Environmental Management System

International Minerals Pty Ltd

March 2007

Environmental Management System

Prepared for

International Minerals Pty Ltd

Prepared by

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			Name/Position	Signature
	31/10/2006		Jamie Shaw Senior Environment Scientist	

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1.0 International Minerals Pty Ltd Environmental Policy

International Minerals and its team are committed to ensuring International Minerals Pty Ltd's industrial growth is in accordance with sound environmental management.

From mining to downstream processing, International Minerals Pty Ltd will balance efficient iron ore extraction and production with due regard for ecosystems and community health which may be affected by International Minerals's activities.

International Minerals Pty Ltd will:

- Comply with all applicable laws, regulations and standards
- Develop and implement as appropriate company wide environmental standards for our operations, integrating environmental considerations and sustainable development into planning, operations and decisions
- Assess the potential environmental impacts of our activities and develop objectives and targets to address those activities that have significant environmental impacts
- Endeavour to conserve, where practicable, significant ecosystems that may be affected by our activities
- Develop environmental awareness and understanding among International Minerals Pty Ltd personnel and contractors
- Regularly monitor and manage environmental impacts of our operations, and audit those operations to confirm environmental performance and identify areas for improvement
- Communicate with government and the community on environmental issues and reporting of environmental performance
- Aim to continually improve our environmental performance by minimising wastes and emissions
- Rehabilitate, in accordance with our commitments, the environment affected by our activities

We are committed to our environmental policy and what it aims to achieve.

2.0 Register of Documents

International Minerals Construction EMS Document Index Number (DIN)	Title	Date
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3.0 Overview of Environmental Management System

3.1 Introduction

International Minerals Pty Ltd is committed to completing the construction of an iron ore mine and downstream processing facilities at the Balmoral South deposit, located 20km south of Cape Preston, Western Australia. The construction activities undertaken will be efficient and cost effective, aiming to minimise the impact on the environment. This commitment is reflected foremost in the development, implementation, review, and maintenance of the construction phase Environmental Management System (EMS).

The EPA recommends an EMS as a useful management tool for particular projects. The reasons for implementing an EMS are to ensure the:

- proper procedures are in place to manage all the environmental impacts of a proposal;
- Environmental Conditions and Procedures set by the Minister for the Environment are properly addressed; and
- project is implemented with quality environmental management and within a system that facilitates continuous improvement.

The structure, development and implementation of this EMS are based on:

- The EPA's Guidance for the Assessment of Environmental Factors Number 43 Guidance Statement to Assist Proponents in Understanding the EPA's Requirements in Relation to the Condition on Environmental Management Systems.
- ISO 14001:2004 "Environmental management systems – Requirements with guidance for use".
- ISO 14004:2004 "Environmental management systems – General Guidelines on principles, systems and supporting techniques".

This ensures the quality and effectiveness of this EMS conforms to Australian and international standards.

3.2 This Document

3.2.1 Overview

The structure of this EMS comprises of procedures and registers that enable International Minerals the capability to develop, implement, review and maintain the EMS during the construction phase of the project. The structure of the EMS is as follows:

- *Procedures* – used to define how, when and by whom the components of the EMS are implemented; and

- *Registers* – used to store the results of the procedure, where those procedures are used in developing the EMS.

All EMS documents contained within and related to the core components of the EMS will be assigned a unique Document Identification Number (DIN) that enable International Minerals and contractor personnel to locate specific documents. Documents related to, but not contained within the EMS will be sufficiently referenced and accessible.

3.2.2 Relevant Environmental Documents

International Minerals has developed environmental management strategies and (where appropriate) Environmental Management Plans aim at minimising all adverse impacts on the environment resulting from its operations. Management of environmental impacts is addressed directly within International Minerals' Environmental Impact Assessment and Management Programme, to which this document is appended. In addition, the following Environment Management Plans operate concurrently with this EMS providing the necessary environmental management requirements and controls:

- Construction Environmental Management Plan;
- Preliminary Decommissioning and Closure Management Plan;
- Recreational Use Management Plan;

In addition to the above EMPs, additional management strategies have been committed to in the Section 38 Referral document, to which this EMS is attached.

3.3 Structure

The EMS is structured as shown in flowsheets attached as **Appendix A**. The four strategies utilised to support the Environmental Policy and International Minerals' commitment towards continual improvement are:

- planning;
- implementation;
- checking and corrective action; and
- management review.

3.3.1 Planning

Planning requires the systematic identification of environmental aspects and impacts associated with the project enabling specific environmental objectives and targets to be set that support the Environmental Policy and legislative requirements. The components of effective EMS planning are:

- Environmental Aspects & Impacts;
- Legal & other Requirements; and
- Objectives & Targets.

3.3.2 Implementation and Operation

The implementation and operation of International Minerals' Environmental Management System requires essential components to ensure it functions effectively. These components are:

- structure & responsibility;
- training & awareness;
- communication;
- EMS documentation;
- document control;
- operational control; and
- emergency preparedness & response.

3.3.3 Checking and Corrective Action

Regular and systematic checking of construction activities to determine conformance with the procedures will result in continued improvement of the EMS. This will lead to the implementation of corrective (and preventative) action as required. The measures incorporated into the EMS to address this are:

- monitoring & measurement;
- evaluation of compliance;
- non-conformance & corrective & preventative action;
- record control; and
- audits.

It is also necessary to determine whether the EMS is being implemented in accordance with the procedures. This is achieved through the implementation of internal and external auditing within the EMS.

3.3.4 Management Review

Management Review is a critical aspect in the continual improvement of the EMS. Requiring senior management to periodically review:

- results of internal audits;
- evaluations of compliance with legal and other requirements
- environmental performance of the EMS;
- progress towards the objectives and targets;
- corrective and preventative actions;
- follow up actions from previous management reviews; and
- recommendations for improvements.

Based on this review process, senior management can decide on appropriate updates for the objectives and targets, the Policy, and other components of the EMS.

3.4 Definitions

- **Document –** a procedure, register, or Environmental Management Plan, which comprises the EMS documentation.
- **Environment –** the surroundings of an organisation's operation. This includes air, water, land, natural reserves, flora, fauna, humans, and their interrelation.
- **Environmental Management System –** the part of the overall management system that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing implementing, achieving, reviewing and maintaining environmental policy.
- **Environmental Policy** – statement by the organisation of its intention and principles in relation to its overall environmental performance, which provides a frame work for action and setting environmental objectives and targets.

3.5 Related Documentation

DIN – 02 Register of Documents

4.0 Procedure for Determining Environmental Aspects and Impacts

4.1 Purpose

- To identify environmental aspects and impacts resulting from construction activities that International Minerals and their contractors have control over and can influence.
- Identify the level of environmental risk by using the Environmental Risk Assessment Method **(Appendix B)**.
- Develop a *Register of Environmental Aspects and Impacts* **(DIN 05)**, which documents the environmental aspects resulting from International Minerals' construction activities. The *Register of Environmental Aspects and Impacts Register* **(DIN 05)**, will state:
  - aspects and impacts;
  - likelihood and consequence;
  - risk rating;
  - relevant legislation; and
  - environmental controls.

4.2 Scope

This procedure applies to construction activities undertaken by International Minerals and its contractors.

4.3 Definitions

Environmental aspects – (ISO 14001, 3.3) element of an organisation's activities, products or service that can interact with the environment.

Environmental Impact – (ISO 14001, 3.4) any change to the environment whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products, or services.

Environmental Consequence – a qualitative term used to represent the significance of an environmental risk in terms of its direct impact on the environment and its degree of non-conformance with this EMS.

Environmental Risk – a rating of the level impact associated with an action.

Environmental Management Procedure – a document that defines the way components of the EMS are implemented.

4.4 Responsibilities

The International Minerals Environmental Manager is responsible for identifying all environmental aspects. This should be established with assistance from:

- environmental professional;
- engineers; and
- construction staff.

The International Minerals Environmental Manager will perform an Environmental Risk Assessment (ERA) for all planned construction activities undertaken by International Minerals and its contactors.

The International Minerals Environmental Manager will ensure that records of the ERA are entered into the *Register of Environmental Aspects and Impacts* **(DIN 05)**.

4.5 Procedure

4.5.1 Identifying Environmental Aspects

The International Minerals Environmental Manager, with the assistance of an environmental professional will identify International Minerals' environmental aspects by using the following tools:

- list of construction activities;
- list of waste streams;
- design drawings;
- approvals and licences; and
- example of similar projects.

4.5.2 Identifying Environmental Impacts

The Environmental Manager, with the assistance of an environmental professional will identify the environmental impacts resulting from International Minerals' environmental aspects.

4.5.3 Identifying Environmental Risk

- The qualitative environmental risk assessment technique, attached as **Appendix B,** gauges the risk resulting from the environmental impact, which is a consequence of International Minerals' aspects. This technique combines the concept of "environmental consequence" and "likelihood" to produce an indication of environmental risk.

- Any significant environmental impact identified will undergo the environmental risk assessment.

- The environmental impact will be allocated a level of consequence from the Environmental Consequence matrix located in **Appendix B.**

- The environmental impact will then be allocated a level of likelihood from the Qualitative Measure of Likelihood matrix in **Appendix B.**

- Once a level of consequence and likelihood is identified for an environmental impact the significant risk of the impact can be determined by using the Qualitative Measure of Environmental Impact matrix located in **Appendix B.**

Register of Environmental Aspects and Impacts

- The environmental risk assessments of the environmental aspects are to be documented in the *Register of Environmental Aspects and Impacts* **(DIN 05)**. The *Register of Environmental Aspects and Impacts* **(DIN 05),** forms part of the EMS documentation and is to be used in:
  - identifying Environmental Objectives and Targets; and
  - identifying construction activities requiring preventative or mitigating actions.

- The Register is to be held by the International Minerals Environmental Manager.

4.5.4 Continuous Improvement

Findings from Checking and Monitoring Procedures

Any additional environmental aspects that are identified through management reviews, audits or non-conformances will be incorporated into the *Register of Environmental Aspects and Impacts* **(DIN 05).**

Updates to the *Register of Environmental Aspects and Impacts* **(DIN 05)**, will be made by the International Minerals Environmental Manager.

Distributing the Updated Register

The International Minerals Environmental Manager will determine whether the updated Register should be distributed immediately or as part of a more significant update of the EMS.

Where updates to the *Register of Environmental Aspects and Impacts* **(DIN 05)**, do not require immediate distribution, the update is to be communicated informally using the *Procedure for Internal Communication* **(DIN 15)**.

4.6 Related Documentation

DIN-01 Environmental Policy
DIN-05 Register of Environmental Aspects and Impacts
DIN-06 Procedure for Legal and Other Requirements
DIN-08 Procedures for Identifying Environmental Objectives, Targets and Indicators
DIN-09 Register of Environmental Objectives, Targets and Indicators
DIN-15 Procedure for Internal Communication
DIN-18 Procedure for Document Control
DIN-21 Procedure for Monitoring Construction Activities
DIN-22 Procedure for Non-conformance and Corrective and Preventative
DIN-27 Procedure for Internal Audit

5.0 Register of Environmental Aspects and Impacts

Aspects	Impacts	Risk Assessment Likelihood (L) & Consequence (C)		Inherent Risk Rating	Relevant Legislation / Guidelines	Operational Control
		L	C			
Clearance & disturbance of vegetation and land	Loss of declared rare and priority flora	A Almost Certain	3 Moderate	High	*Environmental Protection (Clearing of Native Vegetation) Regulations 2004* The *Wildlife Conservation Act 1950.* *Environmental Protection Act 1986*	CEMP
	Soil degradation and erosion	C Moderate	3 Moderate	Significant	*Soil and Land Conservation Act 1945*	CEMP
	Dust generation	A Likely	3 Moderate	Significant	*Occupational Health, Safety and Welfare Act, 1984* NEPM Ambient Air Quality Standards 1998	Dust Management Plan (Section 5.7)
	Disturbance to surface hydrology	C Moderate	3 Moderate	Significant	*Environmental Protection Act 1986*	CEMP
	Disturbance or destruction of Aboriginal heritage sites	C Unlikely	5 Extreme	High	*Aboriginal Heritage Act 1972*	Aboriginal Heritage Management Plan

Aspects	Impacts	Risk Assessment Likelihood (L) & Consequence (C)		Inherent Risk Rating	Relevant Legislation / Guidelines	Operational Control
		L	C			
Clearance & disturbance of vegetation and land	Fragmentation of fauna habitats	C Moderate	3 Moderate	Significant	*Environment Protection and Biodiversity Conservation Act 1999* *Environmental Protection Act 1986* The *Wildlife Conservation Act 1950*	CEMP
	Direct mortality through vehicles movements and machinery operations	C Moderate	3 Moderate	Significant	*Environment Protection and Biodiversity Conservation Act 1999* *Environmental Protection Act 1986*	CEMP
	Reduced fauna biodiversity	A Almost Certain	3 Moderate	High	*Environment Protection and Biodiversity Conservation Act 1999* *Environmental Protection Act 1986* *Wildlife Conservation Act 1950*`	CEMP
	Spread of noxious weeds	Moderate	Major	High	*Agriculture Related Resources Protection Act 1976*	CEMP
Generation of air pollution (Dust)	Reduced visual amenity	D Almost Certain	2 Minor	Significant	*Occupational Health, Safety and Welfare Act, 1984* NEPM Ambient Air Quality Standards 1998	Dust Environmental Management Plan (Section 5.7).

