

FUEL SYSTEM OPERATION PLAN

Section 18 of the *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019* requires that a site with underground petroleum storage systems in use should have a copy of its fuel system operation plan (FSOP) available onsite.

An FSOP documents the site-specific management and configuration of the underground fuel system. It also details maintenance requirements and procedures to be followed in the event of a spill or fuel leak.

ENVIRONMENTAL COMPLIANCE AND INSPECTION ROLE

The FSOP must include all the following components listed in the checklist in Table 4.

Table 4: Fuel system operating plan checklist

FSOP components (section 18 of the <i>UPSS Regulation</i>)	What exactly? (Requirements of the <i>UPSS Regulation</i> or the <i>UPSS Guidelines</i> , where available)	Included (Y/N)	Adequate (Yes/No)	Comments and remedy (why 'no'? how is compliance reached?)
Storage system information (subclause (1))	<ul style="list-style-type: none"> Is the site operational? Is there an FSOP? 			
Loss monitoring system details subclause (2)(a)	Reconciliation process, manual dipping, automatic tank gauging, monthly review, statistical inventory reconciliation analysis, third-party operated system, adequate sensitivity (0.76 L/hour).			
Incident management procedure (subclause (2)(b))	<ul style="list-style-type: none"> Identification of steps that must be followed in dealing with any leaks and spills of petroleum from the UPSS? Is there a clear linkage and response protocol for responses to the loss monitoring system and the leak detection system? 			
Maintenance schedule (subclause (2)(c))	<ul style="list-style-type: none"> Are there details of what maintenance is proposed to be carried out, and when, in relation to the system generally and in relation to the various gauges, indicators, leak detection systems and other measuring instruments in the system? Is there an independent duly qualified contractor? Are maintenance records available? Does the maintenance contractor attend the site as required or defined in the maintenance schedule? 			
Current 'as-built' system drawings (subclause (2)(d))	<ul style="list-style-type: none"> Are the drawings present? Are they legible and adequate? 			

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Table 4 (Cont.): Fuel system operating plan checklist

FSOP components (section 18 of the <i>UPSS Regulation</i>)	What exactly? (Requirements of the <i>UPSS Regulation</i> or the <i>UPSS Guidelines</i>, where available)	Included (Y/N)	Adequate (Yes/No)	Comments and remedy (why 'no'? how is compliance reached?)
Plans of storage site (subclause (2)(e))	<ul style="list-style-type: none"> • Are the plans present? • Are they adequate? • Do the provided site plans clearly identify the following? <ul style="list-style-type: none"> ○ the storage system ○ all buildings and associated infrastructure ○ all fences and gates ○ all groundwater monitoring wells (including any codes or symbols by which they are designated) ○ any unsealed ground surfaces ○ all drainage and services. 			
A copy of each industry standard that has been provided (subclause (2)(f))	<ul style="list-style-type: none"> • The standards must be listed in connection with each of the following: <ul style="list-style-type: none"> ○ the design of the system ○ the installation of the system ○ the design of any modification ○ the implementation of any modification. • Have the appropriate standards been used and referenced? • Is there evidence that they have been followed? 			
Specifications of the UPSS are provided (subclause (2)(g))	<ul style="list-style-type: none"> • Is there a copy of each of the following specifications? <ul style="list-style-type: none"> ○ the design specifications for the system ○ the installation specifications for the system ○ the design specifications for any modification ○ the implementation specifications for any modification. • Are the specifications included? • Do they match the actual site UPSS infrastructure (that is, the makes, models, serial numbers of the UPSS components)? • Are third-party providers and operators listed and contactable for this information? 			

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A record of employee site induction and incident management training that has been undertaken on the site (subclause (2)(h))	<ul style="list-style-type: none"> • Are there records? • Is the induction record adequate? • Is the incident management training record adequate? • Are the records up to date? • Do the records list competencies that the training provides, what the training allows an employee to do, or what action the employee can take? 			
UPSS site details (subclauses (2)(i) and (3)(a))	<p>Are the following details provided?</p> <ul style="list-style-type: none"> • the name of the person responsible for the system, an address for service and a 24-hour contact phone number for that person • if the person responsible for the relevant storage system is a corporation – the name of a natural person who is authorised to act on behalf of the corporation in relation to the control of the system, and a 24-hour contact phone number for that person • the street address of the storage site • the land title particulars (such as the lot and DP numbers) of the land on which the system is situated • if the person responsible for the system is not the owner of the storage site, the name of the owner • details of access to, and the security of, the system, including details of any locks, gates, fences and the like and the means of opening them • the location of all records kept in accordance with Part 5 or 6 of the <i>UPSS Regulation</i> (including leak detection system reports). 			

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Loss monitoring details (subclause 4)	Information regarding the loss monitoring system for a storage system such as: <ul style="list-style-type: none"> • who designed the system? • are they duly qualified? • is the design in accordance with EPA guidelines to measure discrepancies between the amount of petroleum that should be present in the system and the amount of petroleum that is actually present in the system, so as to be capable of detecting losses of petroleum? 			
Is the FSOP adequate? (subclause 6)	<ul style="list-style-type: none"> • Does the FSOP comply with the <i>UPSS Guidelines</i>? • Is the FSOP updated as required (for example, monitoring reports, actions and results)? • Is the FSOP accessible on the storage site (hard copy or electronic)? 			
Is the FSOP format acceptable? (Part 7)	In what format is the FSOP available? <ul style="list-style-type: none"> • one consolidated document • as a collection of documents • hard copy or electronic form, or a combination of both. 			

Note: FSOP = fuel system operation plan; *UPSS Regulation* = *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019*; *UPSS Guidelines* = *Guidelines for Implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019*.

Compliance with subclauses (2)(f) and (2)(g) is not required if the UPSS was installed prior to June 2008 or if the standards and specifications are not available and there is sufficient evidence that the person responsible has taken all reasonable steps to obtain them.

[Fuel System Operation Plans \(Fact Sheet 4\)](#)⁷

documents important details regarding the management, configuration and maintenance of underground fuel systems and steps to be undertaken in the event of fuel leaks or spills.

⁷ <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/clm/19p2014-fact-sheet-4-fuel-system-operation-plans.pdf>