

Barricading and Signage

Document Number – OHS-PROC-134

This document applies to the following sites:

Brisbane Office	<input checked="" type="checkbox"/>	CQ Hydrogen	<input checked="" type="checkbox"/>	FEITH	<input checked="" type="checkbox"/>
Iron Flow Battery SPS	<input checked="" type="checkbox"/>	Meandu Mine	<input type="checkbox"/>	Non-Operational Land	<input checked="" type="checkbox"/>
SAMCo	<input checked="" type="checkbox"/>	Stanwell Battery	<input checked="" type="checkbox"/>	Stanwell PS	<input checked="" type="checkbox"/>
Tarong Battery	<input checked="" type="checkbox"/>	Tarong Site	<input checked="" type="checkbox"/>	Wambo Wind Farm	<input checked="" type="checkbox"/>
Wivenhoe Pipeline	<input checked="" type="checkbox"/>				

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1.0 Purpose

This Business Procedure describes Stanwell's minimum mandatory requirements for the selection and use of temporary barricading, barricade signage and safety signs.

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.

This Business Procedure does not apply to permanent barricading and edge protection installations, for example, handrails and guardrails, nor exit signs for use inside buildings.

3.0 Actions

Barricading and signage must only be used:

- when there are no other practical control measures available;
- as an interim measure until a more effective way of controlling the risk can be used or the hazard is no longer present; or
- to supplement higher level control measures or as a secondary control measure.

Barricading and signage must be visible and legible to all concerned. Illumination of barricades and signs should be considered where general lighting, either natural or artificial, does not provide suitable visibility.

It must also be ensured that:

- processes are in place to instruct workers not to enter barricaded areas unless authorised to do so;
- barricading and signage are reviewed periodically to ensure it remains effective in controlling the risk; and
- barricading and signage that are no longer required are removed as soon as practicable.

4.0 Barricading Requirements

Barricading controls are implemented and authorised as part of the safe work system to protect persons from hazards such as:

- being struck by falling objects;
- being struck by moving plant;
- a fall from height, including falling into an open excavation or penetration, and falls from an unprotected edge such as removed flooring, walkways, stairs and / or hand railings;
- exposure to hazardous chemicals or substances;
- energised plant, equipment, or process;
- construction work activities;
- unauthorised or inadvertent entry into a confined space or work area; and
- any potentially hazardous work processes, for example, hot works, scaffolding, radiation work and work involving asbestos.

Barricading may also be used as an immediate control when an unacceptable risk is present.

Barricading controls must be implemented and authorised as part of the incident management and emergency response procedures.

5.0 Selection of Barricade

When selecting the type of soft or hard barricade, the following factors are to be considered as part of the job design and risk assessment:

- risk associated with the hazard;
- visibility of the hazard;
- required strength of the barrier, for example, physical protection or impact potential;
- duration required and anticipated rate of barricade degradation; and
- the amount of clearance provided by the barricade from the hazard.

In addition, hard barricading which is designed to prevent a fall must be used for:

- a fall from height risk greater than two metres, or where there is risk of a fall, from one level to another, and injury is likely; and
- excavations greater than 1.5 metres deep.

All barricading must be designed, installed, and used in accordance with the relevant Australian Standards and *Appendix B - Barricading Selection Requirements*.

Note: Where a risk assessment determines the requirement of a safety barrier system capable of physical protection, the barricade system must be designed in accordance with the relevant Standard for the application of the barrier system:

- *AS/NZS 4994.1:2009 Temporary edge protection – General requirements.*
- *AS/NZS 4994.3:2010 Temporary edge protection. Part 3 Installation and dismantling for edges other than roof edges.*
- *AS/NZS 4994:4 2018 Perimeter protection screens*
- *AS/NZS 3845.1:2015 Road safety barrier systems and devices. Part 1 Road safety barrier systems*

6.0 Erection and Use of Barricade

The barricade must encompass the entire potentially affected area of the hazard and consider factors such as:

- possible deflection of an object if it falls;
- slag or sparks created from hot work activities;
- distance from the hazard; and
- general access and egress, including for emergencies.

Barricades must be erected so that all sides of the hazard are protected from unauthorised access or inadvertent entry into the barricaded area.

Erected barricades must be frequently inspected and amended as required to ensure they remain effective in controlling the area and are an appropriate distance from the hazard.

Where soft barricading is used to provide a means of restricted access around a penetration or an unprotected edge, it must be located at least two (2) metres from the outside of the edge.