Aspects	Impacts	Risk Assessment Likelihood (L) & Consequence (C)		Inherent Risk Rating	Relevant Legislation / Guidelines	Operational Control
		L	C			
Generation of air pollution (Dust)	Smothering of surrounding vegetation	C Moderate	4 Major	High	*Occupational Health, Safety and Welfare Act, 1984* NEPM Ambient Air Quality Standards 1998	Dust Environmental Management Plan (Section 5.7)
	Adverse impact and disturbance to fauna	D Unlikely	4 Major	Significant	*Occupational Health, Safety and Welfare Act, 1984* NEPM Ambient Air Quality Standards 1998	Dust Environmental Management Plan (Section 5.7)
	Risk to human health	C Moderate	3 Moderate	Significant	*Occupational Health, Safety and Welfare Act, 1984* NEPM Ambient Air Quality Standards 1998	Dust Environmental Management Plan (Section 5.7)
Generation of noise	Effect on human health and well-being	E Rare	5 Extreme	Significant	*Occupational Health, Safety and Welfare Act, 1984* *Environmental Protection (Noise) Regulations 1997* *Mine Safety And Inspection Regulations 1995*	Noise Environmental Management Plan (Section 5.10).
	Impact on fauna populations	C Likely	4 Major	High	*Occupational Health, Safety and Welfare Act, 1984* *Environmental Protection (Noise) Regulations 1997*	Noise Environmental Management Plan (Section 5.10).

Aspects	Impacts	Risk Assessment Likelihood (L) & Consequence (C)		Inherent Risk Rating	Relevant Legislation / Guidelines	Operational Control
		L	C			
Waste generation and disposal	Health, ecological and odour impact	D Unlikely	3 Moderate	Moderate	*Mines Safety and Inspection Act 1994* *Environment Protection (Controlled Waste) Regulations 2001* *Environmental Protection (Rural landfills) Regulation 2002*	Waste Environmental Management Plan (Section 5.11)
	Attraction of pest species	D Unlikely	3 Moderate	Moderate	*Mines Safety and Inspection Act 1994* *Environment Protection (Controlled Waste) Regulations 2001* *Environmental Protection (Rural landfills) Regulation 2002*	Waste Environmental Management Plan (Section 5.11)
Discharge of waste water from construction activities	Contamination of soil, and water resources	D Unlikely	4 Major	Significant	*Environmental Protection Act 1986*	CEMP
	Erosion of constructed earthworks including mine site, roads and downstream facilities	C Moderate	4 Major	High	*Environmental Protection Act 1986*	CEMP

Aspects	Impacts	Risk Assessment Likelihood (L) & Consequence (C)		Inherent Risk Rating	Relevant Legislation / Guidelines	Operational Control
		L	C			
Spillage or leakage of hazardous substance	Contamination of soil and water resources	D Unlikely	5 Extreme	High	*Mine Safety And Inspection Regulations 1995* *Explosives and Dangerous Goods Act 1961 –* • *Explosive and Dangerous Goods (explosives) Regulation 1963* • *Explosive and Dangerous Goods (Dangerous Goods Handling and Storage) Regulations 1992* • *Dangerous goods (Transport road & rail) Regulation 1999* *Environmental Protection (Controlled Waste) Regulations 2001* *Environmental Protection (Rural landfills) Regulation 2002*	Waste Environmental Management Plan (Section 5.11)
Surface water run-off into the marine environment	Reduction in water and sediment quality	D Likely	4 Moderate	Significant	Draft Environmental Protection (State Marine Waters) Policy. Australian & New Zealand Guidelines for Fresh Marine Water Quality (ANZECC & ARMCANZ 2000)	Surface Water Management Plan (Section 5.4)
Release of wastewater outfall from desalinisation plant	Reduction in water quality due to brine disposal	A Almost Certain	2 Minor	Significant	Australian & New Zealand Guidelines for Fresh Marine Water Quality (ANZECC & ARMCANZ 2000)	Wastewater Outfall Environmental Management Plan (Section 5.6)

Aspects	Impacts	Risk Assessment Likelihood (L) & Consequence (C)		Inherent Risk Rating	Relevant Legislation / Guidelines	Operational Control
		L	C			
	Impacts on pelagic marine life	A Almost Certain	2 Minor	Significant	Australian & New Zealand Guidelines for Fresh Marine Water Quality (ANZECC & ARMCANZ 2000)	Wastewater Outfall Environmental Management Plan (Section 5.6)
	Change in water temperature and salinity level.	A Almost Certain	3 Moderate	High	Environmental Protection Authority (EPA) Guidance Statement – Guidance for protection of tropical arid zone mangroves along the Pilbara coastline (2001) Australian & New Zealand Guidelines for Fresh Marine Water Quality (ANZECC & ARMCANZ 2000)	Wastewater Outfall Environmental Management Plan (Section 5.6)
Increased fishing	Pressure on fish stocks	B Likely	3 Moderate	Significant	*Wildlife Conservation Act 1950*	Recreational Use Management Plan (section 5.3)

6.0 Procedure for Legal and Other Requirements

6.1 Purpose

- To identify the legal and other requirements that apply to International Minerals and its contractors during the construction phase of the iron ore mine and processing plants. These requirements include:
  - federal and state legislation and regulation;
  - industry codes of practice;
  - agreements with public authorities; and
  - non-regulatory guidelines.

- To establish a *Register of Legal and Other Requirements* **(DIN 07)** that identifies all applicable legal and other requirements.

6.2 Scope

This procedure covers legislation and regulations at Federal, State, regional and local levels of government as well as industry codes of practice that apply to International Minerals and its contactors.

6.3 Responsibilities

- The International Minerals Environmental Manager is responsible for ensuring the *Register of Legal and Other Requirements* **(DIN 07)** is kept up to date.
- The International Minerals Environmental Manager is responsible for ensuring any new legislation and regulations is integrated into International Minerals' actions.
- All International Minerals and contractor personnel must comply with legal requirements.

6.4 Procedure

6.4.1 Establishing Register of Legal and Other Requirements

Identifying Regulations and Requirements

Identify the legislation and regulations pertaining to the construction of International Minerals' iron ore mine and processing plant. **Appendix C** lists relevant legislation and regulations.

Sources of Information

Government Sources:

- WA Department of Environment and Conservation www.portal.environment.wa.gov.au
- Commonwealth Department of Environment and Heritage www.deh.gov.au (previously Environment Australia www.environment.gov.au)
- Department of Industry & Resource www.doir.wa.gov.au
- State Law Publisher www.slp.wa.gov.au

Web Sources:

- National Environmental Law Association www.ne.a.org.au
- Environmental Defenders Office www.edowa.org.au

Preparing Register

Enter all relevant legislation and other requirements identified into the *Register for Legal and Other Requirements* **(DIN 07).**

6.4.2 Updating Regulations and Requirements

Changes in Regulations and Requirements

- The International Minerals Environmental Manager will ensure the *Register for Legal and Other Requirements* **(DIN 07)** is kept up to date.

- The *Register for Legal and Other Requirements* **(DIN 07)** will be reviewed and updated as part of the management system review.

Works approvals, permits and licenses

- International Minerals will submit applications for the relevant works approvals and permits to the Department of Environment and Conservation. The International Minerals Project Manager will add all approvals and permits granted to the *Register of Legal and Other Requirements* **(DIN 07).**

- The licences will be completed and submitted prior to the construction phase of International Minerals' iron ore mine and down stream process plants.

Access to Legislation, Regulations and Requirements

The environmental legal requirements will be made readily available to anyone in either printed or electronic media.

7.0 Register of Legal and Other Requirements

Commonwealth Legislation				
Legislation	**Agency**	**Brief Description**	**Relevance to Project**	**Action**
Environment Protection and Biodiversity Conservation Act 1999	Department of Environment and Heritage	Provides protection to the environment. In particular actions which are likely to impact upon matters of national significance	Any action which is likely to have a significant impact upon a matter of national environmental significance which was not previously identified.	The *EPBC Act* is the assessment and approval process for *matters of environmental significance.*
Occupational Health, Safety and Welfare Act, 1984	Department of Health & Aging	Sets workplace limits for air quality	Defines acceptable standards allowable for the workplace	Under the Act, the proponent must provide acceptable air quality standards within the work place
Quarantine Act 1908/Quarantine Amendment Act 1999	AFFA	To protect Australia from the introduction and establishment of disease and pests	To stop exotic pest being introduced via ballast water and the like	The Act requires quarantine standards to be met before any substance or material can be bought into the country

State Legislation				
Legislation	**Agency**	**Brief Description**	**Relevance to Project**	**Action**
Aboriginal Heritage Act 1972	Department of Indigenous Affairs (DIA)	Requires that sites of Aboriginal significance are not disturbed and that measures are implemented to reduce the impacts of mining operations	Operations that have the potential to disturb sites of Aboriginal significance	The proponent must gain approval under Section 18 of the Act.
Agriculture Related Resources Protection Act 1976	Department of Agriculture and Food	Requires that mining operations control the spread of noxious weeds and feral animals	Land occupation and need to control declared noxious weeds and feral animal	Under S49 of the Act, the occupier of private land must control any plants and animals (weeds and pests) that have been declared by the Agriculture Protection Board
Bush Fires Act 1954	Bush Fires Board (now part of Fire and Emergency Services Authority)	Governs the burning of vegetation during restricted or prohibited periods	Burning of vegetation within the project area	Under S18 of the Act, permits are required to allow burning during restricted or prohibited times

State Legislation				
Legislation	**Agency**	**Brief Description**	**Relevance to Project**	**Action**
Environmental Protection Act 1986	Department of Environment	Provides a framework for controlling impacts of developments on the environment	All aspects of the project that will result in some form of impact to the environment	The proponent must consider all actions undertaken by the project with regard to the Act
Explosives and Dangerous Goods Act 1961	Department of Industry and Resources	Establishes the necessary policies for storage, handling and transportation of explosive and dangerous goods ensuring the proponent undertakes the appropriate safety measure in operational and maintenance procedures	Construction or alteration of premises for the purpose for storing explosives and dangerous goods Transportation of explosive and dangerous goods	Under S45 of the Act and Part 4 of the Regulations, a license must be obtained to permit the storage of explosive and dangerous goods. The proponent must demonstrate compliance with regulations prior to the license being issued. S34 of the Act states that a vehicle transporting dangerous goods must be licensed, that the person driving the licensed vehicle is also required to be licensed and appropriately accredited
Health Act 1911	Local Government Authorities	Ensures the proper provisions are implemented for the installation and operation of equipment to treat and dispose of sewage and effluent	Installation and operation of equipment to treat and dispose of sewage effluent	Under S107 of the Act, approval is required for the installation and operation of sewage treatment and disposal equipment
Heritage of Western Australia Act 1990	Heritage Council of WA	Governs the administration of any sites listed on the State Heritage Register and how development proposals can proceed in the event that they will affect a heritage listed site	Mining proposal may affect a registered site or a place subject to the Heritage Agreement	Under S11 of the Act, a decision making authority must refer a proposal which may affect a heritage site to the Council for advice
Iron Ore Processing (Mineralogy Pty Ltd) Agreement Act 2002	Department of Industry & Resources	Act under which the project is developed	Establishment of integral agreements between the State Government and the co-signatories to the Act, of which International Minerals is one	Legislation that governs Mineralogy's and its co-signatories' projects and processes according to its terms and notwithstanding the provisions of any Act of law with Western Australia

