

## FIRST RESPONDER AWARENESS LEVEL TRAINING

### **Introduction to course – (20 minutes)**

Our main purpose here is getting you to recognize a site so that you can stay safe. So if you come upon a potential hazardous materials site such as spill, **DO NOT ENTER THE SITE**, what we hope you will do is **RECOGNIZE** the potential hazardous situation, **RETREAT/LEAVE** the area, **RECORD** what you observed, and **REPORT** it to your home office.

Why are we taking this class – **Go over regulatory scenario and how it ties in with employees. Stress employee safety.**

Role as a first responder – **Define the role and responsibilities. 29CFR1910.120(q).**

**Response:** OSHA and other laws and regulations require us to protect employee and public safety and to protect the health of the environment. **Why are we involved?**

Emergency Overview – National emergency list, which portrays (on average) what types of emergencies occur and the order of their severity.

The ten greatest are:

Hazardous material highway incidents  
Winter storms  
Floods  
Hazardous material railroad incidents  
Tornados  
Power Failures  
Stationary hazardous materials incidents  
Urban fires  
Wildfire  
Pipeline or pump station incidents

Hazmat emergency facts –

- 50% occur on land, 25% in air or water, 25% other
- 750,000 people in the U.S. are evacuated from their homes each year due to releases of hazardous substances.
- 20,000 such incidents occur annually.

### **I. What is a Hazmat contingency plan? – (30 minutes)**

A contingency (emergency) plan is a comprehensive and coordinated response to a hazardous materials problem. It includes the development of predetermined sequences of events (an action plan) that lay out the procedures for dealing with an incident.

All of the actions you should follow in any type of hazardous materials incident are outlined in your office hazardous materials contingency plan.

Your plan may be long and complex, or short and simple; but it has to be written and everyone in your office needs to be familiar with the contents of the plan.

The purpose of the plan is to provide guidance to employees in hazardous materials management as follows:

1. Identify procedures to be implemented in a hazardous materials emergency, including safety, reporting and documentation requirements.
2. Identify people to be contacted to respond to the emergency, and the process to be used to do this.
3. Cite regulatory requirements that must be complied with.

The things you must be cognizant about is first of all **Be Safe**, do not enter the site, be observant and keep good RECORDS and DOCUMENTATION of the incident or site and REPORT it to your home office as soon as possible.

Go over the District Contingency Plan – who, what, and where.

## **II. DOT Manual and Placarding – (55 minutes)**

Introduce the DOT manual and go over how to use the manual – (**exercise**).

Go over placarding and hazard classes, NFPA type labels, other labeling.

Show Video – Chemical Manufacturers Association DOT General Awareness Training

## **Break – (15 minutes)**

## **III. Recognition of Hazardous Materials/Waste in the Field – (70 minutes)**

Hazardous Materials (HM): Any element, compound or product whose chemical properties when released to the environment, may cause substantial danger to public health or welfare or the environment.

A HM may also be defined as a liquid, solid, or gas which, when released, is capable of creating harm to people, property or the environment such as oil and pesticides. HM are often ignitable, corrosive, reactive, or toxic.

Hazardous Waste: Wastes that are usually end products that contain chemicals that are harmful to people and the environment.

A HM or waste can take many forms such as:

- explosive like dynamite,
- gas like propane,
- corrosive like sulfuric acid,
- flammable/combustible like gasoline,
- oxidizer like chlorine and iodine
- poison like cyanide and arsenic,
- and radioactive.

Pathways – Hazardous substances can enter the body in different ways:

1. Inhalation – dust, vapors, mist.
2. Absorption (via skin or eyes) – contact with skin.
3. Ingestion – contaminated drinking water or food.
4. Injection – cuts or punctures of the skin.

Brief discussion of Personal Protection Equipment and hygiene.

Types on containers:

1. Drums

- a. Fiber Construction – Usually indicates solid materials contents. These drums may be plastic lined depending on the type of materials contained. Solids frequently shipped in these drums are typically corrosives, oxidizers, surfactants, explosives, Lab Packs and toxins.
- b. Plastic Construction – Usually contain liquids typically of the classification of toxins, corrosives and surfactants.
- c. Metal Construction

Bunged topped drums – usually indicate liquid contents.

