Unit Train Derailment Site Case Study: Emergency Response Tactics

Executive Summary

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This case study is in response to increased railroad hazardous materials train derailments resulting in fires and other hazards in Illinois, Iowa, North Dakota and Virginia. These types of incidents have raised concerns from both emergency responders and industry. Key and unit train transport of commodities, both hazardous and nonhazardous materials, is not unusual in rail transportation. What is new is the extreme growth in rail transport of shale crude oil originating from the Bakken region (U.S.A.) and its associated unconventional hydrocarbon products, surpassing the high volume of ethanol rail transport, that have changed the traditional portfolio of unit train logistics. The project resulted in two publications: an Executive Summary and a Case Study Details. The Executive Summary consists of a Preface, Conclusions, Lessons Learned and an Appendix with an example of a Railway Emergency Operations Plan. The Case Study Details contains extensive discussion and details from the analysis of each of the derailment incidents. Together, this information is intended to be used as a training tool to review past incidents and actions taken by both public and private entities in response to railroad derailments. In no case is the data intended to be used to criticize or condemn response actions, but rather to share lessons learned and smart practices with other emergency responders who may face a similar response.

This document is a result of a grant issued by the U.S. Department of Transportation Federal Railroad Administration (FRA) to the Renewable Fuels Association to conduct a review of significant train derailment incidents involving hazardous materials such as crude oil, ethanol and other products that have occurred in the United States. Renewable Fuels Association greatly appreciates and recognizes the leading author of this information: International Association of Fire Chiefs.

About the Authors:

**Renewable Fuels Association (RFA)** is the national trade association for the U.S. fuel ethanol industry. Membership is comprised of numerous ethanol producers, both large and small, as well as suppliers to the industry and other interested parties. Founded in 1981, the RFA's primary objective is to promote public policy initiatives that increase the market for fuel grade ethanol produced from a variety of feed stocks including grains, agricultural wastes, and various biomass feedstock sources.

As the ethanol industry has grown, so has the Renewable Fuels Association's areas of responsibility to its membership. Today, the RFA not only focuses on legislative/regulatory and public policy type issues but also provides leadership for the industry on product stewardship. The RFA is a founding member of the Ethanol Emergency Response Coalition (EERC) whose sole mission is to develop resources for the emergency response community at large. The EERC is public/private partnership of volunteer organizations bringing emergency response expertise together to develop ethanol and other renewable fuel emergency response resources.

**International Association of Fire Chiefs (IAFC)** represents the leadership of firefighters and emergency responders worldwide, a powerful network of nearly 12,000 fire chiefs, chief officers, company officers and aspiring fire and emergency service leaders. IAFC members are the
world's leading experts in firefighting, emergency medical services, terrorism response, hazardous materials spills, natural disasters, search and rescue, and public-safety policy. The IAFC is one of the oldest professional associations in the United States, providing a forum for fire and emergency service leaders to develop professionally, exchange ideas and uncover the latest products and services available to first responders since 1873.

Founded by fire chiefs wishing to find common solutions to common challenges in the wake of great conflagrations in Chicago and Boston, the association continues to carry on their spirit in our strategic goals: lead, educate and serve.

Today, the IAFC provides the leaders of the fire and emergency service with:

- Representation on Capitol Hill
- Premier conferences and elearning opportunities
- Resources and programs to help implement model practices
- Online and face-to-face networking and collaboration
- Regional resources through IAFC divisions
- Subject-matter discussion and expertise development through our special interest sections, including EMS, fire and life safety, hazardous materials, health and safety, federal/military service and emergency vehicle management
Unit Train Derailment Site Case Study:

Emergency Response Tactics

CONCLUSIONS

There have been railroad train derailments involving both key\(^1\) and unit\(^2\) trains of hazardous materials resulting in fires and other hazards in North America and Canada in recent history. These incidents have raised concerns from both public and private organizations regarding the level of awareness, preparedness and availability of adequate resources to the emergency response community that may be called upon in the event of a derailment. Historically speaking, “unit train” transport of commodities, including both hazardous and nonhazardous materials, is not unusual in rail transportation however; the significant increase of hazardous materials transportation, specifically flammable materials being shipped by rail has experienced exponential growth in the last decade. The extreme growth in rail transport of shale crude oil originating from the Bakken region and its associated unconventional hydrocarbon products, surpassing the high volume of ethanol rail transport, have changed the traditional landscape of unit train logistics.

