

AUSTRALIAN GEOLOGICAL SURVEY
ORGANISATION

EMERGENCY
RESPONSE
MANUAL

FOR

MARINE OPERATIONS

ON

R/V RIG SEISMIC

OR-0440

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1. EMERGENCY RESPONSE PROCEDURES

PLANNING FOR AN EMERGENCY RESPONSE

Ship personnel should be aware of the potential hazards that exist on board RIG SEISMIC without becoming unduly alarmed. The safety training makes all crew members well prepared. Possible hazards include, but are not restricted to:

- An event that results in loss of life or serious injury, causes heavy damage to property or has a major environmental impact, or causes a potential hazard to life or property.
- Hydrocarbon or chemical spill or other emission harmful to the environment.
- A fire of any nature; a major hazard with the oil-filled seismic cable.

IF THERE IS ANY DOUBT AS TO WHETHER THERE IS AN EMERGENCY, THEN INITIATE THE EMERGENCY PLAN

TRAINING FOR AN EMERGENCY

Emergency plans involve organising and training people to perform specialised tasks such as fire fighting and first aid, search and rescue, and to restore the operation to a safe condition. Even with the help available from public emergency services, a self-help plan is AGSO's best assurance that injuries and loss will be kept to a minimum. Each person must know what he has to do in an emergency.

An emergency plan should be tested through regular drills. This will highlight shortcomings and also ensure that people know what to do and where to go, and to feel confident that the situation is under control.

When an emergency does occur, it is important to learn from the experience, whether it is major or minor. The incident should be thoroughly investigated, but in addition the response to the emergency in terms of the effectiveness of the emergency plan should be evaluated and the plan revised where necessary.

RESCUE AND FIRST AID

All people on the ship at the time of the emergency must be accounted for. This is normally done by mustering at Emergency Stations. If someone cannot be found after an exhaustive check, a rescue search must be commenced immediately.

Rescue operations must never endanger the safety of the rescuers. The rescue team must have adequate personnel protection to carry out the search safely.

ACTION WHEN AN EMERGENCY OCCURS

Once an emergency occurs on the ship, the well-defined maritime system switches into action. At that point, responsibility clearly passes into the hands of the Master of the vessel as is laid down in maritime law. All members of the crew, both AMSA and AGSO, have been trained for such an occurrence.

Depending upon the type of emergency, appropriate action will swing into place for which the maritime crew in particular are well trained. The main role of AGSO staff is then to provide support as members of the emergency teams in tackling the problem, whatever it may be, under the direction of the Master or his delegate.

From time to time, AGSO crew will include visiting scientists and others who are classified as "passengers" under Australian maritime regulations as they have not received survival training. These people will only assist in emergency procedures as and when directed by AMSA crew.

One of three likely events will be declared:

- Emergency muster stations.
- Fire stations.
- Abandon ship.

The procedures to be followed are laid down in the "Survival at Sea" booklet, a copy of which is placed in every cabin. Drills will also have taken place on a systematic basis as laid down in the AGSO Health, Safety & Environment manual for RIG SEISMIC.

At this point, it is important to remain calm and render every assistance to the AMSA crew. The Master is charged with seeking assistance as he finds necessary from the outside world. The main actions are likely to include some or all of the following:

- Notifying, alerting or calling for assistance from any one of the emergency services, eg. Fire Brigade, Police or Medical Services.
- Distancing all non-essential people from the danger zone in so far as is practical.
- Rescuing of injured persons and making them as comfortable as possible.
- Advising the Maritime Rescue Centre in Canberra as appropriate.
- Notifying senior AGSO and AMSA personnel in Canberra and Brisbane.

STANDBY ACTION

Both AGSO and AMSA head offices are to be informed as soon as is practicable recognising that the highest priority is to protect life and limb. As soon as possible the Master, or the Ship Manager acting on his behalf, is to advise the AGSO Head of Marine Operations in Canberra and the AMSA Manager Ship Operations in Brisbane or one of their alternates depending upon circumstances.

COMMUNICATIONS

Effective communication is usually the most difficult and demanding aspect of an emergency. The need for simple standard procedures, frequent training, testing and retraining cannot be overstressed.

The communications systems on RIG SEISMIC are fortunately simple and straightforward and well understood by all on board as they largely parallel shore systems.

- Motorola voice-actuated portable hand-held radios provide primary communication around the deck and provide ready access in many areas beyond the phone network.
- The ship's Stentafon phone network is a widely available network of somewhat lower flexibility and coverage than can be achieved with the small radios.
- The public address system will reach all work areas and deck areas. The Bridge can address all cabins as well as the work spaces.

Shore communications are varied and their effectiveness will depend heavily upon location. These include most of the familiar systems:

- The Satcom-A terminal in the AGSO office gives world-wide voice communications almost instantly. It also provides a FAX facility which could prove useful in sending information in picture form, plus a TELEX capability if required.
- The Satcom-C system on the Bridge provides a slightly slower TELEX facility.
- There are three mobile phones on the ship, two connected to the PABX in the AGSO office plus another on the Bridge. Anywhere within reasonable range of the coast near centres of population, we can talk directly to shore-based emergency services people.
- Lastly there is a mobile-phone connected FAX which can be used close to shore.

The Maritime regulations also require the ship to carry radio facilities which help to fill the gap between the satellite-based systems and mobile phones. In some cases these require more specially trained personnel:

- Sailor radio operating in the HF band which is used by almost all ships at sea.
- VHF radio for close ship-to-shore links such as to the port authority.
- VHF Seaphone with semi-automatic hook-up to the land phone network.

USE OF EMERGENCY SERVICES

The Emergency Services will be notified for assistance as required by the Master of the vessel. The most likely requirement while at sea will be for medical advice or for emergency hospital services should someone be seriously injured.

In case of injuries that require rapid transfer to hospital, emergency evacuation procedures have been put in place for those areas around Australia in which RIG SEISMIC works.

Shore treatment is available at one or more hospitals, depending upon the medical treatment required and the local facilities available. Necessarily this must be left to the judgement of the Master who should consult with both Canberra and Brisbane at the earliest opportunity.

It then becomes Head Office responsibility to advise the Executive in an appropriate manner. The Ship Manager and Master should keep their offices advised on an continuing basis within the constraints of recovering from the emergency.

ACTION IN CASE OF OIL SPILLS

There is always a small but finite chance there will be an oil spillage from RIG SEISMIC, either accidentally or because of damage to the ship or its equipment. The relevant authorities must be informed if spillage exceeds 40 litres, and appropriate action taken to contain the oil.

Spillage of the ship's fuel oil represents an environmental hazard because of its known toxicity. Its greatest impact would be when close to the coast, where marine wild life such as sea birds in particular could be affected. However, stringent procedures are in place to keep this risk at an acceptably low level.

Deployment of the oil-filled seismic streamer cable could represent a potential pollution hazard should any of the sections rupture. However the segmented construction of the cable means that the amount of oil that can be released at any one time is limited. It would require almost virtual destruction of a section to release a total of 300 litres of oil into the sea.

The NOPAR-13 oil used in the cable is a special light oil of low flammability and toxicity that rapidly evaporates leaving a negligible residue. Any loss of oil from a section usually results from slow leakage through fish bites or small abrasions, representing a loss of a few litres of oil per day in the worst case, which would be difficult to detect and impossible to contain.

All sections are routinely checked on deployment and retrieval of the seismic streamer cable. Faulty sections that show leakage of oil and contamination with sea water are drained into special holding tanks on the ship following strict procedures to prevent any accidental discharge into the sea. These procedures avoid polluting the environment, stop unnecessary waste and prevent the ship's decks becoming slippery and hazardous to the crew.

Under the MARPOL 73/78 Conventions, any significant spillages of oil at sea must be reported to the Marine Rescue Coordination Centre in Canberra (open 24 hours-a-day), and/or State and local authorities where appropriate, depending upon the spill location.

2. STANDARD EMERGENCY RESPONSE CONTACTS

RIG SEISMIC	Satcom-A	Phone 872-154-5120 Office FAX 872-154-5121 Office TELEX 582-154-5120 Office
RIG SEISMIC	Satcom-C	TELEX 582-4503-00183 Bridge
RIG SEISMIC	Mobile communications	Phone (018) 898-200 Office FAX (018) 632-656 Office Phone (018) 620-515 Mess Phone (015) 242-302 Bridge
AGSO (Canberra)	Head Office	Phone (02) 6249-9111 b/h
AGSO (Canberra)	Head, Marine Operations	Phone (02) 6249-9252 b/h Phone (02) 6254-4556 a/h
AGSO (Canberra)	Shore Manager	Phone (02) 6249-9444 b/h Phone (02) 6288-7643 a/h
AMSA (Brisbane)	Head Office	Phone (07) 835-3600 b/h
AMSA (Brisbane)	Manager Ship Operations	Phone (07) 835-3622 b/h Phone (07) 398-5068 a/h
AMSA (Brisbane)	Personnel Officer	Phone (07) 835-3620 b/h Phone (07) 379-6639 a/h

Maritime Rescue Coordination Centre (Canberra)	Phone (02) 6247-5244 FAX (02) 6257-2036
SOS Assistance Australasia Singapore (Quote SOS Service Membership No S-61-1156)	Phone 65 226 3936 FAX 65 226 3937
Oil Spills at sea, report to MRCC (Canberra) (plus State & local authorities as appropriate)	Phone (02) 6247-5244 FAX (02) 6257-2036

3. EMERGENCY RESPONSE CONTACTS FOR NORTHWEST SHELF

Emergency evacuation procedures have been arranged with Lloyd Helicopters in Karratha, who have three types of helicopters available that are cleared to land on RIG SEISMIC. These are:

- Bell Long Ranger
- Bell Model 412
- Sikorsky Model 76

Hospital treatment is available from Karratha Base Hospital, Port Hedland Hospital, Exmouth Hospital or Carnarvon Hospital depending upon the medical treatment required and the facilities available.

Lloyd Helicopters (Karratha)	Phone (091) 853-355 Airport Phone 018-087-051 Mobile
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Lloyd Helicopters (Onslow)	Phone (091) 846-133 Airport Phone (091) 846-124 Town
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Hospital (Karratha - Nickol Bay)	Phone (091) 853-444
(Port Hedland)	Phone (091) 731-244
(Exmouth)	Phone (099) 491-011
(Carnarvon)	Phone (099) 411-555

Ambulance (Karratha)	Phone (091) 851-222
(South Hedland)	Phone (091) 721-800
(Exmouth)	Phone (099) 491-011
(Carnarvon)	Phone (099) 411-555

Dentist (Karratha)	Phone (091) 442-979 b/h
(Exmouth)	Phone (099) 491-170 b/h
(Carnarvon)	Phone (099) 411-882 b/h

Port Authority (Dampier)	Phone (091) 442-222
(Port Hedland)	Phone (091) 731-400

Sea Rescue Information Centre (Perth)	Phone (09) 336-1666
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4. EMERGENCY RESPONSE CONTACTS FOR OTWAY BASIN

Emergency evacuation procedures have been arranged with Professional Helicopter Services, a Melbourne based firm, who have two types of helicopters available that are cleared to land on board RIG SEISMIC. These are:

- Bell Jet Ranger
- Hughes 500

Hospital treatment is available from the Portland Base Hospital or hospitals in Melbourne, depending upon the medical treatment required and the facilities available.

