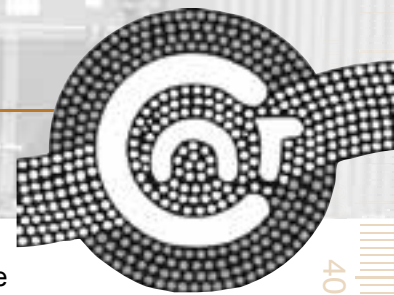


Used oil



Used oil comes from cars, generators, boats and trucks. In remote areas there's often no way to recycle or dispose of it safely. This is a problem because used oil can kill plants and animals, poison water, and make people sick if it enters the environment.

Managing oil safely doesn't have to be expensive or time-consuming. You can make changes that will help keep your community safe - just remember these principles.

- **Collect all used oil in one place**
A single storage point reduces pollution risk.
- **Store the oil safely**
Safe storage means protecting people and the environment, and preventing contamination of used oil with other substances such as water or brake fluid. It may be difficult and expensive to get rid of contaminated oil.
- **Transport it out to a recycler as soon as possible**
If there is a safe means of transport, the less time the oil spends in the community, the better.

Why used oil is dangerous

Used oil contains poisons such as lead, arsenic and magnesium (all heavy metals), as well as dioxins and benzene. These can enter the body via prolonged skin contact, breathing in the fumes, or (very rarely) through eating contaminated food (such as bush-tucker that grew in a contaminated area). Oil spilt on the ground can reach the bore water and poison it. Preventing pollution is the key, because once it has happened, it is very difficult to clean. Large stockpiles of oil are a fire hazard.

Raising community awareness

Put up a big sign at the collection point and the workshop. Make sure that people know where to take their used oil and to not put anything in the storage but used oil.

Lead by example - Ensure that oil from community vehicles is always managed according to best practice.

Provide facilities - Consider making available the workshop drip-tray, funnel, and shifter for residents to use when changing the oil on their own vehicles. Alternatively, encourage the store to sell this equipment.



Use funnels and drip trays to prevent spillage when pouring oil back into drums.



Create a safe place for used oil

Location

The oil collection point should be easily accessible, able to be monitored (to ensure that nothing else gets mixed in with the oil), above the flood line and away from

houses and fire dangers. Clear grass and shrubs away from the surrounding area before the bushfire season.

The facility

The best place for used oil to be stored (especially if producing large amounts) is in a purpose-built oil collection facility. This would be under cover, on a concrete slab, and fully bunded, with the bunding able to contain 10% more oil than the amount stored (the bunding should be at least 10 cm high). A bund is a raised edge, low wall or other obstruction that contains liquid.

If you don't have a facility

If you don't have such a facility yet, or if you are only collecting small quantities of oil, the principles to remember are:

- Prevent oil leaking into the ground
- Prevent water or other contaminants mixing with the oil
- Prevent the oil catching fire.

A simple way to implement these principles is to store oil in its original container, i.e. the four litre plastic container, or good (as new) sturdy 44-gallon drums. If possible, the drums should stand on a concrete slab with bunding (e.g. raised edges of at least 10cm) under a roof. The bunded area should be enough to contain the maximum amount of oil stored there. Any spillage within the bunded area should be collected, stored safely, and removed to a recycler. If there is no roof, store the drums on a slight tilt so that rainwater runs off rather than into the drums, or collects on top and exacerbates rusting.

Transporting used oil to the recycler

Safety

The less time the oil spends in the community, the better - as long as the method of transport is safe.

Contracts

If new oil is supplied to the community on a contract, make it a condition of the contract that the company remove all waste oil at time of delivery.

Backloading

Try backloading the oil out the same way that it came in or, for example, on the stores truck. The company that supplies oil to the powerhouse also should transport powerhouse oil back to town (in the Northern Territory, Power Water does this). It may be possible to arrange for the company to take community oil as well.

Transport it yourself

Sturdy, leak-proof, 'as new' 44-gallon drums are a safe container for oil transport. They should be firmly secured to the vehicle. A 15cm layer of sand underneath the drums can protect them from bumps and vibration on rough roads.



