Perpetual
RESOURCES LIMITED

BEHARRA SILICA SAND PROJECT

ENVIRONMENTAL MANAGEMENT PLAN

PEC-EMP-PLN-01-EMP

MARCH 2021

Perpetual Resources Limited

Beharra Silica Sand Project

Environmental Management Plan

PEC-EMP-PLN-01

Revision Number	Issue Date	Prepared By	Approved By	Signature
0	31/03/2021	Tetris Environmental Pty Ltd	R Benussi, Managing Director Perpetual Resources Ltd	

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1. PURPOSE

Perpetual Resources Limited (PEC), is implementing an Environmental Management System (EMS) to manage unnecessary impacts to the environment, identify and manage compliance, and address risks at its operations.

This Environment Management Plan (EMP) is a key element of the EMS. The EMP outlines the programme for PEC to effectively manage environmental factors in all its activities and to meet its legal obligations across the Project. As well as managing the risk of unintended or unnecessary environmental impact, this plan also seeks to reduce or eliminate the business risk associated with poor environmental outcomes at the Project.

This document needs to be read in conjunction with the project-specific approvals and management plans. Considered as a whole, these documents set the minimum standards required to manage environmental aspects.

The EMS is aligned with the international standard for environmental management systems - ISO 14001:2015 and will be continuously updated and amended to ensure:

- PEC's objectives and targets are met
- Legal obligations are understood and adhered to
- Our environmental management activities are clearly defined
- A commitment to successful environmental management is demonstrated.

The following figure outlines the main features of the EMS. Environmental improvement is driven using the Plan-Do-Check-Act (PDCA) model **Figure 1**.

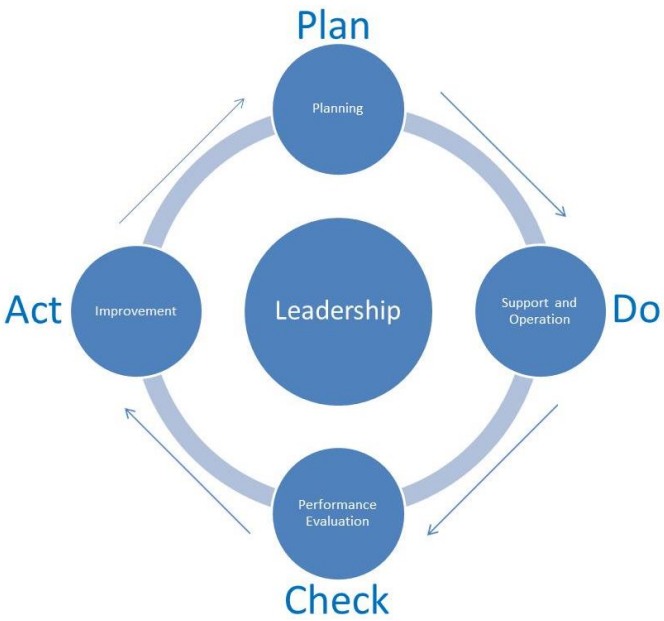

Figure 1: PDCA Cycle

The PDCA model can be described as follows, as it applies to PEC:

Leadership	• Take accountability for effectiveness of EMS. • Integrate EMS into PEC's business processes. • Ensure the resources needed for the EMS are available. • Promote continual improvement.
Plan	• Establish environmental objectives, KPIs and processes necessary to deliver results in accordance with the PEC's policy. • Identify legal obligations.
Do	• Develop and implement an EMP. • Develop and implement systems and operational procedures, and work instructions. • Identify and meet training needs. • Identify responsibilities and accountabilities. • Emergency preparedness and response.
Check	• Measure progress against KPIs. • Environmental monitoring programs. • Auditing and inspection. • Records control.
Act	• Consider performance and take actions to continually improve.

2. SCOPE

This EMP is specific to PEC's Beharra Silica Sand Project (Project) located approximately 300 km north of Perth and 20 km south-east of the town of Dongara in the Mid-west region of Western Australia (**Figure 2**).

Compliance to this document and associated documents (appendices and referenced documents) is mandatory and indicates the minimum compliance requirement for the Project.

Contractors working at the Project and mobilised using their own Management Systems must meet the requirements and expectations set by PEC as a minimum.

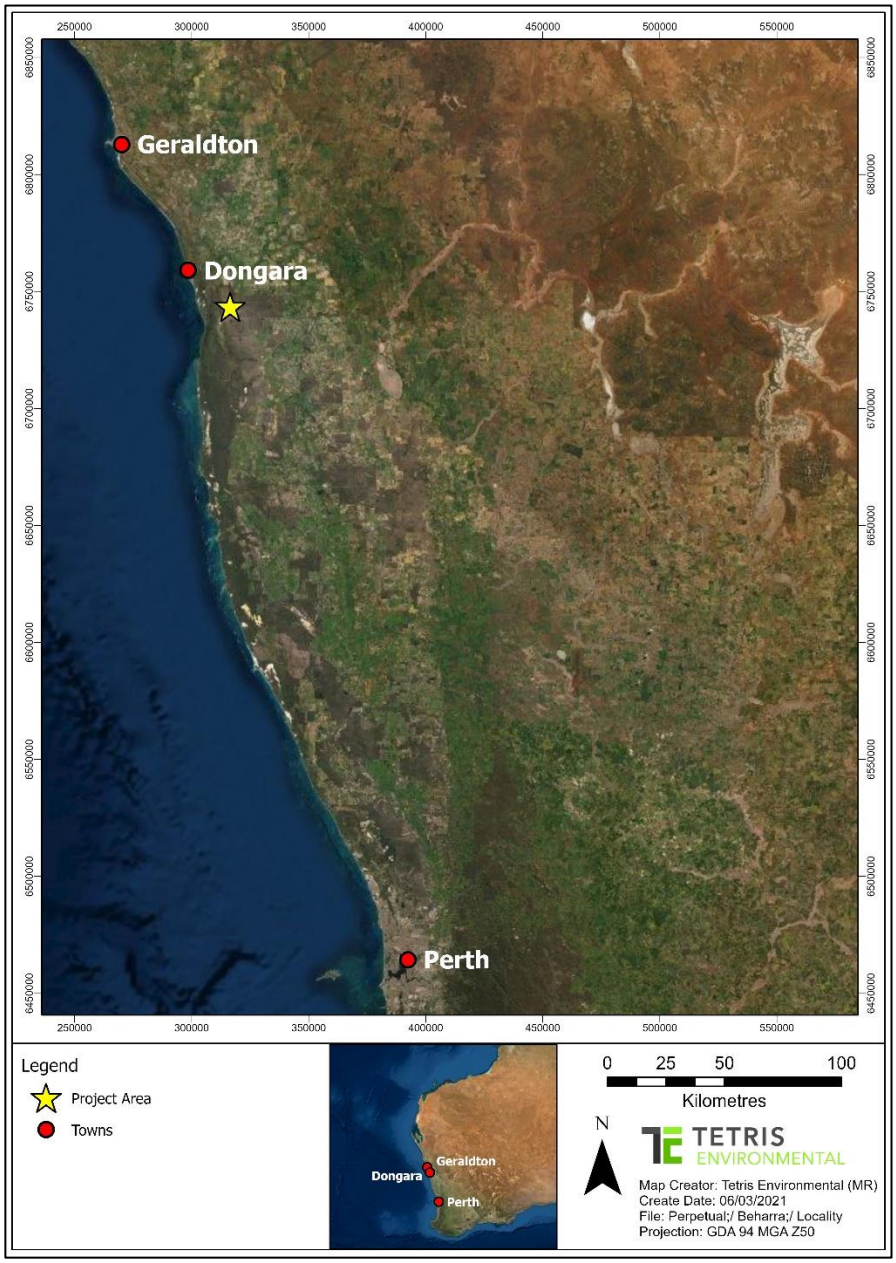

Figure 2: Project Location

3. POLICY

The PEC Environment, Community and Heritage Policy is available internally to our employees and externally on our website www.perpetualresourceslimited.com.au. The Policy will be communicated to our people during induction and will be posted on noticeboards at the Project and Business offices.

