FACT SHEET – IMPROVING RESOURCE RECOVERY CENTRES

Motor oil and cooking oil

Motor oil is waste automotive, transmission or sump oil typically generated from the servicing of cars and farming equipment. Motor oil must be separated from the processing and disposal of general waste so it can be recycled, with hazardous containments in the oil being safely removed for disposal during the recycling process.

Waste motor automotive oils must be treated with great care as in many cases they contain trace levels of low flash products (e.g. petrol, turpentine, paint thinners, solvents etc.), which are flammable liquids that can ignite when exposed to heat or ignition source.

Cooking oil is waste fats and oils typically generated from homes, cafés and restaurant kitchens. If not disposed of or treated correctly, cooking oil can block sewage lines and potentially pollute waterways. Cooking oil is a valuable organic material and should be recycled for re-use or processing into various products (e.g. soaps, animal feed, compost and biodiesel).

Motor oil and cooking oil are to be collected, stored, transported and processed separately.

Items classifying as motor oil or cooking oil

Items that classify as motor oils or cooking oils in this fact sheet include:

- **motor oils**: automotive, transmission and sump oil generated from the domestic servicing (oil changing) of cars and farming equipment
- **cooking oils**: cooking fats or oils used in home, café or restaurant kitchens.

Regulatory requirements and standards (OH&S and environmental)

Various acts, regulations and guidelines apply to the storage, transfer, transport, recycling and disposal of motor oil and cooking oil at resource recovery centres/transfer stations. These include:

- **Occupational health and safety (OH&S):**
  - Occupational Health and Safety Act 2004 (Victorian Government)
  - Occupational Health and Safety Regulations 2007 (Victorian Government)
  - Guide to Best Practice at Resource Recovery Centres (Sustainability Victoria).

- **Environmental:**
  - Environment Protection Act 1970 (EPA Victoria)
  - Industrial Waste – Classification for unprocessed used cooking fats and oils (EPA Victoria)
  - Product Stewardship (Oil) Act 2000 (Australian Department of the Environment and the Oil Stewardship Advisory Council (OSAC)).

- **Dangerous goods storage:**
  - Dangerous Goods Act 1985 (Victorian Government)
  - Code of Practice for the Storage and Handling of Dangerous Goods (WorkSafe Victoria).

- **Relevant Australian Standards:**
  - AS 1940-2004, the storage and handling of flammable and combustible liquids
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Potential hazards and OH&S requirements

Motor oil and cooking oil contain materials and properties that can pose hazards to workers, community, public health and the environment if not managed correctly. These include:

› fire and explosion (motor oils and cooking oils are combustible liquids and can also contaminated with petrol or other low flash products)
› slippery surfaces from spills
› potentially toxic chemicals that can cause skin irritation or other health issues.

When handling waste motor oil or cooking oil, it is important that resource recovery centre/transfer station operators consider the following:

› keep heat and potential ignition sources away from waste oils storage and handling areas
› ensure containers and drums containing waste oil are not cut with any heat-producing equipment (refer to WorkSafe’s Safety Alert, Handling used metal drums (2011))
› follow the correct safe manual handling and management procedures when handling large/heavy drums or containers (refer to WorkSafe Victoria’s Code of Practice for Manual Handling)
› ensure both operators and customers who carry out decanting wear appropriate personal protective equipment (PPE), including gloves and eye protection
› employ spill management plans (SMP) at each site to help avoid spills and ensure spills are contained and cleaned up safely
› ensure each facility has on-site staff trained in the use of suitable firefighting equipment.

Acceptance criteria

Criteria regarding the acceptance of motor oil and cooking oil at resource recovery centres/transfer stations include:

Motor oil:

› the volume should be of a domestic quantity per customer (i.e. 20 litres or less), except in rural areas (where up to 205 litres (standard 44-gallon drum) can be accepted)
› should be separated from other automotive items or contaminants (e.g. radiator coolant, oil filters, electrical transformers and oily rags)
› should not be contaminated by excessive water or other automotive fluids (e.g. brake fluid or radiator coolant).

Cooking oil:

› should include of waste animal fats or vegetable oils (or blends)
› the volume of cooking oil should be of a domestic quantity per customer (i.e. 20 litres or less)
› should not be contaminated by excessive water or other substances (e.g. food scraps).

