



TARONG ENERGY CORPORATION LIMITED
OCCUPATIONAL HEALTH & SAFETY PROCEDURE FOR
SCAFFOLDING
OHS-PROC-105

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1.0 Purpose:

The purpose of this procedure is to detail the requirements for scaffolding erection, use and removal at Tarong Energy sites. The procedure applies to scaffolding equipment owned and used by Tarong Energy employees and also applies to contractor companies bringing scaffolding equipment onto site.

2.0 Procedure:

2.1. Maintenance / Inspection of equipment:

The nominated Tarong Energy person responsible for scaffolding shall maintain evidence (e.g. log book or data base) that company owned scaffolding equipment is regularly checked and is in a safe condition in line with the requirements of **AS1576** and **AS1577**.

Scaffolding contractors shall maintain and be able to provide evidence (eg log book or data base) that their equipment is regularly checked and is in a safe condition in line with the requirements of **AS1576** and **AS1577**.

The competent and authorised scaffolding supervisors responsible for the job shall also check that all scaffolding equipment is safe for use.

2.2. Scaffolding General Requirements:

The following requirements are to be adhered to where scaffolding is to be used/ installed:

- The responsible supervisor & licensed scaffolder shall determine an agreed safe position for the scaffolding.
- A JSEA / risk assessment shall be completed prior to commencing the erection of scaffolding. A generic JSEA / risk assessment can be used however on each occasion the supervisor and scaffolders must inspect and assess for site specific hazards and requirements. These may include:
 - overhead powerlines;
 - contact by moving (eg conveyor) or mobile equipment;
 - risk of falling objects;
 - intended duty (light, medium, heavy) of scaffold;
 - potential chemical interactions (eg exposure of aluminium scaffolding to caustic);
 - Tie in issues with online plant that is planned to come out of service (e.g. scaffolds erected pre-shut where the effects and extent of plant cooling and movement may not be known).
- A register of all scaffolds installed on a TEC site must be maintained and detail the records of and intervals of inspections. The method of establishing and maintaining the register is at the discretion of the specific site / contractor. E.g. Scaffile or logbook.
- Any work at heights performed during scaffolding activities must be in accordance with Working with Heights OHS-PROC-100 and Fall Injury Prevention System OHS-PROC-102.
- Only competent persons (holding the relevant prescribed occupation certificate) who are authorised (by their Supervisor or TEC Contract Supervisor) shall erect scaffolds.
- Access to the area where the scaffold is being erected shall be barricaded and warning signs posted as per the Tarong Energy's Barricading procedure OHS-PROC-113.

2.3. Scaffold Plans

- A scaffold plan should be prepared and approved, prior to work commencing and provided to the scaffolding work party for scaffold work. In the instance of basic scaffolds, the plan may be included in the JSEA / risk assessment for the task.
- Scaffold plans should address the following issues:
 - Basis of design (i.e. comply with AS1576 Scaffolding (parts 2 & 4) and AS/NZS1576 Scaffolding (parts 1,3 and 5));
 - Foundations (including ground conditions & loadings);
 - The capability of supporting structures to withstand any additional loading;
 - Access and egress;
 - Tying;
 - Bracing;
 - Type of scaffold;
 - Edge protection
 - Location and length of time the scaffold is to be erected
 - Making allowances for anticipated climatic conditions such as wind & rain
 - Proximity of the scaffold to an environment that contains hazardous substances which could react with the scaffold
 - The purpose for which the scaffold is to be used
 - The expected weight to be placed on the scaffold and specific loading bays, if relevant.
 - NOTE: Where prefabricated scaffolds are to be erected strictly in accordance with manufacturer recommendations, and used regularly on site, the manufacturer's instructional erection diagrams and associated documentation may suffice in regards to a scaffold plan.
 - All critical scaffolds (i.e. specifically designed/ purpose built scaffolds such as a furnace scaffold and furnace nose scaffold) SHALL have a detailed scaffold plan prepared and approved by a structural engineer, prior to the scaffold being erected.

2.4. Erection & Dismantling of Scaffold:

- The erection and dismantling of all scaffolds shall comply with the requirements of AS/NZS1576.1:1995 & AS/NZS 4576:1995 and the Qld Workplace Health & Safety [Scaffolding Code of Practice 2004](#). In the case of prefabricated scaffolding as per the manufacturer's erection/dismantling instructions..
- The Scaffold Work Party shall ensure the immediate area is free of all loose scaffolding equipment and tooling left on the scaffold or surrounding plant, this must be done both during the erection and dismantling of the scaffold. This will ensure there are no falling object hazards present in and around the scaffold.

2.5. Access and Egress

- All scaffolds must be provided with a safe means of access and egress.
- The supervisor and scaffolder/s must assess and provide the most appropriate means of safe access and egress to/from the scaffold.

