

WHAT YOU NEED TO KNOW ABOUT FUEL OIL



Colonial Pipeline Company



WHAT IS FUEL OIL?

Fuel oil refers to a broad category of refined liquid petroleum products used in many engines, heaters, lanterns, furnaces and stoves. Products such as diesel fuel, lantern kerosene and home heating oil are all common fuel oils. Fuel oils can also be components in solvents. Generally speaking, fuel oils share the following characteristics:

- Liquids at room temperature, usually yellowish-green to brown in color
- Mixtures of hydrocarbons; may also contain small amounts of nitrogen, sulfur, and other elements as additives
- Flammable liquids, burning at temperatures between 177 degrees C and 329 degrees C
- Some evaporation when exposed to air, but generally not very volatile
- Not readily dissolved in water
- "Kerosene-like" odor



HOW DO FUEL OILS REACT WHEN RELEASED TO THE ENVIRONMENT?

Fuel oils are composed of many different chemicals in various mixtures. When released to the atmosphere, some chemicals in fuel oils will evaporate and break down in reaction to sunlight. When spilled to soil, some chemicals may move through soil to groundwater. Other chemicals may attach to particles in soil or water and sink as sediment. Certain chemicals, if not remediated, may remain in the environment for more than a decade.



WHAT ARE THE HEALTH EFFECTS OF FUEL OIL EXPOSURE?

According to the Centers for Disease Control, the effects of exposure to any hazardous substance depends on the amount you are exposed to, the duration, how you are exposed, personal traits, and whether any other chemicals are present. Fuel oil exposure can occur in a number of ways:

- **Inhalation:** Depending on the chemical composition, breathing certain volatilized fuel oil can temporarily affect some individuals' sense of taste and smell.

Exposure to certain fuel oils may also result in nausea, lightheadedness, poor coordination and difficulty concentrating. Long-term exposure to certain fuel oils may increase blood pressure and impair kidney function.

- **Skin Contact and Absorption:** Fuel oils in contact with the skin can cause irritation and can make the skin red and sore. Sometimes blisters develop and the skin will peel. Do not touch fuel oils. Wash exposed skin with soap and water.
- **Eye Contact:** Fuel oils can result in eye irritation or cause eyes to become bloodshot.
- **Ingestion:** When swallowed, fuel oils can cause vomiting, diarrhea, stomach cramps, coughing, drowsiness and irritability. Consumption of large volumes may cause difficult or painful breathing, coma, convulsions or even death.

Your most likely exposure to fuel oils released from the pipeline will be through inhalation. It is common to smell diesel fuel odors at very low levels. The odor threshold for fuel oils ranges from 0.08 parts per million (ppm) to 0.7 ppm. As a result, you may smell fuel oil in the air at concentrations that will not adversely affect your health. The recommended limit for exposure to diesel fuel at work (daily exposure) is 15 ppm.



HOW CAN I LIMIT MY EXPOSURE?

The greatest impact from a release of fuel oils is usually environmental. Colonial will work to recover any fuel released from the pipeline by excavating soils, vegetation, or other debris and recovering product spilled to water. Air, water, and soil will be closely monitored by Colonial as well as state, local and federal agencies to minimize your exposure.



ALWAYS HEED THE INSTRUCTIONS AND DIRECTIVES PROVIDED BY LOCAL EMERGENCY RESPONDERS.

If you have an immediate health and safety emergency related to fuel oil exposure, please call 911.

SOURCE: Center for Disease Control (CDC)
For additional information about fuel oil health risks, visit the Center for Disease Control (CDC) website at:
<http://www.atsdr.cdc.gov/substances/ToxCommunity.asp>