In an effort to assess the level of awareness and preparedness of the emergency response community to key and unit train derailments of hazardous materials, IAFC conducted an analysis into past incidents for RFA. This case study format was used to gather multiple perspectives of the emergency response actions taken when these incidents occurred, attempted to capture effective mitigation techniques and any necessary response equipment as well as identify best practices or gaps/impediments to an effective response to the incident. The project team identified five (5) unit train derailment incidents as the focus of the case study; incidents selected for the study included both rural and metropolitan incident site considerations, as well as varying physical states of the hazardous commodity (liquid and gaseous). Any geographic difficulties, such as incidents occurring on or near navigable water, were also considered. The Lester, IA liquefied petroleum gas (LPG) incident was selected due to its unique characteristics; this incident did not involve a key or unit train. Table 1 identifies the five incidents selected for the case study. A copy of the original grant proposal is located in the Appendix.

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\(^1\) Definition: A “Key Train” is any train with: One tank car load of Poison or Toxic Inhalation Hazard (PIH or TIH) (Hazard Zone A, B, C, or D), anhydrous ammonia (UN1005), or ammonia solutions (UN3318); 20 car loads or intermodal portable tank loads of any combination of hazardous material; One or more car loads of Spent Nuclear Fuel (SNF), High Level Radioactive Waste (HLRW) (Association of American Railroads Circular OT-55-N Effective August 5, 2013)

\(^2\) Definition: A “Unit Train” is a railway train that transports a single commodity directly from producer to consumer. Merriam Webster (November 2014.)
<table>
<thead>
<tr>
<th>Commodity</th>
<th>Incident Location</th>
<th>Date/ Time</th>
<th>Extenuating Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil</td>
<td>Lynchburg, VA</td>
<td>April 30, 2014, 2:00pm</td>
<td>Metropolitan area, navigable water</td>
</tr>
<tr>
<td>Crude Oil</td>
<td>Casselton, ND</td>
<td>December 30, 2013 2:11pm</td>
<td>Rural area, subzero temperature conditions</td>
</tr>
<tr>
<td>Ethanol</td>
<td>Tiskilwa, IL</td>
<td>October 7, 2011, 2:15am</td>
<td>Rural area</td>
</tr>
<tr>
<td>Ethanol</td>
<td>Cherry Valley, IL</td>
<td>June 19, 2009, 10:38pm</td>
<td>Metropolitan area</td>
</tr>
<tr>
<td>Liquid Petroleum Gas&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Lester, IA</td>
<td>November 4, 2012, 4:15am</td>
<td>Pressurized commodity</td>
</tr>
</tbody>
</table>

Table 1

The emergency response tactics taken in each of the five incidents reviewed were satisfactory as the situation was controlled and impacts to the public, personnel and the environment were minimized. Intuitively, in the incidents surveyed, the number of railcars involved in the derailment directly affected the level of emergency response required. The lessons learned from this case study can be broken down into three main categories: Preplanning, Resources and Communication.

Preplanning:
- Even though there was an overall awareness of the railroad activity in each of these incident areas, none of the fire departments had an emergency pre-plan dedicated to railway related incidents.
  - In one case, a county wide/ broad Emergency Operations Plan (EOP) was available to emergency management systems and the railroad hazardous materials teams were identified in the plan however, there was no official role or required actions of the rail personnel in the event of an incident. (Lynchburg)
  - Emergency response personnel were generally unaware of the types of hazards, (flammable, compressed, liquefied gas, etc.) being transported by rail. (Lester)
- Varying types of incident command training are used; however, training varies between Incident Command System (ICS) or National Incident Management Systems (NIMS). Incident command is a topic that is being planned for future training opportunities. (Casselton, Lester, Tiskilwa)

Resources:
- Mutual aid systems, when available, provided timely and much needed resources. (Cherry Valley, Tiskilwa)
- A general lack of training on tank car emergency response was common to each of the municipalities called to respond. (Casselton, Lester, Tiskilwa)

<sup>3</sup> Not a unit train related incident.
• Railroad emergency response resources are extensive however; the local fire department emergency response teams were unaware of these resources and their availability. (Casselton)

• None of the fire departments whether career, combination or volunteer had enough alcohol-resistant aqueous film-forming foam (AR-AFFF) to respond effectively to the ethanol incidents. (Cherry Valley, Tiskilwa) One of the volunteer fire departments had enough aqueous film-forming foam (AFFF) to respond effectively to the crude oil incidents. (Casselton) Also, dependent on the incident, water was a needed commodity. (Casselton, Tiskilwa, Lester)

Communication:
• Personnel were generally aware of the NIMS however; the lack of preexisting relationships between local emergency medical services (EMS)/railroad personnel/Federal investigators/etc. complicated the communication/line of command during an incident. This awareness extended both ways: first responder to rail personnel and rail personnel to first responder. (Cherry Valley, Lynchburg, Tiskilwa)