Perpetual RESOURCES LIMITED

Environment, Community and Heritage Policy

As a growing resource development company, Perpetual Resources Limited (Perpetual) acknowledges that our operations have the potential to impact on environmental, community and heritage values. For this reason, Perpetual will adopt a systematic approach to understanding and managing potential impacts on these values.

Our Commitment

We will strive to:

- Develop and implement environmental management systems, which enable us to conduct our business in a responsible and appropriate manner.
- Continually improve our environmental performance through setting environmental objectives and targets that are endorsed by senior management.
- Provide adequate resources for managing environmental performance.
- Comply with all applicable legislation, standards and codes of practice.
- Use all our resources efficiently, minimise waste generation and appropriately dispose of all waste to prevent pollution.
- Understand and acknowledge the expectations of all stakeholders in our operations for diligent environmental management and fully and regularly communicate our environmental performance.
- Engage with local communities and seek their participation in Project planning.
- Respect the rights of Indigenous Peoples and acknowledge their right to maintain their culture, identity, traditions and customs.
- Treat all employees and stakeholders with dignity, care and respect and recognise achievements and promote successful outcomes of work groups and individuals.

Our Goals

We will cause no environmental or cultural harm beyond that which is necessary to conduct our businesses and for which statutory approval has been received.

Our Responsibility

Every employee has a personal responsibility to maintain a high level of environmental and community awareness and we all must comply with the intent of this policy and any associated policies, procedures or processes.

Leaders at all levels in the group are required to communicate this policy to all our employees, contractors and visitors and involve them in its implementation. Our leaders must take all reasonable steps to protect the environment and communities our activities may impinge upon.

Robert Benussi
Managing Director
March 2021

4. PLANNING

4.1 Legal and Other Requirements

The legislation in **Table 1** provides the broad framework for which this EMP must operate and with which the Project needs to comply. A project Legal Obligations Register (LOR) will be developed to include project specific legislative requirements, such as Ministerial Conditions, Licence Conditions, Tenement Conditions and commitments made in project approvals.

Table 1: Legal obligations

Statute	Regulation Application / Key Requirement	Administrator	Application
Aboriginal Heritage Act 1972/Aboriginal Cultural Heritage Act 2021	Makes provision for the preservation on behalf of the community of places and objects customarily used by or traditional to the original inhabitants of Australia or their descendants.	Department of Planning, Lands and Heritage.	Permits to disturb land.
Biodiversity Conservation Act 2016	Provides for the conservation and protection of native, rare and endangered flora, vegetation and fauna.	Department of Biodiversity, Conservation and Attractions.	Protection of native flora and fauna Permit to take Threatened Species.
Contaminated Sites Act 2003	Regulates the identification, recording, management and remediation of contaminated sites.	Department of Water and Environmental Regulation.	Registering and classifying contaminated sites.
Environmental Protection Act 1986	Provides guidance for the prevention, control and abatement of pollution; and for the conservation, protection, enhancement and management of the environment.	Environmental Protection Authority. Department of Water and Environmental Regulation.	Part IV Division 1 - Referral and assessment of proposals. Division 2 - Implementation of proposals. Ministerial conditions.
		Department of Mines, Industry Regulation and Safety (Division 2), Department of Water and Environmental Regulation. (Divisions 1 and 3).	Part V Division 1 - Pollution and environmental harm offences. Division 2 - Clearing of native vegetation. Division 3 - Prescribed premises, works approvals and licences.

Statute	Regulation Application / Key Requirement	Administrator	Application
Environmental Protection Regulations 1987	Provides guidance on the control of pollution and monitoring.	Department of Water and Environmental Regulation.	Various.
Environmental Protection (Clearing of Native Vegetation) Regulations 2004	Provides procedures and protocols for clearing native vegetation for mining, for infrastructure maintenance and for clearing within existing transport corridors.	Department of Water and Environmental Regulation, Department of Mines, Industry Regulation and Safety	Clearing of native vegetation.
Environmental Protection (Controlled Waste) Regulations 2004	Provides procedures and protocols for the generation, transport and disposal of 'controlled waste'.	Department of Water and Environmental Regulation.	Permitting and tracking of controlled waste during transport.
Environmental Protection (Noise) Regulations 1997	Provides guidance on noise limits and methods for noise assessment and control.	Department of Water and Environmental Regulation.	Department of Environment Regulation.
Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth).	Provides for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance and promote ecologically sustainable development.	Department of Agriculture, Water and the Environment (Commonwealth).	Environmental assessment and approvals.
Mining Act 1978	Provides regulation for mining in Western Australia.	Department of Mines, Industry Regulation and Safety.	Tenement conditions. Programmes of Work. Mining Proposals.
Native Title Act 1993 (Commonwealth)	Provides a national system for the recognition and protection of native title and for its co-existence with the national land management system.	Attorney-General's Department.	Native Title.
Rights in Water in Irrigation Act 1914	Provides guidance on the ownership use, protection, regulation and management of water resources.	Department of Water and Environmental Regulation.	Licence to Construct a Bore (Section 26D). Licence to Take Water (Section 5C).

Statute	Regulation Application / Key Requirement	Administrator	Application
			Permit to Interfere with Beds and Banks (Section 17).
Conservation and Land Management Act 1984	An Act to make better provision for the use, protection and management of certain public lands and waters and the flora and fauna.	Department of Biodiversity, Conservation and Attractions.	For working within a conservation estate.
Health Act 1911 and Regulations	An Act to consolidate and amend the law relating to public health.	Health Department of Western Australia.	Waste water treatment systems, drinking water guidelines, food hygiene etc

4.2 Objectives and Targets

Environmental objectives and targets have been developed with the aim of PEC's right to implement its business plans, now and in the future, while meeting its statutory obligations. Minimising environmental risks has the benefit of minimising the risk of business disruption and loss of reputation with both business partners and the statutory authorities.

PEC has identified the objectives, KPIs and targets as appropriate for our Business in **Table 2**.

Table 2: PEC KPIs and Targets

Objective	KPI	KPI type	Target
To be viewed as a company that meets its environmental obligations.	Major Non-Compliances with State and Commonwealth legislation or permit conditions	Lagging	0
	Delivery of environmental and cultural heritage training	Leading	100% of targeted training completed
	Implementation of environmental audits and inspections	Leading	100% of targeted program completed
To cause no environmental harm beyond that which is necessary to conduct our businesses and for which statutory approval has been received.	Land clearing conducted without approved internal Site Disturbance Permit	Lagging	0
	Significant indirect impacts to surrounding environment	Lagging	0

5. IMPLEMENTATION

5.1 Responsibility and Accountability

All our people are responsible for ensuring they comply with the company's Environmental Management requirements and that any action or inaction on their part does not result in harm to the environment.

