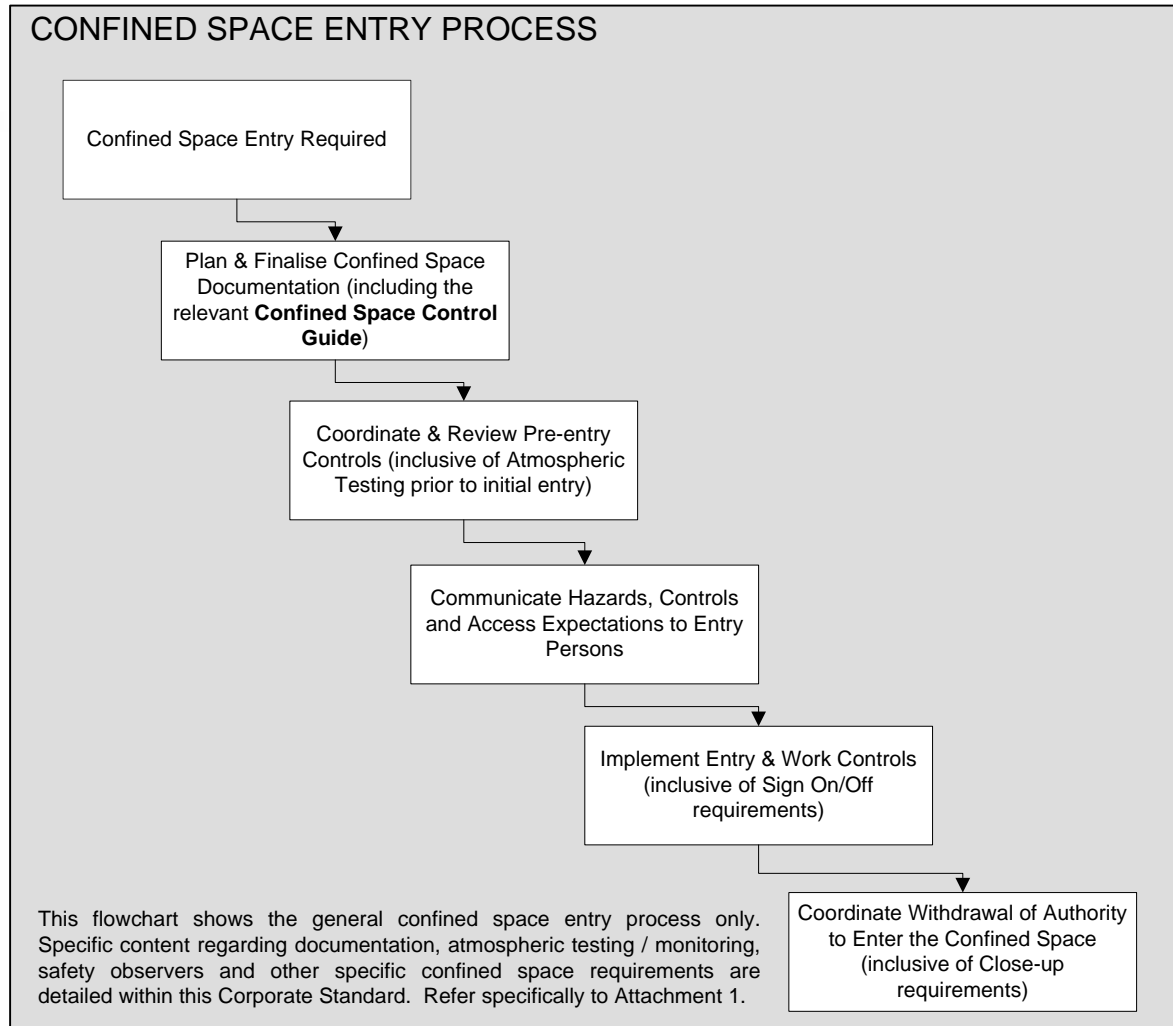


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Functional Flowchart



Objective

To detail the principles and process for managing confined space entry hazards and the methods by which entry and work is controlled.

Scope

This corporate standard applies to all entries and work tasks within any confined space located within a SCL operated and/or maintained site.

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Definitions

AS/NZS 2865: The latest version of the Australian Standard for 'Safe Working in a Confined Space'.

AS/NZS 2865 Compliance Summary: A reference source that identifies the key requirements of AS/NZS 2865 and the corresponding documentation location where SCL addresses the requirement/issue.

Note: Refer to *Attachment 4*.

Basic entry: An entry into a confined space (as defined) that will not result in a release or engulfment of gas, liquid or solid into the space, will not agitate materials or agents in the space that may compromise the atmosphere, and does not involve specific work activities such as;

- hot work,
- work involving tools or equipment that could create a spark or ignition source, or
- work involving hazardous substances or other materials that could have an effect on the atmosphere in the space.

Note: Tasks such as the following are included as a basic entry:

- entry only,
- observation or inspection of the space only,
- use of hand tools such as spanners, screwdrivers, measuring devices, etc to make an adjustment, measure a component, move a valve/gate, etc, and
- entry into a space to undertake plant operations that will not affect the atmosphere or integrity of the isolation (where applicable).

Competent person: A person who has through a combination of training, education and experience, acquired knowledge and skills enabling that person to perform correctly the specified task.

Confined space: An enclosed or partially enclosed space that is at atmospheric pressure during occupancy and is not intended or designed primarily as a place of work, and

- is liable at any time to:
 - have an atmosphere which contains potentially harmful levels of contaminant, or
 - have an oxygen deficiency or excess, or
 - cause engulfment, and
- could have restricted means for entry and exit.

Note: Confined spaces may include, but are not limited to:

- storage tanks, tank cars, process vessels, boilers, pressure vessels, silos and other tank-like compartments,
- open-topped spaces such as pits or degreasers, and
- pipes, sewers, shafts, ducts and similar structures.

