

**System Hazardous Materials  
Emergency Response Plan Summary for  
First Responders**



*“By failing to prepare, you are preparing to fail.”*

**— Benjamin Franklin —**

**[www.BNSFHazmat.com](http://www.BNSFHazmat.com)**

# System Emergency Response Plan Summary for First Responders

In the event of a hazardous materials emergency, **Immediately Perform the Following:**

1. Take all precautions necessary to protect yourself, coworkers, and the public.
2. Check the wind direction.
3. Isolate and secure the immediate area and directly down wind.
  - ✓ Ensure that your employees and the public do not enter the affected area.
4. Obtain as much information on the situation as possible, including:
  - ✓ Car numbers
  - ✓ Commodities
  - ✓ Injuries
  - ✓ Amount spilled
  - ✓ Distance to homes and business
  - ✓ Bodies of water (lakes, rivers, streams) affected.
5. If spill may effect or may impact the general public, call 911.
6. Contact either the BNSF Service Interruption Desk (817-352-2832/817-352-2833) or BNSF Resource Operations Call Center (800-832-5452).



# **System Hazardous Materials Emergency Response Plan Summary for First Responders**

If you have any questions regarding this plan summary, please contact Patrick Brady, BNSF General Director of Hazardous Materials Safety at

(817) 352-3652.



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## Table of Contents

<b>1. Purpose</b>	<b>3</b>
<b>2. Notification Procedures</b>	<b>9</b>
a. Dispatcher, Trainmaster, or Yardmaster	9
b. Service Interruption Desk (SID)	9
c. Hazardous Material and Environmental Responders (HMRs)	11
<b>3. Public Relations</b>	<b>13</b>
<b>4. Hazard Identification</b>	<b>15</b>
a. Weather	15
b. Chemical Hazards	15
c. Physical Condition of Materials Involved	16
d. Potential Pathways of Dispersion	16
e. Site Configuration	16
<b>5. Incident Level Classification</b>	<b>17</b>
a. Level I Incident	17
b. Level II Incident	18
c. Level III Incident	18
<b>6. Incident Management</b>	<b>21</b>
a. National Incident Management System (NIMS)	22
b. Control Zones	22
c. Site Security	23
d. Safety and Operational Status Briefings	23
e. Contract Responders	24
f. Air Monitoring Contractors and Assets	24
g. Emergency Management Contractors	25
<b>7. DECIDE Process</b>	<b>27</b>
<b>8. Response</b>	<b>29</b>
a. Assessment	29
b. Intervention Alternatives	29
c. Evaluations	29

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d. Intervention Selection.....	29
e. Concurrence by Incident Commander.....	29
f. Implementation.....	29
g. Mitigating the Release.....	30
<b>9. Environmental.....</b>	<b>31</b>
<b>10. Resource Utilization .....</b>	<b>33</b>
a. Emergency Response Contractors .....	33
b. BNSF Hazardous Material Emergency Response Team (HMERT) .....	34
c. Hazardous Materials Response “Strike Team” .....	35
d. BNSF Heavy Equipment and Specialized Equipment .....	35
e. BNSF Geographic Information System (GIS).....	37
f. Regulatory and Technical Support .....	38
g. Municipal Responders.....	38
h. Government Resources .....	38
i. BNSF Corporate Relations Department .....	38
<b>11. Site Safety and Health Plan.....</b>	<b>39</b>
<b>12. Terminating the Incident .....</b>	<b>41</b>
a. Post–Incident Analysis .....	41
<b>13. Responsibilities .....</b>	<b>43</b>
a. Incident Director .....	43
b. BNSF Hazardous Material Responders .....	43
c. Directors and Managers of BNSF Hazmat .....	44
d. BNSF Police and/or Special Agents.....	44
e. Corporate Relations .....	45
f. BNSF Claims.....	45
<b>14. Security.....</b>	<b>47</b>
a. Threat Levels .....	47
b. Unauthorized Access to Hazmat and En Route Security .....	47
c. Community Training .....	48

## 1. Purpose

The purpose of the *Hazardous Materials Emergency Response Plan Summary for First Responders* is to provide and document the framework for BNSF and civil first responders to follow, in the event of a hazardous material incident. For purposes of this plan, an **incident** means a release, or potential release, of a material that may adversely affect human life, health, or the environment. This plan includes procedures for prompt notification of responders, shippers, and the public, as necessary, along with a description of their roles in response, post-incident critique, and follow-up. To ensure an effective response is carried out, it is extremely important that all involved personnel understand their assigned roles, so that sound decisions are made; and that action is initiated, in a timely manner.

BNSF recognizes its communities' and shippers' concerns, and its own responsibility to have an effective contingency plan. The plan must ensure reasonable response to minimize and control health, environmental, and liability risks. Railroads in the United States have primary responsibility for controlling incidents involving their operations, equipment, and property. BNSF recognizes and embraces this responsibility. With regard to hazardous material incidents, BNSF will utilize all available resources, including the knowledge and experience of our shippers, to safely mitigate an incident. In the event of an incident, the handling of the event will be performed with priority given to the protection of life, health, and the environment, in that order.

BNSF's System Emergency Response Plan (SERP) provides a map for our overall hazardous materials emergency preparedness. Included within our SERP are Local Reaction Plans (LRP), Geographic Response Plans (GRPs), and Local Emergency Response Plans (LERPs).

LRPs have been developed, and are a part of the SERPs, for locations that have a specific unique hazard that can endanger BNSF employees or the environment and may not be covered by the Local Preparedness Plans. BNSF LRPs are:

- Pueblo Chemical Agent Storage and Disposal Facility – Pueblo, CO

Geographic Response Plans (GRPs) provide a clear and comprehensive oil/hazardous materials emergency response plan for a specific body of water. The GRP includes maps of the emergency response strategies of how the spill is to be contained, in the quickest most efficient way, while minimizing the impact to the water body. GRPs also identify environmentally sensitive areas.

A GRP is developed to:

- Prioritize zones of response based on site specific social, cultural, environmental, microeconomic, and macroeconomic potential impacts.
- Understand unique site logistic constrains and topographic challenges.
- Identify solutions to site specific problems.
- Determine man power requirements.
- Define emergency response tasks, their execution priority, and location to successfully contain and clean the spill.

BNSF Completed GRPs:

- Flathead River GRP – Hi-Line and Kootenai
- Wind River GRP – Casper Subdivision
- Upper Mississippi and St. Croix GRP – St. Croix and Aurora Subdivision
- Wind River GRP – Casper Subdivision
- Deschutes River GRP – Oregon Trunk Subdivision
- Kootenai River GRP – Kootenai River Subdivision
- Colorado River GRP – UP's Moffat Subdivision
- Lake Pend Oreille (Sandpoint, ID).



Public (State or EPA) GRPs used by BNSF and adapted for BNSF Subdivisions and Mileposts:

- Columbia River – Fallbridge Subdivision
- Anacortes (WA) – Spur
- Bellingham (WA) – Subdivision
- Seattle (WA) – Subdivision.

BNSF GRPs planned or under construction:

- Upper Mississippi (Minneapolis, MN to Savanna, IL)
- Yellowstone River (Huntley, MT to Buford, ND)
- Missouri River (Napier, MO to Kansas City, MO)
- South Platte River (Brush, CO to Sterling, CO)
- Missouri River (Stanton, ND to Mandan, ND)
- Missouri River (Glasgow, MT to Williston, ND)
- Lake Almanor, CA.

The requirement for an LERP and exercise frequency is based on the amount and type of hazmat traffic, along with activity at the facility.

