

Fuel handling and dispensing areas

By using good design principles and management practices, you can prevent contaminated surface water harming the environment.

This fact sheet applies to operators of service stations, work depots, transport facilities, car dealerships and anywhere petroleum is stored and dispensed.

These kinds of fuel handling and dispensing facilities generally have hard stand surfaces consisting of tank fill points, vehicle refilling areas, parking bays and trafficable and pedestrian access areas.

As water flows across the hard stand surfaces, for example when it rains, it can collect litter, fuel residues, heavy metals, oil and grease, lubricants, coolants and suspended solids. These pollutants can then be washed into the stormwater system resulting in contaminated run-off and potential harm to the environment.

Good forecourt design and management can significantly improve the quality and reduce the

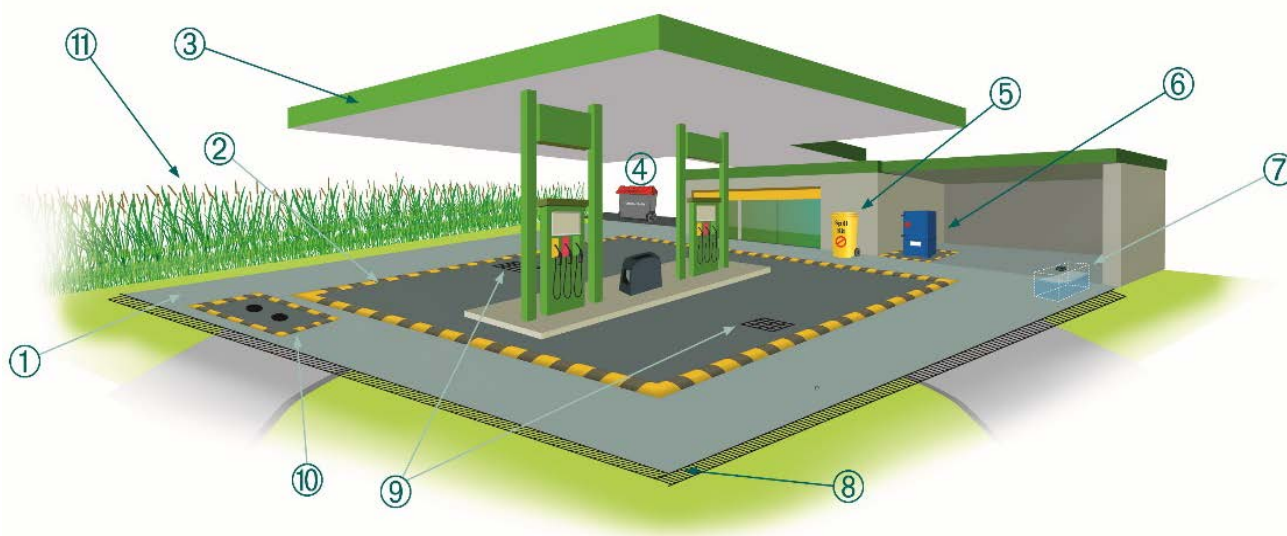
quantity of run-off from fuel handling and dispensing areas.

Good design principles

Good design of fuel dispensing areas will reduce the incidence and impacts of spills on the environment, saving you money in clean-up costs and potential fines. A typical fuel handling and dispensing facility is shown below. The design of any fuel handling and dispensing areas should be consistent with Australian Standards;

- AS1940-2017 – the storage and handling of flammable and combustible liquids
 - AS4897-2008 – the design, installation and operation of underground petroleum storage systems.
1. A clean and sealed surface to stop seepage of fuel and oil into the ground.
 2. A physical divide (preferably using forecourt gradient or **rollover bunding**) between areas at a higher risk of contamination (i.e. in the immediate area where fuel is dispensed) and those at a lower risk (i.e. pedestrian and car park area).
 3. A canopy that extends to the maximum reach of fuel dispensing nozzles and has a 10 degree-from-vertical overhang reducing rainwater entering high contamination zones.

Rainwater that falls onto the canopy should be collected for re-use (if possible) or directed away from the forecourt area.



