SINOSTEEL MIDWEST CORPORATION

WELD RANGE IRON ORE PROJECT
Environmental Management System

March 2009

Document Status						
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ENVIRONMENTAL POLICY

The community's desire to both develop resources and protect and preserve the environment is shared by the Sinosteel Midwest Corporation (SMC), its employees and contractors. All SMC activities will meet statutory requirements as a minimum standard so that potential adverse effects on the environment are either avoided or appropriately managed.

In fulfilling this policy, SMC will:

- Establish a set of environmental policies, objectives and commitments for all its activities.
- Identify its legal environmental responsibilities and comply with all applicable laws and regulations.
- Develop and apply responsible management where laws and regulations do not exist.
- Assess potential environmental impacts before conducting new activities.
- Institute a management system that, amongst other aspects, identifies environmental responsibilities for all its employees and contractors.
- Design and implement a system of work procedures and training programs that encourage concern and respect for the environment, eliminate or reduce emissions and allow its employees and contractors to know exactly how they are to achieve environmental objectives and discharge their environmental responsibilities.
- Implement monitoring and auditing systems that will ensure the company's environmental commitments and objectives are being achieved.
- Develop and foster a corporate culture that encourages continuous improvement in environmental performance.

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Managing Director

Sijun Cheng

Sinosteel Midwest Corporation.

Date:

1.0 INTRODUCTION AND EMS OVERVIEW

INTRODUCTION TO THIS EMS MANUAL

This manual is the primary reference document for the Sinosteel Midwest Corporation (SMC) Environmental Management System (EMS). SMC operates in Australia as a Joint venture between Sinosteel Corporation (Sinosteel) and Midwest Corporation Ltd (Midwest) to operate and manage the Weld Range Iron Ore Project (the Project).

SCOPE

This manual applies to SMC activities at the Weld Range Iron Ore Project and SMC will conduct mining operations in accordance with this EMS.

SMC is committed to best practice standards where practicable, and has aligned its EMS with the internationally recognised standard for Environmental Management Systems: ISO 14001:2004. This manual describes the components of the SMC EMS and explains how they inter-relate. It also provides direction to the relevant standards and documents.

CONTROL OF THIS EMS MANUAL

The SMC EMS will be regularly reviewed and revised to ensure its continued suitability, adequacy and effectiveness with the ongoing aim of continual improvement. When a major amendment is made to the EMS, such as a change to policy or procedure, a new version of this manual will be generated and issued. Minor amendments will lead to an update of the electronic documentation only. This EMS Manual and all its revisions are subject to approval by the Managing Director.

EMS DOCUMENTATION HIERARCHY

LEVEL 1: Environmental Policy

The Environmental Policy documents the environmental performance objectives of the company and is the foundation of environmental management at SMC. The Environmental Policy is available to the public on request.

LEVEL 2: EMS Procedures

The procedures in this Manual address each requirement of the ISO14001 Standard. The procedures detail what, when, where and how various SMC activities are performed with respect to the environment. They also specify the persons responsible for completing the listed tasks and keeping records.

LEVEL 3: EMS Standard work instructions/ Risk Specific Management Plans

Activities associated with significant environmental risks are managed by operational control criteria. The criteria are documented in the environmental management plan, and other aspect specific plans that are required.

LEVEL 4: EMS Tools

Supporting tools of the EMS include forms and registers.

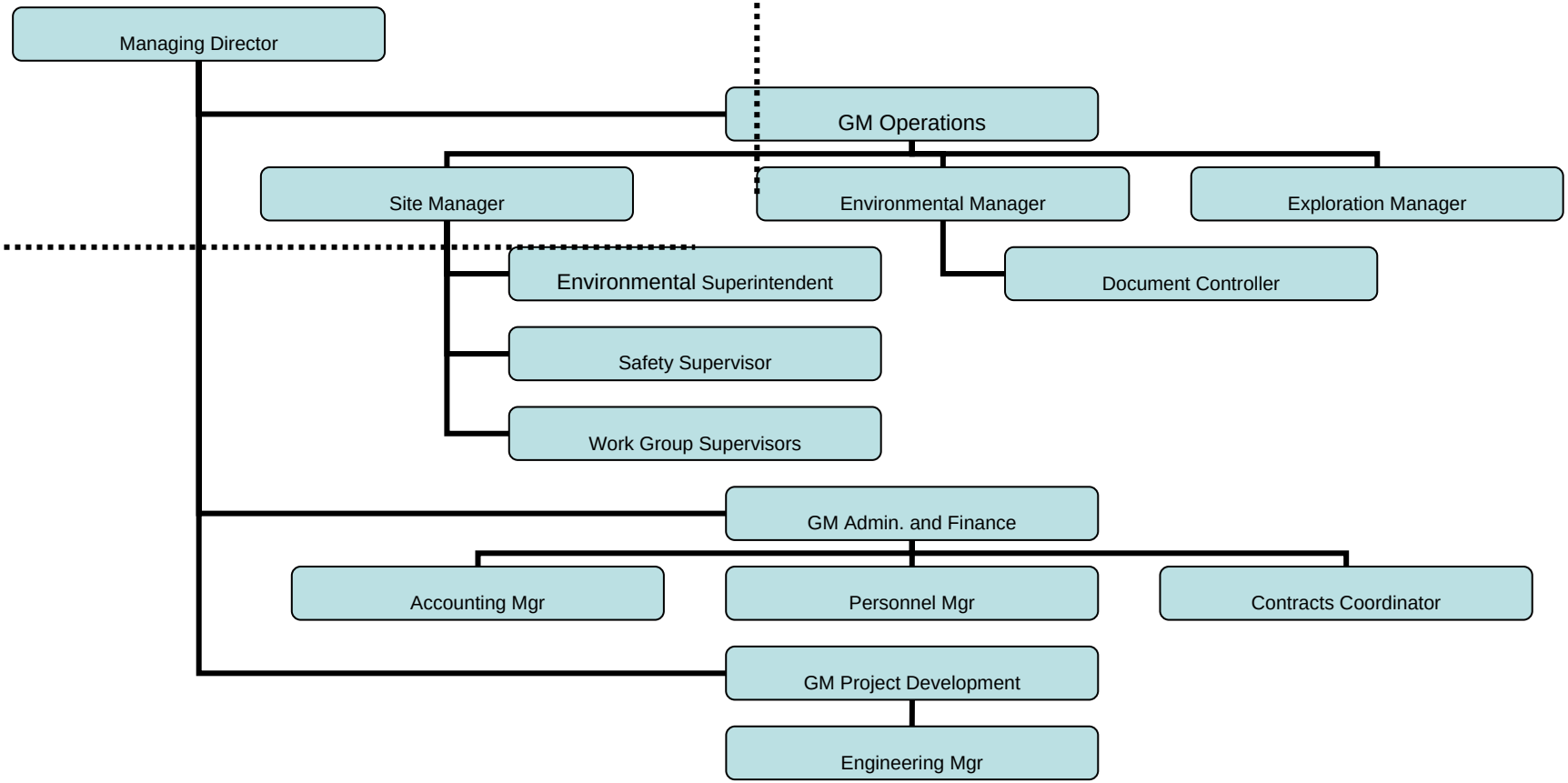


Figure 1-1: Sinosteel Midwest Corporation Organisational Chart for Operations of Weld Range Mines.

Note.: This chart identifies the functions referred to in the Environmental Management System for SMC and is not a complete chart. Any changes in the organisation structure will be reflected in revisions of the EMS.

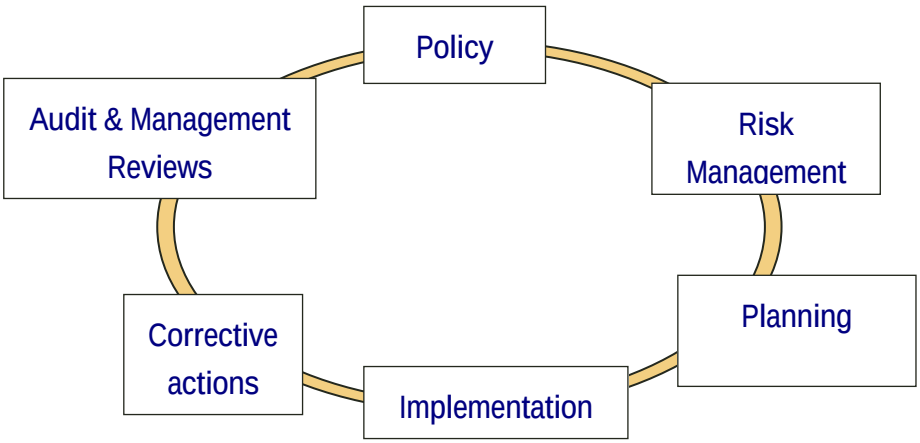
MANAGEMENT RESPONSIBILITIES

MANAGING DIRECTOR	• Promotes a high level of environmental commitment through visible leadership and project direction. • Provides adequate resources and supports the establishment, implementation, maintenance and ongoing improvement of the EMS. • Undertakes management review of the EMS, including setting environmental objectives, targets and performance indicators.
GENERAL MANAGER OPERATIONS	• Accountable to the Managing Director. • Enforces a high level of environmental commitment through leadership and project management. • Focal point for project liaison. • Ensures projects are adequately resourced to fulfil environmental requirements. • Oversees environmental performance via day to day liaison with senior project personnel. • Ensures processes are in place to meet legal and other requirements including the implementation of the EMS and Environmental Management Plans (EMP's). • Resolves issues pertaining to public complaints and legal non-conformances. • Responds to external communication. • Resolves disagreements pertaining to non-conformances. • Manages emergency response situations.
SITE MANAGER	• Accountable to the General Manager Operations. • Enforces high level of site environmental performance through leadership by example. • Channels communication between site and head office. • Manages project sites to meet construction, engineering and EMS requirements. • Coordinates work at site within agreed schedule and budget. • Responsible for site environmental performance. • Receives and forwards external communications to the Project Manager. • Provides emergency assistance. • Enforces prompt preventative and corrective action for non-conformances and incidents.

ENVIRONMENT MANAGER	• Accountable to the General Manager Operations. • Responsible for the environmental performance of the project. • Enforces high level of environmental performance through leadership and example. • Provides environmental leadership and strategic guidance for the project. • Develops implements, maintains and reviews the EMS. • Reviews and reports on information from audits and environmental performance. • Records and responds to internal communications, including communication of issues to relevant personnel. • Forwards external communications to the Site Manager and assists in responding to external communications. • Provide assistance in the event of an emergency situation. • Monitors site activities for non-conformances or additional management actions. • Arranges management reviews and internal / external audits. • Tracks and reports progress against project objectives and targets to the General Manager Operations on a regular basis. • Provides recommendations for EMS improvements to the General Manager Operations.
ENVIRONMENT SUPERINTENDENT	• Accountable to the Site Manager (and Environment Manager). • Develops, implements, maintains and reviews the EMS. • Manages work area personnel and contractors through effective supervision, engagement and inspections. • Records and responds to internal communications, including communication of issues to relevant personnel and contractors. • Forwards external communications to the Site Manager and assists in responding to external communications. • Advises the Site Manager on work area environmental performance through regular performance reports. • Provides assistance during audits and inspections. • Addresses non-conformances and corrective or preventative actions as requested. • Notifies Site Manager of incidents within 12 hours, implements investigations and corrective and preventative actions. • Tracks and reports progress against project objectives and targets to senior management on a regular basis.

