

Environmental Management System

A. Intent

The intent of this standard is to ensure that Rio Tinto Businesses manage their environmental related aspects in a manner that is planned, controlled, monitored, recorded and audited, using an Environmental Management System (EMS) that drives continual performance improvement.

This Standard will provide the comprehensive framework for the implementation of the other Rio Tinto Environmental Standards.

B. Scope

This Standard is applicable to all Rio Tinto Business Units. The Standard covers all exploration, construction, mining, processing, smelting, refining, distribution, transport, closure and corporate activities of the Rio Tinto Group. It also applies to contractors and suppliers with the level of EMS implementation commensurate to the level of hazard associated with the products and services provided by the contractor or supplier.

Other relevant documents are:

- The Way We Work
- ISO 14001:1996 Environmental Management System
- European Eco-Management and Audit Scheme - EMAS
- ARD Prediction and Control Standard
- Air Quality Control Standard
- Greenhouse Gas Emission Control Standard
- Hazardous Materials and Contamination Control Standard
- Land Use Stewardship Standard
- Mineral Waste Management Standard
- Non-Mineral Waste Management Standard
- Noise and Vibration Standard
- Water Use and Quality Control Standard
- Rio Tinto Occupational Health Standards
- Rio Tinto Safety Standards
- Rio Tinto Closure Standard (under preparation)
- Rio Tinto Data Quality Guidance Note
- Rio Tinto Guideline for Six-Monthly Social and Environmental Reporting
- Rio Tinto Procedure for Reporting Investigation of Fatal and Critical Incidents
- Rio Tinto's Guideline for HSE Auditing Within Group Companies
- Environmental Management System Guidance Notes
- Biodiversity Guidance Note (under preparation)
- Product Stewardship Guidance Note (under preparation)
- S&E Reporting Guideline

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C. Requirements

Rio Tinto managed Operations and/or Business Units are required to:

1.0 General

- 1.1 Maintain a certified Environmental Management System conforming to the ISO 14001 Standard or EMAS (European Eco-Management and Audit Scheme). An accredited certification body must conduct the certification.
- 1.2 Ensure that the EMS is compatible with the overall management system of the Operation or Business Unit and in particular with the occupational health and safety management systems.
- 1.3 Ensure that contractors and suppliers are encouraged to maintain an EMS.
- 1.4 Ensure that category 1 contractors are treated as employees for all purposes of the EMS application.

Maintain for Category 2 and 3 contractors a contractor environmental management procedure covering as a minimum:

- a. Pre-qualification of Contractor
- b. Pre-bid Meeting/Discussions
- c. Bid Documents
- d. Selection
- e. Contract Terms
- f. Pre-job Conference
- g. Monitoring and Evaluation
- h. Feedback

2.0 Policy

- 2.1 Ensure that the environmental policy is aligned and compatible with the Rio Tinto corporate environment policy, as expressed in the "The way we work", and all voluntary environment-related policy principles contained in codes and charters adopted by Rio Tinto.

3.0 Planning

- 3.1 In conformity with the adopted international EMS standard and considering the corresponding Rio Tinto Guidance Notes:
 - Identify the environmental aspects and assess the significance of their impacts;
 - Identify the applicable legal, Rio Tinto and other requirements;
 - Establish environmental objectives and targets;
 - Establish environmental management programmes.

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- 3.2 Consider as a minimum, the following list in the process of identifying environmental aspects associated with the operation:
- a. Emissions to air
 - b. Greenhouse gas emissions
 - c. Noise and vibration
 - d. Releases to underground and surface waters
 - e. Mineral and non-mineral waste generation and disposal
 - f. Land use
 - g. Use of hazardous materials
 - h. Use of natural resources
 - i. Changes to ecosystems
 - j. Product life cycle
- 3.3 Where any of the environmental aspects in the list is not applicable to the operation, keep a register with a documented justification of that.
- 3.4 Ensure that new activities, organisational arrangements and management procedures or changes to existing ones are subjected to previous identification of their environmental aspects and impact assessment through a change management procedure.
- 3.5 Translate into the appropriate operational plans, programmes, projects and procedures the Group, Business Unit and operation environmental performance indicators, objectives and targets.
- 3.6 Identify all relevant internal and external business and operational environmental data requirements and establish the data quality provisions necessary to ensure:
- a. Completeness
 - b. Comparability
 - c. Representativeness
 - d. Methods used are defensible and
 - e. Accuracy and precision

