Procedure for Confined Space Entry

1 Purpose

The purpose of this procedure is to establish requirements and actions for the prevention of occupational illnesses, injuries and fatalities associated with persons entering and/or working in a confined space.

2 Scope

This procedure is applicable to every Business Unit of Ok Tedi Mining Limited (OTML) and is to be followed by all employees, contractors, subcontractors and visitors on site. Authorised Recipient in Charge to ensure that these safe access conditions are maintained.

3 Accountabilities

Authorised Issuing Operator	**Duties of Authorised Issuing Operator** The duties of the Authorised Issuing Operator shall be to ensure the establishment of safe access conditions, set specific safety requirements and issue Confined Space Entry Permits to any Authorised Recipient in Charge of a working party involved in confined space work activities. At their discretion the Authorised Issuing Operator may supervise the Authorised Recipient in Charge to ensure that these safe access conditions are maintained
Authorised Recipient in Charge	**Duties of Authorised Recipients in Charge** The duties of an Authorised Recipient in Charge shall include: ▪ Maintenance of all established safety precautions applied by the Authorised Issuing Operator for the duration of the Confined Space Permit. ▪ All personnel signing on and off the permit are duly authorised ▪ The periodical inspection of all equipment used by the working party under his control and the maintenance of that equipment in safe working order. ▪ The supervision of the working party under his control to ensure the application of safe working procedures by them.
Authorised Recipient	**Duties of an Authorised Recipient** Authorised Recipients are to ensure they do not enter any Confined Space where work is to be performed, without first being made aware of: ▪ The nature of the work ▪ Precautions undertaken ▪ Standby Personnel and Emergency Response Procedures ▪ Personal Protective Equipment to be worn prior to signing on the respective permit. Authorised Recipients are at all times when working within a Confined Space, to comply with the instructions given by the Authorised Recipient In Charge.

Authorised Testing Officer	**Duties of an Authorised Testing Officer** The duties of the Authorised Testing Officer shall include: ▪ Physical inspection of the Confined Space to ensure that no unsafe conditions exist and that any conditions with the potential to create hazardous atmosphere during occupancy is identified and eliminated. ▪ Conduct atmospheric gas testing of the confined space using recommended air quality monitoring equipment, and be capable of distinguishing the different types of hazardous atmospheric conditions in a confined space. ▪ Record the test results under "Atmospheric Test Requirements" on the entry permit form and sign off the section in presence of an "Authorised Issuing Operator". ▪ Perform regular calibration of the atmospheric air quality monitoring equipment to ensure that it is functional according to the manufacturer's specifications. ▪ Communicate the test results to "Authorised Issuing Operator" (AIO) and determine need and criteria for intermittent or continuous monitoring as required. ▪ Conduct intermittent and /or continuous air monitoring as required to monitor / detect any possible changes in the quality of air in the confined space.
Stand By Person	**Duties of an Stand-By person include:** ▪ To remain on the outside of and in close proximity to the entry of the Confined Space. ▪ To be positioned so as to be capable of being in continuous communication with and to observe those inside the Confined Space if practical. ▪ To control the entry of authorised persons only into the Confined Space. ▪ To log persons entering and leaving the Confined Space. ▪ Routinely communicate with the central communication point at the specified frequency defined on the permit. ▪ To monitor the area about the Confined Space to ensure that those inside the Confined Space are not placed at risk due to other work activity. ▪ To warn persons inside the Confined Space in case of imminent or immediate danger. ▪ To be familiar with and ensure that the Confined Space Risk Assessment conditions are complied with. ▪ Initiate the emergency procedures in the case of an emergency. ▪ To operate and monitor equipment used to ensure safety during entry and work in the confined space. ▪ Be in possession of a portable 2 way radio.

