

## Noise Management Document Number – OHS-PROC-133

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 describes Stanwell's minimum mandatory requirements for managing noise hazards.

## 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.

It shall be ensured that noise and the risks associated with hearing loss are managed by:

- identifying noise hazards;
- eliminating noise at the source, where practicable;
- minimising risks associated with hearing loss, as far as is reasonably practicable; and
- ensuring that the noise a worker is exposed to at the workplace does not exceed the exposure standard for noise (i.e. hazardous noise).

Noise hazards shall be controlled through the application of the hierarchy of controls to achieve the highest level of protection that is reasonably practicable.

## 3.0 Plant and Equipment

The following shall be applied regarding noise and plant and equipment at Stanwell sites:

1. It shall be ensured that prior to purchasing or hiring plant and equipment, noise emission data is obtained from the supplier or manufacturer. Maximum noise emission limits to ensure the workplace can remain below excessive noise levels are to be stated in specifications for the purchase or hire of plant or equipment. As far as practicable, preference shall be given to plant and equipment with low noise emissions (levels lower than 85 dB(A)).
2. Where possible, noise levels in areas where new plant or equipment is installed is not to exceed 85 dB(A).
3. Where the purchase of equipment involves installing more than one item in the same location, the combined noise level is not to exceed 85 dB(A) (where practicable).
4. New work areas are to be designed and laid out such that the noise level is maintained at the lowest possible level. Where Stanwell takes on the role of a designer, it shall be ensured that control measures are integrated early in the design process to eliminate or minimise the risks associated with noise.
5. Agreements with contractors for the supply of goods or services on site are to be subject to the same noise exposure limits and requirements described in this procedure.
6. Modifications to existing plant are subject to the requirements of this procedure. It shall be ensured that sites minimise hazardous noise levels, where practicable, when modifying existing plant, equipment or work processes.
7. Work areas with excessive noise levels are to be designated as mandatory hearing protection areas (e.g. using signage) if alternative noise level reduction controls are not reasonably practicable.

## 4.0 Risk Assessment

It shall be ensured that sites identify potential sources of hazardous noise (i.e. above the exposure standard) and reduce the exposure. If this is not practicable, a noise assessment shall be conducted to determine the exposure of noise for workers at risk of being exposed to excessive noise.

It shall be ensured that sites undertake noise assessments:

- where a change occurs which may result in a change to noise levels (i.e. increased noise levels);
- where a change to working arrangements affects the length of time workers are exposed to noise; and
- in temporary situations that may produce excessive noise.

Noise assessments are to be done by a competent person, refer to Appendix D of the *Queensland Managing Noise and Preventing Hearing Loss at Work Code of Practice 2011* for details on the contents of a noise assessment report.

Noise assessment records are to be readily available.

## 5.0 Audiometric Testing

It shall be ensured that sites which contain locations with excessive noise levels, implement an audiometric testing program. Audiometric testing shall be provided within three months of the employee commencing work. Follow-up tests shall be carried out at least every two years. Sites may require more frequent audiometric testing, for example every six months, if exposures are at a high LAeq,8h, which is equal or greater than 100 dB(A) (as determined by a risk assessment), or in situations where workers are exposed to:

- any of the ototoxic substances listed in Appendix A of the *Queensland Managing Noise and Preventing Hearing Loss at Work Code of Practice 2011* where the airborne exposure (without regard to respiratory protection worn) is greater than 50 per cent of the national exposure standard for the substance, regardless of the noise level;
- ototoxic substances at any level and noise with LAeq,8h greater than 80 dB(A) or LC,peak greater than 135 dB(C); or
- hand-arm vibration at any level and noise with LAeq,8h greater than 80 dB(A) or LC,peak greater than 135 dB(C).

It shall be ensured that a competent person carries out audiometric testing and assessments in accordance with *AS/NZS 1269.4:2014 Occupational noise management – Auditory assessment*.

### Post Incident Audiometric Testing

Permanent hearing loss can occur suddenly if a person is exposed to very loud impact or explosive sounds. This type of damage is known as acoustic trauma. Peak noise levels greater than 140 dB(C) usually occur with impact or explosive noise such as sledge-hammering or during an explosion.