Professional Helicopter Services (Melbourne)	Phone (03) 580-7433 Airport Phone (018) 333-960 Mobile Phone (018) 333-961 Mobile
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Hospital (Portland)	Phone (055) 210-333
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Seaport Medical Centre (Portland)	Phone (055) 232-322
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Ambulance (Portland)	Phone 11440 (direct dial)
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Dentist (Portland)	Phone (055) 232-966 b/h
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Port Authority (Portland)	Phone (055) 250-900
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Air Ambulance (Rescue Centre, AIR 495)	Phone (03) 379-9155
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SE Ambulance Service (HELIMED 1)	Phone (051) 344-666
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<p>5. EMERGENCY RESPONSE CONTACTS FOR TASMANIA</p>
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Emergency evacuation procedures for the ship have been arranged with Helicopter Resources, a Tasmanian based firm, who have two types of helicopters available that are cleared to land on board RIG SEISMIC. These are:

- Bell Jet Ranger
- Squirrel

Hospital treatment is available from the Royal Hobart Hospital or hospitals in Devonport and Queenstown, depending upon the medical treatment required and the facilities available.

Helicopter Resources (Hobart)

Phone (03) 62485-130
FAX (03) 62485-342

Hospital (Hobart), Dr Smart

Phone (03) 62388-608

Ambulance (Hobart)

Phone 000 (direct dial)

Dentist (Hobart), Andrew Browne

Phone (03) 62296-775 (all hours)

Marine Board (Hobart)

Phone (03) 62351-000

<p>Royal Flying Doctor Service (Air Ambulance)</p>	<p>Phone (03) 6391 8668</p>
<p>(Support available in Devonport, Hobart, Launceston and Queenstown)</p>	

<p>6. EMERGENCY RESPONSE CONTACTS FOR TIMOR SEA</p>

Emergency evacuation procedures have been arranged with Lloyd Helicopters in Darwin, who have two types of helicopters available that are cleared to land on RIG SEISMIC. These are:

- Bell Model 412
- Sikorsky Model 76

Hospital treatment is available from the Darwin Base Hospital depending upon the medical treatment required and the facilities available.

Lloyd Helicopters (Darwin)	Phone (089) 453-888
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Hospital (Darwin)	Phone (089) 228-888
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Ambulance (Darwin)	Phone (089) 279-000
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Dentist (Darwin, 24 hours)	Phone (089) 411-899
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Port Authority (Darwin)	Phone (089) 895-511
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Sea Rescue Information Centre (Canberra)	Phone (06) 247-5244
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Medical advice at sea (24 hours)	Phone (02) 960-0252
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7. EMERGENCY CONTACTS IN THE PHILIPPINES

Emergency evacuation procedures within Philippines waters have been arranged through Supply Oilfield Services of Manila, the major provider of such services in the area.

Hospitals:		
Batangas Hospital	Dr Abelardo Perez	Phone (043) 723-1605
(St Patrick Hospital)		Phone (043) 723-2167
Palawan Adventist Hospital	Dr Varona	Phone (048) 433-2155
	Dr Carlos	Phone (048) 433-2842
Puerto Princesa Hospital	Dr Joe Socrates	Phone (048) 433-2721

Philippine Port Authority:		
Batangas	Levy Reyes	Phone (043) 723-1701
Puerto Princesa	George Alfonso	Phone (048) 433-2351

Philippine Police:		
Batangas	Sgt Herron	Phone (043) 725-3008
Puerto Princesa	Inspector Carbonel	Phone (048) 433-2818

Philippine Coastguard:		
Batangas	Benito Bustamante	Phone (043) 723-4202
Puerto Princesa	Jose Cabildo	Phone (048) 433-2974

SOS Contacts in Manila:		
Chief Operations Officer	Thomas Castelain	Phone (02) 840-0592 A/H (0917) 812-0550
Operations manager	Senen Lazaro	Phone (02) 840-0593 A/H (0912) 311-8071

SOS Standby Radio Frequency		SSB: 7512 KHZ
SOS Duty Radio Frequency		SSB: 6295 KHZ
SOS Standby Radio Frequency		VHF: Channel 16
SOS Working Radio Frequency		VHF: Channel 13
SOS Mabini Base	Boy Tanap	(0912) 306-8016
Supervisor		(0912) 301-0660
SOS Trunkline (7 days a week)		(02) 817-8919
SOS Operations FAX number		(02) 810-5269
SOS Palawan Office	Pinky Cuyo	Phone (048) 433-6917 A/H (048) 433-9528
International SOS Assistance		Phone 63 (2) 893-9383
Dr Robert Calalo (24 hours) in Manila		

AGSO MARINE

Operations Group

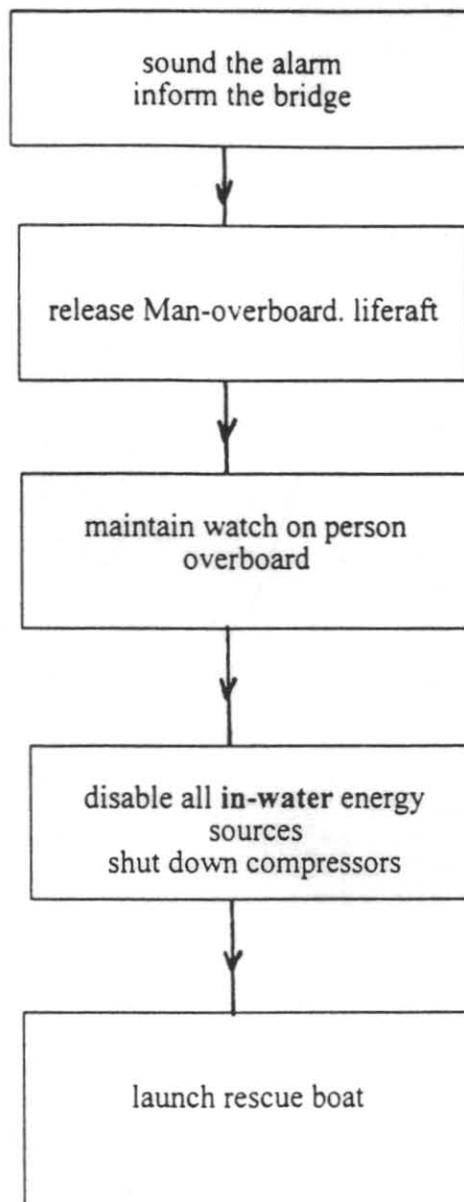
8. EMERGENCY RESPONSE CONTACTS FOR MIMPEX SURVEYS 1995

NAME & COMPANY	POSITION	TEL.NO	AH TEL.NO	FAX NO
R.J.Hall MIM Exploration Pty Ltd	General Manager	(07) 857 7088	(07) 378 6870	(07) 857 7089
R.J.Schroder MIM Exploration Pty Ltd	Exploration Manager	(07) 857 7088	(07) 371 9050	(07) 857 7089
R.G.deLastic MIM Exploration Pty Ltd	Chief Geophysicist	(07) 857 7088	(07) 264 4075 018 068 898	(07) 857 7089
W.Butler MIM Exploration Pty Ltd	Project Geophysicist	(07) 857 7088	(07) 366 7513	(07) 857 7089
T.Gilbey LL&E Australia(Offshore) Pty Ltd WA-258-P		(07) 857 7088	(07) 369 1150	(07) 857 7089
F.Higgins LL&E Australia(Offshore) Pty Ltd WA-258-P	Vice President	(02) 959 2262		(02) 959 2244
C.Oishi Japan Energy Corporation	General Manager	(07) 857 7195		(07) 857 7197
E.Urschel Command Petroleum Ltd		(02) 362 4233	(02) 411 1009	(02) 362 4248
H.Askins Shell Development Aust.	Exploration Manager	(03) 666 5184		(03) 666 5008
R.Whitworth AGSO	Head Marine Operations	(06) 249 9252	(06) 254 4556	(06) 249 9978
C.Pigram AGSO	Head Marine Division	(06) 249 9327	(06) 231 3667	(06) 249 9986
F.Renton Austral Geophysical Consultants Ltd	Client Representative	(049) 753 361	018 681 314	(049) 752 165
K.Fee Austral Geophysical Consultants Ltd	Client Representative	(075) 720 036	018 760 858	(075) 723 374
Peter Baillie Department of Mineral and Energy. WA		(09) 222 3333		(09) 222 3515
Cameron Astill Digicon Limited	Processing	(07) 878 9900	018 195 447	(07) 878 9977
Rig Seismic AGSO		018 898 200 Satcom (872) 154 5120	018 620 515	018 632 656 Satcom (872) 154 5121

9. MEDEVAC AND EMERGENCY RESPONSE CONTACTS FOR MINPEX SURVEYS -WA-235-P AND WA 258-P

- The Medevac procedure is outlined on separate page headed 'MEDEVAC PROCEDURE' in this Emergency Response Manual. It is expected that the Maritime Rescue Coordination Centre will direct any medical evacuation necessary.
- For emergencies near the prospect area WA-235-P the contact numbers are listed in the page headed 'EMERGENCY RESPONSE CONTACTS FOR THE TIMOR SEA' in this manual.
- For emergencies near the prospect area WA-258-P the contact numbers are listed in the page headed 'EMERGENCY RESPONSE CONTACTS FOR THE NORTHWEST SHELF' in this manual.
- Contact numbers for all parties with an interest in these two prospects are given in the page headed 'EMERGENCY RESPONSE CONTACTS FOR MIMPEX SURVEYS 1995' in this manual.
- It may also be necessary to refer to the page headed 'STANDARD EMERGENCY RESPONSE CONTACTS' in this manual.

10. MAN OVERBOARD PROCEDURE





// **AUSTRALIAN MARITIME SAFETY AUTHORITY
NAVIGATION SERVICES**

Organisation : Rig Seismic
 Attention : Bob Harding
 Phone :
 Fax : 010-002050
 No of Pages : 1

From : Maurice Glasson
 Depot Manager
 Phone : 09 3369207
 Fax : 09 4300403
 Date : 12/4/94

HELICOPTER SERVICES CONTRACTS WA

These companies hold the current contracts

Esperance to Carnarvon

Great Northern Helicopters

Colin Anderson Perth 09 4179895 Geraldton 099 642566

Carnarvon to Broome

Lloyd Helicopters Karratha 091 853355 Onslow 091 846133

Broome to Darwin

Rotor Services Darwin 450944 Larry Tessman

Other companies we have used are,

Heliworkse Kununurra 001 691911, they are usually used for the Kimberley light outages as we don't have to reposition from Darwin.

Helicopter Resources,

Perth 09 3324666, they have a helicopter in the Pilbara I think at Hedland for the pilot transfer.

Westcoast Helicopters, Pilbara and Perth

008 808545

27 April, 1994

Mr Roy Whitworth
AGSO
P.O. Box 378
CANBERRA ACT 2601

Dear Sir,

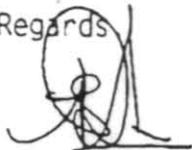
A survey conducted in 1993 of the helideck of the Rig Seismic, confirmed that the helideck is suitable for helicopter operation by day only with helicopters up to BELL 412 specification.

Should an emergency condition exist during Rig Seismic's operation off Dampier during May 1994, Lloyd Helicopters can provide an emergency response from:

Onslow	B 206 L	Gross Weight	4150 lb
Karratha	B 412	Gross Weight	11900 lb
	S 76 A	Gross Weight	10500 lb
	S 76 A++	Gross Weight	10800 lb

If you have any queries please do not hesitate to contact me,

Regards



Neil Forbes
Operations Manager



COLLESS AND O'NEILL PTY. LTD.

CONSULTING CIVIL AND STRUCTURAL ENGINEERS

84 Woods Street, Darwin, N.T. 0800
Postal Address G.P.O. Box 3978, Darwin, N.T. 0801
Phone (089) 81 9644 Fax: (089) 41 0979
A.C.N. 009 622 968



538018

Your References

Our Reference RLH:4964/347.02

18 January 1993

Chief Engineer
R.V. Rig Seismic

ATTENTION: Mr Roger Thomas

Dear Sir

Further to site inspections of 11 and 12 January 1993, our Structural Engineer has assessed the structural capacity of the heliport deck as requested.

Calculations have been carried out on the deck to assess the feasibility of landing both the 7.5t three wheeled helicopter and the 5.26t helicopter with skids. Dynamic loading effects have been taken into consideration in the calculations.

