HASLIN

Risk Management Procedure

SEQ-PR-001

Document Revision Control

Rev:	Date:	Description:
10	13/6/17	Update reference to ISO Standards 9001:2015 and 14001:2015. Made reference to Risk and Legislation s6.4 Section 2. And section 6.4.1 reference to Senior Management commitment to risk assessment
11	6/11/19	Update reference to OHS ISO Standard 45001:2018, SWOT, PEST & Corporate Risk Register
12	20/5/22	Risk Matrix update

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1. Scope

This procedure describes the processes and methods to be followed by Haslin employees in identifying, assessing and managing risks related to the following areas:

- Business (e.g. Financial, Legal, Reputation)
- Health and Safety
- Environment
- Quality

The processes and methods described in this procedure are consistent with the requirements of ISO 31000: Risk Management – Principles and guidelines, and are intended to be used for qualitative risk assessment and ALARP based risk management.

- Risk management processes covered in this procedure include:
- Establishing the context
- Identifying the hazards and threats
- Hazard Reporting
- Risk assessment
- Risk prioritisation
- Hazard and Risk communication
- Risk control
- Monitoring risk control actions

The risk assessment method included in this procedure shall be applied to all aspects of Haslin business and operations. Other methods, such as PEST & SWOT analysis, HAZOP, event tree analysis, fault tree analysis or failure mode and effects analysis, which are not included in this procedure, may be used if required knowledge and skills are available within Haslin.

2. Application

This procedure is primarily applicable to the Haslin Board of Directors, senior managers and line managers. Any persons using this procedure must have attended Haslin's Risk Management Awareness session presented by the Manager Safety, Environment and Quality or his nominated representative.

Application of this procedure is mandatory for relevant Haslin employees in the following circumstances:

- *Prior to commencing any physical work on a project site* – The relevant Haslin Project Manager is required to organise a risk assessment workshop in consultation with the HSEQ Manager, Construction Manager, Business Development Manager and Director to develop a Project Safety and Environmental Risk Register using SEQ-TP-002 (Project Safety and Environmental Risk Register) incorporating the outcomes of the risk assessment workshop.
- *Prior to procurement of any major plant or machinery* – The person responsible for the procurement is required to assess health, safety and environmental risks associated with the installation, operation, maintenance, decommissioning and disposal of the plant or machinery proposed to be procured.
- *Prior to purchase of any new hazardous substance or dangerous good* – The person responsible for the procurement is required to assess health, safety and environmental risks associated with transportation, storage, handling and disposal of the hazardous substance or dangerous good.
- *Prior to authorising a manual handling task with potential to cause musculoskeletal disorders* – Any Haslin employee responsible for authorising such manual handling tasks is required to assess the health and safety risks associated with the manual tasks.
- Prior to issuing a Permit to Work for any hazardous work activity (e.g. work in a confined space, work at height, hot work, electrical work, excavation, demolition etc.) – The Haslin Project Manager or his nominated representative responsible for issuing the Permit to Work (The Authorised Person) is required to complete a health, safety and environmental risk assessment of the hazardous work to be authorised.
- *Prior to the preparation of a Safe Work Method Statement* – Haslin project personnel responsible for the preparation of Safe Work Method Statements for any safety critical activity are required to complete a health, safety and environmental risk assessment of each task involved in the activity in accordance with Haslin's SWMS template.
- Prior to using a new workplace and after re-designing a workplace – The Relevant Haslin Office Manager or Site Manager is required to undertake a health and safety risk assessment for identifying the workplace hazards and developing and maintaining a Workplace Health and Safety Risk Register in accordance with SEQ-TP-002

Other circumstances where application of this procedure is recommended include:

- Prior to making any major business decision – This includes major financial commitment, major organisational change and major changes in company policies and procedures. Whether or not a risk management approach is to be applied to such circumstances shall, however, be decided by the Haslin Managing Directors.
- *When the health, safety or environmental risk profile of a project changes* – Relevant Haslin Project Manager or his nominated representative is required to review and revise the Project Safety and Environmental Risk Register whenever any of the following occurs:
    - Major changes in project scope of work
    - Major changes in work method agreed with Haslin client/principal
    - Significant changes in construction plant and equipment
    - After a catastrophic incident or emergency event
    - Any other reason which requires a revision or amendment of the Project Safety and Environmental Risk Register.
- *While undertaking investigation of a catastrophic incident* – The person responsible for undertaking investigation of a catastrophic incident is required to use this procedure or other appropriate risk assessment method(s) for assessing the severity of the incident and its impact and the risk reduction capacity of any recommended corrective action.
- *Prior to the implementation of any corrective action that involves a capital investment over $10,000* – Relevant Haslin Project Manager or his nominated representative in consultation with the Manager Safety, Environment and Quality is required to assess the risk reduction capability and cost-effectiveness of such corrective actions, whether recommended by external or internal authorities.
- Any other situation where a risk assessment is considered necessary by Haslin senior managers and line managers.

3. References

- Work Health and Safety Regulations 2017
- AS/NZS ISO 31000: Risk Management – Principles and guidelines
- National Code of Practice for Plant and Equipment
- National Code of Practice for Hazardous Substances
- National Code of Practice for Manual Handling
- ISO 45001:2018 clause 6.1.2 Hazard Identification, Risk Assessment & Opportunities
- ISO 14001: 2015 Clause 6.1
- ISO 9001: 2015 Clauses 0.3.3, 4.1, 6.1.1 and 6.1.2
- Heavy Vehicle National Law (NSW) 2013-42a
- ISO_10007_2003 Guidelines for configuration management

4. Definitions

Hazard:	A source of harm.
Risk:	Effect of uncertainty on objectives. Risk is often expressed in terms of a combination of the consequences and the associated likelihood of occurrence.
Risk management:	Coordinated activities to direct and control an organisation with regard to risk.
Risk management framework:	Set of components that provide the foundations and organisational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organisation.
Risk management process:	Systematic application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context, analysing, evaluating, treating, monitoring and reviewing risk.
Risk assessment:	Overall process of risk identification, risk analysis and risk evaluation.
Consequence:	Outcome of an event affecting objectives.
Likelihood:	Chance of something happening.
Hazard Identification:	The process of identifying all situations or events that could give rise to: • Harm, either through injury or illness, to people • Damage to plant, materials and other resources • Damage to or contamination of the environment • Corporate exposure to litigation, financial loss or loss of reputation
Hierarchy of Control	The priority order for the types of control measures to be selected for and applied to hazards: • Remove the hazard • Separate personnel from the hazard • Introduce engineering controls • Change work practices • Provide personal protective equipment

5. Legal Requirements

Part 5 Consultation Division 2 Section 49 of the Work Health and Safety Act 2011 requires that consultation with employees be undertaken when risks to health and safety arising from work are assessed. Such consultation should be undertaken with those employees who are directly involved in undertaking the task, or working with the hazardous substance or plant, to which the risk assessment relates.