These plans provide the following:

- ✓ Local emergency notification procedures.
- ✓ Evacuation procedures.
- ✓ “Safe haven” locations for leaking hazmat packages.
- ✓ Available internal and external BNSF resource listings.
- ✓ LERPs can be found at primary yard, terminal, and/or intermodal facility offices.

LERPs and scheduled drills are required at the following locations:

**Table 1**

LERP Location	Exercises	LERP Location	Exercises
Amarillo, TX	Annual	Albuquerque, NM	Biennial
Avondale, LA	Biennial	Alliance, TX (Intermodal)	Annual
Bakersfield, CA	Biennial	Alliance, NE	Biennial
Barstow, CA	Annual	Ark City, KS	Biennial
Beaumont, TX	Biennial	Belen, NM	Biennial
Casey, TX	Biennial	Birmingham, AL	Biennial

LERP Location	Exercises	LERP Location	Exercises
Cicero, IL	Annual	Casper, WY	Biennial
Corwith, IL	Annual	Centralia, WA	Biennial
Dayton, TX	Annual	Clovis, NM	Annual
Emporia, KS	Biennial	Denver, CO	Annual
Eola/Aurora, IL	Biennial	Denver, CO (Intermodal)	Biennial
Fort Madison, IA	Biennial	Dilworth, MN	Annual
Fresno, CA	Biennial	El Paso, TX	Annual
Galesburg, IL	Annual	El Paso, TX (Intermodal)	Biennial
Galveston, TX	Biennial	Enid, OK	Biennial
Glendive, MT	Biennial	Everett, WA	Biennial
Hastings, NE	Biennial	Fort Worth, TX	Annual
Havre, MT	Biennial	Gallup, NM	Biennial
Houston, TX (New South Yard)	Annual	Gillette, WY	Biennial
Houston, TX (HUB)	Biennial	Hauser, ID	Biennial
Joliet, IL	Biennial	Klamath Falls, OR	Biennial
Kansas City – Argentine	Annual	Mandan, ND	Biennial
Kansas City – Murray	Annual	Memphis, TN	Annual

LERP Location	Exercises	LERP Location	Exercises
LA Terminal (Commerce, La Mirada, Hobart)	Annual	Memphis, TN (Intermodal)	Biennial
Lacrosse, WI	Biennial	New Westminster, BC	Biennial
Lafayette, LA	Biennial	Northtown, MN	Annual
Lincoln, NE	Annual	Oklahoma City, OK	Annual
Logistics Park, IL	Annual	Omaha, NE	Biennial
LPKC Edgerton, KS	Annual	Pasco, WA	Annual
Lubbock/Slaton, TX	Biennial	Phoenix, AZ	Biennial
Minot, ND	Annual	Portland HUB	Annual
New Orleans, LA (Intermodal)	Biennial	S. Seattle and SIG HUBs	Annual
Newton, KS	Biennial	Salt Lake City (Utah Railway)	Biennial
North Bay, CA (Intermodal)	Biennial	Seattle, WA (Interbay, Balmer)	Annual
Oakland, CA (Intermodal)	Biennial	Sioux City, IA	Biennial
Richmond, CA	Biennial	Spokane, WA (Intermodal)	Biennial
San Bernardino, CA	Biennial	Spokane, WA	Annual
San Diego, CA	Biennial	Springfield, MO	Biennial
Shelby, MT	Biennial	St. Joseph, MO	Biennial
Stockton, CA	Biennial	St. Louis, MO	Biennial

LERP Location	Exercises	LERP Location	Exercises
Stockton, CA (Intermodal)	Biennial	St. Paul (Intermodal)	Biennial
Teague, TX	Biennial	Superior, WI	Biennial
Temple, TX	Annual	Tacoma, WA	Annual
Watson, CA (LA Terminal)	Annual	Tulsa, OK	Annual
Wellington, KS	Biennial	Vancouver, WA	Annual
Whitefish, MT	Biennial	West Quincy, MO	Biennial
Wichita, KS	Biennial	Wichita Falls, TX	Biennial
Williston, ND	Biennial	Willmar, MN	Annual
Willow Springs, IL	Biennial	Winslow, AZ	Biennial

**NOTE:** LERP's, LRP's, and GRP's will only be made available to applicable agencies upon request and at the discretion of BNSF.

## 2. Notification Procedures

Notification procedures are initiated immediately following the report of an incident, potentially involving hazardous materials. An incident is considered an emergency, until complete information from the scene indicates that the situation is stabilized. It is essential that proper notification be initiated promptly to ensure a timely response.

### a. Dispatcher, Trainmaster, or Yardmaster

A dispatcher, trainmaster, or yardmaster will generally receive the first report of an incident. This report will usually come from a train crew or switch crew. If a train crew or switch crew member is incapacitated, or the incident does not involve a train or switching movement (such as a car leaking at a siding), the initial report may come from a local emergency response agency through the Resource Operations Call Center (800-832-5452). The dispatcher, trainmaster, yardmaster, or Resource Operations Call Center (ROCC) will obtain as much information as possible, such as:

- ✓ Exact location of the incident.
- ✓ Initials and numbers of cars that may be involved.
- ✓ Commodities or materials involved.
- ✓ Severity of the incident, specifically situations that may pose immediate danger to life, health, or the environment.
- ✓ Circumstances of the incident.
- ✓ Weather conditions, including wind direction, at the incident site.
- ✓ Distance to the nearest populated areas.
- ✓ Possible impact to waterways.
- ✓ Where the train or switch crew can be located and how they can be identified.
- ✓ Any emergency response activities already initiated and by whom.

### b. Service Interruption Desk (SID)

After the dispatcher, trainmaster, or yardmaster receives a report of an incident, notification will be made to the BNSF Network Operations Center's (NOC) Service Interruption Desk in Fort Worth (**North Operations at (817) 352-2832 or South Operations at (817) 352-2833**). The SID can also be notified through the Resource Operations Call Center (ROCC) at 1-800-832-5452 or (817)234-7200.

After the SID or the ROCC receives notification of an incident, they will first ensure that the other is notified of the event. The SID will then notify the following organizations:

- ✓ **Hazardous Materials and Environmental Responders (HMRs)** — The SID immediately notifies a sufficient number of the nearest BNSF HMRs.
- ✓ **US, Canadian, State, Provincial, and/or Industry Agencies** — As soon as possible, the SID will notify US, Canadian, State, Provincial, and/or Industry. These may include:
  - National Response Center (NRC) for NTSB, FRA, USCG, and USEPA notifications.
  - Transport Canada.
  - State or Provincial agencies, including the environmental agencies, offices of emergency services, public utilities commissions, and railroad commissions.
  - Center for Disease Control (CDC).
  - Nuclear Regulatory Commission (NRC).
  - Association of American Railroads (AAR) Bureau of Explosives.

The SID will provide agencies with supplemental reports, as changes in the incident are known during the emergency phases. Otherwise, HMRs will provide follow-up reports detailing incident circumstances.

- ✓ **Shippers and Customers** — As soon as reasonably possible, the SID will notify shippers whose shipments may be involved in the incident. The telephone number for this notification will be the number provided on the shipping paper, bill of lading, or waybill. If no emergency response telephone number is available, the SID will notify **CHEMTREC**, and request notification of the customer.
- ✓ **Resource Operations Center (ROCC)** — As soon as the ROCC receives notification of an incident, but after the SID and the ROCC, ensure the other is notified, the ROCC will notify the following:
  - **Civil Emergency Responders** — The ROCC will notify appropriate civil emergency responders if they have not been already notified.
  - **BNSF Departments** — The ROCC will notify and provide communication liaison between the scene and following BNSF departments:
    - Corporate, regional, and local claims representatives.
    - Special agents (for site security).

