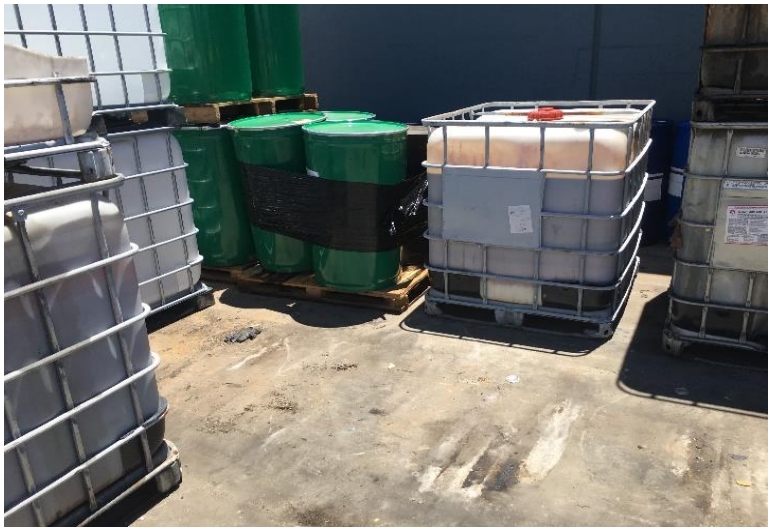
Light industry program fact sheet

Storage management

Light industrial activities may release materials into the environment resulting in contamination and impacts on animals, plants and waterways. Poor storage practices increase the potential for environmental discharge.



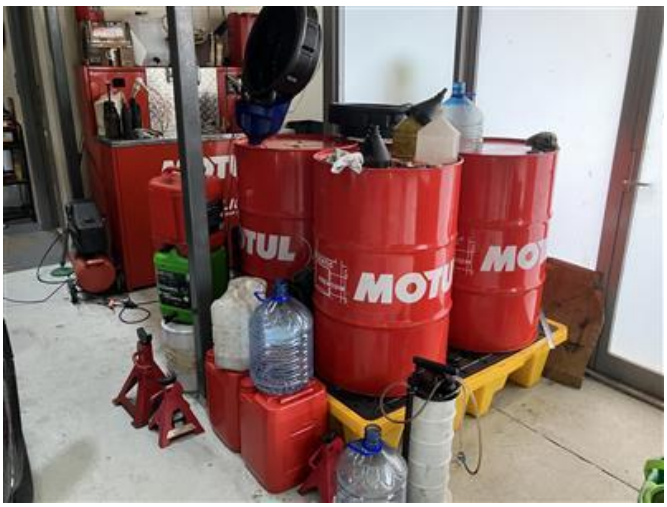
Materials should be stored in a manner which reduces the chance of spills and accidents and minimises environmental impacts if they occur.

For information on the storage of dangerous goods please refer to the Department of Local Government, Industry Regulation and Safety.

Types of materials that need to be stored correctly

A range of substances could cause environmental impacts if they are discharged. These include:

- hydrocarbons, such as oil (including waste oil), diesel and petrol
- engine coolant (including waste engine coolant)
- solvents (including waste solvent)
- cleaning products such as degreaser and detergent
- other chemicals such as acids, bases and oxidising agents
- used vehicle parts still containing residual oil, grease or engine coolant (including engine blocks, differentials, radiators and oil filters)
- scrap metal containing residual oil or grease
- batteries (including but not limited to lead acid batteries, lithium-ion batteries, nickel metal hybrid batteries).



Proper storage practices

The four major management practices for materials which may be environmentally harmful are:

1. Store in a secured area
2. Store undercover, with lids fastened
3. Store on an impervious surface or a hardstand away from stormwater drains
4. Store in a bunded area.

Secured areas

Storing items in a secured area reduces the

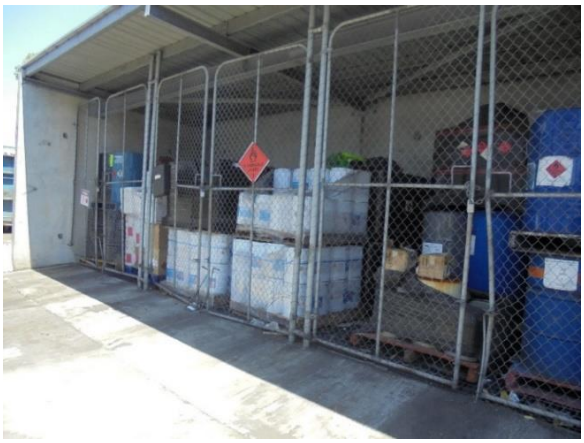
likelihood of unauthorised individuals accessing the materials and lowers traffic flow, decreasing the likelihood of accidents and spillage.