The employer should adopt a systematic approach to risk assessment that includes:

- Reviewing any available information about the hazard;
- Considering factors that contribute to the risk; and
- Deciding what records need to be kept.

Work Health and Safety Regulation 2017. Chapter 3 General risk and workplace management
Part 3.1 Managing risks to health and safety
Work Health and Safety Regulation 2017.
Part 6.3 Duties of person conducting business or undertaking

6. Procedure

6.1. Establishing the Context

The initiator of a risk assessment is required to establish the context of risk assessment by considering and defining the basic parameters within which the risks shall be managed. This will involve consideration of the following:

- External context – Establishing the requirements of external authorities such as stakeholders, regulators, clients, alliance partners and the like.
- Internal context – Consideration of Haslin's policies, resources, financial capabilities and limitations.
- Risk management context – A clear definition of the objectives, scope and boundaries of the risk management process being applied.

6.2. Identifying Hazards and Threats

Identification of the hazards and threats as realistically as practicable is fundamental to any risk management approach. This process must be comprehensive, well-structured and systematic so as to capture all potential hazards, threats and opportunities for further analysis using the processes described in the following sections of this procedure.

Hazards, threats and opportunities should be identified by applying one or more of the following tools:

- Brainstorming
- Judgments based on experience and records
- Checklists
- Site/workplace inspections
- Flow charts
- System analysis
- Scenario analysis
- SWOT analysis.
- Chair risk assessments

Where practicable, these exercises should be undertaken by a group rather than an individual, involving people who are related to or knowledgeable of the site, activity or issue to which the risk assessment relates.

6.2.1. Business related threats and opportunities (SWOT, PEST)

The threats and opportunities related to business shall be identified through a SWOT (Strength, Weakness, Opportunities and Threat) or PEST (Political, Economic, Social Technological) analysis by the senior leadership team of the company who have better knowledge of the following:

- External environment
- Internal environment
- Legal and other requirements
- Company resources and capabilities
- Limitations.

SWOT and PEST analysis are done as a minimum once a year by the senior leadership team and the Corporate Risk Register, SEQ-CL-020 also used in conjunction as a minimum once a year to define further possible risks and mitigate controls

6.2.2. Project related health, safety, environmental and quality hazards

Health, safety, environmental and quality hazards associated with a project should be identified for each item of work included in the project scope of work. Ideally, the project team members, one or more representatives of the client and the key sub-contractors should be involved in the hazard identification and risk assessment processes. Examples of project related health safety, environmental quality hazards included in Appendix – A may be used as a guide.

6.2.3. Workplace health, safety, environmental and quality hazards

Workplace health, safety environmental and quality hazards should be identified through an inspection of the workplace. Where available, the Workplace Safety Representative or an employee representative should be

involved in the workplace hazard identification and risk assessment processes. Examples of workplace health, safety, environmental and quality hazards included in Appendix – A may be used as a guide.

6.2.4. Public or Project Stakeholders access to operational works within project

Health and safety measures should be taken into account of the risks Haslin may impose on other stake holder's staff if working in their environment throughout the course of the project and consideration of the clients preliminaries. Segregation between operational works of the project, for the public and other project stakeholders that may come within project operational hazards, being existing operating plant or new site construction. This should be included in the Project Specific Safety Management Plan and Project Risk Register SEQ-TP-002.

6.2.5. Plant hazard

The Plant Hazard Identification Checklist (SEQ-CL-007) should be used for the identification of health, safety and environmental hazards associated with any plant intended to be:

- Purchased by Haslin

The Plant Authorisation Checklist (SEQ-CL-010) and Plant Risk Assessment (SEQ-TP-058) should be used for the identification of health, safety and environmental hazards associated with any plant intended to be:

- Operated on Haslin worksite
- Hired by Haslin

The checklists should be completed by a person, who has adequate knowledge of the plant and its operational procedures. If practicable, the plant operator or an employee representative should be involved in the hazard identification process.

6.2.6. Health and safety hazards associated with hazardous substances

Any Hazardous Substances and Dangerous Goods used for Haslin Constructions should be issued a Safety Data Sheet (SDS). This is used for the identification of health, safety and environmental hazards associated with any new hazardous substance or dangerous good intended to be:

Purchased by Haslin

Stored and used on Haslin worksite

The Hazardous Substances Register should be completed by a competent person, who has adequate knowledge of the hazardous substance or dangerous good and knows how to use a Safety Data Sheet. Where available, the workplace safety representative or an employee representative should be involved in the hazard identification process.

6.2.7. Manual handling hazards

The Manual Handling Hazard Identification Checklist (SEQ-CL-008) can be used for the identification of health, safety and environmental hazards associated with any manual handling task that has potential to cause musculoskeletal strain or disorder.

The checklist should be completed by a competent person, who has completed a manual handling training and is aware of the work method. Where available, the workplace safety representative or an employee representative should be involved in the hazard identification process.

6.2.8. Noise hazards

Based on the Objective assessment, if there is a risk to employees from exposure to noise then risk assessment (if requested by employees) is undertaken as per this procedure. Controls may include implementation of engineering controls (where practicable), administrative controls or the provision of hearing protection as a last option.

6.2.9. Work activity related hazards (for the preparation of a SWMS)

While identifying health, safety and environmental hazards for the purpose of preparation of a Safe Work Method Statement, the work activity to be covered by the Safe Work Method Statement must be broken down into tasks and hazards associated with each task identified. Where practicable, relevant work group members should be involved in the hazard identification and risk assessment processes.

6.3. Hazard Reporting

Heath, safety and environmental hazards identified in Haslin workplaces and worksites must be reported immediately. The person who identified the hazard(s) must complete a Hazard Report Form (SEQ-FM-001) and forward it to the relevant Office Manager or Site Manager as soon as practicable. The hazard may be under the control of Haslin, sub-contractors / service providers or third parties. The Site Manager has the responsibility for assessing whether the safety risk from this hazard can be controlled, and shall implement immediate corrective action, where it is safe and practicable to do so. This action shall be documented on the Hazard Report.

If the hazard cannot be immediately controlled, then the Site Manager shall ensure that the hazard is isolated or quarantined as much as is practicable. For situations where the hazard exists under the control of a sub-contractor or service provider, the site Manager issue a copy of the form to the respective representative with the status "instruction to rectify" and the with the time frame.

6.4. Risk Assessment

Risk assessments carried out in accordance with this procedure should involve activities that undertake the identification of the source of risks, their consequences and the likelihood that those consequences may occur. Consideration should be given to the magnitude of consequences of an event, should it occur, and the likelihood of the event and its associated consequences, in the context of any existing controls.

