

## 1. PURPOSE

A&R is committed to eliminating all hazards in workplaces and processes over which it has control and where this is not possible, to minimise the risks to as low as reasonably achievable.

A&R is also committed, wherever reasonably practical to do so, to work with Clients/Principle contractors in their efforts to either eliminate or minimize hazards as reference to the hierarchy of controls to achieve the lowest possible levels of risk to all persons of injury and/or ill health at workplaces.

A&R is committed to working with Clients/Principle Contractors through hazard and risk management principles to eliminate or minimise adverse risk, achieve a safe work environment, safe systems of work and plant and substances in a safe condition.

## 2. SCOPE

Hazard Identification and Risk Assessment and Risk Control (HIRAC) are a major element of the A&R operations and are integrated with the organization's core business management systems. A&R management system consists of programs to effectively control hazards and risks in the workplace. A&R will undertake auditing, testing, and visual inspections, accident and near a miss investigations, analysing injury and accident data, in turn implementing preventative and corrective actions. Any changes to health, safety and environs in the workplace that may affect employees and customers, the employees and customers will be consulted.

The programs will be subject to system auditing and management review.

This policy applies to all A&R operations.

## 3. OBJECTIVE

Through the establishment of a consistent quantitative risk assessment methodology and hazards shall be systematically identified. Establish a system that allows for:

- The identification of foreseeable hazards, consistency in risk assessment,
- The eliminate or minimise risks is achieved by the application of the hierarchy of controls
- The risk control and the evaluation of the controls to achieve continuous improvement. This process will be supported by internal auditing, administrative controls, safe work practices and management will review to evaluate safety, environmental and quality performance.

### 3.1 REFERENCES

Business Management System Manual  
AS / NZS / ISO 13001 Risk Management- principles and guidelines  
Territory WH&S (NUL) Acts and Regulations

#### 4. DEFINITIONS

- **Hazard:** a source of potential harm or situation with a potential to cause loss
- **Risk:** the chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood.
- **Risk Identification:** the process of determining what can happen, why and how.
- **Risk Control:** the part of risk management which involves the implementation of policies, standards, procedures and physical change to eliminate or minimise adverse risks.
- **Likelihood:** used as a qualitative of probability or frequency.
- **Consequence:** the outcome of an event expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain. There may be a range of possible outcomes associated with an event.
- **Risk Assessment:** the overall process of risk analysis and risk evaluation.
- **Risk Acceptance:** an informed decision to accept the consequences and likelihood of a particular risk.
- **Risk Register:** document risk mitigation strategies being pursued in response to the identified risks and their grading in terms of likelihood and consequences
- **WHSMP:** Work Health Safety Management Plan
- **CEMP:** Construction Environmental Management plan
- **HIRAC:** Hazard Identification and Risk Assessment and Control
- **ALARP :** As Low as Reasonable Possible

#### 5. RESPONSIBILITIES

All A&R staff, whether permanent or temporary are responsible for performing hazard and risk management activities. In particular;

**Responsible Officer (PCBU):**

- To ensure through monitoring and review processes that the principles of hazard management are appropriately applied.
- During the planning processes of the HSEQ system, the hazard management principles are applied.
- In the resolution of HSEQ and Injury Management issues raised with them apply the principles of hazard management.
- In relation to their own safety and environment and that of others, practice the principles of HIRAC process.

- Compliance to *AS/NZS/ISO 31000:2009, ISO 9001:2016, ISO 14001:2016, Territory legislation and A&R Construction asbestos and EPA licences.*
- To ensure through monitoring and review processes that the principles of the HIRAC management are appropriately applied to all activities within A&R operations.
- Monitoring the use and maintenance of the Hazard/Incident/Accident Register and reporting to ensure agreed Corrective Actions have been completed within the established timeframe.
- Where required, perform Workplace Inspection and Assessments to review the Project Health, Safety Environment Quality Plan, Project Risk Register and Job Safety Analysis are developed to ensure that all Client sites/Principle Contractors have current safe systems of work.
- Perform internal audits on the application of the hazard and risk management process within the application of system audits, workplace assessments and job safety analysis reviews.
- Prepare reports on the application of hazard management principles and issues arising from the application to the Responsible Officer and Health and Safety Representatives.
- Providing induction, training and information for staff in the Principles of Hazard and Risk Management and the application of those Principles. This may involve the use of external accredited resources.
- Undertaking all accountabilities pursuant to the HSE program and hazard and risk management procedures.