- A) Unlined drums generally do not contain corrosive type materials. Liquids in these containers are usually classified as solvents, flammables, toxins and surfactants.
- B) Plastic/Epoxy lined drums can indicate some type of corrosive or metal reactant contents.

Removable topped drums – usually indicate solid materials contents.

These materials are typically of the classifications of toxins, oxidizers, corrosives, heavy metals

- d. Bags – These containers can consist of multiwall paper, plastic, paper lined with plastic will typically contain solid materials such as corrosives, oxidizers, flammables, toxins and explosives.

- e. Cylinders – these typically contain all types of compressed/pressurized gases. These types of containers are not always clearly marked as to their contents.
- f. Carboys – These types of containers are glass/plastic bottles placed inside cushioned boxes and are used typically for corrosives and explosive liquids.

Others – bottles, jars (especially amber in color), cans, and pails.

Main type of sites on our district:

- Pesticide dump sites
- Mine sites
- Containers – solvents/oil/fuels
- Unexploded ordinance
- Drug lab waste
- Medical waste
- Other ---

**Slide Show of actual sites they may find and discuss the dangers. Exercise on site recognition using slides of actual sites.**

#### **IV. Record and Report – (30 minutes)**

Both the Clean Water Act (CWA) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) have mandatory reporting requirements for hazardous materials.

Things to do:

1. Report the incident as soon as possible following the guidelines of the filed office's Emergency Response Contingency Plan.
2. Stay upwind of the site at a safe distance.
3. Observe site, from a safe distance, with a pair of binoculars or use a camera with a telephoto lens.
4. Locate the site as best you can – from maps, aerial photos, GPS, or what you have available with you in the field.
5. If containers are on site, use binoculars or telephoto lens to read the labels and/or stenciling on the containers. Note the color and the condition of the container(s) and the material the container is constructed of such as plastic, glass, cardboard, etc. and the estimated size, i.e. 5 gal, 55 gal.
6. Using binoculars or telephoto lens, determine if the containers are leaking or if the materials is released to the environment. Try to estimate how much material is released and describe the material (color, form, special features).
7. Record the environmental conditions of the site (dead or dying animals or vegetation, unusual odors, weather conditions, free water nearby, environmental pathways). If you smell unusual odors, leave the area immediately to a safe distance from the site (upwind).

8. Make a sketch of the location of the suspected hazardous materials, drainages, road, etc. If these are containers on the site, note their location, whether standing or on their side and which one(s) are leaking with direction of flow of the leaking material.
9. If you have a camera take pictures of the site. **Do not put yourself in risk for the sake of a good picture.** Document important facts about the picture.
10. Prepare detailed field notes following appropriate guidelines for collecting and maintaining evidence. Remember this information may be used in a court of law.
11. If the site appears to be contaminated with hazardous substances/wastes and could pose a threat to public health and safety, the site must be secured to prevent public access. Flagging, signs, barricades may be used. However, if these materials are not available or the situation requires it, a BLM employee may be required to remain at the site until the response team arrives.

### **What to do when witnessing an apparent Illegal Dumping Incident – (10 minutes)**

1. Don't approach the dumper(s) unless you have adequate back-up and have communicated with your office over the radio or contacted appropriate law enforcement personnel. **If you don't have adequate assistance you must leave the area immediately.**
2. **Record** in your field notes, a detailed description of the dumper(s); including clothes, approximate height, weight, hair color, and any other distinguishing features; materials being dumped, number of bags or containers, type of containers, etc.; vehicle make, model, color, license number and state.
3. Take photographs if you have a camera. **Note: Don't jeopardize your safety for a good picture.**
4. Contact a BLM Ranger or other appropriate law enforcement personnel as soon as possible.

### **Summary and Warp Up – (10 to 15 minutes)**

In summary, remember you need to:

**Recognize** the dangerous situation (hazard).

**Retreat** to a safe distance.

**Record** important information.

**Report** this information to the appropriate personnel at your facility.

END