Activities are first broken down into individual work steps that follow the natural sequence of actions from the Hierarchy Control to carry out the activity by using SEQ-TP-002 (Project Safety and Environmental Risk Register) or more special activities a Workplace Health and Safety Risk Assessment SEQ-TP-003 or Work Method Statement SEQ-TP-080 e.g.;

- Construction projects – the work steps are defined in method statements
- Support processes – the work steps are defined in work instructions
- Equipment operation, maintenance and repair – the work steps are documented in the operations and maintenance manuals
- Hazardous materials – the work steps are included in the manufacturer's instructions and the associated Safety Data Sheet [SDS]

In instances where the above documentation is not available or not complete, the work steps will first need to be established.

A risk score shall be calculated for each hazard or threat by combining the consequence and likelihood attributed to the hazard or threat and in accordance with the Risk Calculation Matrix included in Appendix – B.

To avoid subjective biases the best available information sources and techniques should be used for identifying the consequences and likelihood. Sources of information may include:

- Past records
- Relevant experience
- Relevant Legislation, Codes of Practice, Industry Standards and Guidelines
- Industry statistics
- Information from published literature
- Specialist and expert judgements.

Recommended techniques for analysing consequences and likelihood include:

- Use of multi-disciplinary group of experts
- Use of event tree analysis
- Use of fault tree analysis.

In order for making the risk assessments technically sound, preference should be given to the following:

- Risk assessments are carried by a group rather than an individual
- Competent people relevant to the work activity or management/operational issue(s) are involved in the risk assessment process
- Referenced Legislation, Codes of Practice, Industry Standards, Guidelines, Client Design Drawings and Safety in Design Risk Assessments.
- Each risk assessment is facilitated by a competent person
- Outcomes of risk assessments are documented on the appropriate templates

To further assist the assessment process, resources must be acquired, which include but are not limited to:

- State and national regulatory authority and trade-based "Codes of Practice", related journals and publications
- Hazard profiles for specific trades, e.g. Electrical Hazards, Scaffolding, Formwork published by unions, industry bodies and professional associations.
- Australian Standards and/or International Standards
- Operational feed-back from accidents, incidents, near misses, inspections, audits, safety alerts and general consultation processes
- Third-party risk assessments or operating guidelines, workshops etc.

6.4.1. Initial Project Risk Assessment (Senior Management)

Prior to commencing any physical work on a project site – The relevant Haslin Project Manager or HSEQ Manager is required to organise a risk assessment workshop in consultation with the HSEQ Manager, Construction Manager, Business Development Manager, Director or other procured project staff, to develop a Project Safety and Environmental Risk Register using SEQ-TP-002 (Project Safety and Environmental Risk Register)

6.4.2. Competency for Facilitation of Risk Assessment

Haslin employees who have attended the following are eligible for facilitating health, safety and environmental risk assessment of projects, workplaces, work activities, hazardous work processes, hazardous substances and dangerous goods, and plant and equipment:

- WHS Risk Management for Supervisors and Managers (Provided by Accredited Training Organisation or Trainer) or a higher level of training in Risk Management
- Haslin's Risk Management Awareness Program
- At least five health, safety environmental risk assessment workshops facilitated by a competent person.

Business risk assessments should be facilitated by a person who has adequate knowledge of SWOT analysis and general risk management principles.

6.4.3. Identification of Consequences

The relevant consequence descriptors included in Appendix – B of this procedure should be used for identifying the consequences of a hazard or threat. The severity of consequences should be judged in the context of personal experience, industry records and relevant statistics, if available. Haslin requires people involved in a risk assessment exercise to identify the most reasonable consequences of a hazard or threat rather than identifying the worst possible consequences.

While identifying environmental consequences or health and safety consequences arising from a hazardous substance or hazardous work environment, the duration of exposure should be taken into consideration.

In the event of a discrepancy regarding the consequences of a hazard or threat, the verdict of the majority should be accepted.

6.4.4. Determination of Likelihood

The relevant likelihood descriptors included in Appendix – B of this procedure should be used for determining the most probable likelihood of the identified consequences to occur. Where historical data is unavailable or a statistical analysis cannot be carried out for determining the likelihood, an individual's or group's degree of belief should be used for making subjective estimates of the likelihood.

6.4.5. Existing Control

Where one or more existing controls (e.g. engineering control or administrative control) are in place for eliminating or minimising an identified hazard, the strength, weakness and the impact of the control on the consequences and likelihood should be taken into consideration.

6.4.6. Documentation of Risk Assessment Outcomes

The outcomes of risk assessments should be documented in relevant templates as noted in the following table:

Type of Risk Assessment	Template to be Used
Business risk (e.g. Financial, Legal or Reputation) assessment	**SEQ-CL-020:** Corporate Risk Register **SEQ-CL-016:** Tender-Contract Review Checklist **SEQ-CL-003:** Management System Review Checklist **SEQ-FM-012:** Company Performance Against Management System Objectives
Project Safety, Environmental & Quality (SEQ) risk assessment	**SEQ-TP-002:** Project Safety and Environmental Risk Register **SEQ-TP-045:** Environmental Impacts Aspects Register **SEQ-TP-079:** Safety Assurance Plan (Rail) **SEQ-TP-090:** TfNSW Project Risk Register (Rail) **SEQ-TP-040:** Approved Subbie Supplier Register **SEQ-FM-005:** Sub-Contractor Evaluation Form **SEQ-FM-016:** Supplier Evaluation Form **SEQ-CL-041:** Emergency Plan Checklist **SEQ-ML-005:** Site Risk Management Training **SEQ-TP-048:** Site Safety & Environment Induction
Safety in Design	**SEQ-TP-060:** Concept Design RA (Chair 1), **SEQ-TP-061:** Construction Design RA (Chair 2), **SEQ-TP-062:** Maintenance-Repair RA (Chair 3) **SEQ-CL-033:** Design Review Checklist
Chain of Responsibility for RMS projects and or driver delivery management	**SEQ-TP-089:** Chain of Responsibility Management Plan **SEQ-FM-032:** CoR Assessment Form **SEQ-CL-062:** Chain of Responsibility Compliance Audit Checklist
Specific or specialised Workplace SEQ risk assessment	**SEQ-TP-003:** Workplace Health and Safety Risk Assessment **SEQ-TP-080:** Work Method Statement **SEQ-CL-001:** Hazardous Chemicals Register & Risk Assessment **SEQ-CL-011:** Receiving Inspection Checklist **SEQ-CL-034:** ITP Checklist
SEQ risk assessment prior to work activity or issuing a Permit to Work	**SEQ-TP-002**: Project Safety and Environmental Risk Register **SEQ-TP-035:** Safe Work Method Statement **SEQ-TP-036:** Daily Pre-Start Briefing **SEQ-FM-031:** Daily JSEA **SEQ-FM-026:** Working @ Heights Permit **SEQ-FM-030:** Hot Work Permit **SEQ-FM-043:** Confined Space Entry Permit **SEQ-FM-045:** Isolation Lockout Permit **SEQ-FM-046:** Electrical Work Permit **SEQ-FM-047:** Permit to Excavate **SEQ-FM-059:** Pre-Commissioning Permit
Safety risk assessment prior to the Implementation of a SWMS	**SEQ-CL-038:** Safe Work Method Statement Review Checklist
Plant and Operator Risk Assessment	**SEQ-TP-058:** Plant Risk Assessment **SEQ-CL-010:** Plant Authorisation Checklist **SEQ-CL-045:** Verification of Competency Checklist ions needed for the task through out the project, when then project is at its intial
New or revised Legislation, Standards, COP	SEQ-RG-006 - Acts, Regulations, COPs, & Standards Amendments Review Register

