



Industrial Maintenance Roundtable NSW
Common Interest Workgroup (CIWG) Report
from Meeting on September 27th 2007

Safety Management for Contractors CIWG



This document is compiled from discussions during the NSW IMRt Common Interest Workgroup (CIWG) on Safety Management for Contractors.

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Safety Management for Contractors

Attendance List

Attendee	Organisation
Warren Steele	ANSTO
John Craig	ANSTO
Peter McManus	BOC
Juliana Jamal	BOC
Hamilton Wearing	BOC
John Morgan	CSR Bradford Insulation
Mathew Edsall	CSR Bradford Insulation
Ian O'Brien	Eraring Energy
Howard Witt	Ex ANSTO
Wal Firth	Hunter Water
Eddy Valentinis	Hunter Water
Terry Hughes	Hunter Water
Mark Cantor	Orica
Tonia Weaver	Orica
Jillian Searant	Orica
Peter Todd	SIRF Roundtables
Cecilia Preston	Sydney Water
Felicity Gadd	Sydney Water

Introduction

The NSW Industrial Maintenance Roundtable (IMRt) held a Common Interest Work Group (CIWG) meeting on Safety Management for Contractors. This meeting was held on the 27th September 2007 at the Pennant Hills Bowling Club. The meeting was attended by 18 people from 8 different organisations. The attendee group included safety personnel, training personnel, Contract managers/ supervisors, and project managers. The information and ideas included in the document came directly from the discussions that took place at the meeting.

Topics discussed at the meeting included Pre-Qualification of Contractors, Risk Assessment, Inductions, Lone Workers, Motivating Compliance, Swipe Cards, Information Security, Confined Space, JSA's & PTW's, Auditing, Safety Culture and Drug & Alcohol. The NSW IMRt will hold one other CIWG meeting related to contractors in 2007 and the topic will be Best Practice and Innovative Approaches for Contractor Management.

The IMRt is a maintenance networking organisation coordinated by SIRF Roundtables (SIRF Rt) www.sirfrt.com.au. This report gives feedback to meeting attendees and other interested parties. The meeting included the development of a comparison matrix, which is shown on the following page. This matrix was filled out by attendee organisations to enable comparisons to be made between organisations on the issues discussed.

