



ENVIRONMENTAL MANAGEMENT PLAN (WASTE)

RES Division Conducting Works:	Rusca Environmental Services		
RES Division Role:	<input checked="" type="checkbox"/> Principal Contractor		
If Subcontract, Specify PC:		ABN:	86 612 642 458

PLAN APPROVAL

Completion of this section indicates acceptance of the content and approval to proceed with use as specified. ALL fields shall be completed prior to commencing works. ALL EMP re-issues shall be re-approved with superseded versions marked as such and retained in Skytrust Achieve. Scanned copies along with the source electronic version shall be retained in RES Management files.

Plan Revision:	C	Issue:	4	Date of Issue:	14/06/2023
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	COMPANY	NAME	DATE	SIGNATURE
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Group HSEQ Manager	Rusca Environmental Services	Todd Burchell	14/06/2023	
			Click here to enter a date.	

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1 Purpose & Objective of the EMP

The primary purpose of this EMP is to provide an easily interpreted reference document that ensures all environmental commitments, safe guards and mitigation measures are collectively being implemented, monitored, audited/reviewed and improved during the course of Waste Management activities.

The environmental commitments and controls include those identified in the following:

- RES Integrated Management System (IMS);
- RES Environmental Policy
- Environmental Protection Authority environmental approvals and management plans.
- Client specific Environmental Management processes

The purpose of the EMP is also to document the environmental hazard/risk identification and management process for the Waste Management activities to be undertaken by RES, and to document the controls implemented to minimise the impacts of Waste Management activities on the environment.

This EMP is to be a usable document for Waste Management crews to ensure that Waste Management activities occur in a manner which minimises any potential negative environmental impacts. The EMP is designed to reflect and operate under the principles and objectives of the both the RES Integrated Management System (IMS) and EPA NT environmental requirements.

The EMP is designed to be 'flexible' enough to facilitate Waste Management activities and promote innovation while maintaining stringent requirements to protect the surrounding environment.

The key performance objectives are to ensure compliance with all environmental legislation and approvals, avoid potential environmental harm, and ensure that environmental quality is not compromised during Waste Management processes.

2 Rusca Environmental Solutions (RES)

2.1 Background

Rusca Bros Services is a 100% Indigenous, family owned diversified business, with business divisions including; civil and mining services, training facility and construction with over 40 years' experience in delivering major construction and

infrastructure projects. Rusca Bros Services, headquarters in the Northern Territory, has a national presence with offices and projects in Qld, NSW, WA and SA.

Rusca Environmental Solutions is the newest member of the Rusca Bros Services family and aim to be a provider that delivers reliable, innovative, efficient and environmentally safe waste services to all sectors of industry and the community. Rusca Environmental Solutions values its contribution to the community and our ability to build Indigenous capacity and develop true opportunities for economic local development along with the provision of training, employment and mentoring to our Indigenous workforce. We are committed to managing our business in accordance with our adopted core beliefs and daily missions embedded into the tone and intent of our Quality, Safety and Environmental practices.

Safety – “No Injury to Anyone”
Environmental – “No Harm to the Environment”
Quality – “No rework or Error”

RES has been established to manage waste streams from a variety of sources including port side LNG facilities capable of pre-processing, liquefaction, storage & off-loading of LNG. RES is equipped and trained to work within the marine environment managing the risks associated with hydrocarbons and other contaminated waste streams in a sensitive environmental setting.

All RES activities will be conducted in accordance with applicable legislation and aligned with the RES Waste Management Plan and associated Procedures and the Client prescribed Waste Management control framework requirements.

2.2 Site Description

Address 12 O’Sullivan Cct, East Arm, NT 0800

Based at East Arm, the site is located as part of a larger industrial laydown.

The site is a sealed site, concrete hardstand. RES share the site with Rusca Developments, and the corporate offices of Rusca Group.

Outside the warehouse section is a full perimeter apron, also with an impervious concrete floor. Designated car parking spaces outside of the main office along the perimeter fence provide employee, contractor and visitor parking away from the HV route for deliveries and pick-ups, which occur at the rear of the building. Toilets and lunch room are shared facilities located inside main Warehouse, including Disabled Access facilities and showers.

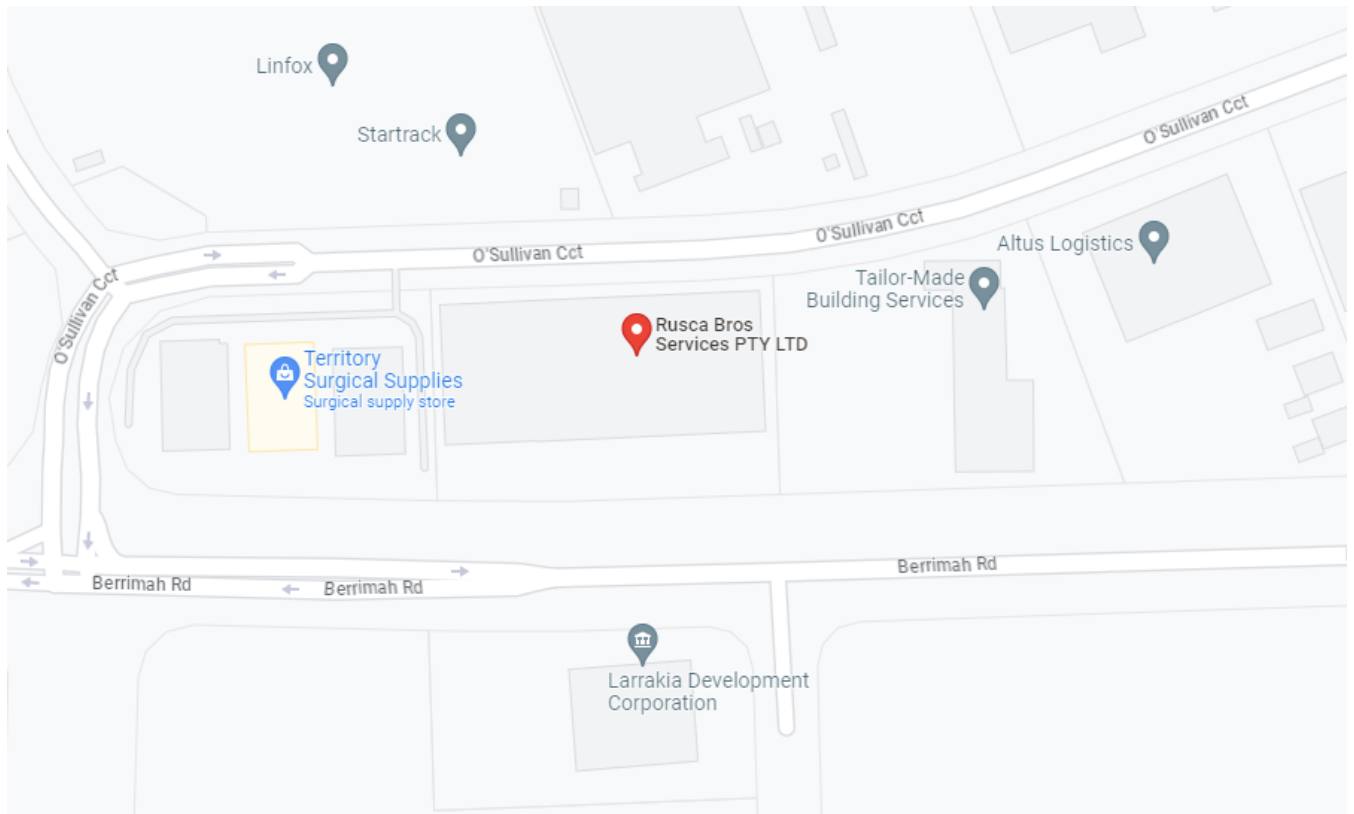
Located in the NT, 16 Kilometres from Darwin CBD, this site is strategically located close to the port of Darwin's East Arm Wharf.

Surrounding premises consist of Heavy Plant/truck mechanical workshop, Transport Yards, Marine, drill supply lay-down yard, shipping and container, oil / mining industry equipment lay-down yards.

There are no known sensitive receptors surrounding the facility. The site is easily accessible (as shown in Figure 1 below) and zoned as Industrial – Development.

MAP OF REGION

Figure 1 - RES Location



SITE PLAN See Appendix 1

2.3 Scope of RES Work

Rusca Environmental Solutions (RES) specialise in waste associated with Oil & Gas Industry and associated Marine activities.

Waste streams from all contract sources coming into RES Facilities will include:

- Non-Hazardous Solid Waste
- Hazardous Solid Waste
- Non-Hazardous Liquid Waste
- Hazardous Liquid Waste (Listed Waste)
- Special Wastes – Wastes requiring special handling or disposal.

While its main function will be to service waste streams being generated on the DLNG and DLE, the intention is to expand its activities to also include other customer's waste of a similar nature. It is important to note that as RES have expanded scope, organic or putrescible waste is now accepted at the site for transfer to local landfill for disposal, as well as waste streams intended for the recycling sector such as cardboard, plastics, batteries, metals etc. with the main waste stream being liquid hydrocarbon type waste such as oils and oily waters, drilling fluids and glycols. There will be minor amounts of acidic and flammable liquids, disused paint tins, empty aerosols and used drums and containers.

The site will be a transit facility in the main with some consolidation activities taking place in order to maximise transport efficiency to alternative, licenced disposal facilities both in the N.T. and where applicable, interstate, using licenced transport carriers.

Liquid waste will only be accepted in drums, IBC's and self-bunded transport tanks up to a capacity of 24,000L. All liquid waste will be unloaded from delivery trucks by a forklift whilst parked on the impervious concrete area for assessment. Once it has been assessed for containment, it will be transferred inside the Warehouse and stored in the appropriate storage bund until it is collected by licenced, authorised Subcontractors, while its weight will be recorded during this transfer.

Solid Wastes will be consolidated with like waste streams. This will be accepted in 3 cubic metre bins and various sized wheelie bins. The waste will be consolidated into skip bins of various sizes from 6 cubic metres to 20 cubic metres and collected regularly by waste management transport subcontractors for disposal at landfill or recycling where possible. All bins will be stored either in the warehouse or outside with fitted covers over them to prevent waste egress. The bins will be transferred to the wash-bay at the southern end of the facility where they will be cleaned and then stored in the undercover area ready for return to customers, once they have been inspected and had minor maintenance performed on them.

