

Rural Emergency Response Guide for Hazmat Rail Incidents

This guide is the companion document to the Rural Response to Rail Incidents training program and provides recommended practices for a railroad related hazardous materials incident. None of the recommendations in this document should take precedence over any federal, state, or local laws/regulations.

1. Start with Scene Size Up and Safety. The safety of the responders and the public is a top priority. Approach with caution and maintain situational awareness.

- The initial arriving officer should establish Incident Command and announce the location of the command post.
- Provide an initial incident size up of the incident to the emergency communications center (ECC) and incoming tactical units. This size up should be in the form of a CAN report (conditions, actions, needs) and include:
 - Incident location by cross street, landmark, or rail crossing markers or milepost ([Federal Railroad Administration Crossing Locator](#)).
 - Estimated number of cars involved, derailed, upright, and rolled over
 - If there is any release of product (gas and/or liquid).
 - If there is visible fire or smoke
 - Any environmental or structural exposures (water, storm drains, buildings, etc.)
 - Any known casualties
 - What actions are currently being taken (isolate the scene, offensive, defensive, or non-intervention operations)
 - What additional resources are needed.
- Maintain situational awareness around blocked crossings, both upstream and downstream of the incident
- Contact the railroad operations center directly or through the ECC to confirm that all train movements in the area have been stopped.

2. Establish contact with the railroad and the train crew at the scene. Under new federal regulations, the railroad is required to immediately provide a copy of the train consist in printed or electronic format to the incident commander. The consist is a list of the train cars in order and the products being carried. The consist may list the car order from front to rear or rear to the front. Confirm this with the conductor or train crew and instruct them to remain at the command post until relieved by another railroad representative.

- Position resources upwind, uphill, and upstream from the derailment, using air monitoring equipment if available.
- Use the “[AskRail](#)®” App to identify car contents using the car markings (reporting mark), its order location. Assess the potential behavior of released materials and identify areas at immediate risk and those downwind. Look for markers that indicate the presence of pipelines or utility conduits along railroad right-of-way. Determine if any of the spilled products are moving, the path of travel, and if any waterways, drainage ditches, or standing bodies of water are in the path. If the product or equipment is on fire, assess potential exposures.
- Employ a non-intervention strategy until the required information and resources are available to engage in offensive or defensive strategies. Start forming Unified Command.
- Consult the local Emergency Response Plan and have Emergency Management through the Emergency Operations Center (EOC) activate protocols for the safety of the public (i.e., evacuating or shelter-in-place).

3. **Secure the Scene and Identify Product(s).** Railroad crossing markers should be located at each public and private highway-rail intersection, and they have a unique identifying (ID) number. Two or more railroads may have tracks at the same location. Verify by checking all markers. There may also be milepost markers to aid in reporting the location.
- Use the FRA's "Rail Crossing Locator" app to assist if needed in identifying crossing numbers and track ownership
 - Utilize the [AskRail®](#) App to access updated train information on the affected rail cars and the products within.
 - Consult the most current edition of the U. S. DOT [Emergency Response Guide \(ERG\)](#) for initial actions based on the hazardous materials that have been identified.
 - Contact the Emergency Response Number located on the consist or side of the rail car to obtain a safety data sheet (SDS) and establish contact with the product manufacturer/shipper to obtain specific technical information about the hazardous products involved.
 - You can also contact CHEMTREC on 800-424-9300, if needed.
 - Ensure personnel are in appropriate PPE with SCBA based on the guidance in the ERG and implement air monitoring as quickly as possible.
 - Establish Exclusion (Hot), Decontamination (Warm), and Support (Cold) zones, sites for decontamination staging, and scene access points. Work with other responders to restrict entry into the hazard area per the established rules and protocols. Properly credentialed railroad personnel will need immediate access.
4. **Secure and monitor the railroad tracks** from both ends of the incident site until the railroad confirms track protection. Until confirmed by the railroad operations center, send law enforcement two miles on both sides of the incident to warn any oncoming trains.
5. **Working with the railroad is key.** Communicating with the railroad is essential for the safe and effective management of the incident. The success of railroad hazmat response begins before an incident - establishing a working relationship with the railroad hazmat response personnel and the local emergency response agencies is critical. The local fire department or other community response agencies should conduct a Hazardous Materials Commodity Flow Study so they know what hazardous materials are transported via rail in their community and can prepare for the type of incidents likely to occur based on those commodities.