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- Confined space working area:** An area, that is defined by an ATW Coordinator as part of confined space control guide planning and documentation and marked out via barricading and/or signage where deemed appropriate, that includes the following:
- the entire physical confined space (see also the following note regarding this criteria),
 - one entry/access point into that confined space, which becomes the nominated sign on/off location,
 - an area, as small as practicable outside the confined space, that may be required for the storage of plant, equipment and materials involved with the entry/work in that space, but not the following:
 - an area inclusive of a portable site shed or crib room, or
 - an area inclusive of portable or on-site amenities, or
 - an area that is excessively large and not specific to that confined space or section of plant.

Note: Where a confined space working area is restricted to a certain part, compartment or section of a very large confined space, this is to be clearly defined and documented as part of ATW and control guide documentation and carefully explained/managed as part of the ATW Coordinator's role in the work/plant activities.

Contaminant: Any dust, fume, mist vapour, biological matter, chemical, gas, or other substance in liquid or solid form, the presence of which may be harmful to health and safety.

Entry (to a confined space): When a person's head or upper body, (i.e. the breathing zone), is within the boundary of the confined space.

LEL (lower explosive limit): In relation to a flammable contaminant, the concentration of the contaminant in air below which the propagation of a flame does not occur on contact with an ignition source.

Restricted entry: In relation to the description of a confined space's physical entry size and location, is a space that has an entry point or opening that would restrict a rescue person (wearing complete supplied air breathing apparatus equipment) from being able to enter the space.

Safety Observer – Confined Space: A competent person assigned to remain on the outside of, and in close proximity to, the confined space and capable of being in continuous communication with and, if practical, to observe those inside. In addition, where necessary, to initiate emergency response procedures and operate and monitor equipment used to ensure safety during entry and work in the confined space.

Responsibilities

OH&S Systems Manager

To maintain the currency and accuracy of the Confined Space Corporate Standard reflective of legislative and corporate change.

Station/Site Manager

To monitor the implementation of the Confined Space Corporate Standard and allocate responsibilities and resources to ensure site-specific processes are developed to satisfy the Corporate Standard.

ATW Coordinator

To ensure safe assessment, control implementation, entry authorisation and overall safe confined space entry in accordance with this Corporate Standard.

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+ + Safety Observer – Confined Space

- + To ensure adequate communication links are maintained as well as being able to initiate emergency response processes.

Workers and Contracted Staff

- + To comply at all times with the requirements specified within this Corporate Standard and any site-specific requirements.

Risk Assessment

Confined Space Planning

The following provisions are to be considered in the planning stage for the construction of new facilities, purchasing of plant and modification of plant/work areas such that hazards involved with entry into a confined space may be minimised at the design stage and during initial plant installation.

Where practicable, spaces are to be designed such that they are not confined spaces or do not require entry for maintenance or other purposes.

Any contract for the design, manufacture, supply or modification of a confined space is to specify compliance with AS/NZS 2865 – Safe Working in a Confined Space (Design, Manufacture, Supply and Modification).

Where practicable the following provisions are also to be made while planning for confined space design, installation and during SCL modification processes:

- adequate and convenient means of entry and exit for personnel, inclusive of the additional space that may be required due to the potential need of personnel to be wearing specific personal protective equipment and clothing,
- outlets and facilities for cleaning are to be provided to eliminate or minimise the need for entry,
- ventilation facilities to avoid build-up of contaminants or combustible atmospheres,
- provisions for persons to work in comfortable positions or postures,
- illumination complying with AS 1680.1 which will be sufficient to permit safe entry, egress and work,
- fixed ladders, platforms and walkways complying with AS 1657,
- signs in a manner complying with AS 1319 at each entry to the confined space warning against entry by persons other than those authorised to enter,
- drain valves, outlets and effective means of isolating energy sources from outside of the confined space to reduce the risk of possible pressurisation and confined space atmospheric contamination.

Confined Space Classification and Categorisation

Where a space is identified as being a potential confined space or one that may require specific planning and entry precautions prior to access, the [Confined Space Classification Procedure – HB# 537629](#) is to be used to assess the space and document findings accordingly.

The above mentioned procedure is also to be used if a modification is identified as being required to existing confined space documentation contained in confined space registers.

Adequate Equipment

If, during any confined space preparations, entry or work activity, a worker or supervisor identifies a faulty or unsafe item of equipment or an unsafe situation, activities that are placing personnel at risk are to be temporarily stopped until the equipment is deemed safe to use, it is replaced or the situation is rectified.

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- + + Confined space atmospheric testing and monitoring devices are to be stored and maintained on SCL sites as per manufacturer's requirements.

Testing and re-calibration of atmospheric testing and monitoring devices are to be undertaken as per manufacturer requirements with records maintained on site.

- + Safe operation, handling, zeroing and placement of the devices during testing and monitoring is to be undertaken as per manufacturer's requirements.

Continuous monitoring combustible substance detectors are to be fitted with latching, visible and audible alarms that are to activate at a contaminant concentration of not more than 10 percent of the LEL.

Controls

Specific Confined Space Entry Requirements

Access to a confined space is only to be undertaken and supervised by personnel who are adequately trained and have an understanding of the safety requirements as specified in AS/NZS 2865, this Corporate Standard and any site specific confined space requirements. See Training and Competency details Section.

Entry into a confined space will only be permitted following the completion of the documentation listed below, (except as specified by the following note):

- an ATW – which highlight the entire work activity and confined space entry and work requirements,
- a confined space Control Guide – which highlights the minimum confined space entry requirements and additional working requirements as deemed necessary,
- a confined space Atmospheric Testing / Monitoring Record – which is used to track the pre-entry testing results and any periodic testing results as deemed necessary, and
- a Confined Space Entry Record – which is used to track the entry and egress of all personnel who are authorised to enter the confined space.

Note: Where a confined space is required to be entered to perform a specific plant isolation operation, the content of the above four bulleted items is to be reproduced (albeit in a shorter compressed format) within the forward and reverse operations sections of the plant isolation guide. Refer also to the [Plant Isolation Corporate Standard – HB# 569942](#) and [Corporate Procedure – HB# 569944](#).

Where entry into a confined space requires the isolation of plant energies or specific process material, this process is to be managed as per [Plant Isolation Corporate Standard – HB# 569942](#) requirements.

Where identified within the Control Guide or as assessed as needed by ATW Coordinators due to the specific work activities involved, a Rescue / Retrieval Plan is to be developed using the Rescue / Retrieval Plan Template.