2.4 RES Environmental Policy & Commitments

Rusca Environmental Solutions (RES) has a genuine commitment to protect the environment and strives to minimise the environmental impact of its operations by preventing pollution, responsibly managing waste generated through workplace activities and managing the work sites to prevent environmental harm.

To further the building of successful relationships and assure transparency, this Management Plan will be made available to the public, regulators, clients, contractors, suppliers and employees upon request. As a condition of our NT EPA EPL the HSESMP, EMP and IWMP will also be available via the NT EPA Website.

RES goal is to provide maximum practicable protection to the environment, by meeting and at times exceeding legal obligations and other requirements to which the company subscribes.

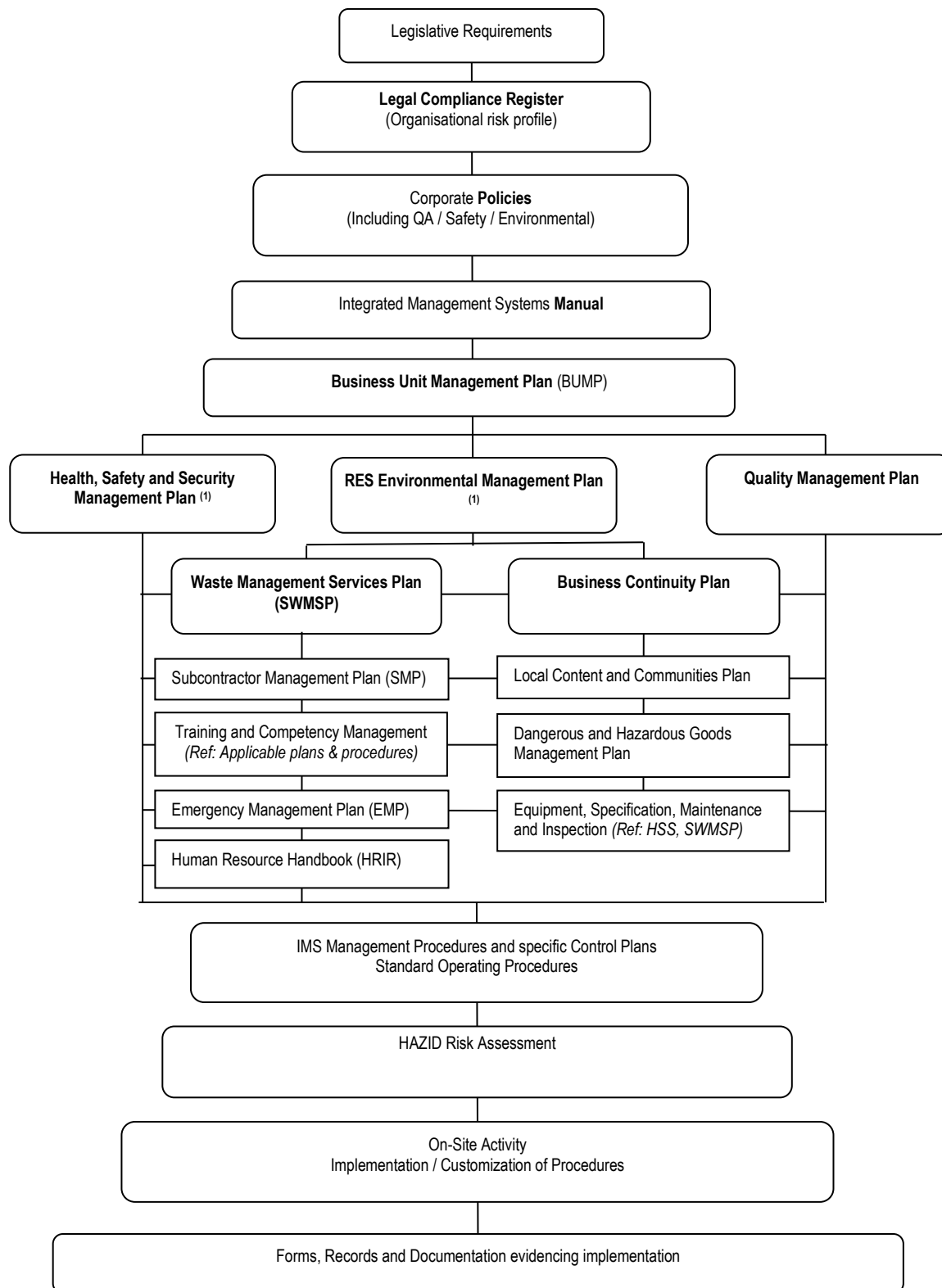
To achieve this goal, our integrated management system incorporates environmental controls for all areas of operation consistent with legislation and aimed at minimising the impact our activities have on the environment.

Refer to Appendix 3 for RES FULL Environmental Policy

2.5 RES Integrated Management System Structure

An Integrated Management System (IMS) is utilised in the delivery of all RES projects. Figure outlines the structure of the IMS as it applies to the Integrated Waste Management of the Project, and highlights where this EMP is located within the IMS.

Figure 2 - RES Integrated Management System Structure



3 LEGISLATIVE AND REGULATORY COMPLIANCE

RES activities are to be delivered in compliance with all applicable Acts and Regulations relevant to our work activity. Legal Compliance monitoring, review and change shall be managed in accordance with RES's Legal Compliance Management Procedure.

Table 1 (below) lists current legislation, guidelines and standards applicable to RES activities. The RES Risk Assessment; identifies the legislation applicable to the RES works by referencing the relevant section of the Register.

The Compliance Manager shall ensure that appropriate legislation, standards and Guidelines are available to all staff and provides an up to date link to the applicable legislative document.

Site personnel may access and print any documentation referenced on Table 1, however all documentation shall then be treated as "Uncontrolled" and checked for currency prior to re-use.

Changes required to RES EMP documentation shall be communicated to the General Manager, who shall establish which activities and contractors are affected by the changes. Change is managed through the RES Document or Process Change form.

Where directed by senior management, revised Safe Work Method Statements shall be requested, submitted and vetted to ensure that work practices take into consideration the changes prior to the re-commencement of activities.

Impacts resulting from changes to legislation shall be discussed and recorded via toolbox meetings.

3.1 Relevant Legislation, Guidelines and Standards

The key environmental legislation relevant to the Project includes the following:

- Environmental Protection Act

The object of the Environmental Protection Act is to minimise the impact of development on all aspects and parameters of the natural environment. All persons are obliged under this Act to ensure they do not cause any environmental harm unless all practical measures to avoid that harm have been taken.

The Project will mitigate its possible impacts on natural water bodies, soil health and stability, air and noise pollution and native flora and fauna. In accordance with the Act, RES will notify their client Representative and/or NT EPA of any potential or actual serious or material environmental harm caused by RES in relation to any contracts.

- Water Act

The object of the Water Act is to achieve sustainable use of water resources by mitigating or abating any negative impacts on the quality of water that occurs within water courses, springs, lakes or dams. All persons are obliged under this act to ensure they and their activities do not negatively impact on the health and ecological functioning of these landscape features.

- Waste Management and Pollution Control Act

The *Waste Management and Pollution Control Act* for the Northern Territory. The Act provides for the protection of the environment through encouragement of effective waste management, pollution prevention and control practices.

Relevant Legislation, Guidelines and Policies

The Legal Compliance Register provides a comprehensive list of the legislation, policies and guidelines applicable to RES activities. Table 1 below provides an extract from this document.

Table 1 - Relevant Legislation, Policies and Guidelines

Type	Title
	Dangerous Goods Act
	Environmental Assessment Act
	Environmental Offences and penalties Act
	Waste Management and Pollution Control Act (NT)
	Water Act
	Weeds Management Act
	Environmental Offences and penalties Regulations
	Waste Management and Pollution Control (Administration) Regulations
	Water Regulations
	Environment Protection and Biodiversity Conservation Act
	Environment protection and Biodiversity Conservation Regulations
Standards	AS/NZS ISO 45001:2018 Safety Management Systems-Requirements with guidance for use
	AS/NZS ISO 9001:2015 Quality Management Systems-Requirements with guidance for use
	AS/NZS ISO 14001:2015 Environmental management systems-Requirements with guidance for use
	AS/NZS ISO 14004:2015 Environmental management systems— General guidelines on principles, systems and support techniques
	AS 2187.2 Explosives – Storage and Use – Use of explosives
	AS 1940 The storage and handling of flammable and combustible liquids
	AS/NZS 1547:2012 – Management of Clinical and related wastes
	AS/NZS 3831:1998 – Waste Management – Glossary of Terms
	AS 4123.7-2006(R2017): Mobile waste Containers – Colours, markings and designation requirements
	AS 4123.6-2006 Mobile waste containers – Health safety and environment
	AS 4123.5-2008 Mobile waste containers – Performance requirements and test methods
Guidelines	Standard Specification for Environmental Management (First Edition) DOI NT http://www.nt.gov.au/infrastructure/techspecs/index.shtml

Type	Title
	<i>Guide for Completing Waste Transport Certificate (WTC)</i> https://ntepa.nt.gov.au/_data/assets/pdf_file/0007/284677/completing_waste_transport_certificates.pdf
	Guideline for Reporting on Environmental Monitoring https://ntepa.nt.gov.au/_data/assets/pdf_file/0006/284856/guideline_reporting_env_monitoring.pdf
	ISBN-1-74361-038-1 Hazardous Chemicals Requiring Health Monitoring – Safe Work Aust

3.2 Approvals, Licences, Permits

Required: EPL – as per licence application and subsequent approvals, See Appendix 5. EPL License.

