



## Before the Flood

Because fuel oil is lighter than water, floodwaters that enter an enclosed basement and are deep enough to come into contact with a fuel tank may cause the tank to become unstable, tip over and/or float on the surface of the water if the tank is not anchored. If an unanchored tank is moved by floodwaters, the supply line can tear free and the basement can become contaminated by oil. An unanchored fuel tank outside a home can be driven into building walls by floodwaters, or it can be swept downstream, damaging other houses. Follow these guidelines if floodwaters will be high enough in a basement to cause a tank to shift or float.

- Contact an area bulk fuel distributor to remove the fuel from the tank. Although this will make the tank more buoyant in the floodwaters, it also will prevent leakage of fuel into a home in the event water tips over and/or enters the tank through an opening.
- Once the furnace/fuel tank is no longer in service, seal the tank's vent, fuel and fill tubes and any other openings in the tank to prevent water from entering or fuel from leaving the tank. Remember that the seals must be water tight. If vent and fill tubes are not sealed, they should at least be extended above projected flood levels.
- Secure or anchor the tank in such a way as to keep it in an upright position in the event that water causes it to float. (Note: A tank may float like a bobber if a basement is fully flooded. Anything used to secure the tank must be able to withstand buoyancy forces.)

## After the Flood

Indoor fuel oil spills can have serious indoor air quality consequences. The vapors from fuel oil spills or leaks are extremely penetrating and volatile.

Homeowners should consider the following steps if home heating oil has mixed with floodwaters in the home.

### ***Report the spill***

- Contact your oil delivery company to report the spill. You also should contact your home insurance agent, local public health unit and the North Dakota Department of Environmental Quality (NDDEQ), Division of Waste Management at 701-328-5166.

### ***Take safety precautions***

- If not already done prior to flooding, shut down the furnace to minimize vapor distribution throughout the building.
- Keep flames and other sources of ignition away from the area.
- Ventilate the area by opening windows.
- Wear rubber gloves, overshoes and a proper respirator.
- Don't track oil from the spill area to clean parts of the house.

## **ASSISTANCE**

If you have questions or need assistance, call your local public health unit or the NDDEQ.

Division of Waste Management  
701-328-5166

*Feel free to use this information,  
but please credit the North Dakota  
Department of Environmental Quality.*

## Cleanup

- **USE PROPER PERSONAL SAFETY EQUIPMENT.**
- If a layer of oil is floating on top of the water in a basement, minimize the amount of oil spread on walls, floors and the amount of other damage to your property by removing the oil before pumping the water out. For an oil film, oil-absorbent “socks” may be sufficient to collect the oil. For a thicker layer of oil, a vacuum truck may be necessary to skim the oil off the water. **DO NOT** pump the water into your yard before removing the oil, as the oil may spread and contaminate other areas including nearby wells, waterbodies and homes.
- Cover any materials with absorbent material (e.g., kitty litter) to help neutralize and control the odor. In addition, cover any stains on concrete floors with detergent, as this will help neutralize the odor and break down the remaining oil stain.
- Starting on the outer perimeter, surround the spill and work inward, scooping oil-soaked materials into buckets as they become saturated. For large spills, place non-dripping material in doubled garbage bags. Seal the inner bag tightly and separately from the outer garbage bag. Contaminated materials may be disposed of at a municipal solid waste landfill if there are no free liquids and they are double-bagged as described.
- Place any free fuel oil collected in a safe container and dispose of at a used oil collection site.
- Plug the floor drain to prevent washing oil into the sanitary system.
- Use a detergent and hot water to clean the floor, walls, appliances and other hard surfaces. Check under appliances, such as the washer and dryer, to ensure all oily residue is removed.

- Professional cleaning companies can be hired to scrub all surfaces free of the oil residue.
- There are specialized products available to assist in the cleanup, especially for persistent odors.
- To remove oil, it is usually best to contact a waste oil or sanitary sewer hauler permitted for handling industrial waste. For a list of these haulers, contact the Division of Waste Management at 701-328-5166.

The cleanup of a fuel oil spill is not complete until odors are gone. If fuel oil spills are promptly and completely cleaned up, residual odors should disappear after several days. Persistent odors indicate that a contaminated source has not been removed. These sources may include saturated cinder blocks, contaminated soils, wood materials and drywall, and oil in sumps or floor drains. These areas may need additional cleanup or removal and disposal at an approved landfill.

The use of chemical air fresheners is not recommended. These products merely mask the fuel odor by adding other volatile chemicals to an already complex mixture. Their use may increase symptoms and cause health problems in sensitive individuals.