DOCUMENT CONTROLLER	• Controls environmental documents and maintains register to indicate current status. • Control EMS documents in accordance with the Document Control Procedures.
WORK GROUP SUPERVISOR	• Accountable to the Site Manager and Environment Manager. • Implements and monitors relevant EMS components in the work group. • Channels communication between work area and site office. • Manages work area to meet construction, engineering and EMS requirements. • Coordinates work at area within agreed schedule and budget. • Responsible for work area environmental performance. • Receives and forwards external communications to the Site Manager. • Provides emergency assistance. • Aids in completing incident and non-conformance report forms. • Enforces prompt preventative and corrective action for non-conformances and incidents.
WORK GROUPS & ALL OTHERS	• Comply with SMC Environmental Policy and the EMS. • Understand and conform with risk management requirements relevant to roles and jobs. • Report all incidents, non-conformances, near misses and hazards as soon as possible. • Complete corrective actions for incident impact mitigation. • Adopt proactive work attitude in addressing environmental issues related to the role.

SMC EMS OVERVIEW



Policy

Top management defines the environmental policy and ensures that it is:

- Appropriate to the nature, scale and environmental impacts of its activities, products and services.
- Includes a commitment to continual improvement and prevention of pollution.
- Includes a commitment to comply with relevant environmental legislation and regulations and with other requirements under which the organisation functions.
- Provides the framework for setting and reviewing environmental objectives and targets.
- Documented, implemented, maintained and communicated to all employees.
- Available to the public.

Planning and Risk Management

Legal and other requirements relevant to SMCs activities are identified *(*Legal and Other Requirements Procedure 3*)* and documented in an obligations register. These requirements form an important component of SMC's risk management process, which involves the systematic identification of environmental aspects of activities over which the Company has an influence (Risk Management Procedure 1). Risk assessment takes into consideration the potential for pollution, inability to achieve targets and non-compliance with legal or other requirements.

Significant risks are addressed through the setting of objectives and targets, and the implementation of management programs (Business Planning Procedure 4). The risks associated with changes to process, plant, organisation, personnel or procedure are identified and managed in the same way (Change Management Procedure 2).

Implementation

To ensure that risk management requirements are effectively implemented, personnel who may have significant impact on the environment are experienced, qualified or trained to competency (Training Procedure 5) in managing their environmental risks. Internal and external communication is maintained (Internal Communication Procedure 6; External Communication

Procedure 7) to facilitate discussions on risks and environmental performance.

Aspects associated with significant environmental risks have documented operational controls in place (Operational Control Procedure 10) to minimise impacts arising from inconsistent work practices. These procedures together with all other documents (Document Control Procedure 8) and records (Records Procedure 15) essential to the environmental management system are controlled and maintained.

The potential for environmental emergency situations has been recognised. Such scenarios are identified by the Project Manager and Environment Manager (Emergency Response Planning Procedure 11) and response and preparedness requirements addressed.

Corrective Actions

Environmental performance is monitored at various levels through inspection (Monitoring and Review Procedure 12), reporting, investigation and analysis of incidents and non-conformances (Incident Management Procedure 13; Non-conformance Management Procedure 14) and regular audits (Audits Procedure 17). Corrective actions are implemented to address the non-conformances.

Audit and Management Review

Performance results are discussed at management level (Management Review Procedure 18) to ascertain the appropriateness of the Policy, objectives and targets, and the adequacy and effectiveness of elements of the EMS.

Continual Improvement

The cyclic nature of the EMS structure described above facilitates continual improvement in SMC's environmental performance, and provides the mechanism for managing significant risks, achieving targets and complying with legal and other requirements.

Demobilisation

The EMS is designed to allow effective management of environmental risks during the life of the project, up until demobilisation and handover. To aid continuation of environmental management beyond this, SMC shall inspect and approve environmental conditions prior to granting permission to demobilise from site (Demobilisation Procedure 16; Project Handover Procedure 19).

2.0 SYSTEM PROCEDURES

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PROCEDURE 1 – RISK MANAGEMENT		
1. Purpose	To identify, plan for and manage environmental risks prior to changes to plant, organisational structure, people, legal obligations, other obligations and work procedures.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.3.1) and AS/NZS 4360: 2004	
4. Definitions	None.	
5. Actions	Determine scope of proposed new or changed project/activity. Refer to **Change Management Procedure.**	Change initiator
	Conduct a risk assessment session prior to implementation of project and / or change **(Environmental Risk Identification and Assessment**). Assess potential impacts to: • Environment and community. • Culture and heritage. • Legal compliance. • Stakeholder relations. • Business targets. • Compliance with procedures. • Commitment to Policies.	Environment Manager
	Document risk assessment outcomes in a **Project Risk Register**.	
	For significant residual risks, develop and implement risk reduction targets and procedures for meeting these targets **(Business Planning Procedure).**	
	Regularly update risk registers, procedures, risk-reduction targets and Policies to ensure consistency with and between EMS components **(Change Management Procedure).**	
	Determine resources and actions required to manage impacts.	Project Manager
	Include risk management requirements in Contract Documents (**Contractor Management Procedure**).	
	Supervise implementation and monitor effectiveness of risk management procedures (**Monitoring and Review Procedure**).	Environment Superintendent
	Respond to unacceptable risks, root-causes of incidents, and deficiencies identified during audits as per the Non Conformance Procedure (**Non-conformance Management Procedure**).	All

PROCEDURE 2 - CHANGE MANAGEMENT		
1. Purpose	To identify and manage environmental risks associated with changes to plant, organisational structure, personnel, legal obligations, other obligations and work procedures.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.3.1).	
4. Definitions	None	
5. Actions	**Requesting a Change**	
	Complete Change Approval Request Form using **Change Control Form** to request a change.	Change Initiator
	Use **Risk Management Procedures** to evaluate potential risks to: • Environment and community; • Culture and heritage; • Legal compliance; • Stakeholder relations; • Business targets; • Compliance with procedures; and • Commitment to Policies	Change Initiator/ Relevant technical expert
	Document outcomes of the risk assessment (**Risk Register** and **Job Environment Safety Analysis**).	
	Determine risk management requirements (**Risk Management Procedures)**.	
	Approve change request only if: • identified risks are unacceptable; • benefits justify resources; and • management actions / plans are feasible.	Project Manager
	Implementing Change	
	Communicate changes to relevant personnel and stakeholders (**Internal Communication Procedure)**.	Change Initiator
	Implement risk management requirements associated with change.	
	Monitor compliance with conditions of change approval (**Monitoring and Review Procedure)**.	

	Review and revise EMS documents (**Document Control Procedure)** to ensure that they are appropriate in light of change. This includes: • Risk Register; • Obligations Register; • Project Action Register; • Operating Instructions; • Procedures; • Policy; • Emergency Response Plan; and • Training Program.	Environment Manager

PROCEDURE 3 – LEGAL AND OTHER REQUIREMENTS		
1. Purpose	To identify, interpret application of and have access to the environmental legal and other requirements pertaining to SMC projects and activities.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.3.2)	
4. Definitions	None	
5. Actions	***Identification of Legal Obligation***	
	Engage Legal Counsel to prepare the obligations register listing applicable environmental legal obligations including legislation, licences and work approvals. The obligations register shall cover the entire scope of the project's activities.	Managing Director
	Within the **Obligations Register**, describe how relevant legislation applies to the project and how compliance is to be achieved.	Legal Counsel
	Provide directions for accessing relevant legislation listed in the **Obligations Register**.	
	Engage Legal Counsel to perform an annual review and update of the **Obligations Register.** This should include changes to relevant legislation and changes to SMC scope of works.	Environment Manager
	Legal Compliance	
	Determine scope of project activities during pre-mobilisation and project changes risk assessment session (**Risk Management Procedure**).	Project Manager
	Refer to the **Obligations Register** to determine the compliance requirements.	Environment Manager
	Monitor legal compliance (see **Audit Procedure**).	
	Obtain necessary licences, approvals, permits and agreements.	
	Develop and/or revise procedures and operational controls to maintain legal compliance.	
	Review legal requirements on a 6-monthly basis to keep abreast of changes to legislation.	
	Communicate compliance requirements to relevant personnel including Contractors (**Internal Communication Procedure**) and provide necessary training (**Training Procedure**).	Site Manager

PROCEDURE 4 – BUSINESS PLANNING		
1. Purpose	To develop, document and meet measurable targets to facilitate mitigation of significant environmental risks and continual improvement of SMC environmental practices.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.3.3)	
4. Definitions	None	
5. Actions	Determine residual risks relevant to the project / activity (**Risk Management Procedure)**.	Project Manager
	Determine legal and other requirements that apply to SMC activities (**Legal and Other Requirements Procedure**).	
	Set measurable objectives and targets for residual risks and to comply with the **SMC Environmental Policy**, legal requirements (**Obligations Register**).	
	Review technological and financial options, operational requirements and stakeholder interests (as part of SMC business management as a whole) when setting objectives and targets.	
	Review and approve appropriate objectives and targets for residual environmental risks and compliance requirements related to projects / activities (**Risk Management Procedure**).	Managing Director
	Document approved objectives and targets (**Objectives, Targets and Management Programs Register**).	Environment Manager
	Develop and implement management programs for meeting objectives and targets. The programs shall specify the necessary actions, responsible persons and timeframes (**Objectives, Targets and Management Programs Register**).	Project Manager
	Monitor compliance with management programs and track progress against targets (**Monitoring and Review Procedure)**.	Environment Superintendent

PROCEDURE 5 - TRAINING		
1. Purpose	• To identify the training needs of personnel and provide training in order to minimise environmental risks; and • To make personnel aware of the potential environmental impacts of their work and the benefits of improved environmental performance.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO14001:2004 (Section 4.3.2)	
4. Definitions	None	
5. Actions	Determine the significant residual risks of project / activities. (**Risk Management Procedure)**.	Project Manager
	Identify the competence and awareness requirements of key personnel. This shall include their: • Understanding of and compliance with Policy and EMS; • Management of significant environmental risks; • Compliance with operational procedures; • Role-based EMS responsibilities; • Consequences of departure from operational procedures; and • Required experience and qualifications.	
	Develop a **Training Needs Matrix** to identify personnel and their training requirements. Update the matrix in the event of changes to process, plant, personnel or organisational structure (**Change Management Procedure**).	Environment Manager
	Develop and implement Training Schedule based on the training needs matrix. Review and revise as required.	Environment Superintendent
	Develop awareness and competence Training Modules.	
	Where appropriate, deliver Training Modules as part of toolbox sessions and pre-start meetings.	
	Monitor effectiveness of training (**Monitoring and Review Procedure** and **Audit Procedure**).	
	Maintain training records according to the **Records Procedure**.	Document Controller

PROCEDURE 6 – INTERNAL COMMUNICATION		
1. Purpose	• To facilitate internal project communication between the different work areas and levels; and • To disseminate and receive relevant environmental information to and from project personnel.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.4.3)	
4. Definitions	None	
5. Actions	Communicate significant environmental issues to the Environment Superintendent.	All
	Resolve issue or pass on to Environment Manager or Project Manager for clarification.	Environment Superintendent
	Forward relevant communication on to external Stakeholders where appropriate (**External Communications Procedure**)	Project Manager
	Communication of Environmental Issues	
	Communicate environmental issues to Project personnel via: • Project meetings and minutes; • Tool-box and pre-start meetings; • Incident reports; • Project monthly reports; • Project Team meetings and minutes; and / or • Inductions and training sessions.	Environment Manager
	Advise project personnel on environmental issues, and provide feedback on environmental performance during weekly project management meetings.	
	Maintain records of significant environmental issues communicated to project personnel (**Meeting Minutes Template**).	Document Controller
	Forward the following environmental communication to Environment Manager: • All relevant external approvals; • Controlled documents; • Audit and inspection reports; • Incident reports; • Corrective actions reports and all relevant records	Site Manager

	Conduct monthly Management Meetings to provide updates on projects and to address environmental issues (**Meeting Minutes Template**). Meeting minutes shall be distributed to: • Managing Director; • Meeting attendees; • Environment Manager / Environment Superintendent; • Project Managers; and • Site Managers.	Environment Manager

<table>
<tr><th colspan="3">PROCEDURE 7 – EXTERNAL COMMUNICATION</th></tr>
<tr><td>1. Purpose</td><td colspan="2">To receive, consider and respond to communication from regulatory authorities, the public and other external stakeholders.</td></tr>
<tr><td>2. Scope</td><td colspan="2">If SMC decides not to communicate its significant environmental aspects externally, a documented record of this decision shall be kept and no liaison with external stakeholders will be entered into, except with regulatory authorities when statutes insist. In such case, this procedure shall be redundant.

