COMMUNITY AWARENESS
EMERGENCY PLANNING GUIDE

This planning guide supersedes all editions of the guide previously provided to local, state and provincial planning committees/groups throughout the CSXT rail network.

Distribution and use of this document is intended for public safety or emergency planning agencies and personnel. Any other use is strictly prohibited without the prior written consent of CSX Transportation, Inc.

Revised May 2014
This publication is dedicated to emergency response, emergency management, homeland security, and law enforcement professionals.
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Community Awareness and Emergency Planning Guide • 2013 Edition
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SECTION 1 - INTRODUCTION

This Community Awareness Emergency Planning Guide (Guide) has been developed by CSX Transportation, Inc. (CSXT), to assist local emergency organizations with their efforts to plan for and respond to incidents involving railroad property or equipment.

The purpose of the Guide is to supplement local emergency plans. It is designed to cover key information needed by planners and responders should an incident involving CSXT occur. Among other things the Guide outlines:

• Important phone numbers and points of contact to initiate CSXT response processes.
• CSXT’s emergency response organization and use of the incident command system and unified command under a NIMS system.
• Rail car placarding requirements and sources of additional information on hazardous materials.
• Hazardous materials shipping documents.
• Incident response guidelines.
• CSXT resource management during an incident.
• Population protection.
• Passenger – commuter train incident considerations.
• Bridge and tunnel incident considerations.
• Security planning and preparation.
• Training and exercise opportunities available with CSXT.
• How to request a list of hazardous materials transported through a community.

This information will assist emergency planners in the evaluation of their capability to respond to an incident involving rail transportation. The information also provides emergency responders access to CSXT staff to ensure that necessary local and private resources are engaged.

CSXT is committed to providing transportation services in a manner that will ensure the safety of our employees, our customers and the communities we serve.


**Dedication to Safety**

CSX Transportation personnel work hard to improve safety performance throughout the company’s 21,000-mile system. Each of its employees is provided with copies of the rules and policies that apply to them. All employees are required to attend training programs and are tested to ensure they understand and comply with company procedures and practices. Nowhere is the need to follow the rules and procedures more evident than in the handling of hazardous materials.

Each year CSX Transportation moves over 350,000 loaded shipments of hazardous materials. Each of these shipments could potentially impact the safety and health of CSXT employees, the general public, and the environment. To minimize the potential for accidents, CSXT has developed some of the most effective programs in the rail industry aimed at moving these materials safely from shipper to destination. The low number of incidents illustrates the CSXT commitment to continually improving our service and safety record. As a result of a team effort by all our employees, CSXT is a leader among all major rail carriers in train accident prevention.

While the results of these efforts have been very successful, accidents do sometimes occur. Emergency responders that may be called to respond to one of these incidents should be aware of the potential hazards that may be present and how to best recognize and avoid them. Common sense should be applied to any response effort and safety must be the key ingredient in any action plan.

**Approaching the Scene of the Incident – Safety First**

History has taught us that there is a significant risk to the first on the scene of any hazardous materials incident. The old phrase “Blue Canary” comes from the fact that the first on the scene (often law enforcement) often became a victim of exposure which resulted in the follow-up responders taking the situation much more seriously. Today, with all we have learned from previous incidents and through the use of advanced technologies and training, no one need be placed in harm’s way.

NFPA 472, Chapter 5 provides Core Competencies for Operations Response. Section 5.2.1 details how to properly survey a HAZMAT or WMD incident. The key is to treat every incident as “immediately dangerous to life and health (IDLH).” No one should rush into a scene without first surveying the area, getting a list of chemicals involved, and use appropriate advanced technology (e.g., air monitoring equipment, thermal cameras, etc.). We cannot count on human senses (sight, smell, sound) to determine if it is safe for our response personnel to approach the scene. Not all chemicals have good warning properties (strong odor or eye, nose, throat irritation) such as ammonia or chlorine. Chemicals such as carbon dioxide, vinyl chloride and compressed natural gas do not have an odor. If a chemical with poor warning properties is involved in an incident, there could be an IDLH situation present and the responders could be putting themselves in danger by approaching the scene.

The CSX Hazardous Materials group has conducted extensive research into derailment safety, tank car assessment, and spill containment and control. This Community Awareness Emergency Planning Guide provides you with lessons derived from decades of successful operations related to hazardous material derailments. By reviewing this document, along with NFPA 72, you can ensure the safety of your responders. The key is to take the time to assess the situation, make early contact with the CSX Public Safety Coordination Center, and utilize standard operating procedures and advanced technologies to survey the area prior to approaching the scene.
Who We Are

CSX Corporation is the parent company of several subsidiaries that provide freight transportation services across America. Formed in 1980, and the largest rail network in the eastern United States, CSX Transportation operates a 21,000 mile network across 23 states. CSX Corporation owns CSX Intermodal (CSXI) which is the nation's only stand-alone nationwide integrated intermodal business. CSXI provides transportation services across the United States and into Canada and Mexico.

Although CSX Corporation and its railroad subsidiary, CSX Transportation, were formed by the acquisition of the Chessie System Railway and the Seaboard Coast Line Railroad in 1980, its predecessor railroads have been a part of America's history for over 185 years.

Through hard work, dedication and focus, the people of CSX Corporation and its subsidiaries constantly pull together to consistently and reliably meet customers’ needs.

What We Do

CSX Corporation, through its subsidiaries, is a multimodal freight transportation company serving customers worldwide. Automakers, steel fabricators, food and grain shippers, concrete makers, and many other industries rely on CSX every day.

- **CSX Transportation**, based in Jacksonville, Florida, provides rail transportation over more than 21,000 route miles in 23 states, the District of Columbia, and two Canadian provinces. In addition, it provides services to customers outside its network through its strategic partnerships with shortline and Class I railroads in the United States, Canada, and Mexico.

- **CSX Intermodal**, based in Jacksonville, Florida, provides multimodal transportation of domestic highway trailers and containers, premium parcel business, and international steamship containers.

- **TRANSFLO** provides a network of product transfer and warehousing facilities, helping shippers and receivers to position goods closer to their own customers.

Trains We Move

Intermodal: Highway trailers and containers on flat cars
Merchandise: Mixed freight with various car types (box car, gondola, hopper, tank car...)
Unit Trains: Single commodity and car type from a single origin to a single destination.

Unit train service is offered to shippers and receivers based on the customers’ needs. While the vast majority of unit trains carry non-hazardous commodities such as grain and coal, some carry commodities that the U.S. DOT defines as hazardous materials. These include Petroleum Crude Oil, Ethanol, Anhydrous Ammonia, Molten Sulfur, Ammonium Nitrate (fertilizer) and Environmentally Hazardous Substances.

CSX has developed a Guide specific to Trains; Emergency Response to Unit Train Incidents which is available online at www.csxhazmat.kor-tx.com
CSX Transportation Highlights

Served by CSX Transportation:

Alabama, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia, District of Columbia, and Ontario and Montreal, Canada

Route miles operated: 21,000
Average employment: 34,000
Average trains per day: 1,200
Average carloads per day: 20,000

Other Data:

• Serves every major population and industrial center east of the Mississippi
• Serves more than 70 ocean, river, and lake ports - more than any other railroad
• Has nearly 4,000 locomotives
• Has more than 100,000 freight cars
• More than 25,000 crossings
• Serves more than 165 bulk intermodal distribution terminals and rail-to-truck bulk transload facilities
• Serves over 125 active coal mines, and provides service to 105 coal-fired power plants and cogeneration facilities

Hazardous Materials Safety

Railroads continue to be the safest surface mode for transporting hazardous materials. For every billion ton-miles of hazardous materials transportation, trucks (which operate over inherently more dangerous public highways) are involved in more than 10 times as many accidents as the railroads. Virtually all of the country’s hazardous material shipments are transported in privately owned tank cars — not in railroad-owned equipment.
Environmental Policy Statement

CSX ENVIRONMENTAL POLICY

CSX is committed to protecting the environment and the safety and health of the public, customers, and employees in all aspects of the company’s operations. We strive to minimize impacts on the environment and the communities in which we operate. We work to maximize the business and its positive impacts by delivering the best service to our customers. The company’s decisions and actions are guided by the following principles:

Skilled and Committed Workforce

- Conduct operations safely.
- Leverage the CSX Environmental Management System to ensure compliance with environmental laws and regulations, internal policies and best management practices.
- Train and empower employees to fulfill environmental responsibilities. Communicate openly with employees, customers and the public regarding the company’s environmental programs.

