

Hazardous Materials and Contamination Control

A. Intent

The intent of this standard is to ensure the safe and responsible use and control of all hazardous materials handled by Rio Tinto operations in ways commensurate with their risks to the environment. The control measures shall also ensure the minimisation of risks and environmental impacts due to spill or other escapes.

For those cases where site contamination has occurred, the intent of the standard is to ensure that contamination is properly characterised and managed.

B. Scope

This standard is applicable to all Rio Tinto Business Units and managed operations from exploration/development and acquisition through to closure and post closure. It covers the management of hazardous materials, including hazard identification and evaluation, cleaner production, reduction of use, re-use and recycling, inventory reduction, secure storage and transport, contamination investigations, site remediation and emergency response. Where the Business or Operation is also responsible for ancillary activities (e.g. power generation) or off-site transport (rail, truck and ship), those activities are also under the scope of this standard.

Other relevant documents are:

- Environmental Management System Standard
- B4 (Hazardous Substances) Occupational Health Standard
- Non-Mineral Waste Management Standard
- Water Use and Quality Control Standard
- Land Use Stewardship Standard
- Mineral Waste Management Standard
- Product Stewardship Guidance Note (under preparation)
- Hazardous Materials and Contamination Control Guidance Note

C. Requirements

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

1.0 *Planning*

- 1.1 Understand and document the environmental hazards of materials brought to site, site products, intermediates and by-products.
- 1.2 Identify and assess the environmental aspects and potential impacts associated with the transport, storage, use and transfer of hazardous materials, including failures of secondary containment structures.
- 1.3 Develop internal criteria for hazardous materials and site contamination when government regulations are absent or incomplete to ensure the correct classification of such. The criteria must be in line with internationally accepted regulations, guidelines, definitions and methodologies.

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- 1.4 Maintain a documented inventory of hazardous materials brought to site or produced onsite and document their storage, usage and final destination.
- 1.5 Develop and maintain a contaminated sites register, with geographical references, for land currently or previously owned, leased and/or managed (RT land). Identify existing contamination and assess its environmental impact. The register must include known contamination for sites previously owned or leased regardless of whether remediation liabilities are retained. Ensure that registers are developed as part of the due diligence process for acquisitions.
- 1.6 Develop and implement a Hazardous Material and Contamination Management Plan that consolidates:
 - a. Controlling the use and inventory of hazardous materials to minimum necessary quantities;
 - b. Assessing and promoting the use of environmentally safer alternatives to currently used hazardous materials;
 - c. Ensuring the safe use, storage and transport of hazardous materials.

2.0 Implementation and Operation

- 2.1 Ensure that all employees and contractors involved with hazardous materials handling or remediation of contamination are fully aware of the associated environmental hazards and risks and are appropriately trained in routine activities and emergency actions.
- 2.2 Ensure that new hazardous materials including those brought by contractors do not adversely impact the environment.
- 2.3 Ensure that all hazardous materials are kept in adequate conditions and containment, within controlled areas and securely protected from contact of non-authorized personnel and, where necessary, from birds and other animals.
- 2.4 Operate effective containment barriers for preventing spills of hazardous material from reaching the environment. Above ground tanks, drum storages and pipelines that contain hazardous material must have properly designed secondary containments.
- 2.5 Storage tanks and pipelines containing or transporting hazardous materials must be above ground. Any exception must be justified and authorised by the Managing Director.
- 2.6 Storage tanks and pipelines containing or transporting hazardous materials must have leakage / spill identification and response controls in place.
- 2.7 Implement selection criteria and control procedures for third party transporters, purchasers and other recipients of hazardous materials and implement follow-up procedures for any hazardous material sent off the premises.
- 2.8 Maintain and test emergency response procedures, associated equipment and personnel for responding to potential, on-site and off-site hazardous material releases.

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2.9 Develop and implement a remediation strategy for those existing contaminated sites where site investigation has shown there are an unacceptable environmental impact to current land uses, ecological function, surface and ground water resources, or where off-site impacts are occurring or are likely to occur.

3.0 Performance Measurement

3.1 Implement routine inspections, testing and monitoring procedures for leaks from, or deterioration of storage tanks and pipelines with a frequency and methodology commensurate with the associated environmental hazards.

3.2 Maintain spill and leakage detection equipment that is adequate for the risk posed by the hazardous material to the environment and linked to the appropriate operational control and emergency response unit.

3.3 Implement a systematic auditing procedure for significant aspects of hazardous materials management at site in order to verify its adequacy and performance.

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