This procedure will be in effect only if SMC decides to communicate its significant environmental aspects to external stakeholders. This decision must be documented.

The scope of this procedure includes SMC, Engineer and Contractor personnel for the duration of the project and pertains to environmental communication received from or transmitted to government regulatory authorities, members of the public, and other external stakeholders.

Only SMC Managers or their delegates are authorised to communicate directly with external stakeholders.</td></tr>
<tr><td>3. References</td><td colspan="2">ISO 14001:2004 (Section 4.4.3)</td></tr>
<tr><td>4. Definitions</td><td colspan="2">None</td></tr>
<tr><td rowspan="11">5. Actions</td><td colspan="2">Inbound Communications</td></tr>
<tr><td>Forward communication from external stakeholder to Project Manager.</td><td>All</td></tr>
<tr><td>Determine required response and notify responsible persons.</td><td rowspan="5">Project Manager</td></tr>
<tr><td>If site visit is required as part of response, alert site personnel and organise visit (Internal Communications Procedure).</td></tr>
<tr><td>File records of communication (Records Procedure).</td></tr>
<tr><td>If appropriate, determine the root cause of communication / complaint and implement correction and preventative actions (Public Complaints Register).</td></tr>
<tr><td>Refer public complaints and media affairs to the Company Secretary. Public complaints shall be investigated (Non-conformance Management Procedure) and logged in a Public Complaints Register.</td></tr>
<tr><td colspan="2">Outbound Communication</td></tr>
<tr><td>Prepare draft communication to stakeholder in response to communication.</td><td rowspan="2">Project Manager</td></tr>
<tr><td>Maintain interim communication with stakeholder.</td></tr>
</table>

	Discuss issue and potential consequence of communication.	
	Contact / notify the Company Secretary if required.	
	Determine media for approved information release.	
	Approve communication for external release.	Managing Director
	Follow up on communication as necessary.	Project Manager
	If appropriate, update **Public Complaints Register**.	
	Release approved information via transmittal as directed (**Document Transmittal Slip**).	Document Controller
	Verify receipt of transmittal as required.	
	File records of communication (**Records Procedure**).	

PROCEDURE 8 – DOCUMENT CONTROL		
1. Purpose	To provide management of environmental documents so that: • Documents are retained identifiable, legible and easy to locate; • Documents are reviewed, revised as necessary and approved for adequacy by authorised personnel prior to issue for use; • Documents are current versions that are available at all locations essential to the functioning of the EMS; • If externally sourced, documents are adequately labelled and their distribution controlled; • When obsolete, documents are promptly removed from all points of issue and use or are otherwise assured against unintended use; and • When obsolete (if retained for legal and/or knowledge preservation purposes) documents are identified as such.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Sections 4.4.4, 4.4.5).	
4. Definitions	None	
5. Actions	Develop, document and maintain critical environmental documents, i.e. those required for the: • Implementation of Policy, objectives and targets; • Determination of scope of EMS application; • Interrelation of EMS components and references; • Management of significant environmental risks; • Compliance with legal and other requirements; and • Implementation and maintenance of the EMS.	Environment Manager
	Develop new procedures or revise existing procedures as required.	
	Review and approve procedures for issue by signing original hard copy document.	Managing Director
	Update cover page of procedure to track revisions made and to show new revision number.	Document Controller
	File signed hard-copy of procedure. Maintain as record (**Records Procedure**).	
	Label any critical external documents and control their distribution (**Records Procedure**).	

	Transmit controlled copies to recipients using **Transmittal Slip** and record document title, revision number, date of issue, transmittal receipt and recipients within the **Controlled Document Register**.	
	Maintain **Controlled Document Register**.	

PROCEDURE 9 – CONTRACTOR MANAGEMENT		
1. Purpose	To describe the operational requirements for the management of contractors working with, for or on behalf of SMC.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.4.6)	
4. Definitions	None	
5. Actions	**Pre-Qualification**	
	Define contract scope of works.	Project Manager
	Send out pre-qualification documents to potential tenderers (**Pre-Qualification Questionnaire**).	Contracts Coordinator
	Select possible tenders who demonstrate the ability to conduct the works and achieve environmental outcomes.	Environment Manager
	Tender	
	Specify contract scope of works (**SMC Information Required with Tender**; **Minimum Environmental Requirements**).	Contracts Coordinator
	Select suitable tenders who: • Meet the environmental tender requirements; • Can demonstrate management of risks; and • Are compliant with the relevant SMC Standards.	Environment Manager
	Assess compliance of tenderer's environmental documentation against the SMC EMS Standards.	
	Use the Tender Assessment Guide (**Tender Evaluation Form**) to quantify tender performance. Award contract to the highest scoring tender.	
	Tender Award	
	Ensure that proposed budgets are adequate to meet contract environmental obligations and sufficiently manage project environmental risks.	Project Manager
	If necessary, request change of personnel or recommend additional pre-works competence training for the nominated Contractor Environment Representative.	Project Manager
	Discuss pre-mobilisation requirements such as deadlines and deliverables.	
	Specify environmental requirements in contract.	Environment

	Enter into negotiations to refine the Contract until both the Company and the Contractor agree on all contractual clauses and requirements (**Environmental General Conditions**; **Minimum Environmental Standards**).	Manager
	Specify additional environmental risk controls in contract.	
	Verify that the nominated Contractor Representative is competent.	
	Pre-Mobilisation	
	Conduct a pre-mobilisation risk assessment session with key project personnel to address all workplace environmental risks. Record outcomes in the **Risk Register**.	Project Manager
	Review and ensure Risk Register has identified and adequately addressed all environmental risks associated with the scope of works.	Environment Manager
	Approve Risk Register.	
	Prior to mobilisation, ensure pre-mobilisation requirements have been met using the **Environmental Approval to Mobilise Form**. Pre-mobilisation requirements may include: • Provision and sign off on Risk Register; • Provision and sign off on Environmental Management Procedures; • Sign off on Induction Material; • Weed hygiene certificates, Permits and licences; and / or • Attendance of project personnel at induction/training courses.	Site Manager
	Performance Monitoring	
	Monitor Contractor performance over the contract period via: • On-going observations; • Inspections; and • Audits of compliance with legal and contractual requirements (**Monitoring and Review Procedure**; **Audits Procedure**).	Environment Superintendent
	Raise Contractor non-conformances as required and monitor close-out (**Non-conformance Management Procedure**).	
	Undertake demobilisation inspection at completion of works using the **Demobilisation Inspection / Approval Form**.	
	Verify fulfilment of contract requirements and approve demobilisation from site.	Environment Manager

PROCEDURE 10 – OPERATIONAL CONTROL		
1. Purpose	To describe the management of significant risks through establishment of operational control criteria.	
2. Scope	This procedure applies to all operational activities that have associated significant risks.	
3. References	ISO 14001:2004 (Section 4.4.6) Construction Environmental Management Plan.	
4. Definitions	None	
5. Actions	Develop operating procedures for activities with significant environmental risks. Procedures shall include controls to achieve compliance with Policy, legal requirements, other obligations, objectives and targets and management of environmental impacts (**Risk Management Procedure**; **Obligations Register**).	Project Manager
	Document operating procedures and stipulate operating criteria in Project **Environmental Management Plans (EMP's)**.	Environment Manager
	Communicate EMP's and the consequences of deviation from EMP requirements to all project personnel.	
	Review and update EMP's as required (**Monitoring and Review Procedure**).	
	Monitor implementation and performance of EMP's and associated procedures (**Monitoring and Review Procedures**).	Environment Superintendent

PROCEDURE 11 – EMERGENCY RESPONSE PLANNING		
1. Purpose	To manage environmental emergency situations through appropriate planning, including identification of potential emergency situations and implementation of training and drills.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.4.7).	
4. Definitions	None	
5. Actions	**Emergency Response Planning**	
	Establish Strategic Emergency Response Team comprising of: • Safety Manager; • Environment Manager; • Environment Superintendent; • Project Manager; • Site Manager; and • Technical Experts (external or mutual aid agencies).	Project Manager
	Identify resources required to manage an emergency event, including equipment and human resources.	
	Establish a dedicated Emergency Response Crew for each work area with sufficient support from external sources or mutual aid agreements.	
	Liaise with external agencies to establish mutual aid agreements (**External Communication Procedure**).	
	Verify staff competency and / or train staff to competency (**Training Procedure**).	
	Monitor effectiveness of emergency prevention procedures (**Monitoring and Review Procedures**).	

	Identify all possible project / activity emergency situations, based on: • Activities; • Geographical location; • Impacts to personnel and the environment; • Political situation; • Physical aspects and impacts of the operation; and • Climatic / weather conditions. Refer to the **Risk Management Procedure** and **Obligations Register**.	Strategic Emergency Response Team
	Document the required response for each emergency situation in the Project Emergency Response Plan (ERP).	
	Specify ERP requirements in Contract documents.	Project Manager
	Implementation of Emergency Response Plan	
	Schedule emergency drills to occur at least annually. Base frequency on project / activity scope.	Safety Manager
	Actual Emergency / Emergency Drill Occurs.	
	Implement Emergency Response Plan.	Strategic Emergency Response Team
	Undertake immediate / recovery action to bring situation under control.	
	Engage mutual aids and deploy emergency response teams.	Safety Manager
	Establish team to carry out emergency investigation of root causes and inadequacies in response. Determine corrective and preventative actions (**Non-conformance Management Procedure**).	
	Review and revise ERP and other relevant procedures as required (**Document Control Procedure**).	
	Communicate and implement resultant changes in consultation with work groups (**Change Management Procedure**; **Internal Communication Procedure**).	
	Complete incident and non-conformance report form (**Incident and Non-conformance report form**).	Personnel involved
	Circulate full investigation report to Senior Management and communicate to internal and external persons / agencies (**Internal Communication Procedure**; **External Communication Procedure**).	Project Manager

PROCEDURE 12 – MONITORING AND REVIEW		
1. Purpose	To ensure that significant risk controls are appropriate and adequate through monitoring and review processes.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.5.1)	
4. Definitions	None	
5. Actions	**Inspection**	
	Schedule environmental inspections based on significance of environmental risks (**Audit and Inspections Schedule / Register**).	Environment Superintendent
	Give prior notice of inspections to site / project personnel (**Internal Communication Procedure**).	
	Conduct site inspections and record all non-conformances and corrective actions (**Environmental Inspection Form**).	
	Verify that corrective actions from previous inspections have been completed and are effective. Identify any new corrective actions / non-conformances.	
	Discuss findings of inspections with site personnel.	
	Issue inspection reports to relevant persons (**Records Procedure**).	
	Implement steps to close out all corrective actions / non-conformances (**Non-conformance Management Procedure**).	
	Maintain inspection reports as records (**Records Procedure**).	
	Aspect Monitoring	
	Establish and implement monitoring programs to assess: • Effectiveness of risk management strategies; and • Project environmental performance.	Environment Superintendent
	Ensure monitoring programs meet the relevant Australian Standards and licence conditions.	
	Determine calibration, testing and maintenance needs of monitoring equipment.	
	Maintain records of calibration, testing and maintenance (**Records Procedure**).	