Fuel Efficiency and Supply Chain Engagement

- Improve our environmental footprint by utilizing state-of-the-art technology and pollution prevention efforts to reduce energy and fuel consumption and waste minimization through comprehensive recycling and reuse initiatives.
- Assist customers in reducing their transportation-related greenhouse gas emissions by promoting highway to rail conversions and continuously seeking to improve our locomotive fuel efficiency.
- Take environmental stewardship beyond CSX by encouraging suppliers to follow environmentally sustainable practices, engaging in public-private partnerships that promote environmental responsibility and fostering communications with communities and public agencies where we operate.

Water Management and Conservation

- Recognize water availability concerns and manage our water consumption by identifying and implementing water reduction, recycling and reuse measures.
- Maintain the quality of our water discharges by applying good operating practices.

Recognize and Respond

- Take immediate action to report and respond to situations that could negatively impact the environment, such as unauthorized dumping, releases or other accidents.
- Maintain broad business continuity plans and site-specific operating plans to maximize responsiveness to events that could include those resulting from extreme weather or shifting populations.

Explore and Protect

- Explore, test and implement the use of alternative energy sources and energy efficiency opportunities.
- Protect local biodiversity and habitats while managing properties, constructing new facilities and managing remediation projects.
- Continue to improve environmental performance by setting and reviewing targets and goals that protect people and the environment using sound business practices.

Michael Ward

MICHAEL J. WARD
CSX Corporation
Chairman, President and
Chief Executive Officer

June 14, 2013
SECTION 2 - EMERGENCY PLANNING INFORMATION

Emergency preparedness activities, programs and response systems are carefully planned and implemented prior to an incident. They support and enhance the response to an incident.

Planning, coordinating, training and conducting exercises are among the activities performed under this phase of emergency management.

CSXT participates in TRANSCaer® (Transportation Community Awareness and Emergency Response), a nationwide community outreach program that helps communities develop and evaluate emergency response plans for hazardous materials transportation incidents.

CSXT encourages local emergency management and response groups to incorporate this Guide into their own plans and take the opportunity to preplan CSXT facilities in their area of responsibility. Local emergency response personnel are encouraged to familiarize themselves with the layout and operation of CSXT properties in their area. CSXT personnel are available to assist in making facilities available for pre-planning and informational tours.

Coordination with CSXT Hazardous Materials Staff

CSXT has a dedicated, professional staff available to assist local communities in emergency planning and response. Hazardous Materials Field Service Managers travel to the scene of an incident and help coordinate the hazardous materials response activities of the railroad with the local fire chief, local and state agencies, environmental experts and shippers' representatives.

Training and Exercises

Training and emergency exercises help to facilitate safe and efficient operations during a response. CSXT offers training on railroad incident emergency response for local emergency responders.

In an effort to make this training available to more responders, CSXT has developed a self-study training program for emergency responders titled, “Emergency Response to Railroad Incidents.” This program covers basic issues such as responder safety, initial response procedures, locomotives and freight cars, and train paperwork. It is designed for all levels of responders in fire, police, emergency management and emergency medical agencies. Personnel who complete the program and send completed quizzes back to CSXT will receive certificates of completion.

Copies of the DVD, workbook or this Community Awareness Emergency Planning Guide, can be requested (free of charge) by any emergency responder in states in which CSX operates at: http://csxhazmat.kor-tx.com

Agencies that desire more in-depth training may contact the CSXT Hazardous Materials Systems group via www.csx.com or by writing to the address shown. CSXT hazmat professionals can conduct training classes for hazmat teams up to eight hours in length with hands-on training.
CSXT conducts two levels of emergency preparedness exercises: tabletop exercises and full-scale exercises. Tabletop exercises test notification, communications and information retrieval procedures helping to identify deficiencies in emergency response plans. Full-scale exercises test emergency procedures using props and equipment in the field. CSXT works with Local Emergency Planning Committees (LEPCs) to coordinate participation in exercises. Groups interested in either training programs or emergency exercise assistance can contact the CSXT Hazardous Material Systems Group, 500 Water Street, J-275, Jacksonville, Florida 32202 or visit www.csx.com.

**Location and Identification of CSXT Rail Lines**

It is important for local emergency planners to familiarize themselves with the ownership and location of local rail lines to identify possible access routes for response vehicles.

The best way to identify ownership of rail lines is to communicate with railroad companies before an incident occurs. As part of a highway-rail intersection public safety program, CSXT posts an emergency telephone number (1-800-232-0144) and a unique identification number at each CSXT highway-rail intersection. This program allows the reporting of malfunctioning traffic control devices or other emergencies at or near these intersections, and may also be used by emergency responders to identify CSXT rail lines in the event of a railroad incident.
Rail Grade Crossing Identification Database

As a result of an accident occurring in 2001, in which a passenger train struck a freight train near Syracuse, New York, the National Transportation Safety Board (NTSB) issued a safety recommendation dealing with the emergency response to a train accident. NTSB Recommendation R-01-22 made the following recommendation to the National Emergency Number Association (NENA): “Facilitate the inclusion of railroad milepost markers on all emergency response maps across the country.” This recommendation addresses the adequacy of maps used by emergency response personnel for railroad accidents and is designed to improve response time and save lives.

The United States Department of Transportation (DOT), Federal Railroad Administration (FRA), maintains an excellent Internet website containing data that is particularly useful to emergency planners when implementing the NTSB’s recommendation. The web site is:


All national highway-rail crossing inventory files are available. Queries can be made by state, county, city, street name, crossing number, railroad, and railroad milepost, etc. Maps, accident history and accident prediction data are also readily available. Emergency response planners can easily obtain milepost designations by railroad, for every grade crossing, in each county and state. CSXT highly endorses the use of this up-to-date information by emergency planners.

Top 25 Hazardous Materials Transported by Rail

Information on the types of hazardous materials being transported through a community is useful for local emergency planners in developing an effective and realistic pre-emergency response plan for rail emergencies. The form included at the end of this booklet in Appendix E can be used to request a Hazardous Materials Density Study showing the most recent hazmat traffic flow on CSXT through a community. Additional information is available at www.csxt.com.

Historically, the types of hazardous materials transported by rail nationwide do not vary greatly by location, although the ranking order of products transported through each community may differ slightly. The top 25 hazardous materials transported by CSXT (as measured by originations of loaded tank cars) are summarized in Table 2-A. The top 25 hazardous materials transported by all rail carriers in North America are shown in Table 2-B.

The risks associated with hazardous materials also vary depending on the hazard class of the material and potential for public or environmental impact. The majority of hazardous materials shipped by rail do not have the potential for impact beyond a small, localized area. Those commodities which represent the highest potential for impact to the community (TIH materials and division 1.1 or 1.2 Explosives) are present in less than 5% of CSXT trains.

CSXT is a common carrier and as such is required by law to transport hazardous materials that have been properly prepared and offered for freight rail transportation in accordance with Federal Department of Transportation regulations. There are certain ultra-hazardous materials such as toxic inhalation hazards (e.g. chlorine and sulfur dioxide) that we would prefer not to handle. However, our common carrier requirement requires us to do so and we make every attempt possible to move these and all commodities with the highest levels of safety and security possible.
### Table 2-A

**Top 25 Hazardous Materials Transported in bulk quantities by CSX Transportation 2012**

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<tr>
<th>RANK</th>
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Table 3-C shows Hazard Class Definitions.
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* Sulfur and Anhydrous Ammonia are classified differently in Canada and the US

Table 3-C shows Hazard Class Definitions.
### Table 2-C

**Top 25 Hazardous Commodities, as Measured by Loaded Non-Tank-Car Originations in the U.S., Canada and Mexico & Total Cars Involved: 2012**

<table>
<thead>
<tr>
<th>RANK</th>
<th>HAZMAT CODE</th>
<th>COMMODITY (DOT PROPER SHIPPING NAME)</th>
<th>DOT HAZARD CLASS*</th>
<th>UN/NA</th>
<th>NON-TANK CAR TYPE OF ORIGINA-</th>
<th>TOTAL CARS USED</th>
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*Subtotal, Top 25 Hazardous Commodities, Non-Tank Car Types*

*All Other Hazardous Commodities, Non-Tank Car Types*

*Total, All Hazardous Commodities, Non-Tank Car Types*

Table 3-C shows Hazard Class Definitions.
SECTION 3 – AGENCY PREPAREDNESS

This section provides an overview of CSXT notification procedures when a railroad incident occurs. Figure 3-A summarizes the CSXT notification process in a flow chart.