If a confined space work environment changes or there is a change of work scope that was not originally considered (eg the need to do some hot work is identified that was not considered in the original control guide process), the entry process or work is not to be initiated until a reassessment of the confined space is done (amend documentation) and necessary controls are implemented to ensure worker safety.

Note: If an unexpected atmospheric change occurs, work is to cease immediately and workers are to leave the confined space area until conditions can be controlled to ensure worker safety.

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Atmospheric Testing / Monitoring

Where necessary, the confined space is to be cleared of contaminants by use of a suitable purging agent prior to atmospheric entry or testing. The purging agent or any gas used for ventilation purposes must never be pure oxygen or gas mixtures with an oxygen content greater than 21%.

Atmospheric testing / monitoring must be undertaken in accordance with the following table of requirements:

Atmospheric Testing / Monitoring Requirements

| | Entry / Space Type | Requirements | Responsibility |
|---|------------------------------|--|--|
| Mandatory Minimum Requirements | Any Entry to Any Space | <ul style="list-style-type: none"> Atmospheric testing prior to initial entry Atmospheric testing once per each 24-hr period following, where entry is required | Authorised Atmospheric Testing Person to: <ul style="list-style-type: none"> undertake testing and record results |
| Additional Requirements relating to Type of Space and Activities within the Space | Any Entry – Category 3 Space | <ul style="list-style-type: none"> Continuous atmospheric monitoring of entry persons' breathing zones during occupancy | Authorised Atmospheric Testing Person to: <ul style="list-style-type: none"> set up testing device in the space if required communicate the need for an entry person to wear the testing device if required communicate specific information regarding the monitoring or use of the device as required Entry Personnel to: <ul style="list-style-type: none"> wear continuous monitoring testing devices if required |
| | Any Entry – Category 2 Space | <ul style="list-style-type: none"> Continuous atmospheric monitoring of the space's atmosphere IF contaminants are present but within safe limits | |
| | Work Within Any Space | <ul style="list-style-type: none"> Continuous atmospheric monitoring of the space or entry persons' breathing zones as deemed appropriate by ATW Coordinator and as documented in the Work Method Statement for the confined space entry / work | |

Where the [Confined Space Control Guide – HB# 692209](#) and evaluation of the atmosphere identifies the potential for later release of contaminants or a variation in oxygen level, arrangements are to be made to continuously monitor the atmosphere within the space during that period.

The process for performing and recording atmospheric testing is to be done in accordance with the flowchart in *Attachment 2*.

As indicated in the Specific Confined Space Entry Requirements *Section*, a Safety Observer – Confined Space must be in attendance during initial and 24-hourly atmospheric testing where entry is required to perform the testing.

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- As part of atmospheric testing / monitoring the following constraints (also included within the Atmospheric Testing / Monitoring Record), are to be observed at all times:

| Atmospheric Issue | Safe | Caution (Entry during an Emergency Response / With Additional Controls) | Unsafe |
|---|--|--|---|
| Oxygen | >19.5% up to 23.5% | <19.5% need positive pressure supplied air breathing apparatus | <14% entry not permitted despite positive pressure supplied air breathing apparatus >23.5% entry not permitted and all persons to evacuate the space |
| Contaminants CO H ₂ S CO ₂ NH ₃ Other | <30 ppm <10 ppm <5000 ppm <25 ppm As per specific exposure standards | Generally, positive pressure supplied air breathing apparatus may be worn at levels approaching and slightly over the exposure standard as determined as part of ATW planning and assessment processes. | >Safe limits – entry not permitted |
| LEL | <5% | > 5% up to 10 % Entry permitted in emergency response, however, if during work, the level rises to above 5 and up to 10, they are to evacuate, unless a suitably calibrated combustible substance detector is used at all times while persons are in the space. | >10% Entry not permitted Evacuation of persons must occur immediately |

Due to the size and complexity of some confined spaces it is not always possible to ensure that remote regions of confined spaces do not contain unsafe levels of flammable contaminants. In such cases, once the atmosphere adjacent to the entry point has been proven safe for entry, testing of more remote regions within the confined space is to be undertaken. For these monitoring tasks and for work in such large and complex spaces, continuous monitoring via the use of a combustible substance detector is to be undertaken at all times while persons are present in the space.

All atmospheric monitoring equipment, batteries, battery levels, etc are to be inspected prior to use and verified as being appropriately calibrated and fit for use. This may involve a verification of the last calibration date, battery check, zeroing of the device, etc.

Access Control

During entry or work in a confined space, measures are to be implemented to provide warning to others of the confined space activity. This may be achieved by way of barricading, signage, or other specific exclusion methods as determined within the ATW planning process and confined space working area demarcation. The use of *Confined Space Entry Point Signs* may also be used by ATW Coordinators as a means of communicating specific access or working requirements.

All persons entering a confined space must sign in, (on the *Confined Space Entry Record* form found at the entrance to the confined space working area), and ensure all controls as detailed on the *Control Guide and Atmospheric Testing / Monitoring Record* forms have been completed/complied with.

All persons leaving a confined space working area must sign off. This variation between sign on and sign off requirements allows workers who are signed on to a confined space to briefly leave the space without having to sign off, as long as they remain within the boundary of the confined space working area. This variation also allows other workers to enter the confined space working area to deliver materials, tools, etc or to discuss work issues with those signed on.

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- + + After concluding any entry or work in a confined space, the space, its entry and its access are to be restored to a safe manner. This will include:
 - + ▫ the ATW Coordinator seeking assistance from one or more authorised confined space entry persons to assist in the coordinated closure of the space and completion of work,
 - + ▫ a check that all personnel involved in the work have signed-off of the Confined Space Entry Record form for the last time,
 - + ▫ a systematic search of all sections of the confined space to confirm that workers, unauthorised personnel and plant, equipment, tools, etc have been removed,
 - the systematic closure of all access and inspection doors, entries, locks, etc as appropriate,
 - removal of barricades, signage, etc, as appropriate,
 - the cleaning of work areas and surfaces around the space, as appropriate, and
 - completion of all forms and documentation related to the activity.

