Water Conservation

Water Conservation measures should include metering of water supply, leakage detection and repair, motion sensors in urinals, re-use of water and the elimination of water wastage. Rainwater harvesting helps conserve water.

For further information refer to www.taptips.ie and:www.waterwise.ie

Site Housekeeping: BEST PRACTICE SUMMARY

- **Maintain Waste Water Treatment Systems**
- **Keep oil tanks bunded to control any leaks or accidental spills**
- **Take care with chemical usage and waste chemical disposal**
- **Locate waste skips away from yard drains and ensure good practice regarding waste storage and disposal**
- **Ensure skips are not leaking and if storing food waste keep them covered.**
- **Maintain rainwater gutters, downpipes, yard drainage, silt traps and oil interceptors in good working order**
- **Minimise soiled yards**
- **Be aware of environmental obligations**
- **Provide training and information for employees**

ENVIRONMENTAL PROTECTION AND THE LAW

The local authority is responsible for the enforcement of environmental legislation relating to small and medium sized enterprises, while the Environmental Protection Agency deals with larger industrial enterprises. Business premises should be aware of their responsibility for environmental protection. Some key areas include:

WATER - The Water Services Act 2007 places a **Duty of Care** on the owners of premises to ensure that treatment systems for waste water are kept so as not to cause a risk to human health or the environment. It is an offence to allow polluting matter to enter waters. Trade effluents require a discharge licence. Accidental spillages that are likely to enter waters must be reported to the local authority. The local authority has powers of entry and inspection.

WASTE - Waste oils, hazardous waste and waste sludge requires special disposal arrangements (consult your local authority). Under environmental legislation, producers of waste have a duty of care to ensure that it is properly managed.

DEVELOPMENT CONTROL– Planning conditions may require pollution prevention measures. Be aware of requirements for your premises.

Monaghan
COUNTY COUNCIL
COMHAIRLE CONTAE MHUINEACHÁIN

Water Protection

Best Practice for Business Premises

Tá Comhairle Contae Mhuineacháin ag obair chun caighdeán an uisce a chosaint agus a fheabhsú ar fud Mhuineacháin. Is acmhainn thábhachtach í an t-uisce sa chontae, le níos mó ná 20 loch agus abhainn agus 20 tollpholl a úsáidear chun usice a chur ar fáil don phobal agus do ghrúpscéimeanna uisce.

The Fane River system supplies water to Churchill-Oram Group Water Scheme, Inniskeen Village, Newry and Dundalk

May 2010

Does your business involve any of the following?

- Disposal of wastewater via septic tank or other treatment system
- Storage of heating oil or dispensing of fuel oil
- Use of chemicals, paints, solvents or lubricants
- Washing of vehicles, premises or equipment
- Disposal of yard storm waters
- Accumulation of general waste on site
- Vehicle dismantling/maintenance
- Handling and storage of construction wastes
- Concrete production
- Quarry activities

If yes, then your business needs to take extra care to protect waters.

In a recent survey of business premises commissioned on behalf of Monaghan County Council common problems Identified include:

- Old or poorly maintained septic tanks
- Unsuitable location, spillages and inadequate bunding of oil storage tanks
- Inadequate drainage systems
- Discharge of waste water/soiled water and oil contaminated water to waterways
- Inadequate small-scale chemical storage

Further Information/ Useful Contacts

www.greenbusiness.ie
www.envirocentre.ie (Enterprise Ireland, refer to Best Practice for Oil Storage (BPGCS005)
www.waterwise.ie (Water Awareness for Businesses, Cavan County Council)
www,change.ie
www.ciria.com/suds (Drainage systems)
www.ctc.cork.ie (Clean Technology Centre)
www.SEI.ie (Sustainable Energy Ireland)
www.epa.ie (refer to - Guidelines on Wastewater Treatment Systems)
www.rainman.ie (Rainwater harvesting)
www.lapd.ie (Prevention Demonstration Project)
www.ballybaywetlands.ie (Environmental training)
Monaghan County Council's Environment Section 047 30592
Scotch Corner Recycling Centre, County Monaghan 047 80888

Use of Chemicals

Chemicals contribute to many environmental problems. Commonly used chemicals include detergents, disinfectants, solvents, paints, degreasing agents, pesticides and veterinary products. The delivery, storage and use of chemicals and solvents need to be carefully monitored to avoid over-use, accidental spillages and improper disposal.

BEST PRACTICE

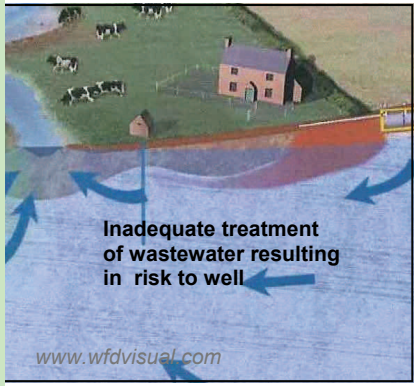
- Chemicals, lubricants and solvents should be stored in a secure area and provided with adequate bunding (drip-tray or similar)
- Storage area should be located away from storm water drain and surface waters
- Care during delivery and careful handling is required to prevent spillages

Protection of private wells

Private well's are still widely used in Ireland to supply homes, farms and businesses, however groundwater can be easily contaminated.