Where star pickets are used to support a barricade and are driven into the ground 150mm or more, the *Stanwell Business Procedure: Excavation and Penetration (OHS-PROC-126)* must be implemented.

Where barricading is erected around excavations, the requirements of the *Stanwell Business Procedure: Excavation and Penetration (OHS-PROC-126)* must be implemented.

6.1 Barricading for Electrical Work

Barricades and signage must be used for electrical maintenance to identify to the working party the safe access area for the task. In addition, where an energised switchboard is located in the same room or barricaded area it must have its own barricading and signage to identify the hazard.

When identified in a risk assessment, an electrical work barricade must be erected to prevent access to electrical hazards and the requirements of *Managing Electrical Risks in the Workplace Code of Practice 2021* implemented:

- The barricade must be erected using appropriate stands and tapes or expandable barricading systems, and where practical and appropriate, with an opening no greater than 2 metres. The entry size can be varied by the Safe Work Coordinator to suit the work location provided it does not introduce a hazard and the work area is clearly delineated.
- Restricted access signs are to be placed at appropriate spacing along the barricade.
- Switchboards under isolation must have details of the isolation recorded on the restricted access signs.

6.2 Barricading for High Voltage Testing

- A high voltage testing barricade must be erected around electrical equipment that is under test to provide a minimum safe approach distance for untrained persons. The distance applied is to be as listed under the *Queensland Electrical Safety Regulation 2013* for testing voltage.
- Where testing is performed inside metal clad switchgear or similar enclosed spaces, barricading is not required provided the testing area is not left unattended and a red flashing light is used when test voltages are applied.
- Flashing red lights must be installed and activated when test voltages are applied.

6.3 Barricading for Confined Space

Refer to the *Stanwell Business Procedure: Confined Space (OHS-PROC-18)* for specific signage and barricading requirements for preventing unauthorised or inadvertent entry into a confined space.

7.0 Barricade Signage

All barricades must be accompanied by appropriate signage, which is to be placed on all access points. Refer to *Appendix C – Appropriate Signage for Barricading*.

Signage used with a barricade must clearly display the following information:

- the name of the person in charge of the barricaded area;
- the hazards that are within the barricaded area;
- the date; and
- the contact details of the person in charge of the area.

8.0 Safety Sign Requirements

Safety signs must be erected to warn persons of specific hazards and to communicate necessary precautionary measures and emergency information.

As a minimum, safety signs which must be erected in accordance with *Work Health and Safety Regulation 2011*, include, but are not limited to:

- confined spaces;
- specific personal protective equipment (PPE) requirements;
- hazardous chemicals;
- fire protection equipment;
- hazardous areas;
- emergency and first aid information;
- emergency eyewash and shower; and
- traffic management and pedestrian control.

Refer to: *Appendix D – Types of Safety Signs Commonly Used on Site*.

Safety signs erected must also meet relevant legislative requirements and Australian Standards (refer to References).

9.0 References (Including Information Services)

Source	Reference
Legislation	<ul style="list-style-type: none"> Queensland Work Health and Safety Regulation 2011 Queensland Electrical Safety Regulation 2013 Queensland Managing electrical risks in the workplace code of practice 2021
Australian Standard	<ul style="list-style-type: none"> AS 1319:1994 Safety signs for the occupational environment AS 4687:2022 Temporary fencing and hoardings <ul style="list-style-type: none"> Part 1: General requirements Part 2: Temporary fencing and temporary pedestrian barriers Part 3: Temporary hoardings AS/NZS 4994.1:2009 Temporary edge protection – General requirements. AS/NZS 4994.3:2010 Temporary edge protection Part 3: Installation and dismantling for edges other than roof edges. AS 1742.1:2021 Manual of uniform traffic control devices. Part 1 General introduction and index of signs AS 1742.2:2022 Manual of uniform traffic control devices. Part 2 Traffic control devices for general use AS 1742.3:2019 Manual of uniform traffic control devices. Part 3: Traffic control for works on roads. AS/NZS 3845.1:2015 Road safety barrier systems and devices. Part 1 Road safety barrier systems
Business Procedures	<ul style="list-style-type: none"> Excavation and Penetration OHS-PROC-126 Confined Space OHS-PROC-18
Stay Safe	<ul style="list-style-type: none"> Barricading and Signage OHS-PROC-134A

