

Standard**E7 - Non mineral waste management**

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Contents page

Scope	3
Programme design	4
Revision history	5

E7 - Non-mineral waste management

Scope

This standard is applicable to all Rio Tinto business units and managed operations, including admin/corporate offices or research facilities located off site, from exploration/development and acquisition through to closure and post closure. It covers non-mineral wastes generated by the activities of the operation, or non-mineral wastes received by the operation to dispose or manage on behalf of others.

Definition: Non-mineral wastes include but are not limited to used oil, antifreeze, greases, batteries, solvents, coolants, spent reagents and paints, tyres, contaminated soils and debris, solid sewage residues, construction debris, spent pot liners, bath, anode wastes, refractory bricks and any other waste materials from processing, maintenance and medical facilities, canteens, offices, workshops, laboratories and gardens, including off-specification raw materials (other than ore) used in processes. Non-mineral wastes do not include residues directly derived from the mining or processing of rock and unconsolidated sediments.

Mineral wastes generated as a direct result of mining or processing, are addressed in the Mineral waste management standard. Process related liquid effluents are covered in the Water use and quality control standard.

Intent: The intent of this standard is to ensure sound non-mineral waste management in Rio Tinto operations by the minimisation of waste generation and ensuring the safe handling, treatment and disposal of all generated wastes.

Other relevant documents:

- HSEQ management system (or standard E1 EMS for non ABS operations)
- Hazardous materials and contamination control standard
- Mineral waste management standard
- Water use and quality control standard
- Land use stewardship standard
- Air quality control standard
- Non-Mineral waste management guidance note

Programme design

1. Planning

- 1.1 Identify, assess and document the quantities, characteristics, environmental hazards and risks associated with non-mineral wastes generated, disposed on-site or transported and disposed off-site or managed on behalf of others.
- 1.2 Develop and maintain a documented inventory, including quantity per year and cumulative total, of non-mineral wastes generated or received and disposed on or off-site.
- 1.3 Maintain measurable indicators and targets for hazard and/or quantity reduction of significant non-mineral wastes destined for disposal.
- 1.4 Develop internal criteria for waste classification and management when government regulations are absent or incomplete. The criteria must have formal approval from the operation's managing director (MD) and be in line with internationally accepted regulations, guidelines, definitions and methodologies.
- 1.5 Develop and implement a Non-mineral waste management plan. The plan shall give priority to those wastes identified as having significant hazards and the actions must demonstrate that the waste management hierarchy has been considered, as follows in order of preference:
 - a) waste avoidance and reduction at source;
 - b) re-use and recycling; and
 - c) waste storage, treatment and/or disposal.

2. Implementation and operation

- 2.1 Ensure that non-mineral wastes are segregated at generation and that wastes awaiting further treatment, transport or disposal are securely contained and monitored. Persons that manage or handle hazardous waste must be appropriately trained.
- 2.2 Maintain operational procedures and effective controls for the safe handling, on-site and off-site transportation, storage and disposal of non-mineral wastes commensurate with their degree of hazard and compatibility.
- 2.3 Maintain records of wastes sent off-site, and a documented inventory and location of on-site waste landfills and storage areas. Historical and abandoned landfills shall be included in this inventory and their location documented.
- 2.4 Disposal of waste must only be carried out in engineered and approved facilities and in accordance with established operational procedures and applicable local laws and regulations.

- 2.5 Undertake verification assessments of contractors and facilities used for wastes sent off-site for disposal or treatment, to verify that the wastes have been dealt with appropriately.

3. Performance measurement

- 3.1 Establish a procedure to inspect and monitor waste handling and storage facilities commensurate with the degree of hazard of the waste. Corrective action must be taken where unacceptable conditions are identified.
- 3.2 The Non-mineral waste management plan must be reviewed at least every four years or more frequently when operational or environmental conditions so dictate.

4. Revision history

Version no.	Effective date	Prepared by	Authorised by	
1	June 2005	Adelino Taboada	ExCo	
Version no.	Revision date	Revised by	Authorised by	Reason for change
2	December 2008	Adrian van Tonder	Bruce Kelley	Incorporation of suggested changes from operations and alignment with HSEQ Management System.