Environmental Management responsibilities and accountabilities are contained within **Appendix 1**. Delegation of responsibilities may occur to ensure that Environmental Management activities are co-ordinated at an appropriate level; however, accountability remains with the person designated those responsibilities. PEC also expects this general principle of line management accountability to apply to all its Contractors.

5.2 Competence, Training and Awareness

PEC will ensure that all personnel have the awareness, understanding, competence and skills appropriate to their role and responsibilities. General guidance on training and awareness requirements is provided in **Table 3**.

Table 3: Competence, training and awareness

Position	Requirements
Managing Director Chief Operating Officer	• Awareness of environmental legislation. • Understanding of national and international trends in the approach to environmental issues relevant to PEC business. • Understanding of PEC's approach to environmental management, as outlined in this EMP.
General Manager	• Awareness of environmental legislation, licences, permits and approvals applicable to site. • Understanding of PEC's approach to managing environmental aspects relevant to site. • Understanding of PEC's approach to environmental management, as outlined in this EMP.
Manager Superintendents Supervisors	• Awareness of environmental legislation, licences, permits and approvals applicable to site. • Detailed understanding of PEC's approach to managing environmental aspects relevant to site. • Ability to conduct incident investigations.
Environmental Professionals	• Tertiary qualifications in Environmental Management or Science. • Working knowledge of EMS and principles of ISO 14001. • Detailed understanding of PEC's approach to managing environmental aspects relevant to site.

Position	Requirements
	• Ability to undertake environmental audits. • Ability to conduct incident investigations. • Specialist training (e.g. auditing land rehabilitation techniques, fauna handling, water sampling and testing).
Our Team	• Awareness of PEC's approach to environmental management. • Awareness of environmental aspects relevant to site and their management. • Specialist training (e.g. spill management) appropriate to site.

5.3 Communication of this EMP

Details of this EMP will be communicated to our people during the Project induction and when material changes are made to the requirements of this EMP and associated documents. Reinforcement of key elements contained within the EMP will be communicated as per the communication and consultation mechanisms outlined in Section 10.

In addition, current copies of this EMP and related Policies, Procedures, Forms and other documents will be available to our people in uncontrolled hard copy and electronically on the Project server.

6. OPERATIONAL CONTROL

This section outlines the standards to which PEC will manage environmental aspects at the Project. PEC procedures and forms outline management of these aspects in more detail (**Appendix 2**).

6.1 Land Clearing and Access

Land clearing for exploration and to establish mines and infrastructure is the most significant environmental impact the Project is likely to have. No land clearing will occur without first undertaking checks to ensure the relevant approvals are in place and to consider the potential impacts. A Site Disturbance Permit system has been developed to ensure these checks are done and may also be required for land previously disturbed by others and where PEC is seeking to commence infrastructure activities. Site Disturbance Permits and land clearing are covered by PEC-EMP-WI-01 and PEC-EMP-WI-02.

The permit may have conditions attached to it relevant to the area to be cleared. Failure to meet the requirements of the Permit will require an Incident Report and may be an externally Reportable Incident.

6.2 Flora and Vegetation

Flora (individual plants, including rare species) and vegetation (whole plant communities) are protected under State and Commonwealth laws. PEC will conduct flora surveys over areas for which clearing is proposed. PEC will only remove flora and vegetation where it has approval to do so. PEC will also adhere to any conditions placed on approvals to clear, including special protection for plants with high conservation values.

PEC will prevent the introduction and / or spread of weeds and dieback in areas in which it operates. PEC will do this by using a Weed and Dieback Hygiene system to prevent transfer of weed seeds and Phytophthora through movement of earthmoving equipment or affected soils (see PEC-EMP-WI-07).

PEC will also manage to prevent potential indirect impacts on flora and vegetation, such as dust on foliage (see PEC-EMP-WI-06) hydrocarbon or chemical spills (see PEC-EMP-WI-09) and bushfire (see PEC-EMP-WI-08).

6.3 Fauna

Fauna (vertebrate and some invertebrate species) are protected under State and Commonwealth laws. PEC will conduct fauna surveys over areas for which clearing is proposed. PEC will only remove fauna habitat where it has approval to do so. PEC will also adhere to any conditions placed on approvals to clear, including protection of animals with high conservation values.

PEC will ensure the Project does not inadvertently assist feral animals to establish or increase local populations. PEC personnel and contractors will not feed or otherwise encourage feral animals and potential food sources will be managed to ensure they cannot be utilised by feral animals. Under some circumstances, control programs may be required.

Special attention will be paid to trenching operations. Open trenches can trap nocturnal animals. Small mammals and reptiles can subsequently die from exposure or predation. PEC will have procedures to manage fauna interaction with open trenches (see PEC-EMP-WI-05).

6.4 Soils

Soil is a critical resource for the return of plants and animals after mining. When conducting land clearing, PEC will preserve topsoil for future rehabilitation work (see PEC-EMP-WI-04). PEC will also protect soils from unnecessary disturbance or degradation through vehicle movements, weeds, and saline water or fuel spillages.

6.5 Water

PEC uses water for mineral processing, dust suppression and domestic (administration) purposes. These requirements are usually met by extracting groundwater. PEC will only extract groundwater under licence from the statutory authority.

PEC will manage process water, especially saline or sediment laden water, so it does not cause adverse impacts on the environment. This will usually involve spill protection measures and regular inspection of water infrastructure.

PEC will not interfere with and hydrological/hydrogeological regimes, except where it has approval to do so.

6.6 Land Rehabilitation

When exploration, mining or related uses are complete, PEC will rehabilitate all disturbed areas to achieve safe, stable and non-polluting landscapes that resemble the surrounding environment. An exception can occur where a facility can be used under agreement with a subsequent land manager, for example, a road or groundwater bores that can be used by others for beneficial purposes.

PEC will include consideration of land rehabilitation within the mine plan to ensure that final landforms and progressive rehabilitation are achieved with the minimum post-mining liability to PEC and the State of Western Australia.

6.7 Heritage

PEC recognises the Traditional Owners of the land it operates in and will negotiate in good faith for land access. Aboriginal heritage is considered in planning and conducting its activities at the Project, and ethnographic and archaeological surveys will be conducted prior to any disturbance to comply with relevant legislation and heritage agreements (see PEC-EMP-WI-03).

6.8 Air Quality

The Project will generate emissions to air. These emissions will include dust and may include combustion emissions such as nitrous oxides. PEC will manage these emissions in accordance with the relevant standards. In the case of dust, visible dust generated from vehicle movements, blasting, crushing or other activities will be controlled. For some activities, such

as topsoil stripping, dust suppression may not be viable where saline water is used. More information can be found in PEC-EMP-WI-06.

This plan does not address air quality within the work environment and any occupational health implications that might apply.

6.9 Greenhouse Gases

Greenhouse gases are produced through combustion of fuel. At the Project, this will usually involve combustion of diesel although gas-fired power stations may be operated. PEC will seek to minimise emissions and meet any government reporting requirements in respect of greenhouse gases and will consider energy efficiency when designing projects.

6.10 Noise and Vibration

The Project will generate noise through vehicle movements, blasting and other activities. PEC will consider the potential impacts on local communities and residences and develop and implement management measures to ensure legal obligations in respect to environmental noise are met.

This plan does not address noise within the work environment and any occupational health implications that might apply.

