PPG8
February 2004

ENVIRONMENT AND HERITAGE SERVICE

SEPA Scottish Environment Protection Agency

ENVIRONMENT AGENCY

Environmental Alliance – working together

Pollution Prevention Guidelines

Safe Storage and disposal of used oils: PPG8

These guidelines are intended to help everyone that handles used oils – from people carrying out a single engine oil change to large industrial users. They are jointly produced by the Environment Agency for England and Wales, the Scottish Environment Protection Agency and the Environment and Heritage Service in Northern Ireland, referred to here as the Agency or Agencies. Compliance with these guidelines will help to reduce the risk of oil pollution of surface waters, groundwater, sewers and drains.

Many sites where waste oil is stored are regulated under the Pollution Prevention and Control Regulations (Reference 1), collectively described in this guidance as the PPC Regulations, and the Waste Management Licensing Regulations (Reference 2). These Regulations cover the storage of waste mineral oils and are intended to protect the whole environment. There may be additional requirements under these Regulations that are not mentioned in this guidance. You should check with your local Agency office for further pollution prevention measures.

In England, the storage of waste oils (except waste mineral-based oils) is covered by the Control of Pollution (Oil Storage) (England) Regulations 2001. These Regulations are made under the Water Resources Act 1991 and are intended to protect the water environment. **Highlighted text in these guidelines indicates areas that must be complied with under these Regulations.** Similar regulations are expected to be introduced in Scotland during 2004 and may follow in Wales and Northern Ireland. Further advice may be obtained from your local Agency office. Contact details can be found at the end of these guidelines.

1. General

Under the Environmental Protection Act 1990[1] and the PPC Regulations, the Agencies are responsible for protecting controlled waters from pollution and for preventing pollution of the environment and harm to human health from waste management activities. Controlled waters include all watercourses, canals, lakes, lochs, coastal waters and water contained in underground strata (groundwater). Under the Duty of Care (see Reference 3), those responsible for waste must keep it safely and prevent its illegal disposal by others.

A waste minimisation review will help you save money on raw materials and waste disposal costs. Further advice on waste minimisation and initiatives in your area can be obtained from your local Agency office. Free independent information on waste minimisation – including publications, events, site visits and specific advice – is available from Envirowise. Visit the Envirowise website at www.envirowise.gov.uk or call the Environment and Energy Helpline on 0800 585794.

The Oil Care Campaign provides information about the safe delivery, use, management and disposal of oils. Further information can be obtained by contacting your local Agency office or by visiting the websites given at the end of this document.

2. Oil in the environment

Oil is a highly visible form of pollution. It harms plants and animals, damages rivers, groundwaters and the soil, and can destroy natural habitats and drinking water supplies. It is the most commonly reported type of water pollution and causes over 16% of all pollution incidents annually.

Careless disposal of oil into drainage systems, onto land or to watercourses or groundwaters is an offence, and the person responsible may be prosecuted and fined if found guilty. Because of the way it spreads, even a small quantity of oil can cause a lot of harm, 10 litres of oil can completely cover the surface of a one-hectare lake.

Cleaning up oil pollution can be expensive and the Agencies have the power to recover the cost from the polluter. Used oil may have other hazardous properties; for example, used engine oil is classified as carcinogenic and should be handled and stored with care. Yet, with proper procedures and good practice many of the oil pollution incidents can easily be avoided.

Do not tip oil into any drains or onto land as this will result in the pollution of rivers and groundwater or cause land contamination. Do not burn waste oil on a bonfire as this pollutes the air.