Safety for Contractors Comparison Matrix

Contractor Safety	Hunter Water	Orica	Eraring Energy	CSR Bradford Insulation	ANSTO	Sydney Water	BOC
<p>What is your organisations system for induction of contractors?</p> <p>- What training is required?</p> <p>- What information is recorded?</p> <p>- What card/ passport system is used?</p>	<p>On Need Basis</p> <p>One HR Induction, general induction and site specific</p> <p>Info- Name & company with Contract Manager- Paper System</p> <p>Induction Card and Handbook ☺</p>	<p>Site induction - including DVD- 1.5hrs delivered by Managers</p> <p>Info- Name, company, medical, date, Contractor SHE charter</p> <p>Database linked to Access Card/ System-Swipe Card ☺</p>	<p>1- Mandatory Green Card</p> <p>2- Site Inductions (Done by contracted companies)</p> <p>3- Job specific. Done by company</p>	<p>45 minute induction, 15 min DVD, Booklet & Questionnaire</p> <p>Info- Name, Company & Position, Insurance details (up to date)</p> <p>Passport System there but not used</p> <p>Currently check contractor tickets & permits but do not record</p>	<p>Everyone entering Site</p> <p>DVD with Q&A (General Ind)</p> <p>Additional DVD + Q&A for specific areas</p> <p>Access Control</p> <p>Safety Div. mentor on Database</p> <p>Contractor Safety Handbook</p> <p>Card Issued > Security Badge (Photo) issued ☺</p>	<p>Computerized Induction site specific</p> <p>SWC General Induction</p> <p>Asset Induction</p> <p>Contractor Induction DVD's</p> <p>Manned/Unmanned Induction</p> <p>Site HIDRA's</p> <p>Access Control Database</p> <p>Security Passes - ERM Process</p> <p>ID Cards/ Passport ☺</p>	<p>Induction Training - 6 Modules</p> <p>General + 5 site specific</p> <p>Web based Q&A</p> <p>Approx 1hr duration + site tour</p> <p>Info- Personal details, Qualifications, employer</p> <p>Photo ID card (not Access Control) ☺</p>
<p>What Work Permit, Hazard Analysis etc. systems are used to control on the job risks?</p>	<p>Self Assessment ☺</p>	<p>JSERA Job Safety Environment Risk Analysis and "Take 5" process and</p> <p>Clearance to Work Permits</p> <p>Including Specific Permits for each of the following</p> <ul style="list-style-type: none"> - Cold Work, Hot Work, Confined Space, Work at Heights or Roof Access, and Break in ☺ 	<p>Isolations performed by Eraring Trained Staff Only</p> <ul style="list-style-type: none"> - Electronic software to manage Isolation called 'Nisoit' - Ambient/Plant Risks identified & sorted by plant area - JSA/ Toolbox Talk/ Stop & Think 	<p>No permit to work</p> <p>CS, HW, WAH permits</p> <p>Excavation and High Voltage permits</p> <p>JSA's</p>	<p>SWMS</p> <p>Safe Work Permits</p> <p>Excavations, C.S., H.W. Planning Meetings ☺</p>	<p>Manned/Unmanned PTWC</p> <p>Self Authorised PTNC/ Job Cards</p> <p>Project Safety Plans</p> <p>Std Operation Procedures</p> <p>SWMS - JA's ☺</p>	<p>PTW- Include general, CSE, Hot Work, Lifting, Excavations, electrical access, Lone worker</p> <p>Requestor provide JSA > issuer + acceptor identify scope + hazards > implement controls > verify isolations, Documents etc > execute > review during execution > close out & verify ☺</p>
<p>What pre-assessment system is used for new contractors?</p>	<p>Insurances, Safety Records/ Safety systems, Financial Checks ☺</p>	<p>Contract control Policies</p> <p>Public liability, SHE Charter</p> <p>Greencard # recorded</p> <p>Passport is spreadsheet- being developed ☺</p>	<p>- Prior Safety Performance</p> <p>LTI/MTI's</p> <p>- Safety polices/ programmes involved with</p> <p>- References</p>	<p>Check workers comp (ins)</p> <p>Check public Liability (ins)</p> <p>Check contractor safety record & system</p>	<p>Tender Process for Company Compliance</p> <p>Included in SWMS</p> <p>Should be on Control database ☺</p>	<p>CSMS</p> <p>Contractor Section Tender evaluation</p> <p>Audits, Self Assessment</p> <p>Inspections</p> <p>Accredited list of contractors</p> <p>Risk Factor, HSMS Review ☺</p>	<p>Pre-Qualification (WIP Trial Phase)</p> <p>Check: Contractor details, insurance, safety history, safety Mgt. System, Training records, safety statistics</p> <p>Classified as Safe/ Not Safe ☺</p>
<p>What on the job Audit Systems are used for contractors?</p>	<p>OHS monthly reports from Contractors</p> <p>Random on-site audits ☺</p>	<p>Unsafe Act Prevention: UAP</p> <p>Safety Audits</p> <p>Informal audits</p> <p>Supervision ☺</p>	<p>On Job Safety Officer/ Mentor X2 during shutdowns. One of these is a contracted persons</p> <ul style="list-style-type: none"> - Weekly Safety Inspection - Behaviour based Safety Systems - Making contractor 'Present' every 6 months on safety performance and direction 	<p>Safe Act Audits</p> <p>Spot Audits</p>	<p>Audits???</p> <p>Very Informal</p> <p>Tight Supervisions ☺</p>	<p>Inspectors via all levels</p> <p>Management</p> <p>Contractor stats monthly/ Weekly</p> <p>Incident reporting Systems</p> <p>Dashboard</p> <p>Audits ☺</p>	<p>Mid stream check of PTW (Hazards & Controls)</p> <p>Weekly safety inspection (inc. PTW + Area inspections)</p> <p>Internal O&E Audits (Annually) ☺</p>
<p>How does your organisation promote its safety culture?</p>	<p>LTI rewards</p> <p>Innovation Awards (Safety) ☺</p>	<p>Site induction</p> <p>Stop & Think safety day 1/yr celebration & Rewards</p> <p>Newsletter, recognition</p> <p>OSH&E Committee reward program connected to Bonus System</p> <p>Significant level of ongoing communication and commitment from senior management ☺</p>	<p>Management involved in Safety Programs/ Sponsor</p> <ul style="list-style-type: none"> - Behaviour Based Safety Program - No blame culture. Disclosure, Incident reporting - Donations to charity based on Safety Performance - Safety raised as 1st issue @ all meetings - Raffles/Team BBQ's 	<p>Safety Recognition Scheme</p> <p>K-Mart \$20 per month without medical treatment</p>	<p>Observations/ Safety Events</p> <p>LTI records (Staff) ☺</p>	<p>Safety Program/ Safety Awards</p> <p>Charity</p> <p>Rewards/ Recognition, BSM</p> <p>Innovation Awards ☺</p>	<p>Daily Safety Meetings (Visual Leadership)</p> <p>"Scratchie" recognition scheme</p> <p>Quarterly Directors Safety Awards ☺</p>
<p>What are your biggest issues with contractor safety?</p>	<p>Compliance Monitoring ☺</p>	<p>Compliance with procedure</p> <p>Communication</p> <p>As a hazardous facility our standard is pretty high. Lifting contractors standards that have never been exposed to process industry is difficult. ☺</p>	<p>No supervisors Vs Contractors</p> <p>Changing safety culture</p>	<p>Picking the right contractor</p> <p>Supervision (Time)</p> <p>Providing PPE</p> <p>Stopping & Thinking/ SWMS (Relevant)</p>	<p>Reporting ☺</p>	<p>Supervision (Manning)</p> <p>Access Control</p> <p>Control of Subcontractors ☺</p>	

Safety Management for Contractors

Pre-Qualifying Contractors

Orica - Contractors are required to provide a certificate of currency of insurance and a safety policy. A data base is kept of contractors and it includes records of their qualifications and cited certificates. This data base is comprehensively checked rather than a spot audit. The Orica officer responsible for contractors has training in this role and is required to ensure compliance.

