

9. ENVIRONMENTAL MANAGEMENT

9.1 Environmental Policy

Minemakers' corporate environmental policy is provided in Figure 9.1. The environmental performance of the company is measured and reported against this policy.

Minemakers' environmental policy is based on the recognition that all activities, including resource development and processing, impact on the environment. Since it is not possible to eliminate this impact, Minemakers' policy is to engineer and conduct operations with the objective of achieving best practice so that adverse effects on the environment are either avoided or managed to an acceptable level.

9.2 Environmental Management System

9.2.1 Objectives

Under the environmental policy, Minemakers is committed to developing an environmental management system (EMS). The system provides a framework that coordinates emergency response, occupational health and hygiene, safety, environment and social responsibility management activities.

The objectives of Minemakers EMS will be to:

- Achieve compliance with regulatory requirements.
- Achieve performance levels/control requirements specified in the Environmental Impact Statement (EIS).
- Achieve best practice to minimise any adverse effects on the environment.
- Minimise waste generation and emissions and usage of resources.
- Satisfy the public with the company's responses to concerns or enquiries.

The immediate target to achieve these objectives is to develop and implement the various EMS components, including issues-based management plans. Specific objectives and performance standards for various environmental aspects are contained within these issues-based management plans (Attachment 5).

9.2.2 Implementation

Minemakers will implement the EMS to reflect the environmental, social and regulatory settings specific to the Wonarah Phosphate Project. Minemakers will adopt a range of site-specific procedures and documentation to support the EMS. These will include protocols outlining:

- The responsibility of Minemakers management, personnel and contractors.
- Legislative requirements and compliance with Mineral Lease conditions.
- Auditing and review of environmental management procedures.
- Recording and reporting of environmental procedures.
- Emergency response.
- Communications with stakeholders.



ENVIRONMENTAL POLICY

Minemakers Limited regards sound environmental management and protection as an integral part of its business and of playing its part in the community, and is committed to excellence in this area of activity.

Minemakers aims to minimise environmental impacts at every stage of work, from planning, exploration, development, mining, production and through to decommissioning.

To achieve this goal, the Company will:

- seek to identify, monitor and manage all environmental impacts arising from its operations;
- integrate environmental considerations into project planning and operations;
- develop, implement and enforce a comprehensive Environmental Management System;
- provide information and training to our workforce, contractors, suppliers and customers to provide a greater understanding of environmental issues and responsibilities in relation to our business;
- undertake consultation with appropriate community and government groups to ensure that community interests are addressed;
- comply with applicable laws, regulations and standards;
- monitor performance and provide safeguards and contingency plans for all activities to detect and prevent any potential impacts;
- review the Company's operations in the context of technological advances to seek improvements in production processes, waste management and the efficient use of resources.

As with all areas of its operations, Minemakers will be a responsible corporate citizen in respect to the environment. All employees and contractors are responsible for upholding the Company's standards of environmental management and care.

ANDREW DRUMMOND

Managing Director
27 February 2009

Revision Date: February 2010

9.3 Responsibility

The Resident Manager will be responsible for ensuring that all activities associated with the project are undertaken in full compliance with statutory regulations and non-statutory obligations, and are consistent with Minemakers' environmental policy.

Minemakers will ensure that the environmental approval conditions are accessible to senior management and other personnel on request at all times. All personnel are responsible for ensuring that their work complies with these conditions and the described environmental management measures. Individual accountability will be defined through conditions of contracts of employment.

Responsibilities of the various personnel involved in the project are outlined in Table 9.1.