10.0 Definitions

Term	Meaning
Barricade	<p>Means a physical barrier, usually temporary, erected or placed to restrict the entry of persons to an area and/or prevent personnel being exposed to a hazard.</p> <p>Barricades can be classed as either soft or hard:</p> <p>Soft barricades are those that use an approved tape, bunting or mesh and are typically connected or suspended to structures to prevent or restrict access to an area. Soft barricades are suitable in situations where physical protection by use of a safety barrier system is not warranted.</p> <p>Hard barricades are those which provide a physical barrier, are erected or placed to restrict entry of persons to an area, and where designed to, may provide physical or impact protection. Examples include self-supporting fencing, a self-supporting series of continuous water-filled plastic, concrete or other modular barriers, scaffold tubes, and concertina/expandable barriers.</p> <p><i>Note: Hard barricades can provide a safety barrier system capable of physical protection of workers e.g. from vehicle / mobile plant impact, or preventing a person from falling from an unprotected edge or into a surface penetration. Where a risk assessment determines physical</i></p>

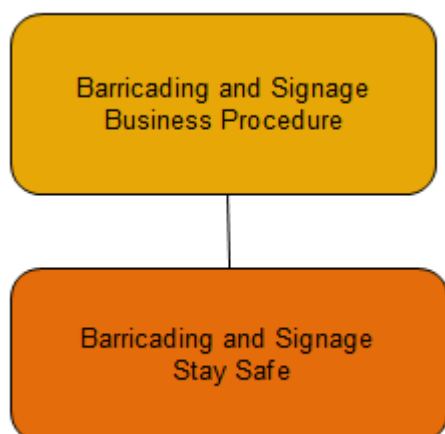
Term	Meaning
	<i>protection from a hazard is required, the barricade system shall be designed and used in accordance with relevant Australian Standards.</i>
Sign	An inscribed board, plaque, or other delineated space on which a combination of legend or symbolic shape is used to convey a message.

11.0 Revision







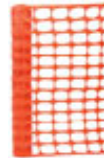
Rev. No.	Rev. Date	Revision Description	Written by	Endorse/Check	Approved by
0	13.11.2015	Document created to consolidate existing documents for Barricades eg, OHS-PROC-113	J. Fullard	M.Joy/T.Hooper	Ian Gilbar
	09.06.2023	Review Due Date Extended: Document review due date extended from 31.12.2022 to 01.11.2023 as this document requires a gap analysis in line with more current Australian Standards to be reviewed by an external consultant. Refer email request 23/65494.	Requested by Carl Rothman. Actioned by Shannon Scott.		
1	07.06.2024	Scheduled periodic review. No significant material or operational changes. Information added and formatting updated to provide clarity.	Jayde Smith	Carl Rothman	Kriss Ussher




12.0 Appendices

Appendix A – Barricading and Signage Document Flowchart



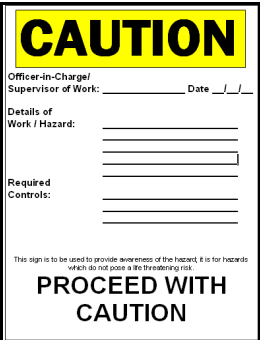

Appendix B – Barricading Selection Requirements

Type	Access Conditions & Application	Barricade Example
Soft Barricading		
Caution Barricade Tape	<p>Access permitted after familiarisation with the hazards and implementation of controls listed on the attached signage.</p> <p>This tape is used to highlight hazards to other personnel who may need to access the area. Caution barricade tape is not appropriate for moderate, major, or severe risk hazards e.g. unprotected edges, falling objects, electrical hazards.</p>	
Restricted Access / Danger Barricade Tape	<p>Access permitted under instruction and authority given from the Safe Work Coordinator / Person Responsible detailed on the attached signage.</p> <p>This tape is used to restrict access to the barricaded work area from hazards such as:</p> <ul style="list-style-type: none"> hot work; persons working above / falling objects; spills / leaks; confined space; and unprotected edges creating a fall risk of less than 2m. 	
Restricted Access / Electrical Work Barricade Tape	<p>Access only permitted to the work party and other personnel authorised by the Safe Work Coordinator in charge of the barricaded area (as indicated on the signage).</p> <p>This tape is used to barricade and restrict access to electrical hazards. This tape is commonly used for switchboard maintenance.</p> <p>Restricted Access / Danger barricade tape with Restricted Access signage can also be utilised.</p>	
Radiation Barricading	<p>Access permitted under instruction and authority given from Radiation Safety Officer / assistant / delegate.</p> <p>This tape is used to restrict access for radiation work activities only.</p>	
First Response Team Incident Scene Barricade Tape	<p>No access for unauthorised persons.</p> <p>This tape is erected by site first response personnel and/or investigation team to secure an incident scene.</p> <p>Restricted Access / Danger barricade tape with appropriate signage can also be utilised.</p>	
Barrier Mesh and Bunting Flags	<p>Barrier mesh and bunting flags are high visibility soft barricading options where a solid barricade is not required. It may be used in conjunction with appropriate barricading tape and signage to delineate work areas that require authorised access or used to highlight the boundary of a work area.</p>	 
		Bunting Flags Barrier Mesh