6.11 Hydrocarbons and Chemicals

PEC stores and uses large amounts of diesel fuel and other hydrocarbons for its operation. PEC will manage fuels and oils to minimise the potential for spills or leaks. Spill kits will be available in workshops and employees will be trained in their use. PEC will always use, store and dispose of hydrocarbons and chemicals in accordance with Australian Standards, sound industry practice and its legal requirements (see PEC-EMP-WI-09).

6.12 Other Wastes

In the course of its operations, PEC will produce waste materials such as food wastes, sewage sludge, inert materials (such as building and construction materials), brine from reverse osmosis plants, tyres and other materials.

Waste will be removed and disposed of into appropriate licenced facilities using a licenced waste management contractor. There will be no disposal of waste on-site;

Waste water treatment plants will be constructed and operated in accordance with licence conditions and guidelines.

The principle of waste minimisation - reduce, reuse and recycle - should be applied to the extent possible within the constraints of the site e.g. remote sites. More information can be found in PEC-EMP-WI-10.

7. INCIDENT MANAGEMENT

Incidents or near misses that either cause, or have the potential to cause harm or contamination of the environment will be reported using the PEC Incident Report Form. Incidents are classified with a potential consequence ranking between 1 (minor) and 5 (major). For incidents with a potential consequence ranking of 3 or greater, a formal root cause investigation will be undertaken within 24 hours of the incident being reported and will be led by a trained and competent facilitator.

Corrective and preventative actions arising from an incident investigation will be recorded within the incident record on STEMS for monitoring to closeout. For high potential events, a review of all corrective actions associated with high potential events will be followed up within three (3) months of the incident date to ensure the risks have been effectively controlled.

All regulatory reporting requirements for the Project will be undertaken by the Registered Manager, or a person having control of a workplace or delegate.

PEC will maintain a register of all incident documents which include:

- Completed incident forms
- Root cause investigation outcomes and attendees
- Defined corrective actions
- External communications to Regulators where relevant
- Corrective action close out reports.

8. COMPLIANCE MONITORING

8.1 Legal Compliance

A project Legal Obligations Register (LOR) will be developed to include project specific legislative requirements, permit conditions and third party agreements. The LOR will be reviewed and maintained by the Environmental Team.

8.2 Environmental Monitoring

Monitoring will be conducted where required for legal compliance and in accordance with best practice, to determine the effectiveness of controls, and to meet reporting requirements.

All monitoring documentation, records and data is to be maintained and controlled for internal and external reporting purposes.

Monitoring and calibration records are to be collected and maintained for all monitoring works conducted.

Failure to complete required monitoring is to be reported as an environmental non-compliance incident. Monitoring results that fall outside targeted thresholds will also be reported as an incident.

Monitoring data is to be validated and regularly reviewed to assess any non-conformances or trends. Identified trends are to be addressed and remedial or improvement actions identified as appropriate.

8.3 Targeted Workplace Inspections

Targeted workplace inspections are aimed at preventing incidents relating to high risk work areas or tasks.

Targeted workplace inspections will be conducted at least weekly by a member of the Environmental Team with Area Supervisors with the aim of inspecting all key risk areas each month.

8.4 Audits

A Schedule of Audits will be developed by the Environmental Team to monitor compliance against this Plan. Audits will comprise assessment of one or all of the following:

- Compliance with this EMP
- Compliance with conditions of site-specific licences, permits and other approvals
- Compliance with targeted aspects of operations e.g. land clearing and use of Site Disturbance Permits.

Our people conducting audits will be trained and competent in preparing audit documentation and leading an audit. From time to time, external third-party auditing of the Project may take place. This may include, but not be limited to Management Systems Certification audits and Regulatory inspections. The site General Manager or their delegate participate in such audits as requested.

9. ASSESSMENT AND IMPROVEMENT

9.1 Management System Review

On an annual basis, a formal review of the EMS and this Plan will be facilitated by the Environmental Department. In instances where the review identifies an opportunity for improvement, the Plan will be updated and the changes communicated to the Project. The review and all changes will be noted in the review minutes.

9.2 Leadership Trend / Performance Review

On an annual basis, the Environmental Department will facilitate a formal review of the Project environmental performance with the Leadership Team (General Manager, Managers). The review will focus on the following key areas:

- Status of achievement of objectives and actions. In the event that these objectives and targets are not being met, improvement opportunities to meet objectives and targets
- Key performance indicators
- Incident trends
- Audit results
- Key activities and associated risks in the upcoming quarter
- Upcoming environmental management activities.

In instances where the review identifies an opportunity for improvement, this will be incorporated in subsequent reviews of this Plan.

10. COMMUNICATION AND CONSULTATION

Continuous improvement in environmental management performance will be driven by improved communication and consultation at all levels across the business. This is achieved by increasing our people's, engagement and participation in environmental management, through the mechanisms outlined in this section.

10.1 Consultation

Consultation is an important process and requires effective two-way communication to ensure the transfer of information within organisations.

As a minimum, our people will be consulted on environmental management matters where:

- Changes that may affect the environmental management of the Project is proposed, including changes to systems or methods of work, such as land clearing procedures
- Decisions are being made to introduce new procedures
- Our people's input into control methods is required.

Consultation with our people on environmental management matters will be through the various communication arrangements that apply to the Project. These are detailed below.

10.2 Meetings

The meetings in **Table 4** will have an environmental component.

Table 4: Meeting Requirements

Meeting	Purpose	Who	Frequency	Records
Pre-shift	Management of site environmental factors (brief).	Workgroup, Project Managers, Site Supervisors, Environmental personnel.	Daily	Nil
Toolbox	Management of site environmental factors (detail).	Workgroup, Project Managers, Site Supervisors, Environmental personnel.	Weekly	Attendance records
Contractor Progress	Environmental performance. Review of management procedures.	Leadership Team, Contractor's representative.	Weekly	Minutes
Site Management	Environmental performance. Site environmental strategy.	Leadership Team.	Weekly	Minutes
Senior Management	Environmental performance. Company environmental strategy.	Managing Director, Executive and General Managers.	Weekly	Minutes

10.3 Noticeboards

The Project will utilise noticeboards placed in prominent positions to provide information on environmental management, including:

- Environment, Community and Heritage Policy
- Environmental Management Alerts
- Statistics and Performance Reports
- General Environmental Management Information
- Emergency communication contacts

Environmental personnel will ensure the noticeboards contain up to date information.

10.4 Environmental Management Performance Reporting

Projects will compile a report against the established Key Performance Indicators, inclusive of contractor results, on a monthly basis to be submitted to the General Manager or his delegate for compilation and further distribution.

Reports will be submitted on the appropriate monthly report template and within the required timeframe, ensuring that the following information is reported on:

- Key performance indicators
- Environmental Incidents
- Achievements
- Key activities
- Challenges.

11. DOCUMENT REFERENCES

A series of management documents have been prepared by PRL to manage environmental risk associated with the project. Work Instructions prepared for the Project are listed in **Table 5**. Forms and checklists are summarised in Table 6 and other management plans as well as policy and guidance documents prepared for the project are described in **Table 7**.