## **c. Hazardous Material and Environmental Responders (HMRs)**

BNSF HMRs will contact either directly, or through the SID, the following groups, and will also provide follow-up information:

- ✓ Hazardous materials response contractors
- ✓ State and federal regulatory agencies
- ✓ Shippers.

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### 3. Public Relations

BNSF Corporate Relations will provide press releases for the news media. They will consult with shippers regarding specific product information for their press releases. When circumstances warrant, BNSF Corporate Relations will coordinate with the civil responders' Public Information Officer to provide a joint press release.

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## 4. Hazard Identification

The most critical aspect of response to a hazardous materials incident is the initial assessment of the situation. This assessment must be based on a thorough understanding of the hazards and potential hazards involved in the situation. Every incident involving a hazardous material is considered an emergency, until there is reasonable certainty that no hazardous materials have been released.

Typically, a train or switch crew will initiate an incident response by notifying a dispatcher, trainmaster, or yardmaster. The train crew can quickly determine if an incident may involve hazardous materials, by reviewing the train list or other shipping papers. Hazardous materials shipping papers identify hazards associated with the materials, along with response information that indicates proper handling and personnel protective measures. If the train or switch crew, for whatever reason, is unable to provide the needed information, the dispatcher, trainmaster, or yardmaster has access to the train list and emergency response information. Upon arrival at the site, the HMR will conduct a situation and safety briefing with the crews, trainmaster, yardmaster, or dispatcher. The briefing will consist of the car(s) and product(s) involved, nature of the release, evacuations, reported injuries, and response objectives. The HMR will provide instructions to the crews, trainmaster, yardmaster, or dispatcher on isolation zones and train/yard activities.

The HMR will make a thorough evaluation of the hazards and potential impact on life, health, and the environment. The HMR's evaluation will include:

### a. Weather

- ✓ Current wind direction and speed
- ✓ 24-hour forecast.

### b. Chemical Hazards

- ✓ Organic vapors, gases, and particulates
- ✓ Inorganic vapors, gases, and particulates
- ✓ Oxygen deficiency
- ✓ Specific characteristics of the chemicals involved
- ✓ Combustible vapors or gases
- ✓ Radiation.

### **c. Physical Condition of Materials Involved**

- ✓ Solids, liquids, and gases
- ✓ Color
- ✓ Behavior (foaming, vaporizing, corroding).

### **d. Potential Pathways of Dispersion**

- ✓ Air
- ✓ Surface water
- ✓ Ground water
- ✓ Land surface
- ✓ Ditches, wells, streams, and ponds.

### **e. Site Configuration**

- ✓ Accessibility
- ✓ Characteristics (conducive to product containment or recovery)
- ✓ Post-emergency remediation factors (short term and long term).

The identification of hazards will vary in complexity, depending on the characteristics of the involved materials, incident site, and the severity of the incident.

## 5. Incident Level Classification

An understanding of the distinction between an incidental release of a hazardous material and a release that requires an emergency response, is fundamental to proper compliance with the provisions of OSHA's HAZWOPER regulations (29 CFR 1910.120 (q)).

Potential releases of hazardous materials that may occur along a BNSF owned track or yard can be categorized into three distinct groups, which include:

1. Releases that are clearly incidental regardless of the circumstances.
2. Releases that may be incidental or may require an emergency response, depending on the circumstances.
3. Releases that clearly require an emergency response, regardless of the circumstances.

Therefore, a system to classify incidents based on its severity and availability of resources is an effective tool in managing an actual or potential threat to human health or the environment. Incident level classification will help the first-arriving personnel initiate appropriate actions.

The criteria used to identify the severity of the incident are:

- ✓ Extent of injuries and/or deaths.
- ✓ Extent or need of evacuation.
- ✓ Extent of need for hazardous materials or environmental response specialists.
- ✓ Level of technical expertise needed to abate the incident.
- ✓ Extent of governmental involvement.

The first-arriving personnel will evaluate these factors to determine classification of the incident. The incident will then be assigned one of three categories based on severity.

### a. Level I Incident

In Level I Incidents:

- ✓ No evacuation is required.
- ✓ First responders can contain and control the release without specialist support.
- ✓ BNSF HMRs or contractor first-response personnel can effectively manage and mitigate the release.

This is an incidental release of a hazardous material which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee mitigating the release. It does not have the potential to become an emergency, within a short time frame. Level I incidents are limited in quantity, exposure potential, or toxicity, and present minor safety or health hazards to employees in the immediate work area and those assigned to mitigate the release. An example of a Level I incident, is a leak that can be stopped by tightening a valve. In this case, the shipper will be given non-emergency notification.

The OSHA HAZWOPER Standard does not require emergency response to incidental releases. An incidental release poses an insignificant threat to health or safety, and is safely mitigated by BNSF employees, in the area, who are familiar with the hazards of the chemical with which they are working, as allowed under OSHA Standards.

## **b. Level II Incident**

In Level II Incidents:

- ✓ The release or potential release is effectively contained with specialized equipment and supplies employed by a HMR team.
- ✓ Evacuation is needed only in the immediate area of an actual or potential release.
- ✓ Governmental agencies respond with technical specialists.

Level II Incidents require BNSF HMR personnel and additional technical assistance from a BNSF strike team, environmental response contractor, industrial specialist, and/or government agency strike team.

A representative Level II Incident is a tank car that is involved in a derailment with a large quantity of its lading released on the ground or in a waterway. Appropriate BNSF personnel are mobilized immediately. HMR contractors, environmental response contractors, and shippers are notified immediately, as determined by the first-arriving personnel.

## **c. Level III Incident**

In Level III Incidents:

- ✓ Releases are not properly abated with immediately accessible HMRs and equipment.
- ✓ Sustained evacuation of the surrounding area is required.
- ✓ Multiple governmental agencies are involved.

Level III Incidents pose major threats to life, health, or the environment. A representative Level III Incident is a derailment involving multiple, incompatible chemical products. Such an incident constitutes a major event and all appropriate departments, emergency response contractors, and shippers are immediately notified, for mobilization.

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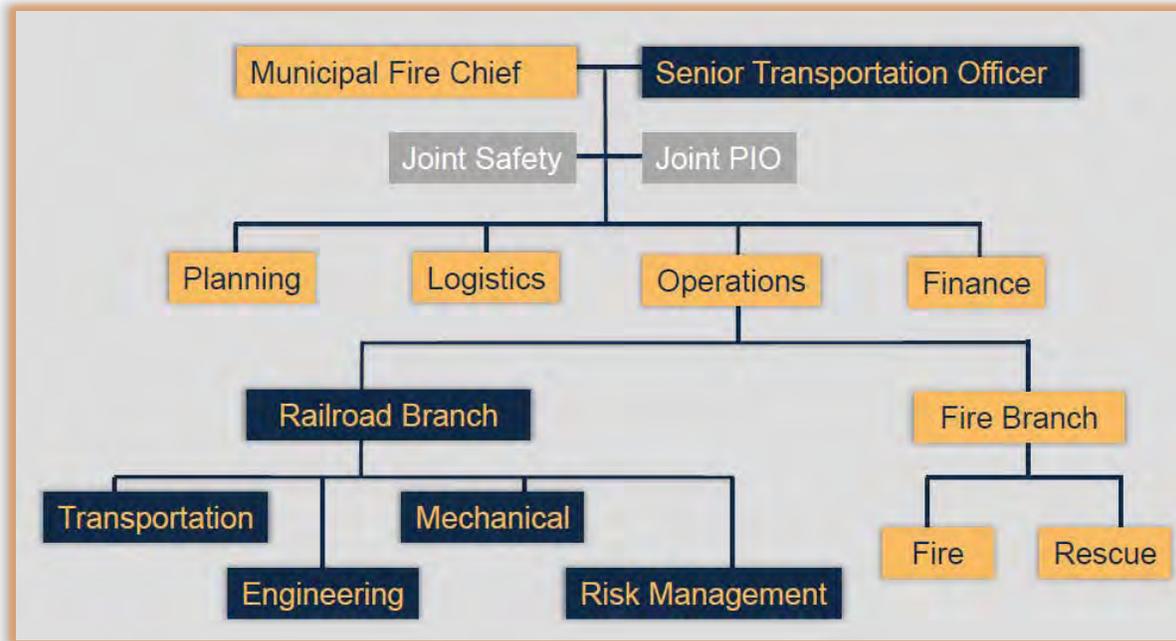
## 6. Incident Management