State Legislation				
Legislation	**Agency**	**Brief Description**	**Relevance to Project**	**Action**
Land Administration Act 1997	Department of Land Information	Consolidates legislative requirements relating to Crown land and the compulsory acquisition of land generally	Proposal that affect Crown land, unmanaged Reserves and public roads	The Act requires that leases be granted before a mining operation can commence
Local Government Act 1995	Department of Local Government	Provides a system for Local Government in Western Australia	Excavation for stone, gravel, sands, clay, limestone, loam or other material on private land	The Act assigns responsibility for issuing extractive licenses to Local Government for operations on private land
Main Roads Act 1930	Main Roads	Consolidates legislative requirements relating to and making provision for the construction, maintenance, and supervision of highways, main and secondary roads, and other roads, the control of access to roads and for other relative purposes	Activities that impact on: Road Reserves future road alignments road transport network a major watercourses	Under the Act, the proponent must obtain a permit approved by the Commissioner of Main Roads to carry out any activities that may trigger the Act
Mines Safety and Inspection Act 1995	Department of Industry and Resources	Ensures prior to commencement of mining operations that occupational health and safety mechanisms have been developed for the minesite	Commencement of mining operations and management of occupational health and safety on a minesite	Approval to be obtained from the State Mining Engineer prior to commencement of mining operations, based on the submission of a project management plan under S3(13) of the Regulations that addresses the measures required to manage major occupational health and safety risks

State Legislation				
Legislation	**Agency**	**Brief Description**	**Relevance to Project**	**Action**
Mining Act, 1978	Department of Industry and Resources	Governs mineral exploration and mining in Western Australia and establishes administrative procedures relating to mineral resources on Crown land including Conservation Reserves and other Environmentally Sensitive Lands	Proponent applies for exploration or mining licenses to gain access to mineral resources	Granting of the mining tenement and compliance with all conditions attached to the tenement. Tenements include: Exploration Licenses (E) Prospecting Licenses (P) Special Prospecting Licenses (SPL) Mining Leases (M) Retention Leases (R) General purpose Leases (G) Miscellaneous Licenses (L)
Native Title Act 1993	Australian Native Title Office	Provides a mechanism for recognition and protection of Native Title, for validation of past acts and for compensation where Native Title has been extinguished. Importantly, the Act establishes a mechanism for determination of Native Title over an area based on the historical ties between Aboriginal people and their traditional lands.	Application for a Mining Lease	Under S29 of the Act, the proponent must undergo an approval process before a Mining Lease can be granted to mine

State Legislation				
Legislation	**Agency**	**Brief Description**	**Relevance to Project**	**Action**
Rights in Water and Irrigation Act 1914	Department of Environment (Water and Rivers Commission)	Governs water resource management and allocation in Western Australia ensuring water resources are comprehensively and appropriately managed	Mining activities requiring water allocation from a specified water source	The Act requires licensing to ensure that the water resources of the State are utilised in a sustainable manner. S5C: Licence to take water from any watercourse, wetland or underground source. S11 and 21A: Permit to obstruct water courses or wetland. S17: Permit to obstruct, destroy or interfere with watercourses, race, drain, dam or reservoir on private or crown land.
Soil and Land Conservation Act, 1945	Department of the Environment	To reduce land degradation and promote soil conservation	To minimise land degradation associated with International Minerals' mining activities	The Act requires management strategies to be developed and implemented throughout the project
Wildlife Conservation Act 1950	Department of Conservation and Land Management (CALM)	Protects declared or priority flora and fauna by enforcing measures that identifies their importance within specified mining operations	Actions that will clearly injure or harm protected flora and fauna that have been declared as threatened. The identification of rare or endangered flora through biological surveys within the project area	Under S23F of the Act, the taking of protected flora that has also been declared as threatened requires the approval of the Minister for the Environment. Under S12(2)(b) of the Act, actions that will affect threatened fauna requires a license, which is provided by CALM

Other Requirements		
Requirement	**Agency**	**Application**
National Environmental Protection Measures (NEPM) - Ambient Air Quality Standards	National Environment Protection Council	NEPM's are broad framework-setting statutory instruments defined in the NEPC Act. Providing a monitoring standard for appropriate levels of dust and particulate matter http://www.ephc.gov.au/nepms/air/air_nepm.html
Dangerous Goods (Transport road & rail) Regulation 1999	Department of Environment & Conservation	To reduce the risks of personal injury, property damage and environmental harm arising from the transport of dangerous goods by road or rail.
Environmental Protection (Rural landfills) Regulation 2002	Department of Environment & Conservation	Provides regulations to which rural landfills must comply
Environmental Protection (Noise) Regulation 1997	Department of Environment & Conservation	Noise limits, methods for noise assessment and control
Environment Protection (Controlled Waste) Regulations 2001	Department of Environment & Conservation	Provides regulations associated with the transport and disposal of Schedule 1 waste.
Environmental Protection (Clearing of Native Vegetation) Regulations 2004	Department of Environment & Conservation	Provides regulations associated with clearing native vegetation
Explosives and Dangerous Goods (explosives) Regulation 1963	Department of Environment & Conservation	Provides regulations associated with the purchase and use of explosives
Explosive and Dangerous Goods (Dangerous Goods Handling and Storage) Regulations 1992	Department of Environment & Conservation	Provides regulations associated with the handling and storage of explosives
Mine Safety and Inspection Regulations 1995	Department of Industry and resources	Regulations relating to the safety of mines and mining operations and the inspection and regulation of mines, mining operations and plant and substances supplied to or used at mines; to promote and improve the safety and health of persons at mines.

8.0 Procedure for Identifying Environmental Objectives, Targets and Indicators

8.1 Purpose

To establish environmental objectives, targets and indicators for the construction phase of International Minerals' iron ore mine and downstream processing plants.

8.2 Scope

The environmental objectives, targets and indicators identified in this procedure are specific to the construction phase of International Minerals' iron mine and downstream processing plants.

8.3 Definitions

- **Environmental Objective –** overall environmental goal, arising from the environmental policy, that an organisation sets itself to achieve, which is quantified where practicable.

- **Environmental Target** – a performance requirement that arises from the environmental objectives that must to be set in order to achieve those objectives.

- **Environmental Performance** – measurable results of the environmental management system, related to an organisation's control of its environmental aspects, based on its environmental policy, objectives and targets.

8.4 Responsibilities

It is the responsibility of the International Minerals Environmental Manager to:

- develop objectives, target and indicators;

- ensure the objectives and targets are monitored and reviewed and a contingency plan is implemented in the event that targets are not being met;

- update the environmental objectives, targets and indicators; and

- inform all personnel and contractors of International Minerals' environmental objectives, targets and indicators.

All inducted International Minerals staff and contractors must ensure the environmental objectives, targets and indicators are achieved.

8.5 Procedure

8.5.1 Establishing Environmental Objectives, Targets and Indicators

- The environmental objectives, targets and indicators are identified by taking the following into account:
  - the International Minerals Environmental Policy;
  - legal requirements;
  - environmental aspect and impacts;
  - environmental management plans and monitoring; and
  - relevant stakeholders.

Environmental objectives and targets will be set for all environmental impacts which receive a high to significant risk through the environmental risk assessment process

8.5.2 Register of Environmental Objectives Targets and Indicators

Register

All environmental objectives, targets and indicators are entered and held within International Minerals' *Register of Environmental Objectives, Targets and Indicators* **(DIN 09)**.

Review of Objectives, Targets and Indicators

- All objectives, targets and indicators will be periodically reviewed and amended as required.

- The review process will include:
  - routine inspections and monitoring;
  - internal and external audits; and
  - management reviews.

- All amendments are to be entered into the *Register of Environmental Objectives, Targets and Indicators* **(DIN 09)** by the Environmental Manager.

8.6 Related Documentation

DIN-01 Environmental Policy
DIN-04 Procedure for Determining Environmental Aspects and Impacts
DIN-06 Procedure for Legal and Other Requirements
DIN-07 Register of Legal and Other Requirements
DIN-09 Register of Environmental Objectives, Targets and Indicators

9.0 Register of Environmental Objectives, Targets and Indicators

Aspect	Objective	Target	Indicator
Clearance & disturbance of land for construction activities	Protect Declared and Priority Flora	No loss of Declared and Priority Flora, unless authorised	Record of approved clearing areas Site inspections
	No overclearing of vegetation	Clearance and disturbance will only occur in identified areas No unauthorised clearing	Project design clearing footprint Site inspections
	Conserve and reuse the vegetation and topsoil which contains seeds, organic matter and micro-organisms for re-establishing vegetation on rehabilitated areas	Regular inspections undertaken to ensure vegetation is being cleared and stockpiled in appropriate locations	Site inspections Clearing operations will comply with the CEMP
	Avoid disturbance to sites of Aboriginal heritage significance	No disturbance to sites of Aboriginal heritage significance	Comply with the *Aboriginal Heritage Act 1972-1980* Site inspections
	Sites that cannot avoid impact ensure disturbance is managed in accordance with the *Aboriginal Heritage Act 1972-1980*	Impact to sites of Aboriginal heritage significance will be managed in accordance with the *Aboriginal Heritage Act 1972-1980*	Comply with the *Aboriginal Heritage Act 1972-1980* Site inspections
	Maintain the abundance, species diversity and geographical distribution of terrestrial fauna	No considerable impact to fauna species during the construction phase of the project	Site inspections Comply with DEP and CALM relevant regulations
	Protect threatened fauna.	No loss of threatened fauna, unless authorised	Record of fauna mortality

Aspect	Objective	Target	Indicator
Generation of air pollution (Dust)	Minimise impact upon visual amenity from dust	Ensure visual amenity is maintained	Site inspections
	Minimise the generation of dust during the construction phase (earthworks, traffic, and unsealed areas)	Average monitored dust level less than target specified by International Minerals' Dust Management strategy. PM_{10} maximum allowable concentration is 50ug/m^3 over a 1 day averaging period. $PM_{2.5}$ maximum allowable concentration is 25ug/m^3 over a 1 day averaging period	Dust monitoring records. NEPM Ambient Air Quality Standards 1998
	Minimise environmental harm caused by dust generation	Minimal impact upon flora and fauna occurring adjacent to construction activities	Vegetation monitoring programme Site inspections
	Avoid nuisance dust levels and ensure other land users do not experience potential health hazards	PM_{10} maximum allowable concentration is 50ug/m^3 over a 1 day averaging period. $PM_{2.5}$ maximum allowable concentration is 25ug/m^3 over a 1 day averaging period	Record of complaints from public or regulatory authorities NEPM Ambient Air Quality Standards 1998
Generation of noise pollution	Implement all practicable measures to prevent or control the generation of noise from the operations.	Average monitored noise level less than targeted specified by International Minerals' Noise Management strategy. 85 dB (A) over an eight hour period.	Site inspections Environmental Protection (Noise) Regulations 1997
	Implement all practicable measures to prevent or control the exposure of workers to excessive noise levels.	Average monitored noise level less than targeted specified by International Minerals Noise Management strategy. 85 dB (A) over an eight hour period.	Site inspections Environmental Protection (Noise) Regulations 1997

