

**HAZARDOUS MATERIALS  
AWARENESS/OPERATIONS  
LEVEL COURSE**



**TESTBOOK**



**Test A (To be completed with Appendix A)**

**Course:** Hazardous Materials Operations Level Course

**Subject:** Hazardous Materials Container Identification

<b><u>Container type</u></b>	<b><u>Product Stored</u></b>
1. _____	A. Nonpressure intermodal
2. _____	B. Nonpressure facility tank
3. _____	C. Bag
4. _____	D. Nonpressure (Lowpressure) tank car
5. _____	E. Cryogenic liquid facility tank
6. _____	F. Drum
7. _____	G. Cylinder
8. _____	H. Pressure tank car
9. _____	I. Pressure facility tank
10. _____	J. Cryogenic liquid cargo tank
11. _____	K. Cryogenic intermodal
12. _____	L. Pressure intermodal
13. _____	M. Carboy
14. _____	N. Pressure cargo tank
15. _____	O. Corrosive liquid cargo tank
16. _____	P. Cryogenic liquid tank car
17. _____	Q. Non Pressure liquid cargo tank
18. _____	R. Low Pressure liquid cargo tank

**Test B (To be completed with Appendix B)**

**Course:** Hazardous Materials Operations Level Course

**Subject:** Radioactive Materials Container Identification

Container Type

- |          |               |
|----------|---------------|
| 1. _____ | A. Type B     |
| 2. _____ | B. Type A     |
| 3. _____ | C. Industrial |
| 4. _____ | D. Excepted   |

**Test C (To be completed with Appendix C)**

SKILLS TEST

**Course:** Hazardous Materials Operations Level Course

**Subject:** Pesticide Label Information

1. Name of Pesticide \_\_\_\_\_
2. Name of Signal Word \_\_\_\_\_
3. EPA Registration Number \_\_\_\_\_
4. Name of Precautionary Statement \_\_\_\_\_
5. Name of Hazard Statement \_\_\_\_\_
6. Name of Active Ingredient \_\_\_\_\_
7. Describe significance of information gathered:  
\_\_\_\_\_
8. Describe appropriate response actions for dealing with the identified product.  
\_\_\_\_\_

**Test D (To be completed with Appendix D)**

**Course:** Hazardous Materials

**Subject:** Hazard and Response Information Identification

**Objective:** Given safety data sheets (SDSs), a current edition of the Emergency Response Guidebook (ERG), and shipping papers, identify hazard and response information for chemical provided.

**References:**

Skills test handout (includes the scenario, SDSs, shipping papers), and an ERG

**Examinee's Answer Sheet:**

Identify the following hazard and response information:

**Chemical #1:** (name) \_\_\_\_\_

(UN ID #) \_\_\_\_\_ **WHAT SECTION?** \_\_\_\_\_

**Physical and chemical characteristics:** **WHAT SECTION?** \_\_\_\_\_

Physical state \_\_\_\_\_

Boiling point \_\_\_\_\_

Vapor pressure \_\_\_\_\_

Vapor density \_\_\_\_\_

Specific gravity \_\_\_\_\_

pH \_\_\_\_\_

Solubility (H<sub>2</sub>O) \_\_\_\_\_

Physical appearance (color) \_\_\_\_\_

Odor \_\_\_\_\_

**Physical hazards of the material:** **WHAT SECTION?** \_\_\_\_\_

Flashpoint \_\_\_\_\_ LEL (% in air) \_\_\_\_\_ UEL (% in air) \_\_\_\_\_

Fire extinguishing agents \_\_\_\_\_

**Health Hazards of the material:**

**WHAT SECTION?** \_\_\_\_\_

Target organs \_\_\_\_\_

**Route of entry** (circle all that are applicable):

**WHAT SECTION?** \_\_\_\_\_

Inhalation

Ingestion

Absorption

Contact

**Signs and symptoms of exposure:**

**WHAT SECTION?** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Permissible exposure limits:**

**WHAT SECTION?** \_\_\_\_\_

TLV/TWA \_\_\_\_\_ LC50/LD50 \_\_\_\_\_ PEL \_\_\_\_\_

PEL-C \_\_\_\_\_ STEL \_\_\_\_\_

**Responsible party contact:**

**WHAT SECTION?** \_\_\_\_\_

Name of manufacturer \_\_\_\_\_

Emergency contact number \_\_\_\_\_

**Precautions for safe handling:**

**WHAT SECTION?** \_\_\_\_\_

Spill procedures (hygiene practices, protective measures, \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Applicable control measures including personal protective equipment:**

**WHAT SECTION?** \_\_\_\_\_

Respiratory protection \_\_\_\_\_

\_\_\_\_\_

Eye/Skin protection \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Emergency first aid procedures:

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**Name two places where you can obtain an SDS**

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**Test E (To be completed with Appendix E, F, G, & H)**

Appendix E

What form of Transportation is this? \_\_\_\_\_

Where would this paperwork be located? \_\_\_\_\_

Who has this paperwork? \_\_\_\_\_

What is the Hazmat? \_\_\_\_\_

For a small spill, what is the initial standoff distance? \_\_\_\_\_

Appendix F

What form of Transportation is this? \_\_\_\_\_

Where would this paperwork be located? \_\_\_\_\_

Who has this paperwork? \_\_\_\_\_

What are the Hazardous Materials? \_\_\_\_\_

For a small spill, what is the initial standoff distance? \_\_\_\_\_

Appendix G

What form of Transportation is this? \_\_\_\_\_

Where would this paperwork be located? \_\_\_\_\_

Who has this paperwork? \_\_\_\_\_

What is the Hazmat? \_\_\_\_\_

For a small spill, what is the initial standoff distance? \_\_\_\_\_

Appendix H

What form of Transportation is this? \_\_\_\_\_

Where would this paperwork be located? \_\_\_\_\_

Who has this paperwork? \_\_\_\_\_

Test F  
**DOT ERG 2016 Exercise**

1) Given a placard with only the number “1.4” visible, which Guide Number would you use until more information became available?