4 Training and Competency

To become an Authorised Issuing Operator, a person must:	▪ Successfully complete the OTML "Lock Out and Tag Out" course to "Authorised Person In Charge of Work" level. ▪ Successfully complete the OTML "Confined Space" course to "Authorised Recipient" level and demonstrate competency in the written and practical assessment conducted for that level. ▪ Successfully complete the OTML "Confined Space" course to "Authorised Recipient In Charge" level and demonstrate competency in the written and practical assessment conducted for that level. ▪ Successfully complete the OTML "Confined Space" course to "Authorised Issuing Operator" level and demonstrate competency in the written and practical assessments conducted for that level. ▪ Have a thorough working knowledge of the OTML plant, or that portion of the plant for which he is to be authorised. ▪ Satisfy the Department Manager, that they are capable of ensuring the safety of personnel and plant with the area of responsibility. ▪ Be trained and proficient in Basic First Aid
To become an Authorised Recipient, a person shall:	▪ Successfully complete the OTML "Lock Out and Tag Out" course to a minimum of "User" level. ▪ Successfully complete the OTML "Confined Space" course to "Authorised Recipient" level and demonstrate competency in the written and practical assessment conducted for that level.
To become an Authorised Recipient in Charge, a person shall:	▪ Successfully complete the OTML "Lock Out and Tag Out" course to "Authorised Person In Charge of Work" level. ▪ Successfully complete the OTML "Confined Space" course to "Authorised Recipient" level and demonstrate competency in the written and practical assessment conducted for that level. ▪ Successfully complete the OTML "Confined Space" course to "Authorised Recipient In Charge" level and demonstrate competency in the written and practical assessment conducted for that level. ▪ Have a thorough working knowledge of the OTML plant, or that portion of the plant for which he is to be authorised. ▪ Be trained and proficient in basic First Aid
Confined Space Stand-by person shall:	▪ Successfully complete the OTML "Lock Out and Tag Out" course to a minimum of "User" level. ▪ Successfully complete the OTML "Confined Space" course to "Authorised Recipient" level and demonstrate competency in the written and practical assessment conducted for that level. ▪ Hold a current first aid certificate

To become an Authorised Testing Officer, a person shall:	▪ Successfully complete the OTML "Lock Out Tag Out" course to Authorised Person In- Charge of Work" level, ▪ Successfully complete the OTML "Confine Space" course to "Authorised Recipient In-Charge" level and demonstrate competency in the written and practical assessment conducted for that level. ▪ Have a thorough working knowledge of the OTML plant, or that portion of the plant for which he is to be authorised.

5 Requirements

5.1 Fitness of personnel

All persons working in a confined space must be medically fit, with no health or physical limitations which would cause problems carrying out the work required.

5.2 Permit required

Work in/on confined spaces shall conform to applicable requirements of this procedure. A Confined Space Entry Permit must be completed and approved prior to starting work.

5.3 Hot Work

Where hot work is required a Hot Work Permit must be completed and approved

5.4 Entry & Exit

Wherever work is to be performed in or on a confined space, provisions shall be made to permit easy access or egress and the worker shall wear equipment that will protect them from any anticipated hazard.

5.5 Stand-by person

While work is being performed inside a confined space, at least one stand-by competent person shall be immediately available to secure or render assistance in the event of an emergency. The stand-by person shall not enter the confined space except in an emergency and only with the proper protective equipment and a replacement stand-by person present.

5.6 Ventilation and PPE

All ventilation and protective equipment required by this procedure shall be provided by OTML or the Contractor and shall be regularly inspected and maintained in proper working condition.

5.7 Rescue

If a person is overcome in a confined space, no personnel shall attempt rescue without wearing the correct personal protective equipment including rescue equipment. A person overcome in a confined space, shall be moved to fresh air immediately.

5.8 Warning Notices

A suitable warning notice shall be posted in a conspicuous place in the area of confined spaces which are used for the storage of hazardous substances.

5.9 Training

Every employee who may be required to enter a confined space, perform standby duties, provide emergency service, give adult first aid or act in rescue shall be instructed and trained thoroughly in their particular responsibilities.