Some examples of methods to provide safe access include:

- Temporary stairs;
- Using the existing floor level of a building (provided such access is safe);
- Use of a portable ladder. Ladders may be used where access to the working platform is needed by only a few persons, and where tools and equipment can be delivered separately to the working platform.

The following are examples of how a ladder can be installed / used:

- Ladders should be within a separate ladder access bay of the scaffold wherever space permits;
- If the ladder access bay is part of the working platform, a trap door or guardrail system is to be provided. Strict controls are to be implemented to ensure the trap door remains closed while working on the platform;
- If the ladder is to be installed external to the scaffold bay – the supervisor and scaffolder must ensure that the access is safe. The height of the scaffold, the type of work and positioning of workers (e.g. crouching) who will be working on the scaffold must also be considered to determine if this type access is acceptable. In such cases where it is deemed to be acceptable, the scaffold must have either of the following – a self closing gate installed at the access or the installation of a solid top rail only with mid rail not installed. Where a solid top rail is used it is recommended that to hop on/off the ladder, persons crouch to one knee and move under the handrail rather than bend under the handrail (i.e. head should not go below the level of the heart).
- Any ladder installed must be installed complying with the requirements of OHS-PROC-10: Working with Ladders.

2.6. Working from Scaffold:

All work from scaffolding shall be undertaken according to a risk assessment, which considers, but may not be limited to, the following requirements:

- Whenever work is to be done over personnel working below on a scaffold, overhead protection shall be provided on the scaffold for those personnel.
- Slippery conditions on scaffolds shall be eliminated as soon as they occur.
- The footing of persons working on a scaffold shall remain within the confines of the kickboards. Any work requiring body positions outside the kickboards/railings will require inclusion of these activities in the **JSEA / risk assessment**.
- Any time that a person leaves the confines of the scaffolding they shall be protected from any potential fall from height and falling objects.
- Scaffolds must be maintained in a clean state. They should be cleaned regularly / as required where the build up of dust and materials can occur or if oil can increase the risk of slips on the scaffold.

2.6 Working from Scaffold (cont'd):

Mobile Scaffolds

The following minimum requirements for **mobile scaffolds** are to be implemented:

- access only via an internally placed ladder (i.e. within the **scaffold**);
- maximum height to be no greater than 9 metres or 3-times the least base dimension;
- edge protection to be fitted inclusive of top rails, mid rails and toe boards (i.e. where a risk of falling objects exists);
- castors with adjustable legs to be used and adjusted to keep the platform level when supporting structure is at different heights;
- castors are to be locked prior to accessing **scaffold**;
- plan bracing is to be used at base of **scaffold** to provide greater stability (where relevant);
- prior to moving **mobile scaffold** check that:
 - no persons are on the **scaffold**;
 - the ground is firm / level;
 - the supporting structure is free from obstructions;
 - there are no overhead obstructions (e.g. power lines etc.);
 - no equipment and material can be dislodged from the platform;
- always push or pull **mobile scaffold** from the base – never use powered vehicles to move **mobile scaffolds**.

2.7. Scaffold Inspection Schedule:

Scaffolds must be inspected with records kept:

- Before their first use; and
- Within every 30 days (Risk assessment may determine the interval to be less depending on use, location, risk etc);
- After any event likely to affect the stability of the scaffold (for example: following strong winds or storms).
- The Maintenance Management System shall be set-up to ensure that inspections are completed in conjunction with a routine MST and Form T-1277.



Note: Only Licensed Scaffolders or Scaffold Inspectors may alter/control Scafftags on scaffolds and or Scaffile Boards.

2.8. Storage of scaffolding:

All scaffolding and associated equipment shall be stored in a safe manner before, during and after construction.

3.0 Responsibilities:

3.1. Manager Operations:

Shall ensure that:

- All scaffolding components are inspected by a licensed competent person before erection.
- All scaffolding is erected in accordance with **AS1576** & the Qld Workplace Health & Safety [Scaffolding Code of Practice 2004](#) as a minimum standard.
- All scaffolding has a 'Scafftag' system that is reinspected at a nominated frequency, but not exceeding **30 days** between inspections. (*Refer AS 4576*).

3.2. Supervisors and Employees:

Shall ensure that:

- No work is commenced on scaffold until a current 'Scafftag' is in place.
- The safe working load of the scaffolding is not exceeded.
- Any damage to a scaffold is reported and corrected immediately.
- After periods of inclement weather, such as heavy rain and strong wind erected scaffolding is re-inspected by a competent licensed person before use.

4.0 Scafftag Use:

The scafftag system must be used to identify the status of all scaffolds used on TEC sites. The different stages of the Scafftag and their meaning are as follows:



“Scaffold is safe to use”

“Do not use scaffold”

“Record of inspections”

Scaffold is under Construction:

- **Scaffold holders** shall be attached to all authorised, approved access points to the scaffold.
- When the Scaffold is incomplete the Scafftag holder will be showing the international prohibition symbol and the script “**DO NOT USE SCAFFOLD**”.