The calculations indicate that the heliport deck is not strong enough between supports to carry the 7.5t helicopter. However it will support the smaller 5.26t helicopter.

We advise that it is not safe for the larger of the two helicopters to land on the R.V Rig Seismic heliport deck.

We trust the above information is to your satisfaction and if you have any further queries, please do not hesitate to contact our Robert Hinckfuss on 089 819 644.

Yours faithfully

Brian Colless

BRIAN COLLESS

12. **AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION**
SOS SERVICE MEMBERSHIP NO. S-61-1156
Effective 01.07.97 - 30.06.98

AGSO is pleased to announce the introduction of an Emergency Assistance Plan for the crew of the ship 'Rig Seismic'.

The Plan has been developed in conjunction with SOS Assistance Australasia Pty Ltd which is part of the International SOS Assistance Group. SOS is the world's leading international emergency assistance organisation.

The services provided by the Plan range from simple telephone advice and referral to very complex medical evacuations or repatriations. SOS operates via a network of multi-lingual critical care and aeromedical specialists at SOS Alarm Centres around the world.

As a member of the Plan, you can call an SOS Alarm Centre, at any time of the day or night, to access the following services.

Medical Services

- o Worldwide 24 Hour Telephone Access
- o Emergency Evacuation
- o Medically Supervised Repatriation
- o Repatriation of Mortal Remains
- o Emergency Medication
- o Transportation for Replacement Employee

Personal Services

- o Legal Advice and Referral
- o Access to Interpreters
- o Hospital Deposit Guarantee
- o Emergency Cash Advance
- o Transportation to Join Disabled Member
- o Return of Minor Children
- o Travel Information
- o Baggage Retrieval

In the case of an emergency please use the contact details shown on the Membership Certificate held by 'Rig Seismic's captain.

MEMBERSHIP CERTIFICATE
AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION
'RIG SEISMIC'

SOS SERVICE MEMBERSHIP
MEMBERSHIP NUMBER: S-61-1156
Effective 01.07.97 - 30.06.98

The holder of this Certificate is entitled to contact the SOS Service Centre detailed below at any time for emergency medical advice and assistance worldwide. Services include telephone medical consultation, referral to local doctors and hospitals, emergency medical evacuation and repatriation, and legal consultation or referral.

Whenever you call the 24 hour Alarm Centre, be prepared to give the member's name, the name of the Company and the Membership Number.

SOS 24 HOUR ALARM CENTRE
TELEPHONE AND FAX NUMBERS

SINGAPORE	-	Telephone	65-226-3936
	-	Fax	65-226-3937

AUTHORISED
CERTIFICATE HOLDER
CAPTAIN - 'RIG SEISMIC'

AUSTRALIAN GEOLOGICAL SURVEY
ORGANISATION

HEALTH
SAFETY
&
ENVIRONMENT
MANUAL

FOR

MARINE OPERATIONS

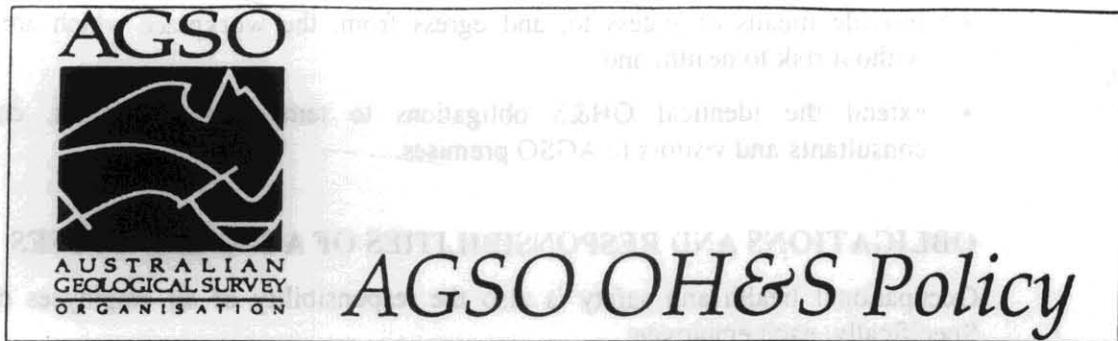
PART 2

ATTACHMENTS

OR - 0440

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The Occupational Health and Safety (Commonwealth Employment) Act 1991 received Royal Assent on 6 March 1991 and came into effect on 6 September 1991. The Act provides a legal basis for the health and safety of Commonwealth Government employees in Departments, Statutory Authorities and Government Business Enterprises.

THE AGSO OH&S POLICY STATEMENT

AGSO and all its employees will strive to promote and maintain an occupational environment which protects the health, safety and welfare of all within AGSO.

"We all make AGSO a safe place to work."

OBLIGATIONS AND RESPONSIBILITIES OF AGSO AS THE EMPLOYING AGENCY

The primary duty of the Employing Agency, in the words of the Act, is to "take all reasonably practicable steps to protect the health and safety at work of the employer's employees".

AGSO as the Employing Agency should take all reasonably practicable steps to:

- provide a safe and healthy workplace and working environment with facilities for the employees' welfare at work;
- establish designated working groups for the election of health and safety representatives and notify employees of their representatives;
- work with employees, Unions, and others to achieve a healthy and safe workplace;
- ensure all AGSO managers and supervisors are aware of and accountable for the health, safety and welfare of those they work with;
- provide resources including time off for employees engaged in OH&S to enable the successful implementation of this Policy;
- provide ongoing training to all employees, and induction of new employees in basic health and safety principles (in appropriate languages and media);
- take all reasonable and practicable steps to monitor the health and safety of its employees at work and the condition of the workplaces under AGSO's control;
- provide appropriate medical and first aid services and maintain appropriate health and safety records of employees;

- provide means of access to, and egress from, the workplace which are safe and without risk to health; and
- extend the identical OH&S obligations to temporary employees, contractors, consultants and visitors to AGSO premises.

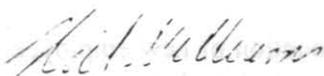
OBLIGATIONS AND RESPONSIBILITIES OF AGSO EMPLOYEES

Occupational health and safety is also the responsibility of all employees of AGSO. Specifically, each employee:

- shall observe all instructions (in regard to safety and working practices) issued to protect his or her safety and the safety of others;
- has a responsibility for working safely, consistent with the extent of his/her control over, or influence on, working conditions and methods;
- should take action as far as practicable to eliminate hazards with regard to working conditions and methods;
- shall make proper use of all safeguards, safety devices, and personal protective equipment provided by AGSO and take notice of instructions on their safe and proper use;
- shall, when required, co-operate to the extent necessary to enable AGSO to meet the duty of care requirements;
- must not, without reasonable cause, wilfully or recklessly interfere or render ineffective any protective equipment or safety device provided for the health, safety or welfare of AGSO employees, temporary employees, contractors, consultants and visitors; and
- must, in accordance with incident reporting procedures, report all incidents, dangerous occurrences, potential and actual hazards to their Occupational Health and Safety Representatives or their Supervisors.

REVIEW OF THIS POLICY

This policy should be reviewed regularly to confirm that it meets the requirements of the Act, while also taking into account possible changes in working and safety practices. This is to be done through the AGSO OH&S Committee ensuring that there is adequate representation from all areas concerned with any proposed changes. This policy has been developed and revised in consultation with the AGSO OH&S Committee and delegates of all involved Unions.



Dr Neil Williams
Executive Director

20 November 1996

prepared by AGSO OH&S Committee

Reviewed
November 1996



2. AGSO Alcohol and Drugs Policy For Field Survey Operations

Alcohol and drugs affect people's performance as well as their safety and competency when working:

- No employee of AGSO is allowed to consume alcohol or drugs while on duty.*
- No employee of AGSO shall be under the influence of alcohol (including hangover) or drugs while on duty. If, in the opinion of the supervisor and the site safety person, a staff member is unable to function safely, the individual will be directed to leave the work area. The affected staff member will be deemed on "leave without pay", unless the condition is caused by prescribed drugs at dose in which case sick leave provisions will apply.*
- Should an AGSO employee be directed to leave the work area on the grounds of an apparent excessive alcohol level, or if the matter is in dispute, s/he can request to undertake a breathalyser test. This will be carried out by the AGSO site safety person and the first aid officer, who will be appropriately trained. A blood alcohol level of 0.05 is considered to be the socially acceptable upper limit while on duty. Whilst in control of a Commonwealth vehicle or heavy plant, a blood alcohol level of 0.02 is allowed. This recognises the small quantities of alcohol found in some medicines, mouthwashes and foods.*
- Repeated occurrences of work impairment due to alcohol or/and drugs will call for a response as laid down in Public Service Personnel Management Manual Volume 3 (Alcohol and Other Drugs Misuse Guidelines).*
- This policy will be reviewed annually taking into account possible changes in work and safety practices as well as the policy's effectiveness. This is to be done through the AGSO OH&S Committee ensuring that there is adequate representation from all areas concerned.*

*Dr Trevor Powell
A/g Executive Director
1.2 September 1996*



3. POLICY ON SMOKING ON BOARD RIG SEISMIC

With the increased understanding of the effects of smoking and the changes in Australian community standards, it is necessary to maintain community expectations with regard to smoking in RIG SEISMIC. Remember that the vessel is not a normal working environment in the usual sense. It is also the home to crew members for weeks at a time.

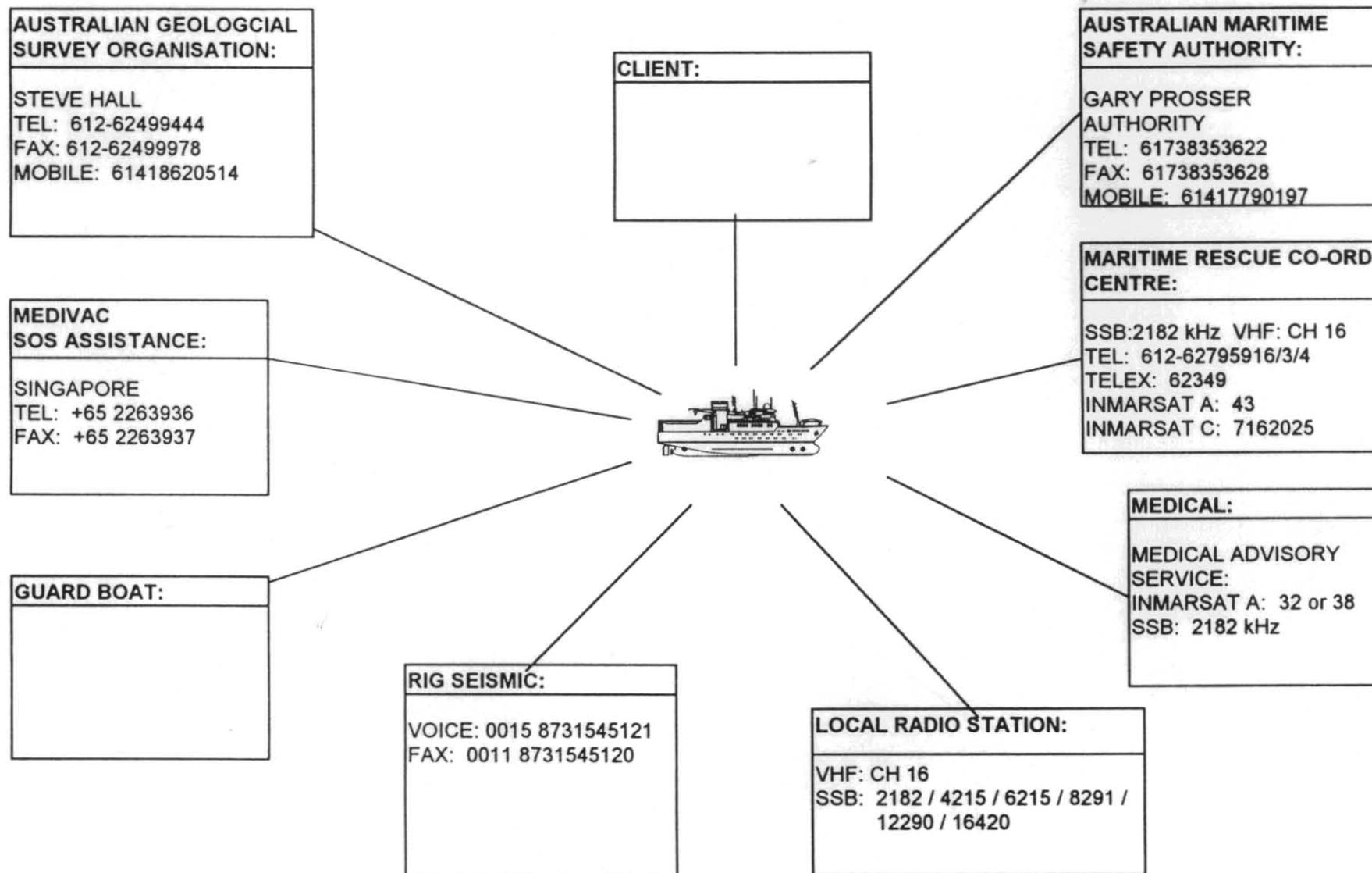
After lengthy discussion, AGSO and AMSA have adapted the following policy. The policy is designed to give individuals a choice of environment without peer pressure, either one way or the other, being an issue.

to accord with this policy smoking is only permitted in the following areas:

On the foredeck	at all times
Behind the bridge	at all times
In the winch control room	when not required for geological work.

