

Standard

E14 – Land management and rehabilitation

November 2017

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Owner: Group Executive Health, Safety & Environment		Approver: Executive Committee	Target audience: All Rio Tinto staff and each Rio Tinto Group business and function	
Direct linkages to other relevant policies, standards, procedures or guidance notes: Rio Tinto management system standard and E16 – Biodiversity and natural resource management standard. E14 - Land management and rehabilitation guidance note				
Document purpose: To support the implementation of the Group HSEC policy. This standard defines the minimum acceptable requirements for behaviours and/or conditions in respect of managing land disturbance and rehabilitation, which if not met, could materially impact the Group.				

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E14 – Land management and rehabilitation

Intent and scope

Business units and operations are accountable to manage impacts associated with our operations to ensure risk is managed in accordance with regulatory commitments, Rio Tinto values as outlined in *The way we work*, and the HSEC policy. Rio Tinto is committed to protecting the environmental value of the regions where we operate and maintaining good stewardship for the long term. The intent of the standard and the requirements herein, is to prevent, or otherwise minimise, mitigate and remediate the effects that our business' operations have on communities and environments.

This standard is applicable to all Rio Tinto business units and managed operations across all phases of their life cycle from exploration through post-closure. It applies to all lands utilised by the business, or for which the business may have responsibility. This includes both lands directly disturbed by our activities, lands that have supporting infrastructure and undisturbed lands held for other reasons such as buffers or biodiversity offsets.

Performance requirements

- 1.1 Confine disturbance to a minimum and within legally designated areas.
- 1.2 Locate, design and construct facilities to minimise the disturbed footprint and preferentially avoid, then minimise, impact to environment, and/or community health and livelihoods, and closure costs.
- 1.3 Plan and construct new and expanded mineral waste storage facilities and any other infrastructure to ensure that environmental impacts are mitigated and facilitate identified post-operational land-uses wherever practicable.
- 1.4 Rehabilitate open pits, subsidence zones and existing mineral waste disposal facilities to the extent practicable, consistent with current and reasonably foreseeable future regulatory requirements, established rehabilitation success criteria, and planned post-operational land use.
- 1.5 Rehabilitate all other disturbed lands to beneficial post-mining land use to meet established rehabilitation success criteria.
- 1.6 Undertake concurrent rehabilitation to avoid unauthorised releases from disturbed areas, meet regulatory requirements, confirm rehabilitation practices, reduce closure liability, and manage other associated risks.
- 1.7 Ensure that all rehabilitated lands are safe, stable, self-sustaining, and do not cause any unauthorised emissions and/or releases.
- 1.8 Lands rehabilitated to wildlife habitat as a post-operational land use must be designed to support a self-sustaining, diverse vegetation community consistent with rehabilitation success criteria.

Control requirements

Requirements in this standard apply in addition to any requirements defined in the *Rio Tinto Management System* standard, those of the *Community and social performance* Standard, as well as the other environmental standards. Materiality thresholds, described in guidance to this standard, determine the level of effort required to meet subsequent clauses herein.

Hazard identification and risk management

- 2.1 Develop internal performance criteria when government regulations are absent or insufficient to ensure protection of the environment, and/or community health and livelihoods. Define rehabilitation success criteria for the mitigation of impacts. Criteria must complement progress towards preferred

final land use associated with closure. Any performance criteria that are more stringent than government regulations must have formal approval from the business' Managing Director.

- 2.2 Identify, characterise and document all past, current, and planned future disturbance, land use, impacts and risks for all land owned or managed by the business, or for which the business may have responsibility.
- 2.3 Develop and maintain a concurrent rehabilitation plan that includes at a minimum, a risk assessment, early trials to identify viable methods, details of rehabilitation activities, integration with the mine plan and the associated budgets. The plan must be reviewed annually, updated as warranted and approved by the Managing Director.
- 2.4 If concurrent rehabilitation activities are to be funded from the operation's closure provision, ensure scope and timing in the closure provision cash-flow model aligns with the year-by-year rehabilitation activities plan.
- 2.5 Delineate and implement defined land use zones with reference to applicable requirements of regulatory authorities and clearly defined allowable activities.
- 2.6 Implement and maintain an internal land disturbance approval procedure.
- 2.7 Recover, stockpile (if necessary) and protect topsoil and suitable growth media from safely accessible areas, as the initial act of disturbance, to preserve viability for subsequent rehabilitation activities wherever possible.
- 2.8 Evaluate and document all potential impacts to land and rehabilitation performance. Develop appropriate mitigation strategies for all significant risks and impacts as part of the technical and financial preparation and evaluation of capital projects.

Management of change

- 2.9 Evaluate and document any change to mine design, infrastructure and operations that could impact land disturbance and rehabilitation performance as part of a formal management of change process that prioritises opportunities to avoid and/or reduce impacts.

Monitoring, measuring and reporting

- 2.10 Design and implement a monitoring programme to confirm impact predictions, and determine if performance and success criteria are being met to validate the success of land disturbance controls and mitigation programmes.
- 2.11 Investigate and take appropriate actions when material deviations from impact predictions are identified or when internal performance criteria are not met.
- 2.12 Develop participatory monitoring programmes with affected communities, as appropriate.
- 2.13 Report on site-level rehabilitation performance to relevant external stakeholders regularly if significant land disturbance risks or impacts are identified.