6.5. Risk Prioritisation

The risk(s) associated with a hazard or threat should be calculated by combining the attributed values for the consequence and likelihood and documented on the appropriate risk assessment template. The colour coding on the Risk Calculation Matrix in Appendix – B of this procedure allow prioritisation of risks. This prioritisation should be used as guidance for identifying:

- Which risk requires more detailed analysis
- Which risk needs to be immediately controlled, and
- Which risk is acceptable to Haslin.

The region below the thick blue line in the Risk Calculation Matrix denotes the 'As Low as Reasonably Practicable (ALARP)' region. Any high or medium risk above the ALARP region must be managed and monitored in accordance with the Risk Management Protocol included in Appendix – B

6.6. Hazard and Risk Communication

Workplace and worksite hazards and risks identified through any process must be communicated to all relevant employees, workplace safety representatives, sub-contractors and visitors.

General requirements and responsibilities for hazard and risk communication are summarised in the following table:

Type of Risk Assessment:	Outcomes to be communicated to:	Other requirements	Responsibility
Business risk assessment	Haslin senior management team	Any High risk to be communicated to the Managing Directors and Haslin Board of Directors	Manager Safety, Environment and Quality
Safety in Design	Designers, Project Management, all involved of constructing		Tender team, HSEQ Manager, Project Manager
Chain of Responsibility for RMS projects and or driver delivery management	All Haslin personnel involved with the project Project client and stakeholders Sub-contractors and suppliers Visitors (only those risks which may be encountered by visitors)		Tender team, HSEQ Manager, Project Manager
Project safety and environmental risk assessment	Initial assessment to be conducted by Haslin Senior Management. All Haslin personnel involved with the project Project client and stakeholders Sub-contractors and suppliers Visitors (only those risks which may be encountered by visitors)	Any High risk to be communicated to the HSEQ Manager who will notify the Managing Directors, if required.	Initial assessment Director, HSEQ Manager, Business Development Manager, Construction Manager. Relevant Project Manager
Workplace health and safety risk assessment	All employees at the workplace	Any High risk to be communicated to the Manager Safety, Environment and Quality	Relevant Project Manager
Work Method Statement	All employees at the workplace Workplace Safety Representative	Any High risk to be communicated to the Manager Safety, Environment and Quality	Relevant Project Manager
Safety risk assessment for preparing a SWMS	All employees involved with the work activity covered by the SWMS	Any High risk to be communicated to the Manager Safety, Environment and Quality	Site Manager or person in charge of site works
Safety risk assessment for issuing a Permit to Work	Relevant sub-contractor Person responsible for controlling the work covered by the Permit	Any High risk to be communicated to the Manager Safety, Environment and Quality	Site Manager or person in charge of site works

Type of Risk Assessment:	Outcomes to be communicated to:	Other requirements	Responsibility
Legal, Standards, Code of Practice risk assessment	All Haslin personnel involved with the project Project client and stakeholders Sub-contractors and suppliers Visitors	Any High risk to be communicated to the Managing Directors and Haslin Board of Directors	Manager Safety, Environment and Quality
Daily Job Safety Environmental Analysis	Haslin personnel involved in specific works. All Sub-Contractors	JSEA or Take 5 approach on task at hand	All Staff

6.7. Risk Assessment Time table:

Type of Risk Assessment	Time to be conducted
Business risk assessment	SEQ-CL-020: Corporate Risk Register, to be conducted annually, or when any significant changes to the operations of the business. SEQ-CL-016: Tender-Contract Review Checklist, to be conducted at every issued contract.
Design risk assessment	At design and construct projects and at construct only ask for the safety in design risk assessment.
Chain of Responsibility	Chain of Responsibility for RMS projects and or driver delivery management (Initial 3months then bi annually, or when any significant changes to the project or major incident)
Project Safety, Environmental and Quality (SEQ) risk assessment	SEQ-TP-002: Project Safety and Environmental Risk Register SEQ-TP-045: Environmental Impacts Aspects Register SEQ-TP-079: Safety Assurance Plan (Rail) SEQ-TP-040: Approved Subbie Supplier Register SEQ-TP-090 TfNSW Project Risk Register (Rail) SEQ-FM-005: Sub-Contractor Evaluation Form SEQ-FM-016: Supplier Evaluation Form SEQ-CL-041: Emergency Plan Checklist SEQ-ML-005: Site Risk Management Training SEQ-TP-048: Site Safety Env Induction, to be conducted prior to the project starts or employees start on site. Review the effectiveness at the times of internal/external audits, (Initial 3months then bi annually, or when any significant changes to the project or major incident)
Workplace health and safety risk assessment or high-risk activity	SEQ-TP-003: Workplace Health and Safety Risk Assessment SEQ-TP-080 Work Method Statement, SEQ-CL-001: Hazardous Chemicals Register & Risk Assessment SEQ-CL-011: Receiving Inspection Checklist SEQ-CL-034: ITP Checklist, to be conducted at all times of throughout the project, changes to a specific task that needs more attention or detail. When Safety in Design or design change occur.
SEQ risk assessment prior to work activity or issuing a Permit to Work	SEQ-TP-002: Project Safety and Environmental Risk Register SEQ-TP-035: Safe Work Method Statement SEQ-TP-036: Daily Pre-Start Briefing SEQ-FM-031: Daily JSEA SEQ-FM-026: Working @ Heights Permit SEQ-FM-030: Hot Work Permit SEQ-FM-043: Confined Space Entry Permit SEQ-FM-045: Isolation Lockout Permit SEQ-FM-046: Electrical Work Permit SEQ-FM-047: Permit to Excavate SEQ-FM-059: Pre-Commissioning Permit, SEQ risk assessments prior to work activity or issuing a Permit to Work
Safety risk assessment prior to the implementation of a SWMS	SEQ-CL-038: Safe Work Method Statement Review Checklist, to be conducted prior to any works on site