Initial Notification

CSXT personnel report most incidents from the scene to the CSXT Public Safety Coordination Center (PSCC) in Jacksonville, Florida. The PSCC can be reached 24 hours a day for emergencies at 1-800-232-0144.

In some cases the PSCC will be notified by the Chemical Transportation Emergency Center (CHEMTREC) based upon a call CHEMTREC has received. CHEMTREC is a 24-hour public service of the chemical industry that provides immediate emergency response information and assistance during emergencies involving chemicals.

Local observers also sometimes report incidents directly to the CSXT PSCC. CSXT provides local emergency dispatch centers with the PSCC number to report any local emergency that could affect train operations.

It is very important that local responders reporting an incident to CSXT provide the railcar initials and number for the car(s) involved. These letters and number are stenciled on the left-hand side of the railcar as you face either side of the car and on both ends of the railcar. This information will facilitate response efforts by enabling CSXT to determine the type and capacity of the car involved and its contents. Figure 3-B depicts the location of the railcar initials and number ("reporting marks").

CSXT has partnered with CHEMTREC to provide access to the railroad's Network Operating Workstation (NOW), the system that tracks all CSXT trains and railcars. This allows CHEMTREC to provide real-time information to emergency responders concerning railcar contents or train makeup. Use of this system by CHEMTREC operators enables responders to have faster access to critical information during incidents.
Figure 3A
CSXT Notification Process

TRAIN INCIDENT OCCURS

Train Crew
- Surveys scene
- Notifies Train Dispatcher

Conductor
- Remains at scene until emergency response agency arrives
- Provides train consist information and location(s) of hazardous material cars

Train Dispatcher
- Notifies CSXT Operations Management and PSCC
- Communicates with crew members on-scene

CSXT PSCC
- Notifies CSXT Crisis Communication Managers
- Notifies Local Public Response Agencies

Crisis Communication Managers
- Contacts reporting party, notifies state and federal authorities
- Manages Logistics for CSXT, activates response resources, as needed
- Contacts shipper through CHEMTREC

Emergency Response Agency
- Manages Incident
- Coordinates with media
- Provides fire, EMS, and law enforcement support

CSXT On-Scene Hazardous Materials Field Service Manager
- Coordinates on-scene response.
Figure 3-B

Location of Rail Car Initials and Number
(Reporting Marks)

- Rail car initials and numbers are one of the most important pieces of information that emergency responders can obtain at the scene of a railroad emergency.
- All information related to the rail car is referenced by use of the car initials and number.
- Responders should attempt to accurately record and report the initials and numbers of any cars involved in a derailment or other emergency situation.
- Remember the railcar's initials and number are stenciled on both left-hand sides of the car (facing the car) and on both ends of the railcar.
Hazardous Material Railcar Requirements

This section describes the United States Department of Transportation’s (DOT) requirements regarding placarding of hazardous materials being transported, the types of hazardous materials information being carried on a train, and where this important information can be found.

Hazardous materials are products or chemicals capable of posing a risk to health, safety or the environment. The Code of Federal Regulations (CFR), at 49 CFR Section 172, requires that diamond-shaped placards be placed on the outside of certain rail cars carrying hazardous materials or residues of such material. Placards must also be placed on the exterior of some intermodal containers carrying amounts of hazardous materials in excess of certain regulatory thresholds.

Hazardous Materials Shipping Documents

A Train Consist is the primary shipping paper used by CSXT in railroad operations. When hazardous materials are present in a train, a CSXT train consist contains the following four (4) basic sections:

1. A “Tonnage Graph” listing each car in the train by initial and number beginning with the first car and showing each car’s numerical position in the train; marking all cars containing hazardous materials with a series of capital “H’s.” (Appendix A, Part 1.)

2. A “Position-In-Train” document bearing a “Notice of Rail Cars/Units Containing Hazardous Materials,” the individual product’s “four-digit ID number”; with car initials and numbers repeated and whether or not the car is loaded (L) or empty (E) and what the car last contained (Residue). (Appendix A, Part 2.)

3. A “Train Listing and Hazardous Material Descriptions” list again showing each car’s initials and number, its position in train, the DOT proper shipping description that includes; the proper shipping name, hazard class, identification number, packing group and emergency contact number. The name of the shipper and receiver of the shipment are also included as well as the Standard Transportation Commodity Code (STCC) Number. (Appendix A, Part 3; Note—Table 3-C describes the various United Nations (UN)/DOT hazard classes and definitions.)

(The STCC system assigns a unique number to each specific article/commodity or group of articles/commodities when offered for transportation by rail.)

Hazardous Material Special Handling Instructions

Hazardous material special handling instructions contain valuable information on dealing with specific commodities on board a train in the event of a spill or fire. Conductors are trained to provide this information to emergency responders in the event of an accident. These instructions conform to DOT requirements for providing emergency response information during transportation and are used widely throughout the rail industry. For each hazardous material present in a train, the document contains the cars’ initials and numbers, positions in the train and the following detailed information:

- General product information and physical description.
- Instructions if the material is, or is not, involved in a fire.
- Personnel protection.
- Land spill instructions.
- Water spill instructions.
- Vapor spill instructions.
- First aid exposure response.

Appendix A displays actual examples of a train consist with certain information highlighted for emphasis.

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The train consist is kept by the train’s conductor who is responsible for updating the document as cars are added to or removed from the train.

Alternatively, an electronic list of cars in train can be obtained by calling the PSCC at 800-232-0144.
# Table 3-C

## UN/DOT Hazard Classes

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<th>CLASS</th>
<th>DIVISION</th>
<th>DEFINITION</th>
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<td>Substances and articles, which have a mass explosion, hazard</td>
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<td>1.2</td>
<td>Substances and articles, which have a projection hazard but not a mass explosion hazard</td>
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<td></td>
<td>1.3</td>
<td>Substances and articles that have a fire hazard and either minor blast hazard or both, but not a mass explosion hazard</td>
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<tr>
<td></td>
<td>1.4-1.6</td>
<td>Other materials with explosive potential</td>
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<td><strong>COMPRESSED GASES (2)</strong></td>
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<td>Gases which ignite and burn easily</td>
</tr>
<tr>
<td></td>
<td>2.2</td>
<td>Gases that may asphyxiate or can cause frostbite</td>
</tr>
<tr>
<td></td>
<td>2.3</td>
<td>Gases which are poisonous by inhalation (PIH,THI) [Subdivided by Hazard Zones]</td>
</tr>
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<td><strong>FLAMMABLE LIQUIDS (3)</strong></td>
<td>3</td>
<td>Liquids with flash points below 141°F</td>
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<td>3</td>
<td>Liquids with flash points above 141°F</td>
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<td><strong>FLAMMABLE SOLIDS (4)</strong></td>
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<td>Substances which are easily ignitable or burn readily</td>
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<tr>
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<td>4.2</td>
<td>Substances that can self-ignite on exposure to air</td>
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<td>4.3</td>
<td>Substances that upon contact with water can either become spontaneously combustible, or can give off flammable or toxic gas</td>
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<td><strong>OXIDIZERS (5)</strong></td>
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<td>Substances that will react to support combustion even in the absence of air</td>
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<td>Substances sensitive to heat, shock and friction or may decompose and self-ignite</td>
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<td>Materials that give off dangerous or irritating fumes</td>
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<td>Infectious substances and regulated medical waste</td>
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<td>Substances which emit ionizing radiation</td>
</tr>
<tr>
<td><strong>CORROSIVE MATERIALS (8)</strong></td>
<td>8</td>
<td>Substances which corrode steel and damage tissue</td>
</tr>
<tr>
<td><strong>MISCELLANEOUS HAZARDOUS MATERIALS (9)</strong></td>
<td>9</td>
<td>Hazardous substances that do not meet the definition of any other hazard class</td>
</tr>
</tbody>
</table>
SECTION 4 - CSXT RESPONSIBILITIES

Upon receiving notification of an incident, the CSXT Operations Center PS CC collects relevant emergency response information and notifies the CSXT Crisis Communication Manager.

If the incident requires intervention, the Crisis Communication Manager may call on several sources for assistance, including: CSXT Hazardous Materials Field Service Managers, the Association of American Railroads (AAR) Bureau of Explosives (BOE) Field Inspectors, emergency environmental response contractors and local emergency responders. The Crisis Communication Manager will contact the shipper through CHEMTREC and request technical assistance or on-scene response from the shipper as needed. The Crisis Communication Manager also notifies the appropriate state and federal authorities of the incident.

