

CHAPTER- 9

HAZARDOUS MATERIAL – HANDLING AND STORAGE

9.1 Introduction

DPS Stores Units deal with all types of materials. This includes hazardous materials. Safety is the most important aspect to be considered while dealing with such materials.

9.2 Hazardous Material -Any item or agent which has the potential to cause injury to men, material or the environment, either by itself or through interaction with other factors are termed as hazardous material. The risk of hazards can be explosion, flame, corrosion, toxicity, etc. Even chemicals that are generally considered to be harmless have potential to be hazardous under specific circumstances. The personnel dealing with chemicals and hazardous material shall have proper knowledge about the properties, risk factors, re-active situations, etc. of the items they are dealing with.

The type of hazards and related few examples are as follows:

- 1 **Explosive materials** - fireworks, rocket motors, etc. have risk of explosion.
2. **Flammable Gas** – Gas like LPG, Hydrogen, Acetylene, Propane, etc. are highly flammable
3. **Flammable Liquids** -FOL items like kerosene, petrol, etc.
4. **Flammable Solids** -Potassium metal, safety matches, etc.
5. **Spontaneous combustion** - Hay stack, coal, etc.
6. **Corrosive**-Caustic Soda
7. **Non – flammable and Non-toxic gases**-Compressed gases like Nitrogen, Oxygen, Argon, etc. contents under pressure

While handling and storage of hazardous material, special care needs to be taken. Handling, transportation and custody shall conform to Standard Operating Procedure (SOP).The SOP shall be in line with statutory provisions like Petroleum and Natural Gas Regulatory Board Act and Rules, Gas Cylinder Rules, Motor Vehicle Act, etc. While handling and storing, instructions contained in the Material Safety Data Sheet shall be followed.