The above confined space close-up process, involving the ATW Coordinator and another Confined Space Entry Person, must be recorded via the acknowledgement of the [Confined Space Entry Record – HB# 692214](#) – Section 2: *Withdrawal of authority*.

Note: The Entry Authority and Withdrawal components of the [Confined Space Entry Record – HB# 692214](#) – Section 2, must only be completed prior to the first initial entry and following final close-up of the space respectively.

As an additional measure, the ATW Coordinator is to use the availability of the ATW and confined space related documentation as a means of access control. Where applicable, the ATW Coordinator is to remove documentation from the work area during periods where access to the confined space is not authorised.

Communication and Safety Observation

As part of any confined space entry, a communication means must be established in addition to pre-entry communication between the ATW Coordinator and Confined Space Entry Persons. This communication means may include:

- ensuring a safety observer stands-by the confined space while entry persons are inside the space,
- ensuring that multiple entry persons enter the space, remain in close proximity and hence monitor each other's safety,
- ensuring that a specific communication device is used and functioning if an entry person accesses the space alone.

Where a specific communication method is to be established during access or work within a confined space, this is to be identified within the [Confined Space Control Guide – HB# 692209](#) with clarifying detail provided in the ATW relating to the activity.

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- + + Use of a Safety Observer – Confined Space must be undertaken in accordance with the following table of requirements:

Safety Observer Requirements

| | Entry / Space Type | Requirements |
|---|-----------------------|---|
| Mandatory Minimum Requirements | Any Space | <ul style="list-style-type: none"> • During atmospheric testing prior to initial entry (where entry is required to undertake the testing) • During atmospheric testing once per each 24-hr period following (where entry is required to undertake the testing) |
| | Category 3 Spaces | <ul style="list-style-type: none"> • During any entry or work within the space |
| Additional Requirements relating to Type of Space and Activities within the Space | Work Within Any Space | <ul style="list-style-type: none"> • As deemed appropriate* by the ATW Coordinator , such as: <ul style="list-style-type: none"> • during work tasks that introduce additional atmospheric hazards, • during those that make the confined space a significantly more hazardous location to work in, • due to the space adjoining other spaces or being able to be influenced by adjacent activities, hazards, etc. <p><i>Examples: cleaning tasks, hot work, chemical use.</i></p> |

Note:
 * The ATW Coordinator is to ensure those situations requiring the use of a Safety Observer are clearly documented within the Work Method Statement.

Safety Observers must sign on/off the Confined Space Entry Record sheet to indicate their involvement with monitoring safe confined space entry and the period of time involved.

Emergency Response / Preparedness

As part of planning activities involving confined space entry, ATW Coordinators are to consider potential rescue / retrieval scenarios. As part of these considerations, and reflective of the work activities and hazards involved, a Rescue / Retrieval Plan may be used to document specific competency and equipment requirements. The development of such a plan must be undertaken however, for the following scenarios:

- for any entry within a Category 3 confined space,
- for entry within a Category 2 confined space that has a restricted entry/exit or presents difficult retrieval characteristics.

Where deemed appropriate for the confined space entry / work task, emergency equipment and personal protective equipment (i.e. self-contained breathing apparatus, rescue harness, etc) are to be suitably maintained and inspected/tested prior to use. It must also be ensured that competent personnel are available to use these items as appropriate.

In the case of a serious emergency situation where external emergency services have been sought to assist in a confined space emergency or evacuation situation, the Emergency Manual / Procedures of the specific site are to be implemented.

Management of Confined Spaces records

In accordance with this Corporate Standard for Confined Spaces, each production site or SCL site where confined spaces exist is to maintain an easily accessible site-specific Confined Space Register, and listing of authorised confined space entry personnel.

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- + + The site-specific Confined Space Register is to contain, but not be limited to, the following components:
 - + ▪ a listing of the site's confined spaces,
 - + ▪ a listing of completed Classification / Entry Categorisation documents,
 - + ▪ a listing of completed Control Guides.

+ Training and Competency

All persons involved with entry or work activities relating to confined spaces, including ATW Coordinators, Confined Space Entry Personnel and Safety Observers – Confined Space are to be trained and assessed as competent to perform those various entry and work tasks.

Confined space training content is to be reflective of the site's specific confined spaces, SCL's specific confined space documentation and methods of managing confined space hazards, and the range of content training areas as outlined in statutory legislation and AS/NZS 2865.

Training content and detail is to be commensurate with the role of the person requiring entry. Training with respect to confined space entry must be undertaken in accordance with the requirements detailed in *Attachment 3*.

Trainers and assessors of confined space training for SCL personnel are to be:

- knowledgeable in all relevant aspects of confined spaces, consistent with AS/NZS 2865,
- conversant with SCL's site specific range of confined spaces and internal work management processes, and
- capable of delivering an up-to-date practical and SCL specific confined space course.

When SCL source external or internal providers for confined space training, the requirements with respect to training content and training providers described above is to be critically assessed to ensure suitable trainers and courses are procured or organised.

Trained confined space personnel are to undertake refresher training as per the [Safety Training Attendance Guideline – HB# 560126](#).

Records of confined space training are to be maintained as per SCL's Corporate Training and Assessment requirements.

Review

This Corporate Standard is to be reviewed as required or on a two yearly basis.