4. A designated storage area for waste bins.
5. Accessible and visible spill kits.
6. A covered and bunded area for hazardous chemicals stored away from fuel dispensers and trafficable areas.
7. A collection pit (including monitoring alarm and pump out well) for any contaminated run-off or spills occurring within the hazardous chemical storage area.
8. Stormwater drains collecting forecourt run-off from **low contamination risk zone/s** for appropriate management consistent with [Practice-note - Managing run-off from service-station forecourts](#)
9. Drainage pits collecting forecourt run-off from **high contamination risk zone/s** for appropriate management consistent with [Practice-note - Managing run-off from service-station forecourts](#)
10. Bunding that encloses the storage tank fill connection points and/or spill containment enclosures. This bunded area should have appropriate capacity to contain the largest compartment of any tanker delivering to the service station (or 9,000 litres) and drain to the high-risk contamination zone disposal system.
11. A **water sensitive urban design (WSUD)** installation suitable for either a new or upgraded service station.
12. Any spill kit materials used to contain and clean up fuel and other volatile substances should be classified using the EPA's waste classification guidelines before being disposed of. Check with your spill kit supplier and waste transporter for appropriate disposal options.
13. Be aware of your responsibilities and obligations required under relevant environmental legislation and Australian Standards (see *UPSS obligations* fact sheet).

The *Protection of the Environment Operations Act 1997* (POEO Act) is the primary legislation used to prevent and regulate pollution in NSW. Under the Act, it is an offence to pollute land and waters, including groundwater.
14. Ensure you have up-to-date site plans which meet the UPSS Regulation requirements. This must be kept in the FSOP.
15. Regularly check and maintain your fuel dispensers and equipment as per the manufacturer's instructions and/or regulatory requirements. Record your daily, weekly and other scheduled maintenance and system checks in the FSOP and have them readily accessible.
16. Undertake regular incident prevention and management training with your staff. This will inform and remind them of the procedures you have in place to reduce the likelihood of leaks and spills and what to do if there is an incident. Make sure you keep a record of all training sessions.

Good management practices

12. Ensure there is an incident management procedure that sets out the steps to be followed when dealing with any petroleum leaks or spills (large and small). This procedure must be included in the site's Fuel System Operation Plan (FSOP).
13. Keep contact numbers of all emergency services (police, fire and rescue) and all relevant authorities (local council, SafeWork NSW, EPA) in an accessible location for you and your staff.
14. Check you have spill kits available and that they are right for all the different products that are used and dispensed at the site.
15. Check forecourt spill kits regularly. Keep an inventory of each spill kit and a record of when the contents of each spill kit were checked and re-stocked as necessary.

Environmental responsibility

Any pollution incident that causes or threatens harm to the environment may be investigated by the Appropriate Regulatory Authority (ARA) as an offence under the *Protection of Environment Operations Act 1997*.

In the event of an emergency, site staff should be trained, knowledgeable and skilled in following appropriate procedures. For example, stopping the source of a spill, containing the spill, evacuating from danger if necessary and notifying the relevant emergency services and authorities.

It is essential that all steps are taken to minimise the environmental risk of the day-to-day operation of a refueling facility.

Contacting the appropriate regulatory authority

Councils are the appropriate regulatory authority for most activities involving fuel handling and dispensing in their local areas. For example, service stations, farms, corner stores, workshops and light industry.

Council is usually also the consent authority for assessing development applications for these types of facilities. Council must be notified of any significant modification, replacement or decommissioning of a UPSS and be provided with an associated validation report.

The NSW Environment Protection Authority (EPA) is ARA for activities operated by public authorities and premises with an Environment Protection Licence.

General enquiries:

Your local council. To establish which council your site is in, visit: [My local council | Office of Local Government](#).

To report a pollution incident, either your local council or Environment Line: phone 131 555.

For general information on UPSS Visit <https://www.epa.nsw.gov.au/your-environment/contaminated-land/upss>

or email: UPSSREG@environment.nsw.gov.au.

NSW Environment Protection Authority

Email: info@epa.nsw.gov.au

Website: www.epa.nsw.gov.au

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