Aspect	Objective	Target	Indicator
Waste generation and disposal	To maximise re-use and recycling of waste materials	No recyclable materials disposed of to landfill No re-usable materials disposed of to landfill	Site inspections (Waste disposal register) DEP Code of Practice for Rural Landfill Management (1996) Ground water monitoring
Discharge of waste water from construction activities	To manage and dispose of all waste water in an appropriate manner to cause no environmental harm	No contamination of soil and water resources No major erosion caused by stormwater drainage	Site inspections
Spillage or leakage of hazardous substance	All waste materials to be disposed of in an approved manner	No improper disposal of waste	Site inspections (Waste disposal register) DEP Code of Practice for Rural Landfill Management (1996) Ground water monitoring
	Ensure that hazardous wastes are properly collected, contained, transported, treated and disposed of	No unapproved or undocumented disposal of hazardous waste	Site inspections (Waste disposal register) Explosives and Dangerous Goods Act 1961, the Dangerous Goods Regulations 1992

Aspect	Objective	Target	Indicator
	All hydrocarbons to be contained and handled in a manner which minimises spillage and leakage	No uncontrolled spillage of fuels and oils	Site inspections (Waste disposal register) Guidelines for Oil Farming and Oily Waste Dangerous Goods Regulation 1992
Spillage or leakage of hazardous substance	To prevent inappropriate disposal of waste oil and other hydrocarbons	No unapproved or undocumented disposal of waste oil	Site inspections (Waste disposal register) Guidelines for Oil Farming and Oily Waste
Release of pollutants into marine ecosystems	To maintain adequate level of water quality in waters surrounding port	No exceedance of marine water quality limits	ANZACC Guidelines for Fresh & Marine Water Quality 2000
Release of wastewater from desalinisation plant	To regulate and monitor marine wastewater outfall and its impact on marine ecosystems	Ensure dispersion and advection of the dense (brine and heat) plume emission	Ensure salinity variation resulting from the discharge is no greater than 5% above ambient level for more than 1% of the time. Ensure toxicant concentrations do not exceed 90% species protection levels at the end of outfall pipe for more than 5% of the time

Aspect	Objective	Target	Indicator
Increased fishing	• To reduce the effects of fishing by International Minerals employees on fish stocks • To reduce the effects on coastal habitats from the activities of International Minerals employees	• Encourage compliance with established bag limits • Limit effect on coastal habitat	• Catch size limit. • Monitor recreational areas for degradation from recreational activities.

10.0 Procedure for Environmental Action Plan

10.1 Purpose

The purpose of this document is to:

- establish a programme that enables International Minerals to achieve its environmental objectives and targets as well as the general requirements of its Environmental Policy;
- determine the procedures that achieve International Minerals' objectives and targets; and
- assign individual responsibility for achieving International Minerals' environmental objectives and targets.

10.2 Scope

This procedure:

- describes the system in place for achieving the project objectives and targets; and
- provides the link between the EMS planning stage, and the implementation stage.

10.3 Definitions

Environmental Action Plan – a procedure that records the environmental management processes implemented to an action, who is responsible for that action and when the action has been completed.

10.4 Responsibilities

The International Minerals Environmental Manager is responsible for implementing, maintaining, and updating the Environmental Action Plan.

10.5 Procedure

10.5.1 Implementation of Environmental Action Plan

- The Environmental Action Plan (EAP) administers a framework that addresses the needs for achieving International Minerals' environmental objectives and targets.
- The Environmental Action Plan identifies the following objectives:
  - what action is being undertaken;
  - who is responsible for carrying out a particular action;
  - when the action is commenced; and
  - when the action is complete.
- An Environmental Action Plan Register is represented in **DIN 11** and outlines the framework that must be followed when carrying out this process.
- The environmental objectives and targets will be monitored and reviewed, in order to meet the requirements of the Environmental Policy.

10.6 Related Documentation

DIN-01 Register of Documents

DIN-09 Register of Environmental Objectives, Targets and Indicators

DIN-11 Register of Environmental Action Plan

11.0 Register of Environmental Action Plan

Action	Responsibility	Commencement Date	Completion Date

12.0 International Minerals Organisation Structure and Management Responsibilities

12.1 Purpose

To assign roles and responsibility to personnel working on the Balmoral South project enabling the development, maintenance, implementation and improvement of the International Minerals Environmental Management System.

12.2 Scope

The implementation of the EMS applies to all International Minerals and contractor personnel working on the project.

12.3 Responsibilities

A visual representation is presented in **Appendix D** showing International Minerals' Organisational Structure.

12.3.1 International Minerals Board of Directors

Quality Plan Responsibilities

- Responsible for the project performance of the Project Manager.
- Responsible for reviewing the quality system and ensuring that the quality system requirements are continually addressed throughout the project.

EMS Responsibilities

- Support the implementation of the EMS.
- Undertake management reviews of the EMS, including environmental objectives, targets and indicators.

12.3.2 International Minerals Project Manager

Quality Plan Responsibilities

- Accountable to the International Minerals Board of Directors.
- Management and execution of the project in terms of timely completion, within the budget, and specified level of quality.
- Directional control over the project team through day to day liaison with the Site Manager.
- Review Quality Management System application to ensure integration throughout the project.

EMS Responsibilities

- Support the implementation of the EMS.

- Ensure the environmental risk assessments are performed by International Minerals and contractor personnel.

- Clarification of legal environmental requirements.

- Resolution of disagreements pertaining to non-conformances.

- Undertake management review of the EMS.

12.3.3 International Minerals Environmental Manager

Quality Plan Responsibilities

- Accountable to the Project Manager.

- Implement the quality plan in all works being undertaken during the project.

EMS Responsibilities

- The site representative responsible for implementing, maintaining, reviewing and updating the EMS for the construction phase of the project.

- Perform any additional environmental risk assessment, once construction has commenced, and update the *Register of Environmental Aspects and Impacts* **(DIN 05)** accordingly.

- Update the *Register of Legal and Other Requirements* **(DIN 07)**, and clarify any legal issues.

- Update the *Register of Environmental Objectives, Targets and Indicators* **(DIN 09)**.

- Record, maintain and respond to internal communications, including communication of issues to relevant personnel.

- Control all EMS records.

- Forward external communications to International Minerals Site Manager as required in responding to external communications.

- Provide environmental assistance in case of an emergency.

- Provide assistance to contractors in the preparation, reviewing and approval of EMP's, in addition to general assistance with any environmental site issues.

- Monitor construction activities, and identify non-conformances or the need for corrective or preventative actions.

- Arrange management review and internal audits.

12.3.4 International Minerals Occupational Health and Safety Manager

Quality Plan Responsibilities

- Accountable to the Project Manager.

- Implement the quality plan in all works being undertaken during the project.

EMS Responsibilities

- Incorporation of environmental management into site induction.

12.3.5 International Minerals Operations Manager

Quality Plan Responsibilities

- Accountable to the Project Manager.

- Implement the quality plan in all works being undertaken during the project.

EMS Responsibilities

- Responsible for communicating all relevant environmental issues to employed personnel, including sub-contractors.

- Forwarding of all external environmental communication to International Minerals personnel.

- Provide assistance in any environmental audits or inspections being undertaken.

- Address non-conformances and corrective or preventative action requests promptly.

12.3.6 International Minerals and Contractor Personnel

- Understand and implement the EMS.

- Conduct activities in an environmentally responsible manner.

13.0 Procedure for Environmental Training

13.1 Purpose

- To provide environmental training that enables site personnel to minimise impacts, increase awareness and understand their environmental responsibilities.

- To build understanding, and encourage International Minerals and contractor personnel to participate and cooperate in protecting the environment.

13.2 Scope

This procedure:

- covers the identification of environmental training requirements for site personnel involved in the Balmoral South project;

- covers types, methods and frequency of environmental training; and

- applies to all International Minerals and contractor personnel, at all levels of management.

13.3 Responsibilities

- Training needs will be identified by International Minerals' Environmental Manager.

- Training will be performed during the site induction by International Minerals' Environmental Manager.

- Responsibility for monitoring the environmental training and inductions is with the International Minerals Environmental Manager.

13.4 Procedure

13.4.1 Identification of Laws and Regulations Requiring Training

The Western Australian *Occupational Safety & Health Act, 1984* places a duty of care on all employers to ensure that employees are provided with a safe place of work.

13.4.2 Providing the Training

- The International Minerals Environmental Manager will develop the detailed environmental training programme by using the components identified in the *Register for Environmental Training Requirements* **(DIN 14).**

- The International Minerals training programme will be of a standard that enables employees to understand their environmental obligations and conduct their work in an environmentally competent manner.

- The International Minerals training programme will identify the potential environmental consequence of departure from specific operating procedures.

13.4.3 Monitoring Training Hours

General International Minerals Site Induction

- To show compliance with the *Occupational Safety & Health Act, 1984* the training hours will be collected and monitored.

- The International Minerals Environmental Manager will record site induction details undertaken by International Minerals, including hours and inductee name, job title and job description.

Contractor Training

- Where training is organised or carried out by the contractor, the contractor will retain records of the training hours as well as the individual's name, job title, job description and reasons for training.

- These records will be periodically inspected by the International Minerals Environmental Manager.

13.5 Related Documentation

DIN-01 Environmental Policy
DIN-15 Procedure for Internal Communication
DIN-26 Procedure for Record Control
DIN-27 Procedure for Internal Audit

14.0 Register for Environmental Training Requirements

Employees will be required to undergo training in the following areas:

- Dust management:
  - requirement for dust management;
  - standards applicable to the project;
  - methods of dust suppression; and
  - dust monitoring programme.

- Traffic management:
  - rationale and requirement for traffic management; and
  - monitoring programme.

- Non-hazardous waste management:
  - reason for waste management;
  - waste storage;
  - disposal methods;
  - waste segregation; and
  - recycling and reuse.

- Hazardous materials:
  - rationale behind hazardous materials management programme;
  - hazardous materials used on the project; and
  - storage and handling procedures.

- Spillage (including hydrocarbons and chemicals):
  - requirement for programme;
  - first spill response;
  - clean up procedures; and
  - monitoring and rehabilitation.

- Noise management:
  - requirement for programme;
  - reduction techniques during construction; and
  - feedback mechanisms.

- Recreational use management;
  - requirement for recreational use management;
  - the requirements of regulatory agencies relating to recreational activities;
  - environmental impact of recreation activities; and
  - reducing environmental impact.

- Aboriginal heritage management:
  - reason for aboriginal heritage management;
  - location of any significant sites (as appropriate); and
  - management of aboriginal sites.

- Flora & Fauna Management:
  - reason for flora & fauna management;
  - environmental impact reduction techniques during construction ; and
  - monitoring and rehabilitation.

- Environmental Risks Register:
  - purpose
  - elements; and
  - update.

- Employee Responsibilities:
  - environmental management programme on site ;
  - awareness;
  - responsibilities; and
  - implementation.

15.0 Procedure for Internal Communication

15.1 Purpose

- To receive, consider and respond to communication from International Minerals and contractor personnel.

- To establish and maintain procedures for reporting and recording relevant internal communication.

- To inform International Minerals and contractor personnel of all relevant environmental issues associated with the project.

15.2 Scope

This procedure covers all relevant internal communication pertaining to environmental issues.

15.3 Responsibilities

- International Minerals and contractor personnel are expected to communicate all environmental issues to the Environmental Manager that are:
  - outside their responsibility;
  - not adequately managed; and
  - issues of environmental concern.

- The Environmental Manager or appointed delegate will review and where appropriate respond to all internal communication relating to the environment.

- Contactors are expected to communicate any relevant environmental issues to all personnel directly or indirectly employed by them during the project.

- The Environmental Manager is expected to maintain and record all relevant internal communication relating to the environment.

15.4 Procedure

15.4.1 General

- International Minerals and contractor personnel will communicate to the Environmental Manager all environmental issues that are:
  - outside their responsibility;
  - not adequately managed; and
  - issues of environmental concern.

- Regular meetings will be held between the Project Manager and staff to communicate all relevant environmental information.

- Environmental issues will be communicated between toolbox meetings and morning start up meetings.

- The Environmental Manager must ensure effective communication mechanisms are in place for ground staff to communicate environmental issues to the Environmental Manager.