Type of Risk Assessment	Time to be conducted
Safety risk assessment to the implementation of a SWMS	SEQ-CL-009: Safe Work Method Statement Compliance Checklist to be conducted at least once a week on any sub-contractor at the height of construction throughout the project, when the project is at its initial and finishing stages SWMS Compliance can be done randomly at timely intervals on the sub-contractor.
Job Safety Environmental Analysis	SEQ-FM-031 Daily JSEA to be conducted by all Haslin staff and hired sub-contractors prior commencement of daily works
Plant and Operator Risk Assessment	SEQ-TP-058: Plant Risk Assessment SEQ-CL-010: Plant Authorisation Checklist SEQ-CL-045: Verification of Competency Checklist, To be conducted prior operation of any plant on site needed for the task throughout the project.
Legal, Standards, Code of Practice Risk Assessment	SEQ-RG-006 - Acts, Regulations, COPs, & Standards Amendments Review Register, to be conducted when significant changes to the legislation, Standards, Codes of Practice may affect the operations to the business
Quality assessment	SEQ-CL-034 ITP Pro-forma. To be used to identify client, design, build, legislation, standards and other reportable requirements to the engineered product.

6.8. Risk Control

Haslin's preferred option for risk control is the elimination of any health, safety, environmental and business risk, if it practicable and the cost of risk elimination is justified. The risks, which cannot be eliminated, should be reduced to as low as reasonably practicable level as indicated in the Risk Calculation Matrix included in Appendix – B.

While determining a risk control action, consideration should be given to the 'hierarchy of risk controls', risk reduction capability of the identified control and the cost effectiveness of the control. As a general rule, persons likely to be affected by an identified hazard or risk should be involved or consulted while determining risk control actions.

6.8.1. Hierarchy of Risk Controls

Elimination — Most preferred option if practicable and cost-effective. Example: Remove a faulty plant from the workplace

Substitution — Second preferred option, if elimination is not practicable or cost effective. Example: Procuring a plant, material or substance which is less hazardous than the existing one.

Engineering Control — Third preferred option, if elimination or substitution is not practicable or cost-effective. Example: Installing a silencer to reduce noise emission.

Administrative Control — Fourth preferred option, if elimination, substitution or engineering control is not practicable or cost effective. This option may also be applicable in combination with substitution and engineering control. Example: Developing and implementing procedures and instructions, training employees etc.

Personal Protective Equipment (PPE) — The last and least preferred option, if none of the above is practicable or cost effective or adequate by itself.

The person responsible for implementing a risk control action should implement such action as a matter of priority and in accordance with the Risk Management Protocol included in Appendix – B of this procedure. No work or activity should commence on a Haslin worksite prior to minimising a High risk to as low as reasonably practicable level.

6.9. Monitoring Risk Control Actions

Haslin recognises that certain risk control actions may not achieve their risk reduction targets due to various factors. As such, the person responsible for implementing a risk control action is required to ensure that the adequacy and effectiveness of each implemented action are verified by a competent person.

6.10. Process specific Risk Management

6.10.1. Tendering

Risk management principles shall be applied to all tender development and review activities. The tendering team shall endeavour to identify the risks outside of those known to exist within the scope of Haslin core business activities. Once identified, the Haslin shall make an initial judgement on each risk's likelihood and severity, and propose appropriate controls accordingly. At the discretion of the Managing Director, the above assessment of risks can be listed in free-form on the tender documents, or can be documented on the risk assessment form. Where a tender is awarded, prior to executing contract documents, the Managing Director will examine the risks and shall record the results of this review on the lower section of the Tender Review Checklist, SEQ-CL-016: Tender-Contract Review Checklist.

Refer to SEQ-PR-046 for details

6.10.2. Design

Risk management principles shall be applied to all design activities.

The Designer shall document any special safety risks, hazards or related method constraints identified during the design process, and pertaining to construction, commissioning, servicing, removal and demolition of the designed structure. The Designer shall subsequently initiate a risk assessment in consultation with Project personnel, and where deemed appropriate, the SEQ Manager on (SEQ-TP-060 Concept Design). The Project personnel and Design Team will carry out a Risk Assessment on SEQ-TP-061 Construction Design at the construction stage and possible design changes. Maintenance and Repair will be conducted on SEQ-TP-062 Maintenance and Repair.

Refer procedure SEQ-PR-047 Design work procedure.

6.10.3. Purchasing & Sub-Contractor Management

Risk management principles shall be applied to all purchasing activities, including hiring, leasing and sub-contracting. The risk management process shall identify risks associated with all purchased goods and services, and consider:

- Transport
- Storage
- Handling / Lifting
- Operation / Methods
- Maintenance / Servicing
- Repair
- Disposal

Priority must be given to selecting controls that eliminate a hazard, or the risk associated with a hazard. Risk assessment shall form an integral part in the development of purchasing specifications and the selection of suppliers/evaluation of tenders. Refer procedure SEQ-PR-052 for Purchasing and SEQ-PR-049 Sub-Contractor Management Procedure for further details.

Special provisions are made for the purchase of Plant & Equipment, and Hazardous Substances / Dangerous Goods. Refer to SEQ-PR-006 Plant Safety Management and SEQ-PR-004 Hazardous substances and Dangerous good management" for further details.

6.10.4. Construction Risk Management (Quality Assessment ITPs)

The purpose of an Inspection and Test Plan using, (SEQ-CL-034 ITP Pro-forma) is to put together a single document that records all inspection and testing requirements relevant to a specific process. On a construction contract the process is likely to be a construction activity, element of work, trade work or providing a product section. An Inspection and Test Plan identifies any materials and work to be inspected and tested, by whom and at what stage or frequency, as well as Hold and Witness Points, references to relevant standards, acceptance criteria and the records to be maintained. Inspection and Test Plans, when properly implemented help ensures that verification of work been undertaken to the required standard and verified requirements, and that records are kept.

6.11. Rail Risk Assessment

This register is intended to be used to record the details of safety hazards, safety risks and outcomes of risk workshops for each stage of the project lifecycle, asset or system or other change. It must be reviewed, kept up to date and available for review as requested. Use SEQ-TP-090 TfNSW Project Risk Register.

Project Managers are responsible for the currency and accuracy of the information, status and maintenance of the completed Project Specific Risk Register.

6.12. Chain of Responsibility

The Chain of Responsibility Management Plan must be conducted for RMS projects or when a project requires specific controls around driver management.