References

- AS 2865: 1995 - Safe Working in a Confined Space
- AS/NZS 2865: 2001 - Safe Working in a Confined Space
- QLD Workplace Health & Safety Regulation 1997, Part 15
- VIC Occupational Health & Safety (Confined Spaces) Regulations 1996
- WA Occupational Health & Safety Regulations 1996, Part 3, Division 8
- SA Occupational Health, Safety & Welfare Regulations 1995, Division 2.4
- NSW Occupational Health & Safety Regulations 2001, Part 4.3, Division 9
- TAS Workplace Health & Safety Regulations 1998, Division 5
- NT Work Health (Occupational Health & Safety) Regulations 1992, Division 3A

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- + + [Plant Isolation Corporate Standard – HB# 569942](#)
- + [Plant Isolation Corporate Procedure – HB# 569944](#)
- + [Confined Space Classification Procedure – HB# 537629](#)
- + [Safety Training Attendance Guideline – HB# 560126](#)
- + SCL Form [Confined Space Classification / Entry Categorisation Tool – HB# 692212](#)
- + SCL Form [Confined Space Control Guide – HB# 692209](#)
- + SCL Form [Confined Space Atmospheric Testing / Monitoring Record – HB# 692213](#)
- SCL Form [Confined Space Entry Record – HB# 692214](#)
- SCL Form [Confined Space Entry Record – Additional Sheet – HB# 692215](#)
- SCL Form [Rescue / Retrieval Plan – HB# 692217](#)

Attachments

1. Confined Space Entry Process Flowchart
2. Atmospheric Testing / Monitoring Process Flowchart
3. Confined Space Training Requirements
4. AS/NZS 2865 Compliance Summary
5. Audit Checklist

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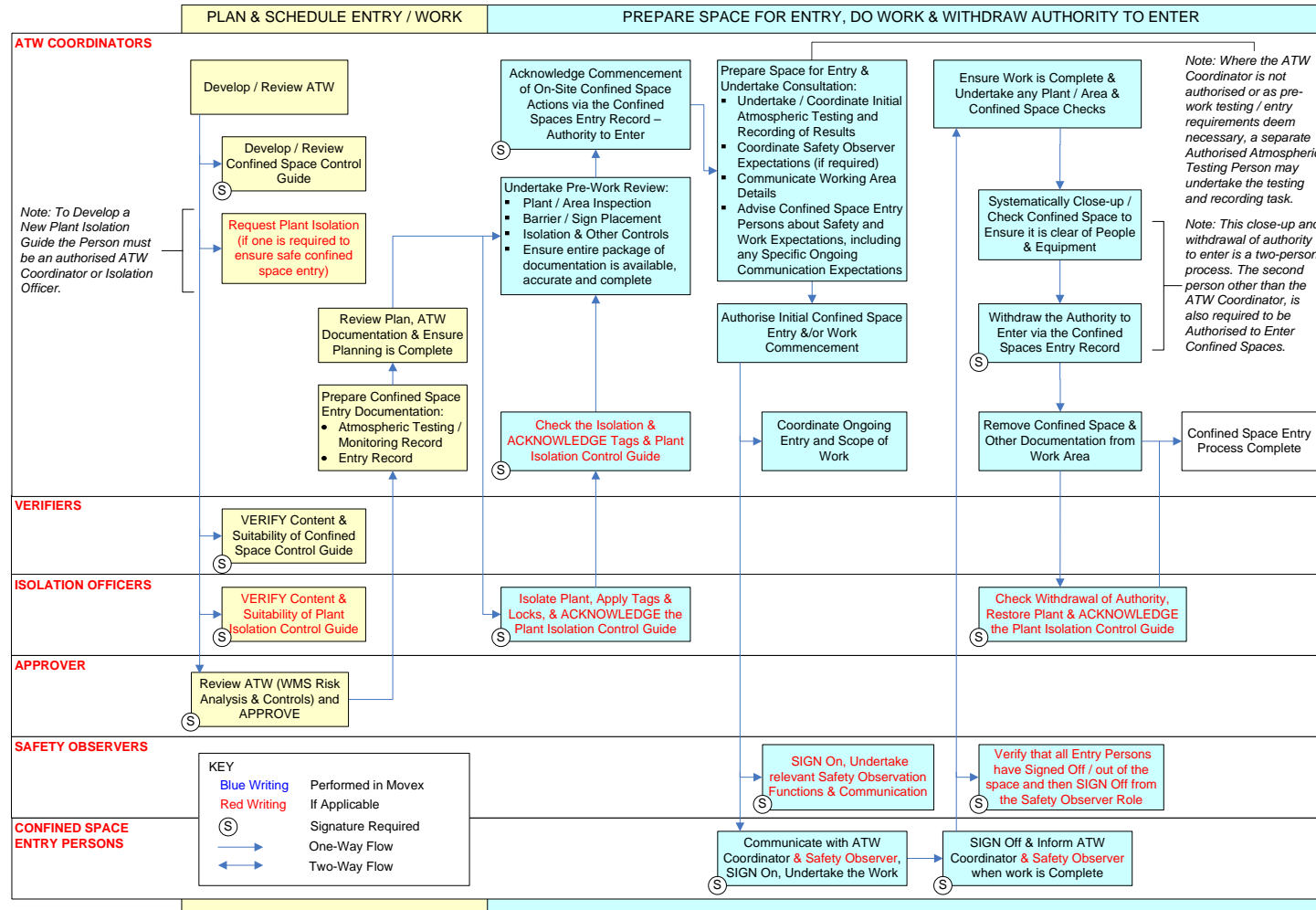
Corporate Standard