	Analyse monitoring results and action non-compliances / non-conformances (**Non-conformance Management Procedure**).	
	Maintain monitoring results and field notes as records (**Records Procedure**).	

PROCEDURE 13 – INCIDENT AND NEAR MISS MANAGEMENT		
1. Purpose	To facilitate prompt reporting, and appropriate response, remediation and prevention of recurrence of environmental incidents.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.5.3)	
4. Definitions	None	
5. Actions	Incident, Near-Miss or Non-conforming Event Occurs	
	Report event to supervisor immediately.	Personnel involved
	Ensure site is made safe and implement Emergency Response Plan if required.	Work Group Supervisor
	Implement immediate actions to prevent the situation and impacts from worsening. This may include spill management and site recovery actions.	
	Report incident in writing to the Site Manager and Environment Superintendent by completing the Incident Report and Investigation form within 12 hours (**Incident and Non-conformance Report Form**).	
	Report event to external stakeholders if required (**External Communications Procedure**).	Site Manager
	Determine level of investigation required, and commence investigation process.	
	Appoint lead investigator and hand over Incident Report.	
	Investigation	
	Review incident report.	Lead Investigator
	Contact persons involved and determine sequence of events.	
	Assess consequences, severity, root cause and inadequacies in response to incident or near-miss.	
	With input from relevant personnel, determine actions to prevent the event from recurring, and to reduce the severity of impacts.	
	Document outcomes of the investigation in the incident report form. Hand over report to Environment Manager.	

	Post Investigation	
	Review the outcomes of the investigation and the recommended actions. Provide input as required.	Environment Superintendent
	Address non-conformances or system inadequacies with appropriate corrective and preventive actions (**Non-conformance Management Procedure**). Inform work group supervisor of the outcomes.	
	File Incident Reports (**Records Procedure**).	
	Where relevant; respond to external stakeholders (**External Communications Procedure**).	
	Communicate investigation outcomes to relevant work groups (**Internal Communication Procedure**).	Work Group Supervisor
	Analyse incident trends as required, and at least every 6 months (**Monitoring and Review Procedure**; **Incident Register**).	Environment Manager

PROCEDURE 14 – NON-CONFORMANCE MANAGEMENT		
1. Purpose	To facilitate correction and prevention of non-conformances and system inadequacies through implementation of appropriate actions.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.5.3)	
4. Definitions	None	
5. Actions	Identify non-conformance during monitoring, audit, inspection or incident investigation.	Appropriate persons according to procedures
	Determine appropriate corrective and preventive actions. This may include: • Changes to process, engineering or design; • Revision of procedure; • Revision of training program; and / or • Revision of system components.	Work Group Supervisor
	Document and communicate corrective actions, responsibilities and schedule of actions to relevant personnel (**Internal Communication Procedure**). Monitor completion and effectiveness of corrective actions	
	Verify by inspection and records that actions have been completed.	Environment Superintendent
	Determine effectiveness of corrective actions through inspection and review of: • Incidents and non-conformance types; • Root causes; and • Recurrence rate.	
	Address root causes and determine additional corrective / preventative actions for recurring non-conformances.	
	Review risk of recurrence and update system components as required (**Change Management Procedure**).	
	Maintain corrective actions register as a record (**Records Procedure**).	

PROCEDURE 15 - RECORDS		
1. Purpose	To ensure that records critical to the implementation / maintenance of the EMS are stored in such a way that they are easily located, remain legible and traceable.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004 (Section 4.5.4)	
4. Definitions	None	
5. Actions	Determine recipients of record if it is to be distributed.	Environment Superintendent
	File records appropriately or forward to the Document Controller. Records include : • Internal / external communication; • Relevant documents and reports; • Licence approvals and permits; • Training and inspection records; • Incident reports; • Environmental approvals; • Audit Reports; • Meeting / review minutes; and • Any other record demonstrates compliance with legal obligations, other obligations or the EMS.	Appropriate persons according to procedures
	Record name of record, date of issue and recipients.	Document Controller
	Log transmittals.	
	File record in project record system.	
	File record in environmental filing system.	
	Maintain **Records Register**.	

PROCEDURE 16 - DEMOBILISATION		
1. Purpose	To ensure that impacts are addressed and rehabilitation is adequate prior to contractor demobilisation from site.	
2. Scope	This procedure applies to all project activities.	
3. References	ISO 14001:2004.	
4. Definitions	None	
5. Actions	Notify Site Manager at least 6 weeks prior to completion of works.	Project Engineer
	Notify Environment Superintendent at least 4 weeks prior to demobilisation.	Site Manager
	Conduct site inspection to determine if demobilisation requirements have been met (refer to **Project Handover Procedure**).	Site Manager
	Where relevant, document actions required for demobilisation and inform Contractor (**Demobilisation Inspection / Approval Form**).	
	Address non-conformances with the contractor (**Non-conformance Management Procedure**).	
	Re-inspect site prior to de-mobilisation when the majority of works have been completed (**Demobilisation Inspection / Approval Form**).	
	Approve demobilisation once all requirements have been met (**Demobilisation Inspection / Approval Form**).	
	Maintain Demobilisation Approval as record (**Records Management**).	Environment Manager

PROCEDURE 17 - AUDITS		
1. Purpose	To verify that the EMS is appropriate for its purpose and is being effectively implemented.	
2. Scope	This procedure applies to all activities associated with SMC projects and their implementation. Types and Frequencies of Audits: • Third Party audits of SMC EMS documentation shall take place annually; • Contractor compliance audit will take place four weeks after mobilisation and thereafter quarterly; and • Internal legal compliance audit will take place midway through the project and prior to completion.	
3. References	ISO 14001:2004 (Section 4.5.5)	
4. Definitions	None	
5. Actions	**Audit Planning**	
	Determine type of audit and document frequency (See Scope above for types / frequencies of audits) (**Audits and Inspections Schedule / Register**).	Environment Manager
	Engage suitable auditor, i.e. impartial, appropriate experienced and qualified.	
	Give adequate prior notice of audit to auditee/s (**Internal Communication Procedure**).	
	Develop scope and protocol for audit.	Auditor
	Audits	
	Agree on audit scope, protocol and program with Auditor.	Environment Manager
	Schedule meetings with auditee/s to occur during the audit.	
	Make necessary arrangements to facilitate audit program, including: • Travel and accommodation; • Site inductions / escorts; • Meeting rooms; • Meals; and • PPE.	
	Implement audit program and guide auditor through site/s.	

	Determine corrective actions to address non-conformances.	
	Submit proposed corrective actions to Auditor for approval.	
	Implement approved corrective action (**Non-conformance Management Procedure**).	
	Communicate audit results to relevant managers and auditee/s (**Internal Communication Procedure**; **Management Review Procedure**).	
	File audit report (**Records Procedure**).	
	Submit audit report within 7 days of audit.	Auditor
	If Auditee does not agree with findings, discuss non-concurrences and revise report if required. Issue final **Audit Report**.	

PROCEDURE 18 – MANAGEMENT REVIEW		
• **Purpose**	To review the adequacy and appropriateness of the EMS and its components, including Policies, Objectives, Targets and Management Programs, and improve where practicable.	
• **Scope**	This procedure applies to the formal Management Review of activities associated with SMC projects and their implementation. Other management review sessions are implemented according to SMC project/function management processes. Types and frequencies of Management Reviews include: • SMC Formal Management Review – Quarterly • Project Team Management Review – Monthly; and • Environmental Team – ongoing, as required.	
• **References**	ISO 14001:2004 (Section 4.6)	
• **Definitions**	None	
• **Actions**	Schedule quarterly Formal Management Review.	Environment Manager
	Notify management attendees of date in advance and make arrangements to facilitate the Review (**Internal Communication Procedure**).	
	Collate and present the following information at the Review: • Status of follow-up actions from previous Reviews • Previous internal and external EMS audit results; • Progress against Objectives & Targets; • Summary of communications including complaints; • Environmental incident trends; • Status of corrective and preventative actions • SMC and contractor environmental performance; • Changes to legal or other obligations; • Changes to EMS procedures and their components; • Corporate expectations and business needs; • Corporate / business – wide environmental initiatives; and • Changes in risks / hazards and new environmental initiatives.	
	Record minutes of the session (**Record Procedures**).	Delegate
	Review environmental performance based on the information presented.	Senior Management
	Propose changes to procedures, objectives and targets, Policies and / or other components of the EMS as required and assign responsibilities (**Change Management Procedures**).	

PROCEDURE 19 – PROJECT HANDOVER		
• **Purpose**	To describe project handover requirements.	
• **Scope**	This procedure applies to all project activities.	
• **References**	ISO 14001:2004.	
• **Definitions**	None	
• **Actions**	Notify Environment Manager at least four weeks prior to Project completion / handover (**Internal Communication Procedure**).	Project Manager
	Re-inspect site prior to demobilisation and jointly approve handover once all actions have been completed (**Demobilisation Inspection / Approval Form**).	Project Manager
	Conduct site demobilisation / handover inspection, including compliance with: • Works Approval commitments; • EMS / EMP • Permits; • Licences; • EPA or Ministerial obligations; and • Legal and other obligations.	Environment Manager
	Document actions required for handover and communicate to Project and Site Managers for close-out (**Demobilisation Inspection / Approval Form**; and **Internal Communication Procedure)**.	

PROCEDURE 20 – ENVIRONMENTAL RISK IDENTIFICATION AND ASSESSMENT	
1. Purpose	To provide operational control for the identification and assessment of environmental risks prior to commencement of a new or changed activity.
2. Scope	This operational instruction applies to all project activities.
3. References	AS/ NZS ISO14001:2004
4. Definitions	None
	Define process Prior to assessing the risks of an activity or process, define the boundaries and scope of the process to be assessed. This should include the beginning and end points of the process and a description of the level of detail of the assessment. Defining the process will enable: • Establishment of a scope of what is to be reviewed; • Appropriate selection of the review team members; and • Collection of relevant information. The development of a process diagram or flowchart will assist in the identification of risks. Alternatively the process/operations could be divided into functional work groups or key activities. For example: • General administration and office work • Site assessment • Pre-mobilisation preparation • Mobilisation of crew and equipment • Drilling • Equipment maintenance • Demobilisation • Site rehabilitation
	Team formation A team of personnel with experience and knowledge of the process shall conduct the assessment. The formation of such a team will allow for a diversity of perspectives and pooling of expertise to be brought to the risk identification process. It may be useful to include stakeholders who are affected by the inputs or outputs of process where appropriate. Team involvement will assist in the building of commitment and ownership over the process.