The Orica site contains stocks of Ammonia Nitrate and police clearances are required for contractors. Each person on site (including contractors) can be tracked by swipe cards and can be locked out of any area. This applies to all areas of the site with higher security for high hazard areas.

Contractors are supervised at all times. Supervisors are retrained every 2 years, they initially operate under guidance (the first 10 certificates they issue).

BOC – The issue of controlling contractors from small organisations was discussed. These organisations tend to have less well developed safety systems. Contractors from small organisations tend to rely on BOC's systems and when asked about safety systems they generally say "we use your stuff". This can cause challenges.

BOC pre-qualify contractors to ensure they have no Work Cover notices and have current insurance, etc. There are culture problems with some contractors. For example guys digging trenches they may roll up sleeves or take off shirts as this is the way they normally work. They need full supervision to ensure they remain compliant with site requirements.

BOC Contractor Charter – "Our Commitment to you – Your Responsibility".

Sydney Water - have approved contractors who have compliant Safety Management Systems. They must meet Sydney Water's standards and follow a suitable SWMS (Safe Work Method Statement).

ANSTO - Contractor safety appraisal starts at the tender process. Contractors need to get ticks in various boxes – trade certificates etc. The Federal Police must give approval for each person to gain access to site.

Shutdowns

Orica - have 200 or more contractors on site at the time of a plant shutdown. 2 weeks safety training is normally required but can relax the rules for shutdown as the plant is less hazardous. At Shutdown the Plant formally changes from an Operating Plant to a Construction Site. An example of handling exception was given eg. if a specialist consultant engineer was to come to site for a specific issue a brief site introduction would be sufficient. Everybody including contractors and employees must do 2 hr induction refresher each year. A recent major shutdown involving 1300 contractors there were only 2 reportable injuries and one of these was that a canteen lady had cut her hand on a beetroot can.

For Orica, taking equipment sent off site may have a requirement to decontaminate. There must be a decontamination certificate with each vessel as it would be dangerous if someone were to use an oxy torch on a vessel contaminated with ammonium nitrate.

ANSTO – has a similar decontamination requirement and a Radiological Clearance is required for items coming out of specified areas.

Risk Assessment

BOC - noted that the site cleaners were the highest risk staff in some of the risk assessment work they have done. This is because they often working alone after hours.

ANSTO - noted that the greatest number of injuries that people sustain occurred on the soccer field.

Sydney Water - have over 1,000 unmanned sites. Maximo the maintenance management system contains a site risk assessment for work performed. Before any contractor goes to a site he/she must read this site risk assessment.

Induction

Eraring Energy - have out sourced safety induction training and 3 companies can provide the 3 hr course. In addition, there are 2 induction videos, a 5 minute general induction and a 1 hr video discussing in detail site hazards. They do not do a 100% check on contractor certificates rather they rely on spot audits.

Hunter Water - A general induction is provided and contract management is not site wide. A review showed that only 1 out of 30 contractors had received the general induction. They only give a 1 hr general induction course to electrical and mechanical staff. There is also an extra 1 hr electrical safety induction. They accepted that their system needs improvement.

Orica - A site induction is held on Tuesday mornings at 8am. They have a DVD filmed on the site that is used with the inductions. Previously they had outsourced training but now consider this gives the wrong message – “induction is not important enough to use our people”. The induction training goes for 1.5 hr. Managers are on a roster to talk at all induction safety induction training to reinforce the importance of safety and management commitment. Participants are required to fill in answer Forms. They have two forms with similar questions in different order (white & yellow) so that your neighbours do not have the same form (to minimise copying). Commonly English is not the first language of contractors so induction classes are limited to 30 so trainer can check participants really understood the information. Orica also have a special induction for truck drivers due to the specific risks and requirements for the site.

They can de-activate the swipe card used by the Orica site if a contractor does not take safety seriously. Contractors must have re-induction following a period of 3 months off site. If there was to be an incident, they need to be able to show that all the appropriate training had been given. It is not adequate to rely on the requirements included in the contract with the contractor. They believe they need to instil their culture directly to the people doing the work on their site.

ANSTO - The Federal Police must give approval for each person to gain access to site. Contractors go to Security with all induction certificates signed and if they also have security clearance they issue a photo ID pass. All personnel must use a swipe card to gain access to the site and to any building. Access is restricted to certain areas.

There is a 15 minute general induction video with question sheet. There is also a radiation safety video and another course for contractors before they can work in radiation areas. All work is to be done according to a work permit system and SWMS (Safe Work Method Statements) must be prepared and reviewed by ANSTO staff. There is also a 5 day pass but personnel on these passes are subject to line of site supervision.