Depending on the level of an incident, the responsibilities and actions taken by various departments will vary. Because every detail of an emergency situation is not identified in advance, this section provides guidance and procedures to follow, when managing emergencies.

An Incident Command System (ICS), established on the National Incident Management System (NIMS) is necessary to effectively control an emergency situation. The typical steps and transactions of control are likely to progress, as follows:

1. A train or switch crew notifies the dispatcher, trainmaster, or yardmaster of an incident.
2. The highest-ranking BNSF officer at the site assumes the lead emergency management role, and becomes the BNSF Incident Director (ID). This company officer is responsible for all railroad activities at the incident, and works directly with civil authority's Incident Commander (IC).
3. Local, state, and federal regulations require that the civil IC be the individual in charge of the incident. However, it is BNSF's preference (because of our specific knowledge, experience, and training) to have control over the hazardous materials operations.
4. Regardless of who is managing the emergency, the objectives to ensure public safety and mitigate environmental damage are of primary concern. The first priority is human life and health.
5. The HMR uses the shipping documents to identify and verify the commodities involved. Information obtained from the shipping documents and other information provides an outline of chemical hazards involved. Guidelines for proper emergency handling of the product also accompany the shipping documents. If the train list or shipping papers are destroyed, additional copies are available by contacting the BNSF Customer Service Center at 1-800-786-2873.
6. The IC, BNSF ID, or the person who assumed the emergency management responsibilities should brief the HMR on the situation.
7. The HMR will conduct a situation and safety briefing with the crews, trainmaster, yardmaster, or dispatcher. The briefing will consist of the car(s) and product(s) involved, nature of the release, evacuations, reported injuries, and response objectives.

8. The HMR provides instructions to the crews, trainmaster, yardmaster, dispatcher, and BNSF Incident Director, on isolation zones and train/yard activities.
9. Because of their experience and specialized training, the HMR evaluates the stability of the incident. In many Level II and III Incidents, release of product occurs and timely action is essential to minimize damage. The HMR has authority to use available resources to initiate an appropriate response.



## a. National Incident Management System (NIMS)

For incidents on significant water bodies or incident of national significance, a State or Federal NIMS structure needs to be established.

## b. Control Zones

After the hazards are identified and the initial plan developed, the next action is to establish control zones:

- ✓ **Exclusion Zone** — The area that represents danger to life or health and is entered only with extreme caution. Depending on the material involved, special protective clothing and equipment is required to enter this zone. Appropriate reference resources are used to determine safe distances for this zone.

- ✓ **Contamination Reduction Zone** — Provides the forward-access point for exclusion zone support personnel. Decontamination stations are located in this zone.
- ✓ **Support Zone** — A safe area, where the Incident Commander and other functions that do not have a need to be closer to the incident, are located.
- ✓ **Evacuation Zone** — When needed, BNSF deploys third-party professionals to conduct air, soil, and water monitoring to determine and document the extent of contamination. This monitoring is used to increase or decrease evacuation zones.

### c. Site Security

Areas around the danger area are controlled, during emergencies, by prohibiting unauthorized personnel from entering pre-established control zones. Emergency response is coordinated from a command post, a safe distance away from the exclusion zone. BNSF's Police and Special Agents have responsibility for site security and control, and are responsible for taking all actions and decisions required, under the circumstance, to save lives, prevent injuries, provide safety to the general public and BNSF personnel, and to protect property within the BNSF right-of-way. However, in many cases the local law enforcement agency may be the first to arrive on-scene, and began site security and management operations, prior to the arrival of BNSF Police. In these cases, the highest-ranking special agent has the responsibility to coordinate site security with the local law enforcement agencies. These entities work together to ensure that the site is secured, and will not allow unauthorized personnel or the public to enter the area.

Contracted security services are considered, if BNSF and the civil agencies cannot provide enough resources for proper security.

### d. Safety and Operational Status Briefings

At periods predetermined by the Incident Commander (IC), BNSF Incident Director (ID), and the HMRs, safety and operational status briefings are conducted to determine the status of the incident, operations to be conducted over the next operational period, and all safety related issues. These briefings must be documented with the time and date of the meeting, those who attended, and topics of the briefing.

Upon completion of the IC's safety and operational status briefing, a designated HMR or the BNSF ID briefs BNSF employees and BNSF contractors at the site.

Other departments may have activities taking place outside the Exclusion Zone and Contamination Reduction Zone. These departments should be aware of ongoing emergency activities. When shifts change and new personnel are brought to the site,

they should be made aware of ongoing activities. The HMR is given appropriate relief, dependent upon the availability of qualified personnel, and the relieving HMR is briefed concerning the situation and intended plan, prior to assuming responsibility.

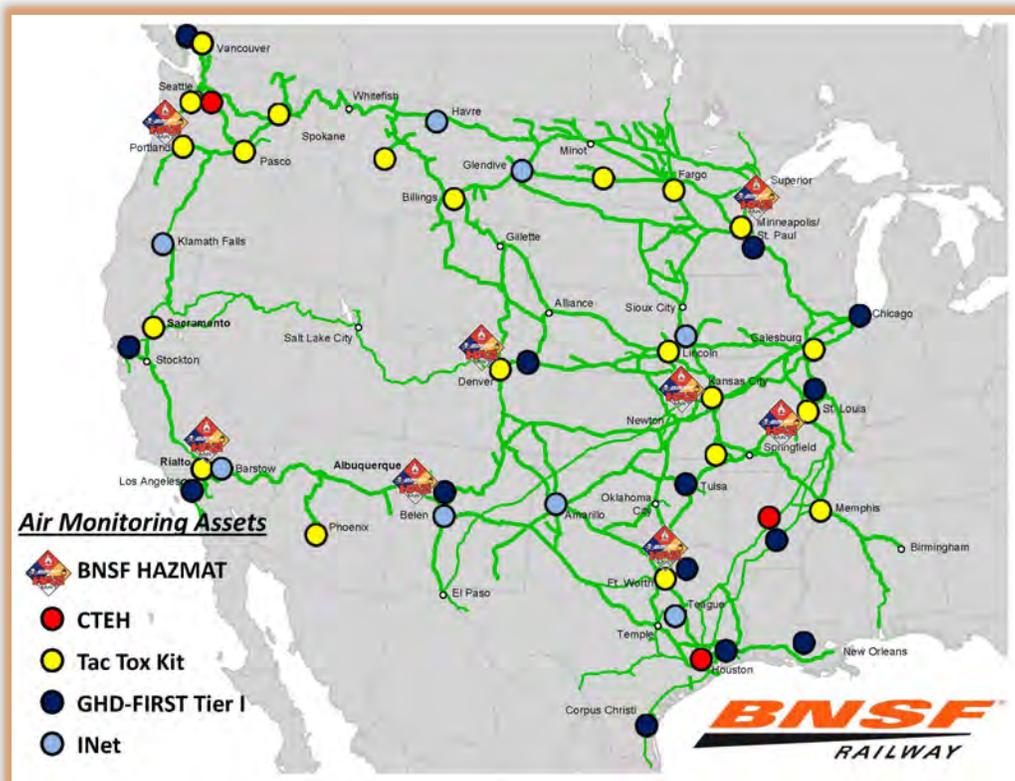
### e. Contract Responders

As stated previously, local, state, and federal regulations require that the civil IC be the individual in charge of the incident. However, as it is BNSF’s preference to have control over the hazardous materials operations, all private response contractors hired by BNSF work directly for BNSF. All tasks authorized or mandated by the IC must have the concurrence of the BNSF ID or HMR.