15.5 Related Documentation

DIN-13 Procedure for Environmental Training
DIN-16 Procedure for External Communication
DIN-26 Procedure for Record Control
DIN-27 Procedure for Internal Audit
DIN-28 Procedure for Management Review

16.0 Procedure for External Communication

16.1 Procedure

- To receive, consider and respond to communications from external stakeholders.

- To provide the International Minerals Environmental Manager with all relevant communications received.

16.2 Scope

This procedure covers:

- International Minerals and contractor personnel for the duration of the project; and

- communication received by International Minerals and contractor personnel from external sources.

16.3 Responsibilities

- The International Minerals Environmental Manager is responsible for dealing with relevant external communications relating to environmental issues.

- All International Minerals and contractor personnel are required to report all external communications with respect to environmental issues to the International Minerals Environmental Manager.

16.4 Procedure

- International Minerals and contractor personnel will forward all external communications to the International Minerals Environmental Manager.

- The International Minerals Environmental Manager or appointed delegate will review the communication and decide on the appropriate course of action.

- The International Minerals Environmental Manger or appointed delegate will prepare a report regarding the nature of the environmental issue raised externally. This report will either state :
  - the required action resulting from the external communication; or
  - no action is required.

- Feedback to external communication must be undertaken within 48 hours, followed by communication outlining the corrective action taken.

- All records must be retained in accordance with the *Procedure for Record Control* **(DIN 24)**.

16.5 Related Documentation

DIN-26 Procedure for Record Control
DIN-28 Procedure for Management Review

17.0 Procedure for Environmental Management System Documentation

17.1 Purpose

To ensure that International Minerals establish and maintain information, in paper or electronic form to:

- describe the core elements of the EMS and their interaction; and
- provide direction to related documentation.

17.2 Scope

This procedure identifies the significant components of the EMS and describes how the EMS operates.

17.3 Responsibilities

The International Minerals Project Manager is responsible for the maintenance and ensuring International Minerals and contractor personnel understand how the EMS operates.

17.4 Procedure

- All EMS documents contained within and related to the core components of the EMS will be assigned a unique Document Identification Number **(DIN)** that enable International Minerals and contractor personnel to locate specific documents. Documents related to, but not contained within the EMS will be sufficiently referenced to be accessible.

- International Minerals and contractor personnel will identify the EMS documents they require by utilising the *Document Register* **(DIN 02)** to locate and ascertain the specific information they need regarding the EMS.

- The core components of the EMS are:

    - *The Environmental Policy* – demonstrating the commitment to and providing direction for continual improvement in environmental performance;

    - *Environmental Aspects & Impacts* – identification and understanding of Balmoral South Project impact upon the environment;

    - *Legal & Other Requirements* – complying with relevant legislative requirements;

    - *Environmental Objectives and Targets* – demonstrating how International Minerals plans to achieve its environmental policy;

    - *Organisational Structure and Responsibility* – defining the structure of International Minerals and establishing who is responsible for certain aspects of the EMS;

    - *Procedures* – used to define how, when and by whom the components of the EMS are to be implemented;

    - *Registers* – used to store results of the procedure, where those procedures are used in developing the EMS; and

- *Environmental Action Plan* - a procedure that records the environmental management implemented to an action, who is responsible for the action and when the action has been completed.

18.0 Procedure for Document Control

18.1 Purpose

To ensure all documents can be readily located and that current revisions are available for use by relevant personnel.

18.2 Scope

This procedure covers all procedures, register, and guidelines that comprise International Minerals' Environmental Management System.

18.3 Responsibilities

The Project Manager is responsible for ensuring all EMS documents are controlled in accordance with International Minerals' Project Quality Plan.

18.4 Procedure

- The International Minerals Project Manager will identify the EMS documents that require "Controlled Document" status and supply the International Minerals Document Controller with the required personnel for distribution.
- Documents will be controlled in accordance with the International Minerals Project Quality Plan.
- Documents will be controlled by the International Minerals Document Controller to ensure current revisions are available to the relevant personnel.
- Superseded, revised or deleted Controlled Documents will be destroyed to ensure against unintended use.
- The transmissions of documents will be controlled and recorded by the use of document control forms.

18.5 Related Documentation

International Minerals' Project Quality Plan

19.0 Procedure for Operational Control

19.1 Purpose

To identify and implement necessary control measures and procedures for International Minerals' activities that have or potentially have significant environmental impacts.

19.2 Scope

This procedure determines the operational procedures and control measures required to manage the aspects and impacts associated with International Minerals' construction phase activities.

19.3 Responsibilities

- The International Minerals Environmental Manager is responsible for ensuring all constructed related Environmental Management Plans (EMP) are implemented.
- The International Minerals Environmental Manager is responsible for ensuring International Minerals' construction phase activities follow the operational procedures and control measures outlined in the relevant EMPs.
- The relevant management controls will be communicated to all project personnel, clients, suppliers and contractors, as appropriate.
- International Minerals and contractor personnel are responsible for ensuring their own construction activities follow the operational procedures and control measures outlined in the EMPs.

19.4 Procedure

- All significant environmental impacts have been identified within the *Register of Environmental Aspects and Impacts* **(DIN 05).**
- The issue specific EMPs develop will be implemented to mitigate the environmental risks resulting from the construction activities.
- If management controls do not adequately mitigate impacts then they will be reviewed to ensure the project does not deviate from environmental policy, objectives and targets.
- International Minerals and contractor personnel are required to understand the environmental aspects and implement the environmental controls during construction.
- Any further environmental impacts that are identified as a result of construction activities will be incorporated into the relevant EMPs.

19.5 Related Documentation

- International Minerals' Environmental Impact and Management Programme
- Construction Environmental Management Plan;
- Preliminary Decommissioning and Closure Management Plan;

- Recreational Use Management Plan;

In addition to the above EMPs, additional management strategies have been committed to in the Section 38 Referral document, to which this EMS is attached.

20.0 Procedure for Emergency Preparedness and Response

20.1 Purpose

To ensure that all International Minerals and contractor personnel understand their responsibilities and roles should an emergency occur during the construction phase of the project.

20.2 Scope

This procedure outlines the response mechanisms International Minerals need to adopt to ensure they are equipped to handle emergency situations arising during the project's construction phase. International Minerals will define and maintain procedures for dealing with environmental incidents and potential emergency situations. The procedures must take into account incidents arising or likely to arise as a consequence of abnormal operating conditions, accidents and potential situations.

20.3 Definitions

Emergencies - are defined as any incident that has the potential to affect human safety or health, or the environment.

20.4 Responsibilities

The International Minerals Environmental Manager is responsible for developing emergency plans and procedures to ensure an appropriate response to unexpected or accidental incidents.

20.5 Procedure

20.5.1 Emergency Plans

The following points will be considered when developing an emergency plan:

- Environmental Sensitivities of the Site - proximity to groundwater or coastal zones, residential areas, water supplies and surface water:
  - creeks;
  - rivers; and
  - lakes.

- Site Layout - the location of significant site areas must be taken into account:
  - storage tanks;
  - process facilities;
  - emergency equipment;
  - fire water containment on site;
  - drainage plan for sewerage;
  - stormwater; and
  - chemical storage sites.

- Site Risk Analysis
  - What can go wrong?
  - What are the environmental risks?
  - What is the probability?
  - How often might it occur? and
  - How can the environmental risk be lessened?

- Emergency situations - that potentially may occur include:
  - fire and/or explosions;
  - power failure;
  - failure of process equipment;
  - failure of pollution control equipment;
  - liquid spills;
  - natural disaster e.g. fire, flood, lightning strikes etc;
  - non routine conditions – emergency venting of pressure vessels;
  - equipment maintenance; and
  - allocate responsibilities for actions and authority to take action.

- Alerting and Notification Procedures - what level of alert is required and who determines this during an event:
  - employee / staff;
  - statutory authorities e.g. EPA;
  - police / fire brigade / press; and
  - consider telephone numbers for day, night and weekend.

- Spill Response:
  - conditions of bunds;
  - availability and location of spill response material and equipment;
  - application of fire fighting foam to minimise toxic gas release;
  - availability of Material Safety Data Sheets;
  - drain plugging material;
  - availability of vacuum trucks (eductors);
  - availability of neutralising chemicals;
  - inventory of chemical materials held on site; and
  - drainage plan.

- Pollution Treatment Facilities:
  - resource available on-site and off-site; and
  - disposal of contaminated firewater.

- Training Programme:
  - emergency response team training;
  - records of training;
  - best and worst case scenarios;
  - practice records;
  - training to include:
    - § incident management;
    - § site security;
    - § public relations; and
    - § communications.

- Evacuation Procedures
  - site; and
  - community – methods of community contact.

- Distribution of Emergency Plan
  - internally;
  - community; and
  - emergency services.

- Review
  - annual incident summary and review; and
  - annual plan review and update.

20.5.2 Environmental Reporting

- The International Minerals Environmental Manager will prepare, when practicable, an *Environmental Incident Report* **(Appendix E)** after an emergency has arisen. The report will then be actioned and filed as per the *Procedure for Record Control* **(DIN-24)**.

20.6 Related Documentation

Appendix E	Environmental Incident Report
DIN-26	Procedure for Record Control

21.0 Procedure for Monitoring Construction Activities

21.1 Purpose

- To ensure all construction activities conducted on site by International Minerals and their contractors adhere to the environmental objectives and targets and environmental policy through regular monitoring and inspections.

- To ensure all construction activities undertaken by International Minerals and its contractors are being monitored as state in the EMPs.

- To gauge progress towards the environmental objectives and targets.

21.2 Scope

This procedure covers International Minerals and its contractors performing site works on the construction of the mine, plant and infrastructure.

21.3 Responsibilities

- The International Minerals Environmental Manager will undertake regular inspections and environmental monitoring in accordance with the schedule outlined in **Appendix F**.

- All contractors will facilitate and assist in inspections and monitoring wherever applicable.

- the International Minerals Project Manager will promptly address non-conformances and/or preventative or corrective actions raised by the inspection and monitoring process.

21.4 Procedure

21.4.1 Establishing the Inspection and Monitoring Process

Education and Training

The concept of inspection and monitoring will be introduced to all International Minerals employees and contractors during the initial site induction. It will be reinforced during regular 'toolbox' meetings.

Schedule

- The inspection and monitoring schedule will be determined in consultation with the International Minerals Project Manager and contractors and will conform to the requirements set out in the Environmental Management Plans. A proposed monitoring schedule is presented in **Appendix F**.

- All monitoring will be conducted in accordance with the relevant Australian Standards. Where laboratory analysis is required, the laboratory will be NATA registered.

21.4.2 Implementing the Inspection and Monitoring Process

Inspection and Monitoring

The International Minerals Environmental Manager will inspect and monitor the environmental performance of International Minerals and its contractors during construction activities, using the monitoring schedule as a guideline. The schedule may be modified over time.

Record Control

All monitoring and inspection records will be retained and documented as outlined in the *Procedures for Document Control* **(DIN 18)** by the International Minerals Environmental Manager.

Review

- The International Minerals Environmental Manager will assess conformance and improvement requirements by reviewing the findings of the inspection and monitoring process against the:
  - Environmental Policy;
  - *Register of Environmental Objectives, Targets and Indicators* **(DIN 09);**
  - *Environmental Compliance Register* **(DIN 23)**; and
  - contractor EMPs as applicable.

- The International Minerals Project Manager will determine all non-conformances, identify the cause and, where practicable, identify a corrective action.

- The International Minerals Project Manager will assess any potential non-conformances observed and will identify the cause and, where practicable, develop a preventative action.

- Where implementation of a procedure is problematic, the International Minerals Environmental Manager will review options for the:
  - relevant procedure;
  - *Register of Environmental Objectives, Targets and Indicators* **(DIN 09);**
  - *Environmental Compliance Register* **(DIN 23)**; and
  - EMS.

- The International Minerals Project Manager will note any environmental hazards not addressed by the Contractor's EMP/EMS and, where practicable, appropriate corrective and/or preventative actions identified.

