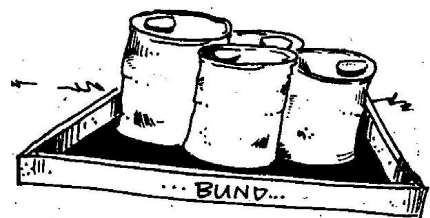


A bund generally consists of a low wall built to contain spills and leaks from fixed tanks and containers such as 200L (44 gallon) drums.

The bund wall and floor area should be made of an impervious material such as bricks or concrete and be large enough to hold the full contents of the largest container plus 10%. If fire protection is provided the bund capacity must be sufficient to retain the firewater as well as the spilled substance. If possible, provide a roof to stop rainwater getting into the bunded area and rusting the drums. Always check with WorkCover NSW first regarding safety considerations before installing a roof over bunded chemicals.

The construction of bunds should comply with Australia Standard AS 1940-1993: *The storage and Handling of Flammable and Combustible Liquids.*



Air Quality Management

Small factories may contribute to air quality problems through activities and processes such as:

- Energy consumption that requires the burning of fossil fuels (oil, gas and coal) and results in the release of greenhouse gases and air pollution
- Release of fumes, odours and emissions from products or processes that are used
- The use of motor vehicles for transportation of goods

Air quality management includes looking after the air inside your premises, as well as reducing the impact of any activities that could affect the air in your local neighbourhood. Air pollution can be caused by dust, odours, fumes or gases coming from your business activities or from products and

equipment you use. Some of the sources of air pollution from your business could be exhaust fans, combustion units, chimneys, extraction systems, motor vehicles, and odours and emissions from chemical substances.

Emissions fumes and odours

The chemical products or processes that you use may result in air emissions, fumes and odours that could cause health, safety and environmental problems. Volatile organic compound (VOCs) in organic solvents, for example, evaporate into the atmosphere and can lead to photochemical smog formation.

Reduce and control your factory's air emissions by:

- Regularly servicing air filtering and control equipment
- Investigating the availability of less toxic materials to replace the materials you are currently using
- Keeping solvent containers sealed when not in use to limit evaporation and prevent excessive odours and loss of materials.

Noise Management

Some activities in small factories can be noisy due to the operation of large machinery. Most of this noise is restricted to internal processes and is therefore a concern in relation to occupational health and safety rather than community noise complaints. There are strict regulations that make noise an offence. Consider the following actions to minimise noise on your premises.

Reduce machinery noise by shielding, enclosing and muffing. Mount machinery on rubber. Maintain equipment regularly checking on rattles or vibrations.

Close external windows and doors when working outside standard hours but make sure the work area is well ventilated.

Limit vehicle movements to standard daytime working hours.



SOLUTIONS TO POLLUTION

Stormwater

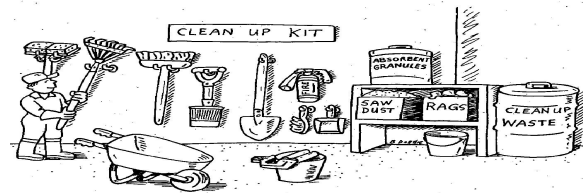
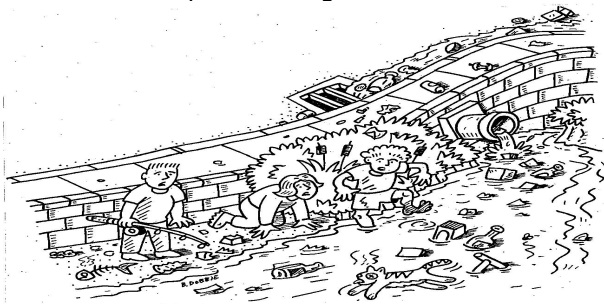
Stormwater runoff from your premises travels via gutters and stormwater drains to local creeks or canals and eventually ends up in a river, harbour or on a beach. Anything that goes down a stormwater drain is not treated – that's why the stormwater system is meant to carry rain water only.



For further information
Please contact Kempsey Shire Council's
Sustainable Development Services
Telephone: 02 6566 3200

Simple things you can do to prevent stormwater pollution from your business

- ✓ Keep the footpath, gutter and external areas near your business free of litter. Regularly sweep your external work areas. Do not hose your outdoor surfaces into the gutter or drain. Recycle or dispose of the swept rubbish in your waste bins.
- ✓ Provide containers for cigarette butts in areas frequented by smokers.
- ✓ Ensure that all rainwater from roofs, yard areas, car parks, etc. is directed to the stormwater system and is not connected to the sewer. Illegal connections of stormwater to sewers can result in overflow of raw sewage into our waterways.
- ✓ Check that any internal trade wastewater drains on your premises drain to the sewer not to stormwater. Any discharges to the sewer should be in accordance with the requirements of your local sewerage utility (Macleay Water).
- ✓ Stencil the stormwater drains with icons (pictures) conveying the message that only uncontaminated rainwater drain. Council's can provide you with this stencil on request.
- ✓ Install litter collection baskets in stormwater drains on your premises.
- ✓ Ensure all water pollution controls (e.g. signs, speed humps, litter baskets etc.) are maintained on a regular basis. Empty stormwater pits of sludge.



Indoor processing, manufacturing and workshop areas

Conduct all activities with the potential to pollute water (e.g. processing, manufacturing, workshop activities) within a roofed and bunded area or indoors. Liquid wastes and wastewater from these processes must not enter stormwater drains but should be either:

- Recycled on-site
- Treated and discharged to the sewer in accordance with the requirements of Kempsey Shire Council's Tradewaste Policy
- Collected in drums or tanks and removed by licensed waste contractor for treatment and disposal at a licensed waste facility.

Floor washwater

Install bunds across entrance and exit points of building and roofed areas to contain spills and washwater. Washwater must not enter the stormwater system but should be collected and either:

- Discharged to sewer in accordance with the requirements of the local sewerage utility; or
- Stored in drums or tanks and transported to a liquid recycling or treatment facility; or
- Collected and recycling or reused on-site, e.g. for garden or lawn irrigation.

Spill containment

Prevent any contaminants, spills or leaks from entering the stormwater drains. Make sure you have spill containment equipment such as absorbents, containment booms and brooms readily available.

Outdoor work areas

Separate relatively clean areas (e.g. driveways and carparking areas) and relatively dirty areas (e.g. loading bays, material collection points, waste storage areas and yards).

Install diversion drains or bunds (e.g. speed humps) to divert clean water away from relatively dirty areas to minimise the amount of potentially contaminated water requiring treatment.

Where practical, provide a roof over and a bund around any relatively dirty areas, contaminated water.

Minor plant

Provide roofs over and bunds around all minor plant located outside (e.g. compressors, generators, oil-water separators and trade waste treatment equipment).

Direct air conditioner bleed-off water to the sewer in accordance with the local sewerage utility's requirements.

Waste skip and bin storage areas

Store all waste skips and bins in a designated area provided with a roof and surrounded by a bund to prevent any leakage entering the stormwater system. Alternatively, establish a system whereby the lids are opened only when waste is being deposited and the skip's bottom and walls are permanently sealed so they do not leak.

Vehicle washing areas, driveway and car parking areas

Provide a roof over and bunding around any area used to wash vehicles. Discharge any wastewater to the sewer in accordance with the local sewerage utility's requirements. (This may include maximising the recycling of washwater.)

Bunding 'drum and tank storage'

A Bund is a simple and effective device or system for minimising the risk of liquid escaping to the environment.