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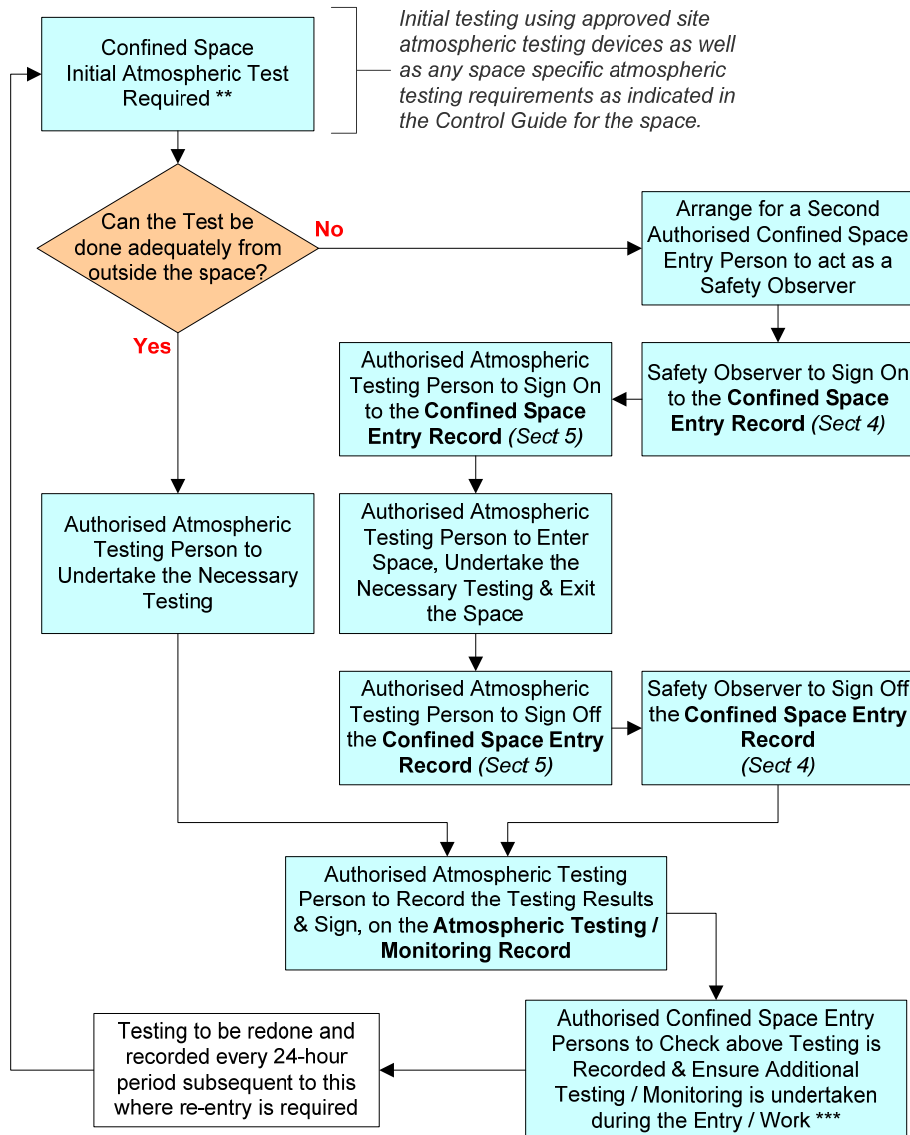
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Confined Space Entry Process Flowchart



Atmospheric Testing / Monitoring Process Flowchart *



Note:

* This Flowchart highlights the typical entry process. Where entry to a confined space is required to perform a plant isolation operation, all of the above actions requiring recording will be done within the plant isolation operation steps undertaken by the Isolation Officer.

** Additional confined space planning via control guide and work method statement development as well as the recording of a written authority to enter on the Confined Space Entry Record must be undertaken prior to this stage being reached.

*** Additional pre-entry communication, sign-on and implementation of controls must also be undertaken by Confined Space Entry Persons at this stage of entry. If continuous atmospheric monitoring is required during entry or certain work periods this initial and daily atmospheric testing process outlined above must still be undertaken and recorded.

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Confined Space Training Summary

| Authorisation / Role | Training Course | Additional Requirements * |
|--|---|---|
| Visiting Entry Person (Guardianship Access) | Site Visitor's Induction Required Informal Confined Space Pre-Entry Briefing Required: <ul style="list-style-type: none"> specifics of entry, the space and SCL entry principles, ATW details, applicable aspects consistent with AS/NZS 2865 (including hazards, controls, emergency response process, safety equipment requirements). | Guardianship Arrangement Must be fully implemented: <ul style="list-style-type: none"> as per <i>ATW Corporate Procedure Section 8.2</i>, and documented via completion of the <i>ATW Guardianship Authorisation Form</i>, inclusive of signature acknowledgements. |
| Confined Space Entry Person ** AND Safety Observer – Confined Space | SCL Safe Working in a Confined Space Induction (Approx: 1.5hrs) | Must be externally certified as having completed a recognised confined space competency course. |
| | OR | |
| | SCL Safe Working in a Confined Space Training Course (Approx: 3.5 – 4hrs) | |
| ATW Coordinator / Verifier & Isolation Officer | Confined Spaces (<i>HEHI Training Package</i>) | Must have achieved the Confined Space Entry Person authorisation as shown above. |
| Atmospheric Testing Person | SCL Atmospheric Testing Training | Must have achieved the Confined Space Entry Person authorisation as shown above. Specific Testing Device Familiarisation. |

* This training summary addresses confined space related training only. Other Site Induction and ATW Work Party Member training requirements also apply.

** It is intended that all contracted personnel required to work within SCL confined spaces can demonstrate external confined space competency certification. Furthermore, it is intended that SCL sites with limited staff numbers who may be called upon to fulfil multiple functions such as atmospheric testing, emergency retrieval, safety observer, etc complete a recognised external confined space course.

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AS/NZS 2865 Compliance Summary

This table has been developed as a guide and reference source that identifies the key requirements of AS/NZS 2865 and the corresponding documentation location where SCL addresses the requirement/issue.

| # | Description | SCL Documentation |
|-----|--|---|
| 5.4 | <p>Confined space An enclosed or partially enclosed space that is at atmospheric pressure during occupancy and is not intended or designed primarily as a place of work, and—</p> <p>(a) is liable at any time to—</p> <p>(i) have an atmosphere which contains potentially harmful levels of contaminant;</p> <p>(ii) have an oxygen deficiency or excess; or</p> <p>(iii) cause engulfment; and</p> <p>(b) could have restricted means for entry and exit.</p> | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 4. Addressed also within Section 6 of the Corporate Standard which reference's SCL's Confined Space Classification Procedure. |
| 6.1 | The confined space shall be designed, manufactured and supplied so as to minimize the need to enter the confined space. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 5 (5.1-5.3). There is a requirement for confined space specific data to be included within contract specifications as deemed appropriate. |
| 6.2 | The confined space shall be designed, manufactured and supplied so as to minimize the risks associated with work in a confined space. | |
| 6.3 | Openings for entry to and exit from a confined space shall be of adequate size to permit rescue of all persons who may enter the confined space. | |
| 6.4 | Any modification to a confined space shall not detrimentally affect the safe means of entry to, exit from, or work in the confined space. | |
| 7.1 | In implementing the requirements of this Standard, consultation shall take place between the stakeholders, or their representatives, in accordance with the relevant provisions of the occupational health and safety legislation in each jurisdiction. | <ul style="list-style-type: none"> Corporate Standard is reflective of specific statutory requirements and references the various statutory legislation. Specific consultation approval process used as part of Safety @ Work Project & Steering Committee as well as the ATW Project Team. Formal consultative planning, development and review process used to form SCL's confined space systems (Confined Space – Working Group). |
| 8.1 | For any work proposed, any confined spaces and the hazards associated with working in or on those confined spaces shall be identified. | <ul style="list-style-type: none"> Hazards and work tasks identified as part of ATW planning, and associated confined space specific documentation. |

