Six Mile Creek Dam Safety Upgrade Project

Waste and Resource Use Management Plan

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Revision 0 | April 2025

Definitions & Abbreviations

Term	Definition
AQP / Appropriately Qualified Person	A person having the qualification, experience or standing appropriate to undertake the work required
CGCR	Coordinator-General's change report 2025
DETSI	Department of Environment, Tourism, Science and Innovation
EMP	Environmental Management Plan
Eng	Engineer
EP Act	*Environmental Protection Act 1994*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
FM	Foreman / Supervisor
IAR	Impact Assessment Report
ESM	Environment and Sustainability Manager
NGER	National Greenhouse and Energy Reporting Scheme
PM	Project Manager
SEP	Site Environmental Plan
SM	Site Manager / Superintendent
Sup	Supervisor
TRA	Task Risk Assessment
WRA	Workplace Risk Assessment

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1. Scope

This Management Plan is applicable to all construction phase works associated with the Lake Macdonald Dam Improvement Project (the Project). This Management Plan is to be read in conjunction with the following:

- Site Environmental Management Plan (ref: LMDIP-05829-GNL-ENV-MPL-00001)
- SMEC Impact Assessment Report including the Draft Environmental Management Plan (Ref: Appendix B of the SMEC Impact Assessment Report)

This Management Plan has been prepared to address the relevant imposed conditions outlined in the Coordinator-General's change report 2025 (CGCR) – Construction and recommendations (the addressable items).

1.1. Objectives

The objectives of this Management Plan are to:

- To prevent or minimise the generation of wastes, where practical, and to appropriately contain, control and dispose of all waste generated
- Maximise waste reuse and recycling and, where practicable, divert waste from landfill

1.2. Stakeholder Consultation

In preparing this Management Plan the following stakeholders were consulted and feedback considered in the development of management measures:

- The Office of Coordinator General (OCG) through the review of the draft Management Plans provided in May 2024
- John Holland Group

2. Specific Performance Measures

The specific performance measures relevant to the implementation of this Management Plan have been detailed in Table 1.

Table 1 Specific performance measures

Specific Performance Measure	Measurable Target(s)
Minimize nuisance caused through waste management on the Project	No offsite release of waste to the environment.
	No verified complaints or community concerns regarding waste management.
Minimize potential for environmental harm resulting from waste management	No environmental incidents resulting from improper waste management.
	No offsite release of waste to the environment.
	Hazardous and non-hazardous wastes will be stored in approved storage containers in dedicated areas during all phases of the Project.

Specific Performance Measure	Measurable Target(s)
	Hazardous substances (or hazardous waste generating processes) will only be selected in the absence of non-hazardous alternatives.
	All waste is disposed of lawfully, with documentation for trackable waste.
Implementation of waste management hierarchy onsite (reduce, re-use, recycle, disposal) and effective and sustainable disposal strategies on site.	No disposal of recyclable and/or reusable material to landfill.

3. Roles and Responsibilities

Roles and responsibilities applicable to the implementation of this Management Plan have been detailed in Table 2.

Table 2 Roles and responsibilities

Role	Responsibility
Seqwater	• Manage the construction process as the Project proponent. • Allocate sufficient resources to prepare, review and update this Management Plan. • Ensure that the requirements of any statutory approvals, legislation and this Management Plan are included in the contract documentation and implemented. • Undertake audits of the contractor to verify compliance with any legislative requirements and this Management Plan.
Contractor Project Manager (Project team leader)	• Maintain a master copy of this Management Plan, a record of the completion of management measures, monitoring records and reports. • Provide sufficient resources to ensure the effective implementation of this Management Plan. • Participate in any audits initiated by Seqwater. • Coordinate required monitoring. • Provide relevant and timely information about construction activities that may impact on the amenity of stakeholders. • Ensure adaptive implementation of the waste management hierarchy for each project activity.
Contractor Construction Manager (Project team member)	• Ensure sufficient resources and infrastructure (i.e. laydown areas) is provided to ensure appropriate waste management procedures can be undertaken. • Report any incidents, non-compliances and complaints to the Contractor Project Manager and Environmental and Sustainability Manager (ESM). • Participate in any investigations of complaints or non-conformances. • Ensure all staff are trained/inducted to the Project.

Role	Responsibility
Contractor Environment and Sustainability Manager (ESM) (Project team member)	• Primary responsibility for implementation and compliance with this Management Plans, statutory approvals and legislation. • Undertake regular inspections of work activities to ensure adherence to this Management Plan. • Participate in toolbox talks as required to ensure staff are aware of waste management practices and requirements. • Report any incidents, non-compliances and complaints to Seqwater. • Lead any investigations of complaints or non-conformances and report any findings and corrective actions to Seqwater. • Document how the waste management hierarchy will be adopted and what measures will be undertaken to avoid disposal of recyclable and/or reusable material to landfill. • Advises the Contractor Project Manager on adaptive implementation of the waste management hierarchy for each project activity.
Healthy and Safety Manager	• Liaise with the ESM to ensure minimum management measures around waste management are adhered to.
Community & Stakeholder Manager	• Ensure community members are appropriately notified of Project work requiring waste management (i.e. offsite removal of waste, additional waste management vehicles). • Manage the project enquiries and responses. • Register and report community complaints and ensure adherence to the complaint's procedure.
Supervisors (project team members)	• Ensure that this Management Plan requirements are communicated to all personnel and are being fully implemented on site. • Undertake any rectifications as required by the Contractor Environment and Sustainability Manager.
All Project personnel (including Subcontractors)	• Comply with reasonable directions given by the Principal Contractor regarding environmental matters. • Comply with the requirements of this Management Plan as relevant to the subcontracted works. • Environmental incidents, non-conformances and near misses are to be reported to the ESM.

4. Receiving Environment

4.1. Waste Environment (Regional Setting)

The Project is located within the Shire of Noosa Local Government Area (LGA), within proximity to existing local government and privately owned waste management facilities and supported by a number of waste service providers. Facilities and services that are proposed to be utilised by the Project are detailed in Table 3.