Table 9.1 Environmental management responsibilities

Personnel	Responsibilities
Resident Manager	Overall responsibility for the project. Overall responsibility for site-specific implementation of the accepted EIS, including: environment policy, systems and management measures.
Environmental Officer	Reports to the Resident Manager. Ensures EMS is implemented uniformly, revised and maintained. Assesses the suitability and effectiveness of the EMS. Ensures that contractors fulfil their contractual obligations. Implements induction procedures and appropriate training. Ensures compliance with licence conditions and company policy via the establishment and maintenance of appropriate reporting systems and databases. Participates with personnel to improve work practices on site. Undertakes internal site environmental audits. Provides advice as required to other project personnel. Liaison with Northern Territory regulatory authorities. Liaises with stakeholders. Ensures implementation and regular review of environmental management measures.
Contractors	Fulfil contractual obligations.
Archaeologist on call	Provides advice and assessment on call in the event that archaeological material is uncovered during exploration activities undertaken outside the Mineral Lease. Liaises with the relevant community groups and government agencies.
Independent Environmental Auditor	Conducts regular independent environmental audits of the operations to ensure compliance with EIS and statutory regulations.

9.4 Induction

Following appointment, each employee and contractor will undergo a formal comprehensive site induction to ensure that personnel have the appropriate knowledge concerning health and safety, environmental and community relations policies, objectives and targets. The induction will address such areas as:

- Organisational structure and responsibilities for environment and community relations
- Legal and other requirements.
- Site environmental management policies and procedures, including Standard Operating Procedures.
- Cultural heritage and archaeology.
- Site safety and occupational health policies, procedures and employee obligations.
- Hazard and incident reporting and management.
- Emergency services and procedures.
- Site security.
- Employment policies and conditions of employment.

9.5 Key Areas of Management

9.5.1 Compliance with Mineral Lease Conditions

A register of legal and other regulatory requirements will be maintained and updated regularly. This register will capture the requirements of the Mining Act, other relevant legislation, Mineral Lease conditions and commitments/environmental objectives contained within the EIS such that site-specific procedures are developed to ensure that compliance is achieved.

9.5.2 Audit and Review

Minemakers' success in achieving the objectives and targets of its environmental management will be reviewed annually during operation. The EMS, its component environmental management plans (EMP) (see Section 9.6) and the procedures outlined within them will be regularly reviewed during construction and operation of the project to ensure that:

- All project activities are undertaken in compliance with statutory obligations.
- Environmental objectives of the project are achieved.
- A system of continuous improvement is established.
- As further information is obtained, this is incorporated into the plan.

Environmental Audits and Inspections

Supervision and Inspection

The Resident Manager (or their delegate) will undertake regular supervision and inspections of activities to ensure that environmental management procedures are being implemented

satisfactorily. The frequency of inspection will depend on the magnitude of risk associated with the particular hazard. Inspection results will be reported to Minemakers periodically.

Compliance Audits

Audits will be undertaken by the Environmental Officer (or their delegate) on a regular basis to ensure compliance with the environmental management procedures and approval conditions.

Complaints

Minemakers will aim to resolve complaints received from stakeholders as soon as possible, although the nature of the complaint will determine the timeframe and actions taken. Table 9.2 sets out indicative timeframes for resolving typical complaints that might be received. Response time is the time taken to secure initial attendance by the Resident Manager (or their delegate) at site after first being made aware of an incident or complaint. Containment time is the time taken to contain the incident after first being made aware of its occurrence.

Table 9.2 Indicative timeframes for response and containment of typical complaints

Type of Complaint	Initial Response Time	Containment Time
Chemical, petrol or oil spill	Within 2 hours of notification	Within 24 hours of notification
Inappropriate vegetation clearing	Within 2 hours of notification	During initial response
Weed/pathogen hygiene not observed	Within 2 hours of notification	During initial response
Dust nuisance	Within 2 hours of notification	Within 24 hours of notification
Noise nuisance	Within 2 hours of notification	Within 24 hours of notification
Damage to land or property not in Mineral Lease	Within 24 hours of notification	Depends on nature of damage
Unacceptable behaviour or abuse of personnel	Within 24 hours of notification	N/A
Request for further information	Initial acknowledgement letter within 24 hours with further follow-up within 5 working days	N/A

The concept of 'response time' will also apply to requests for further information, but in this case it will allow for an initial acknowledgment letter and subsequent investigation of the issue, with a final response in writing.