[1] The Waste and Contaminated Land (Northern Ireland) Order 1997 in Northern Ireland

3. Disposing of domestic used oil

a. Engine oil

Used oils such as engine and gearbox oil from vehicle or machine maintenance may be derived from either mineral or synthetic sources. Take these oils to an oil bank for recycling. Oil banks can be found at most civic amenity sites. For the location of your nearest oil bank, contact the Oil Bank Helpline on freephone 0800 663366 or visit www.oilbankline.org.uk for information. Alternatively, contact your local authority recycling officer who should be able to tell you. Do not mix used oil with other substances such as white spirit, paint or solvents, as this makes recycling extremely difficult.

b. Vegetable oil

Used household oil can be disposed of in the general household waste. Oils and fats should be allowed to cool before being put into the bin. They can be soaked into normal household rubbish or put into rigid plastic containers. Alternatively, small amounts of vegetable cooking oil or animal fat can be used to prepare food for birds by soaking or frying pieces of bread in the used oil.

Some civic amenity sites have facilities for the collection of vegetable oil. Contact your local authority recycling officer for details.

Used vegetable oils must not be put into ordinary oil recycling banks at most sites as this makes the entire contents of the oil bank non-recyclable.

4. Disposing of commercial and industrial used oil

Used mineral oil from commercial and industrial sources will be classified as hazardous waste and may also be special waste under the Special Waste Regulations (Reference 4), which impose additional specific legal requirements for its movement, recovery and disposal. Movement of the waste must be accompanied by a consignment note – a copy of which must be kept by everyone involved in the transfer, including the Agencies; further guidance is given in A guide to the Special Waste Regulations 1996 (Reference 5).

The Special Waste Regulations are due to be replaced to fully implement the Hazardous Waste Directive (91/689/EEC) in the UK. This will, amongst other things, extend the range of wastes defined as hazardous. It is important to note that many wastes, which are not currently classed as special, may however be hazardous. The new definition of hazardous waste already applies to certain legislation including the Duty of Care (Reference 6), the Landfill Regulations (Reference 7) and the PPC Regulations (Reference 1). For the Duty of Care, any waste must additionally be described in a transfer note by reference to the appropriate code or category in the European Waste Catalogue.

Seek advice on the management of oil waste and wastes containing oils from specialist contractors or from your local Agency office. Alternatively visit the NetRegs website (www.netregs.co.uk).

a. Industrial oil

Used oil is a useful substance that, when recovered, can be used as a fuel and save resources; it should be treated as such. Larger quantities of used oil such as hydraulic fluid or lubricants from lorries, buses or mechanical plant should be stored securely to await collection by a registered waste carrier. There are specialist companies that will collect used cutting oils, and then treat and recover the oil. Emulsified cutting oils are highly polluting in water and great care should be taken in their disposal; contact a specialist contractor for advice.

b. Vegetable oil

Cooking oils from commercial users, such as caterers and fish and chip shops, must not be disposed of with the general waste stream. The waste oils are not hazardous or special waste, but are subject to the Duty of Care. These waste oils can be collected by specialist contractors.

Used vegetable oil must not be disposed of to the surface water drain and may not be discharged to the foul sewer without the prior approval of the sewer provider.

c. Garages and workshops

Sites such as garages can generate large quantities of used oil. This oil can be collected by a registered waste carrier or, as an alternative in England and Wales, it may be feasible to use it as a fuel for space heating. This will require adequate storage to balance the supply with seasonal demands and will require an appropriate burner. Such installations require authorisation from the local authority. Further information on handling wastes from garages is given in PPG19 (Reference 8).

d. Transformers

Electrical transformers may use specialist oil. When spent, used transformer oil is a hazardous waste. Older transformers are likely to contain polychlorinated biphenyls (PCBs), a harmful toxin that persists in the environment. If PCBs are present, the transformer oil is also likely to be classified as special waste and will require a consignment note for its movement. Seek advice on the disposal of transformer oil from specialist waste contractors.