	Establish context Establishing the context will set the scope for the risk and change management process. It is important to consider both factors in the external and internal environment. The external context considers the broad external environment in which the company operates and the relationship it has with the external environment. External factors that may support or impair the ability to manage environmental risks shall be identified. Key areas to consider are: • Business, financial, operational, cultural, social, regulatory, and political environment; • The organisation's strengths, weaknesses, opportunities and threats; and • External stakeholders and their perceptions and values. The internal context is assessed in order to understand how it will influence the ability to manage risks. Key areas to consider include: • Policies, objectives and goals; • Organisational structure and management systems; • Resource capabilities (e.g. available technology, capital, people); • Culture; and • Internal stakeholders and their perceptions and values.
	Activities, Products & services The first step in identifying risks is to identify the sources. For each process, identify the activities, products and services that are involved in the process and which can interface with the environment, personnel or the community. When reviewing an existing Risk Register, ensure that any new, changed or planned activities, products or services are included. The activities, products and services identified may be broadly described and do not need to be broken into individual steps, components, products or materials. Some examples of aspects include: • Working with local people; • Equipment use and maintenance; • Land rehabilitation; and • Camp management. Activities, products & services can be identified using the following tools and techniques: • Brainstorming; • Checklists, flow-charts and mind-maps; • Review of relevant information; • Judgement based on experience and records; • Systems analysis and design reviews; • Scenario analysis and • Review of previously identified aspects.

	• Foreseeable emergencies. • Examples of events that could occur include: • Actions that are considered disrespectful in a local cultural context; • Lost personnel; and • Light vehicle accidents
	Impacts For each identified event, determine the impact. To ensure that impacts are captured a simple approach is to consider each aspect and event against possible personnel, environment and community interaction.
	Identifying Controls For each impact, identify the existing and effective controls that are in place to minimise the likelihood of occurrence or the severity of adverse impacts. The controls may be: • Prevention (e.g. automatic switch-off valve); • Protection (e.g. secondary containment of chemical storage tanks); • Detection (e.g. alarm and warning systems); • Administrative (competent personnel); and • Mitigation (e.g. emergency response procedures). Only effective controls shall be considered in this process. Controls that are present but not effectively implemented may not contribute in risk minimisation.
	Analyse Risks Once the aspects and potential events and impacts are identified, the risk is analysed by determining: • The severity of the impacts or consequences of the event; • The likelihood or frequency/probability of consequences being realised; and • The probability of the event occurring (a combination of the severity and likelihood of the consequence). Risks should be analysed in the context of existing controls and treatment measures. The level of risk may be determined for two situations: 1. Assuming that the existing controls fail (inherent); and 2. Assuming that the existing controls work effectively (residual).
	Consequence severity The severity of the consequences (of an event) shall be determined using the Consequence Severity Ranking Table (Table 1). The level of severity for each category may not be the same for a single event. Attention should be given to the one with the highest level of severity.

	Likelihood/probability The likelihood of an impact (and its consequences) resulting from an event shall be determined from the Likelihood Ranking Table (Table 2). The likelihood will depend on the exposure to the environmental aspect (source of the risk) and the probability that the event will occur and cause an impact.
	Level of risk The level of risk is determined by combining the consequence severity and the likelihood of an impact occurring from that event in the risk matrix (Table 3). The level of risk can be determined by the point at which the consequence severity and likelihood / probability rankings intercept in the risk matrix. For example, a 'moderate' consequence that is 'unlikely' to occur has a 'medium' level of risk.
	Evaluate Risks Determine if a risk is: • Acceptable and does not require further action; • Not acceptable and can undergo treatment to lower the risk; or • Not acceptable under any circumstances. Once the level of risk has been determined the identified risks must be evaluated for acceptability (Table 4). An acceptable risk requires no further treatment. An unacceptable risk that can be treated to an acceptable level will require the development and implementation of a risk treatment plan. Multiple risks requiring treatment shall be prioritised based on the resources and efforts required and return benefits. If a risk is deemed not acceptable under any circumstances then the source of the risk must be removed.
	Treat Risks The aim of risk treatment is to reduce the level of risk to an acceptable or desired level. Treatment options should consider, in order of priority: • Elimination of the risk; • Substitution with a lower risk; • Engineering solutions to reduce the impact of the risk; • Administrative procedures; and • Clean up or remediation measures to mitigate impacts. The risk treatment process involves: • Establishing, evaluating, documenting and selecting treatment options; • Conducting a cost/benefit assessment; and • Preparing and implementing treatment action plan.

Table 2-1: Consequence Severity Table

Level		Consequences	
		Environmental/Nuisance	Non conformances
1	Insignificant	No discernible, adverse environmental impact.	Does not affect Policy or EMS.
2	Minor	Discernible 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 resulting in a public complaint.	Does not conform to Policy or EMS - aware of requirements but no clear justification for actions.
5	Catastrophic	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.

Table 2-2: Likelihood Table

Level		Likelihood
A	Almost certain	The incident is expected to occur most of the time, i.e. every time a job is carried out.
B	Likely	The incident will probably occur in most circumstances, i.e. in a job which is carried out regularly, the incident could occur weekly.
C	Moderate	The incident should occur at some time, i.e. in a job which is carried out regularly, the incident could occur quarterly.
D	Unlikely	The incident could occur at some time during the life of the project.
E	Rare	The incident may occur only in exceptional circumstances and may never happen.

Table 2-3: Risk Matrix

		CONSEQUENCES				
		1	2	3	4	5
LIKELIHOOD		Insignificant	Minor	Moderate	Major	Catastrophic
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

Table 2-4: Risk Treatment

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

3.0 EMS TOOLS

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EMS FORM 1 - JOB ENVIRONMENTAL SAFETY ANALYSIS

Date		**Work Area**	
Description of Job:			

JESA Team Members:		

Consider environmental issues such as:

- Type and disposal requirements for waste produced
- Potential for spills
- Clearing controls
- Surface water
- Weed Management
- Heritage values
- Groundwater
- Dust Control
- Soil and Topsoil management
- Legal / procedural requirements
- Any other potential environmental impact

TASK STEPS	POTENTIAL HAZARDS	CONTROL MEASURES	IS RISK ACCEPTIBLE?	
			YES	NO*

This JESA was developed and reviewed by all members of the team involved in the task. Where risks were assessed to be unacceptable, advice was sought before commencement of job.

Supervisor (Print Name)		**Signature**		**Date**	

***** If risk is unacceptable, seek advice from supervisor before commencing work

EMS FORM 2 - CHANGE CONTROL

Change Initiator		Date	

Change Involves (please circle)	
Plant, Equipment of Facilities	Personnel
Work Procedure / Instruction	Business Objectives
Company Organisation	Legal or Other Requirements
Contractual Agreements	Other

Description of Change:

Reason for Change (please circle):	
Corrective Action	**Other :**
Preventative Action	
Legal or Other Requirement	
Management of Unacceptable Risk	

Change Requires (please circle)	
Risk Register Update	Development of New Document
Training of Personnel	Business Objectives Review
Review of Contract Agreements	Internal Communication
Additional Resources	External Communication
Documentation Revision	Other Actions

Action Plan

Actions Required	Responsible Person	Due Date

Change Not Approved

Reason:		
Project Manager (Name)	Signature	Date

Change Approved

This change is required to meet business and environmental objectives and targets and the intents of the Environmental Policy. Action plan addresses all requirements to manage the risks associated with this change.

Project Manager (Name)	Signature	Date

EMS FORM 3 - TRAINING RECORD

Training Topic	

Type of training (Please circle)	Awareness	Induction	Competency (Testing required)

Reason for training	Scheduled Training	Induction	Other

Learning outcomes	

Trainer /Presenter		**Date**	

Attendee Names	**Company**	**Competency Achieved?**		
		Yes	**No**	**N/A**

EMS FORM 4 – ENVIRONMENTAL MEETING MINUTES TEMPLATE

Venue		Date	

Attendees	Company

Apologies	Company

AGENDA	
	Responsible Person
1. Progress Against Targets	
2. Incidents / Complaints	
3. Inspection / Audit Findings	
4. Corrective Actions Status	
5. Proposed Changes Status	
6. New Business	

MINUTES

Items/Actions

1. Progress Against Targets

Targets	Actions	Responsible Person	Due Date	Status

2. Details of Incidents / Complaints and Corrective Actions	Responsible	Due Date

3. Details of Audit and Inspection findings and Corrective Actions		Responsible	Due Date

4. Corrective Action Status	Responsible	Due Date

5. Details of Proposed Changes / Change Control Requests	Responsible	Due Date

6. New Business	Responsible	Due Date

EMS FORM 5 - INCIDENT AND NON-CONFORMANCE REPORT FORM

Sections 1-5: To be completed by initiator of this report

Section 1: Details of person reporting Incident / Non-conformance			
Name		**Date of report**	
Company		**Supervisor**	
Report Type (please circle)	Environmental Incident or Near Miss (Fill in **Section 2**)	Non-conformance (**Fill in Section 3**)	
	External communication (Fill in **Section 4**)	Other (Fill in **Section 5**)	

Section 2: Details of Environmental Incident			
Date of event		**Location of event**	
employee / contractor involved		**Was risk of incident previously known? Yes / No**	
Description of incident:			
Immediate Actions taken			
Go to Section 6			

Section 3: Details of Environmental Non-conformance		
Source of Non-Conformance (please circle)	Inspection on Contractor	Inspection on Self
	EMS Audit on Contractor	Internal Audit on Self
	Contractual Audit	External Audit on Self
	Monitoring non conformance	
Description of non-conformance:		
Go to Section 6		

Section 4: Details of External Communication		
Source of Communication	Public	Interest Groups
	Government Agency	Other (Specify):
Communication was raised in	Phone call	Meeting
	Letter	Other (Specify):
Date of communication		**Received by:**
Details of Stakeholder / Communication:		

Name of Person / Organisation:	**Address:**
Telephone Number:	**Fax Number:**
Description of issue / concern:	
Go to Section 6	
Section 5: Other	
Details:	
Go to Section 6	

Section 6: To be completed by Work Group Supervisor / Environment Superintendent

Section 6: Investigation			
Date of completion		**Lead Investigator**	
Contributing factors for incident / non-conformance			
Breach of existing procedures		Lack of awareness, competence, skill	
No existing procedure		JESA not conducted	
Procedure / equipment not fit for purpose		Miscommunication	
Root Causes:			

Section 7: Corrective / Preventive Actions		
Required changes include: (Use Change Control Form)	Risk Register Update	Documentation Revision / Development
	Training of Personnel	Business Objectives Review
	Review of Contract Agreements	Communication with Employees / contractor
	Additional Resource	Communication with External Stakeholders

Corrective / Preventive Actions Required	**Responsible Person**	**Due Date**

Section 8: Incident / Non-conformance Close Out (To be completed only after all actions are completed)		
We confirm that all actions from this incident / non-conformance have been adequately addressed.		
Project Manager (Name)	**Signature**	**Date**
Environment Superintendent (Name)	**Signature**	**Date**