### f. Air Monitoring Contractors and Assets

Air monitoring is used to quantify exposures to responders and the community. The results of air monitoring is critical in determining the required personal protective equipment for responders and evacuations and shelter in place needs in the community. Therefore, rapid mobilization of air motoring assets are imperative.

### BNSF Air Monitoring Assets – Locations



## **g. Emergency Management Contractors**

Emergency management contractors provide emergency management systems and resources. These systems and resources include:

- ✓ Mobile command posts
- ✓ Portable command posts
- ✓ Communications
- ✓ Generators
- ✓ Bar coding of resources
- ✓ Crisis communication center.

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## 7. *DECIDE* Process

HMR uses the **DECIDE** process, when managing and mitigating a hazardous material incident. The **DECIDE** process follows these steps:

**D**ETERMINE if there is a hazard by placards, shape of container, location and by freight bills or train list.

**E**STIMATE harm without intervention.

**C**HOOSE response objectives

**I**DENTIFY action options.

**D**O the best option.

**E**VALUATE progress – have the options achieved the desired results?

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## 8. Response

The HMRs respond to the incident, as outlined below:

### a. Assessment

HMRs conduct an assessment of the site to determine products involved and whether there are any containers leaking. If the containers are leaking, an assessment needs to be made whether the leaks can be stopped, slowed, and/ or contained. Additionally, damage assessment must be conducted on all tank cars involved in the incident, especially tank cars transporting compressed gases that have sustained extensive damage, without releasing their contents. However, tank car damage can lead to a delayed release of its contents. In one case, the release was delayed as long as 40 hours after the derailment.

### b. Intervention Alternatives

Utilizing the **DECIDE** process, the HMRs determine the intervention alternatives.

### c. Evaluations

The HMRs evaluate all of the intervention alternatives to identify the alternatives that provide the greatest efficiencies with the least risk.

### d. Intervention Selection

The HMRs select the best intervention plan.

### e. Concurrence by Incident Commander

Upon selection of the best possible intervention plan, the IC is briefed. It is imperative that the IC is provided with the intervention alternatives and the criteria for the selected procedure.

The HMRs and BNSF ID will ask the IC for concurrence with the plan.

### f. Implementation

Upon getting IC concurrence, the intervention plan is initiated. During all phases of the implementation, the HMRs must assess their progress and reevaluate whether they chose the best option. If they have not, another intervention plan must be selected.

## **g. Mitigating the Release**

Management of a hazardous material incident or environmental emergency should make every effort to mitigate the release of material, provided such actions can be taken without unnecessary risk to human life or health. Once the source of release is controlled, the next response is to determine the extent of contamination, while taking steps to mitigate further environmental damage.

## 9. Environmental

The Superfund Amendments and Reauthorization Act (SARA, or more commonly “Superfund”) is the controlling federal law that applies to an environmental release or significant threat of a release, as defined by the Act. Most states have a structure to manage their own Superfund programs. The purpose of Superfund is to establish a mechanism of response for the immediate cleanup of contamination from accidental spills and chemical releases. There are three types of responses under Superfund:

- ✓ **Removals** — the removal of impacted soil.
- ✓ **Remedial Actions** — utilizing designed technology such as pump and treatment.
- ✓ **Enforcement Actions** — penalties and fines assessed for noncompliance or non-action.

It is important to note that Title I of SARA ensures citizen involvement in all remedial and removal actions that last longer than 45 days; consequently, cleanup becomes a negotiated position with the regulatory agency that has jurisdiction. Therefore, the company must use every effort during an event to identify, document, and record all data relevant to the event. This information can be used to negotiate subsequent clean up criteria.

The information to establish a company position will usually come by understanding short-term and long-term effects to the environment. An understanding of the vertical and horizontal extent of contamination is needed, along with a risk assessment and a feasibility study that includes cost estimates. These reports, however, can take many days, if not weeks, to develop.

Once the imminent danger to human health is understood and action is under way to mitigate further damage, the preferred resources become more readily available with time. As a result, the immediate emergency may have come and gone by the time the final clean-up is completed, for major liquid spills or gaseous releases.

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## 10. Resource Utilization

Utilizing resources effectively minimizes exposure. Conversely, improper utilization of resources is very costly.

The HMR, working with the BNSF Incident Director (ID), has the authority to direct company resources and BNSF contractors to provide reasonable assistance to abate the emergency. As resources become available, the HMR will oversee the deployment of those resources to ensure the objectives of the plan are met. BNSF has primary responsibility for managing incidents involving its operations. The HMRs have training and experience to know their own capabilities and the capabilities of BNSF contractors and governmental agencies. The HMRs will have authority to marshal whatever resources are needed to mitigate the incident. BNSF will exercise prudence in utilizing every available resource to mitigate an incident involving hazardous materials and assure that this is carried out in a safe and environmentally sound manner.

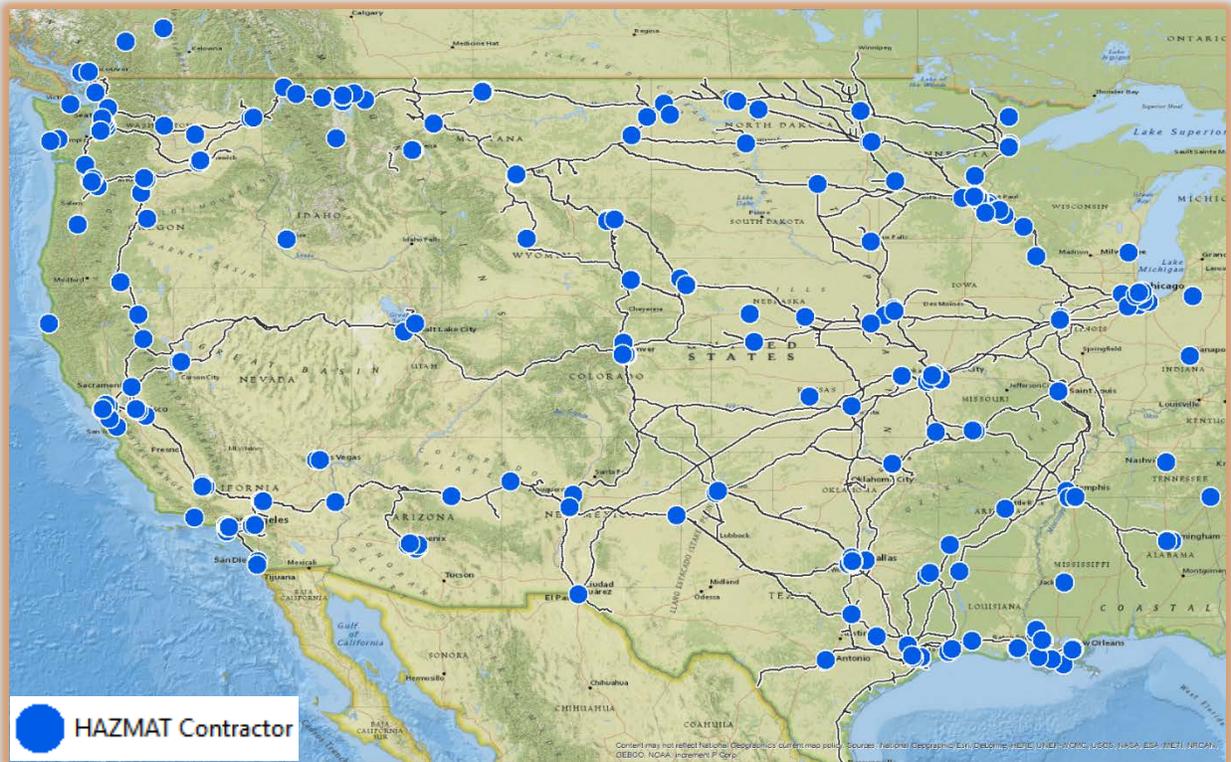
BNSF has established master service agreements with emergency response and environmental contractors who are capable of providing assistance at the incident site. Additionally, there are resources available from government agencies and associations that are useful in managing an emergency. BNSF also involves shippers, as primary contacts, when seeking technical information about a product.