In the event that activities are required in addition to the specified Scope of Works, RES will seek the necessary approvals in consultation with Clients and/or NT EPA

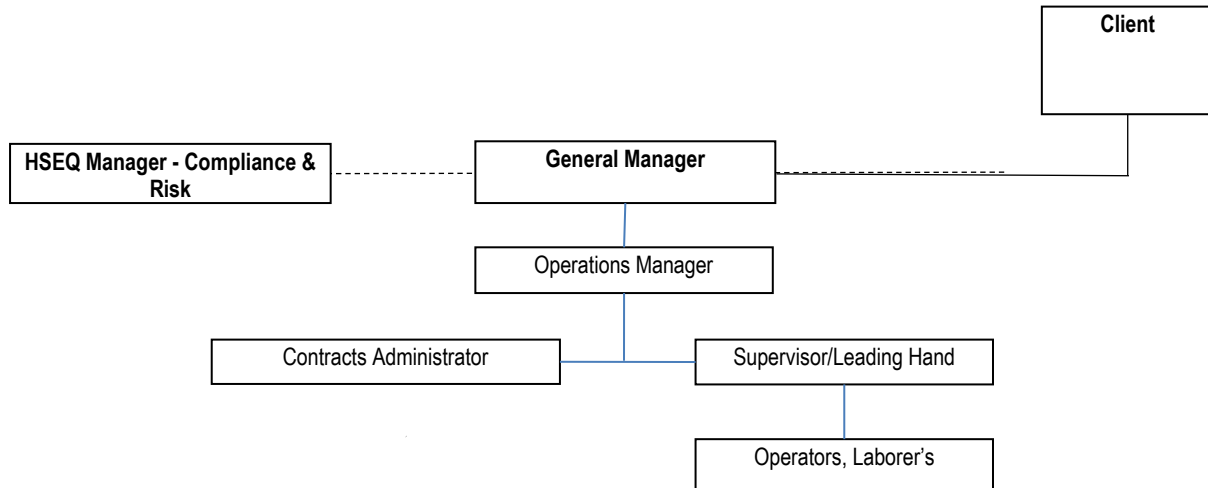
3.3 Contractual Obligations

RES will ensure that the following requirements are adhered to in accordance with Environmental and Waste Management Licencing and legislation:

- Compliance with all conditions of approval issued to RES by the Government, Environmental Management System and associated Environmental Management Plans
- Any additional approvals that may be required are secured by RES,
- All activities conducted by RES meet or exceed the requirements of any conditions of approval issued by the Government, and clients Environment Management System and Environmental Management Plans.
- RES will conduct regular environmental reviews of their activities, involving the client representative or delegate
- Suitably qualified environmental resources will be provided to undertake environmental duties relevant to any Project, including the implementation of the EMP
- Mechanisms will be established and implemented to ensure continual improvement
- Compliance with any reasonable direction given by the NT EPA or client Representative to improve or rectify RES environmental practices.

4 STRUCTURE AND RESPONSIBILITIES

4.3 Project Structure



4.4 RES Environmental Roles & Responsibilities

All RES personnel (including sub-contractors) have a general environmental duty of care as defined in the Environmental Protection Act 1994, and are responsible for their own environmental performance whilst on site.

All staff are responsible for assisting in the delivery, monitoring and reporting on environmental initiatives and should:

- behave in an environmentally responsible manner
- participate in environmental initiatives
- ensure new staff members are aware of their environmental responsibilities and communicate updates in advice and procedures
- Communicate environmental concerns to Managers and Supervisors.

Key Personnel Environmental Responsibilities

Table 2 - RES Key Personnel Environmental Responsibilities

Role	Responsibilities
General Manager	<ul style="list-style-type: none"> - Ensure compliance with all applicable legal, approval and project environmental obligations - Ensure all project staff have a clear understanding of the environmental requirements relevant to their area/scope of work - Ensure all project staff are competent to undertake their duties including fulfilment of the general environmental duty, with regard to appropriate education, training and experience - Ensure the necessary resources and processes are in place for implementation of required environmental controls

	<ul style="list-style-type: none"> - Ensure all site supervisors are familiar with environmental obligations, project approvals, EMP, relevant environmental management plans and associated documents, and their responsibilities within them - Participate and provide guidance in the regular review of the EMP and associated documents - Take action in the event of an emergency and allocating the required resources to minimise environmental impact - Ensure non-conformances are identified, recorded and reported - Report any activity that has resulted, or has the potential to result, in an environmental incident to the Contract Client Representative - Work with the Compliance and Risk Coordinator in planning and implementing environmental requirements
Operations Manager	<ul style="list-style-type: none"> - Communicate with all personnel and subcontractors regarding compliance with the EMP and site specific environmental issues - Coordinate the implementation of the EMP - Be aware of the manuals, operating procedures and systems that are in place to control and monitor waste - Day to day operations for all waste management issues - Management of documentation associated with waste movements - Auditing waste management activities (storage, segregation, labelling, transport, and disposal) - Support Waste Manager to investigate non-compliance/breach of WMP by personnel and contractors where required - Advising on correct categorization, handling, storage, of wastes - Ensuring the availability of competent personnel and other resources needed for carrying out the plan - Managing the Operational Waste Contractor (waste supervisors to undertake daily interface) - Ensure non-conformances are identified, recorded and reported - Co-ordinate the implementation and maintenance of pollution control measures. - Provide necessary resources required for implementation of the EMP - Co-ordinate action in emergency situations and allocating required resources in accordance with the Emergency Response Plan - Ensure that instructions are issued and adequate information provided to field based employees which relate to environmental risks on site
All RES Personnel	<ul style="list-style-type: none"> - Report any activity that has resulted in, or has the potential to result in an environmental incident immediately to the Site Manager, RES Manager and Compliance and Risk Coordinator - Where necessary, ensuring environmental inspections are undertaken and any environmental records are kept - Carry out all activities in accordance with the EMP - Identify and report non-conformances - Implement corrective and preventative action - Work with the waste management team in planning and implementing environmental requirements - Ensuring wastes properly contained, packaged, labelled, segregated and stored - Ensuring waste collection points and storage areas properly maintained and secured - Collection of wastes from generation points - Operating on-site waste handling facilities - Ensuring waste transfer notes accurately completed before waste is transported off-site - Provide bins in line with the site management system for wastes - Collect and transport waste from waste source facilities

<p>HSEQ Manager</p>	<ul style="list-style-type: none"> - Segregate hazardous and non-hazardous wastes prior to transport - Be aware of the local, national and international waste management legislation and standards - Implement the environmental management manuals/procedures, and update as required in consultation with the RES Environment Group - Monitor the implementation and effectiveness of the RES EMP - Review and update the RES EMP in consultation with the RES Environment Group - Conduct environmental auditing, monitoring and training - Complete environmental reporting requirements - Provide advice on environmental matters and corrective actions as requested - Review statutory compliance and ensure compliance with all relevant approvals - Support Waste Manager to investigate HSE and risk issues, non-compliances/breach of WMP by personnel and contractors and ensure corrective measures are undertaken to maintain compliance - Monitor to ensure all personnel are trained on their roles and responsibilities related to waste management - Regulatory/WMP compliance issues (waste classification, permits, interface with regulatory authorities) - Ensure corrective measures are actioned on time in the event of any non-compliance related to Waste
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5 KEY PROJECT ENVIRONMENTAL ASPECTS, IMPACTS & RISKS

Environmental aspects referred to in this document are those activities associated with Waste Management that have the potential to cause, or result in, environmental harm.

Environmental harm is defined as any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value. It may be caused by direct or indirect result of an activity. An environmental value is a quality or physical characteristic of the environment that is conducive to ecological health or public amenity; or another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation.

An environmental risk management assessment has been utilised to identify and assess the environmental aspects associated with any contract activity, and to recommend appropriate mitigation strategies to minimise the likelihood of environmental risks associated with each aspect. This process involves:

- Identifying the risk/aspect
- Analysing the risk/aspect (determining likelihood and consequence)
- Evaluating the risk/aspect
- Minimising the risk

An environmental risk workshop, attended by RES and client contract environmental personnel, shall be conducted prior to commencement of any contract in order to review the key environmental risks of the activities.

All identified aspects have been assessed based on

Table 3 – PRA Risk **Matrix**. Risk assessment is based on (1) the likelihood of an impact occurring as a result of the aspect; and (2) the consequences of the impact if the event occurred.

The definitions for likelihood and consequence are detailed in

Table 4 – Classification of Likelihood and *Compliance*. Following this assessment, each impact is assigned a risk category which range from “Low” (low likelihood and consequence) to “extreme” (high likelihood and consequence).

A risk category identified as having an extreme or high risk (a significant impact) may be downgraded if appropriate environmental controls and measures are implemented and maintained. Project planning, installation and maintenance of appropriate environmental controls and ongoing monitoring will reduce the risks associated with each environmental impact identified.

Table 5 – Residual Risk Levels is to be used when determining how to respond to the Residual Risk Level established (i.e. the level of risk remaining AFTER the recommended controls have been implemented).

It includes the initial risk category, the residual risk subsequent to application of the appropriate control measures and management strategies and the project activity to which the risk applies. Table 7 also includes those site-specific environmental aspects identified in the client contract Environmental documentation and the client contract environmental risk workshop.

Table 3 – PRA Risk Matrix

LIKELIHOOD	CONSEQUENCES				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
A (Almost Certain)	M	H	H	E	E
B (Likely)	M	M	H	H	E
C (Possible)	L	M	M	H	H
D (Unlikely)	L	L	M	M	H
E (Rare)	L	L	L	M	M

Table 4 – Classification of Likelihood and Compliance

LIKELIHOOD – How likely is this event to happen?		
CODE	DESCRIPTOR	DEFINITION
A	Almost certain	Is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Possible	Might possibly occur at some time
D	Unlikely	Could occur at some time but doubtful
E	Rare	May occur but only in exceptional circumstances
CONSEQUENCES – If this does happen, how severe would the outcome be?		
CODE	DESCRIPTOR	DEFINITION
5	Catastrophic	Fatality/ multiple serious injuries, environmental disaster, huge cost
4	Major	Serious/life threatening injury, severe environmental damage, major cost
3	Moderate	Injury requiring medical treatment, contained environmental impact, moderate cost
2	Minor	First aid treatment, some environmental/financial impact
1	Insignificant	No injury, low environmental/financial impact

Table 5 – Residual Risk Levels

Risk Level Code	Description	Actions
E	EXTREME	Do not undertake task. Modify process / design.
H	HIGH	Action plan required including controls to manage risk. Requires senior management attention
M	MEDIUM	Specify management responsibility
L	LOW	Manage by routine procedures

The performance criteria and control measures to be implemented for each environmental aspect/risk are detailed in this EMP, including relevant mitigation strategies, procedures and corrective actions. The associated environmental management sub-plans provide further details, including any site-specific management and control measures. All control measures identified in Section and the associated sub plans shall be implemented in order to achieve the residual risk levels for identification.