Post incident audiometric testing shall be undertaken if a worker has been potentially exposed to peak noise levels without adequate hearing protection.

## 6.0 Personal Hearing Protectors

Personal hearing protection is to:

- be used when levels of excessive noise cannot be reduced by using other control measures (as per the hierarchy of control);
- be mandatory in all areas where workers may be exposed to excessive noise levels, and as per mandatory hearing protection signage; and
- comply with *AS 1270:2002 Acoustics – Hearing Protectors*.

The class / type of hearing protection is to be adequate to provide protection against the specific noise levels and frequencies that persons are exposed to.

Personal hearing protectors shall be managed in accordance with *Business Procedure: Personal Protective Equipment (PPE)*.

## 7.0 Training and Competence Requirements

Training shall be provided in accordance with Stanwell's requirements.

## 8.0 Review and Consultation (Prior to Approval)

This document is required to be reviewed, as a minimum, every 3 year/s

## 9.0 References (Including Information Services)

Source	Reference
<b>Legislation</b>	<ul style="list-style-type: none"> <li>• Queensland Work Health and Safety Regulation 2011, Part 4.1</li> <li>• Queensland Managing Noise and Preventing Hearing Loss at Work Code of Practice 2011</li> </ul>
<b>Australian Standards</b>	<ul style="list-style-type: none"> <li>• AS/NZS1269.1:2005 Occupational noise management – Measurement and assessment of noise emission and exposure</li> <li>• AS/NZS 1269.4:2014 Occupational noise management – Auditory assessment</li> <li>• AS1270: 2002 – Hearing Protectors</li> </ul>
<b>Business Procedures</b>	<ul style="list-style-type: none"> <li>• Personal Protective Equipment (PPE)</li> </ul>
<b>Stay Safe</b>	<ul style="list-style-type: none"> <li>• Noise Management</li> </ul>
<b>Tools</b>	<ul style="list-style-type: none"> <li>• Nil</li> </ul>

## 10.0 Definitions

Term	Meaning
<b>Decibel (dB)</b>	The unit for measuring sound levels.
<b>Hazardous noise</b>	In relation to hearing loss means noise that exceeds the exposure standard for noise in the workplace.
<b>L<sub>Aeq,8h</sub></b>	The eight hour equivalent continuous A-weight sound pressure level in decibels, referenced to 20 micropascals, determined in accordance with AS/NZS 1269.1 This is related to the total amount of noise energy a person is exposed to in the course of their working day. It takes account of both the noise level and the length of time the person is exposed to it. An unacceptable risk of hearing occurs at L <sub>Aeq,8h</sub> values above 85 dB(A).

Term	Meaning
<b>Excessive Noise:</b>	A level of noise above an 8 hour equivalent continuous sound pressure level of 85 dB(A) or a peak sound pressure level of 140dB(C).
<b>Exposure standard for noise</b>	An $L_{Aeq,8h}$ of 85 dB(A) or an $L_{c,peak}$ of 140 dB(c). There are two parts to the exposure standard for noise because noise can either cause gradual hearing loss over a period or be so loud that it causes immediate hearing loss.
<b>Lc, peak</b>	Means the C-weighted peak sound pressure level in decibels, referenced to 20 micropascals, determined in accordance with AS/NZS 1269.1. It is usually related to loud, sudden noises such as a gunshot or hammering. $L_{c,peak}$ values above 140 dB© can cause immediate damage to hearing.
<b>Ototoxic substances</b>	A number of common industrial chemicals and some medications can cause hearing loss or exacerbate the effects of noise on hearing. These substances are called ototoxic substances. Ototoxic substances absorbed into the bloodstream may damage the cochlea in the inner ear and/or the auditory pathways to the brain, leading to hearing loss and tinnitus.

## 11.0 Revision History

Rev. No.	Rev. Date	Revision Description	Written by	Endorse/Check	Approved by
0	16.09.2015	Document issued	Jan Fullard	Michael Joy / Trevor Hooper	Ian Gilbar

## 12.0 Attachments

### Appendix A: Noise Management Document Flowchart