There have been cases where containers of waste at light industrial premises have been maliciously tipped over and the lids or caps removed as an act of vandalism. This has resulted in environmental discharge and costly clean-up fees.

Covered areas

Materials should be stored in covered areas to prevent rain and stormwater from dispersing environmentally damaging materials and waste. Rain and stormwater can cause:

- containers such as drums to fill with water and overflow, potentially resulting in discharges of harmful materials into the environment.
- waste residue adhered to the outside of containers to wash off, potentially resulting in discharges of harmful materials into the environment.
- bunding to fill with rainwater, reducing the likelihood that environmentally harmful materials can be contained should a spill occur.
- an increase in the total volume of material in a bund, resulting in more waste material requiring appropriate disposal and extra business costs.



Bunds

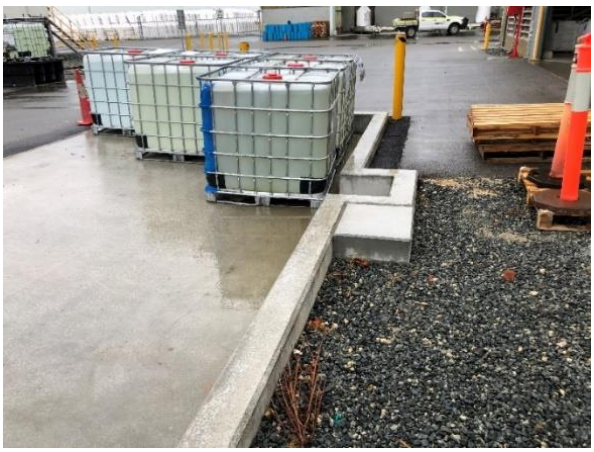
A bund is an impervious embankment or wall which forms the perimeter and floor of a compound and provides a barrier that retains liquid. It is the main part of a spill containment system. The system, or bunded area, is collectively referred to as the ‘bund’. It consists of:

- a bund wall or embankment surrounding the facility or storage receptacles, made from impervious material such as brick, stone or concrete
- an impervious floor in the bunded area
- any joints in the floor or wall, or between the floor and the wall.
- any associated facilities designed to remove liquids safely from the bunded area without polluting the environment.

Where bunding is needed

Bunding should be used when handling or storing all liquids, except rainwater. The level of sophistication that a bund might need depends on the level of environmental risk posed by the premises. This is based on site-specific factors, including the:

- type of liquid being used or stored and its potential impacts on the environment.
- volume of liquid being used or stored
- facility or storage system’s capacity to prevent spillages or leakages and the associated risk of such an incident occurring
- duration of any temporary storage
- sensitivity of the environment.



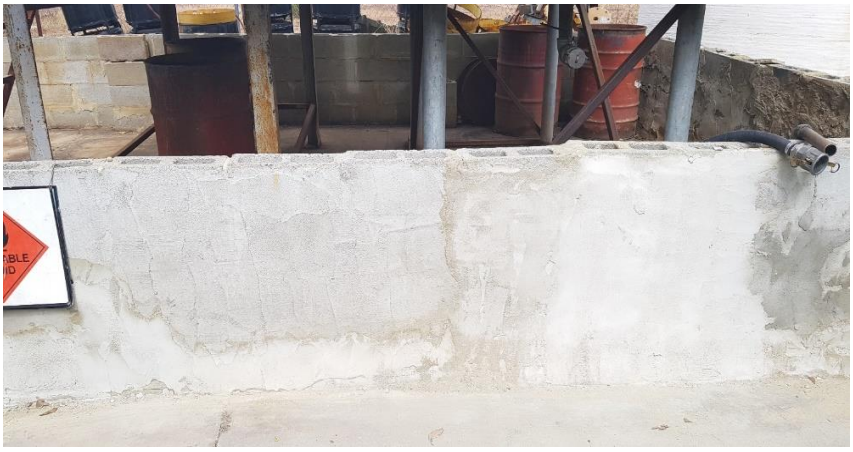
What to consider when installing bunding