Construction Complete:

When the construction of the scaffold is complete it is inspected to ensure compliance with Statutory Legislation and Codes of Practice.

- If satisfied, the inspector completes the green faced Scafftag with its unique identification number, loading and usage, date and signature. Then places the insert into the Scafftag holder, indicating the scaffolding is now “**SAFE FOR USE**”. A duplicate insert will be held at a **Scaffile** (Eg TPS - centrally controlled racking system for quick reference status of scaffolds in the basement of the Northern Annexe) or a record kept in a logbook.
- If the scaffolding is unsafe, the inspector shall issue instructions for remedial works to be carried out and alters the Scafftag holder showing “**DO NOT USE SCAFFOLD**”.
- Upon satisfactory completion of remedial works the inspector can return the scaffold to the “**SAFE TO USE**” status.
- If the scaffold is being modified, it is classed as being under construction and the green scafftag shall be removed.

Ongoing Inspections:

- Ongoing inspections will need to be carried out as per Section 2.7 and recorded on the back side (yellow) of the Scafftag and in the register.

5.0 Training and Competencies:

Before any person erects scaffold on any TEC site and depending on the type of scaffold to be erected they will have to show proof of competence in the following prescribed occupations. (*Minimum Training requirements refer AS4576*)

5.1. Basic Scaffolding (SB)

- Prefabricated scaffolds;
- Cantilevered hoists (materials only & not exceed to 500kg safe working limit);
- Ropes;
- Gin Wheels;
- Safety nets & static lines;
- Bracket scaffold (tank & framework).

5.2. Intermediate Scaffolding (SI)

- Tube and coupler scaffolds;
- Cantilevered crane loading platforms;
- Cantilevered and spurred scaffolds;
- Barrow ramps & sloping platforms;
- Scaffolds associated with perimeter safety screens and shutters;
- Mast climbers.

5.3. Advanced Scaffolding (SA)

- Hung scaffolds (including scaffolds hanging from tubes, wire ropes or chains);
- Suspended scaffolds;
- All types of cantilevered hoists, including personnel and material hoists.

Each of these levels (intermediate and advanced) requires the previous level of scaffolding to have been achieved prior to commencement of the next level.

5.4. Records –

The People Services Department is responsible for managing & maintaining all training records. All hard copy training documentation shall be forwarded to the training coordinator for data entry and filing.



Note: *Record Keeping shall be in compliance Archival of Records GOV-PROC-07.*

6.0 Statutory and Legal Considerations:

- Workplace Health and Safety Act 1995.
- Workplace Health and Safety Regulation (2008).
- Workplace Health and Safety Scaffolding Code of Practice 2004.

7.0 Health, Safety and Environmental Considerations:

Nil.

8.0 Definitions:

JSEA	Job Safety and Environmental Analysis
MST	Maintenance Scheduled Task
Certified scaffolder	A person who holds a certificate of competency as a scaffolder.
Mobile scaffold	An independent free-standing scaffold that is mounted on casters
PPE	Personnel Protective Equipment
RPE	Registered Professional Engineer
Scaffile	Centrally controlled racking system for quick reference status of scaffolds .
Scaffold	A temporary structure, stage or platform specifically erected to support access or working platforms, persons, plant or other material. <ul style="list-style-type: none"> ▪ <i>Light duty; 225kg</i> ▪ <i>Medium duty; 450kg</i> ▪ <i>Heavy duty, 675kg as defined by AS1576.1.</i>
Scaffolder	A person competent to erect, alter, repair and/or dismantle a scaffold.
Scaffolding	Any component assembly or machine used or intended to be used in the construction of a scaffold.
Scafftag	A specific tag holder and card, that, when fixed to a scaffold, identifies the status of the scaffold, details with respect to its use and inspection details.
Shall	Indicates that a statement is mandatory
Should	Indicates a recommendation

9.0 Reference Documentation:

AS 1576	Scaffolding
AS 1577	Scaffolding planks
AS4576	Guidelines for scaffolding
BS EN ISO 9001:2000	
Corp-ENG-07	Inspection of cranes, hoists and mobile lifting equipment
Corp-PTW-01	Corporate Permit to Work Manual
OHS-PROC-100	Safe Working with Heights
GOV-PROC-07	Archival of Records
T-1277	Scaffolding Check List
T-1022	Job Safety and Environmental Analysis Worksheet
	Queensland Workplace Health & Safety Scaffolding Code of Practice 2004.

10.0 Revision History:

Rev No.	Revision. Date:	Revision Description:	Author:	Approved. By:
0	31.07.2007	New Procedure	M Joy	J Judge
0	17.11.2008	Changed reference section 6 to 2008 legislation (Minor Change only – Revision Number and Date remains the same)	T Young	M Joy
1	29.11.2010	Addition to section 2.4 – Erection and Dismantling of Scaffold	T. Young	J. Judge