SMOKING BANS WILL CONTINUE IN ALL OTHER WORK AND ACCOMMODATION AREAS ON THE SHIP FOR REASONS OF FIRE HAZARD, CLEANLINESS AND HEALTH.

4. CONTINGENCY PLAN AND COMMUNICATION NETWORK DIAGRAM



5. MEDEVAC PROCEDURE

CONTACTING THE MARITIME RESCUE CO-ORDINATION CENTRE

MRCC's are on constant watch on: VHF channel 16

SSB 2182
 TEL 06 279 5916/3/4
 TELEX 62349
 FAX 06 257 2036
 INMARSAT A 43
 INMARSAT C 7162025 use the most appropriate method

Distress Call Is: PANPAN PANPAN PANPAN - Vessel Name and Call Sign

Following information will be required:

NAME AND CALL SIGN	LATITUDE AND LONGITUDE
NATURE OF DISTRESS	TYPE OF VESSEL
NUMBER OF INJURED CREW	HELIDECK INFORMATION

MEDICAL ADVICE BY RADIO

Contact local radio station on frequencies:

2182 4215 6215 8291 12290 16420
 INMARSAT A on: 32 or 38 (medical assistance)

MESSAGE FORMAT

The format and following medical protocols should be considered as a reference guide for preparing a request to M.A.R. for advice. depending upon the severity of the injury it is not always necessary to give all the information requested on this format. However to fully document all the details this information will be asked of you at some point during the conversation.

1. VESSEL CALL SIGN - NAME - LATITUDE AND LONGITUDE
2. CALLER'S NAME AND TITLE
3. MAR ACCOUNT NUMBER
4. COURSE IF UNDERWAY
5. LAST PORT OF CALL AND DEPARTURE DATE
6. NEXT PORT OF CALL AND ETA
7. ANY MEDICALLY TRAINED PERSONNEL ON BOARD
8. NAME OF PATIENT - RACE - SEX - AGE - HEIGHT -
WEIGHT - NATIONALITY
9. MEDICAL PROBLEM: INJURY - WHAT HAPPENED
ILLNESS - DESCRIBE SYMPTOMS
TOXIC OCCUPATIONAL EXPOSURE - LIST ALL TOXIC
SUBSTANCES AND LENGTH OF EXPOSURE
10. STATE OF CONSCIOUSNESS. 1-UNCONSCIOUS 2-RESPONDS TO
PAIN ONLY 3-RESPONDS TO VOICE COMMANDS
4-AWAKE BUT CONFUSED 5-NORMAL
11. VITAL SIGNS A-BLOOD PRESSURE
B-RESPIRATION I BREATHS PER MINUTE
C-PULSE BEATS PER MINUTE
D-TEMPERATURE C OR F(ORAL/RECTAL)

AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION
SOS SERVICE MEMBERSHIP NO. S-61-1156
Effective 01.07.97 - 30.06.98

AGSO is pleased to announce the introduction of an Emergency Assistance Plan for the crew of the ship 'Rig Seismic'.

The Plan has been developed in conjunction with SOS Assistance Australasia Pty Ltd which is part of the International SOS Assistance Group. SOS is the world's leading international emergency assistance organisation.

The services provided by the Plan range from simple telephone advice and referral to very complex medical evacuations or repatriations. SOS operates via a network of multi-lingual critical care and aeromedical specialists at SOS Alarm Centres around the world.

As a member of the Plan, you can call an SOS Alarm Centre, at any time of the day or night, to access the following services.

Medical Services

- Worldwide 24 Hour Telephone Access
- Emergency Evacuation
- Medically Supervised Repatriation
- Repatriation of Mortal Remains
- Emergency Medication
- Transportation for Replacement Employee

Personal Services

- Legal Advice and Referral
- Access to Interpreters
- Hospital Deposit Guarantee
- Emergency Cash Advance
- Transportation to Join Disabled Member
- Return of Minor Children
- Travel Information
- Baggage Retrieval

In the case of an emergency please use the contact details shown on the Membership Certificate held by 'Rig Seismic's captain.

MEMBERSHIP CERTIFICATE
AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION
'RIG SEISMIC'

SOS SERVICE MEMBERSHIP
MEMBERSHIP NUMBER: S-61-1156
Effective 01.07.97 - 30.06.98

The holder of this Certificate is entitled to contact the SOS Service Centre detailed below at any time for emergency medical advice and assistance worldwide. Services include telephone medical consultation, referral to local doctors and hospitals, emergency medical evacuation and repatriation, and legal consultation or referral.

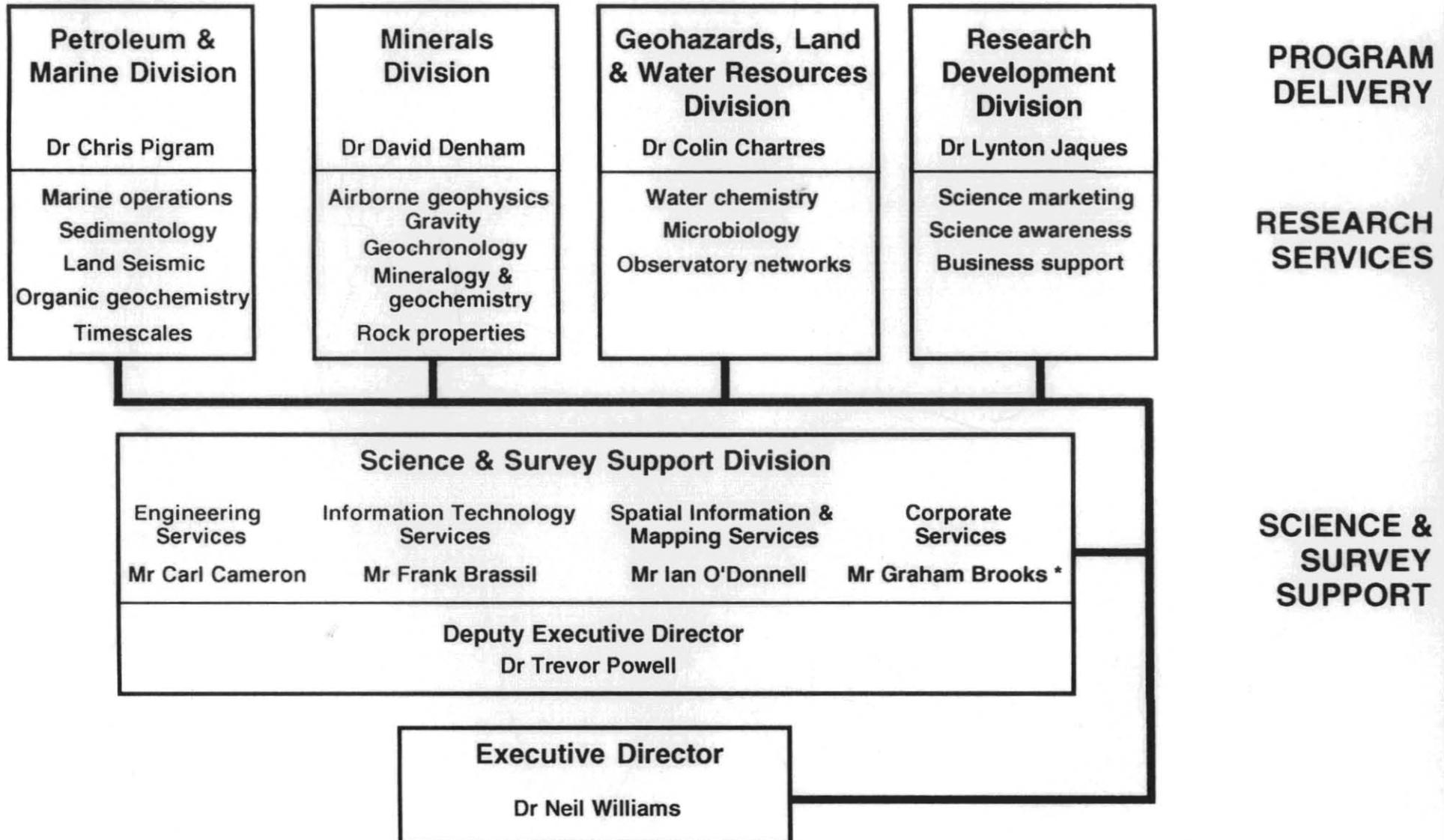
Whenever you call the 24 hour Alarm Centre, be prepared to give the member's name, the name of the Company and the Membership Number.