Table 3 Existing waste facilities

Facility / Service	Address	Ownership	Relevant Permit	Waste Receival authorised Life of Facility
Disposal / Processing Facilities				
Kin Kin Quarry	250 Shepparsons Lane, Kin Kin, QLD	Private	Environmental authority EPPR00792413	Unsuitable earthen material, demolition material, rock, concrete
Ringtail Creek Quarry	Tewantin-Boreen Point Road, Ringtail Creek, QLD	Local Government	Environmental authority EPPR00555613	Clean earthen material and rock
Boral Quarry	720 Moy Pocket Road, Moy Pocket, QLD	Private	Environmental authority EPPR00713713	Unsuitable earthen material, demolition material, rock, concrete
Curra Quarry	1 Bruce Highway, Curra, QLD	Private	Environmental authority EPPR00814413	Unsuitable earthen material, demolition material, rock, concrete
Image Flat Quarry	178 Image Flat Road, Nambour, QLD	Private	Contractor to confirm throughout procurement process	Unsuitable earthen material, demolition material, rock, concrete
Anderleigh Quarry	270 Sorenson Road, Gunalda, QLD	Private	Environmental authority EPPR02912115	Unsuitable earthen material, demolition material, rock, concrete
Noosa Resource and Recovery Centre	561 Eumundi Noosa Road, Doonan, QLD	Local Government	Environmental authority – EPPR01855314	Hydrocarbon liquids, hydrocarbons oil and solvent containers , office waste
Rowcon Recycling	108 Fred Chaplin Circuit, Bells Creek, QLD	Private	Environmental authority – EPPR04321416	General construction Waste, steel and scrap metal, office waste
Nambour Resource and Recovery Centre	18 Cooney Road, BLI BLI, QLD 4560	Local Government	Environmental authority BRID0056	Hydrocarbon liquids, hydrocarbons oil and solvent containers , office waste
Sims Metal	42 Hoopers Road, Kunda Park, QLD	Private	Environmental authority ER14/0004	Steel and scrap metal
Remondis Australia	28 Sippy Creek Road, Tanawha, QLD	Private	Environmental authority – EPPR02825515	General construction waste, office waste, vegetation waste
JJ's Waste and Recycling	95 Cordwell Road, Yandina, QLD	Private	Environmental authority EPPR00875913	General construction waste, office waste, oil filters
Service Providers				
Whale Bins	1 Page Street, Kunda Park, QLD	Private	Contractor to confirm throughout	General construction waste, hydrocarbons, oil filters, oil and solvent containers, hazardous waste, demolition waste, office waste

Facility / Service	Address	Ownership	Relevant Permit	Waste Receival authorised Life of Facility
			procurement process	
Suttons Cleaning Service	Mobile, Cooroy	Private	Contractor to confirm throughout procurement process	Sewerage and septic waste (including provision of portaloos), hydrocarbon liquids

4.2. Sensitive Receptors

The Project area is bordered to the north by Tewantin National Park and otherwise surrounded by a semi-rural residential area (Lake Macdonald suburb), see Figure 1.

The closest dwellings to the Project construction area are located:

- Approximately 30 m to the west of the left embankment.
- Approximately 210 m to the west of the area in which the borrow pit may be located.
- Approximately 215 m to the west of the closest proposed stockpile area.
- Approximately 300 m to the east of the clay borrow area.

Potential impacts to sensitive receptors associated with waste management are captured in the relevant environmental management plans (i.e. noise and vibration management plan, lighting management plan, dust and air quality management plan).