• Including rail personnel in the incident command structure was often times delayed or nonexistent. (Lynchburg, Tiskilwa) When rail personnel were involved in the incident command, improved communications and resources were identified which effectively assisted in controlling the incident. (Casselton, Lester)

• Often the train’s consist\(^4\) was not immediately available to the local emergency response command; many times the train consist had to be tracked down and not available until many hours into the incident. (Cherry Valley, Lynchburg, Tiskilwa)

LESSONS LEARNED

During the review of incident details and discussions with the emergency responders involved in each incident, key lessons learned by the response actions were collected alongside any gaps or impediments to an effective response to the incident. An important gap identified during the review of the incidents was the general lack of a comprehensive Railway Emergency Response Operations Plan. A Railway Emergency Response Operations Plan can be developed for each community, municipality, county, and/ or state that identifies key emergency response personnel, resources available, environmental considerations and other pertinent details that support an effective emergency response. The plan should identify:

• Emergency response leadership,
• their roles during an incident,
• environmentally sensitive areas such as drinking water intakes,
• protected wetlands, etc.,
• available emergency response resources.

Training personnel expected to respond to a railway emergency on key elements and actions that will be needed in the event of an emergency must be completed on some determined frequency. An example Railway Emergency Plan is located in the Appendix.

\(^4\) Consist definition: makeup or composition (as of coal sizes or a railroad train) by classes, types, or grades and arrangement. (Merriam Webster, November 2014.)
A catalog of key lessons learned from the responders appears below:

1. All of the derailments surveyed seem to be caused by a fault in the rail infrastructure, either from use (equipment failure) or weather (washout). None of the selected incidents were caused by any rail car issues (wheel failure, mechanical failure of a car component, coupling failure, brake failure, etc.).

2. In the selected incidents, there was a dequate response from the railroad. That said, there may have been opportunities for improved communications; for example; splitting rail crews after a derailment, one to walk back and apply brakes and the other to get back to the scene with the train consist. When a train crew notifies a dispatcher of a derailment, there appears to be a lag time before the railway dispatcher shares an electronic copy of the train’s consist with the local authorities. Maybe some basic NIMS and ICS training with exercises is needed for those rail personnel to realize the important function they play in the beginning of an incident with information exchange.

3. The incidents surveyed all had a direct correlation to the number and severity of derailed rail cars and speed. Certainly key and unit ethanol and crude oil trains are concerning, but trains carrying tank cars of other hazards classes such as: toxic inhalation hazard (TIH), (e.g. anhydrous ammonia, and chlorine) and flammable gases (LPG), also need to be considered.

4. None of the fire departments surveyed had a pre-plan for railway emergencies, even though some have tracks that split their municipality into two sections. This includes situations like unit trains being so long that every railway crossing in their municipality is blocked, rail line parallel some form of water, experiencing multiple trains a day and one also has Amtrak sharing the tracks with the freight rail operators. Even if the plan is a defensive one, it is a plan. No fire department can handle every possible emergency.

5. No fire department surveyed, whether career, combination or volunteer, had enough AR-AFFF foam for the ethanol incidents; same applies to AFFF foam for the crude oil incidents. Many departments cannot afford the cache needed. This includes overhaul and recovery operations of the damaged tank cars. Further, if municipalities cannot afford to stock the necessary quantity of foam and application equipment, they also cannot conduct training using the resource.

6. Some experiences with outside agencies were not positive in nature. These “outside agency visitors” have a role to play and the Incident Commander must be able to perform the duties leading the response while accommodating other agency interests. Bringing a more cooperative approach to an incident would be very helpful to the Incident Commander. Basic NIMS and ICS training is needed for these support personnel so that they realize the important function they play in an incident.

7. Many of the municipalities surveyed did not have an active or strong Local Emergency Planning Committee (LEPC).

8. At incidents such as a derailment, the ICS form must be completed to maximize the available resources, especially planning, logistics and finance. An Incident Action Plan (IAP) must be written, planning for the next operational periods must be accomplished, resources such as food and porta potties must be brought in, and costs for expenses must be captured for cost recovery purposes.

9. Must bring in experienced dispatchers to handle the multiple radio communications and scribes to capture orders, communications, benchmarks, and establish timelines.
10. Like most incidents, a train derailment is multi-dimensional. Putting these fires out is firefighting, but it is also a hazardous materials incident. Must ensure firefighters are trained to, at least, the Firefighter II/Hazardous Materials Operations Level; Officers must be at the Incident Commander Level.