SOS 24 HOUR ALARM CENTRE
TELEPHONE AND FAX NUMBERS

SINGAPORE	-	Telephone	65-226-3936
	-	Fax	65-226-3937

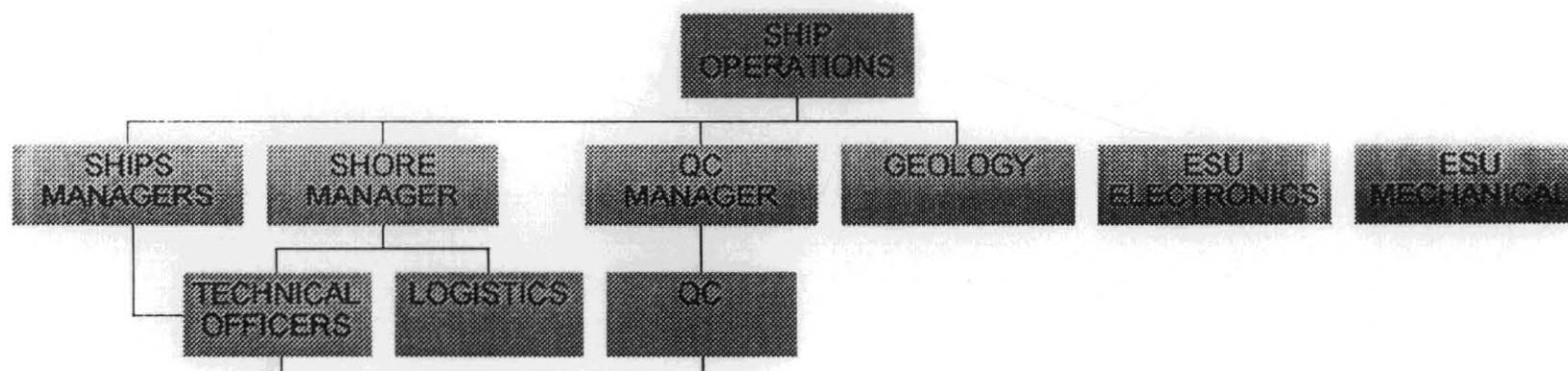
AUTHORISED
CERTIFICATE HOLDER
CAPTAIN - 'RIG SEISMIC'

6.
**Australian Geological Survey Organisation
 Organisational Structure**



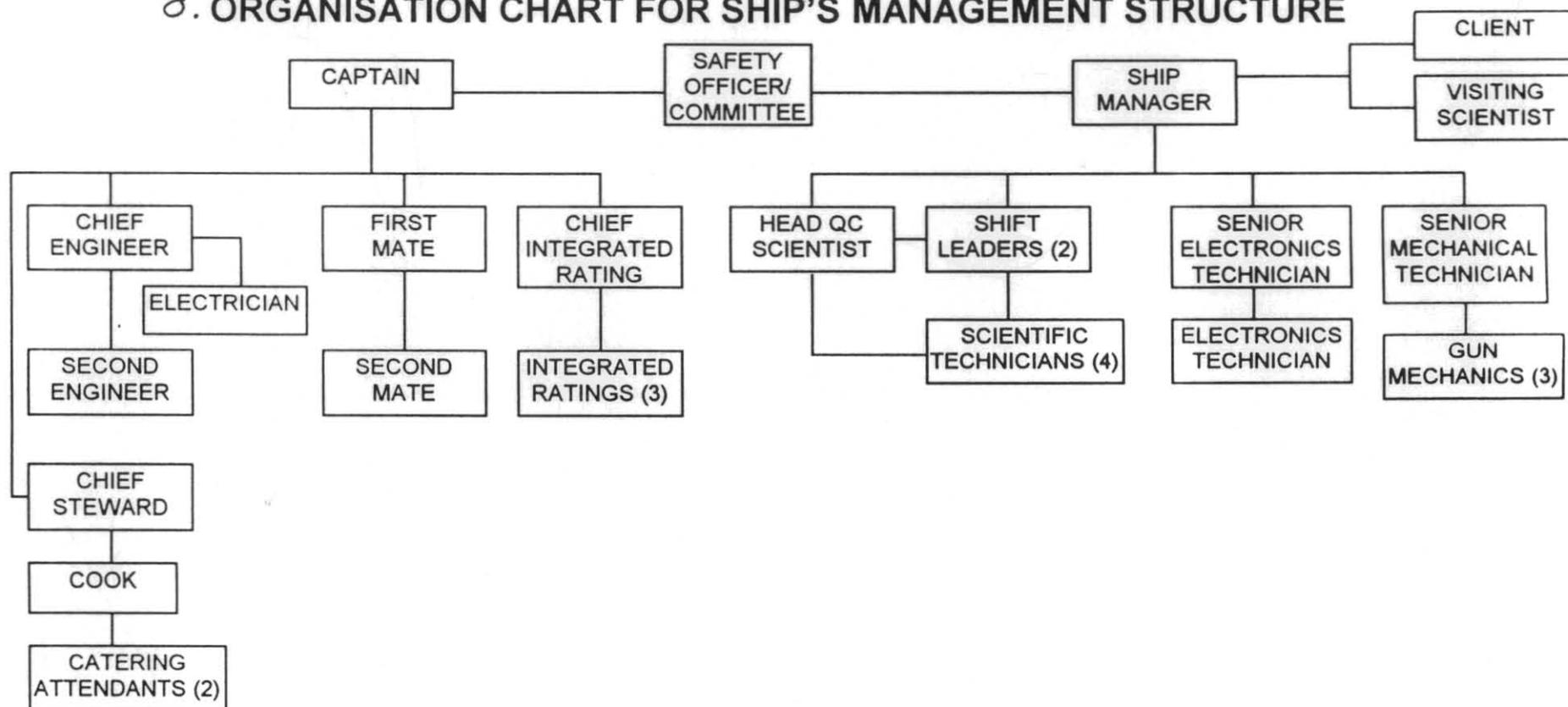
7.

Ship Operations Organisational Structure





8. ORGANISATION CHART FOR SHIP'S MANAGEMENT STRUCTURE



538034

R. V. RIG SEISMIC

9. SAFETY INDUCTION TOUR

To be conducted within 24hrs of joining. Please bring this paper with you.

Attire required for the safety tour is safety boots, earmuffs, safety glasses, and hard hat to be worn as appropriate.

The tour will start in the TV room with the screening of the video 'Safety on the Rig Seismic'

1. INTRODUCTION

This procedure describes the process to be adopted on board AMSA vessels to familiarise personnel new to the vessel with the vessel's general layout, the safety and emergency features.

2. POLICY

Personnel travelling on an AMSA vessel for the first time or after an absence of 12 months or longer shall under go an induction process when first joining or re-joining an AMSA vessel. This process shall ensure that new personnel

- are familiar with the general lay out of the vessel ;
- understand the safety features of the vessel ;
- understand the general routines onboard ;
- are aware of the standards of behaviour expected on board the vessel ;

The induction process will take into account any special requirements of AGSO and/or the charterer of the vessel.

3. INDUCTION PROCESS

The induction process shall consist of the following:

- watching a video on the safety features of the vessel;
- a tour of the vessel, conducted by a deck officer;
- relevant information placed in each cabin;
- participation in emergency drills on board;

The induction process (with the exception of the emergency drills) should be conducted within 24 hours of an individual's arrival on board, and shall occur no

later than 24 hours of the vessels departure for sea. Emergency drills shall be held as soon as possible after the arrival of new personnel on board, taking into account the operational requirements of the vessel.

The induction process shall take account of any special requirements of AGSO and/or the charterer of the vessel. This shall be achieved through consultation on board the vessel when planning the induction of new personnel.

3.1. SAFETY VIDEO

AMSA has prepared a 30 minute video for each vessel on the safety features of the vessel. New personnel shall be required to watch this video as the first part of the induction process.

3.2. TOUR OF THE VESSEL

Following the viewing of the safety video, new personnel shall be taken on a familiarisation tour of the vessel conducted by a deck officer.

The Master of each vessel will develop a ship specific check list for the conduct of induction tours, including but not limited to, the following items:

- emergency exits from the accommodation;
- visit the work area(s) of the personnel in the tour, and the location of the emergency exits closest to the work area(s);
- emergency muster stations, plans, and signals;
- operation of fire alarms and Fire Control Plan: Extinguisher types, Deck Foam System;
- fire fighting systems and appliances;
- fitting of life jacket/survival suit;
- life rafts and life boats, and an explanation of their launching;
- man overboard procedure, emergency stop alarms;
- explanation of the standing orders for workspaces, safety signs and safety and emergency plans and information posted around the vessel;
- hazard areas: Flammable liquids, High Noise, Working back deck and restricted areas;
- doors and portholes that will be closed at sea;

- safety and operational manuals;
- emergency stops- fuel, machinery and ventilation;
- rules for working aloft;
- reporting accidents, near misses and hazards;
- permits required for specific on board work;
- information available in cabins;
- communal facilities;
- company policies;
- general shipboard etiquette;
- importance of good housekeeping;
- person responsible for administering first aid and medicine;
- use of the ship's telephones for personal calls
- ship security in port
- VISIT TO COMPRESSOR AND ENGINE ROOMS.

On completion of the familiarisation tour, new personnel shall complete a form providing the following:

- date on which the familiarisation tour was conducted;
- date on which safety video was shown;
- relevant personal details;
- details of next of kin;
- location of the individual's boat and fire muster station (as proof of understanding of the safety induction); and
- a check of safety equipment possessed by the individual.

3.3. INFORMATION IN CABINS

safety information is provided in a folder in each cabin. Additionally the Shipboard Management Committee shall ensure that each cabin contains details of shipboard routines; shipboard etiquette; use of equipment on

board and any other information which will assist new personnel in familiarising themselves with the vessel.

New Personnel shall check that their cabin contains the required information, and shall ensure that they read and understand this information.

3.4. PARTICIPATION IN EMERGENCY DRILLS

Emergency drills shall be conducted on board the vessel as soon as possible after new personnel arrive on board. During such drills the second mate shall ensure that new personnel understand fitting of a life jacket/immersion suit and their role in any emergency.

All crew, special personnel and passengers (including new personnel) shall attend any life raft demonstrations held whilst they are on board the vessel.

4. RECORDS AND AUDITS

The forms completed by new personnel on completion of the induction tour shall be retained on board for a minimum period of two years as evidence of the satisfaction of the induction requirements. At the end of the two year period the forms may be destroyed.

Implementation of the induction procedures shall be monitored through the Business Unit's planned internal audit process.

PLEASE COMPLETE THIS SECTION

I have viewed the video 'Safety on the Rig Seismic'

My boat station is:

My fire muster station is:.....

Signed:.....(Name of crew member)

Please fill out the attached next of kin forms

Signed:.....(Safety Officer) Date:.....

R.V. RIG SEISMIC

NEXT OF KIN AND SAFETY EQUIPMENT INFORMATION (SCIENCE CREW ONLY)

(PLEASE COMPLETE AND HAND TO SHIP MANAGER WITHIN 24 HOURS OF JOINING)

MEMBER'S DETAILS

Surname _____

Give Names _____

Date of Birth _____

NEXT OF KIN DETAILS

Relationship _____

Surname _____

Given Names _____

Address _____

Postcode _____

Telephone Work _____ Home _____

SAFETY EQUIPMENT CHECK

I declare that I have in my possession aboard the Rig Seismic the following safety items:

Safety Boots/Shoes	Yes	No
Orange overalls in good repair	Yes	No
Safety Glasses (Aust Standard 1337)	Yes	No
Ear Muffs - Bilsom Vikings 2421	Yes	No

Signed _____ Date _____

10. CRUISE SUMMARY OF SAFETY PERFORMANCE

CRUISE:..... (include dates where appropriate)

- 1. Safety Committee meetings (include minutes)
2. General Safety meetings (include minutes)
3. Boat drills
4. Fire drills (drill location)
5. MOB drills
6. Accident reports
7. Lost time incidents
8. Hazard and near miss reports
9. Safety equipment checks
10. Audits and inspections
11. Last visit of company safety representative
12. Acknowledged receipt of safety bulletins or circulars received from head office

Signed..... Captain

Signed..... Safety Officer

Signed..... Client Rep

10 Garbage Type	All Vessels Except Offshore Platforms & Associated Vessels		*** Offshore Platforms & Assoc. Vessels
	Outside special areas	** In special areas	
Plastics - includes synthetic ropes and fishing nets and plastic bags	Disposal prohibited	Disposal prohibited	Disposal prohibited
Floating dunnage, lining and packing materials	Disposal prohibited less than 25 miles from nearest land	Disposal prohibited	Disposal prohibited
Paper, rags, glass, metal, bottles, crockery and similar refuse	Disposal prohibited less than 12 miles from nearest land	Disposal prohibited	Disposal prohibited
* Paper, rags, glass, etc. comminuted or ground	Disposal prohibited less than 3 miles from nearest land	Disposal prohibited	Disposal prohibited
Food waste not comminuted or ground	Disposal prohibited less than 12 miles from nearest land	Disposal prohibited less than 12 miles from nearest land	Disposal prohibited
* Food waste comminuted or ground	Disposal prohibited less than 3 miles from nearest land	Disposal prohibited less than 12 miles from nearest land	Disposal prohibited less than 12 miles from nearest land
Mixed refuse types

* Comminuted or ground garbage must be able to pass through a screen with a mesh size no larger than 25 mm.