5.10 Emergency Response Procedures

Emergency response procedures shall be formulated, discussed and developed as part of work instructions prior to commencement of the confined space work activity. Emergency procedures shall be signposted along with appropriate emergency response equipment, and placed within the vicinity of the entrance to the confined space where it is easily accessible by the stand-by person.

5.11 Work Assessment

Work performed in a confined space shall be done only under the authorisation of the Authorised Issuing Officer who has made an assessment which takes into account:

The work required to be done, including whether it is necessary to enter the confined space.

- The methods by which the work can be done.
- Safe Work Instructions/Procedures.
- The hazards involved and associated risks.
- The actual method of work and plant proposed to be used.
- Emergency response procedures.

The assessment shall be reviewed with the Authorised Recipient in Charge prior to the issue of any confined space entry permit.

5.12 Equipment and Tools

Before the start of a job, the Authorised Recipient in Charge shall make certain that necessary equipment and tools are on hand, of the proper type, clean and in good condition, and that employees are instructed in their correct use. Gas equipment shall be checked for leaks and if found to be defective shall be repaired or replaced prior to commencing work.

5.13 Isolation

Before entry is permitted, the Authorised Recipient in Charge will obtain the Confined Space Entry Permit and ensure that all necessary services, material accesses and physical agents have been de-activated, rendered safe and isolated in accordance with the OTML Lockout & Tag out Regulations and/or OTML Access Permit System Procedures as applicable.

5.14 Ventilation

Before entry is permitted, the Authorised Recipient in Charge shall make certain that necessary ventilation equipment is in place and functioning properly and that clean air in sufficient quantity is being supplied to the confined space.

5.15 PPE

Before entry is permitted, the Authorised Recipient in Charge shall make certain that necessary personal protective equipment has been issued and that employees have been trained in its correct use.

5.16 Warning of Potential Hazards

All employees working in a confined space shall be advised by the Authorised Recipient in Charge of hazards they may encounter before entering the confined space.

5.17 Permit Placed at Entrance

The confined space permit shall be placed in a prominent position at the entrance to the confined space.

6 Preparation of Confined Spaces

6.1 Isolation

All isolations shall be done in accordance with the OTML Lockout & Tag out Regulations or OTML Access Permit system Procedures as applicable.

Before any confined space is entered, where practical it shall be prepared as follows;

- All pipelines, valves, fittings and connections conveying harmful substances to a confined space shall be disconnected or provided with a solid blank of adequate strength and compatible material before entry into the confined space shall be permitted.
- Pipelines eg. water lines not contaminated with harmful substances shall be valved off, tagged and locked. Steam lines shall be double valved with a bleeder between the two valves locked open, tagged and locked.
- If a vessel is fitted with power-driven internal equipment, where it can present a danger to a person, the power source shall be disconnected, tagged out and the disconnection shall be tested before entry is permitted. The point of disconnection must be available for inspection.
- A test shall be carried out by the Authorised Issuing Operator by actuating the starting button or other acceptable methods which will effectively prove the disconnection.

Where any work is to be performed within 10 metres of a radiation source the Radiation Safety Operator must be contacted to remove or lock out the source as required.

6.2 Monitoring Prior to Entry

Before a person enters a confined space, a Testing Officer shall test the atmosphere to ensure that where practicable:

- The concentration of flammable contaminant in the atmosphere of the confined space is below 5% of the LEL,
- The confined space contains a safe oxygen level (19.5 - 23.5%) content by volume,
- The confined space is free from extremes of temperature,
- The presence of the following atmospheric contaminants is below the exposure standards:
  - Hydrogen Sulphide gas 10 ppm (TWA)

- Carbon Disulphide gas 10 ppm (TWA)
- Carbon Monoxide gas 25 ppm (TWA)

Where the concentration of flammable contaminant in the atmosphere of a confined space has been found to be greater than 5% of its LEL and less than 10% of its LEL, persons in the confined space shall be removed unless a continuous-monitoring suitably calibrated gas detector is used in the confined space at all times while persons are present.

