Quality (DEQ), when applicable.
 4. In those situations where nuclear weapons are involved, the U.S. Department of Energy (DOE) Radiological Assistance Program (RAP) team will provide technical support. Time permitting; actions will be taken in consultation with the technical staffs of the Department of Health and Human Services, Division of Public Health, the Nuclear Regulatory Commission (NRC), the Federal Department of Energy (DOE), and the shipper.

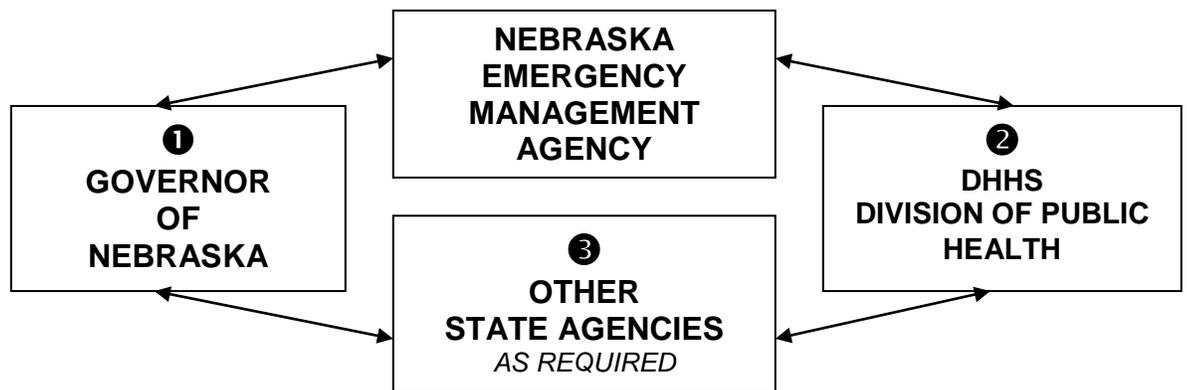
D. Mitigation and Recovery

1. Once the radiological hazard incident site is secured and no further containment measures are necessary, actions will be taken to recover and dispose of the radioactive material from the affected areas. Mitigation and recovery actions shall be performed by personnel of the carrier and shipper or their contractors. The responsible political sub-division and the DHHS, Division of Public Health, will oversee and coordinate those activities necessary to minimize or eliminate the hazard.
2. State personnel will not participate in actual mitigation and recovery activities, unless requested by the responsible political sub-division.
3. Recovery operations will be inspected by DHHS, Division of Public Health to determine the levels of radiation reduction and radioactive contamination.
4. Once the radiological hazard has been eliminated and a determination made that no other non-radiological hazards exist, the accident scene will be declared safe by the responsible political sub-division with advice from DHHS, Division of Public Health, and as required, the Department of Environmental Quality (DEQ).

V. RADIOACTIVE MATERIALS TRANSPORTATION ACCIDENT NOTIFICATION

A. Radioactive materials transportation accident notification may come from many sources. However, when the responsible political sub-division’s initial responding agency receives a report of an accident or incident involving radioactive material, the following procedures and notification will be implemented:

1. The initial responsible political sub-division’s responding agency will request as much information as possible from the reporting party as to the type of accident, injuries, road blockage, fire, spilled cargo, etc., for the Incident Report. See attached.
2. Concurrently, the responsible political sub-division will dispatch emergency response personnel and notify the Nebraska Emergency Management Agency (NEMA) by calling 402-471-7421.
3. It is **critical** that the Nebraska Emergency Management Agency (NEMA) in Lincoln be given the ***name and call-back telephone number of a first responder who has information*** pertaining to the accident/incident. The ***first responder*** should be able to provide answers to the questions listed in Attachment 2 for the health physicist who will return the telephone call to determine if a state response is warranted and if necessary, what type of state response is necessary as well as if federal authorities need to respond.
4. NEMA will then contact all state agencies needed to provide assistance, beginning with the governor and the DHHS, Division of Public Health, concurrently.



B. If the responsible political sub-division agencies dispatched to the scene do not have trained personnel and radiological detection instruments, the closest available personnel trained in radiological monitoring and instruments will be located either through the local emergency management director or through the Nebraska Emergency Management Agency (NEMA) and brought to the scene by the most expeditious manner.

VI. RESPONSE PHASES

Operation and response activities in radioactive materials incidents can be categorized into five relatively distinct phases. Each specific incident will require that knowledge, judgment and discretion be used since not all recommended actions are necessary, adequate or applicable in each case.

A. Phase I – Discovery and Notification

1. Upon notification that an incident has occurred, the local hazardous materials response plan should be implemented and the Nebraska Emergency Management Agency (NEMA) notified for implementation of part or all of the State Emergency Operations Plan and this annex, as necessary.
2. Due to the sensitive nature of the radioactive materials incident which could easily cause wide spread concern, public notification and warning information should be carefully prepared and be as specific as circumstances permit. Warnings should include sufficient information so the public can take appropriate protective actions. Specific hazard area limits should be given as soon as possible, and any warning information given to the public should be repeated on a periodic basis.

B. Phase II – Evaluation and Initiation of Action

1. The first emergency response agency should assume control (incident command) over the accident scene upon arrival at the scene. The incident commander (IC) will assess the situation and give instructions to all other emergency personnel in accordance with local procedures and as provided by the IC's technical training, experience and knowledge.
2. The following initial response actions should be implemented:
 - a. Assess the incident.
 - b. Perform life-saving rescues and emergency first aid.
 - c. Identify potentially contaminated individuals and control their movement.
 - d. Establish control zones and protect the area of the incident.
 - e. Summon assistance (The IC will determine appropriate agency expertise required).
 - f. Minimize contact with the radioactive material.

