

# User Guide for

# Hazardous Material Awareness Training



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# **User Guide for Hazardous Material Awareness Training**

#### **Overview**

#### **Purpose**

This Hazardous Materials Awareness User Guide is a training aid to assist you in completing the self-paced multimedia course. This course was developed for employees who are required by the Department of Transportation to complete hazardous material training every three years.

During the course, you will use this guide for:

- Supplementary information
- Reference materials
- Job aids

Your User Guide also contains materials that will be helpful when creating hazardous material waybills. However, it does not contain all of the materials included in the multimedia course, so you should take notes. Additional blank pages have been included at the back of this guide for that purpose.

#### **Audience**

The targeted population is everyone who deals with HazMat or uses ShipCSX to bill Hazardous Materials, including:

- T&E, Field Clerks, Trainmasters, Dispatchers, Yardmasters
- Engineering (Roadmasters, MOW)
- Mechanical (Car & Locomotive)
- E-Billing
- Customer Operations
- Rail billing and collections customer service
- Any other CSXT, CSX, or CSX subsidiary employee who bills hazardous materials for shipping on our railroad

#### Content

Below are the modules in this manual.

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# **Module 1: Taking the Course on TrainingTrax**

### **Overview**

#### **Purpose**

This section provides general information about accessing the training program, help using TrainingTrax, and course completion information.

**In this module** Below are the sections in this module.

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## **Course Description**

#### **Purpose**

This training will provide general awareness and familiarization with hazardous material shipping at CSX, including documentation, security, and emergency response requirements.

#### Training Goals

Employees will be able to interpret placards and documentation in order to keep hazardous materials secure in transport and know procedures, resources, and their responsibilities in dealing with a security threat or necessitated emergency response. This course will also provide a working knowledge of the shipping life cycle of hazardous materials with respect to applicable DOT regulations, present each person's duties, and discuss possible penalties for noncompliance.

#### **Prerequisites**

There are no prerequisites for this course, but this course is a prerequisite for anyone who works with HazMats or uses ShipCSX to bill HazMats.

Continued on next page

## Course Description, Continued

# Learning Objectives

Upon completion of the training, employees will be able to successfully perform their job functions with respect to hazardous materials transport, security maintenance, and emergency response.

- Identify the reference manual available to transportation employees that contains federal regulations for the transportation of hazardous material.
- ♦ Given a job aid for the Hazardous Materials Awareness course, identify general characteristics of hazardous material classes and placards.
- ♦ Recognize the methods used to communicate the presence of hazardous materials within a shipment.
- ♦ Describe the "life cycle" of a hazardous material shipment.
- ♦ List ways to obtain emergency response information.
- ♦ Determine why accurate documentation is important throughout the life cycle of a shipment.
- ♦ Identify the responsibilities (and penalties) or participants in the life cycle of hazardous material shipments as related to Transportation Security.
- ♦ Fill out the HM10 form correctly for transporting HazMat in a vehicle. (Engineering and Mechanical departments ONLY)
- ♦ Handle PIH/TIH cars securely.
- ♦ Ensure the Chain of Custody & Control documentation is current and security measures are in place.

# **Course Requirements**

# Required Materials

U.S. Hazardous Materials Instructions for Rail and the Emergency Response Guide are used in this course, so have them with you.

You will also need access to TrainingTrax either on a CSX POD computer or from any computer on the CSX network. Do not attempt to view the course via 'apps.csx.com'; Citrix does not support audio.

Starting the Course		The course will either be on your TrainingTrax homepage or you can search for it using the course catalog.		
Step		Action	Result	
1	At the	TrainingTrax Home page,	The Browse Training Catalog page	
	select '	Fraining Catalog tab.	displays.	
2	To find	d the course:	The Hazardous Materials	
	HMT -	- Transportation Employees	<b>Awareness</b> course hyperlink appears.	
	HME -	- Engineering & Mechanical		
	>	"HMT + last two digits of		
		<b>current year"</b> in the <i>Search</i>		
		Test Field. (i.e. HMTXX or		
		HMEXX)		
	>	Select <b>All Words</b> from the		
		Search Type drop-down		
		menu.		
	Press S	Search.		
3	Click t	he <b>Hazardous</b> <i>Materials</i>	The General Course – Windows	
	Aware	eness hyperlink.	<i>Internet Explorer</i> provided by CSX	
		• •	window returns.	
	To lau	nch the course, click the	The course starts.	
	hyperl	ink.		
Fo	ollow on	-screen and audio instructions	s to navigate through the course.	

#### **Breaks**

It is recommended that you exit the course if you take a break.

You may take a break at any time during the **lesson.** When you come back to the course, you will return where you exited the course.

Continued on next page

### Course Requirements, Continued

#### Course Time-Out

The course will automatically exit (time-out) if no activity (keystrokes/trackball movement) is detected for ten minutes. Upon reentry to the course, you will return to the same place in the course where you timed-out.

#### Test Consideration

This is a 45 minute course which includes a final quiz on the learning objectives. The quiz requires you to get 85% of the questions correct to complete this course successfully. You are given three tries on the quiz in a single sitting. In TrainingTrax, if you elect to start a new attempt, your previous "bookmark" is **deleted** and you start again at the beginning.