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| # | Description | SCL Documentation |
|-------|---|---|
| 9.1 | A risk assessment shall be undertaken by a competent person or persons before work associated with the confined space is carried out. The assessment shall be in writing and take into account at least the following: (a) The nature and inherent hazards of the confined space. (b) The work required to be done, including the need to enter the confined space. (c) The range of methods by which the work can be done. (d) The hazards involved and associated risks involved with the actual method selected and equipment proposed to be used. (e) Emergency response procedures. (f) The competence of the persons to undertake the work. | <ul style="list-style-type: none"> The ATW and Confined Space Control Guide form the confined space risk assessment. Specifics required as part of the risk assessment are addressed within these documents and associated training content. |
| 9.2 | The risk assessment shall be revised whenever there is evidence to indicate that it is no longer valid. | <ul style="list-style-type: none"> Generic ATW and Confined Space Control Guides are required to be either newly developed or formally reviewed each time prior to work. |
| 10.1 | If a risk assessment identifies a risk to health or safety arising from work in a confined space, the risk shall be eliminated or, if this is not possible, minimized by the implementation of appropriate risk control measures. The risk control measures shall be documented. | <ul style="list-style-type: none"> Refer to comment in 9.1. |
| 10.5 | Prior to any person entering a confined space, all potentially hazardous services, including all process services, normally connected to that space shall, where it is possible to do so, be isolated in order to prevent — (a) the introduction of any materials, contaminants, agents or conditions harmful to persons occupying the confined space; and (b) the activation or energizing in any way of equipment or services which could pose a risk to the health or safety of persons within the confined space. | <ul style="list-style-type: none"> The ATW process address specifically the energies, plant and introduction of process hazards mentioned, that relate to confined spaces. The Confined Space Control Guide also contains a specific link to the ATW Process. |
| 10.11 | Where necessary, the confined space shall be cleared of contaminants by use of a suitable purging agent. The purging agent or any gas used for ventilation purposes shall never be pure oxygen or gas mixtures with an oxygen content greater than 21%. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.6). |
| 10.22 | Atmospheric testing and monitoring shall be carried out consistent with the hazards identified and the risk assessment. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.6 - 7.13). SCL's confined space systems require atmospheric testing prior to entry as a minimum for all confined space entries and further testing/monitoring as deemed necessary as part of the control guide assessment. |
| 10.25 | No person shall enter a confined space to conduct atmospheric testing or monitoring without a written authority. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.9 & Attachment 1 & 2). All confined space entries require the ATW and Confined Space Control Guide process to be followed. |

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| 10.30 | No persons shall enter a confined space unless— (a) a review of the risk assessment has been completed in accordance with Clause 9.1 and 9.2; (b) a written authority is provided to, or completed by, the person responsible for direct control of the work in the confined space; (c) the written authority includes any control measures or precautions necessary for the safe entry and execution of the work; (d) they are advised of, understand and comply with the requirements of the written authority; and (e) a record of their presence in the confined space is maintained. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.2). The ATW, Confined Space Control Guide and Confined Space Sign On/Off Sheet and Atmospheric Testing / Monitoring Record, address this entry authorisation and recording requirement. |
| 10.31 | Before a person enters a confined space, it shall be ensured where it is technically feasible to do so, that — (a) the confined space contains an oxygen level within the safe oxygen range; (b) the atmospheric contaminants in the confined space are reduced to below the relevant exposure standards; (c) the concentration of flammable contaminant in the atmosphere of the confined space is below 5 percent of its LEL. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.6 – 7.13). Atmospheric Testing / Monitoring Record contains specific O₂ and contaminant parameters. |
| 10.32 | Where it is not technically feasible to ensure an oxygen level in the atmosphere greater than 19.5 percent, or the atmospheric contaminants cannot be reduced to below the relevant exposure standards, no persons shall enter the confined space unless they are equipped with suitable personal protective equipment including appropriate air supplied respiratory protective equipment. | |
| 10.33 | Except in case of emergency response, entry shall not be permitted where the concentration of flammable contaminants in the atmosphere is 5 percent of its LEL or greater or where the oxygen content of the atmosphere exceeds 23.5 percent. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.6 – 7.13). Atmospheric Testing / Monitoring Record contains specific O₂ and contaminant parameters. |
| 10.34 | Where persons have entered or are working in a confined space and the concentration of flammable contaminant in the atmosphere of the confined space has been found to be greater than 5 percent of its LEL and less than 10 percent of its LEL, the persons shall be removed unless continuous monitoring with a suitably calibrated combustible substance detector is used in the confined space at all times while persons are present. | |
| 10.35 | Where the concentration of flammable contaminant in the atmosphere of a confined space has been found to be 10 percent of its LEL or greater, no persons shall remain in the confined space. | |