** Special areas are the Mediterranean, Baltic, Red and Black Seas, and Persian Gulf areas.

*** Offshore platforms and associated vessels includes all fixed or floating platforms engaged in exploration or exploitation and associated offshore processing of seabed mineral resources, and all vessels alongside or within 500m of such platforms.



12. POLICY ON THE ISSUE AND USE OF SAFETY CLOTHING IN RIG SEISMIC

With the large variety of equipment on RIG SEISMIC, the back deck represents an area where special care is required if operations and evolutions are to proceed safely. Special clothing and equipment is provided to all staff to make sure that they are adequately protected while working on the back deck. To avoid use of items that do not meet the required standards, all safety gear must be supplied by AGSO or AMSA.

Much of the gear is supplied as personal issue. This means that individuals are responsible for looking after the items, ensuring that they bring them to the ship when they join for a survey. Generally such items are expected to last for two years, but will be replaced earlier as necessary. The following items are expected to be in the possession of each person whether issued as personal items or on loan:

Orange cotton overalls with long arms and legs

Bilsom Viking 2421 ear muffs (only approved and agreed type)

Safety glasses to ASA 1337 from range provided

Steel-capped slip-off boots

Wet weather three-quarter length jacket (sea-going crew only)

Hard-hat

Some items have more limited use such that general issue is not appropriate. These will be for communal use and must be returned to the correct stowage after use:

Safety harnesses with wide-eye catch

Flotation jackets with permanent buoyancy

Staff who arrive at the ship without their personal issue clothing will be loaned a set of gear. Such items, issued on a temporary basis, must be returned before disembarking.

It must be emphasised that the considerable expenditure on these items is to protect people from the weather and from harm while working on the ship. Individuals are required to look after the items, keep them in reasonable condition, and make sure they are available when needed. There will be some staff who may justify issue of extra items on a more frequent basis. Such cases will be treated on merit.

When outside the ship's main superstructure anywhere on the back deck area, people must observe all safety instructions which include:

Orange overalls and steel-capped shoes must be worn at all times

Ear muffs and eye protectors must be used when appropriate

Safety harnesses must be worn within 1 metre of the stern or side when no fixed safety barrier is in place or if a person is in a position where he/she could fall more than 600 mm.

Flotation safety jackets must be worn when working over the stern or side

Hard-hats must be worn when required

With the facilities provided there is no reason for anyone to come to harm or be exposed to unnecessary risk while working on the back deck.



Information on Chemicals you use

13. Material Safety Data Sheet (MSDS)

The Material Safety Data Sheet (MSDS) plays a key role in the process of identifying, assessing and controlling any risk to the health and safety of employees and other people likely to come into contact with hazardous substances on the job.

What is an MSDS?

You may have seen an MSDS and know that it tells you everything you need to know about the hazardous chemical you are working with. Can you sort through all that technical information and pick up what's important for you to know? Asking the right questions can help you get the information you need to work safely with each hazardous chemical. Here are some questions the MSDS can answer.

What is this chemical?

In the **Identification Section**, you can find out what the chemical is, who makes it, what's in it and how much of each component there is. It also includes common names for the chemical and names of ingredients that may be hazardous. It should also include a statement indicating whether the substance has been classified as hazardous to health in accordance with the National

Commission's Approved Criteria for Classifying Hazardous Substances.

What is the chemical like?

The **Physical Properties Section** can help you to understand chemical's physical characteristics. Some chemicals become hazardous when they evaporate, especially if they are flammable or harmful to inhale. The **vapour pressure** tells how easily the chemical vaporises; the higher the vapour pressure, the more likely you are to inhale it. **Vapour density** indicates how heavy the vapour is; if heavier than air, it will accumulate in low places which can help you understand where the chemicals is likely to be concentrated in the working environment.

This section also includes information on whether the chemical is hazardous when mixed with other substances or exposed to air or water. Is it flammable? Explosive? To avoid improper handling that could lead to a fire or explosion, you need to know the **flash point** - the lowest temperature at which a liquid will produce enough vapour to ignite, if the vapour is flammable; the **auto-ignition temperature** - the temperature at which the chemical will ignite without a spark; and the **flammability limits** - the range of

concentrations of a flammable vapour in air at which a flame can be propagated or an explosion will occur, if a source of ignition is present.

Can the chemical harm me?

The **Health Hazard Information Section** can help you to find out what health hazards can result from exposure. What are the symptoms and treatments? How can the chemical enter your body - through the skin, by breathing, or by swallowing? What type of hazard is it? Is it a cancer causing chemical, an irritant? What emergency first aid should be sought?

How do I protect myself?

The **Precaution For Use Section** gives you information on exposure standards, engineering control methods and what type of personal protective equipment is required when using the chemical.

Other information on procedures on spills and disposal, and measures on storing or transporting the substance are included in **Safe Handling Information Section**.

Where can I get an MSDS?

The Hazardous Substances Regulations are effective from 30th April 1996. The regulations require the supplier to provide an MSDS to an employer.

You must obtain an MSDS when supplied with a hazardous substance from the supplier. The MSDS must be available at work and accessible for employees who could be exposed to the hazardous substance.

AGSO has installed a data base (Chemwatch) which is networked through the laboratories, stores,

library and Safety Office. With this system, you can access information in relation to First Aid, Fire, Spills, Advice to Doctor as well as MSDS etc. on specific chemicals. Training on Chemwatch will be provided in October/November.

It is important to ensure that an MSDS be available for each hazardous chemical used in a workplace, and the safe work practice required for the product be implemented. The user must be familiar with both safe handling procedures and information provided on the MSDS.

It is important that relevant first aid materials be present (e.g. calcium gluconate gel is readily available whenever hydrofluoric acid is used or handled), and any precautions required for fire safety (e.g. appropriate extinguisher, storage cabinet) be provided.

Under the Hazardous Substances Regulations, the employees are required to report any problems they are aware of that might affect the employer's compliance with these regulations. The Occupational Health and Safety Act also refers to the employee's obligation to co-operate with the employer to ensure that the employer is able to fulfil their duty of care. Employees must use control measures as required and co-operate with assessments, training programs and any other action taken to protect health and safety.

If you have any queries, please do not hesitate to contact your OH&S Rep or the Safety Officer.



14. The Safe Use of Chemicals

When working with hazardous chemicals is part of your job, it is important for you to know the risks you face with each chemical you use. This bulletin will outline the kinds of injuries that chemicals can cause, types of chemical exposures and their effects, and factors that influence the severity of exposure.

Exposure: How Much, How Often and How Long?

Chemicals greatly vary in their toxicity, but three factors: (a) the amount, (b) the frequency and (c) the duration of exposure, must always be considered. Acutely toxic chemicals can injure after a single exposure, while other chemicals cause harm after repeated exposures. Being aware of which chemicals you are using are toxic can help you to protect yourself from injuries/illness caused by chemicals.

Physical Properties Affect Exposure Level

Extremely volatile chemicals evaporate readily and thus contaminate the air you breathe more easily than other chemicals do. If flammable they are an

extreme fire or explosion hazard as well. Corrosive or highly reactive chemicals are acutely toxic and will injure skin, respiratory passages or eyes immediately on contact. As mentioned in the Safety Bulletin No.1, read your Material Safety Data Sheet (MSDS) for information on the physical characteristics of chemicals you use.

Routes of Entry

How a chemical gets into your body influences its toxicity. Some chemicals are toxic only when you inhale them, while others are deadly only if swallowed. Still other chemicals can be handled safely but injure eyes on contact. Know which routes of entry are dangerous for the chemical you use, and always use protective equipment to prevent those kinds of exposures.

Kinds of reactions

If you are exposed to a hazardous chemical, you can expect one of two kinds of reactions: local or systemic reactions occur at the place where the exposure occurred, for example, skin, eyes

or lungs and may range from minor irritation to severe tissue damage. Breathing dangerous chemical vapors may injure lungs and respiratory passages, while swallowing such chemicals can damage your mouth, oesophagus, stomach and intestines. Although most local reactions are immediate, some, such as allergic rashes, occur only after repeated exposure and may vary from one person to another. When chemicals enter the blood through the skin, eye, mouth or most frequently, the lungs, certain organs (known as "Target organs") or your entire body can be damaged; this is a systemic reaction. Systemic reactions can be immediate but often are delayed, ie you don't know they are happening until they have done severe damage.

Do Your Homework

To protect yourself from unexpected injury from a hazardous chemical, refer to the MSDS for that chemical. It will list the signs and symptoms of chemical toxicity for both local and systemic reactions as well as the target organs and primary routes of entry. Always use personal protective equipment and follow safety guidelines appropriate for the chemical. And avoid relying on your memory or tips from co-workers. Review the MSDS whenever you have the slightest doubt about the hazards of any chemicals.

Under the Hazardous Substances Regulations, the employees are required to report any problems

they are aware of that might affect the employer's compliance with these regulations. The Occupational Health and Safety Act also refers to the employee's obligation to co-operate with the employer to ensure that the employer is able to fulfil their duty of care. Employees must use control measures as required and co-operate with assessments, training programs and any other action taken to protect health and safety.

This Safety Bulletin should be read in conjunction with Safety Bulletin Number 1.

If you have any queries, please do not hesitate to contact your OH&S Rep or the Safety Officer.



15 Sports Safety

With the onset of a warmer weather and the advantages of daylight saving, the level of outdoor activities has increased significantly. More people are cycling to and from work, taking part in lunch time activities such as jogging, running, playing football, volley ball and various forms of sport.

Sunlight And Your Skin

The increase in outdoor activities also means an increase in exposure to the sun's ultraviolet rays which can result in skin damage. For those of you whose job demands outdoor work, the warmer weather invariably means lighter clothing and shorter sleeves, trouser legs and hem-lines. This also results in increased exposure to the sun's UV rays.

Approximately two out of three Australians who live to 75 years can expect to develop some type of skin cancer at some stage. Although all types of skin can be affected by too much exposure to sunlight, most skin cancer can be prevented by protecting skin from the sun.

There are a number of measures which can be taken to minimise exposure to sunlight. These include the following:

- Organise outdoor activities outside of 10am to 2pm (11am and 3pm during daylight saving) if

possible. This may not be practicable for field operations.

- Wear a hat with at least an 8cm brim to protect your face, lips, ears and neck.
- Take advantage of shade from trees and buildings.
- Wear loose fitting natural fibre garments.
- Use sun protection factor (SPF) 15+ broad spectrum, water resistant sunscreen to cover all skin not protected by clothing.
- Reapply sunscreen every two hours. If sweating freely it must be reapplied more often.
- Be suspicious of any spot on your face/body that look different from those around it, including those that change in colour, size or shape.

Commuter Bike Safety

It is nice to take advantage of the warm weather to enjoy cycling to and from work, and at the same time to maintain a healthy lifestyle. Many cyclists believe that cycling is safe, but in fact bicycles are unstable vehicles, and cycling causes many serious injuries. The following are some tips that can help you to have an enjoyable and safe ride:

- Maintain your bike in good condition, it will make your cycling safer and easier.
- Wear bright clothes and a reflective vest, as bicycles are

difficult to be seen, especially at night.

- Wear helmets to protect you from serious head injuries.
- Wear gloves, long pants and sleeves to prevent gravel rash.
- Wear suitable shoes and ensure that laces are tied properly so that they will not foul the chain.
- Plan to avoid peak traffic and hazardous routes.
- Keep to the bike paths wherever possible.
- Ride defensively! Keep your distance, control your speed, and share the road or pathway. Some pathways have white centre lines; keep to the left.
- Check the brakes, light, bell, tyres and steering at least once a week.
- Overhaul your bike every six months.

(Extract from Canberra Cycle ways)

Why Warm Up

Warm up is an essential part of any sport activity session. An effective warm up prepares the muscles, tendons and joints for the range and type of movements required during exercise. Warm muscles and tendons stretch more easily, are more flexible, contract more effectively and coordinate better, reducing the chance of injury and increasing the level of performance.