11. Non-intervention, which is a defensive/offensive decision to let the fire burn, allows the resources on hand to focus on establishing a perimeter, protecting exposures, evacuating the public, and mustering the needed resources via mutual aid is a sound choice.

12. Railroads, through TRANSERAER and the Association of American Railroads (AAR), have been offering additional training to departments having derailments. More municipalities need to try to take advantage of this offer.

13. Four of the five surveyed departments utilized the U.S. Department of Transportation (DOT) Emergency Response Guidebook (ERG) at some point in their incidents. The evacuation section proved to be especially helpful.

14. Bring in extra alarms early for evacuation of civilians. This is normally a police function but many times they cannot muster up enough of their own mutual aid to accomplish the task and command must augment them with firefighters.

15. Bring in extra EMS units to assist with evacuation in anticipation of the number of limitations who could not self-evacuate.

16. Make sure a timekeeper is assigned to advise command every hour how long you are into the incident. After 5-6 hours, it is easy to lose track of time.

17. If you have access to ATVs, have them brought in for shuttling crews from staging areas to where needed. Once key apparatus is in place crews can just be rotated.

18. Do not take unnecessary risks for ethanol, crude oil, or any other hazardous product salvage in the event of incident.
APPENDIX

RFA Grant Application: Case Study Plan

There have been railroad hazardous materials/key and unit train derailments resulting in fires and other hazards in Illinois, Iowa, North Dakota, Alabama, Ohio, Illinois, Pennsylvania and Virginia in recent history. These types of incidents have raised concerns from both the industry and the emergency response community. Unit train transport of commodities, both hazardous and nonhazardous materials, is not unusual in rail transportation. What is new is the extreme growth in rail transport of shale crude oil originating from the Bakken region and its unconventional hydrocarbon products, surpassing the high volume of ethanol rail transport have changed the traditional portfolio of unit train logistics.

These serious derailment events have required emergency response actions at rail sites at any given time. The incidents have occurred in varied locations and emergency responders have had to deploy with resources on hand or close by for an effective response to these accidents. An important response aspect is to identify the varying techniques of hazard control used, the variety of resources needed, the potential personnel and safety equipment available, and availability of mutual aid used to address the incidents. All of the operations tactics will be reviewed to provide a clearer picture as to potential commonality and document best practices.

Conduct a case study review to assess the emergency response actions that have taken place in hazmat unit train, derailment incidents. The review and assessment will include:

The details of the tank car derailment: root cause, # of cars involved, commodity involved, date, time, weather and geographic conditions,

- The emergency response actions, including the local and regional responders, for the fire and other factors requiring control (flammability, spill pool, etc.), length of time for the flames to be extinguished, spill cleaned up, equipment available and equipment used by the responders, water/ foam, etc.
- Assess the adequacy of the response to control the hazards at a general level, identifying effective actions taken or actions taken that were less than effective, equipment that was necessary to control the hazards, the extent of any injuries to the emergency responders based on actions taken, etc.
- Query FRA Accident Data, hazmat accidents By State/Railroad that may be of interest for future assessments. (derailments for each year respectively). Listing only.
- Provide a listing of location of where the source of information for each accident (bibliography.)
- Establish a template to gather derailment/ emergency response information for future rail incidents.
- After Action reports by local, state and federal partners, list availability.

The Case study will include a review of a minimum of 5 derailment incidents that included hazmat: (2) crude oil, (2) ethanol, and (1) other.
Renewable Fuels Association staff, together with industry experts, will gather information for the case study report. RFA staff will develop an expert team to complete the Derailment Case Study product; the expert team will include industry experts who are skilled and experienced in hazardous materials (hazmat) response and experienced in the hazmat industry. RFA will lead the assessment of historic rail incidents for the study thus allowing an investigation into the emergency response and data gathering from the responder’s perspective. In no case is the data intended to be used to criticize or condemn response actions, but rather to share lessons learned and smart practices with other emergency responders who may face a similar response.

These serious derailment events have required emergency response actions at rail sites at any given time. The incidents have occurred in varied locations and emergency responders have had to deploy resources, from local cache or borrowed from regional cache, for an effective response to these accidents. This case study focused on identifying the varying techniques of hazard control used, the variety of resources needed, the potential personnel and safety equipment available, and availability of mutual aid used to address the incidents. All of the response tactics will be reviewed to provide a clearer picture as to potential commonality and document best practices.
Example: Railway Emergency Operations Plan

Introduction
A minor rail accident in or near Cass County could involve blocked tracks, vehicle traffic disruption, personal injuries or death, and concerns about hazardous cargos. A major rail disaster could include massive wreckage, deaths and the uncontrolled release of hazardous cargo.