### **Project Managers:**

- Identifying, evaluating and controlling hazards in their office or area of control (authority).
- Ensuring clients sites are assessed and evaluated for risk during tendering or quotation phase and appropriate control measures are put in place at the commencement of the work.
- The development and implementation of the WHSMP/CEMP, site specific Risk Assessment and Environmental Aspects.
- Performing Workplace Assessments and Audits, Safety Systems and Job Safety Analysis reviews on client procedures and sites when required.
- Where required, investigating hazards/incidents/accidents within 24 hours of occurrence / reporting and ensure resolution by way of risk elimination or minimisation
- Monitoring workplace practices and conditions to eliminate or minimise hazards. The frequency of this will depend on the nature of the hazard identified on site.

### **Site Supervisors and Team Leaders**

- Evaluating and monitoring the safety performance of clients by conducting risk assessments of clients work sites.
- Ensuring client sites are assessed and evaluated for risks and appropriate control measures are put in place.
- Ensuring the Health, Safety and Environmental Plan and site project Risk Assessment is implemented and monitored and any other plan in relation to the project
- Performing Workplace Assessments, Audits and Job Safety Analysis reviews where necessary on workplaces and tasks to be performed.
- Where required, participating in the investigation of hazards/incidents/accidents and reporting to senior management within 24 hours of occurrence/reporting and ensure resolution by way of risk elimination or control.
- Undertaking all accountabilities pursuant to the HSE program and hazard management procedures.

### **Employees and Temporary Staff**

- Through their induction process they will be trained in the fundamentals of Hazard and Risk Management and will be required to perform tasks in accordance to the established Job Safety Analysis and report identified risks and hazards whilst they are performing activities at the Clients worksite.
- Where hazards are identified, employees shall notify their immediate supervisor to advise them of the hazard and seek elimination of the hazard or where that is not practicable, minimise the risk of injury or illness to the lowest achievable reasonable level of risk.
- Undertaking all accountabilities pursuant to the HSE program, the Project Health, Safety and Environment Plan and hazard management procedures of the Client's HSE management system.

### **Sub Contractors and Labour Hire**

- Prior to working on any A&R controlled site, the Subcontractor will ensure that appropriate steps are taken to identify all reasonable foreseeable hazards arising from work that may affect the health and safety of employees.
- Subcontractors must be issued a current copy of A&R terms and agreement for sub-contractors and HSE specifications
- Sub-contractors working and or participating activities for A&R within our licensed areas must provide and not limited to –
  - Job Safety Analysis / Safe Work Methods
  - Risk Assessments, where applicable
  - HSE Management Plans, if applicable
  - Training and Competency records, where applicable
- Prior to working on any A&R controlled site the sub-contractor and labour hire employee will undertake a site-specific site safety induction and are requested to attend regular site safety and toolbox meetings conducted by A&R.
- An agreed safe work plan / s will be developed and reviewed between A&R the sub-contractor and labour hire employee prior to the commencement of work, ensuring the hazards and risks have assessed, moreover the staff, temporary employees, members of the public the contractor and labour hire employee are not places at risk during any stage of the work being performed.
- During the time of employment, the subcontractor and labour hire employees have a responsibility to communicate any HSE issues that may arise during the work to the designated A&R staff member.
- The subcontractor and labour hire employees will notify A&R site project personnel of any identified Hazard, incident or accident that occur on site immediately and comply with the reporting A&R requirements for legislative required reporting to Authorities.

## **6. INCIDENT, ACCIDENT INVESTIGATION**

- A&R will undertake the appropriate level of investigation for incidents.
- Root causes for serious incidents are identified and actions implemented to prevent further injury or damage.
- Routine data analysis is taken to identify trend and establish pro-active corrective actions to increase HSEQ performance.
- Investigations are completed in a timely manner. (as per System Procedure - Accident Incident Near Miss Reporting and Investigation)

## **7. TRAINING**

Responsible Officers, Project Managers, Site Supervisors, Team Leaders, Employees and appropriate people shall receive training in performing hazard evaluations, covering hazard identification and risk assessment, and control measures via an introduction to the QHSE management system. All A&R Permanent and temporary staff are to receive full A&R company induction prior to commencement of their duties.

The degree of training of those persons undertaking the hazard evaluations will be undertaken on an annual, or as required basis. A&R will assess training needs prior to promotion and or temporary position change to ensure the person has the ability to perform their new tasks. If the assessment indicates training is required A&R will provide the appropriate training to obtain necessary competency levels to perform their role. Training will be recorded and maintained.

Temporary and sub-contractor employees will receive a site-specific safety induction. Induction records will be filed in the project site office.