After initial notifications are complete, CSXT’s Hazardous Materials Team continues to coordinate the response to the incident and provides a central point for communications and follow-up actions.

Resources

In the event of a major derailment or spill, most local responders typically do not have the equipment or manpower to handle large spill cleanup or railroad rerailing operations. CSXT recognizes and accepts its role in providing this specialized expertise and equipment to mitigate an incident. CSXT maintains contracts and agreements with pre-qualified and regularly audited suppliers of these services. While on-scene, these contractors act as agents of CSXT and work directly under CSXT’s control and supervision.

Examples of railroad contractors and the services they routinely provide include:

- Trained personnel equipped with all levels of protective equipment for operations in close proximity to spilled products, including use of leak and spill control equipment to contain product from leaking containers.

- Industrial hygiene and public health contractors provide technical expertise and equipment to perform on/off-site air and water sampling.

- Environmental response contractors provide vacuum equipment, pumping equipment and highway tankers for the recovery of spilled products.

- Environmental recovery contractors provide technical expertise in the on-site remediation or removal of contaminated water, soil or debris from the incident site.

- Containers and heavy equipment for recovery of solid materials.

- Railroad rerailing and wrecking contractors provide heavy equipment such as cranes, off-track lifting equipment, heavy earth moving equipment, equipment operators and ground crews to lift and rerail damaged rail cars and locomotives.
These contractors also develop exclusion zones and/or work zones and perform assessment and monitoring of public health exposure.

CSXT internal resources include:
- Transportation, mechanical and engineering department representatives
- Hazardous material systems and environmental department representatives
- Corporate communication and public affairs representatives
- CSXT police department representatives
- General claims representatives
- Load engineering and design representatives

TestNET®

CSXT in conjunction with the Center for Toxicology and Environmental Health (CTEH) has developed an innovative program for performing air monitoring and plume dispersion modeling at the scene of a release or potential release. This program, called TestNET, establishes monitoring teams using specific equipment in strategic locations around the CSXT System. When an event occurs these teams can be mobilized to the site to initiate air monitoring while at the same time relaying the results of monitoring back to a team of toxicologists and industrial hygienists at the CTEH headquarters. CTEH will also mobilize a team of specialists to the site if necessary with a myriad of advanced detection and monitoring equipment. The results and interpretation of this monitoring will be provided to the incident commander and emergency management officials for their use in making public protection decisions.
On-Scene Incident Command

CSXT understands and abides by the authority and responsibility of local emergency response officials to assume command of any incident that poses a threat to the health and safety of the general public or the environment. Accordingly, all CSXT management personnel recognize that their role at an emergency site is to work with local officials to bring the incident to a safe conclusion.

CSXT personnel and environmental response contractors on the scene of a hazardous materials incident work in accordance with the National Response Plan and the National Incident Management System, and are covered by the U.S. Occupational Safety and Health Administration (OSHA), 29 CFR (Code of Federal Regulations) 1910.120 “Hazardous Waste Operations and Emergency Response” (HAZWOPER) regulations. In accordance with these regulations, CSXT will utilize an Incident Command System (ICS) for its employees and contractors operating within Unified Command System organizational structure as prescribed by the National Incident Management System (NIMS).

CSXT will also work with local officials in a Unified NIMS/ICS as recognized by the U.S. Environmental Protection Agency (EPA) and U.S. Coast Guard (USCG) as cited in the National Response Plan (NRP) and National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Parts 300. Figure 4-A displays the Unified NIMS/ICS identifying CSXT personnel who could be called upon to work as part of the ICS.

Only fully trained and qualified individuals will be permitted to conduct offensive, hands-on, technical response activities. Specialized contractors working at the scene are covered by these regulations and are considered “specialized” employees.

The senior CSXT transportation department representative at the scene is in charge of all CSXT personnel, contractors and other company resources. This senior CSXT official will coordinate all activities with the local emergency response official in charge. CSXT will make resources and information available to the local emergency response official to aid in the safe and efficient mitigation of the incident.

No CSXT official may commit any resources to any task that would violate local, state, or federal laws or pose an unreasonable risk or safety hazard to any personnel working for CSXT.

CSXT’s Operating and Safety Rules will be strictly adhered to during all incident recovery or emergency operations. The senior on-site CSXT official is fully responsible for the enforcement of the rules and the conduct of all employees, both CSXT and contractor personnel.
**Figure 4-A**

**Unified NIMS/ICS Command Structure**

- **Unified Command**
  - Federal
  - Local
  - CSXT
  - State

- **CSXT Incident Manager**
  - Senior Transportation Officer

- **Public Information**
  - CSXT Corporate Communications

- **Government Liaison**
  - CSXT Local and State Government and Community Affairs

- **Safety/Hazmat Operations**

- **Operations**
  - Transportation
  - Mechanical Engineering

- **Information/Intelligence**
  - Environmental
  - Police Department

- **Planning**
  - Network Operations
  - Service Design

- **Logistics**
  - Telecommunications
  - Freight Claims

- **Finance**
  - General Claims

*Note: Operations branch may also provide logistical support.*
Freight Railroad Security

America's railroads have a long history of emphasizing security and law enforcement issues - in times of peace and times of war. The railroad industry recognizes that the on-going threat of terrorism must be dealt with in an assertive manner. In conjunction with the AAR (Association of American Railroads), CSXT utilizes a tiered comprehensive security plan that improves the safety and security of the nation's rail infrastructure, its personnel, the communities through which it operates, and the products being delivered to many communities in the eastern United States. CSXT employs a railroad police force made up of commissioned or certified (depending on state laws) officers with interstate authority under 49 USC, Section 28101, who work very closely with numerous law enforcement agencies throughout the rail network. CSXT has further strengthened our rail infrastructure through the company's Infrastructure Protection Group that focuses on security planning, and a highly specialized and highly trained Rapid Response Team exists to further enhance security.

Federal Railroad Administration Issues Emergency Order to Prevent Unintended Hazardous Materials Train Movement

The U.S. Department of Transportation's Federal Railroad Administration (FRA) issued an Emergency Order and Safety Advisory to help prevent trains operating on mainline tracks or sidings from moving unintentionally. The FRA's announcement was made in response to the July 6, 2013 derailment in Lac-Mégantic, Quebec, Canada. The actions announced build on the success of FRA's rigorous safety program, which has helped reduce train accidents by 43 percent over the last decade, and made 2012 the safest year in American rail history.

The Emergency Order outlines measures that all railroads must undertake in order to comply with this directive. Listed below is the portion directly related to first responders:

Railroads must develop procedures to ensure a qualified railroad employee inspects all equipment that an emergency responder has been on, under or between before the train can be left unattended.

Under current DOT regulations, all freight railroads are required to develop and implement risk assessments and security plans in order to transport any hazardous material, including a plan to prevent unauthorized access in rail yards, facilities and trains carrying hazardous materials. Railroads that carry hazardous materials are required to develop and follow a security protocol while en route; railroad employees are subject to background checks and must complete training. Training programs and protocols are reviewed and audited by the FRA routinely and generally designed to be progressive so as the level of risk increases so does the level of security required.

To view this order in its entirety, please go to http://www.fra.dot.gov.
National Security Effort

On a national level, a freight railroad industry representative serves on the FBI's Joint Terrorism Task Force to ensure the flow of vital security information throughout the rail industry. Freight rail security is coordinated and closely monitored through the AAR 24-hour Operations Center, which acts as a link between the railroads and the national security intelligence community. CSXT, in concert with the rail industry, has established four security alert levels. These security alert levels are continually evaluated and changed to reflect existing security threats against the rail industry.

- **Alert Level 1 – Baseline Security Practices/Normal day-to-day operations:** applies when a general threat of possible terrorist activity exists but warrants only a routine security posture. The nature and extent of terrorist attacks are unpredictable, and current circumstances do not justify full implementation of a higher alert level.

- **Alert Level 2 – Heightened Security Awareness:** applies when there is a general non-specific threat of possible terrorist activity involving railroad personnel and facilities.

- **Alert Level 3 – Credible Threat:** applies when an increased, credible and more specific threat of terrorist activity exists. A decision to declare level 3 will be evaluated against the specificity of threat against railroad personnel and facilities.