- g. Notify a DHHS, Division of Public Health, health physicist through NEMA.

C. Phase III – Containment

1. The carrier and shipper shall take all appropriate and necessary initial actions to protect the public health, safety and welfare; wildlife; and the environment. Initial responders shall inspect measures taken by the shipper and carrier to ensure adequate containment is achieved as per Department of Health and Human Services, Division of Public Health instructions. Once DHHS, Division of Public Health arrives, and if requested by the responsible political sub-division authorities, they will ensure all actions necessary for adequate containment and public health and safety have been taken by the carrier and the responsible political sub-division authorities.
2. Additional actions which may be necessary include:
 - a. A detailed, on-site radiological assessment.
 - b. Defining the area of contamination.
 - c. Identifying short and long term effects of contamination.
 - d. Evaluating effectiveness of containment.

D. Phase IV – Mitigation and Recovery

1. Once the radioactive materials incident area are secure and no further containment measures are necessary, actions will be taken to recover the radioactive material and to mitigate the effects of the incident. Based on a request from the responsible political sub-division, the DHHS, Division of Public Health, shall inspect recovery and mitigation activities of the carrier and shipper, and has the right to split samples with the carrier and the shipper to ensure that proper cleanup is achieved.
2. The mitigation and recovery phase shall continue until the responsible political sub-division authorities, in coordination with the DHHS, Division of Public Health, and the Department of Environmental Quality (DEQ) as required, determine that acceptable cleanup has been achieved.

E. Phase V – Documentation and Reporting

1. Documentation of Participating Agencies' Expenses and Losses
 - a. Detailed documentation of costs incurred in radioactive materials incident response is necessary for potential cost recovery and litigation purposes.

- b. All agencies, including state and responsible political sub-division authorities, who respond to transportation accidents involving radioactive materials may be eligible for reimbursement of their expenses by the carrier and/or the shipper. Therefore, complete and detailed documentation of all expenses incurred, actions taken at the scene, and those support those actions taken at the scene, are required for the purpose of:
 - i. Reimbursement for expenses, when applicable
 - ii. Legal claims
 - iii. Dose assessment
 - iv. Accident investigation
 - v. Statistical analysis; and
 - vi. Planning
 - c. All agencies, including state and responsible political sub-division authorities, who respond to transportation accidents involving radioactive materials shall submit the detailed documentation of expenses and losses to the responsible shipper and carrier.
 - d. The state may seek to recover response expenses from the responsible party through legal procedures. All agencies incurring such expenses should contact the state attorney general's office for coordination of operational and administrative cost recovery efforts.
2. Reports
- a. A chronological log of events shall be provided by participating governmental agencies, both local and state, to the director, Nebraska Emergency Management Agency (NEMA) and the Governor's Radioactive Materials Transportation Working Group within 30 days after the termination of the event. The report should also include in narrative form any pertinent information, observations, and comments on problems or recommendations for improvement, and expenses incurred.
 - b. The Governor's Radioactive Materials Transportation Working Group, in conjunction with NEMA, shall review operational incident reports to evaluate the effectiveness of policies, plans and procedures for improvement purposes.

VII. PROTECTIVE ACTION GUIDES

Protective action guides for initial response actions, local command and control, containment, and mitigation and recovery are found in Attachment 3.

VIII. EQUIPMENT AND SUPPLIES

- A. Equipment and supplies are the responsibility of responding agencies.
- B. If demand and requirements exceed the capabilities of the responsible political sub-division, including exhaustion of mutual aid resources, requests for additional supplies and equipment will be made to NEMA through the SEOC.

IX. COMMUNICATIONS

- A. The responsible political sub-division is responsible for establishing a local communications center when required.
- B. If state assistance is requested, a communications center will be established at the state field liaison team to coordinate the communication activities of those state agencies whose assistance has been requested.
- C. Equipment to support the state field liaison team will be comprised of that equipment in place on either a day-to-day application or on a contingency basis, together with mobile and portable equipment arriving with or as requested by the local emergency management director/coordinator.

X. FEDERAL RESOURCES

A description of Federal Resources is located in Attachment 4.

XI. PUBLIC INFORMATION

Information to the public and press will be provided/coordinated, as necessary, by the designated responsible political sub-division's public information officer (PIO), or upon request, by the DHHS, Division of Public Health PIO, in coordination with the Nebraska Emergency Management Agency (NEMA) PIO and the Nebraska State Patrol (NSP) PIO.

XII. ORGANIZATION, MAINTENANCE AND REVIEW

- A. The organizational structure for review, revision, and distribution of this plan, as well as post-accident review shall consist of the Governor's Radioactive Materials Transportation Working Group. The State Nuclear Waste Transportation Working Group shall meet at least semi-annually to develop and maintain a comprehensive emergency response plan, review planning guidance, review any incident which occurred since the last meeting, report resources and needs, and recommend legislation. The Governor's Radioactive Materials Transportation Working Group shall consist of representatives of:
1. Governor's Policy Research Office (Chair)
 2. Department of Health and Human Services, Division of Public Health)
 3. Nebraska Department of Environmental Quality (DEQ), as required.
 4. Nebraska Department of Roads (DOR), as required.
 5. Nebraska Emergency Management Agency (NEMA)
 6. Nebraska Hazardous Incident Team (NHIT), as required.
 7. Nebraska State Patrol (NSP)
- B. The Governor's Radioactive Materials Transportation Working Group shall be responsible for updating the information and procedures outlined in this annex. The annex shall be reviewed at least once annually.