EMS FORM 6 - ENVIRONMENTAL CONTROLLED DOCUMENT TRANSMITTAL SLIP

Environmental Controlled Document Transmittal	
Please tick one of the following: ❑ **The attached document is NEW** ❑ **The attached document is a REVISION of an existing document.**	
Document Title:	
Date of Issue:	
Revision Issue Number:	
Controlled Copy Number:	
Description of Change	**Changes to section number/s:** **Changes to page number/s:** **Details:**
Recipient Name	
Recipient Title	
Organisation/Department:	
Location:	

Recipient to complete		
Please tick the appropriate box: ❑ The complete document and/or pages as specified have been received. No duplicate pages were received. ❑ Removed obsolete document pages or whole document and destroyed them/it. ❑ Missing/Duplicate pages received were:_____		
Print Name	**Signature**	**Date**
Please return this document to: **Environment Superintendent** **Tel:** **Fax:**		

EMS FORM 7 - ENVIRONMENTAL INSPECTION FORM

Environmental Inspection Report			
Note: Bring along previous inspection record for verification of corrective actions			
Site		**Inspection Date**	
Location		**Inspector/s**	

ASPECT	Action required?	Comments/Actions Required	Related non conformance
Landscape			
Geological Features			
Topsoil			
Erosion control			
Vegetation			
Weeds			
Priority Flora marked			
Fauna			
Water / Drainage structures			
No unauthorised clearing			
Rehabilitation			
Aboriginal Heritage sites			
Pollution Prevention			
Saline Water			
Sumps			
Borrow Pits			
Dust / haul road dust suppression			
Dust / stockpile & loading dust suppression			
Chemical storage			
Hydrocarbon storage			
Oily waste water			
Spillage of hazardous materials			
Solid Waste / Waste Recycling			
Hazardous Waste storage			
Litter			
Spill kits			
General house keeping			
Environmental Management Systems			
Procedures			
Incident Reports			

Inspections/Audits			
Records			
Awareness			
Training			
Other			
Fire fighting equipment/Machinery			
Explosives Magazine			
Signs and Barriers			
Safety Bunds / fences			
Created landforms			
Disturbed areas for rehabilitation			
Actions from previous inspections have been addressed □ **Yes** □ **No**			
Non-conformance has been raised (Complete Incident and Non Conformance Form)			

EMS FORM 8 - SITE DISTURBANCE PERMIT

Date: Time: am/pm

TO BE FILLED IN BY APPLICANT

Project Area:

- ❑ **Location:**_____
- ❑ **Area of Disturbance (ha):** _____
- ❑ **Volume of topsoil to be recovered (m^3):**_____

Originator/Contractor _____

Reason for Disturbance:

❑ Access Track	❑ Power/Water Easement	❑ Topsoil stockpile
❑ Drill Pad	❑ Lay down	❑ Mine Area
❑ Borrow Pit	❑ Other:	

_____

Description of proposed activity (attach plan, maps &/or photos if appropriate)

_____

TO BE FILLED IN BY ENVIRONMENTAL DEPARTMENT

- ❑ Check area is within approved mining area.
- ❑ Government approval, if required (vegetation clearing permit / Ground disturbance application).
- ❑ Botanical survey of area completed.
- ❑ Rare flora/fauna protected
- ❑ Archaeological and anthropological survey of area completed.
- ❑ Aboriginal sites demarcated.
- ❑ Drainage and surface water adequately managed.
- ❑ Adequate pollution prevention safeguards in place.
- ❑ Weed and dieback hygiene requirements can be met.
- ❑ Clearing boundary demarcated to standard.

Environmental Conditions _____

Approved by _____ **Date** _____

(Environment Superintendent)

Signature _____

EMS FORM 9 - BORROW PIT CHECKLIST

Check List Item	Action Yes/No
Name/Location of borrow pit:	
Approval to open borrow pit:	
Vegetation Clearing Permit:	
Aboriginal Heritage Site Clearance:	
Planning • Have existing waste stockpiles been considered for borrow material? • Out of sight of public roads & prominent visual areas, with buffer zones of at least 50m. • Trees and heavy stands of vegetation preserved. • Behind vegetation belt. • Behind physical terrain. • Water courses avoided by 50 m. • Capable of external drainage (preferable). • Single access track. • Borrow pit pegged to delineate size as per vegetation clearing permit. • Rectangular shape as per DoIR guidelines. • Minimum distance between pits of 50 m.	
Vegetation overburden recovered and stockpiled	
Topsoil directly placed If not, topsoil recovered and stockpiled along longitudinal sides, and Topsoil stockpile no higher than 2 m.	
Removal of Borrow Material • All disturbances inside pit area. • Access by single track. • Placed on slope with bottom corner “day lighting” for self drainage of pit floor (preferable). If not; - • Contoured to drain to 1 internal point.	

Check List Item	Action Yes/No
Rehabilitation • Rubbish removed. • Sides battered 3H:1V. • Topsoil spread evenly. • Vegetation overburden spread evenly. • Ripping of entire pit and disturbed areas as per DoIR guidelines. • Ripping of access road along contours and in an irregular pattern. • Seed broadcasting (based on age of topsoil and vegetative material). • Self-draining.	
Monitoring	
Rehabilitation Satisfactorily Completed	
Remedial Rehabilitation where damage may have occurred	

EMS FORM 10 - MOBILISATION HYGIENE CERTIFICATE

Date _____ **Contractor** _____

Contract # _____ **Address** _____

Purchase Order # _____ **Phone** _____ **Facsimile** _____ **Site Contact** _____

Location of Equipment Usage _____

EQUIPMENT NUMBER	EQUIPMENT DESCRIPTION (Please complete as comprehensively as possible for each unit)	Registration No.	Location of last works undertaken by equipment	Date Cleaned

Contractor Supervisor		**SMC Supervisor**	
Signature		**Signature**	
Position		**Position**	
Date		**Date**	

This form will be filed with the SMC Environmental Department, listed on the Mobilisation Hygiene register and a copy must be kept inside the cab of each piece of equipment.

EMS FORM 11 – PREQUALIFICATION QUESTIONAIRE

Introduction

The information provided here by the Contractor will be used to assess the adequacy and ability of the Contractor to meet the environmental requirements expected on the company's projects.

SMC is committed to compliance with environmental legal and other requirements and strives to achieve a high level of environmental standards and outcomes for the project. It is important that personnel working for or on behalf of SMC are similarly aligned with these outcomes.

Information provided in the questionnaire does not relieve the Contractor or subcontractors or consultants from complying with the obligations imposed by the environmental requirements of any future contract.

Section 1: Company Details	
Company Name:	
Telephone Number:	
Facsimile Number:	
Key Contact Person (Name / Title)	

Section 2: Environmental Professional – Head Office	
Name:	
Position Title:	
Reports to (Name / Position):	
Please attach details of competency, qualification and experience of above person.	

Section 3: Environmental Support Resources Describe the resources available to support environmental management requirements of the project.

Section 4 Independent certification of environmental management		
Is your company independently accredited / certified to a recognised standard for Environmental Management (e.g. ISO 14001:2004)?	Yes	No
If yes, please attach documentary evidence of the certification (copy of certificate / registration) and the schedule and scope of surveillance audits		

Section 5 Environmental procedures		
Does your company have an Environmental Policy? ***(Please attach a copy)***	Yes	No
If yes please describe how the Policy is communicated to personnel?		
Does your company have document environmental objectives and targets? ***(Please attach a copy)***	Yes	No
Does you company have written procedures for the management of environmental risks? ***(Please attach a copy)***	Yes	No

Section 5 Environmental procedures

Do procedures include the management of:

Hydrocarbons and Chemicals	Yes	No	Environmental Risks	Yes	No
Solid Waste	Yes	No	Change Management	Yes	No
Dust and Noise	Yes	No	Legal Compliance	Yes	No
Surface Water Quality	Yes	No	Training and Competence	Yes	No
Ground Water Quality	Yes	No	Internal Communications	Yes	No
Weeds and Pest	Yes	No	External Communications	Yes	No
Protected Fauna and Flora	Yes	No	Document and Records	Yes	No
Aboriginal Heritage	Yes	No	Audits and Inspections	Yes	No
Marine Waters	Yes	No	Incident and Non-conformances	Yes	No
Land Clearing	Yes	No	Performance Monitoring	Yes	No
Rehabilitation	Yes	No	Continual Improvement	Yes	No

Does your company have a formal environmental training program and training matrix? ***((Please attach a copy)***	Yes	No
Does your company have an environmental induction for new employees? ***(Please attach a copy of your induction)***	Yes	No
Does your company have regular toolbox sessions and meetings which include environmental information? ***(Please include a schedule and example of environmental information presented)***	Yes	No
Does your company have a behavioural based program which includes environment?	Yes	No
Does your company have a Job Safety Analysis (JSA) program which includes review of environmental risks? ***(Please attach a copy of a JSA form)***	Yes	No
Does your company have an environmental inspection / audit program? ***(Please attach a copy of a checklist / audit protocol)***	Yes	No

Section 6 Previous prosecutions

Has your company been directly or indirectly involved in an environmental prosecution/s. Yes No

If yes, please provide a brief description.

Section 7 Environmental Awards

Has your company been nominated for or received awards for environmental initiatives / management? Yes No

If yes, please provide a brief description.

Completed by

Contractor: _____ Scope # _____

Representative: _____ Date: _____

EMS FORM 12 – INFORMATION REQUIRED WITH TENDER

Section 1: Company Details	
Tender's Company Name:	
Telephone Number:	
Facsimile Number:	
Key Contact Person *(Name / Title)*	

Section 2: Tender	
Contract Number:	
Contract Title:	

Section 3: Environmental Professional – Head Office	
Name:	
Position Title:	
Reports to (Name / Position):	
Please attach details of competency, qualification and experience of above person.	

Section 4: Environmental Representative – Work Site	
Name:	
Position Title:	
Reports to (Name / Position):	
Please attach details of competency, qualification and experience of above person.	

Section 5: Environmental Support Resources

Describe the resources available to support environmental management requirements of the project.

Section 6 Independent certification of environmental management

Is your company independently accredited / certified to a recognised standard for Environmental Management (e.g. ISO 14001:2004)? Yes No

If yes, please attach documentary evidence of the certification (copy of certificate / registration) and the schedule and scope of surveillance audits.

Section 7 Previous prosecutions

Has your company been directly or indirectly involved in an environmental prosecution/s or other sanctions (e.g. fines or directions)? Yes No

If yes, please provide a brief description.

Section 8 Environmental Award

Has your company been nominated for or received award/s for environmental management? Yes No

If yes, please provide a brief description.