- **Alert Level 4 – Confirmed Threat:** applies when a confirmed threat against railroad industry exists, an actual attack against the railroad, an attack in the US causing mass casualties has occurred, or other imminent actions create grave concerns about the safety of operations.

The nations' railroads, are in close, regular contact with the security and intelligence office of the U.S. Department of Transportation (DOT) and the Department of Homeland Security (DHS). The countermeasures established by CSXT, are thoroughly reviewed by the DOT, DHS, and key national security agencies to ensure that hazardous materials are being transported in a safe and secure environment.

The Department of Homeland Security (DHS) and Department of Transportation (DOT) have recommendations in place for the rail transportation of toxic inhalation hazard materials (TIH), such as chlorine and anhydrous ammonia. Several of these recommended security action items involve movement of TIH materials in DHS-defined high threat, high density urban areas (HTUA). CSX Transportation conducts rail operations in high threat, high density urban areas, of which your community may be a part.

CSX Transportation (CSXT) operates with common carrier obligations and is required by law to transport TIH materials, so long as they are offered in accordance with federal regulatory requirements. We continue to encourage the chemical industry to find less hazardous substitutes and otherwise work to reduce the shipment of these materials by rail. When we are called upon to handle these commodities, CSXT is committed to transporting them in the safest, most secure manner we can.
Security Action Steps

Some examples of measures employed by CSXT and other rail carriers to improve security are:

• Increased employee security awareness and training to ensure that over 200,000 railroad employees are the eyes and ears of the industry's security
• Development of a comprehensive security plan and security countermeasure management system
• Creation of an Infrastructure Protection group
• Establishment of a 24/7 AAR operations center to coordinate industry-wide rail freight security
• Increased tracking and inspection of certain commodities and real-time tracking ability for certain shipments
• Conducting security exercises
• Placement of advanced asset monitoring at certain critical infrastructure
• Increased security of railroad physical assets including random inspections
• Enhanced cyber-security procedures and encryption technology
SECTION 5 - RESPONSE PROTOCOLS

Emergency response involves activities designed to address the immediate and short-term impact of a railroad incident. This section reviews CSXT’s response operation guidelines that are of particular importance to local responders and sources of emergency response information available to local responders. CSXT’s response capabilities, resources needed from local responders, and interaction with the media are also discussed in this section.

Response Operation Principles

CSXT supervisory personnel are trained to work closely with local officials to bring the incident to a safe conclusion. CSXT personnel manage internal resources and strive to interact and cooperate effectively with local responders using the elements of the incident command system and unified command, as discussed in Section 2.

CSXT utilizes a modified incident command system in the management of its personnel and contractors and will interface with local responders using the principles of NIMS/ICS unified command.

CSXT response priorities are:

- Immediate safety of life (general public, emergency responders and CSX employees.)
- Health of affected persons.
- Protection of the environment including air, waters (surface and ground) and soil.
- Protection of public and private property.
- System restoration.

In the event of an incident where there has been impact to the community, CSX works to ensure that all parties – community members, employees and first responders - have the assistance they need and a standard of care that provides the least amount of disruption possible and an expeditious return to their homes, lives and places of business. CSX works closely with local agencies such as the Red Cross and Emergency Management providers as well as the CSX environmental contractors as part of its response efforts.
Emergency Response Information Sources

As reviewed in Section 4 of this guide, each CSXT conductor carries specific information about hazardous materials being carried on the train. This information conforms to DOT regulations regarding shipping papers and descriptions for hazardous materials. If the crew is incapacitated or the train documents are otherwise unavailable, copies can be sent via facsimile (fax) or e-mail by the CSXT Public Safety Coordination Center (1-800-232-0144) to a location requested by the Incident Commander. CSXT Operating Rules require the conductor to maintain a copy of the Emergency Response Guidebook that provides initial response actions for the release of specific products. If an incident occurs at a staffed CSXT facility, emergency responders will be provided copies of appropriate shipping papers for the involved car(s).

Local responders can contact CHEMTREC (1-800-424-9300) for chemical safety and response information for rail yard or mainline incidents. While CSXT’s train crews do not routinely carry Material Safety Data Sheets (MSDS), CHEMTREC can provide them when needed.

On-scene responders with access to “Operation Respond Emergency Information System” (OREIS) software may also access this system to obtain product information about the contents of a particular car. This software may be installed in local emergency communication centers, mobile command posts or with hazardous materials units. It provides local responders with quick access to the CSXT computer network for specific data on the products carried in hazardous material cars and the emergency response information for the product. Local responders must have the car initials and number of the railcar(s) involved in the incident to search for this information on CSXT’s computer system. For more information on OREIS contact the Operation Respond Institute at www.OREIS.org.

Incident Scenarios

Table 5-A illustrates the types of incidents involving hazardous materials that may occur and appropriate response roles of various organizations for each type of incident.
### Table 5-A

**Summary of Incident Types, Responses, and Incident Command**

<table>
<thead>
<tr>
<th>INCIDENT TYPE</th>
<th>CSXT RESPONDERS</th>
<th>LOCAL RESPONSE ROLE AND RESPONDERS</th>
<th>INCIDENT COMMAND SYSTEM PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaking container with no off site impact, no fire, no injury</td>
<td>- Shipper&lt;br&gt;- ER Contractor&lt;br&gt;- CSXT Hazmat&lt;br&gt;- Local CSXT Management</td>
<td>- Notification only</td>
<td>- CSXT local management/Hazmat</td>
</tr>
<tr>
<td>Leaking container with off site impact, a fire or injury</td>
<td>- Shipper&lt;br&gt;- ER Contractor&lt;br&gt;- CSXT Hazmat&lt;br&gt;- Local CSXT Management</td>
<td>- Fire/EMS&lt;br&gt;- Hazmat Team</td>
<td>- Local Incident Commander&lt;br&gt;- CSXT local management</td>
</tr>
<tr>
<td>Ruptured fuel tank on locomotive</td>
<td>- ER Contractor&lt;br&gt;- CSXT Hazmat&lt;br&gt;- Local CSXT Management</td>
<td>- Fire/EMS&lt;br&gt;- Hazmat Team</td>
<td>- Local Incident Commander&lt;br&gt;- CSXT local management</td>
</tr>
<tr>
<td>Derailment with no release, no tank damage, upright</td>
<td>- Local CSXT Management&lt;br&gt;- Re-Rail Contractor</td>
<td>- Notification only</td>
<td>- CSXT local management</td>
</tr>
<tr>
<td>Derailment with tank overturned, serious tank damage</td>
<td>- Local CSXT Management&lt;br&gt;- Re-Rail Contractor&lt;br&gt;- ER Contractor&lt;br&gt;- CSXT Hazmat</td>
<td>- Fire/EMS&lt;br&gt;- Hazmat Team (Stand-by mode)</td>
<td>- CSXT local management&lt;br&gt;- Local Incident Commander</td>
</tr>
<tr>
<td>Derailment with release</td>
<td>- Local CSXT Management&lt;br&gt;- Re-Rail Contractor&lt;br&gt;- ER Contractor&lt;br&gt;- CSXT Hazmat</td>
<td>- Fire/EMS&lt;br&gt;- Hazmat Team&lt;br&gt;- State/Federal agencies</td>
<td>- Local Incident Commander&lt;br&gt;- CSXT local management</td>
</tr>
</tbody>
</table>
Media Interaction

CSXT procedures provide that communications with the media should be addressed through the local Incident Command System (ICS) by a Public Information Officer (PIO).

If a member of the media requests information about CSXT or seeks to talk with a CSXT public information representative, such queries/requests will be coordinated through CSXT’s corporate communications main office, unless the representative is present at an incident site.

For Media Inquiries Concerning CSX Transportation please contact:
CSXT Corporate Communications
24 Hours a day 1-877-Tell CSX
(1-877-835-5279)

Agency Resource Utilization

CSXT does not maintain resources such as major firefighting or water supply equipment, emergency medical personnel, medical transport services, command posts, canteens or large-scale communications equipment. During an emergency, CSXT relies upon local emergency officials to provide these types of resources. The senior on-site CSXT official will coordinate with the local Incident Commander to obtain these local resources. Local resources will remain under the control of the local authority.

Population Protection

In the event of a railroad emergency, the protection of life and health must be the first concern and priority. In cases of doubt, the safest course of action must be taken. However, decisions to evacuate potentially affected populations should be based upon facts, not fears.

