

Participant Guide

Module

1

An Introduction to Ethanol

Introduction

About This Course

Administrative Information

Instructors will use this portion of the course time to familiarize the participants with facility safety and convenience features as well as any additional resources or equipment available.

Target Audience

This course is designed for individuals who will respond to ethanol-related emergencies as well as those who work at fixed-facilities and with transport fuel.

Delivery Method

Course delivery method consists of:

- Lecture with PowerPoint presentations
- Videos
- Hyperlinks
- Exercises
- Participant discussions

Course Prerequisites

- None

Course Length

Adjust time based on class size and experience level.

- 4 hours - Lecture with PowerPoint presentations
- 6 hours - Lecture with PowerPoint presentations and participant activities

Course Goal

Upon the completion of this course, participants will have knowledge related to ethanol and ethanol-blended fuels including the use, chemical and physical characteristics, transportation modes, transfer operations, basics of firefighting foam, suggested emergency responder tactics and strategies, and environmental issues.

Introduction

Over 16 billion gallons of ethanol is transported across our country by railroad tank cars, highway cargo tank trucks, freighter ships/ barges and pipeline. Ethanol is one of the top hazardous materials shipped by rail today. It is important that the emergency responder community throughout the country is well prepared and trained for ethanol and ethanol-blended fuel-related emergencies.

Course Overview

Course topics include:

- Module 1: An Introduction to Ethanol
- Module 2: Ethanol and Ethanol-Blended Fuels
- Module 3: Chemical and Physical Characteristics of Ethanol and Hydrocarbon Fuels
- Module 4: Transportation and Transfer
- Module 5: Storage and Dispensing Locations
- Module 6: Fire Fighting Foam Principles
- Module 7: General Health and Safety Considerations
- Module 8: Storage and Pre-planning Considerations

Training Package Includes:

- Training program with PowerPoint & video presentations
- Module PowerPoints embedded with instructor notes
- Instructors manual
- Participants guide
- Emergency Response Considerations video
- Responding to Ethanol Incidents video
- Rail Tank Car 101 PowerPoint

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- U.S. DOT ERG
- TRANSCAER® and CHEMTREC® information
- RFA Fuel Ethanol: Guideline for Release Prevention & Impact Mitigation
- DOT Chart 17
- AAR Pamphlet 34
- Association of American Railroads Loading and Unloading video
- RFA Guidelines for Hinged and Bolted Manway Assembly
- RFA How to Properly Close a Tank Car Manway poster and brochure
- Field Guide for Tank Cars

Resources

For additional information please visit the following websites:

- <http://EthanolResponse.com>
- <http://www.EthanolRFA.org>
- <http://www.transcaer.com>