The object of this Risk Assessment is to be achieved by a regulatory framework that—

- Establishes an entity (the National Heavy Vehicle Regulator) with functions directed at ensuring the object is achieved; and
- (Repealed)
- Prescribes requirements about the following—

  I. The standards heavy vehicles must meet when on roads;
  II. The maximum permissible mass and dimensions of heavy vehicles used on roads;
  III. Securing and restraining loads on heavy vehicles used on roads;
  IV. Preventing drivers of heavy vehicles exceeding speed limits;
  V. Preventing drivers of heavy vehicles from driving while fatigued; and

- Imposes duties and obligations directed at ensuring heavy vehicles and drivers of heavy vehicles comply with requirements mentioned in paragraph (I) to (V) on persons whose activities may influence whether the vehicles or drivers comply with the requirements;

6.13. Work Method Statements (WMS)

Work Method Statements are good practice for the thought process of identifying the hazards and documenting the controls methodically in high-risk activities (refer to template SEQ-TP-080). WMS should be consulted by all stakeholders whom will perform the task.

6.14. Safe Work Method Statements (SWMS)

Preparation of Haslin SWMS follows the risk assessment process. Work tasks with risk rating must be recorded on the form SEQ-TP-035 Safe Work Method Statement. The level of risk will be used to determine the degree of controls required to eliminate or minimise a hazard. The higher the risk class the more extensive the controls to be provided.

The SWMS will be completed and signed by the author. The SWMS will be reviewed by the person competent in the work activity and the approved by the Project Manager. Client approval may be required under contract conditions, and the approval can be documented in the corresponding signature field. Site SWMS should be recorded on the SWMS Register SEQ-TP-056.

6.14.1. Safe Work Method Statement – copy to be given to principal contractor

A person conducting a business or undertaking that includes carrying out high risk construction work in connection with a construction project must, before the high-risk construction work commences, ensure that a copy of the safe work method statement for the work is given to the principal contractor.

6.14.2. A safe work method statement must:

a. Identify the work that is high risk construction work,
b. Specify hazards relating to the high-risk construction work and risks to health and safety associated with those hazards, and
c. Describe the measures to be implemented to control the risks,
d. Describe how the control measures are to be implemented,
e. Describe what legislation, Standards, Code of Practice or Guidelines relevant to the task

f. Description of Plant/Tools used
g. Company details
h. Site specific responsible personnel identification
i. Relevant Trade certificates, Licences or qualifications needed for the task

6.14.3. Review of safe work method statement

A person conducting a business or undertaking must ensure that a safe work method statement is reviewed before its use on site using SEQ-CL-038 SWMS Review Checklist and as necessary revised if;

a. The control measure does not control the risk it was implemented to control as far as is reasonably practicable,
b. Before a change at the workplace that is likely to give rise to a new or different risk to health or safety that the measure may not effectively control,
c. A new relevant hazard or risk is identified,
d. A change to the workplace itself or any aspect of the work environment, or
e. A change to a system of work, a process or a procedure.

6.14.4. Compliance with safe work method statement

A person conducting a business or undertaking that includes the carrying out of high risk construction work must put in place arrangements for ensuring that high risk construction work is carried out in accordance with the safe work method statement for the work.

Use SEQ-CL-009 SWMS Compliance Inspection. This is to be conducted at least once a week on any sub-contractor at the height of construction throughout the project, when the project is at its initial and finishing stages SWMS Compliance can be done randomly at timely intervals on the sub-contractor. If it is found at review the effectiveness of the SWMS not sufficient then an immediate review of the work process shall take place until compliance is met.

6.15. JSEA (Job Safety Environmental Analysis)

JSEA - Job Safety& Environmental Analysis, a consultation process where a work group is involved in the methodology and recording process which includes the identification of hazards, assessment of risk and the implementation of control methods at a worksite.

The Daily JSEA is conducted and documented prior to the commencement of any work activities each day on SEQ-FM-031 Daily JSEA. The Supervisor or Team Leader either Haslin or a Sub-Contractor representative for each scope of works must consult with their team identifying the daily hazards for their lot of works. Controls must be documented and then acknowledged by each team member of their particular work group by signing their name to the Daily JSEA.

The Daily JSEA must be handed in to Haslin Management after each shift.

6.16. Legislation, Standards and Codes of Practice Risk Register

Changes to any legislation, standards, codes of practice or guidelines that relevant to the business shall undergo a risk assessment to see any changes to the way the business is run from the day to day. This shall be recorded on SEQ-RG-006 - Acts, Regulations, COPs, & Standards Amendments Review Register.

6.16.1. Tracking changes in Legal and other requirements

Haslin has engaged Work Safe Australia **http://www.worksafe.com.au/** for monitoring and notifying any changes to work health and safety and environmental legislation and updating Haslin's HSEQ Manager on a regular basis.

The website allows for access to the complete Act or Regulation of all States in Australia. Be alerted to any changes to State WHS and Environmental Acts or Regulations. Workplace Safety and Environment Australia, also provides running commentary to this change of WHS and Environmental legislation. When a change or changes are advised, the Haslin's HSEQ Manager will review the changes and their implications for Haslin using SEQ-RG-006 - Acts, Regulations, COPs, & Standards Amendments Review Register. If such changes affect Haslin's existing safety and environmental practices and documentation significantly, the Manager Safety and Environment and Quality will take immediate initiatives to ensure compliance with the changed requirements.

6.16.2. Tracking changes of TfNSW, ASA, Water and RMS Industry Standards

Engagement of TfNSW, Sydney Trains or RMS projects Haslin will review current industry practices and standards by updating folder \\nd-box\haslin_docs\COMPANY HSEQ FILES\HSEQ\ACT-REGS-AS Standards-COP and industry websites they are as follows:

- https://www.transport.nsw.gov.au/industry/standards-and-accreditation/standards#ASA Standards Directory
- http://www.rms.nsw.gov.au/business-industry/partners-suppliers/disciplines/index.html

6.16.3. Communicating changes in Legal and other requirements

Haslin will keep its employees; subcontractors and suppliers informed of safety and environment related legal and other requirements. Such requirements will be communicated through various means, including the following:

- Corporate Health and Safety Induction for New Employees
- 'Due Diligence' course for relevant Haslin managers and supervisors
- Site Safety and Environmental Induction for Haslin employees, sub-contractors and visitors
- Special safety and environmental briefings for communication of changes in applicable legislation, standards, guidelines and codes of practice via toolbox.
- Email communication of changes in applicable legislation, standards, guidelines and codes of practice by Haslin's HSEQ Manager.
- Safety notices and news bulletins.

6.17. Changes to risk profile

Changes to the risk profile may originate from a range of changes, additions or deletions to the work environment. Any such changes must be communicated to all affected employees.

All temporary and permanent changes to the risk profile must undergo the risk management process, and be integrated into the existing SWMS or Daily JSEA. All affected employees must be re-inducted and sign off on the amended SWMS or Daily JSEA.