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| 10.36 | It shall be ensured and acknowledged, in writing, that work in the confined space has been completed and that all persons involved in the work have left the space before authorization for the return to service of the confined space is made. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.16 – 7.19). The Confined Space Sign On/Off Sheet, ATW and Plant Isolation Control Guide are to be used to manage this aspect. |
| 10.41 | Where the risk assessment indicates a risk to health and safety, the control measures shall require a stand-by person or persons to be outside the confined space while it is occupied. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.20 – 7.23). |
| 10.46 | Prior to any person entering a confined space, and during any occupancy of the confined space, appropriate signs and protective barriers shall be erected to prevent entry of persons not involved in the work. | <ul style="list-style-type: none"> The ATW and Confined Space Control Guide description of the 'work area' shall manage this aspect. |
| 10.47 | Suitable equipment shall be provided including, where necessary, equipment for — <ul style="list-style-type: none"> (a) personal protection; (b) emergencies including rescue; (c) first aid; and (d) fire suppression. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.24 – 7.26). The ATW and Confined Space Control Guide require specific PPE and emergency contingency equipment and procedures to be planned for, identified and made available as deemed appropriate via a Rescue / Retrieval Plan. |
| 10.48 | The equipment shall be appropriate to the work to be carried out in the confined space, and maintained in a proper working condition. The personal protective equipment and emergency response equipment shall be selected and fitted to suit the individual. | <ul style="list-style-type: none"> |
| 11.1 | All persons with work activities related to a confined space shall be trained and assessed as competent to perform those activities. | <ul style="list-style-type: none"> SCL require all persons who enter a confined space to be periodically trained in accordance with their role relating to the space(s). Specific confined space training requirements are addressed within the Corporate Standard, Section 9. |
| 11.2 | Persons shall be reassessed at appropriate intervals to ensure their ongoing competency to perform activities relevant to their entry and work associated with confined spaces. | <ul style="list-style-type: none"> Personnel who undertake confined space training are to receive refresher training. |
| 11.3 | Training shall include at least the following: <ul style="list-style-type: none"> (a) The hazards of confined spaces. (b) Assessment procedures. (c) Control measures. (d) Emergency procedures. (e) The selection, use and maintenance of safety equipment. (f) Legislative requirements. | <ul style="list-style-type: none"> SCL shall ensure that internal training courses or external training undertaken, addresses these issues as a minimum. |

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| 11.6 | Persons shall be trained and assessed as competent to carry out their activities where they— (a) perform work in or on confined spaces; (b) perform confined space assessments; (c) issue written authorities; (d) design and lay out the workplace; (e) manage and/or are responsible for the direct control of the work in confined spaces; (f) maintain equipment used for ensuring the safety of persons in the confined space; (g) provide, fit, wear and maintain personal protective equipment; (h) are on stand-by; and (i) are involved in emergency response and first aid procedures. | <ul style="list-style-type: none"> Key SCL personnel required to enter, perform work or perform safety observer duties must all receive training. |
| 11.9 | The training which is provided to persons shall be recorded. | <ul style="list-style-type: none"> All training and refresher training shall be recorded. |
| 12.1 | Appropriate emergency response and first aid procedures and provisions shall be planned, established and rehearsed. | <ul style="list-style-type: none"> The ATW and Confined Space Control Guide requires specific PPE and emergency contingency equipment and procedures to be planned for, identified and made available as deemed appropriate. Rehearsal of site rescue and retrieval responses is also managed as per the Corporate Crisis Management Process and site specific Emergency Preparedness / Response drills. |
| 12.2 | In cases of emergency response, those persons involved in the response shall be made aware of the conditions in the confined space prior to any entry. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 7 (7.24 – 7.26). The ATW and Confined Space Control Guide requires specific PPE and emergency contingency equipment and procedures to be planned for, identified and made available as deemed appropriate. |
| 13.1 | The following documentation shall be kept and maintained for the time specified unless longer periods are necessary, as in the case of health surveillance being required: (a) Written authorities, for one month. (b) The current recorded risk assessment reports for work in a confined space, for five years from the time of their validity. (c) Training records, for the term of the employee's employment. | <ul style="list-style-type: none"> SCL shall maintain relevant confined space documentation as described for at least the prescribed periods. |
| 13.2 | All records shall be made available to the person and the regulatory authority inspectors on request. | <ul style="list-style-type: none"> Defined in Corporate Standard, Section 8. SCL shall maintain the records such that are easily available and organised for review by both internal and external reviewing parties/authorities. |

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| Item | Status | | | Action Required | Responsible Person | Completed (Insert Date & Initials) |
|--|------------------------------|-----------------------------|-----------------------------|-----------------|--------------------|---------------------------------------|
| Confined Space Planning | | | | | | |
| Contracts &/or purchases for the supply, design, or construction of plant containing confined spaces are to specify compliance requirements for AS/NZS 2865 & where applicable design out confined spaces completely. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Confined Space Classification & Categorisation | | | | | | |
| Classification / Entry Categorisation sheets completed for all confined spaces and suspected confined spaces, (as per the Confined Space Classification Procedure). | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Specific Confined Space Entry Requirements | | | | | | |
| As a minimum, the following documentation is able to be verified for confined space entry / work: <ul style="list-style-type: none"> • ATW Form (ATW), • Confined Space Control Guide, • Atmospheric Testing / Monitoring Record, • Confined Space Entry Record. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Where confined spaces are entered to perform an isolation operational step, confined space entry requirements can be verified as being fully detailed within the isolation guide forward and reverse operational steps. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Where identified within Control Guides or as deemed appropriate by ATW Coordinators, Rescue /Retrieval Plans can be verified as having been developed prior to entry. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Verification of ATWs, Control Guides, Atmospheric Testing / Monitoring Records and Entry Records highlight that relevant confined space controls are being documented, inclusive of safety observer use, description of confined space working area, withdrawal of written authority and sign on/off requirements. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Confined Space Records | | | | | | |
| An easily accessible confined space register exists with: <ul style="list-style-type: none"> • a listing of the site's confined spaces, • Classification / Entry Categorisation sheets, • Control Guides. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |

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| Training and Competency of Personnel | | | | | | |
| Training content for personnel required to enter confined spaces is reflective of their confined space role. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| High energy, high impact (HEHI) Confined Space training delivered to relevant personnel involved in planning & monitoring confined space entry. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Safe working in confined space training delivered to relevant personnel involved in accessing & working in confined spaces. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Atmospheric testing / monitoring training delivered to relevant personnel involved in specific atmospheric testing / monitoring roles in confined spaces. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Training details maintained as per corporate training and record keeping requirements. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Adequate Equipment | | | | | | |
| Confined space atmospheric monitoring equipment is sufficiently tested and calibrated and records are available to verify this ongoing maintenance. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |
| Confined space rescue / retrieval equipment is sufficiently tested and inspected and records are available to verify this ongoing maintenance. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> | | | |

Other / Further Details:

Signature of Person Conducting Inspection:
Copies Provided to:

(Print First & Last Names)