Bunds should be designed to:

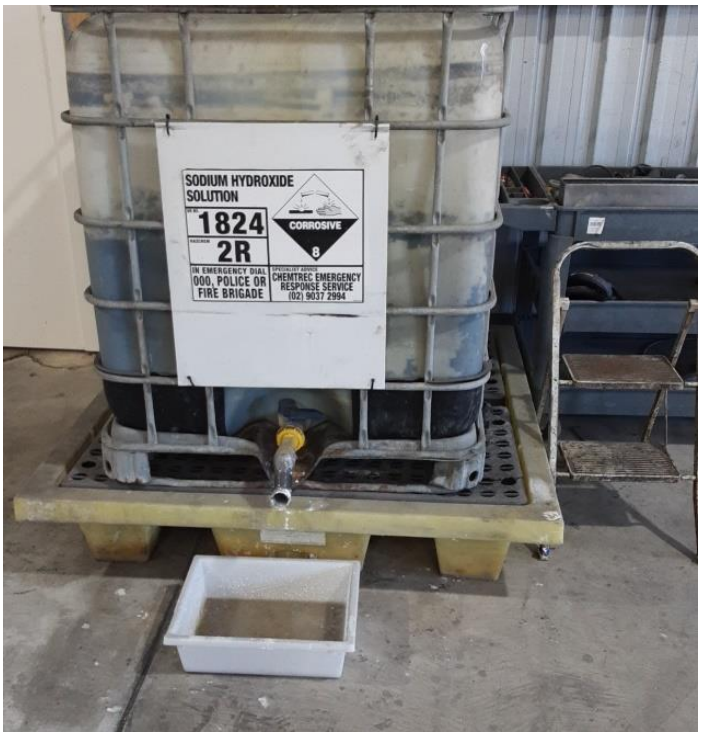
- contain spillages and leaks of liquids
- facilitate clean-up operations
- hold the contents of the largest container stored inside the bund, plus 10 per cent of its volume
- allow for easy access during daily operational activities and waste removal processes
- prevent mosquito harbourage.

Good storage practices

Some regular processes to maintain good storage include:



- Regularly inspect and maintain bunds to ensure their integrity, checking for cracks, holes, and degraded sealant.
- Regularly check that wall and floor joints are sealed where items with potential to leak are being stored.
- Pump out any liquids collected in bunded areas as quickly as possible and dispose of the wastewater appropriately.
- Inspect storage containers regularly and replace them if they are rusted, damaged or likely to leak.



- Keep container caps and lids closed to prevent spills.
- Drain used oil filters and radiators before storing in covered, bunded areas.
- Use drip trays to catch drained liquids.
- Regularly inspect underground storage tanks for integrity and leaks.
- Keep accessible safety data sheets and ensure staff are familiar with them.

Tyre storage

In accordance with the Environmental Protection Regulations 1987, the storage of more than 500 used tyres at a premises used for, or in connection with, tyre fitting or 100 used tyres at any other premises is a prescribed activity.

Where this applies, contact the department to

discuss applying for an environmental licence. The licence will contain specific conditions regarding tyre storage. More information can be found online at Licence and works approval applications | Western Australian Government.

A licence may not be required to store fewer than the prescribed number of tyres but it is important to ensure:

- Tyre piles are small and access between piles is sufficient to both reduce risk of fire spread and allow movement of fire vehicles
- Compliance with the legal limits on the number of tyres kept at the premises
- Tyres are stored in a secure compound to reduce the risk of fires and vandalism.

Furthermore, it is recommended to contact the Department of Fire and Emergency Services in planning a tyre storage area. Incorrect storage of materials significantly increases the risk of spillage, contamination and impacts to the environment.

If materials are incorrectly stored and there are environmental discharges in connection with a business or a commercial activity, it may be considered an offence in relation to Environmental Protection (Unauthorised Discharges) Regulations 2004.

Discharges of harmful materials into the environment can result in site contamination issues and high clean-up costs as well as enforcement actions such infringements and prosecution. Further information on unauthorised discharges is on the fact sheet Environmental Protection (Unauthorised Discharges) Regulations 2004.

Local governments may also have local laws regarding storage of environmentally harmful materials. Contact the local authority for more information.