It is imperative that responders know the railroad's emergency response points of contact (names, telephone numbers, etc.) and the commodities transported based on the study so they may prepare for the type of incidents based on those commodities. All personnel should be familiar with track safety procedures, rail terminology, and rail identification placards.

The Incident Commander should coordinate communications between the Emergency Communications Center (ECC) and the railroad(s) to ensure suspension of all train traffic near the incident site.

6. **Account for the safety of the train crew.** Advise the railroad of the condition and location of the train crew. If a member of the train is transported to a medical facility due to injuries, notify the railroad operations center with name of the crew member (if available) and the name/location of the medical facility. The railroad should also be advised of actions and protective measures underway (evacuations/sheltering in place, traffic control, and site access routes or points); and provide the location of the designated staging area for incoming resources and the location of the Incident Command Post. The railroad may request the name of the IC and how to contact the CP.
7. **Prepare to transition to Unified Command and implement the Incident Action Plan (IAP).** Local or Regional response plans should be consulted and implemented. Establish the required command and general staff positions under ICS. As additional agency representatives arrive, anticipate a transition to Unified Command. Operate within

the Incident Command Structure - establish roles, responsibilities, and accountabilities. Set tactical objectives for the first operational period.

Establish a planning section to develop the Incident Action Plan or IAP. The IAP establishes operational and tactical priorities for a specific operational period based on current conditions, available information, and resources. The IAP is revised for each operational period.

Establish a Finance Section and document all expenditures, labor, and equipment hours for reimbursement. Specify public resources and equipment that are on site and/or responding. Ensure ICS Forms are used and completed; response agencies need the following forms at a minimum for reimbursement:

- ICS 202 - Incident Objectives
- ICS 203 - Organization Assignment List
- 204 - Assignment List
- 215 - Operational Planning Worksheet

These forms and more can be found in FEMA's [Nation Incident System \(NIMS\) Incident Command System \(ICS\) Forms Booklet \(Sept. 2010\)](#).

Consider potential hazards, such as overhead or underground utilities, tunnels or bridges, blocked roadways (may affect evacuation), including structural and environmental exposures. Railroad tunnels are typically not equipped with ventilation systems or firefighting standpipe systems.

Railroad bridges may not have decks, walkways, or railing. Fall protection equipment should be used before entering a rail bridge.

Implement the Emergency Response Plan and call on mutual aid partners or additional resources (i.e., public works, Hazmat Teams, law enforcement agencies).

Checklists

APPROACH CAUTIOUSLY FROM UP WIND, UP HILL OR UPSTREAM:

- ☐ Stay clear of vapor, fumes, smoke, and spills
- ☐ Keep vehicle at a safe distance from the scene

SECURE THE SCENE & OBTAIN HELP:

- ☐ Isolate the area and protect yourself and others
- ☐ Contact train crew/railroad
- ☐ Advise your Emergency Communication Center to notify the appropriate agencies and request specialized hazmat resources

ASSESS THE SITUATION:

- ☐ Is there a fire, spill, or leak?
- ☐ What are the weather conditions?
- ☐ What is the terrain like?
- ☐ Who/what is at risk: people, property, or the environment?
- ☐ What actions should be taken—evacuation, shelter-in-place, or dike?
- ☐ What resources (human and equipment) are required?
- ☐ What can be done immediately?

