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Subj: Transport of Automotive Hazardous Materials for Managers (HMT-0431)

This web-based training course was developed by ShipMate, Inc., in cooperation with the Coordinating Committee For Automotive Repair (CCAR) and The North American Automotive Hazmat Action Committee (NAAHAC).

This course is intended for those persons and facilities that receive, handle or ship automotive hazardous materials by surface transportation. This course fulfills the U.S. Department of Transportation's hazardous materials transportation training requirements for: (1) general awareness and familiarization; (2) general safety; (3) hazardous materials security awareness; and (4) function-specific training for the management and/or supervision of any of the following transportation and pre-transportation functions:

- determining the hazard class of a hazardous material;
- selecting a hazardous materials packaging;
- filling a hazardous materials packaging;
- securing a closure on a filled or partially filled hazardous materials package;
- marking a package to indicate that it contains a hazardous material;
- labeling a package to indicate that it contains a hazardous material;
- preparing a shipping paper;
- providing and maintaining emergency response information;
- reviewing a shipping paper to verify compliance with the HMR;
- certifying that a hazardous material is in proper condition for transportation in conformance with the requirements of the HMR;
- loading, blocking, and bracing a hazardous materials package in a transport vehicle;
- providing or offering placards to a surface carrier to indicate that it contains a hazardous material; and
- the carriage of automotive hazardous materials by private or contract carriers in quantities for which a placard is not required.

You should print and maintain a copy of this course syllabus and overview on file at your facility. It is recommended that you provide a copy of this document in the event of a regulatory agency (e.g., DOT) inspection. If this course does not address all of the hazardous materials transportation or pre-transportation functions that you perform, or if you have any questions regarding this or other hazardous materials training programs, or need any assistance, please call the course authors, ShipMate, Inc. at +1 (310) 370-3600.

Respectfully,

Steven Charles Hunt
ShipMate, Inc.

Web-Based Training (WBT)**Transport of Automotive Hazardous Materials for Managers (HMT-0431)****Module 1****Introduction**

- Lesson 1 Hazardous Materials Overview
- Lesson 2 Consequences
- Lesson 3 Responsibilities
- Lesson 3 Training
- Lesson 4 Regulatory Authorities
 - Federal Aviation Administration (FAA)
 - Federal Railroad Administration (FRA)
 - Federal Motor Carrier Safety Administration (FMCSA)
 - Pipeline and Hazardous Materials Safety Administration (PHMSA)
 - United States Coast Guard (USCG)
- Lesson 5 Regulatory Requirements Overview
49 CFR subchapter C

Module 2**Classification**

- Lesson 1 Accident History
 - Texas City, TX – 1947
 - Bhopal, India – 1984
 - ValuJet 592 – 1996
 - FedEx 1406 – 1996
 - UPS 1307 - 2006
- Lesson 2 Physical & Chemical Properties
 - Explosive
 - Corrosive
 - Flammable
 - Combustible
 - Reactive
 - Radioactive
 - Toxic
 - Elevated Temperature
 - Elevated Pressure

Module 3**Automotive Hazardous Materials**

- Lesson 1 Electrical System
 - Battery
 - Speakers
 - Cable Cutters (Battery Disconnects)

- Lesson 2
 - Fuel System
 - Fuel Pumps, Injectors & Rails
 - Fuel Lines
 - Fuel Pressure Regulators
 - Charcoal Canisters
 - Gas Tanks, Filler Necks & Gas Caps
- Lesson 3
 - Power Train
 - Engines
- Lesson 4
 - Passenger Safety
 - Air Bag Modules
 - Driver-Side Airbags
 - Passenger-Side Airbags
 - Side Impact (Thorax) Air Bags
 - Knee Bags
 - Air Curtains
 - Seat-Belt Pretensioners
- Lesson 5
 - Steering & Suspension
 - Accumulators
 - Brake Boosters
- Lesson 6
 - Paint & Body
 - Lift Gate Supports
 - Windshield Washer Fluid (concentrate)
 - Paint & Paint Related Materials
 - Adhesives & Coating Solutions
- Lesson 7
 - Accessories
 - Flares
 - Fire Extinguishers
 - Tire Inflators
 - Cleaning Compounds
 - After-Market Auto-Care Products

Module 4 Hazard Communication

- Lesson 1
 - Package Marking & Labeling
 - TULIP
- Lesson 2
 - Overpacks, Unit Loads & Cages
 - PILOT
- Lesson 3
 - Limited Quantities
- Lesson 4
 - Consumer Commodity Changes
- Lesson 5
 - Excepted Quantities

Module 5 Lithium Batteries and Hybrid & Electric Vehicles

- Lesson 1 UN38.3 Lithium Battery Testing Requirements
- Lesson 2 Fully Regulated Batteries Overview
Energy Ratings (in Wh)
- Lesson 3 Lithium Metal Cells – Fully Regulated
- Lesson 4 Lithium Metal Batteries – Fully Regulated
- Lesson 5 Lithium Ion Cells – Fully Regulated
- Lesson 6 Lithium Ion Batteries – Fully Regulated
- Lesson 7 Lithium Cell & Battery Packaging
Cargo Aircraft Only Labels

Module 6 Packaging

- Lesson 1 Forces Encountered in Transportation
- Lesson 2 UN POP Marking
- Lesson 3 Non-Specification Packaging ('Strong' Outer Packaging)
- Lesson 4 Packing
- Lesson 5 Damaged Packaging

Module 7 Documentation

- Lesson 1 Basic Description
Alternative Description Formats
- Lesson 2 Required Information
- Lesson 3 Additional Descriptive Information
- Lesson 4 Emergency Response Information
Emergency Response Telephone Number
Emergency Response Information
ERT Service Providers
- Lesson 5 Carrier Specific Requirements
Small Package Dispatch Services
UPS
FedEx
- Lesson 6 Recordkeeping Requirements

Module 8 Handling & Transportation

- Lesson 1 Safety Data Sheets
- Lesson 2 SDS Requirements

Module 9

Emergency Response

- Lesson 1 Initial Response Actions
- Lesson 2 Reporting & Notifications
- Lesson 3 Reports & Notifications

Module 10

HM Security

- Lesson 1 HM Security Awareness
- Lesson 2 HM Security Plan Requirements
- Personnel Security
- Site Security
- En Route Security