Table 5: Work Instruction Documents

Document Reference	Title
PEC-EMP-WI-01	Site Disturbance Permit Work Instruction
PEC-EMP-WI-02	Clearing Work Instruction
PEC-EMP-WI-03	Aboriginal Heritage Work Instruction
PEC-EMP-WI-04	Topsoil Management Work Instruction
PEC-EMP-WI-05	Fauna Work Instruction
PEC-EMP-WI-06	Dust Management Work Instruction
PEC-EMP-WI-07	Hygiene Management Work Instruction
PEC-EMP-WI-08	Bushfire Management Work Instruction
PEC-EMP-WI-09	Hydrocarbon and Chemical Management Work Instruction
PEC-EMP-WI-10	Waste Management Work Instruction

Table 6: Forms and Checklists

Reference	Title
PEC-EMP-ENVF-01	Site Disturbance Permit
PEC-EMP-ENVF-02	Hygiene Certificate

Table 7: Policy and Management Plans

Reference	Title
PEC-EMP-POL-01	Policy, Environment Community and Heritage
PEC-EMP-PLN-01	Environmental Management Plan (this document)

APPENDIX 1 ROLES AND RESPONSIBILITIES

Role:	Responsibility:
Managing Director and Chief Operating Officer	• Demonstrating leadership and commitment to achieve the Company's Environmental Management objectives • Maintain an understanding of the key environmental aspects within the business and that controls and management processes are effective • Ensuring sufficient resources are available for the effective implementation of this plan • Reviewing Environmental Management performance of the Company and driving continual improvement where required • Actively promoting Environmental Management excellence and in doing so create a strong supporting culture for the management of hazards • Ensuring direct reports remain accountable for delivering and performing in accordance with the requirements of this Plan • Ensuring PECs expectations and objectives are communicated and filtered through the Project • Interfacing with the Board and providing feedback to inform them of the company's environmental management performance
General Manager	• Demonstrating leadership and commitment to the achievement of Environmental Management objectives and initiatives • Ensuring Systems for identifying and controlling key environmental aspects within the Projects are implemented and reviewed to ensure they remain effective • Reviewing Environmental Management performance of the Business Unit and driving continual improvement where required • Ensuring that all incidents in his/her area of responsibility are reported and investigated in accordance with corporate requirements • Implementing corrective actions within their area of responsibility within the timeframe specified • Ensuring compliance with applicable legislation for the project
Registered, Project and Construction Manager	• Demonstrating leadership and commitment to the achievement of Environmental Management objectives and initiatives • Actively monitor and review the management of key environmental aspects on site • Carrying out inspections of work areas and reporting and / or correcting conditions in their area of responsibility • Ensuring that all personnel comply with their responsibilities to provide information, instruction and training to work in an environmentally-responsible manner • Ensuring that all incidents in his / her area of responsibility are reported and investigated in accordance with corporate requirements • Implementing corrective actions within their area of responsibility within the timeframe specified • Ensuring compliance with applicable legislation for the site

Role:	Responsibility:
	• Ensuring that all personnel under his / her responsibility have been trained, assessed and are competent for the tasks they are performing and are supervised in the performance of their work • Ensuring compliance with policies, procedures and programs • Ensuring that their Contractors comply with the requirements outlined in this (and their own) Environmental Management Plan, and its accompanying processes and • Conducting inspections of his/her Contractor's work areas to ensure the workplace is maintained in accordance with PEC's requirements. • The Registered Manager can delegate these responsibilities through appointments however the legal accountability remains with the Registered Manager.
Superintendents and Supervisors	• Coordination of Project approvals in conjunction with the Approvals team • Providing environmental support to the Project Managers and Site Environmental Advisors as required • Assessing tasks for key environmental aspects and ensure controls are applied and effective • Ensuring that all incidents in his / her area of responsibility are reported and investigated in accordance with corporate requirements • Ensuring that only competent persons who are fit and capable of doing the work are assigned do so • Ensuring hazards identified are addressed accordingly • Ensuring appropriate work methods are being applied • Ensuring Environmental Management processes are complied with, including the development and review of risk assessments, hazard reporting, incident and investigation processes • Communicating and consulting with team members on changes and / or initiatives that have the potential to affect Environmental Management • Implementing correction actions within their area of responsibility within the timeframe specified • Carrying out daily workplace inspections and reporting and/or correcting unsafe conditions in your area of responsibility • Being the liaison point for Contractor Management Teams and the Leadership Team • Monitoring Contractor performance in relation to their scope of work • Conducting inspections of his / her Contractor's work areas to ensure the workplace is maintained in accordance with PEC's requirements
Environmental Manager / Superintendent / Advisors	• Overseeing the implementation of the project EMP and the maintenance of EMS outputs • Coordination of Project approvals in conjunction with the Approvals team • Developing and reviewing key project environmental documentation as required. Assisting the Resident Manager in ensuring the requirements of EMP are met in all aspects of construction and operation activities • Undertaking audits / inspections in accordance with the audit schedule to ensure compliance with the EMP and legal and other requirements • Providing environmental inductions/training in accordance with the Training Matrix

Role:	Responsibility:
	• Preparation of Environmental Reports as required • Ensure that required environmental monitoring is undertaken • Investigate and report environmental incidents as required • Maintaining knowledge of current governing regulations, codes and practices, and inform the management team whenever revisions to this Plan is required
Our People	• Understanding and applying Project Environmental Management requirements • Have an understanding of the Critical Hazards involved in the tasks being performed and ensure the controls are implemented and effective • Utilising the resources provided and the processes in place for the achievement of Environmental Management objectives • Participating in the compiling of risk assessments (JHA, Take Time) • Actively participating in the implementation of all Project Environmental Management initiatives including hazard reporting and elimination • Challenging behaviour and correct inappropriate Environmental Management performance and • Reporting to their Supervisor, all environmental incidents and near misses at the time of their occurrence.

APPENDIX 2 FORMS AND WORK INSTRUCTIONS

Site Disturbance Permit

TO BE FILLED IN BY APPLICANT

Date: _____

❑ Operations Project: _____ Site Location: _____

❑ Exploration

Tenement	Area of Disturbance (ha)	Volume of topsoil to be recovered (m^3)

Date the work is proposed to commence: _____

Nature of Works:

❑ Pit Development
❑ Waste/Spoil Dump
❑ Ore Stockpile/ROM
❑ Infrastructure/Workshops
❑ Roadwork/Re-alignment
❑ Fence/Pipeline Disturbance
❑ Exploration
❑ Other

Description of proposed activity (attach plan, maps &/or photo's if appropriate)

_____

_____

_____

Note: A detailed plan of the proposed works showing drainage and contours must accompany this form to gain approval. Once the work has been completed, survey to confirm cleared area and provide a DXF or equivalent file to the Environmental Department.

Applicants Name/Signature: _____ **Date:** _____

PM Name/Signature: _____ **Date:** _____

TO BE FILLED IN BY ENVIRONMENTAL DEPARTMENT

❑ Clearing boundary demarcated _____
❑ Aboriginal Heritage approved _____
❑ Rare flora/fauna protected _____
❑ Dust/fibrous hazards mitigated _____
❑ Government approval, if required _____
❑ PoW and NVCP _____
❑ Vegetation disturbance under limit _____
❑ Type/Size of infrastructure consistent with approvals _____

Environmental Conditions: _____

_____

_____

_____

Environmental Department: _____ **Date:** _____

Approved By: _____ **Date:** _____

The Environmental Department and the Registered Manager/Exploration Manager/Project Manager must sign and date this form before it is considered live and ready for use.