Where the concentration of flammable contaminant in the atmosphere of a confined space has been found to be 10% or greater of the LEL; persons in the confined space shall be removed.

Tests to be conducted by means of devices approved to Australian Standards.

Where the Testing Officer is required to enter a confined space to do testing they shall wear air supplied breathing equipment, safety harness and lifeline. As much as possible, tests shall be conducted from outside the confined space.

6.3 Calibration of Equipment

The Testing Officer shall ensure the monitoring equipment has been calibrated in accordance with the manufacturer instructions prior to and immediately after conducting any monitoring.

6.4 Purging and Ventilation

If the test indicates that the atmospheric conditions are hazardous:

- The confined space shall be purged by steaming, washing, venting or otherwise be cleaned.
- After purging the confined space, it shall be tested and if necessary re-purged and retested.
- If the atmospheric conditions are still hazardous and the confined space cannot be purged free of non-flammable contaminant, the work shall only be performed utilising the appropriate protective equipment.
- The use of pure oxygen or gas mixtures with oxygen in a concentration greater than 21% by volume to purge or ventilate is prohibited because of the fire hazard such use creates.

6.5 Cleaning

The confined space shall be cleaned to remove any residue following procedures as established for that confined space.

All material feed systems leading to the confined space shall be thoroughly cleaned to ensure that material/substance cannot fall into the confined space.

Where hot work is to be performed the surface shall be cleaned to remove contamination including paint, rubber lining and metal coatings and sludge.

7 Procedure for the Issue of Permits

7.1 Authorised Recipient in Charge

Confined Space Permits shall only be issued to an Authorised Recipient in Charge.

7.2 Cross-Endorsed Confined Space Permits

Confined Space Permits for a particular apparatus may be issued to several work groups, provided they are issued from the one point and that the Confined Space Permits are suitably cross-endorsed.

7.3 End of Shift

Confined Space Permits shall be cancelled at the end of the shift. If work is to be continued, a new Confined Space Permit shall be issued to the new working party.

7.4 Precautions Explained

Before a Confined Space Permit is issued, the Authorised Issuing Operator shall point out to the Authorised Recipient In Charge, the confined space, precautions taken and the location of the entrance.

7.5 Authorised Recipient In Charge

Each Confined Space Permit shall be received by one Authorised Recipient In Charge on behalf of the working party. The Authorised Recipient In Charge must satisfy their self, that all members of the working party, are duly authorised, they understand the precautions taken and any other points of danger, before they sign on the confined space permit.

7.6 Permit Cannot be Issued to Self

No person shall issue a Confined Space Permit for which they are the Authorised Recipient In Charge.

The Confined Space Permit shall be issued on the job site.

7.7 Signing On

When work is to proceed, all members of the working party shall sign ‘on’ to the permit in the presence of the Authorised Recipient In Charge.

7.8 Minimum of a Two-Man Work Party

Confined Space Permits require a minimum of a two man work party. It is the responsibility of the Authorised Recipient In Charge to ensure they have the correct number of authorised personnel in the work party to complete the work safely.

8 Alteration to Working Party

8.1 New person joining work team

In the case of additional persons being introduced to work under a Permit previously issued, each new person shall not start work until they have seen the Authorised Recipient in Charge of the Confined Space Permit, who will brief them on the requirements of the job. They shall then sign “on” to the Confined Space Permit in the presence of the Authorised Recipient in Charge.

8.2 Person leaving the work team

If members of the working party are released before the cancellation of the Permit they shall sign “off” the Confined Space Permit in the presence of the Authorised Recipient in Charge.

Should a member of the working party leave the work area for any period during the shift they must inform the Authorised Recipient in Charge. Upon their return they shall refer to the Authorised Recipient in Charge of the Confined Space Permit, and if necessary be advised of any change to conditions during his absence.