6 ENVIRONMENTAL CONTROL MEASURES (RES)

6.1 Site Layout Plan

The detailed Site Layout Plan is to be discussed at all -work inductions and posted on the relevant site noticeboards. The Site Layout Plan identifies the following:

- Site boundary and disturbance approval area
- Access routes
- Spill Kits
- Waste Management areas
- Fuel and Chemical Storage
- Environmentally Sensitive Areas
- Contamination No Go area, and
- Other Key Environmental management measures
- Emergency assembly areas

6.2 Air Quality

Objectives

The Air Quality Management objectives are to:

- Minimise impacts of dust and odour generated due to Waste Management.
- Minimise complaints from the community in relation to dust/odour generated from Waste Management activities.
- Preventing the release of any odour, dust or any other airborne contaminant that cause an environmental nuisance

Performance Criteria

- Dust generated during Waste Management is appropriately managed.
- The release of dust, odour or particulate matter resulting from the Waste Management activities must not cause an environmental nuisance.

Mitigation Measures

The key dust mitigation measures during Waste Management activities will include:

- Dust suppression on unsealed roads, Waste Management work areas & stockpiles.
- Revegetation of cleared areas, where feasible.
- Stabilising and reinstatement of work areas as soon as possible after completion.

Table 6 – Air Quality Mitigation Measures

Action	Responsibility	Timing
Waste Management vehicles onsite are to observe site speed limits.	All Personnel	Weekly
Dust generating activities shall be limited during periods of high velocity wind, as determined by the Operations Manager in consultation with the Compliance and Risk Coordinator	RES Manager	When required
Monitor dust generation resulting from Waste Management activities. Report excessive dust generation to Operations Manager.	All staff	When required
All dust complaints from waste management activities shall be recorded and reported to the Operations Manager immediately after receipt of the complaint. All actions taken are to be recorded.	All staff	When required

Action	Responsibility	Timing
Dust and particulate monitoring will be undertaken to investigate any complaint of environmental nuisance caused by Waste Management dust and/or particulate matter. Dust monitoring shall be conducted in accordance with the Environment Protection Policy (Air Quality).	Compliance and Risk Coordinator	When required
All trucks transporting waste to and from the site shall have covered loads.	Manager	Daily
All trucks, plant and temporary equipment used on site shall be regularly serviced such that they operate efficiently and do not emit excessive exhaust.	Manager	When required
Visual monitoring shall be conducted and maintenance records of all trucks, plant and machinery are to be kept.	Waste Management Crews / Manager	Daily
Truck queuing, unnecessary idling of trucks and unnecessary trips shall be avoided through proper planning, toolbox sessions and awareness training.	Manager	When required
Burning of vegetation or other waste materials is not permitted	All Staff	At all times

Corrective Actions

- In the event of any air quality incident, appropriate actions shall be implemented to ensure environmental harm from the event is minimised.
- All air quality incidents shall be reported to the RES Operations Manager and Compliance and Risk Coordinator immediately.
- All air quality related incidents/non-conformances identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/non-conformance reoccurring.
- Corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Operations Manager in accordance with the procedures identified in the relevant sections of this EMP and/or in **Incident, and NCR & Hazard Trend Management Procedure**.
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6.3 Noise and Vibration

Objectives

The Noise and Vibration Management objectives are to:

- Minimise excessive noise and vibration resulting from the Project.
- Implement proactive measures to minimise noise and vibration complaints from land based sensitive receivers during the Waste Management works.
- Achieve compliance with environmental nuisance laws, as well as relevant noise and vibration criteria.

Performance Criteria

- Noise from Waste Management activities must not cause an environmental nuisance at any 'noise sensitive place' as defined under the Environmental Protection (Noise) Policy 2008, or any commercial place.
- Corrective action in response to complaints is to occur immediately following receipt of a complaint.

Mitigation Measures

The below table outlines mitigation measures that shall be implemented to minimise noise and vibration related issues during Waste Management.

Action	Responsibility	Timing
Truck deliveries to site will generally not occur outside of standard Waste Management hours.	RES Manager	Business Operations
All noise complaints shall be logged and reported to the Compliance and Risk Coordinator and/or General Manager immediately upon receipt of the complaint and the actions that were taken shall be recorded. Where possible, all noise or vibration generating activity shall cease upon receipt of the complaint	RES Manager	Monthly
Waste Management site personnel shall be made aware of all community attitudes and noise complaints through toolbox talks and awareness training sessions	RES Manager	When required
Stationary equipment such as generators shall be located as far as practicable from noise sensitive receptors. Noise barriers are to be utilised where required	Waste Management crews	Weekly
Horn signals shall be kept at a low volume, where feasible.	Waste Management crews	Business Operations
All vehicles and equipment shall be turned off when not in use.	All staff	Daily
All Waste Management equipment shall be fitted with noise suppression devices (e.g. mufflers), and be kept in good working condition.	RES Manager	Business Operations
Regular maintenance of plant and Waste Management equipment shall be conducted to ensure items are kept in good working order.	RES Manager	Business Operations
When requested by the Compliance and Risk Coordinator, noise monitoring shall be undertaken by appropriately qualified personnel to investigate any complaint of noise nuisance.	RES Manager	When required
NOTE: Additional Noise Mitigation Measures may be required by the client, or deemed necessary upon monthly site operational task reviews.	RES Manager	When required

Corrective Actions

- The RES Operations Manager and/or Compliance and Risk Coordinator will establish the measures undertaken to mitigate the noise and/or vibration impact.
- If necessary, supplementary monitoring is to be undertaken to identify the source of the incident.
- All noise & vibration incidents shall be reported to the RES General Manager and/or Compliance and Risk Coordinator immediately.
- All noise & vibration related incidents/non-conformance identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/non-conformance reoccurring.
- All corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Manager in accordance with the procedures identified in the relevant sections of this EMP and/or in the Incident, and NCR & Hazard Trend Management Procedure.

6.4 Land Management

Objectives

The land management objectives of RES are to:

- Ensure that any Waste Management-related activities do not cause contamination of the site or the surrounding areas

- Carry out Waste Management activities in a manner that removes or significantly reduces any potential impacts on surrounding land uses and access by landholders

Performance Criteria

- No disruption to, or complaints regarding, the activities of land holders in the area
- Maintain landholder property access at all times
- No damage to existing infrastructure, or injury to livestock
- No contamination of land resulting from Waste Management activities

Mitigation Measures

The mitigation measures to be implemented to minimise impacts to the land during Waste Management.

Table 7 - Land Management Mitigation Measures

Action	Responsibility	Timing
The Waste Management site area is restricted to the RES site contracted work area and specific EPA approval areas as identified by the RES EPL. This area will be appropriately demarcated and all personnel, equipment, plant and vehicles are to remain within this area at all times.	RES Operations Manager	Business Operations
In the event of suspected contaminated material being identified on site, work will cease and the area made secure to enable inspection and appropriate management of the contaminated substances.	RES Operations Manager	When required
Contaminated material shall not be removed from site without the appropriate approvals in place.	RES Operations Manager	When required
All fuels, chemicals and other hazardous materials stored on site, and maintenance areas will have a secondary containment system (e.g. impervious bunding) in place to minimise the risk of contamination	RES Operations Manager	Business Operations
All bunded areas are to be covered to minimise potential rainwater contamination.	RES Operations Manager	Business Operations
All plant and machinery used on site will undergo regular maintenance and inspections for leaks etc., and all maintenance records are kept on file.	RES Operations Manager	Business Operations
Spill Kits are provided in site as per the Site Layout Plan Spill Kit training sessions will be provided to site personnel.	RES Operations Manager	Business Operations
Communications with the neighbouring landholders shall be established to provide them with contacts and communication channels in the case of neighbourhood Issues.	RES General Manager	Business Operations
All vehicles are to remain on the designated access roads at all times. Refer to the Site Layout Plan (Appendix 1) for the location of access roads.	RES Operations Manager	Business Operations

Corrective Actions

- In the event of a land management incident, appropriate corrective actions shall be implemented to ensure environmental harm from the event is minimised.
- Any land management incidents will be reported to the RES General Manager and Compliance and Risk Coordinator immediately.
- All land management related incidents/non-conformances identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/non-conformance reoccurring.

- Corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Manager in accordance with the procedures identified in the relevant sections of this EMP and/or in the Incident, NCR & Hazard Trend Management Procedure.

6.5 Fire Management

Objectives

The fire management objectives of RES are to:

- Raise site personnel awareness of risks and mitigation measures

Performance Criteria

- No fires caused by Waste Management activities
- No damage to plant or equipment that would bring about delays due to fires, however caused.

Mitigation Measures

In the unlikely event of fire, refer also to the EMERGENCY RESPONSE QUICK ACTION GUIDES.

Table 8 - Fire Management Mitigation Measures

Action	Responsibility	Timing
No fires or wood fired barbeques are permitted onsite.	All Staff	Business Operations
The potential fire risks for the site shall be assessed prior to waste activity on site commencing.	RES Compliance and Risk	Prior to Waste Management
Provide adequate road access for firefighting and other emergency vehicles and safe evacuation.	RES Operations Manager	Business Operations
Evacuation plans have been established as part of the Health Safety Management Plan (HSMP).	RES General Manager	Prior to Waste Management
Smoking shall only be permitted in designated smoking areas onsite.	All Staff	Business Operations
All 'hot work' shall only occur in areas that are designated for that purpose, and with an approved Hot Work permit in place – refer to the RES Hot Work Permit & Guidelines (WHS13)	All Staff	Business Operations
Fire extinguishers and other firefighting equipment will be located in accessible areas on site, as identified by the Site Layout Plan. Training will be provided in the use of fire extinguishers as per the RES Training and	RES General Manager	Business Operations
All Waste Management vehicles and equipment shall be equipped with fire extinguishers	RES General Manager	Business Operations
All electrical cables will be kept in good condition, especially if being used outdoors. Continual monitoring of cables will occur to ensure that cables are suitable and where not suitable, such cables will be removed and replaced as appropriate.	Compliance and Risk Coordinator	Business Operations
Any sheds used for the storage of chemicals and fuels will be placed in locations of low fire potential, as per legislative requirements and the Site Layout Plan and shall be well ventilated.	Operations Manager	Business Operations

Corrective Actions

- In the event of a fire incident caused by Waste Management activity, appropriate actions shall be implemented to ensure personnel and environmental harm from the event is minimised. Attempts to extinguish fires shall only be made where there is minimal risk to personal safety and should only be undertaken by trained staff.
- All fires shall be reported to the RES General Manager and Compliance and Risk Coordinator immediately.
- All fire management related non-conformances/incidents identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/non-conformance reoccurring.
- All corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Operations Manager in accordance with the procedures identified in the relevant sections of this EMP and/or in the Incident, and NCR & Hazard Trend Management Procedure.
- The RES Manager/Compliance and Risk Coordinator will advise the Contract Client Representative as soon as possible after becoming aware of a fire related incident relating to their waste.