This form must be completed:

- For all vehicles/mobile equipment entering and exiting site/project areas
- For all ground engaging mobile equipment
- For all vehicles/mobile equipment exiting weed risk areas

Date of arrival/inspection		**Vehicle/Mobile equipment**	
Name of vehicle Owner/ Supervisor		Make	
Name of person conducting inspection		Model	
Vehicle/mobile equipment last know location		Registration/Vehicle No.	

The following areas have been inspected and are free from dirt and vegetation:	**Y**	**N**	**N/A**	**Comments**
Cargo area/internal tray or well body	☐	☐	☐	
Operator cab/air-conditioner filters	☐	☐	☐	
Engine bay/Radiator/filters	☐	☐	☐	
Dust bowls and cyclones (Drill rigs)	☐	☐	☐	
Cutting blades/Buckets/ripper	☐	☐	☐	
Running gear/Bach plates	☐	☐	☐	
Tyres/tracks/wheel arch/mud flaps	☐	☐	☐	
Undercarriage/spare wheel/side bars/steps	☐	☐	☐	
Other	☐	☐	☐	

If you have answered NO to any of above questions, the vehicle/mobile plant must undergo a thorough wash down and inspection prior to entering the site or relocating internally to new areas.

Vehicle supervisor Sign off			
Name		Signature	
Position		Date	
Perpetual Resources Representative Sign off			
Name		Signature	
Position		Date	

Vehicle Wash down Procedure

1. **Wash down vehicle/mobile equipment in designated wash down bay or approved location.**
2. **Remove all soil and vegetation including seeds.**
3. **Ensure soil, vegetation and other contaminants are contained and appropriately managed.**
4. **Carry out final inspection with site personnel before entering site.**

What is a Site Disturbance Permit?

A Site Disturbance Permit Form (SDP) discerns intent to disturb land or construct facilities and sets in motion a due diligence process to ensure that appropriate personnel are informed of the intent and that all environmental aspects associated with the works have been thoroughly considered, any potential impacts managed and government approval sought when required. Works are not permitted to proceed without an approved SDP.

When should the SDP form be filled out?

An SDP will be completed at the initial planning stage of the works. It is important to be proactive in project planning and submission of the SDP to enable relevant regulatory approvals to be sought and prevent project delay.

Who fills out an SDP?

The SDP must be completed by the person who initiates, oversees or carries out the intent to clear.

Where is the SDP submitted?

Completed SDP forms, and attached documentation/spatial data, must be submitted to the Environmental Department (ED) for approval. They in turn will seek approval from the Registered Manager (RM), Exploration Manager (EM) or Project Manager (PM) where appropriate. Alternatively, forms may be submitted to the RM/EM/PM prior to submission to the ED however both signatures are required.

Process for completing the SDP (Please refer to the form):

1. Note the date and proposed date to commence works.
2. Tick the project area in which the work is to be completed.
3. Write the location and the proposed area of disturbance (ha) if any and on which tenement(s) the clearing will take place. If the area occurs on more than one tenement, ensure the area is divided accurately. This information will be supplied by the Survey Department (SD).
4. Only apply for the area that will be cleared immediately. Do not include future proposed clearing as plans and designs change. Submit an additional SDP as required.
5. Write a detailed explanation of the proposed activity, including a time frame for the commencement of works.
6. Include .DXF, .TAB or equivalent electronic file or a detailed, clearly annotated and scaled site plan of the proposed works area with tenement boundaries as prepared by SD.
7. The applicant has the Project Manager sign the permit. The applicant and the Project Manager can be the same person.
8. Submit to the ED to complete their section of the form. ED will review against environmental constraints e.g. significant fauna and flora, heritage areas.
9. All personnel must await receipt of an SDP approved by the EM/PM before commencing works. Only the EM/PM and a representative from the ED have the authority to sign the form.
10. Original SDP's must be returned to the ED for record keeping.
11. Once the work has been completed, SD to confirm area and provide a DXF or equivalent file to ED to track clearing areas including as built infrastructure.

Additional Notes

Please ensure that proactive planning in consultation with the ED is undertaken and SDP's are submitted well in advance of the proposed date to commence works, as delays may occur due to biological and heritage clearances and if government approval or further planning is required.

An incident report must be generated for clearing that has commenced without an SDP.

Objectives

- Implement considered mine design and planning to minimise the area of land cleared.
- Avoid direct impacts to vegetation outside of approved clearing/disturbance boundaries.
- Minimise impacts to conservation significant flora and vegetation.
- Enhance understanding of the status and management of local flora and vegetation.

Management

- All areas to be cleared must be surveyed by qualified biological consultants.
- A field guide for identification of local conservation significant flora and vegetation guide will be prepared.
- Any significant flora and/or fauna habitat identified during surveys will be clearly defined on site plans.
- The Site Disturbance Permit Form will be utilised prior to the commencement of clearing works.
- Ensure the total area to be cleared has factored in stockpiling of topsoil and vegetation and access tracks.
- Personnel responsible for undertaking any clearing works must be inducted by the Environmental Department (ED) prior to commencing works.
- A representative from the ED will be present on site during clearing works to guide operators around the clearing boundaries and ensure over clearing does not occur.
- Conservation significant flora and vegetation will not be disturbed under any circumstances unless prior written approval has been sought by the relevant government agency. The location of these will be provided prior to works.
- Mature trees will be avoided without compromising the safety of the operation.
- Vegetation will be progressively cleared to prevent soil erosion, dust generation and weed introduction.
- Areas to be cleared must be clearly delineated on project drawings.
- Delineation of clearing boundaries will involve:
    - boundaries of areas approved for clearing will be identified using survey pegs and/or photo degradable flagging tape.
    - survey pegs/tape will be placed on the approved boundary and will remain in place once clearing has occurred so that over clearing can be identified.
    - survey pegs/tape will be located at intervals not exceeding 25 metres.
    - survey pegs/tape will be positioned so as to be clearly visible from one marker to the next.
- All sample bags, grid pegs and general refuse are to be removed prior to clearing.
- Vegetation and topsoil may be stripped and stockpiled together to avoid additional clearing for stockpiles.
- Sites for stockpiling of vegetation are to be clearly defined prior to clearing.
- Vegetation will be removed, transported and stockpiled in a way that does not damage vegetation or disturb soil outside of the clearing limits.
- Trees will be hand trimmed where only a portion of the tree will be affected by works.
- Cleared vegetation will be either stockpiled in an approved location or directly placed on areas to be rehabilitated as directed by the ED.
- Cleared vegetation will be stockpiled to avoid any interference to surface drainage flows.
- All vehicles, plant and equipment are restricted to within the clearing limits.
- Burning of vegetation is prohibited.
- The ED will maintain a record of Site Disturbance Permits.

Monitoring

The Superintendent/Contract Manager and Environmental Department will inspect operational areas to ensure:

- Clearing Plans are followed.
- Disturbance to surrounding vegetation and soil has been prevented.
- Clearing limits are pegged/flagged adequately.
- Only authorised clearing is undertaken.
- Vegetation is removed and stockpiled in suitable locations or utilised in rehabilitation.

Reporting

- Clearing plans will be submitted to the ED and then to the RM or EM for approval prior to the commencement of works.
- The area disturbed will be determined by the Survey department and provided to the ED. This will be recorded in the Internal Clearing Register.
- The area disturbed will be reported to the Department of Mines, Industry Regulation and Safety in the Annual Environmental Report.
- Clearing beyond approved clearing boundary and or limits will be reported using an incident report form. Over clearing will be reported to government authorities where the area has exceeded approved limits.
- Unauthorised impacts to Priority Flora will be reported immediately to the ED who will then report to the relevant authorities.