Hard Barricading		
Jersey Type Barriers	<p>A modular device used to segregate areas where plant and equipment is being operated and as a traffic safety control.</p> <p>The barrier is established to maintain a safe distance that segregates pedestrians and workers from plant and equipment. Where a risk assessment determines the barrier system is required to provide physical protection, such as to deflect vehicle impact, the barrier shall meet the design criteria of relevant Australian Standards e.g. <i>AS/NZS 3845.1:2015 Road safety barrier systems and devices. Part 1 Road safety barrier systems.</i></p>	
Expandable / Concertina Barriers	<p>A temporary free-standing, portable hard barrier used to delineate work areas that require authorised access, highlight the boundary of a work area, or control the movement of pedestrians.</p>	
Scaffold Tubing and Equipment	<p>Solid tubing and connections often used as a temporary guardrail or barrier to protect persons or equipment from falls from an unprotected edge or traffic / mobile plant impact.</p> <p>Where the barrier is required to perform the same function as a permanent handrail/guardrail, the barrier shall meet the design criteria of relevant Australian Standards e.g. <i>AS/NZS 4994.1:2009 Temporary edge protection – General requirements.</i></p>	

Appendix C – Appropriate Signage for Barricading

All barricades must be fitted with signage at appropriate spacing intervals along the barricade to ensure the signage is visible from all entry points. The following table indicates the type of signage that is appropriate for each type of barricade. Note signs may differ slightly from the example shown.

Signage	Use
<p style="text-align: center;">Caution</p>  <p>The image shows a rectangular sign with a yellow background and a black border. At the top, the word 'CAUTION' is written in large, bold, black letters. Below this, there are several lines of text and form fields: 'Officer-in-Charge/ Supervisor of Work: _____ Date ____/____/____', 'Details of Work / Hazard: _____', 'Required Controls: _____', and a small disclaimer: 'This sign is to be used to provide awareness of the hazard, it is for hazards which do not pose a life threatening risk.' At the bottom, the words 'PROCEED WITH CAUTION' are written in bold black letters.</p>	<p>Attached to the following types of barricading:</p> <ul style="list-style-type: none"> - Caution barricade tape. - Hard barriers erected for low or minor risk hazards.
<p>Danger / Restricted Access</p>  <p>The image shows a rectangular sign with a white background and a black border. At the top, the word 'DANGER' is written in white letters inside a red oval. Below this, the words 'RESTRICTED ACCESS AREA' are written in bold black letters. Underneath, it says 'Supervisor Approval Required for Entry'. There are several lines of text and form fields: 'Supervisor: _____', 'Contact number: _____', 'Details of Work / Hazard: _____', and 'Date: ____/____/____'.</p>	<p>Attached to the following types of barricading:</p> <ul style="list-style-type: none"> - Restricted Access / Danger barricade tape. - Restricted Access / Electrical Work barricade tape. - Radiation barricading. - First Response Team Incident Scene barricade tape. - Hard barriers erected for moderate, major, or severe risk hazards e.g. scaffold erected for unprotected edge protection.

Appendix D – Types of Safety Signs

Type	Design Criteria	Meaning	Example
Prohibition Sign	White background, red circle with a red strike through, black text	Communicates an action or activity which is not permitted.	
Mandatory Sign	Use of blue signs with white symbols or text	A mandatory instruction that must be carried out.	
Limitation Sign	White background, with red circle with black text or symbols	Set a defined limit on an activity.	
Danger Sign	Signs which encompass the word 'DANGER'	Indicate imminent risk of injury that is likely to be life threatening if the sign is ignored.	
Warning Sign	Yellow background, black text or symbols and often includes use of a triangle	Warn of a particular hazard or hazardous situation which is not likely to be life-threatening.	
Emergency Sign	Green background with white text	Indicate the location of or directions to emergency related facilities.	
Fire Sign	Red background with white text	Advise the location of fire alarms and firefighting facilities.	