5. Waste oil storage and pipelines

In all cases, care must be taken to avoid spillage when transferring waste oil to storage facilities. Any spills should be dealt with using absorbent materials. The Agencies recommend that waste oil tanks and pipework are installed above ground whenever possible. This enables regular maintenance checks to be carried out more easily and leaks to be identified earlier.

a Above ground storage

In England, the above ground storage of oils (excluding waste mineral oils) in containers over 200 litres is covered by the Control of Pollution (Oil Storage) (England) Regulations 2001. These Regulations include the storage of waste synthetic and vegetable oils. Similar regulations are expected to follow in the rest of the UK. Guidelines for above ground oil storage tanks are given in PPG2 (Reference 9) and guidelines for oil stored in drums or intermediate bulk containers (IBCs) in PPG26 (Reference 10).

Storage or treatment of waste oils may be subject to the PPC Regulations. For further information in England and Wales, see Reference 11. In Scotland, contact you local Agency office. Storage of waste mineral oils is covered by exemptions under the Waste Management Licensing Regulations 1994 (as amended). These allow oil to be stored without a licence if the container does not exceed 3,000 litres and is able to prevent oil escaping to the ground or a drain. Further details are given in Reference 3.

Regardless of whether they are covered by the legislation described above, all oil storage facilities should be sited on an impervious base within an oil-tight secondary containment system such as a bund. The bund walls should be constructed without a damp-proof course or drainage outlet from the bund itself. As a minimum, the bund should be capable of containing 110% of the volume of the oil container. Where more than one container is stored, the bund capacity should be at least 110% of the largest tank or 25% of the total storage capacity, whichever is the greater. Fill pipes, funnels, draw pipes and sight gauges should be enclosed within the secondary containment system, and any tank vent pipe should be directed downwards into it.

b. Removal of bund waste

Where oil is stored within a bunded area, rainwater and oil residues can build up. This build-up reduces the storage capacity of the bund and should be removed regularly by bailing from the sump or using a manually operated pump. This residue is likely to be contaminated with oil and, as such, may be hazardous waste and may also be classified as special waste. Where classified as special waste, it must be consigned under the Special Waste Regulations as described in Section 4. It is often cheaper in the long term to provide a roof for the storage facility to prevent the accumulation of rainwater.

c. Underground tanks and pipes

The storage of used oils below ground is primarily covered by the Groundwater Regulations 1998 and accompanying Groundwater Protection Codes (Reference 12). These documents should be consulted whenever an underground facility is present or planned. It is good practice to provide underground oil storage facilities with measures to protect them against damage and corrosion such as a double-skin tank, double-wall piping or laying pipework in a conduit. Regular inspection and testing is vital to identify and repair any damage or leaks.

When underground waste oil storage is used or proposed, it is essential that the local environmental risks around the site are taken into account. This may affect the engineering or operational requirements necessary to reduce the chance of leaks or to identify them. Factors to consider include the local groundwater vulnerability, the proximity of water abstraction points (Source Protection Zones), and the age and storage capacity of any facility. Further information about local environmental factors is available on the Agencies' websites or from your local Agency office. Further information on storage and leak detection systems is given in PPG13 (Reference 13), Reference 14 and PPG7 (Reference 15)

d. Oily water waste

Water contaminated with oil, such as that found in an interceptor or inside a bund wall, is hazardous waste and, unless the concentration of oil is very low, may need to be classified as special. Such waste will need to be dealt with by a specialise contractor and again will need to be accompanied by a consignment note.

6. Dealing with spills

a. Immediate action

If you store or use any oil, you should consider the risks of a spillage and prepare a Pollution Response Emergency Plan (see PPG21; Reference 16). Keep a stock of absorbent materials (e.g. sand, earth or commercial products) on site to deal with spillages and train staff in their use.

If there is a spill, immediate action should be taken to contain the oil to prevent it entering any drains, watercourses, unmade ground or porous surfaces. Notify the Agencies by calling the Emergency Hotline on 0800 80 70 60. Do not hose the spillage down or use any detergents.

b. Used oil absorbents

Where absorbents, (e.g. sand, oil pads or booms) have been used to absorb a leak or contain a spill, the contaminated waste absorbent is likely to be classified as hazardous waste. It may also be special waste if it has been used to absorb an oil that is itself classified as special. These wastes must be disposed of at a suitably authorised waste management facility.