6.6 Dangerous Goods & Hazardous Materials

Objectives

The Dangerous Goods & Hazardous Materials objective of RES is to safely manage dangerous goods and hazardous substances within the RES site, ensuring no environmental harm is caused.

Performance Criteria

- Compliance with relevant legislative requirements and Australian Standards.
- Compliance with EPA licencing rules
- No environmental harm caused by dangerous goods or hazardous materials.

Mitigation Measures

Table 9 outlines mitigation measures that shall be implemented to minimise potential impacts from hazardous substances and dangerous goods associated with Waste Management activities of the Project.

In the event of a hazardous materials spill or related incident, refer to the HSMP and Section 0 of this EMP.

Table 9 - Dangerous Good & Hazardous Materials Mitigation Measures

Action	Responsibility	Timing
A Safety Data Sheet (SDS) for each dangerous good and hazardous substance used on site shall be available on site, and will be located near	RES Operations Manager	Weekly
Prior to the use of any hazardous materials or dangerous goods on site, a risk assessment of the substance to be used shall be completed using the RES Dangerous Good and Hazardous Material Risk Assessment form	RES Compliance and Risk Coordinator	When required
A register shall be kept on site of all hazardous materials and dangerous goods used on site.	RES Compliance and Risk	Business Operations
All personnel involved in the handling of hazardous materials shall be suitably trained, qualified and experienced. Additional toolbox training on the properties, hazards, maintenance and PPE associated with hazardous substances shall be provided where required.	RES Operations Manager	RES duration / When required
Spill kits shall be provided in all dangerous goods and hazardous materials storage and handling areas – refer to the Site Layout Plan for spill kit locations. All key staff shall be trained in spills prevention and clean up.	RES General Manager	Business Operations

Action	Responsibility	Timing
Secondary containment systems (e.g. bunding) shall be: <ul style="list-style-type: none"> - In place for all hazardous and dangerous goods storage and transfer. - Constructed from material that is impervious to the material being stored or transferred - Designed to minimise the risk of leakage, spillage or contaminated water from contaminating the surrounding soil or entering any waterway 	RES Operations Manager	Business Operations
All chemical and hydrocarbon storage <i>drums</i> and containers shall have a secondary containment system with a capacity to contain at least 110% of the maximum volume of the largest drum or container.	RES Operations Manager	Business Operations
Vehicles transporting liquid waste shall be parked on sealed surface and/or bunded areas as shown on the Site Layout Plan.	RES Operations Manager	Business Operations
All vehicles and plant shall be sent offsite for major maintenance.	RES Operations Manager	Business Operations
Regular inspections shall be undertaken to ensure the structural integrity of storage facilities and secondary containment systems. These inspections shall occur as part of the daily/weekly site environmental inspections, or vessel compliance requirements, ensuring the potential to cause environmental harm is being minimised.	RES Operations Manager / Compliance and Risk Coordinator	Business Operations
All equipment and vehicle operators shall be trained and competent in the safe operation of the equipment	RES General Manager	Business Operations
In the event of any spill or leak to the environment, action shall be taken immediately to contain the spill, and the spill response procedures initiated in accordance with the EPR001 and Section 0 of this EMP.	RES Operations Manager	Business Operations
No abrasive blasting or wet blasting shall occur on site.	RES Manager	Business Operations

Corrective Actions

- In the event of a spill or similar incident, appropriate actions shall be implemented to ensure environmental harm from the event is minimised.
- All spills shall be reported to the RES General Manager and Compliance and Risk Coordinator immediately.
- All spill related non-conformances/incidents identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/non-conformance reoccurring.
- All corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Manager in accordance with the procedures identified in the relevant sections of this EMP and/or in the HSESMP.

6.7 Waste Management

Objectives

The Waste Management objectives of RES are to:

- Minimise waste generated through Waste Management activities, and maximise waste recycling and reuse.
- Ensure that waste materials are handled, stored and disposed of in a manner that minimises impacts on air, water and land resources and protects the health of people working on the Project and in the surrounding community.
- Ensure that all waste is managed in accordance with the *Environmental Protection (Waste Management) Policy 2000* (EPP (Waste)).

Performance Criteria

- Waste generation is minimised through reduce, reuse and recycling initiatives
- Recycling bins are to be set up at strategic positions onsite.
- Minimise harm to native fauna from litter onsite.
- No litter to be observed at work sites.
- No unauthorised discharge of contaminants or wastes to the environment

Mitigation Measures

A Waste Management & Tracking Register (WMTR) has been developed for RES, which provides a comprehensive list of the different waste streams, the treatment & disposal options that apply to each waste stream, the applicable regulatory requirements, the waste receptacle type and labelling requirements, and identifies if an SDS is required for the waste type.

The WMTR has been developed for use as an active document, designed to be utilised as a 'soft copy' excel file. The WMTR shall be accessible via the RES document control system.

It is anticipated that the main wastes generated by RES include:

- Waste oils, including hydrocarbons and chemicals.
- Waste associated with Oil and Gas Industry activities
- General wastes, such as paper, litter, plastic bottles, aluminium cans, & milk cartons.

Contracts with appropriately licensed waste disposal service providers shall be entered into prior to Waste Management commencing. This EMP and the WMTR shall be included in the contract(s), ensuring that all relevant waste management control measures are implemented and waste tracking information is recorded appropriately.

Table 10 outlines the control measures that shall be implemented to minimise waste production during Waste Management and to prevent environmental incidents occurring as a result of waste produced onsite.

Table 10 – Waste Management Control Measures

Action	Responsibility	Timing
Waste materials, shall be separated onsite into dedicated bins/areas, where practicable, to be recycled or disposed of in an appropriate manner at licensed facilities as per the Waste Management & Tracking Register	RES Manager	On arrival to site
Waste storage facilities shall be located in easily accessible locations, away from existing drainage lines and have appropriate secondary containment systems and drainage controls. The locations shall also consider proximity to site offices, maintenance areas and work areas in order to minimise impact on Waste Management, on personnel, and on the environment (refer to the Site Layout Plan)	RES Manager	Ongoing during operations
Watercourse, site drains and water bodies shall not be polluted by waste.	RES Manager	Ongoing
Spare waste receptacles shall be kept on site to accommodate for unforeseeable events; and all receptacles shall be kept in good condition to	RES Manager	Ongoing during operations
Containers for waste storage (e.g. waste oil drums) shall be handled in a manner to avoid rupture or leaking	RES Manager	
The waste storage area shall be of adequate capacity to handle the volumes of waste being stored without posing a risk to the environment	RES Manager	
Appropriate spill kits shall be provided in the vicinity of the waste storage area (refer to the Site Layout Plan), and shall be maintained regularly to ensure no equipment is missing from the kits	RES Manager	

Action	Responsibility	Timing
Packaging materials shall be returned to the supplier where possible.	RES Manager	
No litter to be left onsite. All work areas to be tidied each day.	All staff	
Lids and seals shall be maintained on all odour generating waste material; and all domestic and food scrap waste shall be secured to prevent wildlife	RES Manager	
No waste is to be burned or buried on site	All staff	
Store and dispose of chemicals in accordance with SDS and Australian Standards for storage of chemicals and dangerous goods.	RES Manager	
Regulated wastes shall be stored in an appropriately secure containment area, and managed by appropriately qualified licensed contractors.	RES Manager	Business Operations
Regulated waste storage areas shall be clearly demarcated to prevent mixing with non-regulated waste. The waste registers shall be used to record all regulated wastes being stored on site.	RES Manager	Business Operations
The regulated waste containment area may include a drainage & sump system to assist with the removal of any waste material released in to the containment area. Inspections of this system shall occur on a regular basis.	RES Manager	Business Operations
Ensure that audit protocols are being followed and that all records are being created and stored in regard to the tracking of regulated wastes.	RES Manager	Business Operations
For all waste generated on site and transported offsite for disposal, the following information shall be recorded in the Waste Register: <ul style="list-style-type: none"> - Date of pickup of waste. - Waste Stream - Waste Classification (regulated or non-regulated) - Treatment (reused/recycled/landfill) - Volume - Receptacle Type - Name & Licence details of the transporting contractor - If an EPA waste certificate has been received, and the tracking code - The name of the receiving facility, and - Other relevant comments/information. 	RES Manager	Business Operations

Action	Responsibility	Timing
<p>The following procedures shall be followed for any unidentified wastes on site:</p> <ul style="list-style-type: none"> - Conduct an investigation and risk assessment to determine where the unidentified waste originated from and how it came to be incorrectly/un-labelled. - Client from whom waste was received from will be informed of issue and will be required to collect waste (unhandled) or provide instruction of management and risks of the same. - Unidentified waste must be temporarily stored as a regulated waste and at least 5 metres away from other materials and wastes in a secure area - A risk assessment must be performed on the waste to determine whether it is hazardous before the waste is handled - Personal Protective Equipment (PPE) must be worn at all times whilst handling unidentified wastes: gloves, safety glasses and protective clothing (long sleeved shirt and long pants) as a minimum. Samples may be taken (at client request) and sent to an accredited laboratory for analysis - Following identification, use a licensed waste transporter to transport waste to a licensed recycling or disposal facility 	RES Manager / Compliance and Risk Coordinator	Business Operations
<p>Inspections of the waste storage area and facilities shall be conducted, as part of the weekly environmental inspection.</p> <p>Inspections shall include;</p> <ul style="list-style-type: none"> - Ensuring waste material is being properly separated, stored and labelled - Ensuring waste containers and storage areas do not reach full capacity prior to collection by the disposal contractor - Checking the condition of the receptacles and secondary containment systems - Ensuring that spill kits are available and full, and PPE is available where 	Operations Manager / Compliance and Risk Coordinator	Business Operations
<p>Site Induction & toolbox training shall include information:</p> <ul style="list-style-type: none"> - The waste hierarchy as outlined in the EPP (Waste). - The waste streams produced by the Project - Reuse and recycling strategies. - Waste handling, waste storage and disposal. - Management of waste spills, contamination and contaminated material. 	RES Manager	Business Operations

Corrective Actions

- Waste spills are not to be cleaned up by hosing or sweeping materials.
- In the event of a spill or similar incident, appropriate actions shall be implemented to ensure environmental harm from the event is minimised.
- All waste spills shall be reported to the RES Manager and Compliance and Risk Coordinator immediately.
- All waste related non-conformances/incidents identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/non-conformance reoccurring.