Do not take a break during the **test.** If you exit the course during the test, or allow the machine to time-out, you will be charged with one **failure** in the test. Have all necessary notes, references, and this user guide available during the testing portion of this course. Take notes on the questions that you miss. There are blank pages in this manual for notes.

# Approximate Completion Times

The Hazardous Materials Awareness course is divided into three lessons and a test. Approximate times required to complete each component are listed in the table below.

Sections	Topics	Approx. Time
	<ul> <li>Definitions</li> </ul>	
	<ul> <li>Regulations &amp;</li> </ul>	8 min.
Awareness	References	
	<ul> <li>Identification</li> </ul>	
	<ul> <li>Dangers</li> </ul>	
	Hazardous Materials:	
Identification	<ul> <li>Classification</li> </ul>	10 min.
	<ul> <li>Communication</li> </ul>	
	<ul> <li>Life cycle for each</li> </ul>	
	employee	
Life Cycle	<ul> <li>Emergency Response</li> </ul>	8 min.
	<ul> <li>TSA Regulations</li> </ul>	
	<ul> <li>Chain of Custody</li> </ul>	
Test	Hazardous Materials Awareness	20 min.
rest	Certification Test	20 111111.

### **Trainee Records**

#### **Purpose**

CSX maintains completion records for employees who have taken the course on a computer or who have attended a training session.

#### Course Completion in TrainingTrax

Course completion will be monitored through TrainingTrax. When you have successfully completed the test for this course, credit for completion will be posted to your TrainingTrax transcript, and you will be considered "certified" for FRA purposes.

#### Classroom Training

For classroom training, the instructor is responsible for submitting training information.

#### Help

If you experience any issues taking this course, here are some contact numbers.

Contacts and Telephone Numbers			
Need	Call	At	
Registration/User	CSX Gateway:		
Guides	Search for Hazardous		
	Material Awareness		
	<u>Guide</u>		
	• TrainingTrax:		
	Search by content title or		
	keyword		
Hardware Problems	CSX Help Desk	<b>RNX</b> 426-1111	
		<b>Bell</b> 279-1111	
	<i>Note:</i> If calling the Help		
	Desk have your computer		
	name & user ID		
	number(s) ready. The		
	computer name can be		
	located using PC		
	Diagnostics.		
	_		

# Module 2: Supplementary Information and References

### **Overview**



**Purpose** 

This section provides some highlights from the course and also lists reference materials.

Goal

The information in this module will provide reference material for the practice questions.

In this module:

Below are the sections in this module.

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What you must know about HazMat shipments &	10
identification	
Regulatory Agencies	11
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## What You Must Know About Every HazMat Shipment

#### **MUST Know**

Three things to know about every HazMat shipment:

- 1. What it is and what are its harmful effects.
- 2. Where it is 24 hours a day, seven days a week.
- 3. What to tell emergency crews about who to call in case the material is released into the atmosphere.

In any emergency, contact the Public Safety Communication Center (PSCC) at 1-800-232-0144.

#### Identification

Four methods to identify the presence of hazardous material in a shipment:

- 1. Placards
  - Shaped like a square, turned on its point
  - 10 3/4 by 10 3/4 inch signs
  - Displayed on bulk and non-bulk shipments
  - Found on trailers, shipping containers, and railcars

It is the shipper's responsibility to apply appropriate placards to their shipments.

- 2. Labels
  - Diamond-shaped
  - 4 by 4 inch labels
  - Placed on individual packages of hazardous material
- 3. Markings
  - Found on railcars and intermodal bulk containers
  - Painted on the car or container
  - Commodity information may include:
    - DOT identification number
    - Proper shipping name
    - Marine pollutant warning
    - Hot warning
    - Inhalation Hazard Warning
- 4. Documentation
  - Begins with the shipper
  - Correct identification of shipment contents is crucial
  - The shipper AND its employees can be fined and/or imprisoned for misrepresenting a shipment's contents

## **Regulatory Agencies**

#### DOT

Transport and handling hazardous materials is strictly regulated by the Department of Transportation (DOT). The Hazardous Materials Transportation Act includes all of the hazardous material transportation laws in Title 49 of the United States Code.

Transportation requires tracking throughout the life cycle of each hazardous material shipment.

Hazardous material shipments pose security risks if the shipment is compromised in any way.

#### DHS

The Department of Homeland Security's (DHS) overriding and urgent mission is to lead the unified national effort to secure the country and preserve our freedoms.

#### **TSA**

The Transportation Security Administration (TSA) protects the nation's transportation systems so you and your family can travel safely.

#### **BOE-6000**

CFR 49 – Transportation

We will reference the rules in the Bureau of Explosives, Hazardous Materials Regulations of the Department of Transportation BOE-6000 which is the same as 49 CFR.

It is the primary source of information available to transportation workers when questions arise concerning hazardous material shipments.

# Life Cycle Overview & Emergency Response Basics

#### Waybill

Billing clerks at CSX receive shipping requests and transcribe information form the shipping papers into the CSX Waybill system. All hazardous materials shipments require a ShipCSX waybill.