6.18. Changes to risk profile for rail projects and large complex projects (Configuration Management)

Configuration Management is an administrative process for establishing and maintaining consistency of a product's performance, functional and physical attributes with its requirements, design, and operational information throughout its life cycle.

The Configuration Management Plan (CMP) details procedures for establishing, monitoring and revising baseline documentation to reflect design, construction, procurement, and system testing and start-up phases of the project.

The CMP Plan is a management control tool which is used to determine the significance, potential impact and outcomes of changes during design and/or construction of the project. Refer to the SEQ-TP-084 Configuration Management Plan for further detail

6.19. Emergency Risk Assessment

Before work has commenced on any site, a competent person to conduct an emergency risk assessment using the Emergency Plan Checklist SEQ-CL-041, this checklist not only includes fire and first aid but other emergency elements, such, water or stored energy, working within operational buildings. Consideration of the Project Safety Risk Register SEQ-TP-002, can all so determine emergency outcomes. Once this information has been gathered an Emergency Evacuation Plan SEQ-TP-037, can proceed with the appropriate procedures and emergency equipment.

6.20. Safety Assurance (Rail)

Safety Assurance processes to be implemented leading to the development of Safety Assurance Reports (SARs) for the project.

The Safety Assurance processes covered by this plan are only those processes that are in place to control hazards relating to the eventual operation and maintenance of the assets delivered as part of the project.

This Safety Assurance Plan does not cover managing and controlling workplace and construction site safety hazards.

Furthermore, in accordance with good international practice for System Assurance the scope of the SAP includes the following:

- All design, construction, testing and commissioning phases of all works associated with the project;
- Any Contractor involved in the delivery of the project is required to manage identified risks and assess all potential safety hazards, especially those introducing new and novel technologies. Due to the uncertainty, new and novel items or systems (those not current in use or understood by the end user) will be described in the SAR, using the approaches described in this document as applied to the Contractor's works;
- The SAP will describe the approach for the use of Goal Structuring Notation (GSN) for the presentation of the safety arguments in the Safety Assurance Report (SAR) and any Safety Assurance Statements (SAS);
- The SAP will describe the arrangements for internal and subcontractor System Assurance audits; and
- The SAP will clearly identify the reviews of the SAP that will be performed at the end of each stage of the project.

7. Training

Internal hazard and risk assessment training is provided to all Haslin Management using SEQ-ML-005 Site Risk Management Training. Site specific inductions using (SEQ-TP-048 Site Safety Env Induction) are used for all projects to train and inform all stakeholders of the specific site risks.

External training is provided for all Haslin employees for specific high risk activities and Sub-Contractors are contracted for their experience and qualifications in their specific employment

Records of training are held as per SEQ-PRO-069 Training.

8. Relevant Templates, Forms and Checklists

Forms

SEQ-FM-001	Hazard Reporting Form
SEQ-FM-005	Sub-Contractor Evaluation Form
SEQ-FM-016	Supplier Evaluation Form
SEQ-FM-031	Daily JSEA
SEQ-FM-026	Working @ Heights Permit
SEQ-FM-030	Hot Work Permit
SEQ-FM-043	Confined Space Entry Permit
SEQ-FM-045	Isolation Lockout Permit
SEQ-FM-046	Electrical Work Permit
SEQ-FM-047	Permit to Excavate
SEQ-FM-059	Pre-Commissioning Permit

Checklists

SEQ-CL-001	Hazardous Chemicals Register & Risk Assessment
SEQ-CL-007	Plant Hazard Identification Checklist
SEQ-CL-010	Plant Authorisation Checklist
SEQ-CL-011	Receiving Inspection Checklist
SEQ-CL-016	Tender-Contract Review Checklist
SEQ-CL-033	Design Review Checklist
SEQ-CL-034	ITP Checklist
SEQ-CL-041	Emergency Plan Checklist
SEQ-CL-045	Verification of Competency Checklist
SEQ-ML-005	Site Risk Management Training

Templates

SEQ-CL-020	Corporate Risk Register
SEQ-TP-002	Project Safety and Environmental Risk Register
SEQ-TP-003	Workplace Safety Risk Assessment
SEQ-TP-035	Safe work Method Statement
SEQ-TP-036	Daily Pre-Start Briefing
SEQ-TP-040	Approved Subbie Supplier Register
SEQ-TP-045	Environmental Impacts Aspects Register
SEQ-TP-048	Site Safety Env Induction
SEQ-TP-056	SWMS RegisterSEQ-TP-058: Plant Risk Assessment
SEQ-RG-006	Acts, Regulations, COPs, & Standards Amendments Review Register
SEQ-TP-060	Concept Design RA (Chair 1)
SEQ-TP-061	Construction Design RA (Chair 2)
SEQ-TP-062	Maintenance-Repair RA (Chair 3)
SEQ-TP-079	Safety Assurance Plan (Rail)
SEQ-TP-080	Work Method Statements
SEQ-TP-084	Configuration Management
SEQ-TP-089	Chain of Responsibility Management Plan
SEQ-TP-090	TfNSW Project Risk Register

Appendices

Appendix – A:

Examples of Typical Hazards and Threats

Appendix – B:

Risk Calculation Matrix, Risk Management Protocol, Consequence Descriptors and Likelihood Descriptors

Appendix A
Examples of Hazards and Threats

Typical Workplace Health and Safety Hazards

- Rough or slippery surfaces
- Obstructions in movement areas, emergency exit doors
- Inappropriate work station
- Screen-based equipment
- Inappropriate illumination
- Inappropriate room temperature
- Inadequate ventilation
- Hazardous substances
- Manual handling
- Plant noise

Typical Health and Safety Hazards on Project Sites

- Overhead electrical wire
- Underground services
- Rough and/or slippery movement surfaces
- Unstable ground condition
- Confined spaces
- On-going hazardous operations
- Operational noise
- Traffic and pedestrian movements
- Hazardous materials (e.g. asbestos, lead etc.)
- Contaminated soil and/or groundwater
- Noxious weeds
- Vicious wildlife
- Site location (e.g. isolation)
- Uncontrolled service provisions (e.g.no systematic approach)

Typical Health and Safety Hazards Associated with Construction Activities

- Rough and/or slippery surfaces
- Sharp metal or glass pieces (on movement surfaces)
- Faulty design
- Inappropriate work methods
- Unskilled or physically unfit workers
- Powered mobile plant
- Moving or rotating components of plant
- Hot or cold components of plant
- Faulty hand-held tools
- Heavy or awkward shaped construction materials
- Confined spaces
- Unstable or inappropriate elevated work platform
- Inappropriate or unsecured ladders
- Live electricity
- Hot work
- Deep Excavations
- Engulfment
- Groundwater (on-rush)
- Falling objects
- Hazardous materials (e.g. asbestos, lead paint etc.)
- Hazardous chemicals and dangerous goods
- Extreme weather conditions