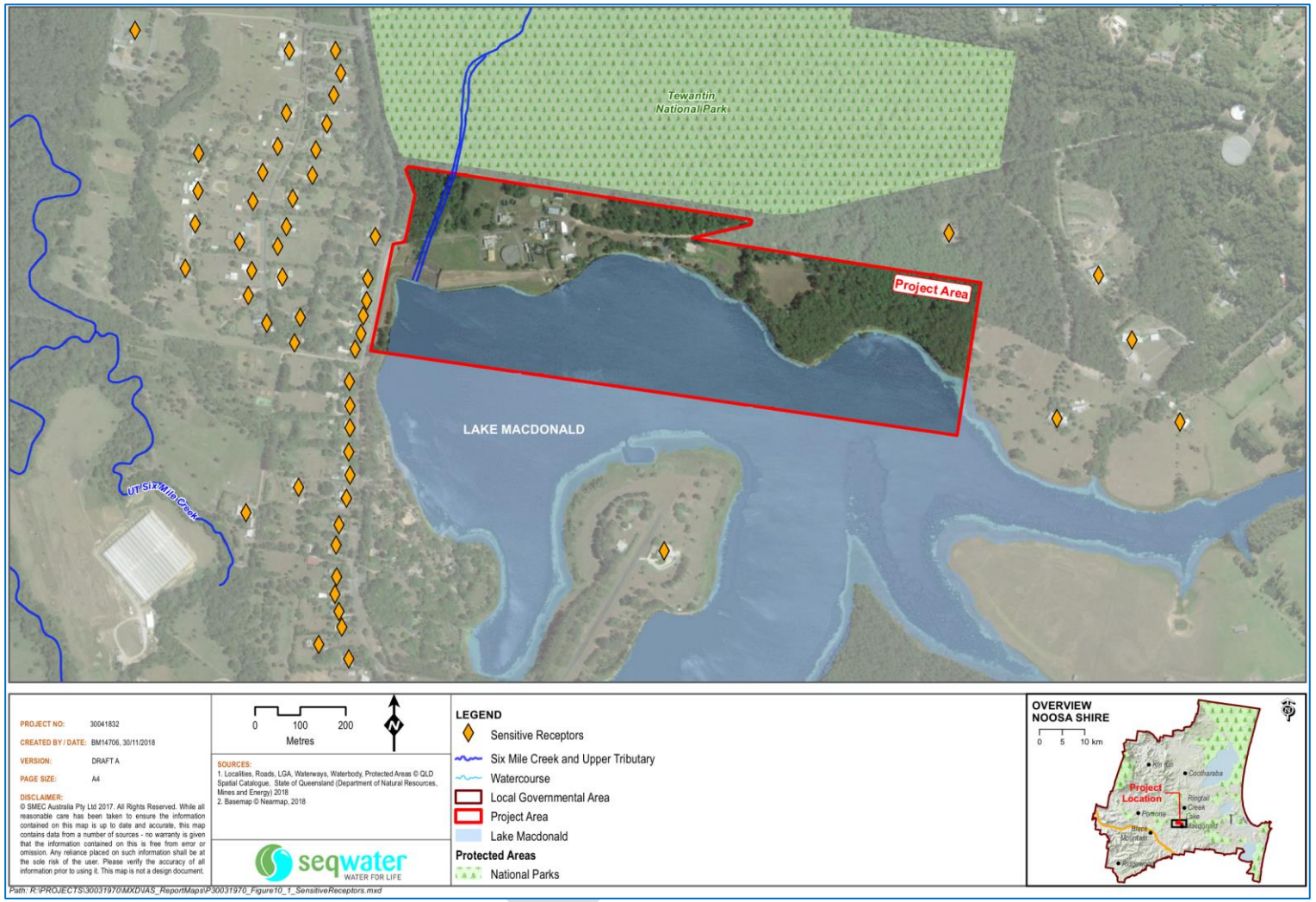

Figure 1 Sensitive receptors

5. Legislative and Other Compliance Requirements

5.1. CGCR Addressable Items

Details of the applicable CGCR addressable items and how these have been addressed in the Management Plan have been provided in Table 4.

Table 4 CGCR addressable items relevant to this Management Plan

CGCR Reference	Type	Addressable Items	How addressed in this Management Plan
Coordinator-General (CG) Conditions			
Appendix A. Imposed Conditions, Schedule 1, Condition 1 (c) Site Environmental Management Plan (SEMP)	Imposed conditions	The SEMP must include the following construction EMPs: (H) waste and resource use management plan	This Management Plan has been developed to comply with this condition and includes performance criteria, mitigation measures, monitoring reporting, responsibility and corrective action. Performance criteria are described in Section 2 and Table 1 Mitigation measures are provided in Section 0, Table 8, MM1-MM22 Monitoring is described in Section 9 and Table 10 Reporting is described in Section 11 and Table 12 Roles and responsibilities are described in Section 3 and Table 2 Corrective actions are described in Section 10 and Table 11

5.2. Legislation

Details of relevant legislation applicable to this Management Plan have been detailed in Table 5. These roles and responsibilities are in addition to those described in Table 9 of the SEMP.

Table 5 Other legislation applicable to this Management Plan

Legislation	How it Applies to This Management Plan
State Legislation	
Waste Reduction and Recycling Act 2011	The *Waste Reduction and Recycling Act 2011* (WRR Act) contains a suite of measures to reduce waste generation, landfill disposal and encourage recycling. The purposes of the WRR Act are: • To promote waste avoidance and reduction, and resource recovery and efficiency actions • To reduce the consumption of natural resources and minimise the disposal of waste by encouraging waste avoidance and the recovery, re-use and recycling of waste • To minimise the overall impact of waste generation and disposal • To ensure a shared responsibility between government, business and industry and the community in waste management and resource recovery • To support and implement national frameworks, objectives and priorities for waste management and resource recovery
Waste Reduction and Recycling Regulation 2023	The *Waste Reduction and Recycling Regulation 2023* (WRR Regulation) supports the management of waste through supporting avoidance, reuse, recycling and safe disposal of waste, through setting regulatory requirements and providing enabling heads of power for waste reduction and recycling activities. The WRR Regulation sits under the WRR Act and provides details about the legislative framework. The key provisions of the WRR include: • Fees for applications under the WRR Act 2011 • Management of used packaging materials • Details about who is required to plan and report waste management
Environmental Protection Act 1994	The *Environmental Protection Act 1994* (EP Act) protects Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains ecological processes. In respect to the Project, the EP Act provides a definition for waste and outlines obligations to be met by individuals and corporations involved in the construction of the Project. Seqwater has an obligation to uphold their general environmental duty, duty to notify, and duty to restore the environment under the EP Act to prevent environmental harm, nuisance and contamination occurring from project activities.
Environmental Protection Regulation 2019	In relation to the Project the *Environmental Protection Regulation 2019* (EP Regulation) EP Regulation does prescribe the requirements to be met for the management of waste and regulated wastes including its storage, disposal, transportation, tracking and treatment. • Category 1 regulated waste (highest risk) • Category 2 regulated waste (moderate risk) • Not-regulated waste /general waste (lowest risk)
Local Government Legislation	
Noosa Shire Council Local Law No 7 (Waste	Local Law No. 7 outlines the requirements of waste storage, servicing and removal, regulates the disposal of waste at waste facilities and protects public health, safety and amenity related to waste management.

Legislation	How it Applies to This Management Plan
Management) 2018	

6. Potential Impacts

6.1. Expected Waste Streams

Various types of waste will be generated during construction, including, but not limited to:

- Unsuitable earthen material including rock
- Demolition material (e.g. timber, concrete, roadbase, plasterboard)
- Vegetation wastes (where unable to be recycled)
- General construction waste (e.g. timber, general waste, plasterboard, bricks, packaging, plastics, materials)
- Regulated/trackable waste (e.g. sewage and grey water)
- Hydrocarbons, oil filters, oil & solvent containers
- Hydrocarbon liquids
- Contaminated soil from any hydrocarbon spills
- Steel and scrap metal
- Hazardous substances (including asbestos)
- Office waste (e.g. batteries, paper, cardboard, glass)
- Sewerage and septic waste
- Clean earthen material (not classified as a waste product but listed as there may be a requirement to dispose of offsite to receival facility as outlined in Table 3).

6.2. Waste Characterisation

Detail on the volume and type of waste generated as part of the Project are provided in Table 6.