The purposes of this document are to present a comprehensive plan for law enforcement, rescue, medical and firefighting operations to combat the effects of a major rail disaster occurring within Cass County, to establish procedures designed to protect life and property in the event of a rail disaster within or near Cass County, to protect the emergency scene, and to preserve evidence for further investigation. Cass County officials are in command of disaster operations. State and local response units, while under direct supervision of their own superiors, should coordinate their activities with Cass County officials. However, a major event could easily overtax local resources and Cass County authorities should be prepared to accept guidance and assistance from agencies trained, staffed, and equipped to handle mass disasters.

Environment
Rail carriers utilize over 100 miles of track in Cass County. While most of the track crosses agricultural land, it also travels through many Cass County communities. Rail carriers send freight trains through Cass County area 24-hours a day, seven days a week traveling at speeds of between 10 and 45+MPH. The mere presence of rail traffic poses a potential hazard to Cass County. The current local economy does not rely on the commercial value of rail traffic, but a rail emergency could create local economic hardships. There are impediments to emergency response for rail emergencies including: accessibility, limited water supply, and seasonal impacts.

Assumptions
A rail emergency or other large scale catastrophe may create a situation that taxes the normal resources of Cass County and surrounding communities.

Cass County and many of its communities would be vulnerable to a rail emergency. Probably no one community has sufficient law enforcement, fire, medical, rescue, and other trained personnel to cope with a major rail emergency. In recognition of this mutual need for support, personnel and material resources are identified for response and assistance. The severity of the disaster may be of such magnitude that additional assistance may be required from State and/or Federal resources.

Red River Regional Dispatch or the railroad dispatcher will be the first to be alerted to an impending or actual emergency through their normal communications network. Depending on the location of the emergency and the materials involved, there may be a need to implement other emergency response plans, i.e. hazardous materials. A rail emergency recovery operation will involve multiple agencies for days or weeks.
Organization
The Cass County EOP identifies the Sheriff’s Department as the Primary Incident Commander for man-made disasters including fire/ explosion, vehicle accidents and hazardous materials events. Secondary Incident Commanders are identified as Rural Fire Chief, Sector EMS, Public Health, and States Attorney.

Under the ICS, the responding Cass County Sheriff’s Department Deputy at the scene has the initial authority to direct and control emergency actions. Unified command will be employed to facilitate a coordinated response by all local, state and federal agencies. While the Incident Commander assumes operational authority, the Cass County Commission shall have the power to declare that a state of emergency exists when such an event has occurred or the threat of such event is imminent.

The Cass County EOC should be activated for incidents that could overwhelm the resources of Cass County. The activities of the EOC will be coordinated by the Office of Emergency Management.

The Incident Commander will establish a command post from which to direct and oversee all emergency operations. The Incident Commander will have the emergency site secured by the Cass County Sheriff’s Department. (Mutual aid may be requested from other available law enforcement agencies.)

The Incident Commander will designate a Joint Information Center (JIC) for the press/ media representatives.

The EMS Branch Director shall be the first qualified person on scene from the EMS responding agencies. This person shall retain EMS command until the command is passed to a superior from the Director’s agency, or the Director relinquishes command to someone else. The EMS Director shall appoint supervisors to EMS Divisions/ Groups.

Law Enforcement has responsibility to secure and control access to the scene for the duration of the incident. Law enforcement officials shall assume Incident Command, as appropriate, during the course of the incident. NTSB is one of the lead agencies responsible for investigating, determining probable cause, and reporting of all rail accidents within the United States.

Concept of Operations

A. Preparedness

Preparedness involves actions designed to save lives and minimize damage. It includes planning and training prior to an incident. All responders should:

- Maintain a resource inventory of equipment and manpower which could be utilized.
- Train personnel in the responsibilities and emergency duties required under this plan.
- Conduct periodic exercises that will test the effectiveness of this plan.
• Review and update the plan as needed based on exercises, emergency response or changes in policy.
• Follow the established communications network identified in this plan.

B. Emergency Response

Emergency response begins as soon a rail emergency is identified or reported. When 911 is notified of a rail emergency they will immediately make notifications per Red River Regional Dispatch Center protocols. The first responder on scene makes a preliminary assessment and notifies the dispatcher with all information available. The 911 dispatcher will immediately notify agencies according to the established protocol.