Section 9: Required Tender Information Please attach the following information as part of your tender submission.
1 A preliminary assessment of the environmental risks associated with the scope of works. This may be in the form of a risk register.
2 Specific work instructions for the management of environmental risks identified above.
3 Documentation describing how the requirements of the Environmental General Conditions and the Minimum Environmental Requirements will be met. This may be in the form of an Environmental Management Plan, Environmental Management System procedures or Work Instructions.
4 Provide position descriptions for personnel e.g. Environment Manager, Site Environment Superintendent, Project Manager, Site Supervisors, Construction / Area Manager.
5 Provide a list of installation of similar works / equipment which you have constructed or supplied, together with contact references, including current telephone and facsimile numbers.
6 Provide a brief summary of past Projects undertaken of a similar nature to the work specified under the Contract. E.g.: The summary should include key details such as: • Value of Project • Duration of Project • No. of people employed • Location • Date(s)

Tender completion checklist

Please ensure the following information is attached as part of your tender submission

1. CV of Environmental Professional (Head Office)	Yes	No	NA
2. CV of Environmental Representative (Site)	Yes	No	NA
3. Certificate of ISO 14001 registration	Yes	No	NA
4. ISO 14001 independent surveillance audit – scope and schedule	Yes	No	NA
5. Environmental Risk Register / information specific to the scope of works	Yes	No	NA
6. Specific work instructions for the management of environmental risks including position description of management personnel	Yes	No	NA
7. Environmental Management Plan / System Procedures / Documentation addressing the requirements of the Environmental General Conditions and Minimum Environmental Requirements.	Yes	No	NA
8. List of similar works.	Yes	No	NA
9. Summary of past projects	Yes	No	NA

I confirm on behalf of the tendering company that all information required as part of the tender submission has been provided on this form and in enclosed attachments, to an adequate level of detail.

REVIEW AND EVALUATION	
Tenderer Representative (Name):	
Position Title:	
Date:	
Signature:	
Tendering Company:	
Tender Number:	

EMS FORM 13 - TENDER EVALUATION FORM

To ensure that the commitments in Environmental Policy are met, companies contractors are required to submit project specific Environmental Management Compliance Plans (EMCP's). The Plans must comply with all requirements of the contract tender package.

The evaluation and approval of contractor EMCP's will be based on mandatory and recommended items addressed in the evaluation assessment.

A score will be allocated to each section of each element and a total score collated. This score will be compared against other contractors to judge which companies best complies with the project's environmental requirements.

The scores have been weighted for each section; this reflects the importance of individual requirements in managing the environmental performance of projects.

REVIEW AND EVALUATION	
Date of Review:	
Tendering Company:	
Tender Document Number:	
Description of Works:	

Review Team	
Name	**Position / Title**

Actual score	***Possible score***	***Requirement***
Legal Requirements, Policy and Management System		
	10	Environmental Management System (EMS) in place.
	5	EMS conforms to the intents of ISO 14001: 2004.
	5	Environmental Policy exists and refers to: • Senior management commitment to environmental protection; • Risk identification, assessment and control; • Commitment to legislative & regulator compliance; and • Performance review and improvement.
	5	Processes are in place to communicate the Policy to staff and employees.
	5	Procedures in place to identify and have access to all legal and other requirements associated with the scope of works.
	10	No prior Actions/ Convictions by a regulatory agency responsible for aspects of environmental protection / management.
	10	Prior nomination for or awards for environmental initiatives / management.

Environmental Risk - Assessment and Control		
Actual Score	***Possible score***	***Requirement***
	5	Procedure is in place for identification of environmental risks of planned and unplanned activities and changes.
	7	Procedure is in place for the control of environmental risks.
	7	Environmental risk reporting procedure includes provisions for the non-routine reporting and documentation of risks.
	5	Risk Register is in use which records environmental risks specific to the works and tracks elimination / control of risks.
	7	A process is in place for regular reviews of environmental performance, risks and strategic issues.
	10	EMCP details the measures needed to ensure that risks are adequately controlled, including all requirements of environmental management plans.
	5	Procedure for waste management is in place.
	7	Procedure for material use reduction and/or recycling is in place.
	5	Procedure for hydrocarbon management is in place.
	3	Procedure to track and manage environmentally hazardous or dangerous goods brought to site is in place.
	5	Procedure for groundwater and surface water management is in place.
	10	Procedure for land disturbance control is in place.
	5	Procedure for Job Safety and Environmental Analysis (JESA) is in place to review all new and non-routine jobs.
Management of Sub-contractors		
Actual score	***Possible score***	***Requirement***
	5	Procedure to identify environmental risk management requirements of sub-contractors is in place and includes risk management provisions and requirements for effectively implementing the EMCP.
	10	Procedures are in place to make sub-contractors aware of environmental risks associated with their scope of works, and are competent in management the risks are in place.

Responsibilities and Authority		
Actual score	***Possible score***	***Requirement***
	7	Processes are in place to ensure that managers and supervisors are trained and competent in compliance with relevant legal and other requirements and project environmental management plans.
	3	Environmental Duty of Care requirements are known, understood and followed through training and communication programs.
Planning and Objectives		
Actual score	***Possible score***	***Requirement***
	5	Regular reviews of environmental performance, risks and strategic issues will be undertaken.
Training		
Actual score	***Possible score***	***Requirement***
	5	Procedure for environmental training is in place
	10 (2) (2) (2) (2) (2)	Formal induction program incorporating the following is in place: • Environmental procedures and checklists for employees, sub-contractors and visitors; • Written competency based assessment of induction material understanding; • Environmental Duty of Care requirements; • Job specific induction and checklist for employees; and • Re-induction procedure and attendance schedule.
	4	Training needs analysis has been conducted for all persons required to work under the EMP.
	10	Employees will be trained in environmental procedures relevant to their work.
	5	Provisions exist for consultation with employees and environmental representatives on any significant changes to the project that may adversely effect the environment.
	10	Employees are educated in JESA techniques and application in the management of change. There is clearly defined JESA training / awareness in the induction or other training packages.
	7	Environmental representatives and supervisors are / will be trained in incident investigation techniques.

Documents and Records		
Actual score	***Possible score***	***Requirement***
	3	Environmental information/documentation will be distributed to appropriate persons – including sub-contractors records to be maintained digitally with back-up systems.
Monitoring and Reporting		
Actual score	***Possible score***	***Requirement***
	10	Schedule of site inspections, compliance audits and system audits is / will be in place and implemented.
	7	System to measure, monitor and evaluate actual environmental performance using measurable performance indicators; and report performance progress to SMC is / will be in place.
	10	Audit of the implementation of the EMCP will be undertaken at monthly intervals.
	5	Annual independent audit of the contractor's EMCP and compliance with Contractual Agreements will be undertaken where the period of the contract exceeds twelve months.
	10	Monthly environment meeting will be / is held between the contractor and project site representative to discuss the EMCP and any changing environmental management needs of the project
Incident Reporting and Investigations		
Actual score	***Possible score***	***Requirement***
	10	Procedure for incident reporting and investigation is in place.
	10	All environmental incidents are / will be reported within 24 hours.
	10	System is / will be in place to ensure corrective actions from inspections, audits and incident investigations are followed through to completion.
	7	A close out system for corrective actions is in place.
	5	Procedure to notify the project personnel of incidents reportable under Mining or Environmental Legislation is in place.

Summary of Evaluation			
Requirement	**Comments**	**Actual score**	**Possible Score**
Legal Requirements, Policy and Management System			
Environmental Risk - Assessment and Control			
Management of Sub-contractors			
Responsibilities and Authority			
Planning and Objectives			
Training			
Documents and Records			
Monitoring and reporting			
Incident Reporting and Investigations			
	Total Score		
General comments			

EMS FORM 14 – ENVIRONMENTAL APPROVAL TO MOBILISE

Contractor: _____ Contract # _____

Representative: _____ Date: _____

Check List Item	Date Submitted	Checked by:	Approved Yes/No
Risk assessment for scope of works completed.			
Environmental management procedures approved.			
Induction materials approved.			
Mobilisation hygiene certificates completed and verified.			
Actions required:			
Comments:			

CONTRACTOR IS APPROVED TO MOBILISE

Signature

Project Manager: _____ Date: _____

Signature

Environment Manager: _____ Date: _____

EMS FORM 15 – DEMOBILISATION INSPECTION / APPROVAL

Contractor: _____ Contract # _____

Representative: _____ Date: _____

Check List Item	Date Assessed	Checked by:	Compliant Yes/No
Temporary structures removed.			
Temporary land disturbances have been rehabilitated.			
Temporary disturbances to infrastructure have been corrected.			
Rubbish and waste material have been removed from site.			
Contaminated soil removed.			
Natural drainage has been reinstated.			
Earthmoving equipment cleaned prior to departure from site.			
Records and documents have been handed over as required.			
Corrective actions required:			

CONTRACTOR IS APPROVED TO DEMOBILISE

Signature

Project Manager: _____ Date: _____

Signature

Environment

Manager: _____ Date: _____

ENVIRONMENTAL GENERAL CONDITIONS

1) Compliance with Legal and Other Requirements

(i) Contractor shall comply with all legal and other requirements applicable to the Work. This shall include:

a. Relevant State and National Legislation;

b. Ministerial Condition Statements,

c. Relevant works approval, license and permit conditions,

d. the SMC Environmental Management Plan,

e. The SMC Environmental Management System,

f. Contract Conditions,

g. SMC Minimum Environmental Requirements, and

h. Other relevant guidelines and procedures provided by the Company.

(ii) The Contractor shall maintain and produce on request by the Company, records and other documented evidence to demonstrate compliance with legal and other requirements.

(iii) The Contractor shall ensure all personnel working for or on behalf of the Contractor are competent in achieving compliance with legal and other requirements within their area of work.

(iv) The Contractor shall implement proactive monitoring programs to verify compliance with legal and other requirements.

(v) The price to be paid for the Work and the date for completion of the Work shall be regarded as containing adequate allowance for any delay or disruption suffered, and any costs and expenses incurred, by Contractor in complying with this clause.

(vi) Where the scope of work is not completed, or does not meet environmental legal or other requirements prior to Contractor demobilisation from the project, the Company reserves the right to withhold final payment to the Contractor, or arrange for back charge of the costs of works to the Contractor.

2) Breach of Conditions

(i) Any significant or sustained breach or violation of environmental legal and other requirements shall be considered to be a material and substantial breach of this Contract.

(ii) The Contractor shall immediately notify the Company of any potential or actual breaches of these requirements. This shall extend to potential or actual breaches resulting from practices of personnel working for or on behalf of the Contractor.

(iii) The Company reserves the right to direct personnel working for or on behalf of the Contractor to stop work that is, or has the potential to result, in a breach of legal and other requirements.

(iv) Potential and / or actual non-conforming situations shall be remedied in consultation with the Company, and prevented from recurring.

(v) The Company reserves the right to terminate this contract in accordance with default provisions of the Contract, and/or remove from site any person or persons responsible for breach or breaches to legal and other requirements. The costs associated with the removal and subsequent appointment of a replacement person shall be borne by Contractor.

3) Indemnity

Contractor shall indemnify and keep indemnified the Company, its Related Entities and its and their directors, officers, employees and agents from and against any loss or damage of any kind whatsoever, arising directly or indirectly from:

(i) any breach of any warranty or of any terms of this Contract by Contractor;

(ii) environmental pollution or harm arising out of or in connection with this Contract; and / or caused by or contributed to by:

a. the performance of Contractor's obligations; and/or

b. the entry onto, or the activities undertaken on, under or around the Site and other SMC premises by Contractor and/or Contractor's employees, agents, contractors and/or subcontractors;

(iii) any negligence or wilful act or omission by Contractor and/or any of Contractor's employees, agents, contractors and/or subcontractors in connection with this Contract;

(iv) any penalty imposed for breach of legal and other requirements in connection with the performance of the Work by Contractor;

(v) except to the extent that any liability, loss or damage is solely and directly caused by the Company's wilful misconduct.

4) Environmental Management Plans and Procedures

(i) Upon Contract Award and prior to mobilization, the Contractor shall present an Environmental Management Plan (EMP), Environmental Management System procedures or Work Instructions for approval by the Company. This EMP shall comply with relevant legal and other requirements including the SMC Minimum Environmental Requirements, SMC Environmental Management Plan and SMC Environmental Management System procedures.