Objectives

- Prevent disturbance to Aboriginal Heritage sites unless approval has been given under Section 18 of the *Aboriginal Heritage Act 1972*.
- Ensure protection of known heritage sites outside of approved development footprint during the life of the Project.
- Ensure that all personnel are aware of the significance of Aboriginal Heritage and the associated responsibilities/liabilities under the Act.

Management

- The Site Disturbance Permit Form will be applied for and signed-off prior to clearing works to ascertain whether Aboriginal Heritage surveys are required.
- Aboriginal Heritage surveys will be undertaken in consultation with the appropriate communities, and the Aboriginal Heritage Inquiry System (AHIS) will be searched prior to the disturbance of any land.
- Any sites identified during Aboriginal Heritage surveys or using the AHIS will be clearly demarcated and included on site plans.
- If Aboriginal sites cannot be avoided for exploration or mining operations, consultation will be undertaken with the Traditional Owner group and approval will be sought under Section 18 of the *Aboriginal Heritage Act 1972*.
- Environmental inductions will provide information on Aboriginal Heritage sites in the Project area, the importance of avoiding these sites and how to recognise Aboriginal Heritage sites in the field.
- If personnel unearth or discover something they deem to be of heritage significance, including human remains, they must stop work, clearly demarcate the site, report immediately to the Environmental Department (ED) and cease works until authorised to proceed.

Monitoring

- During clearing activities, personnel supervising the works and the ED will ensure that the clearing remains within the design area.
- Routine monitoring of known Aboriginal Heritage sites will be undertaken by the ED to ensure disturbance to known heritage sites has not occurred.

Reporting

- Any new suspected heritage sites will be reported immediately to the site ED. They in turn will report to the relevant Traditional Owners and the Department of Planning Lands and Heritage (DPLH).
- Unauthorised interference to identified Aboriginal sites of significance will be reported using an Incident Report Form and the ED advised immediately. Relevant Traditional Owners and the DPLH will be advised as appropriate.

Objectives

- Define optimal soil characteristics for utilisation in rehabilitation.
- Optimise the retention and viability of topsoil resources for successful rehabilitation.

Management

- Soil sampling will be conducting to determine chemical and physical characteristics prior to stripping for mining operations.
- Sites for stockpiling topsoil are to be clearly defined in consultation with the Environmental Department prior to the commencement of stripping operations.
- Topsoil with suitable characteristics (i.e. not skeletal, acidic, sodic, alkaline etc.) will be stripped to a minimum depth of 300 mm and based on relevant soil mapping.
- Stockpiles will be no higher than 2 m and will not be compacted. Vegetation and topsoil may be stripped and stockpiled together to avoid additional clearing for stockpiles.
- Topsoil will not be stripped when wet as this can lead to compaction and loss of soil structure when stockpiling.
- Topsoil will be removed, transported and stockpiled in a way that does not damage vegetation or disturb soil outside of the clearing limits.
- Preference will be given to fresh topsoil for direct placement on disturbed areas available for progressive rehabilitation. Alternatively, where progressive rehabilitation is not possible, it will be utilised within one year of stripping to prevent decline in soil structure, seed and nutrient viability.
- Revegetation of topsoil stockpiles will be encouraged after one year to minimise erosion, discourage weeds and maintain nutrient and seed loadings.
- Stockpiled topsoils will be monitored for weed germination and weed control undertaken as necessary.
- Topsoil stockpiles will be located to avoid any interference to the flow of surface water.

Note: the same principles apply should vegetation and topsoil be stripped and stockpiled together however stockpile height can exceed 2 m with this method.

Monitoring

- Topsoil will be monitored for the colonisation of weed species and erosion.
- Ponding of water on the upslope side of stockpiles will be monitored.

Reporting

The area disturbed and volume of topsoil stripped will be recorded by the Survey Department and reported annually as part of the Department of Mines, Industry Regulation and Safety Annual Environmental Report process.

Objectives

- Avoid direct impact to native fauna, particularly species of conservation significance
- Minimise indirect impacts to fauna and associated habitat.

Management

- All employees and contractors are required to participate in the site induction.
- Vehicles are prohibited to leave the designated project area footprint without an approved Site Disturbance Permit.
- All personnel to drive to conditions and posted speed limits applied to mine roads and tracks.
- Other than formal monitoring and fauna relocation undertaken by specialist consultants, native fauna will not be captured or intentionally handled.
- Personnel required to handle fauna will have appropriate training and licenses.
- Native fauna have right of way.
- Firearms and pets are prohibited.
- Do not feed native or feral animals and ensure foodstuffs are stored and disposed of appropriately to avoid scavenging.
- Vegetation clearing will be kept to a minimum and infrastructure located to preserve fauna habitat, particularly that of rare fauna.
- Road kills will be removed from the road to a minimum of 10 m into the vegetation to avoid further impacts on fauna feeding on carcasses.
- Install fauna egress ramps on all excavations i.e. sumps and trenches.
- Ensure barriers to native fauna movement are to be kept to a minimum.
- All lined dams will be fenced and have appropriate fauna egress matting installed.
- Exploration drill holes to be capped immediately with a concrete conical plug once drilling has ceased, to avoid native fauna falling or becoming trapped down holes.

Monitoring

- Fauna monitoring and survey programmes will be undertaken in accordance with guidance statements. These programmes will be implemented by licensed personnel.
- An environmental map will be located on notice boards and will be regularly updated to illustrate environmentally sensitive areas and associated buffers.

Reporting

- Observations of significant and feral species will be reported by all personnel to the ED and/or recorded on the Fauna Interaction Register located in office buildings.
- Any native animal injury or death is to be reported immediately to the ED.

Objectives

- Minimise dust generation from mining activities.
- Minimise indirect impacts to flora, vegetation and fauna habitat from dust emissions.

Management

- Progressive clearing will be undertaken to minimise dust generation from exposed surfaces.
- Bare surfaces will be progressively rehabilitated.
- Water carts will be utilised for dust suppression. Where excessive dust cannot be effectively controlled, additional resources will be employed. If required, alternative methods of dust suppression could be investigated.
- Regular housekeeping will be undertaken to collect and remove earth material that may contribute to airborne dust.
- Product stockpiles will be monitored to determine whether there is significant dust generated and stabilised if necessary.
- Personnel must inform their supervisor if they deem there to be excessive levels of dust generated from exploration and mining activities and dust suppression methods enacted. Where dust in high winds is generated and suppression is unable to abate dust emissions, activities may be suspended until emissions can be controlled or winds have subsided.
- During drilling operations, water will be used to minimise dust generation
- Dust generation should be monitored in excessively windy conditions, if dust generation becomes uncontrollable then drilling should be postponed.
- Where saline water is used for dust suppression, overspray in to vegetated areas will be prevented.
- Saline water will not be sprayed on topsoil to be stripped for rehabilitation to retain to prevent salinity loading.

Monitoring

- Dust emissions from mining activities are monitored via dust deposition gauges situated around the mining operation.
- Passive dust levels are monitored using particulate deposition gauges. Sample bottles are collected and sent to the laboratory for analysis every month.
- Monitoring of control and impact vegetation plots will be undertaken by the ED and qualified botanists on an annual basis.
- Health and vigour of remnant vegetation adjacent to the mining operations will be monitored to assess impacts from dust or saline water.
- General dust levels around site will be monitored by the ED.