The first arriving Cass County Sheriff’s Deputy becomes the Incident Commander and will direct all emergency response actions until relieved as the Incident Commander. The Incident Commander assesses the need for additional resources. The Incident Commander will establish a command post and request agency representatives from the responding Rural Fire Department and EMS and appoint command and general staff as appropriate. In conjunction with the Incident Commander, law enforcement will set up security and establishes access and traffic control.

The responsible Rural Fire Department will assume Fire Command and in conjunction with the Incident Commander, set up the Fire Incident Command structure. The Fire Branch Director shall establish the fire ICS structure and direct firefighting strategies and communicate the need for additional resources to the Incident Commander.

The first qualified EMS provider at the scene shall assume EMS command and in conjunction with the Incident Commander, set up the EMS incident command structure in accordance with the Mass Casualty Incident (MCI) plan. The EMS Branch Director shall appoint supervisors to EMS Divisions/Groups. The Incident Commander will instruct emergency response personnel to not move property and debris associated with the wreckage unless there is imminent danger of items being destroyed, or unless they inhibit access to passenger rescue.

The Coroner is responsible for the identification, movement and/or removal of the dead. In the event a body has been moved prior to the Coroner’s approval, personnel moving the body shall make careful note of the location and condition of the body for the Coroner.

The NTSB, Railroad Police, the Federal Railroad Administration (FRA), the owner of the train, the owner of the tracks and other officials shall contact the EOC. The EOC will be in constant communication with the command post. Department heads, fire, law enforcement, EMS, or their designees will direct the activities of their respective response forces from the command post and/or the tactical operations center. The Incident Commander may request other personnel to report directly to the command post. The Incident Commander can request the closure of airspace around the incident by asking the dispatcher or EOC to relay this request to the air control tower. If a temporary closure is granted, the Federal Aviation Administration (FAA) will be responsible for air traffic in proximity to the scene, with immediate regulatory control of
airspace around the area. They will keep the airspace clear of intrusive air traffic, to the limits of the regulations.

The 911 dispatcher will notify the owner of the tracks to stop all rail traffic in the affected area.

C. Recovery

Recovery immediately follows emergency response. It involves direction from the Cass County Commission to restore to normal conditions and may include:

- The Cass County Commission may request a Disaster Declaration through the Department of Emergency Services and the Governor.
- Maintaining access control.
- Clearing debris.
- Restoring public utilities.
- Removing wreckage.
- Providing interment services.
- Providing emergency social services (shelter, clothing, food, etc.).
- Investigating the accident.
- Demobilizing emergency personnel and resources, which may include
- Emergency worker counseling.
- Adjusting traffic control perimeters.
- Continuing public information - general and health.
- Maintaining security in restricted areas.
- Providing for resident long-term counseling.

D. Direction and Control

The Incident Commander will control and direct all activities at the scene in accordance with the ICS. If a disaster is declared, the Cass County Commission will exercise executive authority over all disaster operations in Cass County in accordance with mission assignments contained in this plan. The command post will be established in a location near the scene. This is the center from which all emergency operations will be directed. Staffing for the command post, as directed by the Incident Commander, should be limited to primary responders: fire, law enforcement, EMS, communications, and others who may be appointed by the Incident Commander.

The news media will assemble at the JIC and when the Incident Commander deems the site accessible, be escorted to the scene staging area (designated by the Incident Commander). The EOC Public Information Officer (PIO) will disseminate information in conjunction with the Incident Command PIO staff. Lines of succession within the command structure will follow standard ICS practices.

Mission Assignments

A. Cass County Commission
If a State of Emergency is declared, the Cass County Commission is responsible for, but not limited to, performing the following functions: Directing the activation of the Cass County EOC which coordinates the efforts of volunteer agencies, state and federal authorities, public utilities and other support agencies during emergency response, and the recovery/ re-entry phase.

Designating a spokesperson authorized to discuss the emergency with the media. The spokesperson and the Incident Command Public Information Officer shall make joint news releases as appropriate and coordinate media requests for information.

Requesting state aid through the North Dakota Division of Emergency Services if the emergency is beyond local capability.

Maintaining communications and supporting the Incident Commander regarding all on scene operations.

B. The Incident Commander is Responsible for:

- Assessing the magnitude of the scene and reporting this to the 911 dispatcher.
- Directing and controlling all tactical operations.
- Assigning command and general staff as required.
- Assessing the need for additional resources.
- Establishing and staffing a command post/ operations post as needed.
- Designating the inner and outer perimeter (emergency site boundary).
- Conferring with the Cass County Administrator as requested.
- Evacuating the vulnerable population from the emergency site.
- Requesting utility shut-offs.
- Designating a staging area for media representatives.
- Lighting the emergency scene in coordination with public utilities and public works.
- Assessing the need to incorporate other response plans in the emergency response.
- Assuming responsibility for the safety of all emergency responders.