Table 6 Waste streams

Waste Type	Proposed Activity / Source	Volume (tonnes per annum)	Onsite Storage	Hazardous Material (yes / no)	Regulated Waste (yes / no)	Trackable Waste (yes / no)	Disposal Location
Steel / metal	Demolition / General site construction works	100	Industrial skip bins	No	No	No	Recycling facility as per Table 3
Timber (treated)	Demolition / General site construction works	5	Industrial skip bins	No	No	No	Landfill facility as per Table 3
Timber (untreated)	Demolition / General site construction works	5	Industrial skip bins	No	No	No	Landfill facility as per Table 3
Plastics	Demolition / General site construction works	10	Lidded skip bins	No	No	No	Recycling facility as per Table 3
Paints, solvents	Demolition / General site construction works / workshop facilities	3	Approved storage containers	Yes	Yes	Yes	Recycling facility as per Table 3
Concrete waste	Demolition / General site construction works	1200	Industrial skip bins	No	No	No	Quarry facility as per Table 3
Brick	Demolition / General site construction works	2	Industrial skip bins	No	No	No	Quarry facility as per Table 3

Waste Type	Proposed Activity / Source	Volume (tonnes per annum)	Onsite Storage	Hazardous Material (yes / no)	Regulated Waste (yes / no)	Trackable Waste (yes / no)	Disposal Location
Construction and Demolition Waste	Demolition / General site construction works	5000	Industrial skip bin	No	No	No	Landfill facility as per Table 3
E-waste / Electronics	Demolition / General site construction works / office	0.5	Industrial skip bin	No	No	No	Recycling facility as per Table 3
Fuel (diesel)	Demolition / General site construction works	5	Fuel truck / fuel cell / selecta tank	Yes	Yes	Yes	Recycling facility as per Table 3
Asbestos sheeting / ACM / asbestos cement[1]	Demolition	15	Double wrapped in plastic, stored in industrial skip bin	Yes	Yes	Yes	Landfill facility as per Table 3
Sewage / effluent / sludge	Amenities	10	Not stored onsite	Yes	Yes	Yes	Landfill facility as per Table 3
Paper / carboard	Amenities / office	2	Lidded skip bins	No	No	No	Recycling facility as per Table 3
Mixed Recycling	Amenities / office	10	Lidded skip bins	No	No	No	Recycling facility as per Table 3
Mixed General Waste (Packaging materials, office	Amenities / office	20	Lidded bins	No	No	No	Landfill facility as per Table 3

[1] There is potential for asbestos to be encountered during construction activities i.e. asbestos cement materials within the dam wall. Quantities provided are an estimation only to inform development of appropriate management measures.

Waste Type	Proposed Activity / Source	Volume (tonnes per annum)	Onsite Storage	Hazardous Material (yes / no)	Regulated Waste (yes / no)	Trackable Waste (yes / no)	Disposal Location
waste, food waste and other non-regulated wastes not otherwise listed in this table not feasible to separate on site)							
Aluminum waste	Amenities / general site construction	5	Industrial skip bins	No	No	No	Recycling facility as per Table 3
Waste oil and containers/rags	Workshop	5	Lidded skip bins / approved storage containers	Yes	Yes	Yes	Landfill facility as per Table 3
Tyres	Workshop	20	Stockpiled	Yes	Yes	No	Recycling facility as per Table 3
Batteries	Workshop	0.25	Stored isolated within workshop	Yes	Yes	Yes	Recycling facility as per Table 3
Air filters	Workshop	0.25	Industrial skip bin	No	No	No	Landfill facility as per Table 3
Earth / Fill Materials							
Topsoil	General site works	100	Stockpiled	No	No	No	Reused onsite
Green waste	General site works	750	Stockpiled	No	No	No	Reused onsite, or where weeds are present (refer to Weed and Pest Management Plan), disposed of as general waste as per Table 3

Waste Type	Proposed Activity / Source	Volume (tonnes per annum)	Onsite Storage	Hazardous Material (yes / no)	Regulated Waste (yes / no)	Trackable Waste (yes / no)	Disposal Location
Rock	General site works	15,000	Stockpiled	No	No	No	Reuse options will be explored, however will be limited onsite. Where unavailable, excess rock will be disposed of at the source quarry facility where it will be reused / onsold as per Table 3
Earthen fill / spoil	General site works	7500	Stockpiled	No	No	No	Reused onsite
Roadbase	General site works	4500	Stockpiled	No	No	No	Quarry facility as per Table 3, options for reuse will be explored
Contaminated soil	General site works	500	Industrial skip bin	Yes	Yes	Yes	Landfill facility as per Table 3

6.3. Potential Impact Summary

A summary of potential impacts resulting from waste management at the site is provided in Table 7. Waste types have been broadly classified into four key streams:

- General waste
- Regulated waste
- Construction and demolition waste
- Sewage waste

A risk assessment considering all Project impacts is provided in Appendix A.

Table 7 Potential impacts - summary

Waste	Potential Impact No.	Potential Impacts
General waste	PI1	• Impacts to human health and hygiene from incorrect management and disposal of putrescible waste • Increased pressure on local waste disposal facilities • Attraction of pest fauna species (e.g. feral pigs, feral cats, native rodents and scavenging bird species) arising from an inadequately managed waste collection area • Land, surface water and groundwater contamination from leachate or run-off originating from unsealed waste collection and storage areas • Litter in and around the Project site. impacting: — visual amenity — fauna and flora habitats — risk of fire — health risks by providing a mosquito breeding habitat • Increase of traffic resulting from waste transport movements
Regulated waste	PI2	• Risks to workplace health and safety resulting from unsafe or inadequate storage, containment and/or handling of hazardous material • Resource inefficiencies arising from inadequate recycling and/or reuse of waste materials • Pollution to the receiving environment (e.g. surface water and land) from the loss of hazardous material • Non-compliance with the waste tracking requirements • Increase of traffic resulting from waste transport movements
General construction waste	PI3	• Resource inefficiencies arising from inadequate recycling and/or reuse of waste materials • Land, surface water and groundwater contamination from leachate or run-off originating from unsealed waste collection and storage areas • Increased pressure on local waste disposal facilities • Increase of traffic resulting from waste transport movements

Waste	Potential Impact No.	Potential Impacts
Sewage	PI4	• Pollution to the receiving environment (e.g. surface water and land) from the loss of untreated effluent • Land, surface water and groundwater contamination from inappropriate and/or inadequate treatment and management of sewage effluent

7. Management Measures

The management measures that will be implemented to minimise the potential for impacts associated with waste management have been detailed in Table 8.

The sub-contractor will be responsible for implementing the waste management hierarchy in Figure 2. This will extend to implementation of many of the management measures captured in Table 8.