Key factors in deciding upon an evacuation should include the following:

Situational Factors:
- Actual situation and conditions (leak, fire, spill).
- Products involved (physical and chemical properties).
- Hazards of the products.
- Condition of the containers.
- Ability of the products to migrate off site.
- Results of air monitoring or dispersion models.
Location Factors:
- Location of the incident and containers.
- Size of affected population.
- Risks of moving people.
- Types of affected population.
- Ability to shelter in place non-ambulatory populations.

Resource Factors:
- Ability to shelter evacuated populations.
- Ability to notify and move the affected population.

Pre-Emergency Identification of At-Risk Populations

During the pre-emergency planning process, facilities such as schools, day care centers, hospitals, nursing homes, high-rise occupancies, and factories should be identified. Local emergency response officials should meet with facility managers and review problems expected with an evacuation, as well as the resources needed to move the population of the facility.

Even though releases of hazardous materials are rare, the possibility does exist that one could occur in either a rail yard or along a mainline. As such, CSXT recommends the adoption of the shelter-in-place guidelines as issued by DOT, the US Environmental Protection Agency (EPA) and the Federal Emergency Management Agency, in the Emergency Response Guidebook (See Protective Actions Section). Shelter-in-place guidelines may provide greater safety and health protection to affected residents than evacuations. Effective communications with residents on what to do during an incident is an important component of a successful shelter-in-place plan.

The key to successful shelter-in-place operations is developing individual facility plans with facility managers and safety personnel. Instructing residents on what to do and not to do in the event of an emergency, and communicating information to them during an emergency are all-important components of a shelter-in-place plan. (See Appendix C for shelter-in-place recommended practices.)

Passenger-Commuter Train Incident Considerations

At many locations, passenger rail entities operate commuter and passenger trains on CSXT owned and operated tracks. When operating on CSXT, these trains are under the operational control of a CSXT train dispatcher. In the event of an emergency involving a passenger train, CSXT officials will coordinate with the passenger rail entity officials to manage the evacuation of passengers and mitigation of the emergency. Notification of the incident to emergency responders is essentially the same as outlined in Section 3 of this guide.
For emergency responders, the concept of Unified Incident Command is essential to safe, effective emergency operations. CSXT and passenger train officials will work with the public safety incident commander to bring the incident to a safe conclusion.

In the event of a passenger train emergency, the timeliness of the response is paramount since medical treatment and evacuation of passengers will sometimes be required. Many passenger rail entities produce detailed guidance and information for emergency responders. Localities having passenger rail traffic are encouraged to contact the local passenger rail operator for further emergency planning information.

Identifying access points for emergency equipment and routes for emergency medical evacuation is an important aspect of emergency preparedness preplanning. Emergency management officials should be aware of the location and type of operations conducted on rail lines in their area of responsibility and whether it involves freight, passenger or both types of rail operations. Local CSXT personnel can assist emergency responders by providing information on points of vehicular access to railroad property.

In the event of a derailment of a passenger train, special consideration needs to be given to passenger evacuation. For safety reasons, passengers on the train should not be evacuated unless it is absolutely necessary to do so. If the rail cars are upright and there is no danger to the passengers inside the car, it is recommended that they stay in the cars until such time that adequate shelter and transportation is available. Since the areas in and around railroad tracks, especially immediately following a train derailment, can be very hazardous, keeping passengers in the cars helps to maintain site safety and passenger accountability.

CSX Transportation has prepared a Passenger Train Emergency Preparedness Plan in order to ensure the safety of National Railroad Passenger Corporation (Amtrak) passenger trains during a security event while operating on our network.

As part of this plan, CSXT is designating certain locations on passenger routes where Amtrak operates as “Safe Havens.” These Safe Havens were selected based on geographic spacing throughout our network and having an accessible discharge point should the need to evacuate a train arise.

There are 201 locations on CSXT’s network that have been identified Safe Havens. Of these selected locations, 149 are at Amtrak stations or facilities and the remaining 52 are at road crossings or other commuter locations. These crossings have been identified by street name, and the corresponding railroad milepost location.

If emergency response personnel need to communicate with a passenger train operating on CSXT tracks they should contact the CSXT Public Safety Coordination Center (PSCC) at 1-800-232-0144.

It is also important to recognize that if an incident involving a passenger, commuter or freight train occurs on, or in close proximity to, a track adjacent to CSXT’s tracks, CSXT should be promptly contacted through the PSCC.
Below is a list of passenger rail entities that operate on or in close proximity to (i.e., parallel to, over, under, or across) CSXT rail lines:

<table>
<thead>
<tr>
<th>PASSENGER - COMMUTER ENTITY NAME</th>
<th>LOCATION OF OPERATION</th>
<th>NON-EMERGENCY TELEPHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amtrak</td>
<td>Various</td>
<td>202-906-3000</td>
</tr>
<tr>
<td>Metro</td>
<td>St. Louis, MO/E. St. Louis, IL</td>
<td>314-982-1400</td>
</tr>
<tr>
<td>CTA</td>
<td>Chicago, IL area</td>
<td>312-664-7200</td>
</tr>
<tr>
<td>RTA (Shaker Heights Rapid Transit)</td>
<td>Cleveland, OH area</td>
<td>216-621-9500</td>
</tr>
<tr>
<td>HART</td>
<td>Tampa, FL area</td>
<td>813-254-4278</td>
</tr>
<tr>
<td>Long Island Rail Road, Co.,</td>
<td>The Long Island, NY area</td>
<td>718-558-7400</td>
</tr>
<tr>
<td>MARC Train Service</td>
<td>Maryland/Washington DC area</td>
<td>410-539-5000</td>
</tr>
<tr>
<td>MARTA</td>
<td>Atlanta, GA area</td>
<td>404-848-5000</td>
</tr>
<tr>
<td>Metra</td>
<td>Chicago, IL area</td>
<td>312-322-6900</td>
</tr>
<tr>
<td>Metro North Railroad</td>
<td>Metropolitan NYC area</td>
<td>212-340-3000</td>
</tr>
<tr>
<td>MBTA</td>
<td>Boston, MA area</td>
<td>617-222-3200</td>
</tr>
<tr>
<td>MTA</td>
<td>Baltimore, MD area</td>
<td>410-539-5000</td>
</tr>
<tr>
<td>NCDOT [1]</td>
<td>Raleigh, NC area</td>
<td>919-733-7245</td>
</tr>
<tr>
<td>NICTD</td>
<td>Chesterton/Michigan City, IN area</td>
<td>219-926-5744</td>
</tr>
<tr>
<td>NJT</td>
<td>North New Jersey</td>
<td>201-714-2811</td>
</tr>
<tr>
<td>PATH</td>
<td>New Jersey area</td>
<td>201-216-6199</td>
</tr>
<tr>
<td>SEPTA</td>
<td>Philadelphia, PA area</td>
<td>215-580-7852</td>
</tr>
<tr>
<td>VRE</td>
<td>Virginia/Washington DC area</td>
<td>703-684-1001</td>
</tr>
<tr>
<td>WMATA</td>
<td>Washington DC/Maryland area</td>
<td>202-962-1234</td>
</tr>
</tbody>
</table>

[1] Trains owned by North Carolina Department of Transportation (NCDOT); operated by Amtrak on and adjacent to CSXT trackage.

[2] Trackage owned by the State of Florida; train dispatching conducted by CSXT

Emergency responders and planners desiring additional information on passenger train emergencies may contact Amtrak's manager-emergency preparedness at perryj0@amtrak.com.

To contact Amtrak directly in the event of an emergency, call the Amtrak Operations Center at 1-800-424-0217.
Bridge and Tunnel Incident Considerations

Railroad bridges and tunnels have the potential to present difficult situations in the event of an emergency. Emergency responders need to be aware of the potential hazards and difficulties they could encounter in either of these environments.

Tunnels

Fires and emergency situations within the confining areas of a tunnel system are among the most difficult to cope with due to the limited space available for fire and emergency personnel to operate.

Direct liaison between railroad authorities and emergency officials is essential to keep emergency forces apprised of current conditions within underground installations.

Prior to entry into a railroad tunnel, emergency personnel must contact the controlling railroad to ensure that all rail traffic has been stopped in the tunnel and on rail lines leading to the tunnel.

In most cases, there is very little side clearance between the rails and the walls of the tunnel. In certain tunnels, there are emergency vestibules that normally only accommodate a single individual. These vestibules may provide limited protection from passing equipment, but should only be used in an emergency. Emergency personnel should confirm that all rail equipment is secured prior to entering the tunnel.