7. References

1. Pollution Prevention and Control (England and Wales) Regulations 2000
   Pollution Prevention and Control (Scotland) Regulations 2000
   Pollution Prevention and Control Regulations (Northern Ireland) 2003
2. Waste Management Licensing Regulations 1994 (apply in England, Wales and Scotland)
   Waste Management Licensing Regulations (Northern Ireland) 2003
3. Waste Management, the Duty of Care, a code of practice (revised 1996). ISBN 0-11-753210X. The Stationery Office. Tel: 0870 6005 522 (see also www.defra.gov.uk/environment/waste/management/doc/)
4. Special Waste Regulations 1996 (as amended) (apply in England, Wales and Scotland)
   Special Waste Regulations (Northern Ireland) 1998
5. A guide to the Special Waste Regulations 1996
6. Environment Protection (Duty of Care) Regulations 1991 (apply in England, Wales and Scotland)
   Controlled Waste (Duty of Care) Regulations (Northern Ireland) 2002
7. Landfill (England and Wales) Regulations 2002
   Landfill (Scotland) Regulations 2003
   Landfill Regulations (Northern Ireland) 2003
8. PPG19: Garages and vehicle service centres
9. PPG2: Above ground oil storage tanks.
10. PPG26: Storage and handling of drums and intermediate bulk containers
11. Interpretation of Schedule 1 to the PPC Regulations. Environment Agency IPPC Regulatory Guidance Series No. 4
12. Groundwater Protection Code: petrol stations and other fuel dispensing facilities involving underground storage tanks. Department for Environment, Food and Rural Affairs (DEFRA). Tel: 0870 1226 236 or http://www.defra.gov.uk/environment/water/quality/oilstore/index.htm

    Underground storage tanks for liquid hydrocarbons: code of practice for the owners and operators of underground storage tanks (and pipelines). Scottish Executive Environment Group Paper 2003/27. Tel: 0131 556 8400 or www.scotland.gov.uk/publications
13. PPG 27: Installation, decommissioning and removal of underground storage tanks
14. Wetstock reconciliation at fuel storage facilities
15. PPG 7 Refuelling facilities (an update is planned for June 2004)
16. PPG21 Pollution incident response planning

References 5, 8–11 and 13–16 are available from the Agencies.
References 1, 2, 4, 6 and 7 are available from The Stationery Office (Tel: 0870 600 5522) or visit www.legislation.hmso.gov.uk

8. Additional information

Oil Care Campaign contact details:

England and Wales	Scotland	Northern Ireland
www.environment-agency.gov.uk/oilcare	www.oilcare.org	please use Environment Agency website

ENVIRONMENT AGENCY
GENERAL ENQUIRY LINE
0845 9 333 111

ENVIRONMENT AGENCY
EMERGENCY HOTLINE
0800 80 70 60

The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water in England, Wales, Scotland and Northern Ireland

Pollution Prevention Guidance notes (PPGs) are available to download from the Agencies' websites, see details below.

Environment Agency
www.environment-agency.gov.uk

HEAD OFFICE
Rio House
Waterside Drive
Aztec West
Almondsbury
Bristol BS32 4UD
Tel: 01454 624 400
Fax: 01454 624 409

Scottish Environment Protection Agency
www.sepa.org.uk

CORPORATE OFFICE
Erskine Court
The Castle Business Park
Stirling FK9 4TR
Tel: 01786 457 700
Fax: 01786 461 425

Environment and Heritage Service
www.ehsni.gov.uk

HEAD OFFICE
Calvert House
23 Castle Place
Belfast BT1 1FY
Tel: 028 9025 4868
Fax: 028 9025 4777

ENVIRONMENT AND HERITAGE SERVICE
SEPA Scottish Environment Protection Agency
ENVIRONMENT AGENCY

Environmental Alliance – working together

HO-03/04-10K-BHTN-AMP-EP146D