BEST PRACTICE

- Prevent surface water from entering the well. The well head should be properly constructed to prevent entry of surface run-off.
- Keep polluting activities away from wells.
- Wells should be located a minimum of 15 to 60 meters (depending on site conditions) away from any part of a waste-water treatment system.



Separation of clean and soiled water

PROBLEM

- Manufacturing and commercial activities can generate soiled water, which if allowed to enter natural waterways can cause pollution.
- Extra care is needed during construction works and cleaning processes.

BEST PRACTICE

Separate clean and dirty waters by installing effective guttering and storm water drainage systems:

- Regularly remove silt and debris from yard drainage systems
- Install silt traps and/or oil separator where silt or oil contamination is likely
- Keep soiled yard areas to a minimum
- Clean roof and yard waters should be discharged separately to a suitable soak-away or watercourse
- Dirty or contaminated waste water can be minimised and treated to reduce contamination levels
- Consider use of permeable surfaces, infiltration trenches, swales and constructed wetlands, which can remove low-level contaminants from storm or yard waters.

Further Information on sustainable hard surface drainage systems
www.ciria.com/suds

Wastewater treatment systems for canteen, toilet waste waters and trade effluents

PROBLEMS

- Poorly constructed septic tanks (particularly older systems)
- No adequate percolation area
- Overloaded treatment systems
- No sludge removal and poor maintenance
- Unauthorised discharges to water

Faulty septic tank systems

BEST PRACTICE

- Check treatment system performance. Pre-1990s systems, over-loaded systems or systems receiving trade effluent, may require up-grading (seek expert advice from a suitably qualified and experienced consultant)
- Don't allow hazardous wastes like solvents or excess cleaning prod-ucts to discharge to your treatment system
- Install grease traps on drainage from restaurant, take-away and cooked food preparation areas
- Ensure good housekeeping to reduce the quantities high strength liquid wastes
- Replace soak pits and pipes to drains with an adequately designed percolation area or other approved polishing system (seek expert advice)
- Ensure that no roof or clean yard waters enter the treatment system
- Remove sludge regularly using a licensed contractor
- Mechanical treatment systems require regular maintenance and main-tenance contracts should be entered into with the supplier
- Keep records of maintenance and sludge removal

Trade Effluent

What is trade effluent?

Activities such as vehicle washing, food preparation, food processing, premises and equipment washing produce a **trade effluent.** Trade effluent disposal requires treatment facilities to reduce contamination levels prior to discharge to surface or groundwater.

Monaghan County Council is responsible for the issue and enforcement of trade effluent discharge licences under Section 4 (to surface and groundwater) and under Section 16 (to sewers) of the Local Government Water Pollution Acts.

For further information contact your local authority

Contaminated discharge to stream

Contaminated land

Land can be contaminated by poor industrial practices, through inappropriate disposal of waste including sludge, liquid wastes, batteries, oil and chemical spillages and construction waste.

Oil spill containment measures in a stream

BEST PRACTICE

Waste from business premises should be recycled where possible or otherwise disposed of by an authorised contractor to a licensed facility.

Waste oils should be stored on a drip tray and disposed of by an authorised contractor.

For further information on the disposal of waste to land and disposal of hazardous waste contact your Local Authority

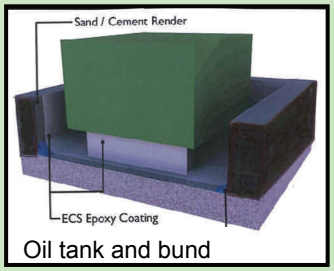
FUEL STORAGE: PROBLEMS

A significant proportion of oil storage facilities are poorly bunded, contain unsuitable filling points and receive infrequent inspection and maintenance.

- Oil may escape in a large spillage at once, or through prolonged seepage
- Spills will lead to contamination of soil, surface water and/or groundwater
- Oil pollution incidents occur frequently in County Monaghan
- Clean-ups following oil pollution incidents can be very costly. Businesses need to consider associated cleanup costs and environmental liability.

FUEL STORAGE: BEST PRACTICE

Fuel storage tanks should be sited on an impervious base within an <u>oil tank bund</u> with no drainage outlet. All pipes should be enclosed within the bund with the vent pipe directed downwards into it. Oil tank bunds should be:

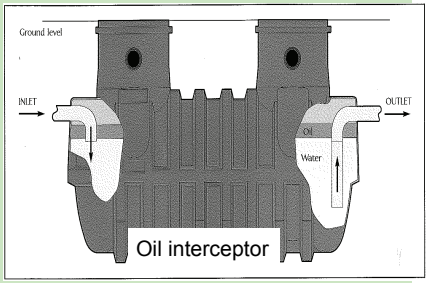


Oil tank and bund

- Located away from septic tanks, yard drains, waterways and wells
- Sufficient to contain 110% of the tanks maximum capacity. Where there is more than one tank within the bund the capacity should be sufficient to accommodate 110% of the largest tank's max. capacity or 25% of the total max. capacity of all tanks, whichever is greater
- Adequately constructed with regular bund integrity testing
- Provided with safety barriers for protection against accidental impact where machinery is used nearby
- Secure against unauthorised access and vandalism
- Covered and regularly monitored for water levels due to rainfall

Fuel dispensing

- Provide yard channels leading to adeuately maintained oil interception facilities (seek expert advice)
- Regular inspection and maintenance records



Oil interceptor