8.3 Change in Authorised Recipient in Charge

Should a change of Authorised Recipient in Charge become necessary, the Permit shall be cancelled and another issued to the new Authorised Recipient in Charge.

9 Cancellation of Permits

9.1 Authorised Recipient in Charge

When work on the confined space is complete, the Authorised Recipient in Charge shall:

- Make sure all tools and working equipment have been removed, including notices or barriers which have been applied by persons under his control, under the terms of the Permit.
- Obtain cancellation signatures of every person who has signed on the Permit. Such signatures shall be witnessed in their presence.
- Sign in Section 11 of the permit advising that all persons have left the confined space and that further entry will not be permitted unless a new permit is issued.
- If the permit is endorsed in Section 12 of the permit “The work as defined in Section 1 of the Confined Space Permit has been completed”, then an inspection of the confined space shall be undertaken with the Authorised Issuing Operator prior to cancelling the permit, to ensure such space is fit to be returned to service.
- In the presence of the Authorised Issuing Operator, apply their signature, together with the time and date of cancellation of the Confined Space Permit in Section 11 of the permit form.

9.2 Authorised Issuing Operator

When receiving notice of intention to cancel a Permit, the Authorised Issuing Operator shall:

- Check that the confined space is or is not available for service.

- If the permit is endorsed in Section 12 of the permit "The work as defined in Section 1 of the permit has been completed", then an inspection of the confined space shall be undertaken with the Authorised Recipient In Charge prior to cancelling the permit, to ensure such space is fit to be returned to service.
- Note any special conditions as given by the Authorised Recipient In Charge in respect to the Confined Space.
- Accept the cancelled permit and record the cancellation by applying his signature, time and date of permit.

9.3 "Authorised Recipient In Charge" not available.

Should the Authorised Recipient In Charge not be available, and the Confined Space Permit must be cancelled, and all steps in attempting to locate the Authorised Recipient In Charge have been taken, then the following steps apply:

1. Department Manager is informed

The Authorised Issuing Operator will take control of the permit, and inform the Department Manager or his Nominee, of the circumstances and need to cancel the permit.

2. Equipment returned to a safe condition

When permission is obtained from the Department Manager, or his nominee that the permit may be cancelled, the Authorised Issuing Operator will immediately cancel the permit. In addition, the Authorised Issuing Operator will enlist the aid of the most senior Authorised Recipient on the permit, and the Authorised Recipient In Charge's Supervisor, to ensure the equipment is returned in a safe condition, or is available for service as required in section "12" of the Confined Space Permit. The names of the enlisted Authorised Recipient and Supervisor will also be entered in section "12" of the permit, along with the reason for the permit cancellation.

3. Incident Report Completed

Immediately the Confined Space Permit is cancelled, an Incident Report is to be completed with the cancelled permit attached, and copies forwarded to the Safety Department, the Authorised Recipient In Charge's department head and the registered Mine Manager for an immediate investigation.

4. Authorised Recipient In Charge Informed

The Authorised Issuing Operator and the Authorised Recipient In Charge's Supervisor have the responsibility to inform the Authorised Recipient In Charge at the earliest possible time, and by any available means, that the Confined Space Permit has been cancelled, and that they have no access to the confined space and shall treat such equipment as being returned to service. They must obtain written confirmation from them that he understands the cancellation and withdrawal of access.

9.4 "Authorised Recipient" not available.

Should an Authorised Recipient not be available, and the Confined Space Permit must be cancelled, and all steps in attempting to locate the Authorised Recipient have been taken, then the following steps apply:

1. Department Manager is Informed

The Authorised Recipient In Charge will take control of the permit, and inform the registered Department Manager or their Nominee, of the circumstances and need to cancel the permit.