- All corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Manager in accordance with the procedures identified in the relevant sections of this EMP and/or in the Incident, and NCR & Hazard Trend Management Procedure.
- The RES Manager/Compliance and Risk Coordinator will advise the Client Representative as soon as possible after becoming aware of an incident, including making a recommendation regarding EPA notification if applicable.

6.8 Flora and Fauna Management

Objectives

Whilst the site does not have any identified flora and fauna, the flora and fauna objectives for RES are to:

- Avoid any adverse impacts on flora and fauna species as a result of Waste Management activities

Performance Criteria

- No clearing of vegetation or potential habitat areas without an approved permit in place

Mitigation Measures

Table 11 outlines only the key mitigation measures to be implemented to minimise the impact to flora and fauna on the site.

Table 11 - Flora & Fauna Mitigation Measures

Action	Responsibility	Timing
Any injured animals are to receive veterinary attention immediately. Once recovered, animals shall be relocated to an area of similar habitat adjoining the Project area.	RES Manager / Compliance and Risk Coordinator	Business Operations

Corrective Actions

- Any injured wildlife (native or introduced) are to be taken to receive veterinary attention immediately; once recovered, wildlife will be relocated to an area of similar habitat adjoining the Project area.
- All unauthorised clearing or other incident shall be reported to the RES Manager and Compliance and Risk Coordinator immediately.
- All flora or fauna related incidents/non-conformances identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/non-conformance reoccurring.
- All corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Manager in accordance with the procedures identified in the relevant sections of this EMP and/or as outlined in Incident, and NCR & Hazard Trend Management Procedure.
- The RES Manager/Compliance and Risk Coordinator will advise the Client Representative as soon as possible after becoming aware of an incident, including making a recommendation regarding EPA notification if applicable.

6.9 Pest Management

Objectives

- Control of pests. RES will not be receiving any green waste.

Performance Criteria

- No spread of pest species beyond those areas already infested
- No introduction of pests into non-infested areas

Corrective Actions

- In the event of a pest management incident, appropriate corrective actions shall be implemented to ensure environmental harm from the event is minimised.

- All pest incidents will be reported to the RES Manager and Compliance and Risk Coordinator immediately.
- All pest related non-conformances/incidents identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/non-conformance reoccurring.
- All corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Manager in accordance with the procedures identified in the relevant sections of this EMP and/or as outlined in Incident, and NCR & Hazard Trend Management Procedure.
- The RES Manager/Compliance and Risk Coordinator will advise the Contract Client Representative as soon as possible after becoming aware of an incident, including making a recommendation regarding EPA notification if applicable.

6.10 Mosquito and Midge Management

Objectives

The mosquito and midge management objectives for the Project are to manage the site in a manner that is conducive to public health and community well-being with respect to mosquito and midge exposure.

Performance Criteria

- No outbreaks of mosquito borne disease within the RES site or equipment
- No environmental harm caused by mosquito and midge management controls

Mitigation Measures

Table 12 outlines the mitigation measures to be implemented to minimise the impacts of mosquitoes and midges at the RES site, and the measures to ensure environmental harm is avoided.

Table 12 - Mosquito and Midge Mitigation Measures

Action	Responsibility	Timing
Mosquito management on site shall be in accordance with the Mosquito Management http://www.health.nt.gov.au	RES Manger	Business Operations
Project personnel shall be informed of the relevant health management and responsibilities regarding mosquitoes and midges.	RES Manger	Business Operations
All personnel shall wear the appropriate PPE and be provided with mosquito repellent where required.	RES Manger	Business Operations
Site shall have appropriate drainage to reduce water ponding and retention	RES Manger	Business Operations
There will be no open water storage areas preventing water borne insects from breeding	RES Manger	Business Operations
Inspections of containers and other vessels that may retain water shall be undertaken – and cleared when necessary – as part of the weekly environmental inspections	Compliance and Risk Coordinator	Weekly
Chemical treatments shall be utilised where required, when other controls are ineffective. All chemical treatments shall be undertaken by a suitably licensed operator.	RES Manger	Business Operations

Action	Responsibility	Timing
A register of all chemical treatments shall be maintained, and will include <ul style="list-style-type: none"> - The areas treated - Date and time of treatment - Equipment used - Name & Licence number of the operator - Dosage and batch measure - Result of the treatment 	RES Manager	Business Operations

Corrective Actions

In the event of a mosquito or midge management related incident, appropriate corrective actions shall be implemented to ensure environmental harm from the event is minimised.

- All incidents will be reported to the RES Operations Manager and HSEQ Manager immediately.
- All mosquito & midge management related incidents/non-conformances identified shall be corrected as soon as possible and strategies implemented to reduce the likelihood of the incident/accident reoccurring.
- All corrective actions resulting from an incident/non-conformance are to be closed out by the Compliance and Risk Coordinator and signed off by the RES Operations Manager in accordance with the procedures identified in the relevant sections of this EMP and/or as outlined in Incident, and NCR & Hazard Trend Management Procedure
- The RES Operations Manager/General Manager will advise the Client Contracts Representative as soon as possible after becoming aware of an incident, including making a recommendation regarding EPA notification if applicable.

6.11 Severe Weather Management

Objectives

- Identify potential adverse weather conditions (i.e., lightning storms, excessive wind speed, severe weather, and cyclone conditions).
- Evaluate the threat, and implement precautions to prevent environmental harm.

Performance Criteria

- No Soil, surface water and groundwater pollution
- No Impacts to flora and fauna
- No Uncontrolled Oil Release
- No Uncontrolled Chemical Release

Mitigation Measures

Table 12 outlines the mitigation measures

Weather is to be monitored by the HSET Team to monitor lightning detection systems and the local radar.	Operations Manager	Business Operations
Any adverse weather conditions where there is a potential for plant damage resulting in environmental impact must be risk assessed. <ul style="list-style-type: none"> - Site must be left in a safe and secure state prior to evacuation. - All chemicals must be stored in locations where they are deemed safe. - Contingency Plans for the major impact during severe weather - Coordination with EPA during any Environmental Impact 	Operations Manager	Business Operations

TRAINING AND AWARENESS

RES shall ensure that all project personnel are aware of and understand the environmental requirements of RES relevant to their role and responsibilities. This includes regulatory requirements (EPL), and RES EMP and procedures. To achieve this, the training and awareness measures identified below shall be implemented as required for the duration of the Project.

6.12 Site Induction

Prior to working for RES, all personnel and sub-contractors will undertake an induction detailing the significant environmental and WHS requirements associated with work activities. The induction will include, without limitation, the following environmental components:

- The EMP (purpose, objectives & key issues);
- Legal requirements including due diligence, duty of care and potential consequences of infringements;
- Environmental responsibilities and duties;
- Conditions of licences, permits and approvals;
- RES environmental policy;
- Significant environmental issues and areas of the site, including the identification of boundaries and No-Go areas, location of refuse bins, washing, refuelling and maintenance of vehicles, plant and equipment;
- Environmental management techniques for key environmental elements (soil and water, waste and recycling, flora and fauna etc.);
- Incident management and emergency plans;
- Reporting process for environmental harm/incidents;
- Handling complaints and enquiries; and
- Protection and maintenance of environmental controls.
- Any Client Specific Inductions as required for their work activity.

A record of all persons who have attended the induction shall be maintained.

Visitors are not permitted to perform works without having completed the full induction. They shall be accompanied at all times by an authorised fully inducted person within the RES site.

6.13 Toolbox Training

Toolbox training will help to ensure that relevant information is communicated to RES personnel and that feedback can be provided on issues of interest or concern. Toolbox training will generally be prepared and delivered by the Managers and/or Compliance and Risk Coordinators and will reflect risks and concerns associated with Waste Management activities occurring onsite and as part of work activities.

Toolbox training shall be conducted on a monthly basis or as required through change management, and shall include environmental risks and responsibilities where required. Client Contracts may from time to time provide additional toolbox topic training materials or require environmental stand-down toolbox training to occur in response to specific high risk issues identified with any contracts

Records of all toolbox training will be kept on file, including details of the training topic(s) presented, participants and training dates. All participants will be required to 'sign-off' that they have been informed and understand their obligations at the conclusion of each training session.

6.14 Environmental Management Training

RES has identified the following *key areas* of environmental training to be conducted as part of staff training:

- Spills
- Dangerous Goods
- Waste Management Processes

RES will develop and implement a training program to cover these core modules. A training schedule for the key areas identified above shall be developed for RES.

Targeted Environmental Training

A site personnel competency analysis shall be completed. The outcomes of the analysis will provide the following information:

- A training register of all RES personnel (including sub-contractors). This register shall include records of all training received, dates training was received, competencies achieved, and information on who delivered the training.
- Confirmation that site personnel have adequate skills and training to carry out their tasks; and
- Confirmation that site personnel are not performing tasks for which they have not been adequately trained.

Where the need is identified, RES will conduct any additional training of employees and subcontractors. Targeted environmental management training may be provided to individuals responsible for environmental management onsite, or groups who are undertaking activities which have been identified as high risk, in accordance with the PRA. This environmental training is designed to achieve a level of awareness and competence appropriate to their assigned activities.

The target groups and suggested topics for training are shown in Table 20

Table 13 - Potential Environmental Training Topics

Target Group	Topic
General Manager	<ul style="list-style-type: none"> • Content & requirement of the EMP and sub-plans • Environmental risk management • Project approvals and legislative requirements
Operations Manager	<ul style="list-style-type: none"> • Content & requirement of the EMP and sub-plans • Environmental risk management • Legislative approvals and requirements • Environmental incident reporting • Working near sensitive receivers • Environmental paperwork and tracking
Supervisors and staff	<ul style="list-style-type: none"> • Content & requirement of the EMP and sub-plans • Environmental risk management • RES approvals and legislative requirements • Environmental incident reporting • Working near protected areas and waterways • Incident response • Waste classification and management

ENVIRONMENTAL INCIDENT PROCEDURE

The following sections provide details regarding the classification of environmental incidents and the process for investigation and close out of environmental incidents. All environmental incidents shall also be managed in accordance with the HSMP for the Project.

6.15 Environmental Incident Levels

Environmental Incidents/Non-Conformances are classified into three levels as detailed in the Emergency Response Categories & Response Timelines and in Table 14 .