ANSTO has a simple C1 induction/safety qualification/supervision for a low hazard contractor such as a photo copier service technician. A C2 induction/safety qualification/supervision is required for construction workers.

Eraring – have a 5 tiered induction system.

- 1 Visitor – fully escorted
- 2 Not fully escorted but they know where they are at all times
- 3 Truck on site
- 4 Contract maintenance staff
- 5 Coal Haul

CSR – have a 40 min induction training system.

Sydney Water - The standard induction applies to manned sites. Contractor must read and sign off on the site hazard ID. Using the passport system Sydney Water know the location of all contractors. It is acceptable for a lone worker to go to some sites. There is a lone worker procedure requiring regular contact back to base. Sydney Water provide passports/ swipe cards for contractors with a three tier approach.

- General
- Site
- Asset

Lone Worker

ANSTO - Lone workers are provided with a radio, which has a Man-Down alarm when it is laid horizontal. There is also full emergency response coverage by a SOSS (Site Officer Safety Services). With the radio system and worker must call in every hour on the radio. A 24x7 team of Site Safety Officers man this base station.

Sydney Water – As Sydney Water know the location of all contractors, so it is acceptable for a lone worker to go to some sites. There is a lone worker procedure requiring regular contact back to base. The swipe card and security system records the end of each task. This is checked by the contract site supervisor on a daily basis. Work with a high potential financial loss is given the same special attention as high safety risk job. As a principal, Sydney water must maintain overall supervision on both direct contractors and there sub-contractors so safety is maintained.

At Sydney Water workers must initially review hazards for the area. Scheduler/supervisor must check on each guy each hour. At 45 minutes the worker is called to remind them that

the 1 hr is nearly up. Asset failures are immediately reported back to base and an alarm may initiate an earlier check on workers at an unmanned site. Personnel must practice the emergency response plan for areas they visit. Radios with the man down feature are issued. Hazards are initially discussed with contractor at the time a contract is initiated. The detailed arrangements are agreed at this time. The maximum time some one is hurt until support is initiated is 60 minutes and it was suggest it is not realistic to provide more than that.

Motivating Safety Compliance

BOC - Peter McManus described a talk he had attended on legal issues given by a Katherine Morris from the Law firm Deacons. It was quite an “eye opener on responsibilities” for Peter and the BOC attendees. He suggested IMRt member companies may be interested in getting her to do a similar presentation at their site. The contact is given below.

Katherine Morris Senior Associate Deacons - 1 Alfred Street Circular Quay Sydney Ph: 02 9330 8579 Email: katherine.morris@deacons.com.au Web: www.deacons.com.au .

Orica – Suggested strongly that motivating compliance on safety is very much about showing very strong management commitment “If you want to work here do it – If you do not want to do it don’t work here”.

Orica have a very tight system and a good record. On one occasion (due to purchasing pressures), rather than using an approved tanker a multi purpose tanker was used. A serious incident occurred. For all work (even mowing the lawn) there must be a permit to work. It was suggested that Shell Clyde refinery have/have an excellent DVD called “Remember Charlie”. *Google on “Industrial Safety Remember Charlie” gave many suppliers at \$600 <http://www.safetytrainingnetwork.com/products/safetyorientation.shtml>~ \$400. SIRF has no knowledge of these suppliers.*

ANSTO, CSR & Sydney Water - Spoke highly of the OH&S Mock Court conducted in a Courthouse and gives people a real feeling of what it would feel like if a serious incident occurred and they had to face a court eg “Explain why you were too busy”. See www.thebriefgroup.com.au A presentation by Tony Anthony from The Brief Group will occur in the 14th November 2007 NSW IMRt meeting.

Need to Standardise Inductions – Green Card

Orica – Mark from Orica suggested he has done so very many different safety inductions over the years it would be so much better if there was a generally agreed induction applicable across many sites. For example, many companies such as Bluescope, OneSteel, Tomago and Orica use the same lockout system based on an old BHP Steel model. The system based on Red, Blue and green locks. Sydney Water also use a lock system. It would be so much easier if this was a more widely used Australian Standard. Currently there is excessive & unnecessary repetition of the same material during inductions and it does not improve safety as people switch off when they are bored.

General - An idea was suggested that if the swipe access card to leave a site was attached to your personal lock, you could not leave site without taking your lock off.

It was suggested there is a possible role for SIRF to help support standardisation.

CSR - There is currently a degree of conformity with the WorkCover Green Card system. The Green Card system is aimed at the Construction Industry and provides a basic level of safety awareness training. Another or an extension to this card aimed at the Manufacturing Industry would be a good idea and would make site inductions much more focused a specific site risks rather than repeating what is covered in every other site induction that contractors do.

If a contractor needs to dig a pipe to maintain they consider it as maintenance and do not require a green card. However at least the excavation component could be easily viewed as construction, so need to think this out more for the CSR site.

Hunter Water - The Green Card training is aimed at introducing workers to the OH&S act and legislation it is not site specific. It is mandatory for construction sites not really relevant to HW operations. The definition of Construction in the legislation could be interpreted to cover a range of maintenance type activities.