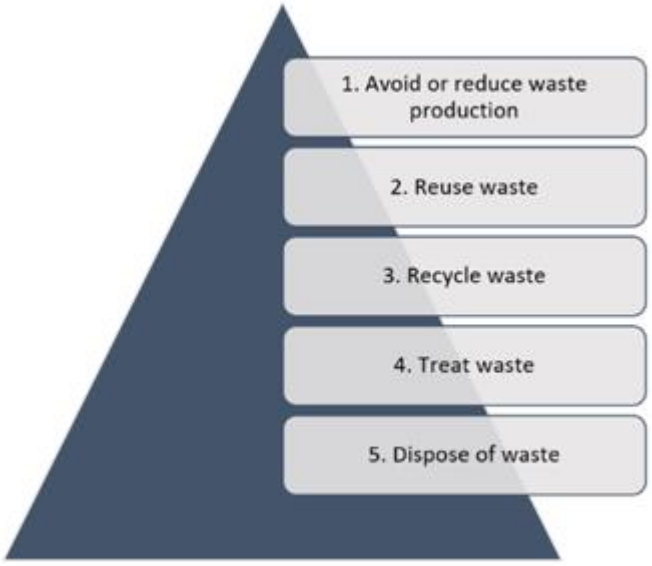

Figure 2 Waste management hierarchy (JHG 2025)

Table 8 Management measures

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
MM 1		Waste minimisation measures will be included in tendering, subcontracting and procurement processes. Procurement of materials to favour suppliers who can reduce bulk packaging and minimise waste generation.	PI1- PI3	ESM/ Eng	Workplace Planning
MM 2	Y	During construction planning and methodology development, measures and procedures to minimise waste and sort all waste (including from clearing, demolition, offcuts, etc.) into appropriate categories for on Site reuse, recycling or disposal will be developed.	PI1- PI3	ESM/Eng	Workplace Planning
MM 3	Y	The percentage (by weight) of waste that is re-used or recycled will be quantified and recorded.	PI1- PI3	ESM/Eng	Workplace Planning
MM 4		Regular consultation with local waste disposal facilities will be conducted to determine potential increased pressure on their ability to continue servicing the surrounding community, and any pending limitations or constraints that will impact their ability to service the Project.	PI1 – PI4	ESM	Project Delivery
MM 5	Y	A waste management strategy will be prepared that includes plans for any potential incident where waste material with the potential to cause environmental harm is released to the environment.	PI1 – PI4	ESM/Eng	Workplace Planning
MM 6		Location of all waste disposal bins and facilities will be clearly identified and included on the relevant Site Environmental Plan (SEP).	PI1	ESM/Eng	Workplace Planning
MM 7		Existing items will be re-used to reduce the need for additional purchases.	PI1 – PI3	All personnel	Project Delivery
MM 8		All waste will be either segregated on-site or comingled and separated off-site. Waste will then be reused, recycled or disposed of in an appropriate manner at licensed facilities. Separate bins will be provided for: • General waste (construction and other) • Concrete/masonry waste • Metals	PI1 – PI3	All personnel	Project Delivery

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
		• Paper, cardboard & recyclables etc. • Plastics • Glass • Hazardous wastes			
MM 9	Y	Recycling bins (co-mingled or otherwise) will be provided within all offices, crib rooms and adjacent to construction work areas.	PI1 – PI3	Sup	Project Delivery
MM 10		There shall be no dumping or discharging of any deleterious material into the drainage system, or at any locations, that have not been reviewed and approved by the Superintendent.	PI1- PI4	All personnel	Project Delivery
MM 11	Y	Waste bins and skips will be provided for all office and crib facilities. Wastes will be separated into recyclable waste, non-recyclable waste and other waste, e.g. batteries and printer cartridges.	PI1- PI3	All personnel	Project Delivery
MM 12	Y	Waste skips/bins will meet the following provisions: • Adequate number for waste segregation (recycling, re-use and disposal) and sufficient volume • Labelled to clearly identify the contents • Appropriate for the waste being contained – be compatible, leak-proof and fit for purpose • Be accessible and appropriately located • Be covered (where necessary) to prevent ingress of rain and prevent animals from entering	PI1- PI3	Eng/Sup	Project Delivery
MM 13		Sanitary waste facilities will be provided for all female ablutions.	PI4	Eng	Project Delivery
MM 14	Y	Waste will be removed by an appropriately licensed waste subcontractor and taken to an appropriately licensed recovery or disposal facility. The subcontractor is to provide monthly reports detailing:	PI1 – PI4	ESM	Project Delivery

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
		• Date(s) of waste collection • Description of waste • Cross reference to relevant waste transport documentation • Quantity of waste collected • Origin of waste • Destination of waste (for listed/controlled/regulated wastes) • Intended fate of waste, e.g. re-use, recycling or disposal			
MM 15		No waste is to be burned on Site.	PI1- PI4	Sup	Project Delivery
MM 16		No waste other than spoil (which may only be placed in designated areas) is to be buried or placed in long-term on-site containment.	PI1- PI4	All personnel	Project Delivery
MM 17		The movement of hazardous materials and regulated wastes will occur at non-peak times to minimise the possibility of traffic conflicts and associated risks. Movement outside of normal working hours shall only be conducted under an approved out-of-hours work permit.	PI1- PI4	Contractor Construction Manager	Project Delivery
MM 18	Y	Dedicated waste receptacles suitable for storage and segregation of Regulated wastes will be provided as relevant. Containers and storage areas will comply with storage requirements as per SDS and relevant Australian Standards including, as relevant: • The Storage and Handling of Mixed Classes of Dangerous Goods in Packages and Intermediate Bulk Containers (AS/NZS 3833:2007) • The Storage and Handling of Flammable and Combustible Liquids (AS 1940) • Guidelines for Bulk Storage of Rubber Tyres (NSW Fire and Rescue)	PI2	Contractor Construction Manager	Project Delivery
MM 19	Y	All Regulated waste, including used spill kits, will be removed by an appropriately licensed waste contractor who holds a current license to transport such waste. The waste contractor will provide: • A copy of their current license (record to be retained)	PI2	ESM	Project Delivery