Reporting

- Monthly informal reports will be submitted to the Project Manager summarising the findings of any inspections and monitoring procedures undertaken since the previous report.

- All actual and potential non-conformances along with the recommended preventative actions will be detailed in the weekly report (refer to *Procedures for Non-conformance and Preventative and Corrective Actions,* **DIN-24**).

- Where applicable, the report will recommend modifications to the:
  - specific procedures;
  - *Register of Environmental Objectives, Targets and Indicators*
  - *Environmental Compliance Register* **(DIN 23)**; and
  - EMS in general.

21.5 Related Documentation

DIN-01 Environmental Policy

DIN-09 Register of Environmental Objectives, Targets and Indicators

DIN-24 Procedure for Non-conformance and Corrective and Preventative Action

DIN-26 Procedure for Record Control

Contractor Environmental Management Plans and Procedures

Contractor EMS

22.0 Procedure for Environmental Compliance

22.1 Purpose

To periodically evaluate International Minerals' compliance to relevant legal and other requirements to which it subscribes.

22.2 Scope

The *Environmental Compliance Register* **(DIN 23)** applies to legislative compliance during the construction phase of the project.

22.3 Responsibilities

The Environmental Manager is responsible to maintain the register to ensure compliance to relevant legislation and other requirements.

22.4 Procedure

The Environmental Manager will complete the *Environmental Compliance Register* **(DIN 23)** once construction of the project commences. The procedure is based upon the following process:

- **Legislation & other requirements** – Determine relevant legislation and other requirements
- **Evidence of compliance** – records or evidence of compliance (e.g. groundwater abstraction licence, audit)
- **Time Frame** – when is it to be completed or frequency of monitoring or recording (monthly reporting). Records of periodic evaluations
- **Responsibility** – who is responsible for monitoring or recording compliance?
- **Regulatory authority** – who to report information to? (EPA, stakeholders)
- **Status** – what is the current status of the requirement?

The Environmental Manager will prepare any reports required for compliance with licenses and other legislative or regulatory requirements and submit them to the relevant regulatory body.

22.5 Related Documentation

DIN 23 *Environmental Compliance Register*
DIN 7 Register of Legal and Other Requirements

23.0 Environmental Compliance Register

Legislation & Other Requirements	Evidence of Compliance	Time Frame	Responsibility	Regulatory Authority	Status

24.0 Procedure for Non-conformance and Corrective and Preventative Action

24.1 Purpose

- To establish and maintain procedures for defining responsibility and authority for handling and investigating non-conformances.

- To undertake the necessary actions to mitigate environmental impacts caused by non-conformances and implement the required corrective and preventative action.

- To implement and record any changes in the documented procedures, and to update the EMS as a result of corrective and preventative action.

24.2 Scope

- This procedure covers all non-conformances, and corrective actions identified by the Environmental Manager.

- This procedure covers all non-conformances, and corrective actions identified by the Environmental Auditor.

24.3 Responsibilities

- The International Minerals Environmental Manager is responsible for identifying an actual or potential non-conformance.

- The Environmental Auditor is responsible for advising the International Minerals Project Manager when an actual or potential non-conformance is identified.

- The International Minerals Environmental Manager once receiving advice of a non-conformance has the responsibility to:

  - nominate corrective and preventative actions, or provide a formal reply explaining why no action is considered necessary;
  - provide a timetable for implementation of the actions; and
  - nominate an individual who is responsible for the implementation of the action.

24.4 Procedure

24.4.1 Non-conformances

Identifying the Source of Non-conformances

When identifying the source of an actual or potential non-conformance the Environmental Auditor or International Minerals' Environmental Manager will determine the cause (source) of the non-conformance.

Proposed Corrective and Preventative Actions

The Environmental Auditor or International Minerals' Environmental Manager shall propose corrective and/or preventative actions for actual or potential non-conformances. The proposed actions are

suggestions only and the final course of action will be subjected to discussions with relevant International Minerals and contractor personnel.

Advising of Non-conformance

- The Environmental Auditor will advise the International Minerals Environmental Manager of actual or potential non-conformances and the proposed corrective and/or preventative actions that should be undertaken.

- The International Minerals Environmental Manager will advise the relevant International Minerals or contractor personnel that an actual or potential non-conforming activity has been identified along with the proposed corrective and preventative actions.

Agreeing on Corrective and Preventative Actions

- Once the relevant personnel have been advised of the non-conformance the International Minerals Environmental Manager will endeavour to reach an agreement on appropriate corrective and preventative action.

- The International Minerals Environmental Manager will then identify a person responsible for the implementation of the corrective and preventative actions.

Implementing Corrective and Preventative Actions

The designated International Minerals employee will implement the agreed corrective and/or preventative action within the specified time frame.

Recording

- The International Minerals Environmental Manager will document and retain all records of:
  - non-conformances;
  - corrective and/or preventative actions;
  - responsible personnel;
  - specified timeframe; and
  - alterations to the EMS due to the corrective and preventative actions.

- The International Minerals Environmental Manager will record this in the *Register of Corrective and Preventative Actions* **(DIN 25)**.

Resolving Disagreements

- International Minerals or contractor personnel may elect to query the correctness, relevance or importance of the non-conformance or the proposed corrective or preventative actions.

- If no agreement is reached the views of both parties will be documented and presented to the International Minerals Environmental Manager for final resolution.

24.4.2 Following Up Corrective and Preventative Actions

International Minerals Project Manager

- The International Minerals Environmental Manager will follow up all corrective and preventative actions that have been agreed upon by International Minerals or contractor personnel.

- The International Minerals Environmental Manager follow-up methods may include personal communications or a series of meetings. In each instance the follow-up will be directed to the person responsible for corrective and preventative action. The need to formally document the communications will largely be determined by the deficiency of the non-conformance.

- The frequency of the follow-up will be determined by the seriousness of the corrective or preventative action.

Closing Corrective and Preventative Actions

- On conformation that the corrective and/or preventative action has been implemented the Environmental Manager can mark the entry in the *Register of Corrective and Preventative Action* **(DIN 25)** as actioned.

24.5 Related Documentation

DIN-18 Procedure for Document Control
DIN-21 Procedure for Monitoring Construction Activities
DIN-25 Register of Corrective and Preventative Actions
DIN-26- Procedure for Record Control
DIN-27- Procedure for Internal Audits

25.0 Register for Corrective and Preventative Actions

NON-CONFORMANCES	CORRECTIVE AND PREVENTATIVE ACTIONS	Responsible	Timeframe	Action Implemented (Tick)

26.0 Procedure for Record Control

26.1 Purpose

To ensure all records are easily located and available for use by relevant personnel.

26.2 Scope

This procedure covers the control of records. These records include:

- audits/findings;
- site inspections;
- monitoring records;
- external communications;
- training records;
- inspection findings;
- Environmental Management Systems reviews;
- waste removals;
- objectives, targets and indicators;
- Environmental Management Plan; and
- aspects, impacts and risks.

26.3 Definitions

Record – information collected during the execution of the EMS including:

- site inspections;
- inspection findings;
- internal & external communications; and
- monitoring & audit results.

26.4 Responsibilities

The Environmental Manager is responsible to ensure that all records are controlled in accordance with this procedure.

26.5 Procedure

- The document control procedures detailed in the International Minerals' Project Quality Plan apply.

- All incoming records are to be actioned by the International Minerals Environmental Manager.

- The Environmental Manager will identify the necessary action and by whom, and circulate copies as required.

- The Environmental Manager will ensure a filing arrangement is developed enabling records to be safely stored and readily available.

26.6 Related Documentation

DIN-18 Procedure for Document Control
International Minerals' Project Quality Plan

27.0 Procedure for Internal Audit

27.1 Purpose

- To ensure works conducted by International Minerals and contractor personnel are completed in an environmentally responsible manner.

- To ensure the Environmental Management System is being implemented in an effective manner by all International Minerals and contractor personnel.

- To review and update, as appropriate, the Environmental Management System.

27.2 Scope

- This procedure applies to all International Minerals and contractor personnel.

- The internal audit encompasses the Environmental Management System. This is inclusive of all:
  - procedures;
  - environmental management plans;
  - collected data and records; and
  - current work practices.

27.3 Definitions

Environmental management system audit – (ISO 14001:2004, 3.6) a systematic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organisation's environmental management system conforms to the environmental management system audit criteria set by the organisation, and for communication of the results of this process to management.

27.4 Responsibilities

- The Environmental Manager is responsible for arranging internal audits and notifying relevant International Minerals and contractor personnel when an audit is to be conducted.

- The Environmental Manager is responsible for arranging external audits.

- The contractors are responsible for assisting the Environmental Auditor in arranging and performing audits of their facilities and works.

- The Environmental Auditor is responsible for identifying where corrective and preventative action is required.

27.5 Procedure

27.5.1 Initiating the Audit Process

Training and Awareness

The concept of auditing will be introduced to International Minerals and contract personnel during their site induction.

Audit Schedule

The audit and inspection schedule will be arranged in consultation with the International Minerals Project Manager and contractor.

27.5.2 Audit Procedure

Audit Commencement Meeting

- The Environmental Auditor will conduct a commencement meeting with International Minerals and contractor personnel to outline the objectives of the audit. The Auditor will adequately address all issues raised by International Minerals and contractor personnel in this meeting.

- The Auditor will endeavour to accommodate special requests made by International Minerals and contractor personnel.

Review of Documentation and Records

- To ensure all relevant issues are addressed, the Auditor will review the following:
  - the audit schedule;
  - records from the *Procedure for Monitoring Construction Activities* **(DIN 21)**;
  - reports from previous audits; and
  - all documented procedures and registers that comprise the EMS.

- Through the review process the Auditor will determine:
  - conformance with the requirements of the Environmental Management Systems; and
  - conformance with and progress towards the objectives and targets stated in the *Register of Environmental Objectives, Targets and Indicators* **(DIN 09)**.

Site Inspection

- The Auditor will commence the site inspection following the review of all relevant documentation.

- During the site inspection the Auditor will record all environmental aspects deemed relevant to the EMS.

- The Auditor will not produce any illegitimate reporting on any aspects.

Audit Completion Meeting

- The Auditor will hold a completion meeting with International Minerals and contractor personnel to discuss the initial findings of the audit.

- The completion meeting may be used to:
  - review the Register of Corrective and Preventative Actions **(DIN 25)**;
  - acknowledge previous non-conformances that have been addressed;
  - identify any previous non-conformances that have not been attended to; and
  - discuss possible corrective or preventative actions for new non-conformances.

27.5.3 Preliminary Reporting Procedure

Identifying Non-conforming Activities

- The Auditor will analyse the findings of the site inspection and audit meetings.

- Based on the findings, the Auditor will prepare a list stating the actual or potential non-conformances with:
  - applicable regulations;
  - International Minerals environmental policy; and
  - contract agreement.

Proposed Corrective and Preventative Actions

The Auditor will prepare a list of proposed corrective and preventative actions based on the identified non-conformances.

Preparation of Preliminary Audit Report

The Auditor will prepare a Preliminary Audit Report which presents the:

- findings of the inspection and subsequent analysis;
- list of actual and potential non-conformances; and
- proposed corrective and preventative actions.

Distribution List

- A copy of the preliminary audit report will be forwarded to site management personnel.
- The audit report may contain confidential or sensitive information, therefore this report will not be available to the group as a whole.

27.5.4 Final Audit Report

Preliminary Feedback

The Auditor will solicit feedback on the Preliminary Audit Report. In particular, the Auditor will look for:

- agreement to the proposed corrective and preventative actions;
- nomination of the individuals who are responsible for the implementation of the preventative and corrective actions; and
- proposed timing for the implementation and/or completion of the corrective and preventative actions.

Preparation of Final Audit Report

The Auditor will prepare a Final Audit Report which incorporates:

- the preliminary audit report;
- corrective and preventative actions;
- personnel responsible for implementation of the corrective and/or preventative actions along with the proposed timing;
- actions that may have already been implemented; and
- non-conformances or corrective actions which have not been resolved.