Table 14 - Environmental Incident Classes

Level 3 – Major	Level 2 - Major	Level 1 - Minor
<p>Class One Environmental Incidents create permanent or long term damage to the environment.</p> <p>Damage will result in the environment taking 12 months or more to return to pre-existing conditions.</p>	<p>Class Two Environmental Incidents create short to medium term damage to the environment.</p> <p>Damage will result in the environment taking up to 12 months to return to pre-existing conditions</p>	<p>Class Three Environmental Incidents typically cause short term or nuisance damage.</p> <p>Damage usually rectified within one day.</p>
Parameters		
<ul style="list-style-type: none"> Serious or material environmental harm or damage. Reportable prosecution - > \$50,000 	<ul style="list-style-type: none"> Potential or actual material environmental harm or damage reportable as per State regulation Prosecution <= \$50,000 Notice to provide records to regulatory authority as other notice> \$5,000 Infringement Notices 	<ul style="list-style-type: none"> Environmental Pollution No mandatory external reporting Typically <\$5,000
Examples		
<ul style="list-style-type: none"> Breaking an Environmental Protection Order / Notice / Licence conditions Wilful discharge or disposal of contaminated materials/liquids off site or waterways Wilful damage/destruction to native vegetation 	<ul style="list-style-type: none"> Complete failure of Erosion Sediment Controls where run off leaves the site. Deliberate discharge of water outside of approved limits offsite, i.e. into stormwater Any fuel/oil/chemical leaks/spills to waterways. Any fuel/oil/chemical spills contained on site 5 L – 1000 L Litter leaving the site Disposal of waste at an unapproved facility: <ul style="list-style-type: none"> Waste Management waste 	<ul style="list-style-type: none"> Oil Leak <=5 L, i.e. hydraulic oil leak Fuel leak/spill <=5 L, i.e. from refuelling equip. Chemical leak/spill <=5 L, Dust emission (remaining visible at 20 m from site – or visible at a sensitive receptor, whichever is less, e.g. dust settlement on surrounding properties.)

Level 3 – Major	Level 2 - Major	Level 1 - Minor
	<ul style="list-style-type: none"> - Spoil material - Liquid waste • Incorrect storage of regulated contaminated or hazardous waste: <ul style="list-style-type: none"> - Oils / Contaminated material • Not having required licence permits or approvals • Complaints relating to odour 	<ul style="list-style-type: none"> • Lights – unwanted illumination of neighbouring properties. • Complaints – record all unless validated. • Not covering loads on truck carrying material off site.

6.16 Environmental Incident Investigation and Close-out

The following section outlines the environmental incident investigation process, and is to be undertaken in conjunction with the. The actual detail required will vary depending on the level & type incident.

For all incidents, an Incident Report form shall be used, and for all Level 2 and 3 Incidents, a Detailed Investigation Report form shall also be used.

Where a Level 3 Incident has occurred the Compliance and Risk Manager will initiate the investigation and allocate responsibilities and an external consultant may be engaged. Legal privilege shall be established if required.

For all environmental incidents relating to a RES contract, the Client. Representative shall be notified immediately (within 2 hours of the incident occurring) and will make the determination to notify the relevant authority (EPA). The relevant site personnel shall work with the Client. Representative as required during incident investigation activities.

A register of incidents (safety and environmental) shall be kept for all incidents on the Skytrust Incident Register.

Step 1- Identify the class of incident and obtain the incident details

- The first priority is to understand the incident and how the incident occurred.

Step 2 - Observation and information gathering

- **Take samples or obtain results (required for Level 2&3 Incidents)** - laboratory results or in-situ samples (Note: NATA certified laboratories may be required).
- **Interview persons involved where required** - Include witnesses / supervisors / experts
- **Inspect the incident scene** - Take measurements (do not guess), photos, videos, drawings, diagrams / sketches.
- **Collect related documentation** - Attach additional material as appropriate such as Work Method Statements, JSEA's, Risk Assessments, induction records, toolbox talks, pre-start, environmental training records, sub-contractor incident report, relevant design documentation, maintenance records.

Step 3 – Provide a detailed description of the incident. Outline exactly what happened, and applicable details e.g.:

- Area or people affected and pollutant type as appropriate
- Time, date and weather conditions
- Plant, equipment, organisations involved
- Potential stakeholders involved
- Describe the nature of the incident including:
- Breach of licence condition, Act or regulation
- Unauthorised release of harmful substance to environment
- Penalty or fine imposed or protection order or notice issued.
- Performance of the environmental controls

-
- Describe the immediate remedial actions undertaken:
 - Notify relevant parties
 - Contain pollution or clean up affected area
 - Repair to environmental controls - Rectify damage and remediate the affected area

Step 4 - Undertaken basic level incident analysis

- List the elements involved including people, equipment, environment (weather conditions), activity, procedures
- List the essential and contributing factors for the items above

Step 5 - Identify the corrective and preventive actions

- Change to equipment/machinery design / maintenance
- Improve environmental control measures
- Implement additional resources
- Change to work methods or processes
- Change or additional induction training
- Additional ongoing training

Step 6 - Implement the corrective and preventive actions outlined above

- Outline responsibilities and accountabilities
- Obtain relevant approvals for the corrective and preventive actions (i.e. Regulatory Authority or Client requirement)
- Provide proposed completion dates for the approved actions
- Document actions implemented and close out

MONITORING AND REVIEW

6.17 Environmental Monitoring & Inspections

Daily Site Inspections and Surveillance

Inspections and surveillance of Waste Management activities (including sub-contractors) will be undertaken on a day-to-day basis by the Operations Manager, Waste Supervisors and/or Compliance and Risk Coordinator. These inspections will not be documented unless significant non-conformances with the EMP are identified.

As part of daily activities, Operations Manager and Waste Supervisors will be required to maintain a site diary detailing the day's activities and any issues (including environmental issues) which may have arisen during the course of operations.

Weekly Site Environmental Inspection

The effectiveness of environmental protection measures will be assessed weekly by the Compliance and Risk Coordinator (or a nominated delegate) unless otherwise specified. A site environmental inspection checklist has been developed addressing the key environmental impacts which have the potential to arise during Waste Management activities.

The purpose of this checklist is to:

- Promote a proactive style of environmental management
- Provide a surveillance tool ensuring that environmental safeguards are being implemented effectively
- Identify where site issues may be occurring and any reoccurring issues
- Facilitate the early resolution and actioning of identified issues

Any actions that are identified as a result of these site inspections will be recorded in the action plan and issued to the relevant personnel e.g. Operations Manager, Waste Supervisors for action.

Actions identified in weekly inspections are to be closed out prior to the subsequent inspection, in accordance with the allocated action priority. However, in certain circumstances only and upon consultation with the General Manager or Compliance and Risk Coordinator, an extended timeline to close out particular actions may be established.

Environmental Non-Conformances

Actions identified in the weekly environmental inspections that have not been closed out within the agreed timeframe shall be raised as an Environmental Non Conformance.

Non-conformances shall be recorded using the Non Conformance / Corrective Action Report the form also outlines the procedure for actioning and closing out a non-conformance.

To ensure improvement of environmental performance, details of all non-conformances shall be maintained in the Non Conformance / Corrective Action Register including the verification of corrective and preventative actions implemented.

Raising a non-conformance does not preclude the requirement to undertake an incident investigation and may be conducted simultaneously.

Monitoring of Specific Environmental Events

All environmental monitoring is to be conducted in accordance with the RES and EPA. Monitoring Program. Specifically, it includes monitoring of the following environmental events that may occur during Waste Management activities:

- Control of mosquito and midge larvae
 - Mosquito and midge potential breeding areas shall be monitored on a weekly basis, as part of the weekly environmental inspection
- Air emission monitoring

-
- Visual monitoring for dust shall be conducted on a daily basis, and dust deposition shall be monitored as part of the weekly environmental inspection.
 - Noise Monitoring
 - It is not anticipated that, given RES site location, that noise monitoring will be required.. However it shall be undertaken if noise issues are raised by authorities or neighbours..
 - Biosecurity monitoring
 - Visual inspection for weed & pest infestation shall be conducted as part of the weekly environmental inspection (ENV 06)
 - Incident response monitoring
 - Sampling for the purposes of incident response shall be conducted in accordance with training and risk requirements

All monitoring shall be conducted by suitably qualified personnel, and shall be undertaken in accordance with the relevant regulatory guidelines and standards.

6.18 Key Performance Indicators

The Project has adopted the following environmental Key Performance Indicators (KPIs) to monitor environmental performance during Waste Management. The details & reporting frequency of each KPI is detailed below in Table 15. The table also provides reference information indicating the relevant document or section of this EMP that addresses each KPI.

Table 15 - Environmental KPIs

OBJECTIVE	ANNUAL TARGET	FREQUENCY OF	REASONS FOR MEASUREMENT	CALCULATION METHOD
Employees and contractors trained against Environmental Training	>90% Compliance	Monthly	Competency check of workforce.	Actual v planned activities
Environmental Assurance Activities - Environmental Audits	90% of planned	Quarterly	Reports completion of Assurance Activities against plan	Number of audits completed /Total Number of audits scheduled
Environmental Assurance Activities - Audit Score	90%	Quarterly	Reports back trends and score in the three tier audit program (Systems, hazard area and on the ground compliance).	Number of reviews completed/Total Number of reviews scheduled
Environmental Investigations and Response	75% of actions closed out within agreed timeframe	Quarterly	Measure effectiveness of assurance processes in driving environmental improvement actions, implementing lessons learned and protecting corporate reputation via effective incident response	% of agreed actions from environmental audit and incident investigations completed and closed out on time.
Reportable (External) Environmental Incidents	Zero	Monthly	Meeting EPA Compliance Requirements	Number of all incidents per month
Spill Response	All spills responded to within 1 hour	Monthly	Measure effectiveness of incident response & reduce severity & consequence of incidents	Time elapsed from when incident first identified to response initiated (i.e. inspection of spill site)

*Where required, additional environmental performance KPIs shall be developed in consultation with Client Contracts. And incorporated into the Monthly Statistics Reporting for the Project.

6.19 Auditing & Reporting

Internal Audits

Internal Audits shall be conducted by the RES Compliance team and/or trained internal auditor.