(ii) The Contractor may elect, with approval from the Company, to adopt existing SMC procedures and plans as part of their documentation. It is the responsibility of the Contractor to ensure that SMC procedures and plans comply with all legal and other requirements of the project. The Contractor shall provide the Company with appropriate statements to indemnify the Company of any inadequacies of SMC procedures and plans.

(iii) Between contract award and throughout the duration of the works, the Company may request for specific environmental management procedures in addition to an EMP based on the scope of works and level of risks.

(iv) The Contractor shall not commence any work prior to receipt of written approval of the EMP, Environmental Management System procedures or Work Instructions from the Company.

(v) The Contractor shall ensure pre-mobilization requirements stipulated in SMC Minimum Environmental Management Requirements are met prior to mobilization.

(vi) The Company reserves the right to refuse site entry and/or commencement of works until such time when pre-mobilization requirements have been completed and are to a standard deemed satisfactory to the Company.

(vii) The Contractor shall maintain and ensure the suitability of the EMP, Environmental Management System procedures or Work Instructions and associated environmental management procedures in light of potential or actual changes to legal or other requirements, personnel, equipment, risks and work procedures, or as directed by the Company.

(viii) The Contractor shall ensure that personnel working for or on behalf of the Contractor are

advised of any changes to the EMP, Environmental Management System procedures or Work Instructions, and that obsolete documents are removed from circulation to avoid unintended use.

(ix) The Contractor shall meet on a regular basis with the Company Representative to report on its implementation and compliance with the EMP, Environmental Management System procedures or Work Instructions. The Contractor shall at the Company's request provide documentary evidence that it has complied with the EMP, Environmental Management System procedures or Work Instructions.

5) Audit, Inspection and Reporting

(i) The Company reserves the right, at any time and without prior notice to the Contractor, to conduct audits or inspections of the site / work to determine the Contractor's compliance or otherwise with legal and other requirements including:

a. Relevant State and National Legislation;

b. Ministerial Condition Statements,

c. Relevant works approval, license and permit conditions,

d. the SMC Environmental Management Plan,

e. the SMC Environmental Management System Manual,

f. Contract Conditions,

g. SMC Minimum Environmental Requirements, and

h. Other relevant guidelines and procedures provided by the Company.

(ii) Contractor shall, at its own cost, provide the Company's personnel with all reasonable assistance and access to Contractor's records, Contractor's Personnel, the Site and the Work to enable the Company to conduct an audit or inspection.

(iii) Where such audits or inspections reveal non-compliances with Legal and Other Requirements as listed in section 1, the Contractor shall at its own cost rectify such non-compliances and/or deficiencies in accordance with the requirements of SMC Minimum Environmental Requirements.

(iv) The Company may conduct surveillance inspections and/or audits to verify that non-compliances have been effectively addressed by the Contractor.

6) Performance tracking and reporting

(i) The Company reserves the right to hold regular progress meetings with the Contractor to review Contractor's performance.

(ii) The Contractor shall submit periodically environmental reports to the Company as per requirements stipulated in SMC Minimum Environmental Requirements.

(iii) The Contractor shall report, investigate and correct incidents and near miss situations as per requirements stipulated in SMC Minimum Environmental Requirements.

(iv) The Company reserves the right to develop and implement incentive based performance monitoring programs using key performance indicators relevant to the scope of works. The Company may, at any time during this Contract, review and revise these performance indicators based on environmental risks and continual improvement commitments.

7) Communications

(i) The Contractor shall participate in pre-mobilization meetings and risk workshops prior to the start of the Work to address environmental issues of the scope of works. The intent of these meetings / workshops is to inform the Contractor of specific environmental issues and shall not relieve the Contractor of any of its obligations under this Contract.

(ii) The Contractor shall maintain training and communication procedures as stipulated in SMC Minimum Environmental Requirements for the management of environmental risks. The Contractor shall make available records of such training and communication as requested by the Company.

(iii) The Company reserves the right to develop and implement communication channels with the Contractor for the management of environmental risks at any time throughout the duration of the contract. The Contractor shall participate in and make available the necessary personnel and resources as required.

8) Organisation and Responsibilities

8.1 Organisational information

Prior to commencement of any Work under this Contract and, whenever directed to do so by the Company, the Contractor shall provide the Company with:

a. an updated detailed organisation chart showing the positions, job descriptions and reporting relationships for all managerial or supervisory personnel associated with the Work under the Contract;

b. details of each subcontractor's name, address and representative; and

c. any other information requested by the Company.

8.2 Environmental Professional

(i) The Contractor shall appoint Environmental Professionals for the management of environmental issues as per requirements stipulated in SMC Minimum Environmental Requirements.

(ii) The nominated person/s shall have a direct reporting line to the Contractor's Project Manager and Contractor's Corporate Environment Manager.

(iii) The Company reserves the right to veto the appointment of, or release from engagement in the project, environmental professionals based on competency, qualification, experience, or performance on the job.

8.3 Contractor Personnel Responsibilities

(i) The Contractor represents and warrants that its managers and supervisors are responsible, and will be advised in writing that they are responsible for ensuring that all work is performed in accordance with this Contract.

(ii) The Contractor shall develop clear role and responsibility statements, which shall include environmental key performance indicators for its managerial and supervisory personnel/Contractor's personnel.

9) WORKFORCE SELECTION, COMPETENCY & TRAINING

(i) The Contractor shall ensure that all personnel working for or on behalf of the Contractor are appropriately qualified, skilled and experienced to carry out the duties required of them.

(ii) Before commencement of any Work, the Contractor shall at its own expense ensure that all personnel working for or on behalf of the Contractor have been given the necessary training including training in environmental hazard identification, risk analysis, environmental harm and pollution prevention requirements. This shall be in compliance with the requirements stipulated in SMC Minimum Environmental Requirements.

(iii) The Contractor shall ensure that all personnel working for or on behalf of the Contractor be provided with relevant documentation for the management of significant environmental risks, and as relevant to comply with legal and other requirements.

(iv) The Contractor shall, if requested, provide the Company with details of ongoing training programs and shall provide the Company with all revisions to such programs during the term of the Contract.

(v) The Contractor acknowledges that the cost of providing all training and instruction required to perform the Work under this Contract is included in the price for performing the Work.

10) RISK MANAGEMENT

The Contractor shall ensure that environmental risk management requirements as stipulated in SMC Minimum Environmental Requirements are fulfilled and maintained during the term of the Contract.

11) EMERGENCY RESPONSE

(i) The Contractor shall provide the Company with a copy of its emergency response procedures, and manage the risk of emergency situations as per requirements stipulated in SMC Minimum Environmental Requirements. The Contractor shall revise these procedures as instructed by the Company if deemed necessary.

(ii) The Contractor shall ensure that all personnel on the Site, including visitors, are properly instructed in the emergency response procedures.

12) CONTRACTOR SELECTION & MANAGEMENT

(i) Contractor may not sub-contract any part of the Work without the prior written consent of the Company, such consent not to be unreasonably withheld.

(ii) If all or any part of Contractor's performance may be assigned or sub-contracted in accordance with the terms of this Contract, such performance shall remain subject to all the Provisions of this Contract. The Contractor shall remain obligated to ensure compliance with the Provisions of this Contract unless written exemption is obtained from the Company.

(iii) Prior to awarding a sub-contract, the Contractor shall assess and ensure that the sub-contractor is competent in complying with legal and other requirements as defined in Section 1 of this contract. On request by the Company, the Contractor shall provide evidence of such assessment and compliance.

13) MAINTENANCE, INSPECTION, TESTING & MODIFICATION

(i) Environmental equipment and structures consists of equipment and structures critical to the prevention and detection of pollution and environmental harm, mitigation of environmental impacts, compliance with legal and other requirements as defined in Section 1, and monitoring of environmental aspects.

(ii) The Contractor shall ensure that environmental equipment and structures both fixed and temporary on the work-site relating to the Work are designed to applicable legislation, codes of practices and industry standards.

(iii) The Contractors shall regularly maintain, test, and calibrate where required, both fixed and temporary environmental equipment and structures on the work-site relating to the Work. Documentary evidence of maintenance, tests and calibration shall be maintained by the Contractor and made available to the Company on request.

(iv) The Contractor shall ensure that all personnel working for or on behalf of the Contractor are instructed, trained and, where required, certified in the use of such environmental equipment and structures.

14) SPECIFIC PROVISION OF ENVIRONMENTAL MANAGEMENT

(i) The Contractor shall meet the requirements stipulated in SMC's Minimum Environmental Requirements. Where practicable or instructed by the Company, the Contractor shall exceed these requirements as part of continual improvement for the management of significant risks.

(ii) Nothing in these contract conditions releases the Contractor from compliance with requirements stipulated in SMC Minimum Environmental Requirements.

(iii) The Contractor shall implement and demonstrate compliance with all provisions of environmental management requirements at all times during the execution of the scope of works under this Contract.

DEFINITIONS

The Company – Sinosteel Midwest Joint Venture Ltd

Contractor's Personnel - all Contractor's employees, agents, contractors and subcontractors engaged to perform any part of the Work.

Environment – living things, their physical, biological and social surroundings, and interactions between all of these.

Environmental Equipment and Structures - equipment and structures critical to the prevention and detection of pollution and environmental harm, mitigation of environmental impacts, compliance with legal and other requirements as defined in Section 1, and monitoring of environmental aspects.

Environmental Harm means direct or indirect -

a) Harm to the environment involving removal or destruction of, or damage to:
   (i) native vegetation; or
   (ii) the habitat of native vegetation or indigenous aquatic or terrestrial animals;

b) Alteration of the environment to its detriment or degradation or potential detriment or degradation.

c) Alteration of the environment to the detriment or potential detriment of an environmental value.

d) Alteration of the environment of a prescribed kind.

Hazardous Materials - material or materials which because of its quantity, concentration or physical, chemical or infectious characteristics (in particular toxicity, reactivity, corrosivity or ignitability) may pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed or any material or substance identified as being hazardous by any law or regulation.

Legal and Other Requirements – includes conditions and requirements stipulated in:

a) Relevant State and National Legislation;

b) Ministerial Condition Statements,

c) Relevant works approval, license and permit conditions,

d) the SMC Environmental Management Plan,

e) the SMC Environmental Management System Manual,

f) Contract Conditions,

g) SMC Minimum Environmental Requirements, and

h) Other relevant guidelines and procedures provided by the Company.

Pollution means direct or indirect alteration of the environment -

a) To its detriment or degradation.

b) To the detriment of an environmental value.

c) Of a prescribed kind.

d) That involves an emission.

Site - any area associated with the project to which contractor will have access and upon which the contractor will perform work.

Waste includes matter -

(a) whether liquid, solid, gaseous or radioactive and whether useful or useless, which is discharged into the environment; or

(b) prescribed to be waste;

Wilful Misconduct - any act or omission (including a negligent act or omission) done with deliberate or reckless disregard for foreseeable and harmful consequences.

4.0 EMS REGISTERS

These registers shall be developed and maintained on project implementation:

- Risk register
- Obligation register
- Objectives, targets and management programs
- Training need matrix and schedule
- Public complaints register
- Controlled document register
- Incidents / corrective actions register
- Records register
- Audits and Inspections schedule