Used oil (continued)

Facility at Kununurra
(Photo: Department of the
Environment and Heritage.)



Oil could be transported in a maxi-cube, which is a square plastic pod inside a wire cage, designed for oil transportation and capable of holding 1000 litres). Contact Wren Oil in Perth for more information. (see list below)

Use a waste disposal or oil recycling company

See the list of contacts below. This option is safe and simple, but may be prohibitively expensive. As well as picking up drums, some oil recycling companies may provide communities with large tanks and a periodical emptying service. A rough estimated cost of hiring an oil recycling company to pick up 10,000 litres from a place like Ernabella (SA) would be \$2,500.

Disposal costs

Transport and/or disposal costs are inevitable but should be weighed against the potential cost to the community in the event of oil spillage or fire. Most companies charge to accept used oil – from \$15 to \$30 per 44-gallon (205 litre) drum, or about 8 cents per litre (early 2004 prices).

In the workshop

Protecting people

When working with used oil, wear gloves and eye protection. Work in an open, well ventilated area.

Preventing pollution: practices

- Use drip trays and funnels when changing oil to minimise spillage. Clean up any spills with an absorbent material such as sand.
- Pour small amounts of waste oil back into the old oil container and label clearly as 'used oil'. Pour larger amounts directly into a 44-gallon drum.
- Avoid storing the oil in paint cans, metal containers that have been used for storing petrol, or containers that have been used for flammables or combustible liquids.
- If using an oil-water separator, use biodegradable quick-break detergent rather than solvents for washing floors or oily engines and parts. (This ensures that the oil in the wastewater rapidly floats to the top in

Dos and Don'ts

- Don't pour oil into the ground or drains.
- Don't put used oil in the landfill.
- Don't burn oil.
- Don't use oil on roads or airstrips to suppress dust.
- Don't use waste oil to kill weeds or to preserve wood.
- Don't mix with water or paint and thinners, solids, brake fluids, radiator coolants, pesticides, resins or chemicals. Oil may no longer be recyclable if contaminated.
- Don't store used oil near houses, bores, or fire dangers. It could leak or catch fire.
- Do check oil regularly if storing it for long periods. Storage containers may start to leak.

the oil-water separator, rather than remaining dissolved and polluting ground and water at the outlet.)

- Monitor and maintain the oil collection facility and oil-water separator.

Preventing pollution: workshop construction

The workshop should be undercover, with a sealed concrete floor, which is fully bunded and drains to a well-maintained oil-water separator.

Outside the workshop

Consider constructing a wash down area for vehicles, consisting of a large concreted area draining to a trap that separates water, silt, gravel and oil. Each can then be recovered and recycled.

Further information

The Federal Government is funding a Product Stewardship of Oil program that aims to install used oil collection facilities in many towns and communities throughout Australia. Information on whether one may be built in your community, and on the location of your nearest used oil collection point or recycler, is available by contacting your local council or the Australian Government's Product Stewardship for Oil program; website at www.deh.gov.au/oilrecycling or telephone 1800 803 772.

Written by Hannah Hueneke, CAT Alice Springs.

Oil recycling companies

Area	Company name	Office	Telephone contact	Further information
All areas	Collex Pty Ltd	Darwin	08 8947 268	
All areas	Nationwide Oil	Perth	08 9351 1313	
Western Australia	Wren Oil	Perth	1800 654 002	Drop-off only
Alice Springs	Grease Monkeys	Alice Springs	0409 096 964	
Top End	Wastemaster	Darwin	08 8932 5900	See Note below
Katherine region	Wastemaster	Katherine	08 8971 0995	See Note below
Central Australia	Wastemaster	Alice Springs	08 8952 1336	See Note below
Northern Queensland	Cleanaway	Weipa	07 4069 8231	
Karratha	Cleanaway	Karratha	08 9185 6111	Drop-off only
Port Hedland	Oil Energy Corporation	Wedgefield (Port Hedland)	08 9140 2191	Drop-off only, open 24hrs, 7 days

Note: Wastemaster will collect from many communities for around \$150 an hour from their base. They also pump out septic tanks and could collect waste oil on the same trip at low cost.