2. Equipment returned to a safe condition

When permission is obtained from the Department Manager, or their Nominee that the permit may be cancelled, the Authorised Recipient In Charge will immediately cancel the permit. In addition, the Authorised Recipient In Charge will enlist the aid of the most senior Authorised Recipient on the permit, and the Authorised Recipient's Supervisor, to ensure the equipment is returned in a safe condition, or is available for service as required in section "12" of the Confined Space Permit. The names of the enlisted Authorised Recipient and Supervisor will also be entered in section "12" of the permit, along with the reason for the permit cancellation.

3. Incident Report Completed

Immediately the Confined Space Permit is cancelled, an Incident Report is to be completed with the cancelled permit attached, and copies forwarded to the Safety Department, the Authorised Recipient's department head and the Department Manager for an immediate investigation.

4. Authorised Recipient In Charge

The Authorised Recipient In Charge and the Authorised Recipient's Supervisor have the responsibility to inform the Authorised Recipient In Charge at the earliest possible time, and by any available means, that the Confined Space Permit has been cancelled, and that they have no access to the confined space and shall treat such equipment as being returned to service. They must obtain written confirmation from them, that they understand the cancellation and withdrawal of access.

10 Special Precautions

10.1 Smoking

Smoking in or around confined spaces is prohibited. The use of Butane lighters is also prohibited.

10.2 Portable Electric Equipment

Portable electric devices used in or on confined spaces where explosive gases or vapours may be present shall be intrinsically safe and comply with the requirements of AS 2431 "Electrical equipment for explosive atmospheres". They shall be protected by an approved residual current device or fed from an isolating transformer at extra low voltage i.e.: not exceeding 32 volts A.C.

10.3 Ignition Sources

Open flames, welding equipment, general purpose type electrical equipment, light sources other than explosive-proof equipment, or spark, or flame producing agents shall not be used in or on any confined space until it has been demonstrated by atmospheric test that a flammable vapour does not exist. Continuous monitoring is required if fuel gas is used and the equipment must be removed from the confined space when not in use.

10.4 Safety Harness and Life Lines

Whenever a worker is required to enter a confined space, safety harness with life line attached and secured outside of the confined space shall be used.

The use of a life-line shall not be required in the following cases:

1. Where the concentration of structural members, piping, equipment and other obstructions to free travel within the confined space, is such as to make a life line useless for rescue purposes.
2. Where the number of people within the confined space is such that the use of life lines is likely to result in line entanglement which would impede rescue.
3. Where the area of the confined space is so great as to make the use of a life line obviously impracticable.
4. Where it has been established by tests that the atmosphere of the confined space is free from contamination and will remain so for as long as work therein is to be performed.

10.5 Fire Extinguishing Equipment

Sufficient and proper fire extinguishing equipment to cope with the hazards which may be encountered shall be provided and maintained close at hand.

10.6 Fume Extraction/Positive Ventilation

Where fumes or vapours are generated in the confined space these shall be removed using positive ventilation and local exhaust ventilation. In large spaces the use of ventilating fans may be adequate. The confined space may have to be modified temporarily to achieve satisfactory venting.

10.7 Welding & Cutting Equipment

Gas bottles must never be taken into a confined space. Gas torches and welders taken in only as required then removed.

Flash back arrestors shall be fitted to all gas bottles.

A Hot Work Clearance Certificate must be issued prior to any hot work being carried out.

Gas equipment must be checked for leaks prior to start of the job and defects rectified or replace equipment.

10.8 Electric Welding

Where electric welding is required all precautions shall be taken in accordance with AS 1674 “Safety in welding and allied processes”, to prevent the likelihood of a person being electrocuted.

10.9 Personal Protective Equipment

Suitable personal protective equipment and protective clothing conforming to Australian Standard shall be provided whenever the risk of injury or illness in a confined space requires their use.

10.10 Respiratory Protection

Where a test of the atmosphere in the confined space shows a hazard exists, or there is reason to believe such a condition might occur while the confined space is occupied, all persons entering the space shall be equipped with suitable protective breathing equipment.