Eraring Energy - When part of the site is shutdown at Eraring, it is fenced off and declared a construction site and all personnel in that area must have green cards. There are different requirements for construction sites in other states.

BOC – Peter McManus suggested he may have opportunities to discuss lockout conformity with WorkCover.

ANSTO – Suggested that WorkCover is the correct organisation for construction safety issues but there is quite different legislation for manufacturing industries.

Sydney Water - does not require Green Card for maintenance contractors.

Swipe Cards

Orica – uses a database that shows the areas of plant contractor has had inductions for.

General - A number of organisations present had a swipe card system and can be set up to limit access to certain areas within the site. Generally, similar cards were issued to contractors as to permanent staff. Some organisations included on the back of the card the activities contractors were authorised to perform.

ANSTO - Has a swipe card issued by Security that limits areas to access but there is currently the need for better co-ordination between security and safety induction. Induction and authorised activities could be included on their card and this seems like a good idea.

Orica - They have toxic material on site. In case of a gas release, all personnel must go to a safe house & swipe in emphasis is on ensuring emergency response personnel know if anyone has not made it to safe house.

Evacuation Management

SIRF Rt - Last week we had a CIWG at Shell discussing Gearboxes. One entry to the offices we were all given swipe cards and required to swipe in and out of all locations so they can

tell where all the people on there site are at all times. The evacuation assembly point also had a swipe card readers to quickly identify missing persons in an emergency.

ANSTO – Have similar system of safe locations. On recent evacuation test 2 officers failed to leave their work, which enabled follow-up and reinforcement of required behaviours.

Orica - had an incident and everyone survived the initial incident but three guys were killed because they thought a person was still in an unsafe area and they attempted to rescue. The person was actually safe. The Emergency Response Coordinator is in a tough position, as if there are people who are not accounted for, does he risk sending emergency response in and risk their lives?

Eraring Energy – has identified the need to improve their site alarm system as it can not be heard at the ash dam. They had a consultant review their system and he found lots of holes. They have 100 cameras all around site displaying in command centre and this is a major advantage in evacuation management as well as helping on a range of other issues.

Sydney Water - All unmanned sites are security system alarmed. If someone goes in they must swipe in first so the alarm does not go off. As contractors always log in, this assists with monitoring by contact site supervisors. Information from the swipe system goes both to Head off i.e. at Homebush and Security at Guilford.

Information Security

The issue of the security of the information in accident conditions and on loss of power was discussed. If you require a software system such as databases and swipe systems then you need to enure they will not fail during an emergency, which may include loss of site power.

ANSTO - All alarms are supplied from a secure essential instrumentation UPS (uninterruptible power supply) with a back up generators. Similar arrangements were reported to be in place at the other organisations represented.

Confined Space

Hunter Water - rely on support from state emergency response (dial 000). For example if a switch board in a dry well requires work and an emergency occurs, the other operator dials 000. Contractor organisations often enforce more stringent requirements on their workers than are required by Hunter Water. For example, contractors often will not undertake confined space work with less than 3 people. Hunter Water require only 2. With 3 people the second can go into the space to assist the tradesman if he gets into trouble whereas with 2 people the watcher can not go to assist as he/she must stay outside as the contact person. At Hunter Water trades staff can write their own confined space certificates. There are situations where the work must be conducted several levels down, which creates problems for rescue.

Sydney Water - are currently running a major Case Study with police, fire, cave rescue related to air pockets of contaminated air with the aim to work out general rescue plans.

Hunter & Sydney Water – Gas tests are performed before entry but it is still possible for bad air to enter later after personnel have entered. There are differing approaches between Sydney and Hunter Water regarding reliance on “000”. Sydney water have been advised

state emergency response inappropriate as it's not set up for sewer contamination, whereas it is the recommended approach at Hunter.

General - It was generally agreed that it was essential to practice the emergency response plans to ensure access and egress is workable. Staff involved must ensure that equipment (ladders, winches etc) are in good condition. Some organisations performed a degree of Incident Plan practice before each job is done.

It was agreed that a worker must have adequate level of fitness before being allowed to enter a confined space. Good fitness gives a lower chance of being harmed and being fit enough to rescue another.

Orica - Have Safety Officers that are specific assigned to confined space approval. Orica requires the signature of a high level manager for approval to initiate a confined space job. At the moment there is a difficulty as there are only 2 CSE (Confined Space Entry) approvers. If a CSE was scheduled for a certain day and the approving officer is away the CSE does not happen. Stringent requirements are used for the highly hazardous nature of high pressure ammonia and steam pipes.

At Orica the site the Nurse keeps a record of medical history and can deem a worker not fit for confined space work.

An example was given where multiple confined space support personnel was required at a number of levels in a vessel to ensure adequate monitoring was carried out. Another example was with an asbestos removal job that was located in a place that was not a normal area of work. This was defined as a Hazardous Restricted Area and not a confined space. A "watcher" was still required.