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
		• Records for all Regulated waste (in the form of a Waste Transport Certificate or equivalent)			
MM 20		Spill kits shall be provided in all areas in which hydrocarbons (fuel and oil materials) are stored or used (e.g.: refueling facilities). Soil contaminated with hydrocarbons as a result of incidents/spills will be managed as Regulated waste. Depending on the scale of contamination appropriate protection, storage, testing and remediation are to occur. A suitably qualified person (SQP) will be engaged to characterise the soil with notification made to DETSI as required.	PI2 – PI3	ESM	Project Delivery
MM 21		Waste transport certificate documentation will be completed for each load of Regulated waste removed from Site.	PI1 – PI4	Eng	Project Delivery
MM22		In the event that any hazardous material is discovered such as asbestos, buried waste, hydrocarbons etc. the following steps will be undertaken (It is noted that the probability of encountering hazardous asbestos material is very low). • Stop all work immediately and notify the supervisor for the area • Barricade off the area to minimise access • Supervisor to notify the ESM and HSM • ESM and HSM will attend the scene and advise on the appropriate course of action Where external agencies or the regulator attend the incident, work will not recommence until authorised by the relevant administering authority.	PI1 – PI4	All personnel/ ESM/ HSM	Project Delivery

8. Hold Points

The hold points that will be adopted for waste management have been detailed in Table 9.

Table 9 Project hold points

Hold Point Number	Management measure reference number	What	When does it occur	Construction activities restricted until Hold Point completed
1	MM2, MM5	Implement waste management system, including dedicating waste storage and sorting areas to outline how waste management hierarchy (Figure 2) will be achieved and which materials will be reused and recycled and where and how they will be stored.	During Project Planning	Prior to any works commencing that may generate waste
2	MM3	Implement systems, processes to ensure that the percentage (by weight) of waste that is re-used or recycled can be reasonably quantified.	During Project Planning	Prior to any works commencing that may generate waste
3	MM9	Recycling bins (co-mingled or otherwise) will be provided in office, crib rooms and adjacent to construction work areas.	During Delivery	Prior to any works commencing that may generate waste
4	MM11	Waste bins and skips will be provided for all office and crib facilities. Wastes will be separated into recyclable waste, non-recyclable waste and other waste, e.g. batteries and printer cartridges.	During Delivery	Prior to any works commencing that may generate waste
5	MM12	Waste skips/bins will meet the following provisions: • Adequate number for waste segregation (recycling, re-use and disposal) and sufficient volume; • Labelled to clearly identify the contents; • Appropriate for the waste being contained – be compatible, leak-proof and fit for purpose; • Be accessible and appropriately located; • Be covered (where necessary) to prevent ingress of rain and prevent animals from entering.	During Delivery	Prior to any works commencing that may generate waste

Hold Point Number	Management measure reference number	What	When does it occur	Construction activities restricted until Hold Point completed
6	MM14	Waste will be removed by an appropriately licensed waste subcontractor and taken to an appropriately licensed recovery or disposal facility. The subcontractor is to provide monthly reports detailing: • Date(s) of waste collection • Description of waste • Cross reference to relevant waste transport documentation • Quantity of waste collected • Origin of waste • Destination of waste (for listed/controlled/regulated wastes) Intended fate of waste, e.g. re-use, recycling or disposal.	During Delivery	Prior to any works commencing that may generate waste
7	MM18	Dedicated waste receptacles suitable for storage and segregation of Regulated wastes will be provided as relevant. Containers and storage areas will comply with storage requirements as per SDS and relevant Australian Standards.	During Delivery	Prior to any works commencing that may generate waste
8	MM19	All Regulated waste, including used spill kits, will be removed by an appropriately licensed waste contractor who holds a current license to transport such waste. The waste contractor will provide: • A copy of their current license (record to be retained) • Records for all Regulated waste (in the form of a Waste Transport Certificate or equivalent)	During Delivery	Prior to any works commencing that may generate waste

9. Monitoring

To verify this Management Plan is achieving its performance measures the following monitoring program has been proposed, as outlined in Table 10.

Table 10 Monitoring program

No	Monitoring Required	Staff Responsible	When
1	Waste management will be monitored daily, with observations entered into daily diaries where necessary.	Sup	Daily
2	Waste management will be inspected as part of a weekly environment or HSE site inspection. Results of the weekly inspection will be entered into Protecht.	ESM	Weekly
3	Keep and audit records of any regulated/trackable waste removed from the site, including name and license number of waste transporters, volume and description of waste transported, destination of waste, and license number of the waste treatment operator. Registers and manifests maintained to track waste material.	ESM	As required
4	Quarterly (internal) and annual (external) audits of this Management Plan will be undertaken as part of the EMP auditing process.	Regional HSEQ	Quarterly/Annual
5	Discharges from site associated with waste management shall be monitored in accordance with the requirements of the relevant EMP sub-plan (e.g. Water for release to water, noise and vibration for noise, air quality etc).	ESM	As required

10. Corrective Actions

Corrective actions that will be implemented in the event that a performance measure has not been achieved, have been detailed in Table 11.

Table 11 Corrective action plan

Problem	Corrective Action
Any breach of this Plan	• Notify the supervisor responsible for the area of non-conformance • ESM will provide the supervisor instructions to resolve the non-conformance • ESM will check the non-conformance is rectified 24 hours after the instruction was given • Incident to be documented in the Seqwater incident management system
Wastes incorrectly separated/segregated	• ESM to inspect onsite temporary storage facilities monthly for adequacy and conformance with appropriate Australian Standards • Notify and train personnel on this management plan and the contractors waste management practices to ensure all parties are aware of the waste segregation requirements and appropriate storage areas
No/inadequate collection	• ESM to arrange for collection by approved/licensed waste contractor • ESM to investigate reason for missed/inadequate collection • If external service provider is found responsible, issue to be referred to Project Manager. If failed collection is a result of internal procedures (i.e. poor