Elements that may be audited include but are not limited to:

- Compliance with the EMP and associated sub-plans
- Compliance with approvals, permits and licence obligations
- Compliance with method statements
- Complaint responses
- Sub-contractor activities
- Training records
- Non-conformances and subsequent actions/closures
- Environmental monitoring results
- System documentation such as checklist completion

Internal audits will occur on a three (3) month basis. A proposed audit schedule is displayed in Table 16. Any non-conformances identified during audits will be recorded within the audit report and may result in a non-conformance report (NCR) being issued for significant deficiencies.

All audits are to be recorded on the Audit Register.

Table 16 - Proposed Internal Audit Schedule

Document	June	September	December
EMP			
Waste Management & Tracking Register			
Emergency Response Management Plan			
Monthly Environmental Statistics Reporting			

External Audits

External audits may be conducted by Clients, NT EPA., accreditation agencies and/or environmental authorities during the course of Waste Management. Following each audit, audit reports will be providing detailing the scope of the audit and subsequent findings. These reports will be reviewed by the RES Manager and Compliance and Risk Coordinator and all proposed corrective actions and observations will be addressed. Details of all actions undertaken as a result of the audit will be documented and filed onsite for reference.

Environmental Records

The Compliance and Risk Coordinator will maintain the following records:

- The EMP and associated sub-plans
- Relevant approvals, regulatory licences and permits
- Inspection records and checklists
- Environmental monitoring results
- Environmental accident/incident/emergency reports
- Non-conformance documentation
- Environmental complaint reports
- Waste reports

- Audit reports
- Management review minutes and action taken

Where hard copy records are provided they will be scanned and available electronically. Each set of records will be allocated a register/index for easy reference and filing. Records will be maintained for at least 5 years after the date of final completion and will be available to Client. Representatives and authorised EPA officers as required.

Document and Data Control

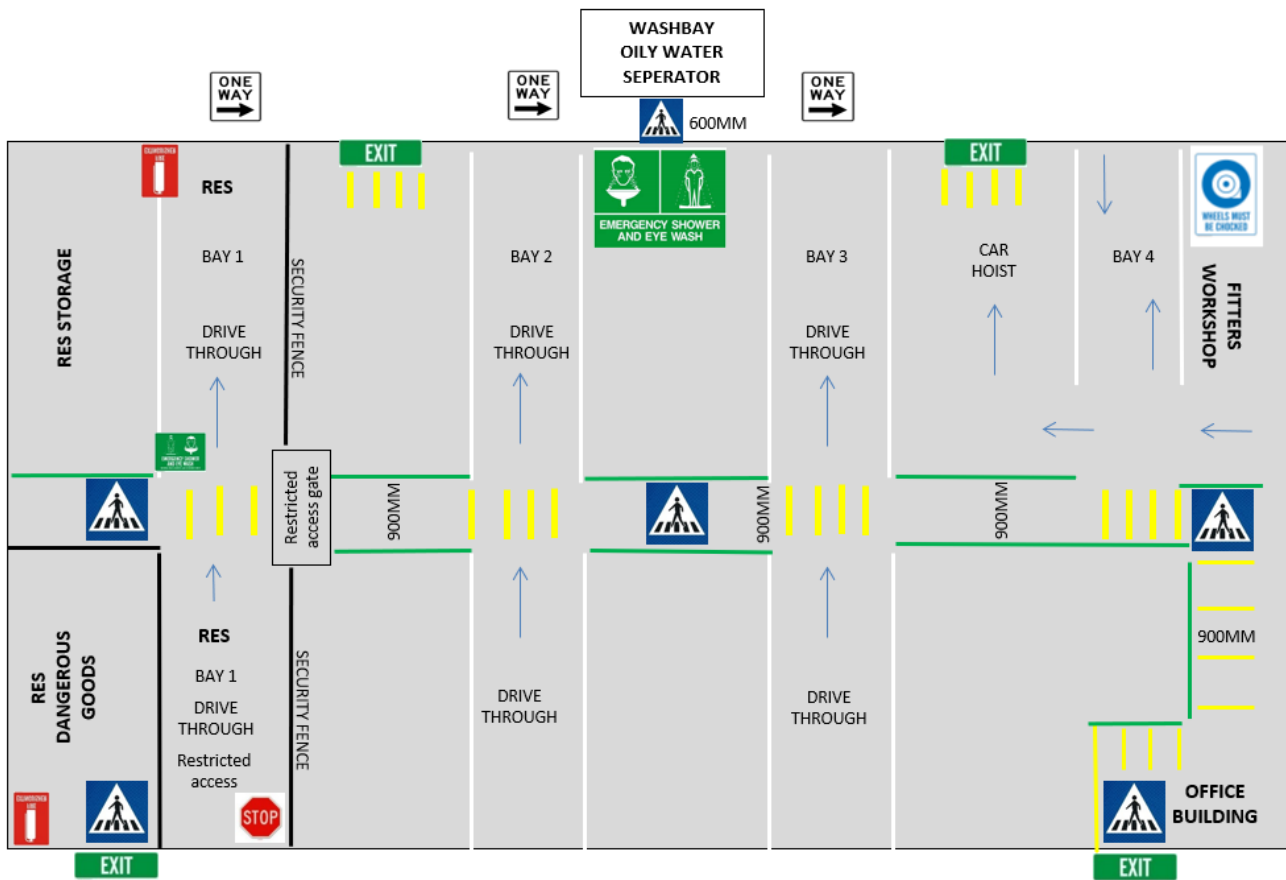
The Compliance and Risk Coordinator shall coordinate the preparation, review and distribution of environmental documents as required.

Documents and data that are to be issued will be controlled to ensure that they are approved prior to issuing and that the current issue or revision is known to relevant personnel. Controlled documents will be distributed on a revision basis only, with obsolete documents clearly marked as “superseded”. Obsolete documents will be maintained and filed for contractual purposes onsite in an achieved documents file.

Controlled documents will be uniquely identified with a defined revision number recorded on each page. All controlled document revision numbers/achievements are held on Skytrust document management system.

During the course of Waste Management, environmental documents will be stored at the RES office and in the Skytrust Document system. Hard document access is controlled by the GM and Operations Manager. Access to Skytrust documents is managed via internet document security levels of staff.

Appendix 1. Site Layout and Plan



Appendix 2. Relevant RES Forms & Procedures

- Legal Compliance Register
- Waste Management & Tracking Register
- Environmental Inspection Checklist
- Non Conformance / Corrective Action Report
- Non Conformance / Corrective Action Register
- Monthly Statistics Reporting
- Site Induction Register
- Toolbox Training Attendance Form
- Dangerous Goods & Hazardous Materials Register
- Daily Pre Start and Site Attendance Record
- Project Audit Schedule
- Audit Register
- Site Personnel Competency Analysis
- Hazardous Substances & Dangerous Goods Risk Assessment

Appendix 3 RES Environmental Policy

ENVIRONMENTAL POLICY

Rusca Environmental Solutions (RES) has a genuine commitment to protect the environment and strives to minimise the environmental impact of its construction and development activities by preventing pollution, responsibly managing waste generated through construction activities and managing the work sites to prevent environmental degradation through erosion of land and sedimentation of creeks and waterways.

RES goal is to provide maximum practicable protection to the environment, by meeting and at times exceeding legal obligations and other requirements to which the company subscribes.

To achieve this goal, our integrated management system incorporates environmental controls for all areas of operation consistent with legislation and aimed at minimising the impact our activities have on the environment.

To achieve our Daily Mission, the following objectives have been established:

1. Ensuring Compliance
 - Adhering to all relevant environmental legislation, codes of practice, external standards and other requirements to which RES subscribe at all sites and
 - Maintaining compliance with environmental management procedures used by RES and our subcontractors.
2. Providing Training and Establishing Effective Controls
 - Identification and control of any potential environmental issues on all projects
 - Ensure all site Employees, including subcontractors, are aware of significant environmental aspects and controls relevant to each project as well as the consequences of departing from the required controls;
 - Improve the knowledge and expertise of all employees in environmental issues
 - Avoid, reduce or control the creation, emission or discharge of pollutants to reduce environmental impacts and
 - Minimise the possibility of causing environmental harm at all sites.
3. Effective Reporting and Investigation
 - Investigate and report environmental incidents and instigate corrective and preventative actions as necessary;
 - Ensure all environmental complaints are documented and addressed in an efficient manner and
 - Notify the client and administering authority of any significant or serious environmental harm.
4. Consistent Monitoring and Improvement
 - Establish and monitor environmental performance indicators and targets
 - Maintain the frequency and scope of environmental performance monitoring by senior management
 - Regularly monitor and audit the implementation and effects of procedures and controls and report non-conformances and
 - Monitor and continually improve environmental performance.

All staff are responsible for the communication, promotion and implementation of this policy and are accountable to the Managing Director for the achievement of outcomes in accordance with this policy.

Executive management shall also ensure that the intent of this policy and performance of the system against these objectives is reviewed bi-annually and is updated where required.

Managing Director:  Date: 22/09/2016

Appendix 4. ISO 1400:2015 Certificate



MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:
209861-2016-AE-AUS-JAS-ANZ

Initial certification date:
09 November 2010

Valid:
08 January 2023 – 09 November 2025
Expiry date of last certification cycle:
09 November 2022
Date of last re-certification:
22 December 2022

This is to certify that the management system of
Rusca Bros Services Pty Ltd
Rusca Environmental Solutions Pty Ltd
Rusca Developments Pty Ltd
12 O'Sullivan Circuit, East Arm, NT, 0822, Australia
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Environmental Management System standard:
ISO 14001:2015

This certificate is valid for the following scope:

The registration covers the design, development and construction of projects relating to retail, industrial, mining, commercial and domestic construction and civil engineering of earthworks, road water and bridge construction, subdivision and infrastructure works. Additionally, the registration covers waste management as well as the provision of plumbing and hydraulic services and the hire and maintenance of heavy machinery, plant and equipment.

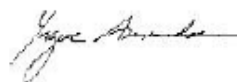
Place and date:
North Sydney, 08 January 2023



JAS-ANZ



For the issuing office:
DNV - Business Assurance
Level 7, 124 Walker Street, North Sydney,
NSW, 2060, Australia



Yngve Amundsen
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

Accreditation by the joint accreditation system of Australia and New Zealand (www.jas-anz.org/register)
ACCREDITED UNIT: DNV Business Assurance Australia Pty Limited, Level 7, 124 Walker Street, North Sydney, NSW, 2060, Australia
TEL: +61 2 9600 9600. <https://www.dnv.com.au/businessassurance>