- Traffic and pedestrians
- Construction noise
- Dust
- Fumes

Typical Environmental Hazards (Aspects) Associated with Construction Activities

- Construction noise
- Exhaust emissions (from plant and vehicle)
- Dust
- Sediment run-off
- Spillage of hydrocarbons and chemicals
- Removal of vegetation
- Disturbance of habitats
- Excavated contaminated soil
- Exposed contaminated groundwater
- Waste generation
- Use of non-renewable natural resources
- Changes in aesthetic values

Typical Financial Threats

- Unrealistic estimate (over or under priced)
- Cost of materials (price increase)
- Cost of labour (cost increase)
- Work delays
- Loss or damage of construction plant or materials
- Non-complying work
- Dishonour of claim
- Misappropriation
- Litigation
- Infringement
- Fatality and/or serious injury

Typical Legal Threats

- Non-compliance with statutory requirements
- Non-compliance with client requirements
- Litigation with client
- Prosecution by regulators for breaching regulatory requirements
- Litigation with sub-contractors/service providers
- Prosecution by members of the community
- Prosecution by employees or employee unions

Reputation

- National media coverage against the company
- Community outcry
- Local media coverage against the company

Appendix B
Risk Calculation Matrix, Risk Management Protocol, Consequence Descriptions, Likelihood Descriptions

Risk Calculation Matrix:

Likelihood	Consequence: Catastrophic A	Catastrophic/Major B	Major C	Major/Minor D	Minor E
1 Almost Certain	HIGH A1	HIGH B1	HIGH C1	MEDIUM D2	MEDIUM E1
2 Likely	HIGH A2	HIGH B2	MEDIUM C2	MEDIUM D2	MEDIUM E2
3 Possible	HIGH A3	MEDIUM B3	MEDIUM C3	MEDIUM D3	LOW E3
4 Unlikely	MEDIUM A4	MEDIUM B4	MEDIUM C4	LOW D4	LOW E4
5 Highly Unlikely	MEDIUM A5	MEDIUM B5	LOW C5	LOW D5	LOW E5

Note: Region below the thick black line indicates the ALARP Region, (As Low as Reasonably Practical)

Risk Management Protocol

Risk Category	Reporting and Communication	Required Management Actions
High	• Report immediately to the Project Manager, HSEQ Manager and Company Director. • Communicate the risk to client, relevant Haslin employees, sub-contractors and visitors	• Discuss with Project Manager, HSEQ Manager and Company Director regarding the need for further analysis/assessment • Do not commence work before eliminating the hazard or reducing the risk by using and implementing risk assessment tools e.g. permits WMS SWMS etc. • Increased supervision increased inspections • Monitor the adequacy and effectiveness of risk control action(s)
Medium	• Report to the Project Manager, HSEQ Manager as soon as practicable. • Communicate the risk to relevant Haslin employees, sub-contractors and visitors	• Reduce the risk by better or alternative procedures or actions e.g. permit WMS SWMS etc. • Requires short term/long term actions. • Manage by specific monitoring or procedures
Low	• Communicate the risk to relevant Haslin employees, sub-contractors and visitors	• Manage by routine procedures • Monitor the adequacy and effectiveness of risk control action(s)

Consequence Descriptors

Consequence Descriptor	Safety	Environment	Business
Catastrophic	Fatality	Irreversible environmental damage leading to community outcry	Financial loss over $1M **or** National media coverage against Haslin **or** Major prosecution with potential to cause Haslin out of business
Catastrophic Major	Serious injury causing permanent disability	Environmental damage leading to potential prosecution and penalty	Financial loss over $500K but less than $1M **or** Local media coverage and community outcry **or** Prosecution with potential for conviction
Major	Serious injury or illness requiring hospitalisation and long-term absence from usual duties	Environmental damage requiring signification remediation or resulting in non-compliance with licence conditions	Financial loss over $100K but less than $500K **or** Local media coverage against Haslin **or** Major non-compliance and customer dissatisfaction
Major Minor	Injury or illness requiring medical attention and LTI up to 5 working days	Environmental impact causing community complaint but no significant impact on the bio-physical environment	Financial loss over $10K but less than $100K **or** Community complaint **or** Minor non-conformance and/or customer concern
Minor	Injury requiring first aid but no LTI	Negligible impact on bio-physical environment (e.g. minor spill, exhaust emission)	Financial loss less than $10K **or** Customer or community concern

Likelihood Descriptors

Likelihood Descriptor	Descriptor Criteria
Almost Certain	Expected to occur in most circumstances It has happened often in similar circumstances
Likely	Will probably occur in most circumstances It has happened sometimes in similar circumstances but not often
Possible	Might occur at some time It has happened often in slightly different circumstances but rarely in similar circumstances
Unlikely	Could occur at some time It has never happened in similar circumstances but has happened sometimes in slightly different circumstances
Highly Unlikely	May occur only in exceptional circumstances It has never happened in similar circumstances but has happened rarely in different circumstances

Action on Residual Risk

LOW	Proceed
MODERATE	Proceed with caution. Risk shall be accepted subject to demonstration that the level of risk is as low as reasonably practicable
HIGH – A3, C1	Proceed following review and approval by senior management e.g. Company Director, Construction Manager. Risk shall only be acceptable if further risk reduction is not practicable or possible.
High – A1, A2, B1, B2	Do not proceed until residual risk rating is reduced through specific controls. Seek alternative solutions. Work must not start until risk has been reduced. Risk shall be reduced by whatever means possible. If risk cannot be reduced, project/work should not proceed.

Likelihood and Consequence assessment tables are shown below.

CONSEQUENCE				
Description	Scale Value	BUSINESS	HSE	Commercial
Catastrophic	A	Business investment could not be sustained (e.g. deaths environmental damage, bankruptcy etc.)	Multiple fatality or extreme environmental incident	>$3m loss / reduction in project margin
Catastrophic/ Major	B	Serious threat to business or investment.	Fatality or major environmental incident	$500-1m loss / reduction in project margin
Major	C	Reduces profit significantly	Major injury or environmental impact	$25k-$500k loss / reduction in project margin
Major/Minor	D	Low effect on profit	Minor injury or environmental impact	$5k-$25k loss / reduction in project margin
Minor	E	Very low effect on profit	Very minor safety injury or environmental impact	<$5k loss in project margin

LIKELIHOOD			
Description	Scale Value	Scenario	Probability
Almost Certain	1	The threat can be expected to occur	Over 85%
Likely	2	More than even chance	50-85%
Possible	3	Quite often occurs	30-50%
Unlikely	4	Small likelihood but could happen	1-30%
Rare	5	Not expected to happen	Less than 1%