### a. Emergency Response Contractors

Emergency response contractors provide services including:

- ✓ Leak repair
- ✓ Commodity transfers
- ✓ Industrial fire fighting
- ✓ Environmental cleanup and restoration
- ✓ Oil Spill Response Organization (OSRO).

## Emergency Response Contractors – Locations

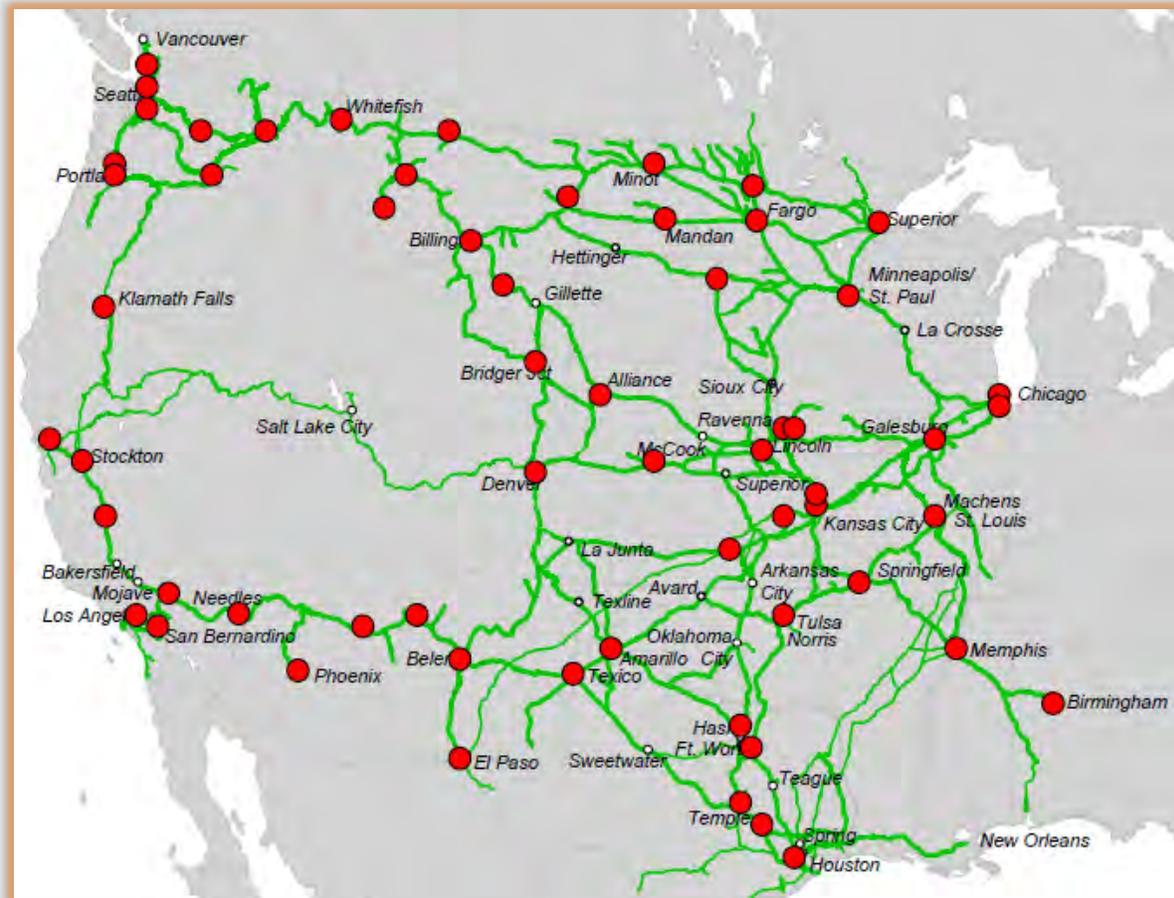


### b. BNSF Hazardous Material Emergency Response Team (HMERT)

Trained HMERT members, located throughout the BNSF system, provide timely response to emergency situations. The HMERT program is comprised of employees from various departments.

Each member of the HMERT has completed 80 hours of initial training and 24 hours of yearly refresher training, and meets the requirements necessary to assume the responsibility accorded to a HMR. All HMRs are capable of Level A site entry. Equipment for a Level A entry includes self-contained breathing apparatus, appropriate encapsulating suits, and hand and foot protection.

## HMERT – Locations



### c. Hazardous Materials Response “Strike Team”

The HMERT program is augmented with BNSF technical specialists who comprise a Hazardous Materials Response “Strike Team.” The Strike Team, when needed, converges at the site of the hazardous materials incident, and provides technical assistance to the local BNSF HMR.

