



Australian Government

Department of the Environment,
Water, Heritage and the Arts

USED MOTOR OIL A VALUABLE RESOURCE

Used motor oil is a valuable resource. Australians are good at recycling used oil, with about 250 million litres of used oil recycled during the 2007–08 financial year. However, not all used oil is disposed of appropriately. Local governments are helping to conserve a valuable resource and protect the environment by encouraging Australians to recycle their used motor oil.



Contact your local council for the nearest used oil collection facility.



What happens after the used motor oil is collected?

Used oil collectors take used motor oil from collection tanks at sites such as landfills, waste transfer stations and work depots. The used oil may then undergo some pre-treatment before it is recycled or sold to a specialised used oil recycler.

Pre-treatment of used oil involves removing any excess water, a process known as *dewatering*. One way of doing this is by pouring the used oil into large settling tanks where the oil and water separate.

Processes for refining used motor oil

Depending on the final product, used oil can go through various recycling stages, including:

- *filtering* the oil to remove any solids present in the oil
- *demineralisation* to remove inorganic material and certain additives



Remember: you can also recycle used oil filters, oily rags and oil containers.



- *propane de-asphalting* to remove the heavier bituminous fractions
- *distillation* to physically separate the components of lubricating oil by boiling range
- *solvent extraction* to dissolve and remove undesirable compounds, and
- *hydrofinishing* to improve physical properties of a re-refined base-oil.

More information about the different recycling stages is available at:
www.oilrecycling.gov.au/what-happens.html

Uses for recycled oil

Used oil can be cleaned of contaminants and can be recycled again and again. There are many uses for recycled oil, including:

- industrial burner oil
- mould oil to help release products from their moulds (e.g. pressed metal products, concrete)
- bitumen based products
- an additive in manufactured products, and
- re-refined base oil for use as a lubricant, hydraulic or transformer oil.

What is *lube to lube* recycling?

Turning used motor oil back into lubricating oil is referred to as *lube to lube* recycling. Re-refined used oil is blended with additives to produce oil suitable for re-use in the same way as a 100 per cent virgin oil product. The re-refined base oil is tested to ensure that it meets strict health and safety standards.

How does the Australian Government support oil recycling?

Through the Product Stewardship for Oil Program, the Australian Government provides industry incentives to increase the recycling of used motor oil. More information on the program is available at: www.oilrecycling.gov.au

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