

Introduction to Emergency Communications Course

Topic 26 – Hazardous Materials Awareness



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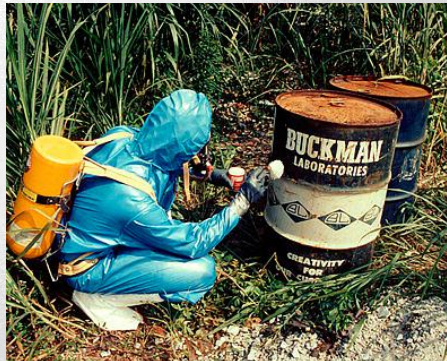
Objective

- This learning unit introduces the reporting of hazardous materials (HazMat) incidents and stresses personal safety awareness for emcomm volunteers.



Overview

- Amateur Radio operators may encounter HazMat incidents during their travels, or they may be asked to assist with emergency communications in such incidents.
- The term “hazardous materials” (HazMat) refers to any substance or materials, which if released in an uncontrolled manner (e.g., spilled) can be harmful to people, animals, crops, water systems, or other elements of the environment.
- The list includes explosives, gases, flammable and combustible liquids, flammable solids or substances, poisonous and infectious substances, radioactive materials, and corrosives.



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Hazardous Chemicals On The Move

- The US Department of Transportation (DOT) has established several systems to manage HazMat materials.
- These include definition of various classes of hazardous materials, placards and other marking requirements for vehicles, containers, and packages to aid in rapid identification of cargoes, and an international cargo commodity numbering system.



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Hazardous Chemicals On The Move

- The DOT requires that all freight containers, trucks, and rail cars transporting these materials display placards identifying the hazard class or classes of the materials they are carrying.
- The placards are diamond-shaped, 10 inches on a side, color-coded and show an icon or graphic symbol depicting the hazard class (flammable, caustic, acid, radioactive, etc).
- They are displayed on the ends and sides of transport vehicles.



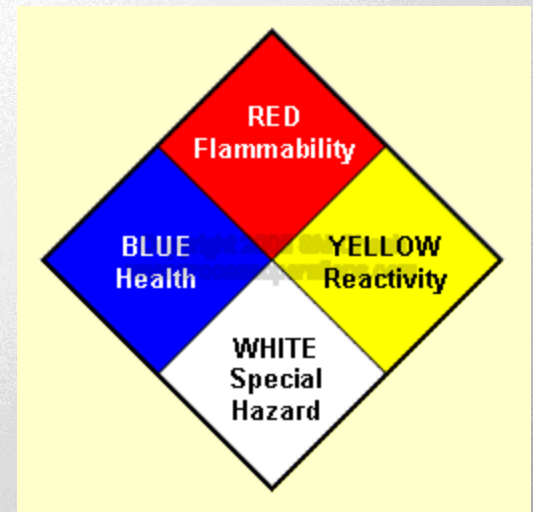
Gasoline is number 1203.

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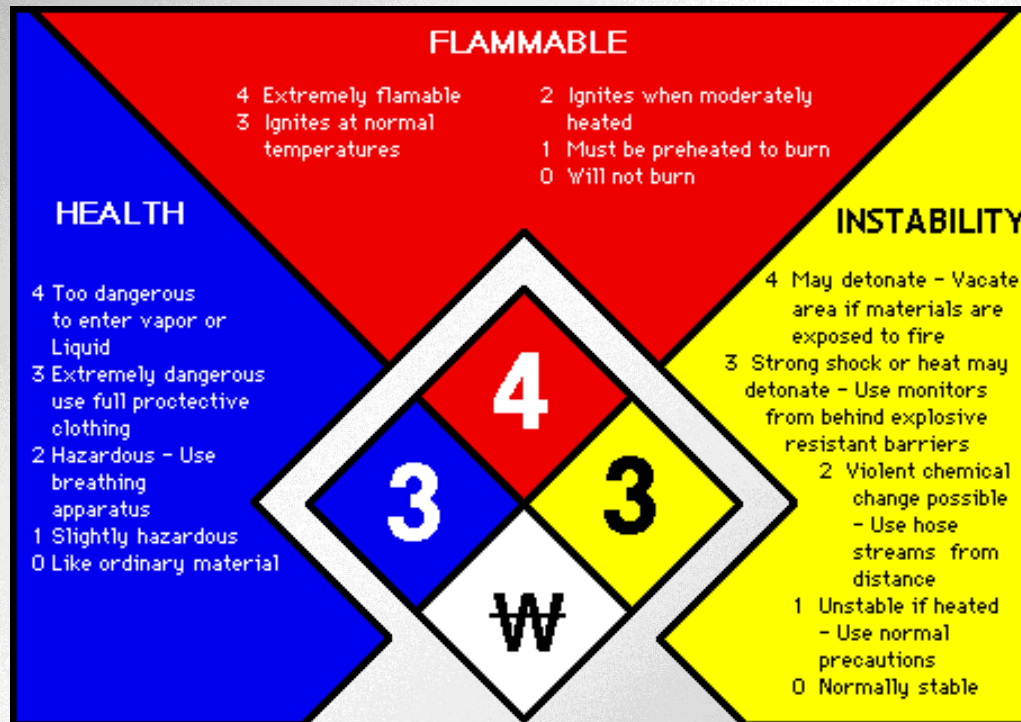


Hazardous Chemicals in Buildings

- The National Fire Protection Association (NFPA) has devised a marking system to alert firefighters to the characteristics of hazardous materials stored in stationary tanks and facilities.
- This system, known as NFPA 704M, can also assist citizens visiting a site in identifying the hazard presented by the stored substance.



Hazardous Chemicals in Buildings



Guidelines for Handling HazMat Incidents

- Once you are in a safe position up-hill and up-wind, try to identify the material.
- Do NOT be tempted to get just a little closer so that you can read placards, etc.
- Use binoculars or a spotting scope.
- Call for help immediately and let the experts handle the situation.
- When reporting, identify yourself, give your current location and the location of the incident, describe what you see, including weather conditions.



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Questions

1. Which of the following BEST describes where you should be located when in the vicinity of a HazMat incident?
 - a. Far away enough to ensure your safety.
 - b. Downhill and downwind.
 - c. Close enough to read the numbers on any placards with your naked eyes.
 - d. Alongside emergency responders wearing exposure suits.



Questions

2. Which federal agency is responsible for warning the public about hazardous materials containers and shippers?
 - a. Federal Emergency Management Agency.
 - b. Federal Response Plan.
 - c. National Communications System.
 - d. Department of Transportation.

Questions

3. Before transmitting in the area of a HazMat incident, what should you always do?
 - a. First identify the agents by reading the placard or container labels.
 - b. Be far enough away so that no vapors or fumes are present.
 - c. Wait to report the incident until police or fire officials have arrived.
 - d. Take action to stop or contain any agents that might be leaking.



Questions

4. On the sides of transporting vehicles, how are different classes of hazardous materials identified?
- a. Placards.
 - b. Four-digit numbers.
 - c. Warning labels and/or icons.
 - d. All of the answers are correct.

Questions

5. Gasoline tankers filling the neighborhood gas station's underground tanks are identified with a placard bearing which of the following?
- a. 1203.
 - b. 1993.
 - c. 2003.
 - d. 2706.

Answers to Questions – Topic 26

1. A
2. D
3. B
4. D
5. A



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