Problem	Corrective Action
	segregation of waste preventing transport or disposal), relevant corrective actions (this table) are to be adopted
Reuse or recycling opportunity not recognised	• ESM to undertake 6-monthly audits on waste management procedures and investigate potential unrecognized reuse or recycling opportunities • Train/re-train personnel on this management plan and the waste hierarchy • Market to be tested on a 6-monthly basis to ascertain which recycling contractor is able to offer the most complete recycling opportunity (i.e. which contractor is likely to dispose of the least amount of waste to landfill)
Unlicensed operator	• Operator licences to be reviewed and approved by ESM prior to engagement of the operator • A register is to be maintained by ESM outlining all approved operators and scope of their licences (i.e. what they are legally able to carry) • Should any unapproved operator (i.e. those not on the approved operators list) be observed on site partaking in waste removal activities the ESM is to be notified immediately • Operators who are not authorised are to be removed from site until appropriate licences are obtained and presented
Incorrect disposal	• ESM to confirm suitability of waste removal contractor and waste disposal facility operator, verified through reviewing the operators and disposal facilities licence conditions • If either waste transport operator or disposal facility are found to not have appropriate licences, waste transport and disposal is to immediately cease until appropriate licences have been obtained and presented • ESM to investigate cause of problem and ascertain whether any environmental harm has been caused as a result
Contamination of the Site	• Notify supervisor responsible and the ESM • ESM to initiate investigation to assess degree and extent of contamination • Prevent access to the area • A SQP under section 564 of the EP Act is to be engaged to investigate the impacted area and determine rehabilitation actions • Following completion of the investigation, if required all contaminated material is to be removed and the impacted area to be remediated in accordance with Regulator/Client requirements • The remediated area is to be validated by an SQP in accordance with Regulator/Client requirements • Incident to be documented in the Seqwater incident management system
Inaccurate records management	• Update records • Improve reporting system • Train personnel

11. Reporting

Reporting that will be undertaken in accordance with this Management Plan has been detailed in Table 12. Reporting described in Table 12 is in addition to requirements in the SEMP.

Table 12 Reporting plan

No	Reporting Required	By Whom	By When	To Whom
1	Records of waste quantities generated (including that reported by subcontractors) and any associated waste transport certificate documentation	ESM	Project Delivery	Seqwater
2	Details of field observations will be reported via the Weekly Environmental Inspection Checklist, and communicated to staff during pre-starts, toolbox and team meetings as appropriate.	ESM	Project Delivery	All personnel
3	Results of investigations and corrective actions	All personnel	Following incident	ESM / Seqwater
4	Monthly report to Seqwater that includes details of waste disposal, monitoring results, audits, non-compliances, training, and incidents. For any recorded environmental incidents involving spills, include time of incident, persons involved, details of incident, mitigation measures and actions taken to minimise the probability of recurrence. Monthly reporting must include the percentage (by weight) of waste that is reused or recycled	ESM	Monthly	Seqwater
5	Report any significant hydrocarbon spills or potential risk of spills to the ESM immediately.	All personnel	As required.	ESM / Seqwater /
6	Notification of environmental harm.	ESM	Within 24 hours	Administrating Authority
7	Quarterly report to the CG as per the requirements of schedule 2, condition 2. Report will include: • An evaluation of compliance with the SEMP • Monitoring data required by the Imposed Conditions included in Schedule 2 of the CGCR (2025) for the period and an interpretation of the results • Details of any environmental incident during the reporting period, including a description of the incident, resulting effects, corrective actions (including site remediation activities), revised activity practices to prevent a recurrence, responsibility and timing The report must be provided to the Coordinator-General and also be made available on the Project website within 20 business days of the end of the	Seqwater	Quarterly	Coordinator-General

No	Reporting Required	By Whom	By When	To Whom
	three-month period to which the report relates and continue to be available on the project website for the duration of the Project			

12. Training and Awareness

Site inductions will include the following specific components for waste management:

- Identification of waste types, including non-hazardous waste, hazardous waste and Listed/Controlled/Regulated wastes.
- Key requirements for handling, transportation and storage, including segregation of wastes.
- Waste storage facilities on the Site.

Additionally:

- All subcontractors that will produce waste will be provided with a National Greenhouse and Energy Reporting Scheme (NGER) Data Letter and Subcontractor Energy, Water and Waste Report prior to commencing on site.
- Personnel who routinely handle hazardous chemicals or hazardous or Listed/Controlled/Regulated waste (e.g. refuelling personnel, pump operators, mechanics and stores personnel) will receive training in handling, transporting and storing hazardous chemicals or hazardous Listed/Controlled/Regulated wastes; in reporting and documentation requirements; and in spill clean-up techniques and practice.

13. Review and Continual Improvement

This management plan shall be reviewed within the first 3 months of site mobilisation to ensure the plan is fit for purpose and any identified incidents, issues or hazards are addressed in the Management Plan accordingly. Follow up reviews are to be undertaken annually. This plan is to be reviewed, out of the normal cycle, in the event of a legislative breach, incident, community complaint, when a new hazard or impact has been discovered or following changes to regulatory frameworks, including guidelines and standards.

14. Appendix A: Risk Assessment

Waste type	Risk Statement/Potential Impact	Inherent Risk			Controls/ Management Measures	Residual Risk		
		Likelihood	Consequence	Risk Rating		Likelihood	Consequence	Risk Rating
General Waste	Impacts to human health and hygiene from incorrect management and disposal of putrescible waste	Unlikely (2)	Moderate (3)	Moderate	MM1 MM2 MM3 MM4 MM5 MM6 MM7 MM8 MM9 MM10 MM11 MM12 MM14 MM15	Rare (1)	Moderate (3)	Low
	Increased pressure on local waste disposal facilities	Unlikely (2)	Moderate (3)	Moderate		Unlikely (2)	Minor (2)	Low
	Attraction of pest fauna species (e.g. feral pigs, feral cats, native rodents and scavenging bird species) arising from an inadequately managed waste collection area	Possible (3)	Minor (2)	Moderate		Unlikely (2)	Minor (2)	Low

Waste type	Risk Statement/Potential Impact	Inherent Risk			Controls/ Management Measures	Residual Risk		
		Likelihood	Consequence	Risk Rating		Likelihood	Consequence	Risk Rating
	Land, surface water and groundwater contamination from leachate or run-off originating from unsealed waste collection and storage areas	Possible (3)	Major (4)	High	MM16 MM17 MM21 MM22	Unlikely (2)	Major (4)	Moderate
	Litter in and around the Project site. impacting: • visual amenity • fauna and flora habitats • risk of fire • health risks by providing a mosquito breeding habitat	Possible (3)	Mod (3)	Moderate		Unlikely (2)	Moderate (3)	Moderate
	Increase of traffic resulting from waste transport movements	Possible (3)	Minor (2)	Moderate		Unlikely (2)	Minor (2)	Low
Regulated Waste	Risks to workplace health and safety resulting from unsafe or inadequate storage, containment and/or handling of hazardous material	Unlikely (2)	Major (4)	Moderate	MM1 MM2 MM3 MM4 MM5	Rare (1)	Major (4)	Low