Reporting

- Dust generation will be reported via the annual National Pollutant Inventory.
- Methods undertaken to control dust emissions will be reported in the Department of Mines, Industry Regulation and Safety Annual Environmental Report.

Objectives

- No increase in the abundance or diversity of weeds in the project area.
- No spread of *Phytophthora spp.* dieback from known infestations.

Management

- All employees and contractors are required to participate in the site induction, which will provide an awareness of weeds including risk species and response to weed infestation.
- Vegetation will be progressively cleared to prevent weed colonisation on disturbed ground.
- The Environmental Department (ED) must be informed of the intent to mobilise vehicles, plant and ground engaging equipment prior to arrival to site.
- It is a requirement that all vehicles, plant and ground engaging equipment pass a hygiene inspection to ensure they are free of soil and vegetation matter prior to mobilisation to site. A Hygiene Certificate (PEC-EMP-ENVF-02_HC) will be completed by the vehicle owner/supervisor and signed-off by the ED and/or representative.
- Any vehicle, plant and ground engaging equipment considered to have worked in a known weed or dieback risk area will undergo a hygiene inspection before accessing other work areas.
- Equipment may be turned away from entry if they are dirty or without a Hygiene Certificate.
- All vehicles and equipment are restricted to designated mine areas and roads unless undertaking mineral exploration or approval has been sought from the ED.
- Weed control programmes will be implemented when weed species are found.

Monitoring

- The status of recorded weed populations and dieback infestations will be monitored periodically during site environmental inspections.

Reporting

- Identification of weeds or suspected dieback infestations should be reported to the ED.
- Incidents relating to a failure in hygiene procedures will be reported as environmental incidents.
- Status of weed species and control initiatives will be reported to the Department of Mines, Industry Regulation and Safety in the Annual Environmental Report.

Objectives

- To minimise bushfire risk.
- Educate employees in fire prevention and response procedures.

Management

Prevention

- All employees and contractors are required to participate in the site induction, which will provide an awareness of fire hazards and required management measures.
- Select site personnel will undergo training in fire prevention and suppression
- Appropriate vehicles will carry firefighting equipment and staff will be trained in its use.
- Hot work permits will be required for work that has the potential to create ignition sources.
- Fire safety and housekeeping inspections of plant and equipment will be undertaken.
- Local Government restricted fire periods and total fire bans will be adhered to.

Control

- Smoking will be restricted to approved locations only and cigarette butts must be disposed of into allocated container.
- Vehicles, mobile plant/equipment will be parked on cleared area as to prevent possible ignition of vegetation.
- Appropriately trained personnel to take immediate response to bushfire control.
- In the event a bushfire cannot be controlled and threatens exploration infrastructure and personnel safety, the Exploration Manager or Senior Geologist will initiate the bushfire contingency and emergency response plan.
- All vehicles will contain a fire extinguisher.

Monitoring

- Regular housekeeping inspections and routine maintenance of firefighting equipment and all equipment that may cause bushfires will be undertaken.

Reporting

- All personnel are responsible for reporting potential fire hazards to their supervisor.
- Any fire event is to be immediately reported to a Galaxy representative and reported to the Department of Mines Industry Regulation and Safety within 24 hours.
- Any fire event needs to be reported as an incident within 24 hours using an incident report form.

Objectives

- Ensure hydrocarbons and chemicals are transported, stored, handled and disposed of according to regulations and site procedures.
- Prevent contamination of the surrounding environment, particularly soil and water resources.

Management

Storage

- Storage of fuels and oils to comply with AS 1940 – 2004: The Storage and Handling of Flammable and Combustible Liquids.
- Hydrocarbons will be stored within a low permeability bund(s) designed to contain no less than 110 % of the volume of the largest storage vessel, or at least 25 % of the total volume of substances stored in the compound whichever is greater.
- The capacity of the bund must be maintained at all times i.e. pump out trapped rain water.
- All hydrocarbons will be stored in their original containers. Storage vessels must be water proof and display clear labelling specific to their contents.
- Appropriate firefighting equipment will be supplied and easily accessible at storage locations.

Spills

- Spill kits will be provided and personnel are to be familiar with their use. Absorbent and other spill response materials to be available in the field for quick response.
- Identify spilt substance and appropriate Personal Protective Equipment requirement (Consult MSDS).
- If safe to do so, spills will be controlled at the source (e.g. if a valve is open, close it).
- Contain spill from spreading beyond the immediate area particularly to waterways and vegetation and cleaned up using absorbent materials.
- Contaminated soil to be excavated and disposed of into designated bins and/or bioremediation facility.
- Servicing and maintenance of vehicles, plant and equipment is to occur within designated service and wash down bays. Where this is not possible in the field drip trays will be used to collect spills.

Disposal

- Waste hydrocarbons will be stored in bunded storage containers and or holding tanks until collection and disposal offsite by licensed contractors.

Monitoring

- Routine inspections of hydrocarbon storage areas, go-lines, service bays and workshops will be undertaken by the Contractor and the Environmental Department (ED).
- Maintain Spill Kit Register to ensure spill kits remain fully stocked and checked regularly.
- Storage vessels and pipelines will be regularly checked for leaks or damage.

Reporting

- Hydrocarbon spills outside of bunded areas greater than 250 litres (L) that have had a discernible environmental impact will be reported to the Department of Water and Environmental Regulation (DWER) within 24 hours of becoming aware of the incident.
- All spills to soil outside of bunded areas greater than 20 L are to be reported to the ED within 24 hours of the incident occurring with a completed Incident Report Form.
- All spills to soil outside of bunded areas less than 20 L are to be reported using the Spill Register.

Objectives

- To operate a landfill site without impact to the environment.
- To maximise the recycling and reuse of wastes.
- Ensure waste management practices comply with current legislation, industry standards and waste disposal guidelines.

Management

- Waste will be removed and disposed of in appropriate licenced facilities using a licenced waste management contractor. There will be no disposal of waste on-site;
- Obey signage. Wastes that can be disposed to landfill include inert (building and construction material), domestic and putrescible (food, paper products, glass, aluminium, plastics) waste. Chemical containers must be triple rinsed prior to disposal. No hydrocarbon or chemical wastes can be disposed at the landfill.
- Sewage wastes will be managed in an approved Waste Water Treatment Plant in accordance with statutory legislation.
- All employees and contractors will comply with the following waste procedures:
    - littering will not be tolerated. Personnel caught littering intentionally will receive disciplinary action.
    - rubbish containers will be carried in all vehicles and provided at all work sites.
    - where foodstuffs are being discarded, covered receptacles will be used to keep animals out.
    - ensure waste materials are secure in vehicles to prevent windblown rubbish.
    - litter and debris collections around camp and offices will be undertaken at least once a month.
    - at the cessation of specific projects (e.g. exploration, construction) all waste materials will be removed from the project area.
- Unauthorised discharge/disposal of waste to the environment will be reported as an environmental incident.

Monitoring

- Housekeeping inspections to be undertaken as required by site representative.

Reporting

- Incorrect waste disposal will be reported as an environmental incident within 24 hours by completing an Incident Report form. Investigations will be undertaken if required.
- The Contractor is responsible for reporting the findings of routine housekeeping inspections.