## **8. RISK REGISTER METHODOLOGY – Work Health and Safety**

The Hazard and Risk Management approach adopted by A&R is based on Australia New Zealand Standard AS/NZS/ISO 31000: 2009 “*Risk Management*”. The following tables address the probability of the event occurring and the consequence if it does occur. The definitions within the table are A&R definitions to assist in the appraisal and the establishment of a project specific risk register. The risk register objective is to provide a useful tool for managing and reducing the risks identified before and during the project.

The team are to examine the risks systematically, scoring and ranking each identified risk. Residual risks ranked greater than H are to be considered as “unacceptable” to the business and the team will need to further examine these risks to determine the adequacy of controls and the level of residual risk.

*Consequence Table 1 – the risk level is devised by considering the following: Consequences or outcomes of injury/property damage/environmental harm.*

**Table 1: Qualitative Measures of Consequences or Impact**

LEVEL	DESCRIPTOR	EXAMPLES
1	<b>Insignificant</b>	No injuries, low financial loss, limited damage to area
2	<b>Low</b>	First aid treatment, on-site release immediately contained, medium financial loss.
3	<b>Moderate</b>	Medical treatment required, on-site release contained with outside assistance, high financial loss.
4	<b>Major</b>	Extensive injuries, single fatality, loss of production capability, off-site release with no detrimental effects, major financial loss.
5	<b>Extreme</b>	Multiple fatalities, toxic release off-site with detrimental effect / long term environmental effects, huge financial loss

**Table 2: Qualitative Measures of Likelihood**

LEVEL	DESCRIPTOR	EXAMPLES
A	<b>Very likely</b>	Is expected to occur in most circumstances
B	<b>Likely</b>	Will probably occur in most circumstances
C	<b>Moderate</b>	Might occur at some time
D	<b>Unlikely</b>	Could occur at some time
E	<b>Rare</b>	May occur only in exceptional circumstances

**Table 3: Qualitative Risk Analysis matrix-Level of Risk**

	CONSEQUENCE	INSIGNIFICANT Level 1	LOW Level 2	MODERATE Level 3	MAJOR Level 4	EXTREME Level 5
LIKELIHOOD	Very Likely (A)	<b>H (11)</b>	<b>H (16)</b>	<b>E (20)</b>	<b>E (23)</b>	<b>E (25)</b>
	Likely (B)	<b>M (7)</b>	<b>H (12)</b>	<b>H (17)</b>	<b>E (21)</b>	<b>E (24)</b>
	Moderate (C)	<b>L (4)</b>	<b>M (8)</b>	<b>H (13)</b>	<b>E (18)</b>	<b>E (22)</b>
	Unlikely (D)	<b>L (2)</b>	<b>L (5)</b>	<b>M (9)</b>	<b>H (14)</b>	<b>E (19)</b>
	Rare (E)	<b>L (1)</b>	<b>L (3)</b>	<b>M (6)</b>	<b>H (10)</b>	<b>H (15)</b>

**Table 4: Risk Level Definitions**

RISK LEVEL	NUMBER DESCRIPTOR
<b>Low</b>	<b>1 -5</b>
<b>Moderate</b>	<b>6 - 9</b>
<b>High</b>	<b>10 - 17</b>
<b>Extreme</b>	<b>18 – 25</b>

**9. RISK REGISTER METHODOLOGY – Environmental**

An environmental aspect is defined as any change to the environment, resulting from our normal business activities, products, or services.

A&R has established a procedure to identify environmental aspects and determine those aspects that have/can have a significant impact to the environment. This register of the environmental aspects is kept up to date and takes into account planned new or modified activities, products, or services. A criteria for determining significance has been established.

We are required to manage environmental aspects which are within our control or influence and those that are declared significant. Every significant aspect should be controlled by establishing one or more controls and the level of control should be appropriate to the nature and risk of the significant aspect.

A&R aims to reduce their environmental impact where possible, however due to the nature of typical operations, there may be some limitations on how this is conducted and/or achieved.

The register shall be reviewed and may be revised / updated in response to:

- Significant proposed changes to the work that is being carried out
- Where there is evidence the aspect/impact is no longer valid; or
- Following any incident with potential or actual major consequences or any adverse audit findings

The review team are to examine the aspects systematically, identifying the significance of each identified aspect. The review team will develop control measures for all aspects with a significance rating. The significance rating will be determined by the severity of the impact caused. In assessing the significance the following will be considered:

- potential to cause environmental harm
- size and frequency of the aspect
- importance to the stakeholders of the area of work
- requirements of relevant environmental legislation