ANSTO - Persons issuing permits to work have a confined space register and is much more arduous requirements than for situations that use restricted access permits. Confined Space rescue training is performed annually and a worker pretends to be unconscious and is "rescued". It is surprising how hard it is to move a "dead weight".

There are legislative requirements to keep a confined space register and to review this yearly. This review needs to be performed by persons with appropriate competency. It was generally agreed that situations with **ANY ONE of the 5 criteria** are defined as Confined Space in NSW. One on these criteria is if there is any chance of harmful gas build up. For example, if a petrol fork lift operates near a large pit (not otherwise considered confined space) because exhaust gas could accumulate in the pit it becomes a confined space. There is a 10 point analysis process in Victoria.

An example was given of an organisation that had many areas classified as "confined space". A new engineering manager had them reviewed and relaxed about 70% to "restricted access".

In NSW a Confined Space is an enclosed or partially enclosed space which:

- A) Is above or below atmospheric pressure during occupancy or;
- B) Is not designated primarily as a place of work; or
- C) Have restricted means of entry or exit; or
- D) Have an atmosphere which may contain harmful levels of contaminant; or
- E) Not have a safe oxygen level or can cause engulfment.

This is to be assessed by “A person who has through a combination of education, training and experience acquired knowledge and skills to correctly assessing areas”. Some discussion followed about training providers and whether the 3 or 5 day course is appropriate.

General - The comment was made that they had seen a confined space sticker at McDonalds in the garbage storage area and is an example of stringent interpretations of Confined Space Entry. Any area that is not a “standard work space” can be called a confined space.

Some discussion followed on definition of **Restricted Access** and Confined Space. It was suggested that if an area is classified as a “restricted space” you are allowed to apply some judgement however once it is classified as a “confined space” there is no room for judgement as the legislation states you **SHALL** do specified things. Where the legislation states “shall” compliance is mandated under the law (it is not optional or a subject of a risk assessment – operator has no choice under the law). For example, the operator must insist on a harness being worn. If an area is classified as “Confined Space” and do not apply these measures the organisation is placing it self at risk were there to be an incident. However, if the area is classified as Restricted Access with identified control measures in place your organisation is legally on safer ground.

JSA (Job Safety Analysis) & PTW (Permit to Work)

General - The relative benefits of “generic” (pre written) and “job specific” (blank sheet) JSA were discussed. There was some agreement that, personnel performing the work, should just use a generic JSA as a starting point, reviewing the specific task themselves checking job steps, hazards and controls. This can be done as a “take 5” before they start the job. Generally the JSA is prepared as part of the Job Pack (together with tools, isolation procedures, ETC).

Orica - A specified individual is the PTW (Permit to Work) issuer located in the PTW hut and a specified individual on the work team is the “receiver”. A PTW receiver has to be a competent person (with 3-6 months experience) and it can be an experienced on-site contractor. Typically the team leader will go to the PTW hut and collect the PTW and the team (typically 5 for a large job) will proceed to do the task.

The PTW receiver is responsible for the safe work environment of the workers and is not necessarily the team leader. The person may be the receiver for several jobs and they can not leave the site without handing this responsibility over to another suitably qualified person. Orica have a culture where the receiver personally checks that the isolations are in still in place. The tradesman doing the work must rank risks with no additional controls in place. If the risk is above 3 or 4 additional controls must be added to get the risk below 3 (on the risk matrix).

Sydney Water - At a manned site treatment plant the issuer of the PTW goes with the full team to the job and discusses safety issues with the full team before the task starts. At an unmanned site the details are set up and checked daily by the site supervisor.

ANSTO - Contract Electricians must prepare their SWS (Safe Work Statement) for electrical work as this is their area of expertise. The scientists in the area are not experts in electrical safety. The area supervisor is responsible to advise contract staff of other risks (e.g. radiological) inherent with the location. In sensitive areas of plant, ANSTO staff does all isolations and contractors add their tags. Specific equipment is prepared for contractors to work on - but areas of work are not handed over. For example, a contract electrician can check isolations are complete and add tags but can not take the initiative to isolate further equipment without approval from ANSTO's electrical supervisor. They must comply with ANSTO's controls for radiological and other safety hazards.

BOC - Have a number of different types of sites and contractors are required to have familiarity with that type of plant before working on it. There is a formal handover from operations to maintenance as part of the PTW issuing/receiving process. Similarly, on completion of the task and removal of personal locks there is a formal handover from maintenance back to operations. Operations also remove their isolation locks.

SIRF Facilitator - described the procedure at a Rio Tinto mine site. Contractor was provided with generic JSA but was required to add his assessment of risks according to a risk matrix and sign-off on control measures. Also they were required to add any other hazards (and additional controls) they identified that might have been specific to the time or related to other concurrent work, etc. This reinforced why they were undertaking each control measure.

Eraring Energy - The risks are included in the printed JSA. These are discussed with the person doing the job (tool box talk). The person doing the job must summarise the discussion before being authority to proceed.

