

## Tailgate/Toolbox Safety Training

Safety Services Company-Safety Meeting Division, PO Box 6408 Yuma, AZ 85366-6408 Toll Free (866) 204-4786



Company Name:

Job Site Location:

Date: \_\_\_\_\_\_Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

## Topic 387: Disposal and Clean-up of Oil & Oily Waste

Introduction: Since 1987 it has been illegal to dispose of used oil or oily waste in any way which might contaminate the environment. Used oil contains contaminants such as lead, magnesium, copper, zinc, chromium, arsenic, chlorides, cadmium, and chlorinated compounds. Oil poured down drains or onto the ground can work its way into our ground and surface waters and cause serious pollution. One gallon of used oil can spoil a million gallons of drinking water. Federal reports indicate that used motor oil accounts for more than 40 percent of the total oil pollution of our

nation's harbors and waterways. Following are guidelines for proper and responsible disposal of oil and oily waste:

*Used oil is recyclable* - Used oil can be re-refined or processed into fuel oil. Unfortunately, not enough oil is being recycled. Of the total lubricating oil sold in the U.S., approximately 40% leaks out of engines or is burned, and about 45% is recycled. This leaves around 15% missing, representing tens of millions of gallons of oil unaccounted for and probably disposed of improperly.

An oil spill may be as small as an oil can accidentally knocked over or a leaking hydraulic line, up to a bulk oil transport tanker running aground. Regardless of the amount of oil spilled, oily waste is generated and needs to be responsibly cleaned up.

*Three different types* of oily waste can generally be identified from an oil spill - fluid oil, heavily contaminated soil material (water, sand, and aggregate), and oily debris (wood, paper, plastic). Various methods of disposal are available including direct disposal to controlled landfill sites, use in land reclamation, road building or similar activities, and destruction by incineration or biological processes. The disposal method chosen will depend on a number of factors including the amount and type of oil and debris collected, the location of the spill, the likely costs involved, and environmental, legal, or practical limitations.

- Fluid Oil If the oil is recovered soon after it is spilled it may still be in a fluid state and relatively free of solid debris and other contamination, and can be turned in directly to a recycling or collection center.
- Heavily Contaminated Oil Recovery of spilled oil, either from the surface of water using skimmers or from the ground using a combination of manual methods and standard equipment, usually results in the collected oil becoming mixed with a large quantity of water, debris, and soil material. This dramatically increases the volume of oily waste for treatment and disposal. Large quantities of oil contaminated by water and solids can be discharged into lined storage lagoons or pits, or large open topped tanks. Oil can be skimmed from the surface, and the water decanted from below. The residual oily solids are then disposed of by one of the methods outlined below.
- Oily Debris (Solid Waste) The disposal of solid oily waste is strictly controlled. Selection of an appropriate method from those that are technically feasible need to take into account any applicable restrictions, as well as the relative costs.
  - \* Direct disposal: Disposal of oily solid waste, mixed with domestic rubbish, to designated landfill sites is one of the methods commonly used. Modern sites are usually enclosed by an impermeable membrane to prevent substances from leaching from the site. Provided the waste is properly mixed with the domestic refuse, there is little risk of oil leaching from the site. Nevertheless, where such linings are not regularly used, care is needed to ensure that contamination of nearby ground and surface water does not occur.
  - Incineration: When oil is first spilled, it is flammable. Burning oily debris in the open is not a recommended method of disposal, except in remote areas, due to the resultant smoke levels. When oil is burned in the open, it also tends to spread and penetrate the ground. Additionally, a tar-like residue may remain since it is rarely possible to achieve complete combustion.
  - Stabilization: Stabilization is a method that can sometimes be used with oiled sand. This entails mixing the oiled sand with an inorganic substance such as quicklime (calcium oxide) powder to form an inert product. The oil binds with fine particles which prevent leaching. However, this method is not appropriate for larger aggregate or if the sand is mixed with large amounts of wood, vegetation, or other debris. Stabilized material can usually be disposed of with fewer restrictions than untreated oily sand and can be used in land reclamation or similar applications.

## You Can Participate in Oil Recycling by Following These Tips:

D Drain your used oil into a clean container. D Do not mix any other materials, including water, with used oil.

Take your used oil to a household hazardous waste collection facility or a used oil collection site. In addition, many automotive service stations in your area will accept used motor oil for recycling. To find the collection center nearest you, call <u>1-800-CLEANUP</u> or go on line at <u>www.1800cleanup.org</u>.

## Work Site Review

Specific Work-Site Hazards and Safety Suggestions: \_\_\_\_

Foreman/Supervisor's Signature:

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.