- a. Guide 111
- b. Guide 112
- c. Guide 113
- d. Guide 114

2) A cargo tanker identified as a DOT 412 is leaking and no other information is available. Which guide number would you use?

- a. Guide 117
- b. Guide 137
- c. Guide 115
- d. Guide 111

3) If the following placard is visible with no identification wording, which ERG guide page would you utilize?

- a. Guide 111
- b. Guide 125
- c. Guide 159
- d. Guide 136



4) What guide page would you use if the only detection clue available were a white over red placard?

- a. Guide 136
- b. Guide 155
- c. Guide 112
- d. Guide 148

5) What does the “X668” Hazard Identification Code on the top half of the orange panel affixed to intermodal containers means?

- a. Poisonous flammable liquid and gas
- b. Highly toxic substance, corrosive, which reacts dangerously with water
- c. Highly corrosive solid emitting toxic gas
- d. Corrosive liquid, flammable, which reacts dangerously with water

<b>X668</b>
<b>2032</b>

6) Which of the following is a U.S. Pipeline resource?

- a. American Energy Pipeline Association
- b. National Pipeline Mapping System

- c. Hazardous materials marking system
- d. NFPA 704

7) What is the UN # for Organophosphorus compound, poisonous, n.o.s.?

- a. UN 1955
- b. UN 3278
- c. UN 2762
- d. UN 3279

8) If a tank, rail car, or tank truck of this material (identified in question #7) is NOT involved in a fire, first ISOLATE for:

- a. 500 meters
- b. 600 feet
- c. 500 feet
- d. 2640 feet

9) If a cargo container of Liquefied gas, poisonous, flammable, n.o.s. is on fire, what is the recommended isolation and protective action distance?

- a. 1/2 mile
- b. 2 miles
- c. 1600 meters
- d. 1900 meters

10) Calcium hydrosulfite (UN 1923) has a general hazard as substance-spontaneously combustible. Which of the following extinguishing materials are recommended to utilize if there is a fire?

- a. Carbon dioxide
- b. Aqueous Film Forming Foam
- c. Flooding amount of water
- d. Dry chemical extinguisher, Dry sand, Soda ash, Lime

11) For a small spill of the dangerous goods, "Other regulated substances, liquid, n.o.s.", first ISOLATE in all directions as an immediate precautionary measure?

- a. 50 meters
- b. 80 feet
- c. 50 yards
- d. 1/2 mile

12) What is the recommended initial isolation distance for a large spill of "Chloropicrin" not on fire?

- a. 600 feet
- b. 250 feet
- c. 500 feet
- d. 700 feet

13) How far should an incident commander establish initial isolation distances and downwind protection distances for all persons during a large spill of Sulfur Dioxide from multiple ton cylinders during nighttime conditions with moderate winds and not involved in fire?

- a. 4 km / 2.5 miles

- b. 1 mile / 1600 meters
  - c. ½ mile / 1800 feet
  - d. 6000 meters / 2.9 miles
- 14) A recommendation for emergency response and minimum evacuation distances for responders when dealing with a 4000L/1544 Gal propane (LPG) container involved with fire posing a BLEVE potential is?
- a. 1600 meters / 1 mile
  - b. 295 feet / 801 feet
  - c. 525 meters / 1,722 feet
  - d. 577 feet / 2169 feet
- 15) The mandatory evacuation distance and preferred evacuation distance for a SUV/Van with a potential IED is?
- a. 400 feet / 2,400 feet
  - b. 263 meters / 1143 meters
  - c. 640 feet / 2,750 feet
  - d. 98 meters / 457 meters
- 16) “Ethylene Oxide” has a Guide Number of 119P. What hazard does the “P” represent?
- a. Polymerizing material
  - b. Pyrophoric material
  - c. Polar miscible material
  - d. Polarizing material
- 17) This organization must be immediately notified for releases of dangerous goods and hazardous substances spilled into the environment a reportable quantity (RQ) of a hazardous substance or a material identified as a marine pollutant?
- a. NRC
  - b. CANUTEC
  - c. CHEMTREC
  - d. DOT
- 18) What amount is considered to be a small spill in the DOT - ERG?
- a. Approximately 3785 liters (1000 gallons) or less
  - b. Approximately 200 liters (50 gallons) or less
  - c. Approximately 208 liters (55 gallons) or less
  - d. Approximately 37 liters (10 gallons) or less
- 19) The emergency number to contact the Nationwide Poison Control Center (US only) is?
- a. 1-800-851-8061
  - b. 1-800-424-9300
  - c. 1-800-222-1222
  - d. 1-888-226-8832

**Test G (To be completed with Appendix L)**

**AWARENESS**

**Discussion #1**

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**Discussion #2**

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**OPERATIONS**

**Discussion #4**

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**Discussion #5**

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**Discussion #6**

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**Discussion #7**

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**Discussion #8**

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**Discussion #9**

**Discussion #10**

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**Discussion #11**

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**Discussion #12**

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