C. The responding Rural Fire Department(s) is Responsible for:

- Establishing initial incident command in accordance with the Incident Management System (IMS) and unified command.
- Establishing operational control of fire and rescue operations.
- Conducting and coordinating evacuation as necessary.
- Conducting search and rescue operations.
- Assuming responsibility for the safety and well-being of all involved firefighters.
- Assisting in body recovery as needed or requested by the Coroner.
- Staffing both the command post and the EOC.
- Identifying, securing, and managing necessary resources.
- Utilizing technical representatives and resources available from other agencies.
- Providing assistance and support services to state and federal agencies for the duration of the incident.
D. Cass County Sheriff’s Department is Responsible for:

- The Cass County Sheriff’s Department will be the lead law enforcement agency and will work in conjunction with other law enforcement agencies as appropriate.
- Initiating preliminary incident investigation, evidence preservation and collection, and incident documentation.
- Limiting access of unauthorized persons to the emergency scene.
- Establishing an inner and outer perimeter in conjunction with the Incident Commander.
- Activating traffic and crowd control systems.
- Establishing emergency vehicle ingress and egress.
- Coordinating activities with the Incident Commander at the command post.
- Maintaining law and order.
- Assisting with evacuation.
- Assisting with rescue operations.
- If it is necessary to remove mail and cargo from the wreckage to protect it from further damage, law enforcement will designate a secure area for these items.
- Assisting with body recovery and identification as needed or requested by the Coroner.
- Staffing the Law Enforcement Branch of the EOC/Tactical Operations Center (TOC).
- Coordinating security of the emergency site with the NTSB.
- Assuming incident command, as appropriate, during the course of the incident. Initiating the required actions for a post-accident alcohol/drug test when required by U.S. DOT for those possessing a commercial vehicle license.
- Acting as lead agency and coordinating responsibilities when railroad personnel report a criminal act. In accordance with federal law, if the act occurred on the train, the crime occurred in the jurisdiction where the train stops.
- Law enforcement response may include the railroad police.

E. Emergency Medical Services is Responsible for:

- Responding to the scene and establishing an EMS Branch in coordination with the Incident Commander.
- Coordinating all activities with the Incident Commander, and staffing the command post and the EOC.
- Designating Supervisors, and establishing appropriate divisions/groups (triage, treatment, transportation, etc.).
- Declaring an MCI in conjunction with the Incident Commander to activate the MCI plan. Establishing on-site advanced life support consistent with regional EMS and hospital plans and protocols.
- Establishing communication with hospitals regarding the number of incoming injured, severity of injuries, estimated time of arrival, and termination of patient flow.
- Keeping the Incident Commander informed of all operations.
- Maintaining all medical supplies and re-supply.
- Coordinating hospital destination for patients (transportation sector).
- Communicating and coordinating with the Coroner.
• Coordinating with health officials.
• Assuming responsibility for the safety and well-being of all EMS providers involved with the incident.

**F. The Emergency Manager is Responsible for:**

• Establishing an EOC, at the direction of the Cass County Commission.
• Coordinating staffing and functions of the EOC.
• Alerting departments, agencies and individuals assigned responsibilities under this plan.
• Establishing and coordinating communications with the command post to inform the Incident Commander of all operations.
• Coordinating with the State Department of Emergency Services regarding support from State and Federal Agencies.
• Coordinating support from private agencies and volunteer groups.
• Collecting, displaying and disseminating emergency information in the EOC.
• Directing volunteer civil preparedness forces.
• Keeping the Cass County Commission Chair and commissioners fully informed of all operations.
• Supporting emergency response forces to the fullest extent.

**G. The Command Post will Function as:**

• Direction and control of all tactical operations at the scene of the emergency, under the supervision of the Incident Commander.
• The on-site headquarters for the Incident Commander and other key personnel at the direction of the Incident Commander.
• Site communications link with the EOC.
• The central communications center within the crash scene perimeter.
• Control for use of on-scene resources.

**H. The Emergency Operations Center is Responsible for:**

1. Maintaining communication with the Incident Commander at the scene for coordination and support.
2. Coordinating public information.
3. Coordinating state and federal support through the State Emergency Operations Center (SEOC).
4. Verifying identification of appropriate EOC response personnel as required.
5. Collecting, analyzing and disseminating all emergency information.
6. Administering record keeping procedures required during the response and recovery phase.