#### Train Documents

Train documentation is created and includes:

- Contents of the hazardous shipment
- Location in the train
- Emergency response information

The documentation for hazardous material shipments must be correct. The position of the shipment in the train must match the train consist. The shipment has to be positioned away from the hazardous materials.

# **Emergency** Responders

Emergency responders need to know:

- What is in the shipment
- Where it is located within the train
- What other hazardous shipments are close to it
- Who to call PSCC first

#### Emergency Response Resources

Emergency response information has to be assessable to all workers, such as the Material Safety Data Sheets (MSDS). This information as well as other emergency response information can be referenced by an employee using these resources:

- Mainframe
- Emergency Response Guide (ERG)
- Internet MSDS lookup site from a CSX computer
  - Type "MSDS" on the Gateway address bar and press ENTER
  - Select 3E Material Safety Data Sheets from the Start button
  - Use the Gateway home page site link on the right side
- Chemical Management Companies

# **Hazardous Material Classification**

**Classification** Hazardous materials are divided into numbered classes based on the physical characteristics they display.

	Classification of Hazardous Commodities		
Class	Name (Examples are enclosed in parentheses)		
1	Explosives and Blasting Agents		
1.1	Explosives with mass explosion hazard (TNT)		
1.2	Explosives with projection hazard (aerial flares)		
1.3	Explosives with predominantly a fire hazard (liquid fueled rocket motors)		
1.4	Explosives with no significant blast hazard (fireworks)		
1.4s	Explosives with no significant blast hazard (small arms ammunition)		
1.5	Very insensitive explosives (blasting agents)		
1.6	Extremely insensitive explosives (no known examples in the United States)		
2	Gases		
2.1	Flammable gas (liquefied petroleum gas)		
2.2	Non-flammable gas (carbon dioxide)		
2.3	Poisonous gas (sulfur dioxide, chlorine)		
2.4	Corrosive gases (anhydrous ammonia)		
3	Flammable Liquids (methyl alcohol, gasoline) Note: These liquids may have a flash point of up to 141 degrees Fahrenheit.		
	Combustible Liquids (butanol fuel)		
	Liquids with a flash point between 141 – 200 degrees Fahrenheit. Flammable liquids with a flash point at or above 100 degrees.		
4	Flammable Solids and Reactive Liquids/Solids		
4.1	Flammable solids (magnesium pellets)		
4.2	Spontaneously combustible material (phosphorus)		
4.3			
5	Dangerous when wet materials (calcium carbide)		
3			
5.1	Dangerous when wet materials (calcium carbide)		
	Dangerous when wet materials (calcium carbide)  Oxidizers and Organic Peroxides		
5.1 5.2 <b>6</b>	Dangerous when wet materials (calcium carbide)  Oxidizers and Organic Peroxides  Oxidizer (ammonium nitrate)		
5.1 5.2	Dangerous when wet materials (calcium carbide)  Oxidizers and Organic Peroxides  Oxidizer (ammonium nitrate)  Organic peroxide (benzoyl peroxide)  Poisonous Liquids and Solids and Infectious Substances  Poisonous material (arsenic, carbon tetrachloride) or		
5.1 5.2 <b>6</b> 6.1	Dangerous when wet materials (calcium carbide)  Oxidizers and Organic Peroxides  Oxidizer (ammonium nitrate)  Organic peroxide (benzoyl peroxide)  Poisonous Liquids and Solids and Infectious Substances  Poisonous material (arsenic, carbon tetrachloride) or  Poisonous material "Keep Away From Food" (chloroform)		
5.1 5.2 <b>6</b>	Dangerous when wet materials (calcium carbide)  Oxidizers and Organic Peroxides  Oxidizer (ammonium nitrate)  Organic peroxide (benzoyl peroxide)  Poisonous Liquids and Solids and Infectious Substances  Poisonous material (arsenic, carbon tetrachloride) or		
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5.1 5.2 <b>6</b> 6.1 6.2 <b>7</b>	Dangerous when wet materials (calcium carbide)  Oxidizers and Organic Peroxides  Oxidizer (ammonium nitrate)  Organic peroxide (benzoyl peroxide)  Poisonous Liquids and Solids and Infectious Substances  Poisonous material (arsenic, carbon tetrachloride) or  Poisonous material "Keep Away From Food" (chloroform)  Infectious substances (AIDS, hepatitis)  Radioactive Materials (cobalt 60, "yellow cake")		

# **Class – Name & Placard Examples**

# 1 - Explosives and Blasting Agents EXPLOSIVES 2 - Gases 3 - Flammable Liquids FLAMMABLE COMBUSTIBLE

4 - Flammable Solids and Reactive Liquids/Solids



**5 - Oxidizers and Organic Peroxides** 



6 - Poisonous Liquids and Solids and Infectious Substances



7 - Radioactive Materials	8 - Corrosive Materials	9 - Misc. Hazardous Materials
RADIOACTIVE	CORROSIVE 8	9

#### **Other Regulated Materials**



Notes	