

factsheet 3

used oil - health & environmental impacts

Motor oil picks up a variety of contaminants during its use that pose significant risks to human health and the environment. Oil is also a pollutant: it takes only one litre of oil to contaminate one million litres of water (which is about half the size of an Olympic swimming pool), and a single automotive oil change produces four to five litres of used oil. To look after our health and protect the environment, we need to recover and recycle as much used oil as possible.

Why is used oil an environment and human health hazard?

Once released into the environment, the contaminants in used oil tend to build up in soils. They can then be absorbed by plants, animals, fish and shellfish, harming the health of these organisms. People can also be affected by eating these plants or animals.

In water, oil is a visible pollutant, floating as a scum on the surface. This oil scum can stop sunlight and oxygen from getting into the water, affecting fish and water plants. It can kill the fish, frogs and other animals that breathe from the water's surface. Water that is contaminated with oil should not be used.

Used oils can contain heavy metals such as cadmium, chromium and lead, and may also contain arsenic and dioxins. Humans can be exposed to some or all of these chemicals by drinking water and eating food contaminated with used oil, by coming into contact with contaminated soil, and by breathing in contaminated dust.



Water quality can be affected by dumping used oil into stormwater drains.



If used oil is handled properly and recycled in a safe and environmentally sound manner, human health and the environment will be protected.

Low temperature burning of used oil can create airborne pollutants that can get into people's lungs. The health effects from exposure to some of these chemicals are very serious, as they can be quickly absorbed through the skin, lungs and intestines, and can accumulate to high levels in people's bodies.

- Short-term exposure to used oil can lead to irritation of the skin, eyes and respiratory system, and potentially gastro-intestinal upsets.
- Long-term exposure can cause damage to the liver, brain, immune system, reproductive system and can cause cancer.

Children may be especially sensitive to used oil and the contaminants it may contain.



An Australian Government Initiative



oil, soil & water....they just don't mix!



The oil on this road will spread into the environment and could ultimately affect your health as well as the health of plants and animals.

How is used oil released to the environment?

Australians are getting better at recycling their used oil. However, about 50 million litres still go missing each year – discarded in household bins, poured on weeds or in ditches, left lying in sheds or illegally dumped. Spraying of used oil onto roads as a dust suppressant, painting fence posts to stop termites, and inappropriate burning are other old habits that needlessly release used oil contaminants into the environment.

If used oil is sprayed onto roads, the contaminants in the oil can blow away with dust, seep into groundwater, or wash into streams with rainwater. Oil will also stick to vehicle tyres and spread to other areas.

Householders should not re-use used oil for any purpose - there is no appropriate household use of used oil and it should be taken to your local recycling facility. Recycling your used oil ensures any contaminants are properly disposed of, and allows us to reuse a valuable resource. When handled properly, used oil is not a serious threat to human health or the environment.

How do I handle used oil?

To handle used oil properly:

- ♦ always change your oil in a well-ventilated area
- ♦ always wear gloves
- ♦ ensure spills are prevented by using a drip tray
- ♦ avoid contact with used oils or oil-soaked clothing
- ♦ don't keep oily rags in pockets *and*
- ♦ discard any oil soaked shoes



Used oil collection facilities are being established throughout Australia, with over 800 sites operational.

If your skin comes into contact with used oil, wash the area thoroughly with soap and water.

Where can I get more information on recycling oil?

To get more information on used oil or to search the on-line directory to find your nearest used oil collection facility, visit the Product Stewardship for Oil Programme web site at www.oilrecycling.gov.au, or contact the Australian Government Department of the Environment and Heritage via email - oilrecycling@deh.gov.au or phone - 1800 982 006.

Guidelines for safe exposure levels of chemicals in used oil can be found on the National Occupational Health and Safety Commission Exposure Standards Database at www.nohsc.gov.au/OHSInformation/Databases/ExposureStandards/expsearch.asp

This factsheet has been developed by the Australian Government Department of the Environment and Heritage in consultation with the Australian Government Department of Health and Ageing.

The information in this fact sheet comes from various respected sources including: the World Health Organisation, the New Zealand Ministry for the Environment, the Environment Protection Authority Victoria, and the Oil Companies' European Organisation for Environment, Health and Safety. The views of these organisations do not necessarily reflect the views of this Government.