

► CODES AND REGULATIONS:

CODES AND REGULATIONS

DOT 49 CFR 173.3 (C) SALVAGE DRUMS:

Packages of hazardous materials that are damaged, defective, or found leaking and hazardous materials that have spilled or leaked may be placed in a metal or plastic removable head salvage drum that is compatible with lading and shipped for repackaging or disposal under the following conditions:

- Drum must be a UN 1A2, 1B2, 1N2 or 1H2 tested and marked for Packing Group III or higher performance standards for liquids or solids and a leakproof test of 20 kPa (3 psi).
- Capacity of the drum may not exceed 450 L (119 gallons).
- Each drum shall be provided when necessary with sufficient cushioning and absorption material to prevent excessive movement of the damaged package and to eliminate the presence of any free liquid at the time the salvage drum is closed. All cushioning and absorbent material used in the drum must be compatible with the hazardous material.
- Packaging must be marked "SALVAGE" or "SALVAGE DRUM". (The overpack requirements of Section 173.25 do not apply to drums used in accordance with this paragraph.)

EPA 40 CFR 264.175 CONTAINMENT:

Ref (b)(3) The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.

EPA 40 CFR 112 SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC):

The purpose of the SPCC regulation is prevention of oil discharge into navigable waters and related areas, rather than cleanup after a spill has occurred. The regulation generally affects all facilities with at least 1,320 gallons above ground storage capacity, or 42,000+ gallons underground storage capacity. The SPCC requires affected facilities to prepare and file an action plan (the SPCC Plan).

Some affected facilities include: onshore and offshore drilling, platforms, barges and mobile facilities; fixed and mobile onshore or offshore production; oil refining and storage; any industrial, commercial, agricultural or public facility that uses or stores oil; some waste treatment operations; loading racks, transfer hoses and related equipment; vehicles and pipelines. Oils, fats and greases of any kind or in any form are specifically included in the regulation.

The SPCC Plan must include elements such as: Operating procedures to prevent oil spills; Control measures to prevent spilled oil from entering surface water; Countermeasures such as Secondary Containment for spills and bulk storage compliance; Professional Engineer certification; Management approval; Facility inspections; Security; Training and more. More information is available at www.epa.gov/oilspill.

EPA 40 CFR 122.26 STORMWATER REGULATIONS, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES):

The NPDES permit program controls water pollution by regulating point sources and non-point sources that discharge pollutants into United States waters. These regulations are a key component of EPA's Clean Water Act. The goal is to protect the quality of waterways by reducing the discharge of sediment, oil and chemicals into storm drains, surface and ground waters.

NPDES requires Minimum Control Measures to be put into place by activities in affected Urbanized Areas (UA). Visit www.epa.gov/owm (US EPA Office of Wastewater Management), Appendix 6 to determine particular affected places.

This program includes the development and implementation of the Stormwater Pollution Prevention Plan (SWPPP). The SWPPP identifies: Potential Sources of Pollution and Exposed Materials; a history of past spills and leaks; BMPs; Non-Structural controls (Good Housekeeping Practices, Spill Prevention and Response); Structural controls such as Containment including Pollution Incident Prevention Plans (PIPP) and Spill Prevention, Control, and Countermeasures (SPCC) plans.

29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE:

Suitable quantities of proper absorbents shall be kept available and used in areas where spills, leaks or ruptures may occur.

29 CFR 1910.22 WORKPLACE HOUSEKEEPING:

Every workroom floor shall be maintained in a clean and, so far as possible, a dry condition.

29 CFR 1910.1450

Laboratories must have containment and clean-up materials for spills and leaks to reduce occupational exposure to hazardous chemicals.

29 CFR 1910.178(G)(2)

Facilities shall be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage by trucks, and for adequate ventilation for dispersal of fumes from gassing batteries. (Battery Storage)

40 CFR 263.31

Transport and carriers must clean up any hazardous waste discharge that occurs during transportation.

49 CFR 171.8 OVERPACK CONTAINERS:

An Overpack is a larger container in which a smaller one can be placed. Made from any material (from traditional metal to hard plastic). Overpack drums are protective packaging to contain non-hazardous materials or provide outer protection. Note: Standard Overpacks are not for hazard waste transport. In these cases, a Salvage Drum is needed.

UFC 79.406 UNIFORM FIRE CODE:

When used as a substitute for spill and damage control and secondary containment, pallets shall comply with: liquid-tight sump; sump capacity of at least 66 gallons ; compatible substances; provide sump protection from rain water.

IFC 2704.2.3 INTERNATIONAL FIRE CODE:

When used as an alternative to spill control and secondary containment for outdoor storage, containment pallets shall comply with all of the following: liquid-tight sump accessible for visual inspection shall be provided, The sump shall be designed to contain not less than 66 gallons, Exposed surfaces shall be compatible with material stored, Containment pallets shall be protected to prevent collection of rainwater within the sump.

NFPA 30 FLAMMABLE AND COMBUSTIBLE LIQUIDS:

Warehouses, separate buildings containing flammable and combustible liquids whose flash point does not exceed 100°F.

NFPA 70 NATIONAL ELECTRICAL:

Covers the installation of electrical conductors, equipment, and raceways; signaling and communications conductors, and optical fiber cables.

NFPA 400 HAZARDOUS MATERIALS:

Applies to the storage, use, and handling of hazardous materials in all occupancies and facilities including nitrites, corrosives, flammables, peroxide formulations, oxidizers, water-reactives, compressed gases, and cryogenic fluids.

OSHA 29 CFR 1910.253 STORAGE OF CYLINDERS:

Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards. (b)(2)(ii) Cylinders should be kept at least 20 ft. (6.1 m.) from highly combustible materials, should be placed away from elevators, stairs and gangways. (b)(3)(i) For storage in excess of 2,000 cu. ft. (56 cu. m.) total gas capacity of cylinders or 300 lbs. (135.9 kg.) of liquefied petroleum gas, separate rooms or compartments shall be provided.

FM (FACTORY MUTUAL) GLOBAL 6049:

A combination of pressure-relieving (venting) and pressure resisting exterior construction which is intended to mitigate over-pressure damage to the building in case of a vapor-air deflagration. The design of relieving and resisting features must be engineered to account for fuel, surface area, or the enclosure, vent area and structural loads imposed by the deflagration.