Waste type	Risk Statement/Potential Impact	Inherent Risk			Controls/ Management Measures	Residual Risk		
		Likelihood	Consequence	Risk Rating		Likelihood	Consequence	Risk Rating
	Resource inefficiencies arising from inadequate recycling and/or reuse of waste materials	Unlikely (2)	Minor (2)	Low	MM7 MM8 MM9 MM10 MM11 MM12 MM14 MM15 MM16 MM17 MM18 MM19 MM20 MM21 MM22	Unlikely (2)	Insignificant (1)	Low
	Pollution to the receiving environment (e.g. surface water and land) from the loss of hazardous material	Possible (3)	Major (4)	High		Unlikely (2)	Major (4)	Moderate
	Non-compliance with the waste tracking requirements	Possible (3)	Moderate (3)	Moderate		Unlikely (2)	Moderate (3)	Moderate
	Increase of traffic resulting from waste transport movements	Possible (3)	Minor (2)	Moderate		Unlikely (2)	Minor (2)	Low
General Construction Waste	Resource inefficiencies arising from inadequate recycling and/or reuse of waste materials	Unlikely (2)	Minor (2)	Low	MM1 MM2 MM3	Unlikely (2)	Insignificant (1)	Low

Waste type	Risk Statement/Potential Impact	Inherent Risk			Controls/ Management Measures	Residual Risk		
		Likelihood	Consequence	Risk Rating		Likelihood	Consequence	Risk Rating
	Land, surface water and groundwater contamination from leachate or run-off originating from unsealed waste collection and storage areas	Possible (3)	Mod (3)	Moderate	MM4 MM5 MM7 MM8 MM9 MM10 MM11 MM12 MM14 MM15 MM16 MM17 MM20 MM21 MM22	Unlikely (2)	Major (4)	Moderate
	Increased pressure on local waste disposal facilities	Unlikely (2)	Mod (3)	Moderate		Unlikely (2)	Minor (2)	Low
	Increase of traffic resulting from waste transport movements	Possible (3)	Minor (2)	Moderate		Unlikely (2)	Minor (2)	Low
Sewage	Pollution to the receiving environment (e.g. surface water and land) from the loss of untreated effluent	Possible (3)	Major (4)	High	MM4 MM5 MM10 MM13	Unlikely (2)	Major (4)	Moderate

Waste type	Risk Statement/Potential Impact	Inherent Risk			Controls/ Management Measures	Residual Risk		
		Likelihood	Consequence	Risk Rating		Likelihood	Consequence	Risk Rating
	Land, surface water and groundwater contamination from inappropriate and/or inadequate treatment and management of sewage effluent	Possible (3)	Major (4)	High	MM14 MM15 MM16 MM17 MM21 MM22	Unlikely (2)	Major (4)	Moderate

14.1. Risk Assessment methodology

This risk assessment has been conducted with a methodology aligned with the *AS/NZS ISO 31000:2009 Risk Management Principles and Guidelines*.

For each potential impact, a likelihood and consequence score are generated, which combine to determine the category of risk (extreme, high, medium or low).

14.1.1. Likelihood

The likelihood of an event occurring is expressed qualitatively (rare – almost certain) and quantitatively (1 – 5). The likelihood was determined through consultation with subject matter experts and technical specialists and considers both historically reported events, prevailing site conditions and proposed operations.

The likelihood scale adopted for the proposed amendment and associated project works is presented in Table 13.

Table 13 Likelihood scale

Level	Descriptor	Definition
1	Rare	Unlikely to occur during Project lifetime or very unlikely to occur
2	Unlikely	Could occur once during Project lifetime or more likely not to occur than to occur
3	Possible	Could occur more than once during Project lifetime, or equally likely not to occur than occur
4	Likely	Will probably occur during the Project lifetime in most circumstances
5	Almost certain	Is expected to occur in most circumstances

14.1.2. Consequence

The consequence of an event occurring varies according to aspect, with no common metric available to describe economic, environmental, social and human health consequences of an event occurring. To apply a quantitative value to each level of consequence, each aspect was presented separately.

The consequence scale adopted for the proposed amendment and associated project works is presented in Table 14.

Table 14 Classification of consequence

Class	Category	Consequence
1	Insignificant	No environmental impact. Remediation costs less than $5,000 Requires minor or no remediation

Class	Category	Consequence
2	Minor	Short-term environmental impact. Remediation will take less than 2 months or cost less between $5,000 and $10,000 No lasting environmental damage
3	Moderate	Medium-term environmental damage. Remediation will be between 2 months and 1 year or cost between $10,000 and $50,000
4	Major	Long term environmental impact. Remediation between 1-5 years or costs between $50,000 and $500,000
5	Critical	Permanent environmental damage: remediation will take more than 5 years to remediate, or remediation costs exceed $500,000

14.1.3. Risk matrix

The risk assessment matrix provided in Table 15 allows for a correlation of risk likelihood, and risk consequence to produce a risk rating, where:

[Risk Rating] = [Likelihood] x [Consequence]

The resultant risk rating (quantitatively presented as 1 – 25) can therefore be correlated to a (qualitative) very low, low, moderate, high or extreme risk.

Table 15 Risk assessment matrix

Likelihood	Consequence				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Extreme (5)
Almost Certain (5)	Moderate (5)	Moderate (10)	High (15)	Extreme (20)	Extreme (25)

Likelihood	Consequence				
	Insignificant (1)	**Minor (2)**	**Moderate (3)**	**Major (4)**	**Extreme (5)**
Likely (4)	Low (4)	Moderate (8)	High (12)	High (16)	Extreme (20)
Possible (3)	Low (3)	Moderate (6)	Moderate (9)	High (12)	High (15)
Unlikely (2)	Low (2)	Low (4)	Moderate (6)	Moderate (8)	Moderate (10)
Rare (1)	Very Low (1)	Low (2)	Low (3)	Low (4)	Moderate (5)