Tunnels used primarily or exclusively for freight trains are not typically equipped with ventilation systems. In the event that entry is required into a tunnel and there is fire, smoke, or exhaust fumes present in the tunnel, emergency responders should use and/or have available self-contained breathing apparatus (SCBA) for respiratory protection. Special consideration needs to be given to the amount of time available when using self-contained breathing apparatus (SCBA); i.e., tunnel length as well as means of entry and egress.

Tunnels used primarily or exclusively for freight trains will typically have limited means of entry and egress. The only points of entry normally present are the entry portals through which the trains pass - manholes, access ports, or other mid-length entry points are not normally available. Emergency personnel should consult with local railroad officials to identify points of tunnel entry and egress in their area of responsibility.

Tunnels are not normally equipped with standpipes or other forms of fire-fighting water supply. In the event of a fire, responders may be required to deploy water supply lines a considerable distance inside of the tunnel structure. Pre-fire planning of tunnel structures should be conducted cooperatively between the railroad and the fire department to determine the most effective method to deploy fire hoses and equipment.

Due to the close clearances inside of tunnel structures, the removal of derailed rail equipment can be a complicated and time-consuming procedure. Emergency personnel should be aware of the additional time that may be required to remove damaged and/or derailed equipment.

Vehicle access to tunnels may be accomplished through the use of railroad “hi-rail” equipment. These specially designed vehicles are equipped with wheels that allow them to traverse rail lines. This equipment can be made available to emergency personnel for the transportation of personnel and equipment into a tunnel.
Bridges

Railroad bridges, much like railroad tunnels, can present unique obstacles to emergency response personnel. Prior identification and pre-planning are essential to safe, successful emergency incident response.

Railroad bridges are custom built structures designed specifically to handle train traffic. They are generally narrow and are not for use by motor vehicles. Railroad bridges can be classified based on the type of deck construction; open deck or ballast deck. Open deck structures utilize timber bridge ties spaced between 12 and 15 inches on center. Ballast deck structures have solid decks that contain the normal track structure (ballast, track ties and rail). Most railroad bridges do not have walkways. When walkways are provided, they are for use by railroad personnel only, while there are no trains passing over the structure. Clearances do not allow for persons to be on the bridge during train operations.

Proper track protection is needed to occupy or cross railroad bridges and should be done only with the assistance and at the direction of a qualified railroad employee.

Like tunnels, the limited access associated with bridges may require special techniques for emergency responders to deploy fire-fighting hoses and equipment. In some cases, water supply lines may have to be stretched onto and across the span of a bridge in the event of a fire on or in the bridge structure. In other cases, pumping from water sources or use of fire fighting vessels could be necessary. In most cases, every effort will be made to pull the cars of a train across a bridge to solid ground. Railroad “hi-rail” equipment can be made available to transport personnel and equipment onto and across bridge structures.

Pre-planning to identify points of access, clearances, and equipment requirements is strongly encouraged. Emergency personnel should coordinate informative inspections with local railroad officials in their area of responsibility. Close coordination with railroad officials is essential in the event of a train emergency on a bridge. Emergency responders should limit their movements onto the bridge structure until it is deemed safe.

**Extreme caution should be used when responding to emergencies in tunnels or on bridges.**
APPENDICIES
APPENDIX A

TRAIN DOCUMENTATION AND SHIPPING PAPERS

Introduction

This appendix shows examples of the documents and shipping papers carried on CSXT trains. The examples are excerpts and compilations from actual train documents.

The Department of Transportation (DOT) prescribes the documentation and descriptions for shipments of hazardous materials. Emergency responders should familiarize themselves with the basic documents/description requirements for shipments of hazardous materials. All modes of transportation, including railroads, are required to supply and have readily available shipping documentation for hazardous materials.

Shipping documents on a CSXT train are maintained and carried by the train conductor. The conductor will make these documents available to emergency response officials in the event of an emergency.

CSXT can also transmit the shipping documents by various means to emergency responders in the field. Train consists, freight car waybills and emergency-handling instructions can be relayed via email, facsimile or verbally.

To obtain shipping documents or other emergency information, responders can contact CSXT’s Public Safety Coordination Center at 1-800-232-0144. The center operates 24 hours a day, 7 days a week.

EXAMPLE OF HAZMAT SHIPPING DESCRIPTION

- Car Initial & Number
- Quantity
- Proper Shipping Name
- UN Number and Packing Group
- Emergency Contact
- Hazard Class
- Reportable Quantity Notation
Appendix A, continued

CSXT TRAIN CONSIST (PART 1) "TONNAGE GRAPH"

START OF TRAIN DOCUMENTS

CSXT TRAIN DOCUMENTATION

THIS DOCUMENT IS REQUIRED BEFORE DEPARTURE FROM ALL ORIGINATING TERMINALS

TONNAGE GRAPH

=-------------
### Appendix A, continued

**TRAIN CONSIST (PART 2) POSITION-IN-TRAIN DOCUMENT**

CT 168 REPORT - NOTICE OF RAIL CARS/UNITS CONTAINING HAZARDOUS MATERIALS

The following rail cars/units containing hazardous materials are located in your train. They must be positioned in your train in accordance with Federal regulations. Whenever there is a change in the position of any hazardous material car in the train, the conductor (or designee) must immediately update this document to show the new position of all hazardous materials cars.

**Key Field Codes:**
- **P** = Poison Inhalation Hazard Zone A or B
- **F** = Flammable Gas 2.1
- **E** = Environmentally Sensitive Chemicals
- **X** = Explosives 1.1 or 1.2

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<th>NUMBER</th>
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The paperwork carried by a CSXT train crew is a multi-page document made up of four basic sections.

Section 1 – Tonnage Graph
Section 2 – Position-In-Train Document
Section 3 – Train Consist Train Listing and Hazardous Materials Description
Section 4 – Hazardous Special Handling Instructions Emergency Handling Precautions
Appendix A, continued

TRAIN CONSIST (PART 4) EMERGENCY HANDLING INSTRUCTIONS

HAZARDOUS SPECIAL HANDLING INSTRUCTIONS

IN CASE OF ACCIDENT PROVIDE THIS LIST TO RESPONSE TEAM

IF MATERIAL INVOLVED IN FIRE

EXTINGUISH FIRE USING AGENT SUITABLE FOR TYPE OF SURROUNDING FIRE
(MATERIAL ITSELF DOES NOT BURN OR BURNS WITH DIFFICULTY.)
USE WATER IN FLOODING QUANTITIES AS FOG
APPLY WATER FROM AS FAR A DISTANCE AS POSSIBLE

IF MATERIAL NOT INVOLVED IN FIRE

KEEP MATERIAL OUT OF WATER SOURCES AND SEWERS
BUILD DIERES TO CONTAIN FLOW AS NECESSARY

PERSONNEL PROTECTION

AVOID BREATHING VAPORS OR DUSTS
AVOID BODILY CONTACT WITH THE MATERIAL
WEAR APPROPRIATE CHEMICAL PROTECTIVE GLOVES, BOOTS AND GOGGLES
DO NOT HANDLE BROKEN PACKAGES UNLESS WEARING APPROPRIATE
PERSONAL PROTECTIVE EQUIPMENT
WASH AWAY ANY MATERIAL WHICH MAY HAVE CONTACTED THE BODY
WITH COPIOUS AMOUNTS OF WATER OR SOAP AND WATER
IF CONTACT WITH THE MATERIAL ANTICIPATED,
WEAR APPROPRIATE CHEMICAL PROTECTIVE CLOTHING

ENVIRONMENTAL CONSIDERATIONS - LAND SPILL

DIG A PIT, POND, LAGOON, HOLDING AREA
TO CONTAIN LIQUID OR SOLID MATERIAL
DIKE SURFACE FLOW USING SOIL, SAND BAGS,
FOAMED POLYURETHANE, OR FOAMED CONCRETE
ABSORB BULK LIQUID WITH FLY ASH OR CEMENT POWDER
NEUTRALIZE WITH VINEGAR OR OTHER DILUTE ACID

FIRST AID RESPONSES

MOVE VICTIM TO FRESH AIR; CALL EMERGENCY MEDICAL CARE.
REMOVE AND ISOLATE CONTAMINATED CLOTHING AND SHOES AT THE SITE.
A waybill is the shipping document for a single railcar. Waybills are not normally carried in train service.