General - There was general agreement that PTW with issuer/receivers signatures are legal documents and it is the "facility owner's" responsibility to set up a safe system and to ensure the persons signing these documents are adequately trained and competent in the tasks.

Auditing

Eraring Energy - Being a State owned Corporation they must follow NSW OHS guidelines. They are self insured and audited by WorkCover every 6 months to 2 years. These audits are quite arduous. There is significant financial incentive in retaining self insured status. They do internal audits regularly to ensure they will pass WorkCover audit. In 2006 they trained 30 people (1 week) as auditors.

Another tool used is the on-site Take 5 Toolbox Talk, with results of discussion to be recorded on the back of the work permit.

ANSTO – It was suggested that Process Manager at their sites is the best person to perform audits.

Orica – staff personnel must perform 2 UAP (Unsafe Act Prevention) audits per month. This involves asking 3 questions. What are you doing? What are the risks? What preventive measures are you taking? People are picked at random. During shutdowns, managers are required to do 2 UAP's per day

Discussion followed on the value of incentives. Raffle tickets are used by Orica and are given out during shut downs and drawn at the end of the day with the raffle winner announced next morning. Guys are keen to win as is a plasma TV as a prize with one given away each week. "Hey come and audit us and give us some tickets".

Also giving away Scratchy instant winner was suggested as another incentive that is also used to give people a positive view on safety audits. Others prefer a name and shame approach.

SAO (Safe Acts Observation) were also discussed. One approach was to have a team of 2 (Auditor and Reviewer) to review work for safety. The reviewer does the audit discussion and focusing on positive reinforcement with the second auditor watches the first and giving feedback on auditing performance. They then change over roles for the next person audited.

Safety Culture

Hunter Water - Safety is all about culture. Small contractors it was suggested give the greatest challenges in achieving a good safety culture. Discussion followed on care needed to ensure incentives and other systems do not drive people to hide accidents. "If you report the minor cut finger you will stop us winning a prize". "I will be viewed as a poor performer." "It is not worth the paperwork that reporting my minor injury will initiate." Injuries can tend to go underground.

The discussion of the classification of incidents into avoidable and unavoidable followed.

BOC - discussed the policy of 10 km speed limit on site and the non use of hand held mobile phones on site or in company cars.

Towards the ends of a major shutdown that had delays, contractors started to rush and cut corners. In this situation management were strong enough to call a stop to work and take a 4 hr loss to production to get the project back onto a safe footing. It was generally agreed that achieving the correct culture amongst workers and contractors was vital. Sometimes contractors can have a better culture than employees as site management have a zero tolerance to contractor safety breaches but are sometimes more forgiving for their own staff. The contractor's future work depends on full compliance. The small contractor can in some situation be a big challenge as they don't often have the required level of safety training.

The BOC CEO is acutely aware of the impact of a poor safety record or image on the organisation's profitability. It is given very high priority from the top of the organisation down.

Drug and Alcohol

Orica - perform random breath and urine tests. If a contractor fails the urine or blood test they are escorted off site and can not work on site again. Employees are admitted to a rehabilitation program if they fail a test. If they re-offend their employment is terminated. The blood alcohol level is set at 0.02%. There is provision to do a voluntary self check at the front gate before taking the "official" test. Poppy seeds on bread rolls have been shown can take you over. At many mine sites they have drug and alcohol policies that are even stricter than Orica's.

Eraring Energy - have selected a hand eye co-ordination tester rather than breath tests (brand name OSPAT). It is effective for drugs, poor health, tiredness, also. There is another test which checks for eye dilation response as the eye is exposed to higher light levels. Staff considered the coordination test less obtrusive. Initially it causes stress for some people but now it is well accepted. The system was not cheap - each person has 6 goes to set up his/her personal settings. Subsequently each person is judged against their own past performance. Each person must use every day and before doing overtime. If performance is low a person can work but not on hazardous duties. If you fail the test you see the nurse and discuss the reason. Ian O'Brien invited anyone who wanted to see the system to come to Eraring. Google gave <http://www.ospat.com/index.html>.

Eraring have found that fatigue is more of an issue than Alcohol. If they are a danger to operations they are probably a danger to themselves and they are sent home in a taxi.

WorkCover Prosecution

BOC – Peter McManus Raised an incident at QANTAS for discussion. A tanker driver had broken the rule about top and bottom filling and an incident occurred. QANTAS were fined even though the driver had broken the rule. How much supervision is enough?

Availability of resources was not an excuse for QANTAS. If it was foreseeable that a contractor would cheat the system (as is quicker for him to fill), so ever if the contractor is liable, Qantas are also liable. Organisation can not divest their safety responsibility.

A Google on QANTAS and Tanker Filling – findings attached from “Allens Arthur Robinson a leading international law firm’s” web page. Story makes interesting reading and is included as **Appendix 1** of is report. The other stories on the site also make interesting reading particularly the one about a scissor lift.

Orica - How much supervision is enough is “the call” of the job issuer at Orica. He/she will supervise less as confidence is gained that the contractor is “a reliable person”.