IDENTIFY THE HAZARDOUS PRODUCTS USING:

- ☐ Placards
- ☐ Container labels
- ☐ Train Consist or other shipping documents
- ☐ AskRail App
- ☐ Rail Car and Road Trailer ID Chart In the ERG
- ☐ Safety Data Sheets (SDS)
- ☐ Knowledge of persons on scene
- ☐ Consult the applicable ERG guide page

RESPOND:

- ☐ Establish Incident Command, make initial command and general staff assignments and initiate development of the incident action plan (IAP).
- ☐ Conduct a thorough risk assessment before attempting any rescue to ensure it can be accomplished without undue risk to the responders.
- ☐ Enter only when wearing appropriate personal protective equipment with SCBA.
- ☐ Continually reassess the situation and modify incident objectives accordingly.
- ☐ Maintain scene safety for response personnel operating in the immediate area including command staff.
- ☐ Contact the product shipper/manufacturer using the 24-hour emergency telephone number found on the consist or shipping document for technical assistance.

Additional Hazmat Rail Related Resources

[ASKRAIL App](#)

[Bureau of Explosives - Association of American Railroads](#)

[Compendium of Rail Hazmat Response Training](#)

[FRA Crossing Locator App](#)

[Hazmat Reference and Data Bases](#)

[ICS Forms link](#)

[National Railroad Network Map](#)

[Railroad Glossary of Terms](#)

[TRANSCAER](#)

- [Railroad Emergency Response Resources](#)
- [Commodity Flow Study](#)

[Updated consist video](#)

[2024 DOT Emergency Response Guidebook](#)

Pre-incident Rail Response plan

Fire Department Representative: _____

Railroad – Class 1*: ☐ BNSF Railway ☐ Canadian National Railway ☐ Canadian Pacific Kansas City

☐ CSX Transportation ☐ Norfolk Southern Railway ☐ BNSF Railway ☐ Union Pacific Railroad ☐ Other

Railroad – Other: _____

Railroad Operations Center Telephone Number: _____

Railroad Hazmat/Dangerous Goods Officer: _____

Mobile telephone: _____

Hazardous material shipments being moved through region: (highest hazard, most volume, etc.) based on commodity flow study:

DOT Product Shipping Name:

UN Placard ID Number: _____

DOT Product Shipping Name:

UN Placard ID Number: _____

DOT Product Shipping Name:

UN Placard ID Number: _____

DOT Product Shipping Name:

UN Placard ID Number: _____

Map of the locations of rail lines:

Other considerations:

Evacuation/shelter-in-place procedures:

Law enforcement recommendations:

Air monitoring (incident responders and public)

- Availability of air monitoring equipment and 4 gas detectors:

- Location of specialized hazmat response teams:

Railroad Incident Tactical Worksheet

CHEMTREC: 800-424-9300

Location: _____

_____ Offensive Strategy

Date: _____ Alarm #: _____ Time of Incident: _____

_____ Defensive Strategy

Time Contained: _____ Time Released: _____

_____ Non-Intervention

Railroad: _____

Railroad Operations Center Phone Number: _____

Emergency Contact Number on the Consist: _____

Contact Name and Mobile Number: _____

Shipper/Manufacturer: _____

Contact Name and mobile number: _____

Weather:

Time: _____ Wind: _____ Temp: _____

Time: _____ Wind: _____ Temp: _____

Time: _____ Wind: _____ Temp: _____

Product Information:

DOT Shipping Name: _____

UN ID #: _____ Guide Page #: _____ DOT Hazard Class: _____ Car #: _____

Quantity: _____

DOT Shipping Name:

UN ID #: _____ Guide Page #: _____ DOT Hazard Class: _____ Car #: _____

Quantity: _____

DOT Shipping Name:

UN ID #: _____ Guide Page #: _____ DOT Hazard Class: _____ Car #: _____

Quantity: _____

Material Name: _____ Flash Point: _____

Specific: _____

Other Hazards (i.e., toxic, corrosive, etc.):

IMPORTANT: Identify the container and product before approaching any rail cars using the ERG, ASKRail, Consist, or other sources. Liquids, Solids, and odorless gases/vapors can be harmful - USE DETECTION CLUES TO PROTECT RESPONDERS. If using detection devices, the absence of readings does not indicate the absence of a hazardous condition.

SCENE SKETCH

SCENE DETAILS