Warm up increases body and muscle temperature and increases the blood and oxygen level to the muscles. In effect, it lubricates the muscles and joints and avoids the possibility of sudden stretching of cold muscle tissue. The following are examples of suitable warm up activities: jogging, a brisk walk, slow swim, slow cycle, dance routine, or controlled activities using balls and other playing equipment.

Why Stretch

The major purpose of regular stretching is to lengthen muscle and tendon tissue and to increase the range of movement at a joint. Without stretching, muscles will gradually lose their flexibility and may fail to respond effectively during sporting activity. Stretching before an exercise session prepares the participant both physically as well as mentally for the activity ahead and reduces the likelihood of injuries such as muscle strains.

What About Cooling Down

At the end of any sporting activity, it is essential to cool down. A light jog or walk for 2-3 minutes followed by a stretching routine is the simplest way to cool down. Cooling down helps the body recover from exercise by removing muscle waste products, returning blood flow to normal, reducing muscle soreness and improving flexibility.

(Acknowledgement: Sports Medicine Australia)

Replacement Of Fluids

It is important to replace the fluids lost while exercising by taking adequate amounts of water during or after exercise.

For information on how to stretch, please refer to the "Start Warm, Play Hot" pamphlet. If you have any queries, please do not hesitate to contact your OH&S Rep or the Safety Officer.



16. Solvents

Solvents can cause serious illnesses. Large amounts of solvents are used in industry. They are often used as cleaners or degreasers, and as an ingredient in paint, inks, glues and varnishes. Many of these products have more than one solvent in them. Examples of some solvents used at AGSO:

Paint - white spirits, xylene, toluene;

Spray painting - methyl ethyl ketone, acetone; and

Laboratories - ketones, alcohols, petroleum ethers, xylene, hexane, chlorinated solvents.

Physical Characteristics

To understand the dangers of solvents, you need to know their physical characteristics. Most solvents evaporate quickly, creating a breathing and explosion hazard. The vapours of solvents can ignite under certain conditions; some flammable solvents can be ignited at room temperature when they are exposed to a spark, a flame or static electricity.

Most solvent vapours are heavier than air, so they tend to concentrate near the floor. Questions you should answer when reading a solvent's Material Safety Data Sheet (MSDS) are: Is it flammable? What are its upper and lower explosive limits? (These numbers indicate the range of concentrations in air in which the solvent's vapour can explode if it is

ignited.) What is the solvent's exposure standard expressed as Time Weighted Average (TWA), the amount of solvent in the air you can safely be exposed to?

How solvents enter your body

Solvents can enter your body in three main ways:

1. By breathing in solvent vapour;
2. Through skin contact (most solvents can be absorbed through unbroken skin);
3. You can also swallow it through the contaminated food and drink.

Health hazards

If you breathe in too much solvent vapour, you may contract the following symptoms: headaches, irritability, mood changes, dizziness or giddiness, forgetfulness, nausea, weakness, abnormal tiredness.

These effects may disappear once you stop working with solvent products, however, long term or high exposure increases the risk of permanent damage to the liver, kidneys and nervous system. Some solvents can damage your heart. Exposure to high levels of solvents can also cause unconsciousness and death.

Solvents dissolve the natural oils of your skin, leaving the skin dry, irritated and open to infection. Solvents can go through your skin and into your bloodstream. Long term exposure to solvents can cause contact dermatitis, a persistent skin

disease with painful or itchy, red skin and blisters.

Control Measures

Information

- Know about the solvents that you use and use the safest possible product that will do the job.
- Always read the Material Safety Data Sheets for all products that you use.
- Avoid using solvents that may cause cancer or reproductive hazards. The following solvents are known or suspected of causing cancer or of being a reproductive hazard:

Benzene, Carbon Tetrachloride, Methylene Chloride (Dichloromethane), Chloroform, Epichlorohydrin, Formaldehyde, Perchloroethylene.

- Ask yourself if you really need to use the solvent at all.

Good ventilation

- Work areas where solvents are used must be properly ventilated. A local exhaust ventilation system will be needed in most cases.
- The system should suck contaminated air away from you not past you.

Safe work Procedures

- Do not use solvents to clean your hands.
- Do not enter confined spaces where fumes may have collected. People have died from doing this.

Personal Protective Equipment

As solvents can get into your body more easily than other substances, you need to be protected from their short and long term effects. Always wear the recommended personal protective equipment when using solvents. This includes chemical splash goggles, face shield or safety glasses with side shields. Use the recommended gloves and respirator

for the job you do; a respirator not designed for your solvent will not protect you at all.

Storage and Disposal

Flammable solvents must be stored in a fireproof cabinet. If bulk decanting is required, containers must be grounded to prevent sparking from static electricity. Keep solvents away from direct sunlight or other heat sources, and away from oxidizers, which increase fire hazard. Do not mix incompatible solvents as fire or explosion may occur. Storage and disposal of solvents must comply with local requirements.

Emergencies

If a solvent splashes on unprotected skin, wash it off immediately under running water. Splashes in the eye should be flushed at an eyewash station for 15-20 minutes. If you get dizzy from breathing solvent, get to fresh air immediately, notify someone in the vicinity and get medical help. Spilled flammable solvent poses an explosion hazard. If a spill is too large to clean up quickly, evacuate the area and report the spill to your supervisor.

Under the Hazardous Substances Regulations, the employees are required to report any problems they are aware of that might affect the employer's compliance with these regulations. Employees are required under the Occupational Health and Safety (Commonwealth Employment) Act 1991 to use all personal protective equipment in the correct and safe manner (as instructed by their supervisor) and to co-operate with their employer to fulfil it's duty of care and not to endanger themselves or others.

If you have any queries, please do not hesitate to contact your OH&S Rep or the Safety Officer.



17. Corrosives

Corrosive are substances that can burn or destroy on contact. There are two main types of corrosives: Acids and Bases (Alkalies). There are many corrosives being used in AGSO. They are mainly acids such as Hydrochloric Acid, Sulphuric Acid, Nitric acid, and Hydrofluoric acid. In some areas, Alkalies such as Sodium Hydroxide and Potassium Hydroxide are also used.

Danger! Corrosives can causes severe burns to skin and eyes.

Corrosives react with body tissue to cause burns. They can burn skin, (cause irritation or blistering and denaturing to the skin) and cause severe eye tissue damage which can result in total loss of vision. There have been cases of severe burns and deaths caused by accidental exposure to Hydrofluoric Acid (please refer to Safety Alert No.2).

The extent of a corrosive burn depends on the concentration of the corrosive and how long it stays on your skin. This is why you should treat any corrosive burn as quickly as possible. Your work area is equipped with emergency showers and eyewash stations. When you are dealing with a chemical burn, your top priority is to get under running water as fast as possible and stay there for at least **20 minutes**. Clothing contaminated with the chemical should be removed

after you're in the shower. Since a burn victim may panic or be in extreme pain, you must know the quickest route to the shower like the back of your hand. If no shower is available, use tap water or a garden hose; but remember that these water sources may not provide the best water pressure and should not be relied on if a shower is available.

If a chemical splashes into your eyes you certainly will not be able to see where you are going - an added incentive for learning the route to the eyewash station now. You should use a buddy system (get help from your workmate in case of emergency).

The eyewash station is designed to provide low pressure water to the eyes. If you must use water from other sources, avoid spraying the water directly on the eye; the water may push corrosives back into the affected eye and can cause further damage and the victim's head should be side ways, with the affected eye below, so that corrosives won't wash into the other eye. *For treatment of Hydrofluoric Acid Burns please refer to Safety Alert No.2.*

How to protect yourself from chemical burns?

Chemical burns can cause severe pain and suffering, disfigurement, lifelong

disability or death. It is common sense to follow safety procedures to prevent burns. Read the Material Safety Data Sheet (MSDS) before using any chemical and understand the hazards involved. Follow instructions for the chemical's use, storage and disposal. always handle corrosive substances in a fume cupboard and wear the appropriate protective clothing.

As a general rule of thumb for **low concentration corrosives (except hydrofluoric acid) the following personal protective equipment must be used:**

Eyes

Chemical goggles or safety glasses with side shields. (It is advisable not to wear contact lenses as they may absorb irritants and cause further damage to eyes.)

Hands/feet/body

Appropriate protective gloves as per MSDS, water repellent shoes, and lab coat.

For High concentration corrosives and hydrofluoric acid the following personal protective equipment must be used:

Eyes

Full face shield. (Do not wear contact lenses.)

Hands/feet/body

Natural neoprene gloves (refer to MSDS of individual chemicals) with plastic sleeves or elbow length PVC gloves, rubber boots or PVC safety gumboots (If there is a risk of the gloves being punctured, such as when etching rockslabs, a second set of internal close fitting gloves must be worn, with a more robust glove over the top).

Lab coat, PVC apron or, if practicable, PVC protective clothing (please refer to the MSDS of individual chemicals).

Others Measures

- Ensure that there is ready access to the eye wash unit and emergency shower.

- Ensure that there is ready access to emergency breathing apparatus.
- Staff should be trained in correct use & maintenance of respirators.
- Ensure there is a supply of calcium gluconate gel readily available for *hydrofluoric acid* burns.

A spill on gloves or equipment may not be noticed until later, when you accidentally touch the contaminated material. Washing your gloves thoroughly after use and ensuring your work area and equipment is clean is good practice that must be followed at all times.

Summary

If you use corrosives, you must read the MSDS of each corrosive being used in the laboratory to learn what first aid treatment is required for a chemical burn, and what special dangers it poses in addition to being corrosive. You must then take steps to protect yourself and your environment from those dangers.

Under the Hazardous Substances Regulations, employees are required to report any problems they are aware of that might affect the employer's compliance with these regulations. The Occupational Health and Safety Act also refers to the employee's obligation to co-operate with the employer to ensure that the employer is able to fulfil it's duty of care. Employees must use control measures as required and co-operate with assessments, training programs and any other action taken to protect health and safety.

If you have any queries, please do not hesitate to contact your OH&S Rep or the Safety Officer.

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18. SAFETY AND HANDLING OF COMMERCIAL LITHIUM CELLS

Any person working directly with lithium cells and emergency response personnel must be trained in the specific precaution for safety and handling. Electrochem Industries has Product Safety Data Summaries on each type of cell produced. This information includes: internal components and hazards; storage and disposal tips; handling and use precautions. In addition Electrochem Industries has produced a VHS video on the "Safety and Lithium Batteries Design, Use and Handling."

This document should be used in coordination with all material listed above. If there are any questions regarding any of these materials, please contact your Electrochem Industries representative.

SCOPE:

This procedure deals only with the removal of dead or partially used lithium cells or batteries from a piece of equipment. It is possible under severe abuse conditions that cells contained within a piece of equipment may be swollen or leaking. Leaking cells shall contaminate sealed equipment with acid fumes.

WORK AREA:

The work area should have good ventilation, preferably a mechanical exhaust hood. For safety precautions the area should have two exits; access to emergency alarm system or telephone; eye wash station and safety shower. The work surface must be non-conductive.

EQUIPMENT:

Non-conductive tools.
Lithex fire extinguisher.
Individual thick plastic bags with sealing mechanism.
Glass jars with lids containing Calcium Oxide (lime) for leaking cells.
Department of Transportation containers for waste disposal.
Vermiculite.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Non-Vented Cells
Safety Glasses with side shields.
Full face shield.
Chemically resistant apron.
Lab coat.
Latex gloves.

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Vented Cells in non-fire conditions with greater than 19.5% oxygen content
Full Face Respirator with Acid Gas/Organic Vapor Filter.

Chemically resistant apron.

Lab coat

Latex gloves.

Vented Cells in fire conditions should only be handled by highly trained individuals in self contained breathing apparatus.