At the last shutdown Orica had 20 stand-by men. For six weeks, they stood in front of the various vessels. The organisation also carries risk of lost production. For example, if a contract engineer incorrectly advises equipment is OK and production is lost. Orica loses the production not the contract engineer.

ANSTO - are required to give “an appropriate level of supervision” but this is mostly driven by security issues. For day pass contractors they must retain “line of site” supervision. They have 8 supervisors and may have 30 jobs on – not possible to give 100% supervision to all jobs.

Induction Reminders

Orica - Site Services Manager has regular meetings with contractors and he gives them a list of people due for training. Orica have a limited number of approved contract staff suppliers. Their Insurance details etc are recorded in SAP.

Appendix 1 – WorkCover Prosecution – Qantas Case

Google Gave <http://www.aar.com.au/pubs/wr/fowrjun06.htm>. Allens Arthur Robinson Information is from the web page as follows

Strict liability for occupational health and safety

In brief: The New South Wales Industrial Relations Commission has confirmed that an employer must take an active role in health and safety and cannot rely on the special expertise of contractors alone. Lawyer Shelley Golden reports.

Background

Qantas Airways Ltd (*Qantas*) contracted with Caltex Petroleum Distributors Pty Ltd, trading as Metropolitan Fuel Distributors (*MFD*), to remove fuel from underground tanks at Sydney International Airport, a site controlled by Qantas and used as a place of work. Qantas had the expertise necessary to conduct the removal of jet fuel, but not lead replacement petrol or diesel fuel stored in the underground tanks. When selecting a contractor for that phase of the removal process, Qantas asked MFD about its expertise in undertaking this operation safely and was assured that MFD had the necessary expertise and that an appropriately qualified person would be present to supervise the operation.

Before engaging MFD, Qantas received only basic safety information about the proposed removal procedure. While the decision to engage MFD was made without detailed procedural or safety information, Qantas had considered MFD's extensive fuel loading experience and MFD's assurances as to the presence of suitably trained personnel and equipment. The specific fuel removal process was discussed and verbally agreed upon only after MFD had been engaged.

Unbeknown to Qantas, MFD had contracted with Kel Campbell Pty Limited (*KCPL*) for the provision of tankers and drivers to remove the fuel. During the fuel removal operation, an employee of KCPL initially filled the tanks in the approved manner, but, after deeming this process too slow, decided to instead fill the tanks by way of a quicker, more dangerous process. This was contrary to the direction given by MFD to KCPL and was a process that was unsafe according to training and standards known to all KCPL and MFD staff. The KCPL employee suffered burns to his face and chest as a result of an explosion caused by the alternative procedure.

Qantas was neither informed of the decision to change the fuel removal procedure, nor was it given a chance to consent to it. While a Qantas duty officer was present throughout the process, he had neither the authority nor expertise to give directions throughout the operation.

Qantas was charged under s8(2) of the *Occupational Health and Safety Act 2000* (NSW) (the *Act*) for failing to ensure that people other than employees were not exposed to risk at employer's place of work.

Qantas eventually pleaded guilty, acknowledging that it had failed to require a contractor to supply written procedures for contracted work before commencement and to nominate a suitably trained supervisor.

The decision

The Commission⁴ held that, although contracting out work in this manner was an everyday work practice, an employer cannot contract out the responsibility for occupational health and safety. Qantas' lack of expertise and the potential for untrained interference did not relieve the company of its obligations.

Justice Boland stated that the appropriate course of action would have been:

- to obtain the procedures in writing and engage an independent expert to advise as to the safety of the proposed course of action; and
- to have the fuel transfer monitored or supervised by an independent expert or trained supervisor nominated by MFD.

Key issues regarding penalties

Justice Boland considered it relevant that simple steps could have been taken to avoid the risk and were, in fact, adopted independently by Qantas for the removal of the remaining fuel before the Commission's decision.

His Honour held that the penalty imposed upon Qantas should include a small percentage for general deterrence. Although this was a discrete operation, the widespread engagement of contractors and subcontractors justified reinforcement of the obligations under the Act. Additionally a small percentage of the penalty should take into account Qantas' five prior convictions under the Act. However, Qantas' generally good occupational health and safety record, its expressed contrition, and its steps to avoid this risk in the future resulted in a relatively low penalty. Qantas was fined \$150,000 (out of a maximum of \$825,000).

Conclusion

Employers engaging contractors, whether for discrete tasks or as a regular part of their business, must consider their occupational health and safety obligations in light of the Commission's decision. An employer may be in breach of the Act and penalised, notwithstanding its endeavours to engage appropriately qualified contractors with good health and safety records.

In certain circumstances, employers should consider requiring:

- the contractor to set out its procedure in writing;
- the procedure be approved by an independent expert or appropriately qualified person; and
- an appropriately qualified supervisor to be present for the period of work.

Employers should also consider any other available preventative steps as the availability of such procedures may be evidence of a failure to fulfil an employer's occupational health and safety obligations.

Generally, the maximum penalties for contraventions will depend upon the employer's previous health and safety record.