Storage guidelines

Motor oil and cooking oil must both be stored separately and in designated, accessible, secure, leak-free and bunded containers or tanks.

Volumes of motor oil and cooking oil stored at resource recovery centres/transfer stations should be minimised, and operators should ensure collection occurs within reasonable timeframes (in accordance with any applicable regulations and licensing requirements). Requirements for the storage of motor oil and cooking oil is covered under the relevant dangerous goods storage acts and codes for combustible liquids (refer to regulatory requirements and standards section above, namely AS 1940).

Best practice and minimum standards in the storage of motor and cooking oils are not significantly different and the following standards should be met at resource recovery centres/transfer stations:

Store motor oil and cooking oil in suitably labelled areas (refer to Sustainability Victoria’s signage library). This includes using standard signage that provides clear indication to users of the material accepted, drop-off location, hazards (e.g. flammable) and appropriate and safe disposal method (e.g. no smoking).

Ensure tanks:

› have full rust protection and are hot dip galvanised after fabrication
› are placed in an open location well away from heat sources and any potential ignition sources such as heaters welding or other spark producing equipment
› are placed on a flat, impervious surface (preferably a concrete slab)
› are double-skinned and/or incorporate a bund (in accordance with the EPA’s Bunding Guidelines)
› are fitted with a graduated dipstick or similar device so that operators can readily assess the amount of oil in the tank
› are separated from storm water drains, battery stores or potential sources of acid leaks or sparks
› are fully lockable and have adequate safety signs warning “WASTE OILS” and “no ignition sources within three metres of the tank”.

Ensure bunded areas are roofed and of sufficient size to allow for storage of emptied containers.

Provide and maintain spill kits in storage areas and train staff in the correct use of these.

Ensure users are able to pour oil into the drop-off tank without using ladders or platforms.

Ensure flammable liquids (e.g. petrol) are not placed in or near the drop-off tank and ignition sources (e.g. cigarettes or mobile phones) are not used within three metres of the tank.

Avoid storage of oil for longer than three months.
Transport and re-use/recycling guidelines

Motor oils contain valuable materials, which can be:

- reprocessed or refined to remove contaminants for use in the production of lubricants, hydraulic or transformer oils, industrial burners, mould oils and bitumen-based products
- cleaned for reuse as burner fuel.

Cooking oil is a valuable organic resource that goes through separate recycling/resource recovery processes to motor oil and can be used to produce a variety of products, including animal and pet feed, soaps, paints, composting and biodegradable diesel (biodiesel).

Best practice and minimum standards in the transport and recycling of motor and cooking oils are not significantly different and the following standards should be met at resource recovery centres/transfer stations:

- collection should occur by EPA collection contractors with tankers or trucks that have safe, secure and leak-free storage containers - an exception to this is for cooking oil where, if managed in compliance with the Classification, an exemption applies. (Hamish to double check with EPA)
- the recycling location should be appropriately licenced for processing motor oil or cooking oil and known by the resource recovery centre/transfer station before transportation
- motor oil and cooking oil should not be placed in landfill, as they may leak hazardous or toxic materials into the landfill and surrounding environment.

Record keeping guidelines

It is important to keep records of motor oil and cooking oil received and sent for recycling at resource recovery centres/transfer stations. This is to enable tracking of resource recovery from the site, as well as managing on-site storage.

Record keeping requirements related to motor oil and cooking oil include:

- taking records at the gatehouse of the volume and type of oil received (including date and quantity)
- doing a monthly stocktake of motor oil and cooking oil on-site and comparing this to the recommended maximum allowable oil stored on-site
- keeping records of the volume of motor oil and cooking oil collected from the site by the approved contractor and retaining a copy of the waste transport certificate.

Resources

WorkSafe Victoria
Phone (03) 9641 1444 or 1800 136 089 (toll free)
http://www.worksafe.vic.gov.au

Australian Government Department of Environment
Phone 1800 803 772
https://www.environment.gov.au

EPA Victoria
Phone 1300 372 842 (1300 EPA VIC)

Further information

For further information and resources, please contact Sustainability Victoria on 03 8626 8700 or visit www.sustainability.vic.gov.au