Table 5: Checklist for design principles of UPSSs and forecourts

Principles of UPSSs	What exactly?  (Requirements/guidance of the <i>UPSS Regulation</i> or NSW EPA fact sheets and guidance, Australian Standards, where available, and international best practice as technology innovations emerge and become available and accepted by regulators)	Included (Y/N)	Adequate (Yes/No)	Comments and remedy (why 'no'? how is compliance reached?)
Applies to	New petroleum storage sy all new petroleum storage systems ins		r 1 January	2020
Fuel dispensing areas and fuel delivery areas	<ul> <li>Are the fuel dispensing and fuel delivery areas located in a covered area to minimise the entry of stormwater?</li> <li>Is the covered area protected at the canopy line from the entry of surface waters from the uncovered area by either a grade change, grated drains or a combination of both?</li> <li>Does the canopy extend to the maximum reach of nozzles and, from that point, have a 10-degree fromvertical overhang so as to minimise rainwater entering the forecourt areas?</li> <li>Are stormwater drains located outside the fuel dispensing or fuel delivery areas?</li> <li>Is the ground surface within the fuel dispensing and fuel delivery areas made of impervious material?</li> <li>Note: asphalt is not considered to be a suitable material as it can react with petroleum products.</li> <li>Is drainage from these areas directed to one of the following?</li> <li>Class 1 full retention oil water separator. The device must be fitted with a hydrocarbon level visible and audible alarm and be sized appropriately for the catchment area of the covered forecourt area plus a fuel spill from one fuel tanker compartment, prior to discharge to the sewer system (subject to approval from the relevant utility).</li> <li>Class 1 stormwater quality improvement device. The device must be fitted with a hydrocarbon level visible and audible alarm and be sized appropriately for the catchment area of the site plus a fuel spill from one fuel tanker compartment, prior to discharge to the stormwater system.</li> </ul>			

## **DEVELOPMENT ASSESSMENT AND CONSENT**

Table 5 (Cont.): Checklist for design principles of UPSSs and forecourts

Principles of UPSSs	What exactly? (Requirements/guidance of the UPSS Regulation or NSW EPA fact sheets and guidance, Australian Standards, where available, and international best practice as technology innovations emerge and become available and accepted by regulators)	Included (Y/N)	Adequate (Yes/No)	Comments and remedy (why 'no'? how is compliance reached?)
Above-ground petroleum storage systems	<ul> <li>Is the ground surface within the fuel dispensing and fuel delivery areas made of impervious material? No fuel should be dispensed outside of this area.</li> <li>Is the drainage in this area directed to a spill containment device or, where the above-ground tanks are installed in an excavated bund, is drainage directed back into the bund?</li> </ul>			
Self-bunded petroleum storage tanks (above-ground storage tanks)	<ul> <li>The following requirements apply to all above-ground storage tanks:</li> <li>Are the self-bunded petroleum storage tanks constructed of double-walled materials that provide double protection against leakage?</li> <li>Is the construction of the tank suitable to be filled with petroleum products?</li> <li>Is there a clear access route to the fuel tank that is clear of clutter, hanging branches of trees and electrical lines?</li> <li>Is the tank located in a suitable position that considers the location of waterways, the stormwater system and drainage patterns on the site?</li> <li>Are steel bollards installed to protect the tanks from damage?</li> <li>Are the dispensing areas roofed with a minimum of 10 degrees of overhang?</li> </ul>			
Single-wall petroleum storage tanks (above-ground storage tank)	<ul> <li>The following requirements apply to all above-ground storage tanks:</li> <li>Is the tank installed within a bunded area?</li> <li>Does the bunded area have a capacity of at least 110% of the tank's volume?</li> <li>Is the bunded area roofed with a minimum of 10 degrees of overhang?</li> <li>Are the steel bollards installed to protect the tanks from damage?</li> <li>Is the construction of the tank suitable to be filled with petroleum products?</li> </ul>			

## DEVELOPMENT ASSESSMENT AND CONSENT

Table 5 (Cont.): Checklist for design principles of UPSSs and forecourts

Principles of UPSSs	What exactly?  (Requirements/guidance of the UPSS Regulation or NSW EPA fact sheets and guidance, Australian Standards, where available, and international best practice as technology innovations emerge and become available and accepted by regulators)	Included (Y/N)	Adequate (Yes/No)	Comments and remedy (why 'no'? how is compliance reached?)
Parking, footpaths and trafficable areas	<ul> <li>Are parking areas, footpaths and trafficable areas paved with concrete?</li> <li>Is the stormwater captured in this area diverted to a treatment system that is capable of removing litter, sediment and oil products?</li> </ul>			

**Note:** UPSS = underground petroleum storage system; UPSS Regulation = Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019.

## **ENVIRONMENTAL COMPLIANCE AND INSPECTION ROLE**

Inspections would likely be carried out as part of the construction certification process and prior to the issuance of an occupation certificate.

Once the UPSS site becomes operational, inspections of the UPSS site should occur at a frequency as determined by the risk-based approach detailed in the Council's UPSS plan.

A common problem in regional areas is a service station that requires significant capital investment (for example, overall site works, improvements to the forecourt, stormwater management). Where regional service stations do not have the capital to invest in this, a risk-based approach that considers what the highest risks are and how they can be mitigated by agreed actions with the operator may be the only way forwards via an agreed action plan.

However, certain instances of noncompliance may require enforcement procedures under the *Protection of the Environment Operations Act 1997*. These instances may include:

- a significant leak in the UPSS, resulting in an increased risk of harm to human health and the environment
- identification of a contamination plume that has migrated offsite
- not having a fuel system operation plan, which means the site must immediately cease operations until this plan is in place
- no progress in resolving noncompliance matters via an agreed action plan.