

# Business Procedure

## Radiation Safety Document Number – OHS-PROC-07

This document applies to the following sites:

All Sites	<input type="checkbox"/>		
Rockhampton Office	<input type="checkbox"/>	Brisbane Office	<input type="checkbox"/>
Barron Gorge Hydro PS	<input checked="" type="checkbox"/>	Kareeya Hydro PS	<input checked="" type="checkbox"/>
Koombooloomba Hydro PS	<input checked="" type="checkbox"/>	Swanbank PS	<input checked="" type="checkbox"/>
Wivenhoe Small Hydro PS	<input type="checkbox"/>	Stanwell PS	<input checked="" type="checkbox"/>
		Tarong Site	<input checked="" type="checkbox"/>
		Mica Creek PS	<input checked="" type="checkbox"/>
		Mackay Gas Turbine	<input checked="" type="checkbox"/>
		Meandu Mine	<input type="checkbox"/>

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## 1.0 Purpose

This Business Procedure defines Stanwell's minimum mandatory requirements for managing radiation safety in Stanwell workplaces.

## 2.0 Scope

This Business Procedure applies throughout Stanwell, all its sites and all activities under Stanwell's control. It applies to all Stanwell employees and contractors, including visitors to Stanwell workplaces.

## 3.0 Actions

### 3.1 Safe Systems of Work

Where practicable, the need to use and store radiation sources on site shall be eliminated through design and planning. Where elimination is not possible, the potential for harm shall be minimised.

The use of radiation sources shall be controlled under the Safe System of Work, refer to *Business Procedure: Safe System of Work*.

#### 3.1.1 Work Method Statement

A work method statement (WMS) shall be developed for any activity that involves the use of a radiation source.

#### 3.1.2 Radiation Safety and Protection Plan

A site specific *Radiation Safety and Protection Plan* is required where a site has a permanent source of radiation (i.e. not simply for industrial radiography tasks); the plan must be approved by the Chief Executive of the Department of Health (Director General, Queensland Health). The purpose of a *Radiation Safety and Protection Plan* is to ensure that the risks associated with radiation sources are minimised to as low as reasonably practicable. It shall as a minimum identify the location and types of radiation sources and the specific requirements of limiting exposure to radioactive sources to as low as reasonably practicable. The *Radiation Safety and Protection Plan* shall address the following:

- particulars and a risk assessment of all the radiation hazards specific to the operation / use of the sources;
- the control measures to manage the hazard, including:
  - any measures necessary to deal with the hazard including storage and disposal;
  - how the licensee proposes to monitor and review the implementation and effectiveness of the measures;
- the functions of the Radiation Safety Officer and the Possession Licensee;
- particulars of the competencies and training requirements for persons exposed to / working with sources of radiation;
- other particulars under the Radiation Safety Regulation;
- annual audit / verification requirements, including the positions to which the results must be advised;
- details of the requirements for personal protective equipment to be used for persons exposed to / working with sources of radiation, i.e. personal monitoring devices;
  - the supply of a personal monitoring device; and
  - assessment of the device (following working with radiation source);
- the plan must be written in a way likely to be understood by persons carrying out activities associated with the plan and must be signed and dated by the licensee (the possession licensee contact, on behalf of Stanwell).

### 3.1.2 Radiation Safety and Protection Plan (cont'd)

A *Radiation Safety and Protection Plan* must be resubmitted for approval prior to the expiry date of the current plan. Changes to an approved plan must be submitted for approval to Queensland Health, using the applicable form (*Application to Change an Approved Radiation Safety and Protection Plan*); approval must be sought when a change to a relevant radiation practice is required; i.e. a change to an activity in relation to a radiation source that may result, whether or not intentionally, in exposing anyone to radiation, but does not include the transport of a radioactive substance (the storage of a radioactive substance is included), e.g. changes to the storage arrangements / practices of a radiation source at a site.

### 3.1.3 Radiation Safety Officer

Sites which have permanent sources of radiation (and therefore have a *Radiation Safety and Protection Plan*) shall appoint a trained and competent Radiation Safety Officer.

### 3.1.4 Possession Licensee

A possession licence is the authorisation granted as per legislation that is required to be obtained to be in possession or control of a radiation source, for a particular purpose; at Stanwell, the corporation shall hold the licence. Stanwell shall nominate a Possession Licensee contact to act on behalf of the corporation. This contact will be the most relevant person to fulfil the designated responsibilities (e.g. Site Manager) and will be the Stanwell representative who shall sign and date *Radiation Safety and Protection Plans*. The Possession Licensee is responsible for:

- ensuring the development and implementation of required *Radiation Safety and Protection Plans*;
- appointment of a Radiation Safety Officer;
- ensuring that an approval to acquire is obtained before taking possession of a radiation source;
- ensuring required certificates of compliance are obtained and maintained;
- ensuring an approval to relocate is obtained if a radiation source is to be relocated to a place outside of Queensland's jurisdiction; and
- ensuring radiation sources are disposed of according to the legislation.

### 3.1.5 Record Keeping

The following records shall be maintained, as applicable:

- risk assessments;
- audits and inspections of radiation storage and containment areas;
- current possession licences issued under the statutory authority;
- current *Radiation Safety and Protection Plans*;
- approval notifications for the acquisition of radioactive sources;
- equipment maintenance log books;
- the results of all quality-control checks performed;
- an inventory showing the location of radioactive materials;
- results of source leakage tests;
- calibration check certificates (for sealed source meters);
- approval certificates for radiation stores and movement log;
- radiation safety audit reports; and
- incident reports.

## 3.2 Training and Competency Requirements

All personnel involved in the use or management of radiation sources shall be trained and competent in accordance with their specific *Radiation Safety and Protection Plan*.

## 4.0 References (Including Information Services)

Source	Reference
Legislation	<ul style="list-style-type: none"> <li>Queensland Radiation Safety Act 1999</li> <li>Queensland Radiation Safety Regulation 2010</li> <li>Radiation Safety Standard – Standard for Premises</li> </ul>
Business Procedures	<ul style="list-style-type: none"> <li>HS Hazard Management</li> <li>Safe System of Work</li> </ul>
Stay Safe	<ul style="list-style-type: none"> <li>Nil</li> </ul>
Tools	<ul style="list-style-type: none"> <li>Nil</li> </ul>

## 5.0 Definitions

Term	Meaning
Radiation	Ionising radiation or non-ionising radiation.
Radiation Safety Officer	A person who holds a current approved radiation safety licence issued by the statutory radiation safety authority.
Possession Licensee	Stanwell's nominated contact and signatory of the <i>Radiation Safety and Protection Plans</i>

## 6.0 Revision History

Rev. No.	Rev. Date	Revision Description	Author	Endorse/Check	Approved. By
0	21.10.2014	Procedure created	Jason Paull	Michael Joy, Trevor Hooper	Ian Gilbar