9.5.3 Recording

The EMS and EMP will become part of an auditable record system maintained by Minemakers. The record system will also include the following:

- EIS and associated documents.
- Approval documents.
- Mining Management Plan (MMP).
- Compliance inspection and audit reports.
- Incidents register.
- Complaints register.
- Consultation records including meeting notes.

In accordance with the principles of AS/NZS ISO 14001:2004, the above EMS documentation will be:

- Easily located and logically filed in hard copy and electronic copy form, including date of issue.
- Available for all Minemakers personnel, contractors and consultants.
- Periodically reviewed and revised as necessary (and clearly dated) by authorised personnel.
- Removed from all points of issue when obsolete.

The Resident Manager will be responsible for ensuring that feedback is assessed and implications for the EMS are acted upon.

9.5.4 Reporting

Routine Reporting Systems

Minemakers will employ the following environmental and social reporting systems:

- Results from environmental monitoring and investigation programs will be reported formally to Department of Regional Development, Primary Industry, Fisheries and Resources (DRDPIFR) on an annual basis as part of the MMP.
- An annual report dealing specifically with environmental issues will be included in Minemakers internal reports. This will include a summary of non-compliances, corrective actions, and major issues arising from daily supervision and inspection and audits.

Databases

Minemakers will maintain a computerised database for monitoring data and other relevant information. The primary functions of the system will include:

- Recording relevant regulatory documents, e.g., acts of parliament, government policies, permits and dangerous goods or other licences.
- Recording additional information such as training records and the results of environmental audits and reviews.
- Providing other information.
- Recording hydrocarbon usage.

Management Review

Continual improvement is the implicit aim of any EMS and EMP. The EMS and EMP will therefore be subject to review and modification to reflect issues that arise as the project is developed.

9.5.5 Emergency Response

An Emergency Response Plan is included in Attachment 5.

9.4.6 Communications

The Resident Manager (or their delegate) will maintain consultation with stakeholders, including:

- DRDPIFR.
- Department of Natural Resources, Environment, the Arts and Sport (DNRETAS).

- NT Worksafe.
- Central and Northern Land Councils.
- Wunara community.
- Project personnel.
- Other stakeholders as relevant.

Matters for consultation will include operational issues, potential impacts of the project on other parties and their management, and safety or environmental incidents. Consultation may be required on an ad-hoc basis for some stakeholders (in terms of issues to be covered and timing of communications); while for others a structured program may be required. Depending on the stakeholder involved, consultation may take the form of telephone communications, formal written correspondence, one-on-one informal meetings or formal gatherings. Significant stakeholder consultation will be recorded in a stakeholder database and kept in the site office.

A Complaints Register will be established to:

- Record complaints received from stakeholders.
- Identify the party/person responsible for dealing with the complaint.
- Record the action(s) taken to resolve the complaint.
- Record communication with the complainant (including feedback).

Further detail on stakeholder consultation is provided in Chapter 10.

9.6 Draft Environmental Management Plan

The following issue-based management plans, included in Attachment 5, have been developed to manage risks for the main environmental impacts of the project discussed in Chapter 6:

- Air Quality Management Plan.
- Waste Management Plan (which includes both hazardous and non-hazardous wastes).
- Fire Management Plan.
- Emergency Response Plan.
- Groundwater Management Plan.
- Cultural Heritage Management Plan.
- Flora Management Plan
- Fauna management Plan
- Mosquito Management Plan.
- Sediment and Erosion Control Plan.
- Stakeholder Consultation Plan.

The draft EMP are strategic documents that describe the framework for environmental management for construction, operation and decommissioning phases of the project. The EMP will be finalised after the EIS assessment is complete and will take into account comments received during the public display period. The EMP will also incorporate recommendations and conclusions contained in the EIS Assessment Report and approval conditions. The plans will be used directly in the Mining Management Plan for the project.