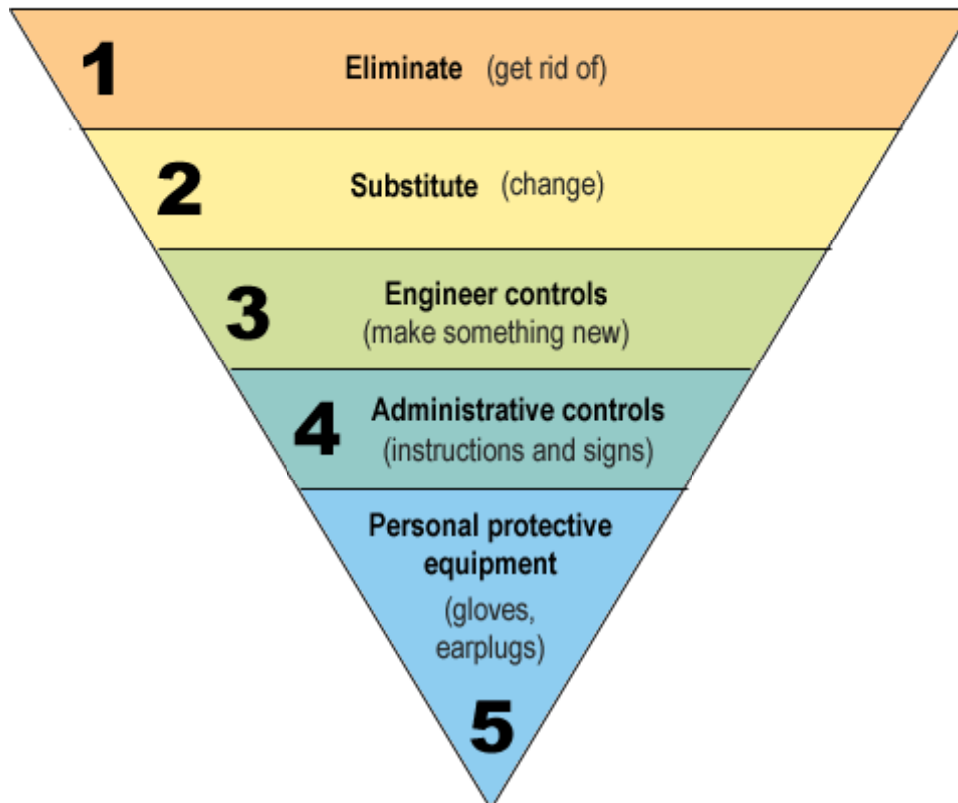
**Table 4: Assessment Matrix**

SIGNIFICANCE	DEFINITION / DETERMINATION / ACTION REQUIRED
<b>Significant - Major</b>	Aspect will have a major impact on the environment. Impacts are expected to be permanent and non-reversible, or on a national scale and/or have international significance or result in legislative non-compliance. Implement measures within a defined period.

<b>Significant - Moderate</b>	Aspect will have a moderate impact on the environment. Impacts are long term but reversible or manageable. Implement measures within a defined period.
<b>Minor</b>	Aspect has been considered; however no further action is required. Impacts are considered to be short term, reversible and/or localised in extent. Monitoring may be required to verify ongoing effectiveness of controls.
<b>Insignificant</b>	Aspect has been considered. No impact is expected, or there is insufficient data on which to assess significance.
<i>NOTE: Consider the 'Hierarchy of Controls' when determining suitable control measures.</i>	

### 10 RISK MANAGEMENT APPROACH.

A&R has adopted the “Hierarchy of Control” as the method of controlling identified hazards. The first option is to eliminate the hazard however where this is not practicable the aim is to minimise the risk to as low as reasonably achievable.



### 11. APPLICATION

A&R will apply the hazard identification and risk assessment and control approach to all aspects of its business but with particular reference to:

- Purchasing/hiring substances, plant and equipment
- Development of plans (WHSMP/CEMP)



- Project Risk Assessment
- Job Safety Analysis of A&R positions
- Workplace Audits and inspections
- Accident/Incident Investigations and analysing injury data
- Preventative and Corrective actions

### 12. DOCUMENTATION

- SP 008 Contract Management
- SP 016 Accident/Incident/Near Miss Reporting & Investigation
- SP 009 Purchasing
- SP 005 Corrective, Preventative Action and Control of Non-Conformances
- F 068 Project Surveillance Audit
- F 008 Tool Box meeting minutes
- F 001 Job Safety Analysis
- F 073 Hazard Report
- F 016 JSA/SWMS Review
- F 069 Safe Act Observation
- Subcontractor Terms and Agreement
- F xxx - Project Risk Register
- F 067 - Environmental Aspects & Impacts Register