4.0 Implementation and Operation

- 4.1 In conformity with the adopted international EMS standard and considering the corresponding Rio Tinto's Guidance Notes:
- Define environmental management structure and responsibilities;
 - Ensure personnel are trained, aware and competent for managing the environmental aspects and impacts related to their roles;
 - Establish internal and external communication procedures;
 - Maintain the EMS elements documented;
 - Establish and maintain document control procedures;
 - Implement operational control of environmental aspects;
 - Maintain an environmental emergency preparedness and response procedure and capability.
- 4.2 Designate operational control of the relevant environmental aspects as a clear and accountable responsibility of line management. This must include the authority, resources and competence required for operating to established plans and procedures and for achieving the specified environmental performance outcomes and targets.

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- 4.3 Establish a cross-functional committee, including the line managers, to support the development, implementation and operation of the EMS including the establishment of targets and objectives on environmental matters.
- 4.4 Ensure that the General Manager (or equivalent) is fully aware of, and adequately resourced to manage the environmental aspects connected with the Operation.
- 4.5 Establish a communication programme related to environmental aspects including keeping records of:
- a. Stakeholder complaints, enquiries and views;
 - b. Responses and feedback to (a).
- 4.6 Ensure that no material change in process or management that might involve an environmental aspect is carried out prior to competent process of approval, communication and incorporation into appropriate routines or procedures.
- 4.7 Establish, document and implement procedures, including quality control elements, for the measurement or estimation of all environmental data requirements.
The procedures must:
- a. Encompass all of the principal and ancillary parameters for which environmental data must be measured or estimated;
 - b. Ensure that the measurement or estimate is consistent with the criteria against which the data are to be evaluated;
 - c. Detail the method(s) for ensuring that the measurement or estimate takes into account the inherent variability of the operation's activities;
 - d. Detail the method(s) for measurement/estimations that are consistent with external requirements and recognized good practice; and
 - e. Include an estimate of uncertainty.

5.0 **Checking and Corrective Action**

- 5.1 In conformity with the adopted international EMS standard, comply with the following requirements of that standard:
- Maintain procedures to monitor and measure activities that can lead to impact on the environment;
 - Maintain procedures for handling non-conformances and for corrective and preventive actions;
 - Maintain procedures for environmental record-keeping; and
 - Maintain procedures of environmental management system and performance auditing.
- 5.2 Review environmental data on a regular basis and take corrective actions if quality requirements are not met.
- 5.3 Establish a process of internal environmental audits covering environmental performance and the environmental management system. The audit requirements and process must be compatible with Rio Tinto's Guideline for HSE Auditing Within Group Companies.

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- 5.4 Ensure the following conditions for the internal environmental auditing are met:
- a. The members of an audit team must be sufficiently removed from the activities they audit to ensure independence of the audit process and its findings;
 - b. Develop and maintain audit protocols that reflect the environmental aspects and significant impacts of each activity/operation/business to be audited;
 - c. The frequency and coverage of the auditing process must be compatible with the significance of the potential environmental impacts;
 - d. A documented report must be prepared for each environmental audit, including the significant audit findings to be reported as indicated in the Guideline for Six-Monthly Social and Environmental Reporting.
- 5.5 Establish a system for recording and reporting all incidents involving injury, damage to property or damage to the environment or the potential for such injury or damage. This system must satisfy applicable regulatory requirements.
- 5.6 Establish a system for ensuring that a written report of Significant Incidents are submitted to the Chief Executive of Rio Tinto, with a copy to the Product Group Chief Executive and Head of HSE, within 24 hours of their occurrence.
- 5.7 Establish a system for ensuring that environment incidents of relevance to other Group operations are posted on the Rio Tinto Portal Intranet Site within seven days of their occurrence.
- 5.8 Investigate any significant environmental incidents and non-conformances using qualified and trained personnel and transparent procedures. Incident and investigation reports must be communicated in accordance with the Procedure for Reporting Investigation of Fatal and Critical Incidents.

6.0 Management Review

- 6.1 Assess environmental performance regularly and review objectives and targets to maintain continual improvement.
- 6.2 Conduct a review of the EMS by senior management at least every three years or at lesser intervals if needed. The review process and its outcomes must be documented and signed off by management.

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