They are available for printout in the event of an emergency.

As with other shipping documents, freight car waybills can be faxed or otherwise transmitted to emergency responders in the field.
APPENDIX B

RECOMMENDED PRACTICES FOR SHELTER-IN-PLACE

The purpose of sheltering in place is to protect people from the affects of a natural disaster or to prevent people from being exposed to a hazard from an industrial or transportation-related chemical release. The following steps represent recommended practices for sheltering in place:

1. Remain calm.

2. If you are outdoors, gather your family members and pets and go inside immediately. If you are in a car, close windows and vents.

3. In the event of a chemical emergency, try to make your building airtight so that outside air cannot enter. For example:
   - Close all doors to the outside and close and lock all windows.
   - Building superintendents should set all ventilation systems to 100% re-circulation so that no outside air is drawn into the structure. Where this is not possible, ventilation systems should be turned off.
   - Turn off all heating systems.
   - Turn off all air conditioners and switch inlets to the “closed” position.
   - Turn off all exhaust fans in kitchens, bathrooms and other spaces.
   - Seal gaps under doorways and windows with wet towels and duct tape.
   - Seal gaps around windows and air-conditioning units, bathroom and kitchen exhaust fans and stove and dryer vents; use duct tape and plastic sheeting, wax paper or aluminum foil.
   - Close all fireplace dampers.
   - Close as many internal doors as possible.
   - Minimize use of elevators in buildings, as these tend to “pump” outside air in and out of a building as they travel up and down.

4. Move to an interior room (or hallway) with no windows or doors to the outside. You may want to bring a cooler with drinks and snacks, a battery-powered flashlight and a battery-powered radio into the place that you have chosen.
Appendix B, continued

5. If an explosion is possible, close drapes, curtains and shades over windows. Stay away from external windows to prevent potential harm from flying glass.

6. Stay indoors until you receive official notice it is safe to go out or until you are asked to leave the area. Tune into the Emergency Broadcasting System (EBS) on the radio or television for further information and guidance.

It is vital to maintain communications with competent persons sheltering inside buildings to advise them about changing conditions.

Sources:
(b) Emergency Response Guidebook (ERG), U.S. Department of Transportation
(c) Guide for All Hazard Emergency Planning Federal Emergency Management Agency (FEMA), September 1996
APPENDIX C

USEFUL WEB LINKS


American Chemistry Council – http://www.americanchemistry.com/

American Short Line and Regional Railroad Association – http://www.aslrra.org/

Association of American Railroads – http://www.aar.org/

CANUTEC (Canadian Transport Emergency Centre) – http://www.tc.gc.ca/canutec/

CHEMTREC (Chemical Transportation Emergency Center) – http://www.chemtrec.com/

Chlorine Institute – http://www.cl2.com/


National Transportation Safety Board – http://www.ntsb.gov

Operation Respond – http://www.oreis.org


U.S. Fire Administration (National Fire Academy) – http://www.usfa.fema.gov/
## APPENDIX D
### ACRONYM LIST

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACC</td>
<td>American Chemistry Council</td>
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<tr>
<td>AAR</td>
<td>Association of American Railroads</td>
</tr>
<tr>
<td>BOE</td>
<td>Bureau of Explosives (AAR)</td>
</tr>
<tr>
<td>CAER</td>
<td>Community Awareness and Emergency Response</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>CHEMTREC</td>
<td>Chemical Transportation Emergency Center</td>
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<tr>
<td>CIA</td>
<td>Central Intelligence Agency</td>
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<tr>
<td>CSXT</td>
<td>CSX Transportation, Inc.</td>
</tr>
<tr>
<td>DHS</td>
<td>United States Department of Homeland Security</td>
</tr>
<tr>
<td>DOD</td>
<td>United States Department of Defense</td>
</tr>
<tr>
<td>DOT</td>
<td>United States Department of Transportation</td>
</tr>
<tr>
<td>EBS</td>
<td>Emergency Broadcasting System</td>
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<tr>
<td>EMS</td>
<td>Emergency Medical Services</td>
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<tr>
<td>EPA</td>
<td>United States Environmental Protection Agency</td>
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<td>ERG</td>
<td>Emergency Response Guidebook</td>
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<tr>
<td>FBI</td>
<td>Federal Bureau of Investigation</td>
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<td>Federal Emergency Management Agency</td>
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<td>FRA</td>
<td>Federal Railroad Administration</td>
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<td>HAZWOPER</td>
<td>Hazardous Waste Operations Emergency Response, 29 CFR 1910.120</td>
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<tr>
<td>HMERP</td>
<td>Hazardous Materials Emergency Response Plan</td>
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<tr>
<td>ICS</td>
<td>Incident Command System</td>
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<tr>
<td>LEPC</td>
<td>Local Emergency Planning Committee</td>
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<tr>
<td>MSDS</td>
<td>Material Safety Data Sheets</td>
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<td>NA</td>
<td>North America</td>
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<td>NENA</td>
<td>National Emergency Number Association</td>
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<tr>
<td>NTSB</td>
<td>National Transportation Safety Board</td>
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<tr>
<td>OREIS&lt;sup&gt;®&lt;/sup&gt;</td>
<td>Operation Respond Emergency Information System</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<tr>
<td>PSCC</td>
<td>CSXT's Public Safety Coordination Center</td>
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<tr>
<td>PIH</td>
<td>Poisonous by Inhalation (Synonymous with TIH)</td>
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<tr>
<td>PIO</td>
<td>Public Information Officer</td>
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<tr>
<td>SCBA</td>
<td>Self-Contained Breathing Apparatus</td>
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<tr>
<td>STB</td>
<td>Surface Transportation Board</td>
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<tr>
<td>STCC</td>
<td>Standard Transportation Commodity Code</td>
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<td>STRACNET</td>
<td>Strategic Rail Corridor Network</td>
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<tr>
<td>TRANS&lt;sup&gt;®&lt;/sup&gt;CAER</td>
<td>Transportation Community Awareness and Emergency Response</td>
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<td>Toxic Inhalation Hazard (Synonymous with PIH)</td>
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<tr>
<td>TSA</td>
<td>Transportation Security Administration</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>USCG</td>
<td>United States Coast Guard</td>
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APPENDIX E

REQUEST FOR HAZARDOUS MATERIALS DENSITY STUDY
(To Request a List of Hazardous Materials Transported Through a Community)

Organization Requesting Density Study: ________________________________

Contact Person: ________________________________

Phone Number: ________________________________

Email Address: ________________________________

Mailing Address: ________________________________

(Street Address)

(City, State, Zip)

Geographical Description of Area for study: ________________________________

By signing below I acknowledge and agree to the terms set forth by CSX Transportation, Inc. for use and dissemination of the information contained within the CSXT Hazardous Materials Density Study. I affirm that the information provided by CSXT in this report will be used solely for and by bonafide emergency planning and response organizations for the expressed purpose of emergency and contingency planning. This information will not be distributed publicly in whole or in part without the expressed written permission of CSX Transportation, Inc.

(Signature of person requesting density study)

Return Completed Form to: CSXT, Director-Hazardous Materials Systems
500 Water Street
J-275
Jacksonville, FL 32202 or Fax 904-245-2867

For CSXT Use Only
Director, Hazardous Material Systems Approval: ___ Yes ___ NO Date: ________________

Crisis Communication Manager:

Date Request Received: ________________________________

Date Report Generated: ________________________________

Date Report Sent: ________________________________
For questions or comments concerning this document please contact:

CSX Transportation
Hazardous Materials Systems
500 Water Street; J-275
Jacksonville, FL 32202

Or Via
www.csx.com

Non-Emergency Comments and Questions: 877-TELL-CSX (835-5279)

For Emergency Responders – This document is available online in addition to an Emergency Response to Railroad Incidents (ERRI) a self study guide please contact www.csxhazmat.kor-tx.com. The ERRI is a comprehensive self study course introduces First Responders and agencies a brief introduction to safety and working in emergency situations on the rail road. The Course materials include a workbook with exam for Completion Certificate and DVD.

Notes:
CSX Environmental Field Services

RAILROAD POLICE
CSX TRANSPORTATION

TRANSCAER®
Safety is a way of life.

How tomorrow moves [CSX]

In case of emergency on CSXT property or equipment, please call the Public Safety Coordination Center (PSCC) at 800-232-0144.

This emergency planning guide was produced by CSX Transportation and the CSXT Hazardous Material Systems Team, a Transcaer® partner.