

Documented Risk Management Process

Record of risk management 'process' to be carried out in accordance with the *Workplace Health & Safety Regulation 1997*

Date of assessment:

.....

Date/times of work

.....

Work to be undertaken for:

.....

.....

Work to be undertaken on:

.....

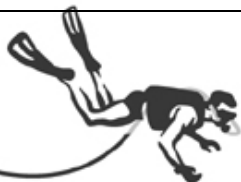
Site location:

.....

Name of person conducting risk assessment process	Competency determined by

Names of divers participating in underwater diving work	Competency determined by
1	
2	
3	

Name of all other persons involved in the work	Role
1	
2	
3	



Assessment of Consequences

LEVEL	DESCRIPTION	EXAMPLE
1	<i>Major</i>	Extensive or life threatening injuries, emergency protocols enacted, loss of production capability, emergency services required.
2	<i>Moderate</i>	Medical Treatment required, emergency services required, person is not able to continue work.
3	<i>Minor</i>	First aid required, person may / may not be able to continue work.
4	<i>Insignificant</i>	No injuries, person able to continue work.

Assessment of Likelihood

LEVEL	DESCRIPTION	EXAMPLE
A	<i>Almost Certain</i>	Is expected to occur in most circumstances.
B	<i>Likely</i>	Will probably occur in most circumstances.
C	<i>Possible</i>	Might occur at same time.
D	<i>Unlikely</i>	Could occur at same time.
E	<i>Rare</i>	May occur only in exceptional circumstances.

Risk Analysis Matrix

LIKELIHOOD	CONSEQUENCE			
	Major 1	Moderate 2	Minor 3	Insignificant 4
A Almost Certain	E	E	H	H
B Likely	E	H	H	M
C Possible	E	H	M	L
D Unlikely	H	M	L	L
E Rare	H	M	L	L

Risk Score

Symbol	Risk	Pre Dive	During Dive
E	Extreme Risk	Dive must not commence	Urgent action required
H	High Risk	Dive must not commence	Action required at the earliest possible moment
M	Moderate Risk	Dive must not commence	Action required
L	Low Risk	Diving may commence / Manage with routine practices	Continue managing with routine practices
CR	Controlled Risk	Diving may commence with controls in place	Diving may commence with new controls in place

Important Note:

Diving operations should only commence or continue when the risk score is either L or CR.

Should the risk score change during diving operations then actions above should be taken to reduce the risk to L or CR.



Risk Assessment and Control Measures

LEVEL OF DIVER COMPETENCE					
Identified Hazard	Assessed Consequence	Assessed Likelihood	Assessed Risk	Risk Control	Assessed Risk After Control

ENVIRONMENTAL CONDITIONS					
Identified Hazard	Assessed Consequence	Assessed Likelihood	Assessed Risk	Risk Control	Assessed Risk After Control
Strength and direction of wind (consider emergency response)					
Current and tide					
Underwater Visibility					
Entrapment Hazard					
Depth of Worksite					
Water Temperature					
Time of Day					
Underwater Terrain					
Atmospheric Temperature and Humidity					
Contaminants					
Isolation of Dive Site					

TASK RELATED CONDITIONS

Identified Hazard (Consider Complexity, non-routine nature)	Assessed Consequence	Assessed Likelihood	Assessed Risk	Risk Control	Assessed Risk After Control

HYPERBARIC / PHYSIOLOGICAL HAZARDS

Identified Hazard	Assessed Consequence	Assessed Likelihood	Assessed Risk	Risk Control	Assessed Risk After Control
Frequency of diving, inc repeat diving, multi day diving.					
Depth of Dive					
Duration of Dive					
Breathing Gas					
Exertion Required to Reach Dive Site					
Exertion Required to Conduct Task					
Excessive Noise					
Immediate Pre Dive Fitness					
Altitude Exposure					

ASSOCIATED ACTIVITIES HAZARDS						
Identified Hazard	Assessed Consequence	Assessed Likelihood	Assessed Risk	Risk Control	Assessed Risk After Control	
Manual Handling						
Boat Handling						
Dive Site Entry*						
Dive Site Egress*						
Crane / Winch Operations						
Rigging						
Topside Plant*						
Dive Platform						

OTHER HAZARDS

Identified Hazard	Assessed Consequence	Assessed Likelihood	Assessed Risk	Risk Control	Assessed Risk After Control
Dangerous Marine Animals					
Non Associated Boat Traffic (Small Craft)*					
Shipping Movements					
Water Inlets					
Water Outfalls*					
Water Pressure Differentials*					
Use of Hazardous Substances					
Existing in Water Chemical Pollutants					
Existing in Water Biological Pollutants					
Explosives					
Hazards Peculiar to Dive Site					

RISK CONTROL

In deciding on control measures, the hierarchy of control measures mentioned in AS/NZS 2299 part 1, appendix D3.2 must be taken into account:

1 General Control of risk is achieved by selecting from the hierarchy of control measures, one or more measures which individually or in combination achieve the required risk reduction.

2 Control measures Appropriate control measures should be applied to risks, using the hierarchy of controls in the following order:

- (a) *Elimination* – Where the level of risk cannot be controlled to an acceptable level, no diving should take place.
- (b) *Substitution* – Where the risk can be controlled by performing the task by using alternative methods of diving, consideration should be given to using these alternative methods.
- (c) *Design* – Plant and procedures should be designed to minimize risk.
- (d) *Isolation* – Persons should be isolated from the identified hazards.
- (e) *Administrative* – Every dive plan should seek to minimize the degree and duration of the divers exposure to risk.

NOTE: Almost every aspect of dive planning falls into this administrative category.

Administrative controls include:

- (i) training, supervision, experience and selection of employees, including staffing levels;
 - (ii) provision of an appropriate diving operations manual;
 - (iii) organization and planning before, during and after the dive;
 - (iv) selection of appropriate plant; and
 - (v) selection of the appropriate form and level of communication.
- (f) *Personal Protective Equipment* – Appropriately designed and sized personal protective equipment should be provided, used and maintained. The limitations of all equipment used should be identified as part of the risk assessment process. Information from manufacturers and from records of prior experience should be used to identify limitation