Distribution List

A copy of the Final Audit Report will be forwarded to site management personnel.

Management Review

- Information presented in the Final Audit Report can lead to liability implications if the documented information is not acted upon.

- The International Minerals Project Manager is responsible for ensuring that unresolved issues raised in the Final Audit Report are pursued through the *Procedure for Non-conformance and Corrective and Preventative Action* **(DIN 24)**.

27.6 Related Documentation

DIN-01 Environmental Policy
DIN-09 Register of Environmental Objectives, Targets and Indicators
DIN-15 Procedure for Internal Communication
DIN-21 Procedure for Monitoring Construction Activities
DIN-24 Procedure for Non-conformance and Corrective and Preventative Action
DIN-25 Register of Corrective and Preventative Actions

28.0 Procedure for Management Review

28.1 Purpose

- To ensure relevant senior management review the suitability, adequacy and effectiveness of the EMS to changing circumstances.

- To ensure necessary information is available to relevant senior management enabling a comprehensive review of the EMS.

- To update necessary amendments to the environmental policy, objectives, targets and other critical elements of the EMS enabling International Minerals to address any changing circumstances and continually improve the EMS.

28.2 Scope

This procedure applies directly to International Minerals senior management to address any changing circumstances and continually improve the EMS.

28.3 Definitions

Suitability – is the EMS fit for purpose given changing conditions and changing operational environment? Does it suit the purpose? Is the EMS congruent with International Minerals' Environmental Policy?

Adequacy – is the EMS sufficient in relation to the nature and scale of International Minerals' operation?

Effectiveness – is the EMS working to do what it was established to do, is there an improved environmental performance?

28.4 Responsibilities

- The International Minerals Environmental Manager is responsible for organising the EMS management reviews.
- Relevant senior management will discuss and document required changes to the system.

28.5 Procedure

28.5.1 Preliminary Action

- The International Minerals Environmental Manager will organise an annual management review.

- The International Minerals Environmental Manager will notify relevant senior management that a management review of the EMS is required and provide all relevant information to enable the review to be conducted. Relevant information to be provided includes:
  - internal audits;
  - external audits;
  - non-conformances;
  - environmental management plans
  - relevant external and internal communications; and
  - objectives and targets.

28.5.2 Management Review

The review of the EMS will include:

- a review of environmental objectives, targets and performance;
- findings of the EMS audits;
- recommendations for improvement;
- environmental performance; and
- an evaluation of the suitability of the environmental policy and the need for changes due to:
  - changing legislation
  - changes in the products or activities of the organisation
  - advances in science and technology
  - environmental incidents
  - market preferences
  - reporting and communication.

28.5.3 Management Meeting

- The International Minerals Environmental Manager will convene a meeting between relevant senior management to discuss and resolve outcomes from the management review.

- The issues raised and the actions undertaken will be recorded. A schedule for implementation of the actions will be prepared and agreed upon by all relevant parties.

- All documents will be updated as per schedule.

28.5.4 System Acknowledgement

- The International Minerals Environmental Manager will retain the schedule for implementation of management review actions.

- The International Minerals Environmental Manager will amend the schedule when the EMS updates have been implemented.

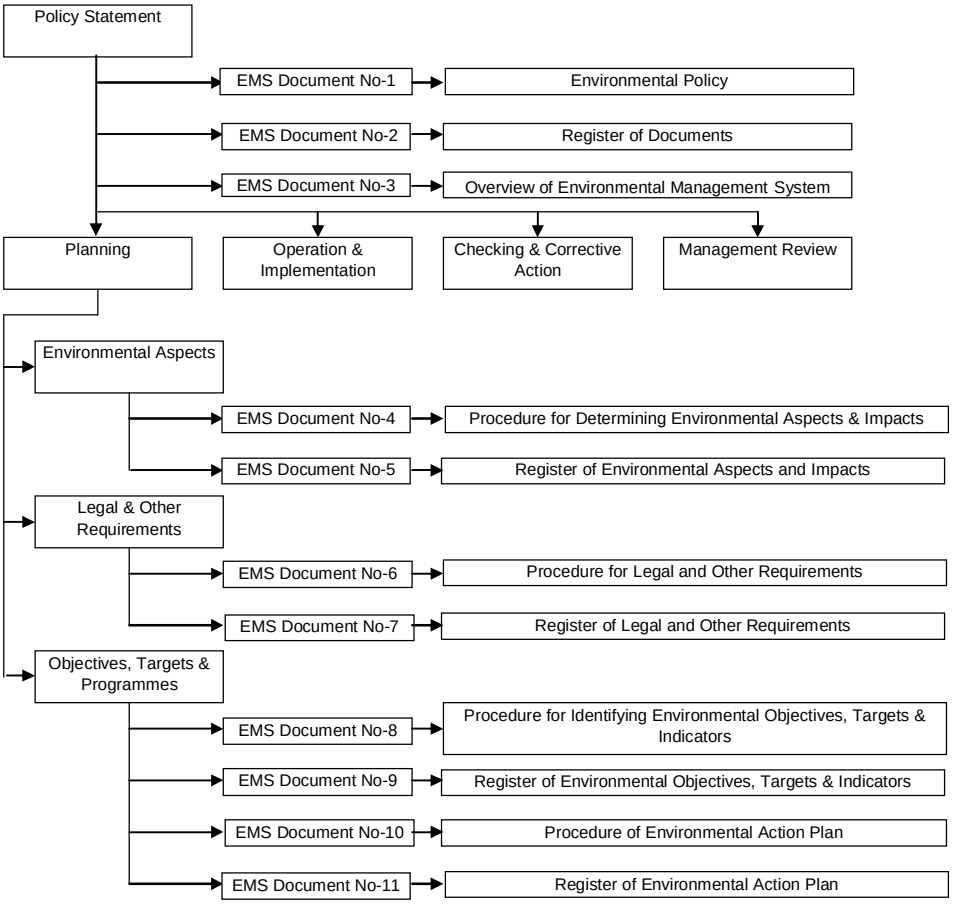
- Implementation of the schedule will follow the Procedure for Non-conformance and Corrective and Preventative Action **(DIN 24)**.

28.6 Related Documentation

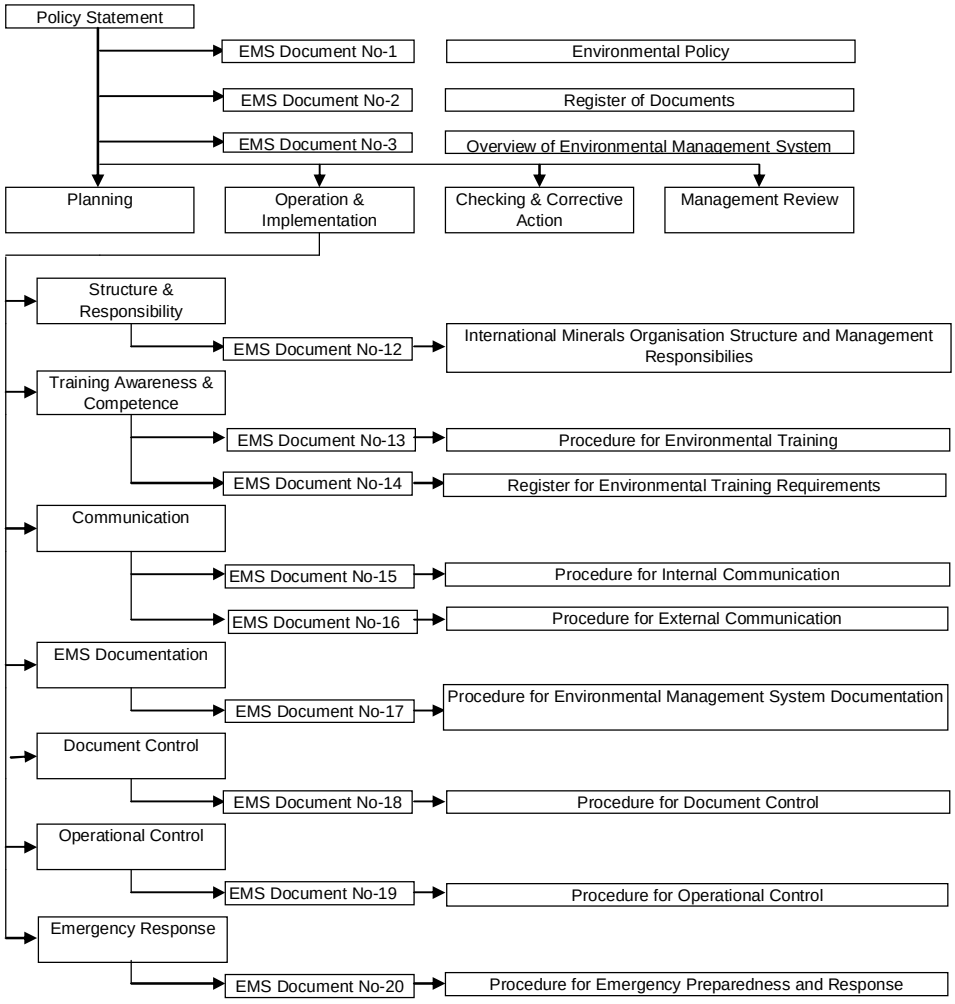
DIN-01 Environmental Policy
DIN-09 Register of Environmental Objectives, Targets and Indicators
DIN-24 Procedure for Non-conformance and Corrective and Preventative Action
DIN-26 Procedure for Record Control

Appendix A – Structure of Environmental Management System

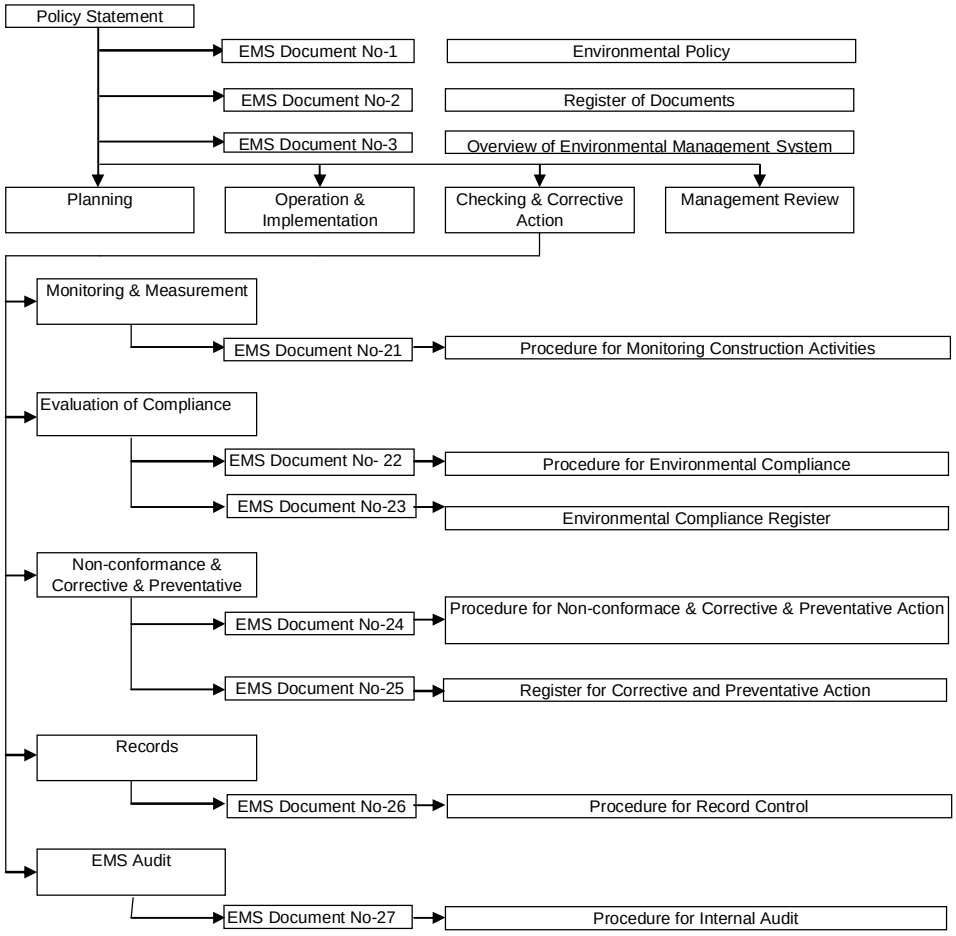
EMS STRUCTURE FLOWCHART - Planning



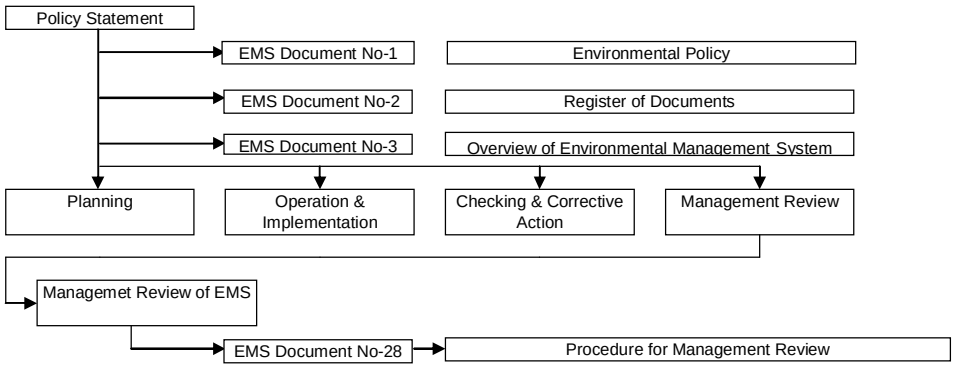
EMS STRUCTURE FLOWCHART - Operation & Implementation



