



An **Oil Spill** is the release of a liquid petroleum hydrocarbon into the environment due to human activity, and it is a form of pollution. The April 2010 Gulf of Mexico oil spill involves crude oil released from the explosion of an off-shore drilling rig.

During an oil spill cleanup, workers may encounter many types of crude oil, including fresh and weathered, which contain carcinogenic volatile aromatic compounds like benzene, toluene and naphthalene.

The light parts, such as benzene, xylene, toluene and ethyl benzene generally evaporate into the air in the first 24 hours of a spill (usually before reaching the shore). The medium and heavy parts (consistency much like motor oil) are what cleanup operations on the land and near shore areas focus on. The weathering processes eventually create tarballs that are hard and crusty on the outside and soft and gooey on the inside. Turbulence in the water or beach activity from people or animals may break open tarballs, exposing their softer, more fluid centers.

What are the operations and hazards during shoreline and vessel operations?

If you are involved in response and cleanup of weathered oil, you might be:

- Placing or recovering booms
- Skimming and pumping oil (inshore)
- Loading and unloading booms, supplies, operations and people
- Pressure-washing boats
- Picking up oil-covered debris
- Conducting other shoreline cleanup
- Launching and/or landing boats

Hazards from these operations can include:

- Heat stress
- Sunburn and sun poisoning
- Skin and eye irritation or rashes (dermatitis) from contact with “weathered oil”
- Back injury from lifting and carrying
- Cuts and lacerations
- Exhaustion and fatigue from long hours and demanding work
- Being hit by earthmoving equipment
- Traffic hazards and car accidents
- Bites from snakes, fire ants, mosquitoes, rodents and alligators
- Noise
- Lightning and severe weather
- Drowning

Exposure to any of these hazards depends on what you are actually doing and where you are working. For example, heat stress is a real concern for all outdoor activities because the weather is hot and humid. If you are pulling in oil-covered booms, then contact with weathered oil, drowning, and back injuries are also concerns.

What type of training do you need?

You must be trained on the hazards of your job in a language that you understand before you begin oil spill response and cleanup work. Training is based on your job duties and the job's hazards.

Safe work practices and personal protective equipment

Your employer must determine the safe work practices and protective equipment that are appropriate for each job. Work practices and protective equipment requirements depend on the hazards of each job. Examples of safe work practices that your employer should use to protect you include:

- Providing rest breaks throughout a work shift to help control heat stress. Providing breaks and rest areas in the shade. Providing you with water to drink throughout the shift. Providing sunscreen to protect you from sunburn and sun poisoning.
- Training you how to lift loads safely, and ensuring that you have the right equipment or enough people to lift heavier loads.
- Having buckets, brushes, water and soap available, and providing you with instructions about how to clean oily protective equipment before removing it.

Most jobs will require some type of personal protective equipment. In general, your employer needs to provide protective equipment and must train you on how to use it. Examples of jobs and personal protective equipment (PPE) include:

- For jobs that do not involve contact with oil, like picking up clean debris along the shoreline, employers need to give you **work gloves**.
- For jobs involving oil-contaminated debris and those involving contact with oil or other chemicals, employers need to provide additional protective equipment, such as **oil- or chemical-resistant gloves, boots and overalls**.
- For jobs involving work on vessels, docks or other areas with potential drowning hazards, employers need to provide **life jackets (personal floatation devices)**.

Your employer will develop a health and safety site plan about the job and worksite hazards, and spell out the requirements for safe work practices, personal protective equipment, training, and emergencies. OSHA has posted sampling data for the Gulf of Mexico oil spill.

Online resources (copy into browser)

OSHA Oil Spill Homepage - <http://www.osha.gov/oilspills/index.html>

OSHA Oil Spill Hazards - <http://www.osha.gov/oilspills/hazards.html>

OSHA Oil Spill Training - <http://www.osha.gov/oilspills/training.html>

NIEHS Oil Spill Response Training Tool - <http://tools.niehs.nih.gov/wetp/index.cfm?id=2495>

OSHA Oil Spill PPE Matrix - http://www.osha.gov/oilspills/oil_ppematrix.html

OSHA Gulf of Mexico Oil Spill Sampling Data - http://www.osha.gov/oilspills/index_sampling.html