PROCEDURE:

- 0010 There should always be two people present during removal of lithium cells from equipment. All unnecessary individuals should be removed from the area.
- 0020 The work area must be free of clutter, flammable liquids and combustible materials.
- 0030 Check the ventilation system, exits, emergency alarm system, eye wash station, emergency shower, lithex fire extinguisher and materials for disposal of used cells.
- 0040 Make sure that all Personal Protective Equipment is in working order and Occupational Safety and Health Administration training is in compliance. There should be respirator protection available for each person in the work area.
- 0050 Employees working directly with cells and the observer, must be wearing a minimum of safety glasses, gloves, and a lab coat. All additional PPE must be available within the work area.

REMOVAL OF CELLS:

- 0060 Work in well ventilated area.
- 0070 Equipment containing cells should be disassembled cautiously as it may contain acid gas from possible leaking cells.
- 0080 If there is any sign of acid gas, indicated by a pungent odor or eye irritation, the unit should be placed in a ventilated hood. If a ventilated hood is unavailable, all employees in that work area should don respirator protection as outlined in PPE section.
- 0090 Remove used cells from the housing. If cells are not leaking, they must be packaged individually in non-conductive bags for disposal. Follow local, State and Federal regulation for hazardous waste disposal.

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- 0100 If any cells are leaking, they must never be handled without gloves. The leaking electrolyte is corrosive and an irritant. See Product Safety Data Summary for specific chemistry and the First Aid Section of this document for further information.
- 0110 Leaking cells should be placed in individually sealed non-conductive bags and placed in a container, preferably glass, containing lime. The lime will neutralize as escaping electrolyte gases. The material must then be packaged for proper disposal.
- 0120 Equipment once containing leaking cells must be handled with gloves until decontaminated. Because the nature of each piece of equipment is unique, please contact Electrochem Industries for specific instructions.

FIRE CONDITIONS:

- 0130 Fire directly involving lithium cells must be fought as lithium fires. Only trained personnel should handle lithium fires. No one should ever fight a fire alone.
- 0140 Use Lithex (graphite powder) extinguishers, specifically formulated for lithium fires.
- 0150 DO NOT use carbon dioxide, dry chemical or Halon extinguishers. These extinguishers will be ineffective with in a lithium fire.

HEALTH HAZARD INFORMATION FOR LEAKING CELLS:

- 0160 The electrolyte contained within the lithium cells can cause severe irritation to the respiratory tract, eyes and skin. All precautions should be taken to limit contact with any internal components of the cell. See First Aid Procedures in case of contact.

FIRST AID:

- 0170 **EYES:**
IMMEDIATELY flush eyes with a direct stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET IMMEDIATE MEDICAL ATTENTION.
- 0180 **SKIN:**
Flush with cool water or get under shower, remove contaminated garments. CONTINUE TO FLUSH FOR AT LEAST 15 MINUTES. Get medical attention if needed.

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0190 **INHALATION:**
Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, give mouth-to-mouth resuscitation. GET MEDICAL ATTENTION IMMEDIATELY.

DISPOSAL:

0200 Environmental Protection Agency considers lithium cells and batteries hazardous waste upon disposal. Please check all local, State and Federal regulations regarding the disposal of hazardous waste.

**For further help please contact your
Comcare Australia State OH&S Manager**

ACT

Phone: (06) 276 0333
Fax: (06) 247 2136

New South Wales

Phone: (02) 9289 9511
Fax: (02) 9289 9547

Victoria

Phone: (03) 9652 3555
Fax: (03) 9652 3596

Queensland

Phone: (07) 3233 1311
Fax: (07) 3233 1390

Western Australia

Phone: (09) 480 1444
Fax: (09) 322 7080

Tasmania

Phone: (03) 6223 1366
Fax: (03) 6234 5685

South Australia

or

Northern Territory

Phone: (08) 8224 1600
or (008) 888 468
Fax: (08) 8223 3721

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Occupational Health & Safety
Incident Report

When to use this form. (Note: This is not a compensation form)

Your employer must, under sections 68 and 69 of the Occupational Health and Safety (Commonwealth Employment) Act 1991, record and report to Comcare Australia serious accidents and dangerous occurrences. By using this Incident Report form and the Additional Information form you can also satisfy the requirements of the Australian Standard for Workplace Injury and Disease Recording (AS1885.1).

Reporting and Recording Incidents under the OH&S(CE) Act 1991:

- 1 Report to Comcare Australia any work-related incident which results in:
 - death,
 - emergency treatment by a doctor or admission to hospital (serious personal injury),
 - 5 or more consecutive days or shifts off work, or
 - a dangerous occurrence—that is, an event in which no one was hurt but one of the above **could** have happened.

2 Complete this form and the Additional Information form.

3 Retain a photocopy of the Incident Report form and the original Additional Information form for your records.

4 Within 28 days of the incident, send the original Incident report form to: **The OH&S Manager,
 Comcare Australia
 GPO Box 9905
 (in the relevant State/Territory)**

Recording other incidents for your employer:

To record other incidents in accordance with the Australian Standard for Workplace Injury and Disease Recording (AS1885.1):

- 1 Complete this form and the Additional Information form.
- 2 Retain both forms in accordance with your employer's instructions.

How this information is used.

The Safety Rehabilitation and Compensation Commission and Comcare Australia will use the information you provide to:

- develop strategies to identify and reduce work-related injury and disease.
- carry out its functions under the Occupational Health and Safety (Commonwealth Employment) Act 1991 and the Safety, Rehabilitation & Compensation Act 1988.

Personal information is safeguarded by the Privacy Act 1988.

To be completed by your Personnel Office

Cost Centre Code & Title

*If the person was injured or killed, enter the code for the area responsible for that person.
 Otherwise enter the code for the area responsible for the "dangerous occurrence".*

Agency's Region Name (if not applicable, write N/A)

*If the person was injured or killed, enter the region responsible for that person.
 Otherwise enter the region responsible for the "dangerous occurrence".*

ASCO Code for the affected person's job

Comcare Use Only

Comcare
Office

Comcare
Reference

Entered by

Date

1 What is the full name of your organisation or Government Department?

8 What is the full name of the injured or affected person?
Given Names

Surname

2 Your organisation's internal reference number or code for this incident.

If not applicable, write 'N/A'.

9 Is the affected person male or female?

Male

Female

3 When did the incident happen?

Time

am / pm

Date (Day / Month / Year)

10 What is the date of birth of the affected person?

Day / Month / Year

11 Was the affected person an employee of YOUR organisation?

Yes ▶ Go to 13

No ▶ Name and address of the affected person's employer
(If the person was not employed, enter N/A — not applicable)

4 Did you see the incident happen?

No ▶ Go to 5

Yes ▶ Go to 6

5 Did anyone else see the incident happen?

No ▶ Go to 6

Yes ▶ Please complete the details below:

Witness's name

Postcode

Witness's home or work address

12 In what capacity was the affected person on the premises?

As a commercial contractor ▶ Go to 13

As a Commonwealth contractor ▶ Go to 13

As a Commonwealth employee from another organisation ▶ Go to 13

Other ▶ Go to 18

13 Did the affected person have an Australian Government Service (AGS) Number, a Service Number or Employee Number?

No ▶ Go to 14

Yes ▶ Enter the appropriate number below

AGS Number

Service Number

Employee Number

6 Did the incident result in injury, disease or death?

No ▶ Go to 21

Yes ▶ Go to 7

7 Which of the following happened to the person?

Serious personal injury
(had emergency treatment by a doctor or went to hospital)

Had 5 or more consecutive working days or shifts off work

Death

None of the above

▶ This incident does not have to be reported to Comcare

14 What was the job classification or job title of the affected person at the time of the incident?

If there is no job title, please describe the job. Include the designation or classification, if known, for example ASO 5 or TO 1.

15 What were the affected person's official hours of duty on the day of the incident?

From	To
mm	mm
pm	pm

16 What are the main tasks performed by the affected person?

17 What was the affected person's work status at the time of the incident?

- Permanent full-time
- Permanent part-time
- Temporary full-time
- Temporary part-time
- Casual full-time
- Casual part-time
- Graduated return to work
- Other

18 What was the affected person doing at the time of the incident?

19 How many years experience did the affected person have in doing the task being carried out at the time of the incident?

Years Months (if not applicable, write 'N/A')

21 Describe how the incident happened.

We need to know:

- What **started** the sequence of events
- The **sequence** of events
- The **final thing** that happened
- The name of any particular chemical, product, process or equipment that was involved

Please continue on the next page

20 Describe the injury or illness, including the parts of the body that were affected.

Comcare Office Use	
Nature of Injury	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Body Location	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Breakdown Agency	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Mechanism of Injury	<input type="checkbox"/> <input type="checkbox"/>
Agency of Injury	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

22 What is the address where the incident happened?

Postcode

23 What is the exact location within the above address where the incident happened?
(e.g. employee's desk, machine shop, fire stairs)

24 Was the incident on your employer's premises?

No Go to 25

Yes Go to 26

25 What was the normal workplace, depot or base?

Postcode

26 Have you or your employer **already taken** or do you **propose take** any of the following actions to prevent similar incidents?

Already taken Propose to take No action

Change to induction training

Change to on-going training

Modify equipment

Change to work procedures

Change to work environment

Equipment maintenance

Other job redesign

Other, *specify below*

27 Your name.

28 Your classification or designation.
If you don't have a classification, describe the duties you perform.

29 Your work phone number.

()

30 Signature and date

For further help please contact your
Comcare Australia State OH&S Manager

ACT

Phone: (06) 276 0333

Fax: (06) 247 2136

Victoria

Phone: (03) 9652 3555

Fax: (03) 9652 3596

Western Australia

Phone: (09) 480 1444

Fax: (09) 322 7080

South Australia

or

Northern Territory

Phone: (08) 8224 1600

or (008) 888 468

Fax: (08) 8223 3721

New South Wales

Phone: (02) 9289 9511

Fax: (02) 9289 9547

Queensland

Phone: (07) 3233 1311

Fax: (07) 3233 1390

Tasmania

Phone: (03) 6223 1366

Fax: (03) 6234 5685

Additional Information

**This form is for your organisation's records only.
Do not send to Comcare Australia.**

1 Was the affected person:

Wage/salary earner:

- Trainee
 — Outworker
 — Apprentice
 — Pieceworker
 (other than Outworkers)
 — Other

**Self employed
 (including contractors
 and subcontractors)**

Unpaid worker:

- Work experience
 — Other

2 What is the preferred language of the affected employee?

3 What training had been provided for the affected employee?

- Induction training
 Task specific training
 Both of the above
 None of the above

4 Number of hours worked:

- 8 hours or less
 More than 8 hours
 (excluding overtime)

5 What proportion of the work day or shift had the affected employee already worked when the incident occurred?

- 25% or less
 26% to 50%
 51% to 75%
 76% to 100%
 Overtime

6 Under what shift arrangements was the affected employee working at the time of the incident?

- Fixed, standard or flexible hours
 Rotating shift

Questions 7 - 10 should be answered as soon as information becomes available. For some occurrences some of these questions will not be relevant.

7 Was the injury or disease fatal?

Fatal Go to end of form

Non fatal

8 Does the affected employee require rehabilitation?

No Go to 9

Yes When does the rehabilitation program start

9 When did the affected employee resume work on:
 (Enter each date when applicable)

Short-term alternative duties

 / /

Permanent alternative duties

 / /

Normal duties

 / /

10 What was the total number of working days lost by the affected employee?

To be completed only when the employee has resumed permanent duties.

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Please turn over

Occupational Health and Safety - Incident Report

Additional Information

11 Have proper safety procedures been followed? If not please state the reasons.

1).....

2).....

3).....

12 What measures can be taken to prevent the recurrence of incidents with similar nature?

1).....

2).....

Supervisor's Signature:..... Date:.....

Safety Officer's Comments:

.....
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.....

Safety Officer's Signature:..... Date:.....