



## Underground Petroleum Storage System (UPSS) Regulation 2008 Update

### What You Need to Know...

The Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008 came into force on 1 June 2008. The Regulation adds to the list of Australian Standards that currently specify minimum requirements for underground fuel tanks:

1. *AS 1940 – 2004 The storage and handling of flammable and combustible liquids*
2. *AS 4897 – 2008 The design, installation and operation of underground petroleum storage systems*
3. *AS 4976 – 2008 The removal and disposal of underground petroleum storage tanks*

### Existing UPSS

For existing UPSS the Regulation prohibits the use of a UPSS until all of the following are in place:

- Loss monitoring/detection procedures e.g. system to detect loss > 0.76 L/h
- Groundwater monitoring wells (by 1 June 2011)
- Incident management procedure
- Checks for measuring instruments and recording of data
- Record of equipment integrity test
- Environment Protection Plan (by 1 June 2009)

The requirements are quite onerous and would entail considerable expense for most UPSS owners. At a recent seminar in Newcastle, an experienced drilling consultant estimated a minimum cost of \$13,000 for drilling the minimum three groundwater monitoring wells required by the new legislation. The combined cost of establishing or upgrading the required procedures, preparing the Environment Protection Plan and ensuring regular equipment integrity tests is likely to exceed the cost of establishing the groundwater monitoring wells.

### Exemptions

The UPSS Regulation offers four ways that existing sites can apply for an exemption from some of the UPSS Regulation clauses. Exemptions are only granted by the EPA after a formal request from the applicant.

1. Class 1 exemptions apply to storages of waste oil, diesel for back-up generators, and heating oil for residential premises.
2. Class 2 exemptions from installing groundwater monitoring wells apply to UPSS that are located outside an environmentally sensitive area or where it can be demonstrated that there has been no contamination, no petroleum loss and that groundwater wells would not be effective. The NSW Department of Environment and Climate Change (DECC) provides a map of the protected zones. Most owners would need to incur considerable cost to engage a suitably qualified person to prove that the existing system met these criteria. This expenditure would be similar to the cost of removing the tank.

- Class 3 exemptions from undertaking groundwater monitoring every six months apply to sites that can demonstrate no existing contamination, have a loss monitoring procedure and have secondary containment systems.
- Class 4 exemptions from any specific requirement apply if it can be demonstrated that it is not possible to comply with a particular provision of the Regulation.

## New UPSS

The Regulation closely follows AS 4897 and specifies that new sites, or existing sites that are replacing or upgrading more than 50% of their underground facilities, must install mandatory pollution protection equipment (Level 1 equipment as defined by AS 4897).

This mandatory equipment includes:

- Non-corrodible tanks and associated pipe-work
- Secondary containment of tanks and pipe-work
- Overfill protection devices
- Spill safe box on fill point
- Earthing of UPSS

## How Can Advitech Help?

Advitech has developed templates for the assessment of UPSS and the preparation of Environment Protection Plans. We have also prepared emergency plans for a number of organisations thus ensuring compliance and minimising preparation costs.

In addition, Advitech has competent persons who can conduct audits, reviews and risk assessments related to the storage and handling of dangerous goods and hazardous substances. Advitech's risk management specialists have developed a simple risk management software package called Criteria Enterprise in conjunction with Novecom Pty Ltd.

If you require more information on any of the above issues, or are unsure if you are complying with the relevant regulations, please contact us for an assessment and a proposal.

## Reference Material

For further information on the UPSS Regulation regulations click on this link to the NSW DECC website:

<http://www.environment.nsw.gov.au/clm/upss.htm>

**For more information please contact Jim Kelty, Senior Consultant, on 4961 6544 or [jim.kelty@advitech.com.au](mailto:jim.kelty@advitech.com.au).**

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