EMS STRUCTURE FLOWCHART - Checking & Corrective Action



EMS STRUCTURE FLOWCHART - Management Review



Appendix B – Qualitative Environmental Risk Assessment

INTRODUCTION

The Qualitative Environmental Risk Assessment has three components:

- a qualitative measure of consequence;
- a qualitative measure of likelihood; and
- applications of a standard Qualitative Risk Matrix to generate the level of environmental risk.

The use of this technique along with the relevant matrices is presented in this section.

MEASURING CONSEQUENCE

Consequence is defined as the direct impact to the environment.

The measure of consequence is broken down into five levels of significance. **Table B.1** defines the extent of impact by each level of the environment and non-conformance.

Table B.1 – Qualitative Measure of Consequence

	Consequence	
Level	**Environmental/Impact**	**Non-conformances**
1. Insignificant	No discernable, adverse environmental impact.	Does not affect Policy or EMS
2. Minor	Discernable effect on the environment but no adverse impact.	Does not conform to specifics of EMS but follows general intent of Policy.
3. Moderate	Measurable adverse impact on the environment (including public amenity).	Does not conform to Policy or EMS – not aware of requirements due to lack of training.
4. Major	Damage to an ecological system, or loss of public amenity result in a public complaint.	Does not conform to Policy or EMS – aware of requirements but no clear justifications for actions.
5. Extreme	Significant damage to an ecological system, or adverse impact on public health.	Does not conform to Policy or EMS – deliberate avoidance on basis of time or cost.

MEASURING LIKEKIHOOD

The measure of likelihood is broken down into five levels. **Table B.2** defines each level.

Table B.2 – Qualitative Measure of Likelihood

Level		Likelihood
A	Almost certain	The incident is likely to occur every time the job is carried out.
B	Likely	The incident is likely to occur in most circumstance, when a job is carried out regularly (the incident could occur weekly).
C	Moderate	The incident may occur at some time, when a job is carried out regularly (the incident could occur quarterly).
D	Unlikely	The incident could occur at some stage during construction phase.
E	Rare	The incident may only occur in exceptional circumstances and may never happen.

A level of likelihood should be assigned to each environmental impact.

LEVEL OF ENVIRONMENTAL RISK

The level of environmental risk is determined by applying the measures of consequence and likelihood for each environmental impact to **Table B.3** below.

Table B.3 – Qualitative Measure of Environmental Impact

		CONSEQUENCE				
		1	2	3	4	5
LIKELIHOOD		Insignificant	Minor	Moderate	Major	Extreme
A	Almost certain	S	S	H	H	H
B	Likely	M	S	S	H	H
C	Moderate	L	M	S	H	H
D	Unlikely	L	L	M	S	H
E	Rare	L	L	M	M	S

Where:

H	High Risk	Senior management involvement and planning needed.
S	Significant Risk	Senior management attention needed.
M	Moderate Risk	Management responsibility must be specified.
L	Low Risk	Manage with routine procedures.

Appendix C – Relevant Legislation

Commonwealth Government Legislation

- *Environment Protection and Biodiversity Conservation 1999*
- *Native Title Act, 1993*
- *Environmental Protection (Sea Dumping) Act, 1981.*

State Government Legislation

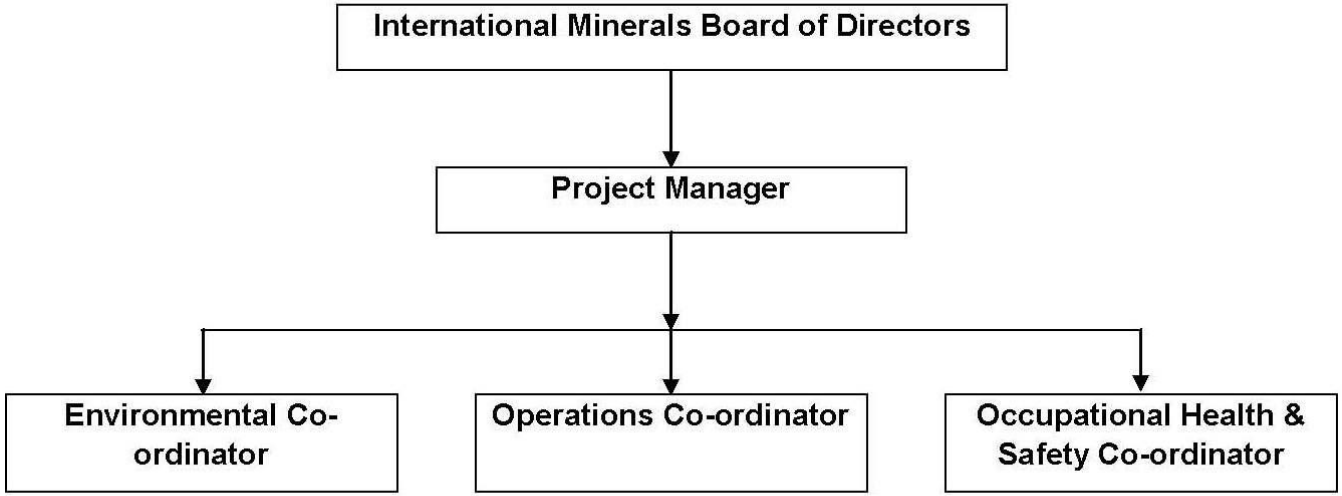
- *Aboriginal Heritage Act, 1972*
- *Agricultural and Related Resources Protection Act, 1976*
- *Bush Fires Act, 1954*
- *Electricity Act, 1945*
- *Environmental Protection Act, 1986*
- *Explosives and Dangerous Goods Act, 1961*
- *Health Act, 1911*
- *Heritage of Western Australia Act, 1990*
- *Iron Ore Processing (Mineralogy Pty Ltd) Agreement Act, 2002*
- *Land Administration Act, 1997*
- *Local Government Act, 1995*
- *Mines Safety and Inspection Act, 1995*
- *Mining Act, 1978*
- *Pollution of Water by Oil and Noxious Substances Act, 1987*
- *Rights in Water and Irrigation Act, 1914*
- *Soil and Land Conservation Act, 1945*
- *Water Supply, Sewage and Drainage Act, 1912*
- *Wildlife Conservation Act 1950.*

Federal & State Regulations

- *Aboriginal Heritage Regulations, 1972*
- *Bush Fires Regulations, 1954*
- *Electricity Regulations, 1947*
- *Environmental Protection Regulations, 1987*
- *Explosives and Dangerous Goods Regulations, 1963*
- *Dangerous Goods Regulations, 2001*
- *Environmental Protection Regulations, 1987*
- *Environmental Protection (Liquid Waste) Regulations, 1987*
- *Health Regulations, 1996*
- *Heritage of Western Australia Regulations, 1991*
- *Land Administration Regulations, 1998*
- *Mining Regulations, 1981*
- *Mine Safety and Inspection Regulations, 1995*
- *Native Vegetation Clearing Regulations, 2004*
- *Noise Abatement Regulations, 1979*
- *Pollution by Water by Oil and Noxious Substances Regulations, 1993*
- *Wildlife Conservation Regulations, 1970*

Appendix D – International Minerals' Organisation Structure

INTERNATIONAL MINERALS ORGANISATION STRUCTURE



Appendix E – Environmental Incident Report

Balmoral South Iron Ore Mine and Downstream Processing
Cape Preston, Western Australia

Environmental Incident Report

In the event of a pollution incident, complete the following form and return to the Environmental Manager within 24 hours.

DATE INCIDENT OCCURRED:	
TIME INCIDENT OCCURRED:	am/pm
LOCATION OF INCIDENT: (attach any diagrams or photographs)	
REPORTED BY:	
COMPANY NAME:	
REPORTED TO:	
COMPANY NAME:	
TIME REPORTED:	am/pm
DESCIBE THE INCIDENT: (size of any spills, substance involved etc)	
RESPONSE TO THE INCIDENT (containment or clean-up action taken)	

Appendix F – Monitoring and Inspection Schedule

Monitoring and Inspection Schedule

Aspect	Inspection Item	Responsibility	Timing
Dust	High volume sampling at specific locations	International Minerals Environmental Manager	Daily
	Visual inspection of construction area for evidence of dust generation	International Minerals Environmental Manager	Daily
	Visual inspection of surrounding vegetation for evidence of dust deposition	International Minerals Environmental Manager	Daily
	Portable sampler measurement of significant dust areas	International Minerals Environmental Manager	Daily
Land Disturbance	Over clearing of native vegetation	International Minerals Environmental Manager	Weekly and during clearing periods
	Monitoring clearing area records	International Minerals Environmental Manager	Monthly
	Monitoring Aboriginal heritage sites	International Minerals Environmental Manager	Weekly and during clearing periods
Noise	Noise meter measurement of construction areas	International Minerals Environmental Manager	Daily
	Noise meter measurements of equipment items	International Minerals Environmental Manager	At start of use of each equipment item
Fauna	Monitoring fauna mortalities	International Minerals Environmental Manager	As observed
Solid Waste	Collection of waste disposal records	International Minerals Environmental Manager	Weekly
	Segregation of recyclable materials	International Minerals Environmental Manager	Weekly
	Visual inspection of surrounding environment for evidence of accumulated wastes	International Minerals Environmental Manager	Weekly
Hazardous Waste	Collection of waste disposal records	International Minerals Environmental Manager	Weekly
	Storage and handling of hazardous waste	International Minerals Environmental Manager	Weekly
Marine Outfall	Water quality monitoring	International Minerals Environmental Manager	Weekly
Site Runoff	Visual Inspection of drains and construction areas for possible discharge of pollution to stormwater	International Minerals Environmental Manager	Weekly and after heavy rainfall events
	Visual inspection of site runoff treatment facilities	International Minerals Environmental Manager	Weekly and after heavy rainfall events
Hydrocarbon Storage	Visual inspection of bunded areas	International Minerals Environmental Manager	Weekly
Training and	Training and competency reports	Induction officer and	Weekly

Aspect	Inspection Item	Responsibility	Timing
Education		International Minerals Environmental Manager	
General	Visual inspection of construction area(s) for general housekeeping (eg spillage and cleanup)	International Minerals Environmental Manager	Daily
Public	Complaints	International Minerals Environmental Manager	Receipt of complaint
Fishing	Monitoring catch limits by personnel	International Minerals Environmental Manager	Weekly
	Visual inspections of areas associated with recreational activities	International Minerals Environmental Manager	Weekly