**I. 911/ Dispatch is Responsible for:**

• Activating the dispatch/notification protocol for appropriate responders. Requesting stoppage of all rail traffic in the affected area.
• Maintaining communication with the Incident Commander.
• Relaying critical information to responders on their tactical channels.
• Maintaining 911 communication services for the duration of the incident.

K. The Cass County Highway Department is Responsible for:

• Providing and setting traffic control barriers and cones.
• Coordinating the use of private contractors, equipment supplies and staffing as required.
• Assisting fire and rescue forces at the direction of the Incident Commander.
• Assisting emergency transportation.

L. The Cass County Social Services Director will Provide:

• Assistance with rehabilitation of families.
• Assistance as required in triage operations.
• Assistance in handling inquiries from the public on where to contact missing or injured residents, shelters, or social services.
• Assistance with human services (social services).
• Provide coordination with local non-governmental organizations through Voluntary Organizations Active in Disaster (VOAD)/ Community Organizations Active in Disaster (COAD) for individual assistance needs.

M. The Public Information Officer is Responsible for:

• All agency Public Information Officers will be notified of the JIC location, and they will be encouraged to participate with the JIC.

N. The National Transportation Safety Board (NTSB) has Federal Mandates:

• Investigate a rail incident including any accident involving a passenger or employee fatality, or any accident in which damage exceeds $150,000.00.
• Investigate such accidents and report the facts, conditions, and circumstances relating to each accident and the probable cause thereof. May dispatch a “Go-Team” to assist in the investigation. Provide an Investigator-in-Charge (IIC), who organizes, conducts, and controls the field phase of investigation. The IIC, “Shall assume responsibility for the supervision and coordination of all resources and of the activities of all personnel, both NTSB and non-NTSB, involved in the onsite investigation.” (Title 49 - Transportation, Chapter VIII - NTSB, Part 831.8).
• Release the wreckage, records, mail, and cargo.
• Release the remains of victims.
• Release information during the field investigation, limited to factual developments, through NTSB members present at the accident scene, the representative of NTSB’s Public Affairs Office, or the investigator-in-charge.
• Provide the official accident report.
• Provide assistance to the local community as necessary.
O. The Carrier will:

- Designate a representative(s) to report to the Incident Command Center for a briefing on the incident.
- Appoint a carrier liaison to report to the EOC/TOC to assist in coordinating response and recovery operations.
- Designate a spokesperson to coordinate with JIC.
- Designate a telephone number as a point-of-contact for inquiries from the public.

P. The Federal Railroad Administration:

Was created pursuant to section 3(e) (1) of the Department of Transportation Act of 1966 (49 U.S.C. app. 1652). Its purpose includes, “to promulgate and enforce rail safety regulations. . . and consolidate government support of rail transportation activities.” It administers and enforces the federal laws and related regulations designed to promote safety on railroads. It exercises jurisdiction over all areas of rail safety under the Rail Safety Act of 1970, such as track maintenance, inspection standards, equipment standards, and operating practices. It also administers and enforces regulations resulting from railroad safety legislation for locomotives, signals, safety appliances, power brakes, hours of service, transportation of explosives and other dangerous articles, and reporting and investigation of railroad accidents. Railroad and related industry equipment, facilities, and records are inspected and required reports reviewed.

SUPPORT

Emergency response operations will be principally by local forces supported by state forces and, as needed, by federal forces. The FRA, NTSB, and other federal agencies will play key investigatory roles and, depending upon the magnitude of the disaster, provide assistance in the recovery phase.
Abbreviations
AAR Association of American Railroads
AFFF Aqueous Film-Forming Foam
AR-AFFF Alcohol-Resistant Aqueous Film-Forming Foam
COAD Community Organizations Active in Disaster
DOT Department of Transportation
EMS Emergency Medical Services
EOC Emergency Operations Center
EOP Emergency Operations Plan
ERG Emergency Response Guide
FAA Federal Aviation Administration
FRA Federal Railroad Administration
IAFC International Association of Fire Chiefs
IAP Incident Action Plan
ICS Incident Command System
IIC Investigator-in Charge
IMS Incident Management System
JIC Joint Information Center
LEPC Local Emergency Planning Committee
LPG Liquefied Petroleum Gas
MCI Mass Casualty Incident
NIMS National Incident Management System
NTSB National Transportation Safety Board
PIO Public Information Officer
RFA Renewable Fuels Association
SEOC State Emergency Operations Center
TIH Toxic Inhalation Hazard
TOC Tactical Operations Center
TRANSCAER Transportation Community Awareness and Emergency Response
VOAD Voluntary Organizations Active in Disaster