### d. BNSF Heavy Equipment and Specialized Equipment

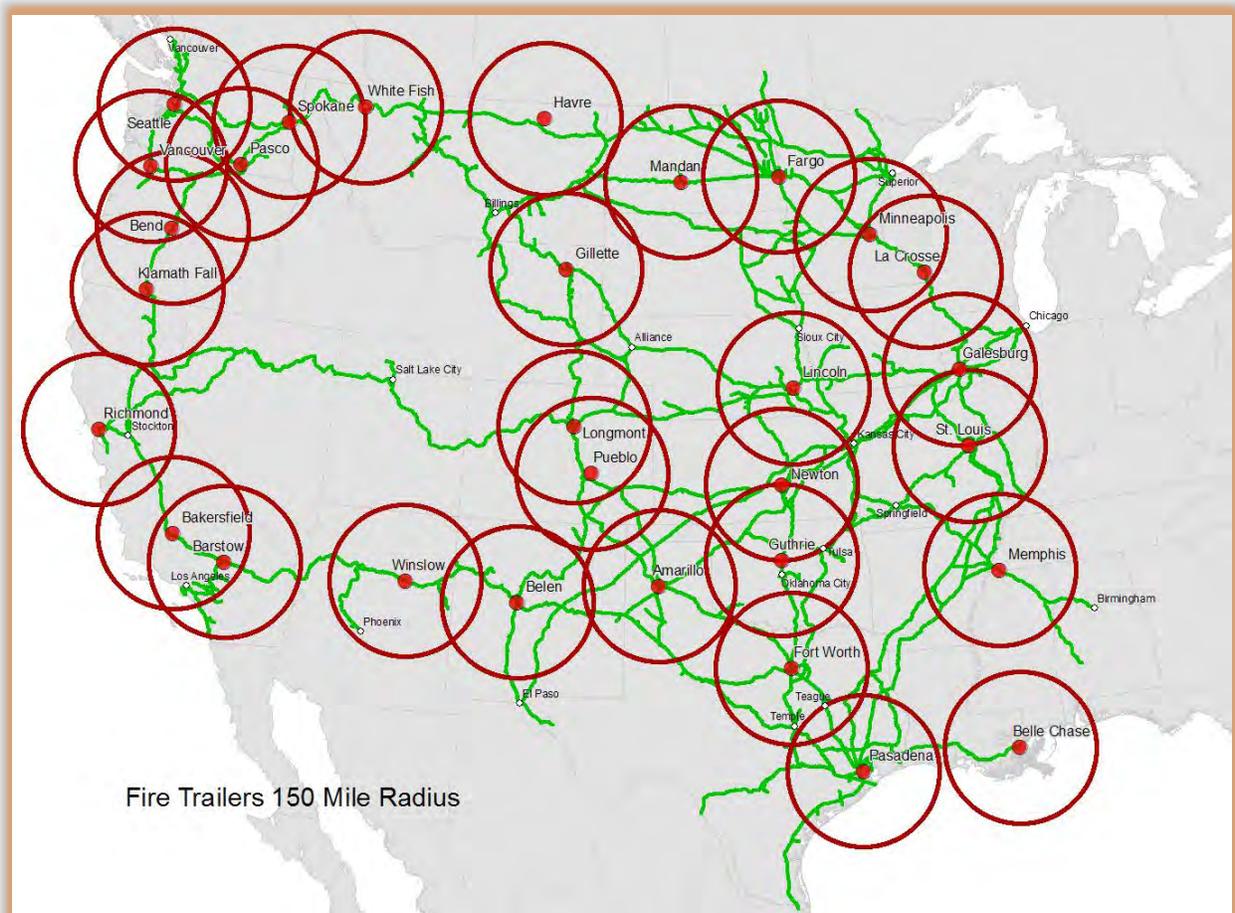
BNSF work crews have access to specialized equipment and to operators capable of moving supplies into incident sites. Remote areas may require specialized rail-mounted equipment to bring supplies or personnel to the site. BNSF has response equipment, such as cranes, material trucks, loaders, backhoes, and dump trucks. This equipment is available to build containment areas and transport supplies. BNSF also has fire trailers that are equipped with foam, hose, and pumps. Specialized mitigation equipment is also

available, and is spread throughout the BNSF network (see map). BNSF work crews, who are skilled in operation of the equipment listed above, may not be “40-hour” OSHA

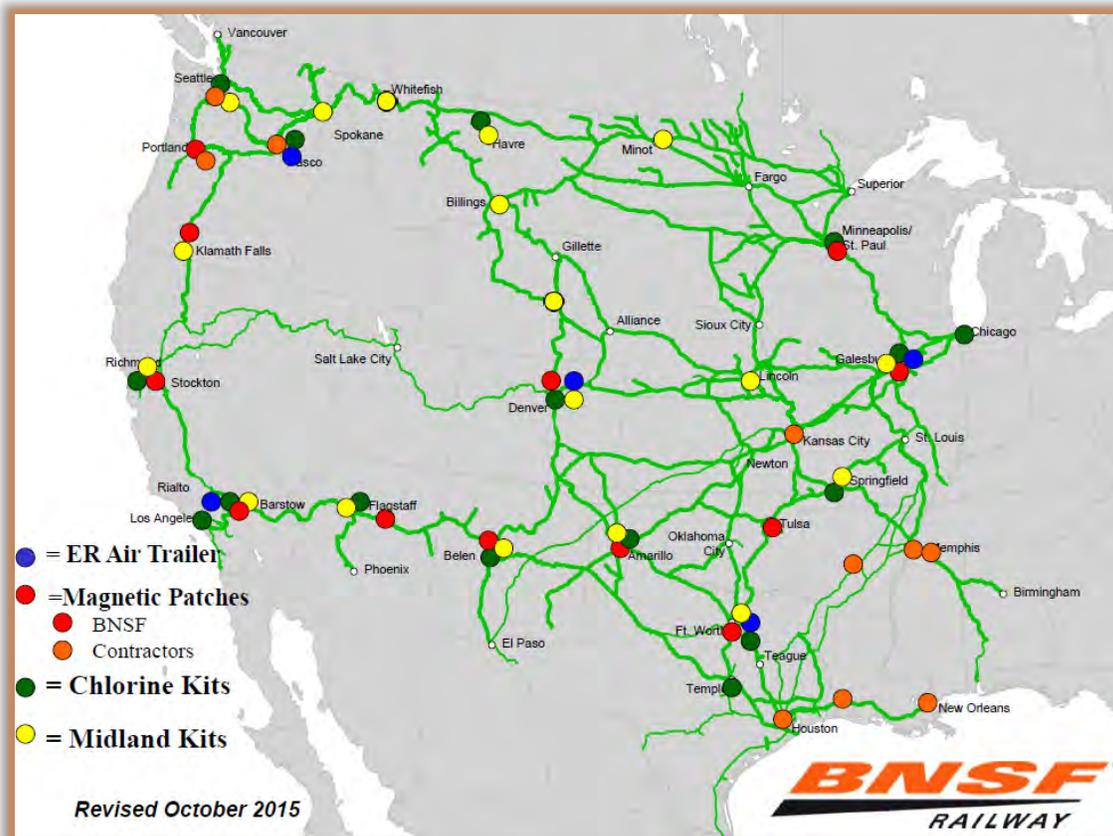
Trained, but can work at the site, as permitted by Section 1910.120(q) of 29 CFR. However, they are not expected to function as HMR, and must be given a safety briefing at the site, prior to their participation in any emergency response. The initial briefing includes the instruction of wearing appropriate personal protective equipment, what chemicals are involved, and what duties are performed.



### BNSF Industrial Fire Fighting Trailers – Location Map



## BNSF Specialized Hazmat Equipment – Location Map



### e. BNSF Geographic Information System (GIS)

BNSF has developed a GIS that provides point-and-click information about specific locations on the BNSF rail network. The GIS is especially important in a situation that may impact the health and safety of local communities, as it provides rapid access to information about the rail infrastructure, chemical spill handling procedures, environmental risks, and demographic factors. This knowledge enables BNSF to quickly and effectively work with local emergency response agencies.

The GIS includes BNSF track locations and infrastructure data, as well as environmental and community demographics within several miles of the right-of-way. Several databases are integrated into the GIS, including:

- ✓ SAFER air dispersion model
- ✓ Database of local emergency contacts.

GIS also includes a database of street network data, including street names, which allows BNSF staff to locate problems reported by private citizens and local agencies.

## f. Regulatory and Technical Support

When an incident meets the criteria established in 49 CFR 171.15, the SID notifies the National Response Center (1-800-424-0201) and state response centers, as required by law. The SID will notify shippers, whose shipments may be involved in the incident. The telephone number for this notification is the number provided on the shipping paper, bill of lading, or waybill. If no emergency response telephone number is available, the SID will notify **CHEMTREC**, and request notification of the customer. For incidents in Canada, the SID will contact CANUTEC (Canadian Transportation Emergency Center) (1-613-996-6666).

