

What is Oil?

By Nhu Lee

Oil is a **nonrenewable** resource that takes millions of years to create. Nonrenewable resources are things that can run out, or be used up. Oil, like natural gas, is a **fossil fuel**. It's called a fossil fuel because of how it forms. All fossil fuels are nonrenewable resources.

The oil that we use today was formed millions of years ago when tiny plants and animals died and sank to the bottom of a shallow body of water. Then, sand, clay and silt (lots of tiny pieces of rock) covered the thin layer of dead plants and animals. The dead organisms began to **decay** or **decompose** (break down). Then this process repeated itself when more dead organisms covered the rocky layer, and then more sand, clay and silt covered the new layer of organisms. Over a long, long time, enormous amounts of pressure built up, causing the bottom layer to become very hot. Under this pressure, the clay, sand and silt formed into rocks and the decayed animals and plants between the rock layers turned into a dark, heavy liquid – oil! Oil is a result of millions of years of decay, pressure, and heat.

There are many uses for oil. Oil contributes to the creation of fuel, paint, detergent, trash bags, and many other things. However, the oil must be **refined** before we use it for these purposes. The most common use of oil is in fuel for automobiles; almost anything with an engine requires fuel to run. Therefore, oil is a main source of our **mobility** (our ability to move around). Although oil can be very helpful to us in many ways, it can also be very harmful.

Whether on land or in water, when oil is spilled, it has a great effect on our lives. Oil spills affect us by polluting our resources such as water. Water pollution from oil spills harms animals and ecosystems. Oil spills can also interfere with the normal working of power plants because many of them require a continuous



supply of clean seawater. The power plants draw in seawater to use as a coolant. And polluted water clogs machinery.

Another major problem with oil is the air pollution that it creates when burned. Oil is one of the major causes of **smog**, a type of air pollution. Smog is created when coal or heavy oil are burned in places like power plants, industrial plants, and cars, releasing toxins into the air. Smog consists mostly of a mixture of dust, different types of gases released in the burning and water vapor. It's really just a very dirty cloud, but it is very bad for our health. Today, pollution from oil and other dangerous substances is hurting our air. Although oil provides us with fuel and energy, we need to limit our use of it because there is a limited supply and its use pollutes the environment.