The type of breathing equipment shall be identified on the Permit by the Authorised Issuing Operator and shall be compatible with the requirements of the work to be performed by the person entering the confined space.

The protective breathing equipment shall be of a type which will provide respiratory protection without creating a hazard in itself.

Supplied air to the worker shall be from the uncontaminated source.

10.11 Hearing Protection

Noise may reverberate within a confined space and hearing protection requirements may be greater than otherwise needed.

11 Definitions

Authorised Issuing Operator	An Authorised Issuing Operator is a competent employee authorised in writing with the authority of an Authorised Recipient and additional authority to: a) Issue and cancel Confined Space Permit's b) Carry out all tasks associated with Confined Space Entry.
Authorised Recipient In Charge	An Authorised Recipient In Charge is a competent person, authorised with the authority to receive Confined Space Permits on behalf of a work party.
Authorised Recipient	A person who has been instructed and assessed as competent on the procedures, hazards associated with confined space work activities and basic emergency response procedures.
Competent Person	A person who has, through a combination of training, education and experience, acquired knowledge and skills enabling that person to perform correctly, a specified task. They shall hold a current OTML permit validating the competency

Confined Space	Confined Space – AS2865 – 2009 An enclosed or partially enclosed space that is not intended or designed primarily for human occupancy, within which there is a risk of one or more of the following. (a) An oxygen concentration outside safe oxygen range (b) A concentration of airborne contaminant that may cause impairment, loss of consciousness or asphyxiation. (c) A concentration of flammable airborne contaminant that may cause injury from fire or explosion. (d) Engulfment in a stored free flowing solid or a rising liquid that may cause suffocation or drowning.
Contaminant	Any dust, fume, mist, vapour, gas or other substance in liquid or solid form, the presence of which can be harmful to health and safety.
Explosive (flammable) Range	The range of flammable gas or vapour (percent by volume) in air in which an explosion can occur upon ignition. Expressed by lower explosive limit (LEL) and upper explosive limit (UEL).
Exposure Standards	An airborne concentration of a particular substance in the worker's breathing zone, exposure to which, according to current knowledge, should not cause adverse health effect nor cause undue discomfort to the average worker.
Hot Work	Welding, thermal or oxygen cutting, heating, and other fire producing or spark-producing operations including grinding that may increase the risk of fire or explosion.
Lower Explosive Limit (LEL)	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.
Permit - Confined Space	A Confined Space Permit is an authority, issued by an Authorised Issuing Officer to only an Authorised Recipient In Charge, to allow access to work in a confined space which has been rendered free from danger by isolating, discharging and, where applicable, earthing.
Purging	The method by which contaminants are displaced from a confined space by a neutral substance.
Stand-by Person	A competent and authorised 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 practicable, to observe those inside. In addition, where

	necessary and safe to do so, initiate rescue procedures, apply adult first aid and operate and monitor equipment used to ensure safety during entry and work in the confined space.
Sufficient Oxygen	The minimum oxygen content in the air should be 19.5% by volume under normal atmospheric pressure.
Testing Officer	A person competent and qualified in the use of atmospheric testing equipment, capable of distinguishing the different types of hazardous atmospheric conditions in a confined space. These people are nominated by the head of departments. They shall hold a current OTML permit validating the competency
Upper Explosive Limit (UEL)	In relation to a flammable contaminant, the concentration of the contaminant in air above which the propagation of a flame does not occur on contact with an ignition source.
Work Location	The work area defined on the Confined Space Permit.
Work Party	Work Party includes all personnel who are working under the terms of the Confined Space Permit. The minimum number of personnel in a work party is two, one of whom shall be an Authorised Recipient In Charge.

12 Approval

Approver	Position	Signed	Date
Garry Lee	Exec Manager OHS		04/03/2013
Nigel Parker	Managing Director & CEO		04/03/2013
Jeff Innes	GM Mining		04/03/2013
Noel Foley	GM Processing		04/03/2013