## g. Municipal Responders

Typically, municipal hazardous materials responders are used at the discretion of the Incident Commander. Their roles vary, and may be used as entry, decontamination, or rescue. Additionally, municipalities may have resources, such as sand and heavy equipment that can be used for damming or diking.

## h. Government Resources

If governmental resources are needed at the incident, the request for those resources is made through the Incident Commander.

## i. BNSF Corporate Relations Department

The BNSF Corporate Relations Department receives initial notification from the SID. The ROCC and SID supply updated information, so that the Corporate Relations team will remain current on the status of the event.

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## 11. Site Safety and Health Plan

A BNSF HMR or designee establishes a Site Safety and Health Plan. Although not specifically required under OSHA (29 CFR 1910.120(Q)), the Site Safety and Health Plan outlines and documents the hazards and mitigation of hazards at the site.

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## 12. Terminating the Incident

Systematic procedures must be followed for terminating a Level II or III hazardous material incident. Incident termination procedures are designed to facilitate any remaining cleanup or restoration actions that are required. The termination procedure will focus on:

- ✓ Proper decontamination of personnel and equipment to ensure that the contamination is not carried off-site.
- ✓ Proper disposal to ensure that all waste materials and products, resulting from the incident or generated by the response activities, are properly handled and documented.
- ✓ Site restoration and rehabilitation to ensure that reasonable measures are taken to allow for any site damage caused by the incident or response activities. Typically, final clean-up is a negotiated position with regulatory agencies.
- ✓ Medical surveillance to ensure response personnel, who were possibly exposed during the incident, are examined, as part of the termination phase, to document any health effects related to the incident.

### a. Post-Incident Analysis

Following termination of an incident response, when applicable, BNSF Hazmat completes the DOT5800.1 hazmat release report form. The Asst. Director of Hazmat discusses with the HMR the following questions:

- ✓ **Procedures** — Were adequate or correct orders given and actions taken? Were these the result of sufficient information, good judgment, and procedures? Can procedures or training be improved?
- ✓ **Communication** — Was communication adequate? Was contact with appropriate resources readily available?
- ✓ **Involvement** — Were all responders sufficiently or properly involved in managing the response?
- ✓ **Equipment** — Was the hazmat equipment (BNSF and contractor) adequate? Are changes necessary?
- ✓ **Contractors** — Were the hazmat contractors adequate? Are changes necessary?

When requested, HMR and Hazmat Group participates in after action meetings with community responders.

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## 13. Responsibilities

The responsibilities listed in this section should be followed as closely as possible; however, judgment, based on actual circumstance, must be the final guide for protecting lives, property, and the environment.

### a. Incident Director

1. Upon reporting to the incident Emergency Command Post, the most senior railroad official takes over as BNSF Incident Director (ID), and can dismiss the train crew and/or junior officer of their ID duties.
2. Review the status of the emergency.
3. Interface with civil emergency responders, and ensure that they have all the information they need.
4. Review civil responders plan of actions, and give input, where it is needed.
5. Jointly, with representatives from the HMERT, environmental, and the civil Incident Commander, determine a mitigation and clean-up plan, as outlined in the ***Incident Management*** section of this plan.
6. Ensure that all government agencies are notified, as required.

### b. BNSF Hazardous Material Responders

1. The Service Interruption Desk notifies the BNSF HMRs of any incident involving, or potentially involving, hazardous materials. If the responder is notified by anyone else, or is the first to detect a situation, immediate notification must be made to the appropriate area operation official and the SID.
2. At the scene, the HMRs serve as advisors and resources to the BNSF Incident Director and the civil Incident Commander.
3. If safe to do so, the HMR will:
  - Determine the location and the status (health, injuries, medical) of all employees or involved persons, and determine if emergency support services are required.
  - Determine a safe perimeter.
  - Assess the degree of contamination to the environment.

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- Determine if assistance or additional resources are required, and if so, advise the ID, IC and/or SID so the resources (medical, shipper, contractor, etc.) are obtained.
4. Evaluate the situation, prior to entering the area, as follows:
    - Identify the commodities involved.
    - Determine what dangers the materials, containers, and possible conditions present.
    - Consult the shipper and the BNSF monitoring and personal protective equipment guide to select the correct protective clothing, respiratory protection, and monitoring equipment.
    - Confirm that there is proper back-up, and use the buddy system.
    - Determine the extent of damage to hazardous materials containers, by assessing the scene remotely and by entry.
    - If possible, monitor the atmosphere for contamination (flammable, toxic, etc.) and oxygen levels.
    - Monitor environmental contamination for leaks or spills.
  5. Follow the **DECIDE** process and the procedures outlined in the ***Incident Management*** section of this plan.

All the responder's actions must be consistent with the capabilities of the individual HMR and the protective equipment available.

### **c. Directors and Managers of BNSF Hazmat**

1. Contact and mobilize hazmat and remediation contractors, when needed.
2. Coordinate all site remediation activities with BNSF's Incident Director, civil Incident Commander, and BNSF HMRs.
3. Ensure that local, state, and federal regulatory agencies are notified and are aware of the environmental and remediation activities.
4. Manage all site environmental sampling and monitoring activities.

### **d. BNSF Police and/or Special Agents**

Provide and coordinate site security with local law enforcement agencies.

## **e. Corporate Relations**

1. Schedule, coordinate, and manage periodic press releases and/or interviews.
2. Maintain a log of key events and press inquiries.
3. Provide a liaison between the BNSF on-site personnel and the media.
4. Provide and manage external and internal communications of the incident.
5. Interface with HMRs, environmental, and industrial hygiene personnel to ensure that press releases are technically correct and scientifically sound.

## **f. BNSF Claims**

1. Establishes a claim center for displaced citizens/businesses due to evacuation.
2. Investigates property loss claims.
3. Provides disbursement to affected parties, as applicable.

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## 14. Security

The purpose of this section is to provide information on the security plans BNSF has in place to protect hazardous materials shipments, as required by the federal regulations in 49 CFR, Part 172.800-802.

The railway industry, in collaboration with the Association of American Railroads, American Chemistry Council, The Fertilizer Institute, and others, has formed a Railroad Security Task Force to develop and maintain a Terrorism Risk Analysis and Security Management Plan. Components of this plan identify risks associated with the transportation of hazardous materials and specific countermeasures that are commensurate with the railway's threat level. For security reasons, specific countermeasures remain on a **strict** need-to-know basis, and are provided to the responsible individuals as a need develops.

### a. Threat Levels

The threat level is determined by using a model to establish the level of risk. Risk assessment includes the type of asset, vulnerability, and the threat, which is driven by intelligence information. It accounts for risks to the population, national economy, and national security. There are four established threat levels:

- **Level 1** — New/normal day-to-day operations.
- **Level 2** — Heightened security awareness.
- **Level 3** — Credible threat of an attack on U.S. or the railroad industry (subject to continuous reevaluation).
- **Level 4** — Confirmed threat of attack against the railroad industry or an actual attack in the U.S. (up to 72 hours and reevaluated).

### b. Unauthorized Access to Hazmat and En Route Security

Hazardous materials shipped on BNSF receive special identification on waybills, track and train list inventories, and special handling (including in-train placement checks and automatically updated train list entries). Emergency response information is provided to train crews and operations managers.

### **c. Community Training**

Our hazmat team has a strong commitment to training local responders on hazmat awareness and emergency response. We want to ensure that we can work with communities, and respond quickly in the unlikely event that a hazmat emergency occurs.

The training focuses on identifying and training fire departments and emergency responders in smaller communities along our rail lines, areas where trained emergency responders are less common. Through this program, BNSF trains approximately 4,000 responders per year.



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