ERA Standard

Environmental Protection Act 1994

Eligibility Criteria and Standard Conditions for Mining Activities on a Mining Lease

This document provides eligibility criteria and standard conditions for mining lease activities.

An environmentally relevant activity (ERA) standard is made up of two parts:

- **Eligibility criteria** are constraints set to ensure environmental risks associated with the operation of the ERA are able to be managed by the standard conditions.
- **Standard conditions** are the minimum operating requirements an environmental authority holder must comply with.

Eligibility Criteria

To be eligible for a standard or variation application for an environmental authority under a mining lease, the activity (the relevant activity) must meet the following criteria:

Eligibility criteria category	Eligibility criteria
ERA	Mining activity on a mining lease
Activity description	Mining activity that is only the following types: • clay pit mining where the activity involves mining a quantity of material less than 5,000t in a year • opal mining • shallow pit mining, for minerals other than gemstones • shallow pit mining for gemstones (eluvial and colluvial deposits) where the activity involves extracting less than 5,000t of material from which gemstones are extracted, in a year • dimension stone mining where the activity involves mining a quantity of material less than 5,000t in a year • hard rock mining, for minerals other than gemstones • hard rock mining for gemstones where the activity involves extracting less than 5,000t of material from which gemstones are extracted, in a year • alluvial mining, for minerals other than gemstones • alluvial mining for gemstones where the activity involves extracting less than 5,000t of material from which gemstones are extracted, in a year
Resource Authority Description	Legislation: *Mineral Resources Act 1989* Tenement Type: Mining lease
Authorised Minerals	All minerals except coal, uranium and mercury

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Activity location	The activity is not carried out in an area that is constrained for the eligibility criteria of the ERA Standard for mining activities on a mining lease (Eligibility Criteria and Standard Conditions for mining activities on a mining lease) in Appendix 1.
Operational constraints	The activity will not: a) at any one time, cause more than 10ha of land to be significantly disturbed by any activities including all associated infrastructure such as roads, campsites, dams, renewable energy structures and waste storage areas. b) at any one time, cause more than 5ha of either of the following to be significantly disturbed— i. a riverine area; or ii. mine workings. c) include a general environmentally relevant activity (ERA) to which a section of schedule 2 of the Environmental Protection Regulation 2019 applies and for which there is an aggregate environmental score d) include an activity being carried out as a single integrated operation with another mining activity(ies) authorised under a separate environmental authority.

Which conditions apply

Schedule A - General, Schedule B – Significant Environmental Values and Schedule D - Rehabilitation apply to **all activities** authorised under this environmental authority.

Where the authorised activity is **alluvial mining**, the holder must **also** comply with:

- **Schedule C – Alluvial mining within a watercourse**.

Where the authorised activity is either **dimension stone** or **clay pit mining**, the holder must **also** comply with:

- **Schedule E – Specific rehabilitation requirements for clay pit and dimension stone mining**.

Standard Conditions

Schedule A – General

Explanatory note: *Schedule A outlines the activities authorised for the mining lease under the environmental authority and the operating requirements considered by the administering authority to be acceptable performance standards. A number of activities are not authorised or are otherwise restricted under the standard conditions in Schedule A. This is because the process followed for a standard application does not require a formal assessment by the administering authority.*

In complying with the standard conditions in Schedule A, the holder will be carrying out the mining activities in a way that reduces the risk of environmental harm. Industry is encouraged to exceed these performance standards.

Condition Number	Condition
A1	Activities must not occur within: a. a resources reserve under the *Nature Conservation Act 1992*; b. a nature refuge under the *Nature Conservation Act 1992*; c. a State forest under the *Forestry Act 1959;* d. a timber reserve under the *Forestry Act 1959;*

	e. a coastal management district under the *Coastal Protection and Management Act 1995*; f. erosion prone areas under the *Coastal Protection and Management Act 1995;* g. a coastal wetland as defined under the *Coastal Protection and Management Act 1995;* h. a reservation for public purposes under the *Land Act 1994*, section 23; i. for each agricultural research facility mentioned in Attachment 2, the area with the land description shown opposite the facility's name.
A2	Only alluvial mining activities are authorised within a watercourse.
A3	Activities must not occur within waters in the Great Barrier Reef catchment (*Great Barrier Reef catchment waters*).
A4	The activity must not include: a. a regulated structure; or b. a watercourse diversion; or c. chemical separation or processing.
A5	Contaminants must not be released directly to waters, land or air.
A6	All plant and equipment reasonably necessary to ensure compliance with the standard conditions must be installed, maintained and operated in their proper and effective condition.
A7	Effective erosion and sediment controls must be installed, used and maintained at all stages of mining.
A8	Measures to minimise stormwater entry onto significantly disturbed land must be implemented and maintained.
A9	Chemicals and fuels must be stored in an effective containment system that meets Australian Standards to prevent leaks and spills.
A10	Topsoil must be removed before disturbance, kept separate, and managed to prevent erosion or degradation. A record of topsoil must be kept.
A11	Waste, other than mining waste, must not be disposed of on the resource authority(ies).
A12	Acid producing waste must: a. be separated from benign waste rock b. disposed of in an excavation or pit and: i. Backfill the excavation or pit with benign, low permeability material as soon as practicable; and ii. Seal the excavation or pit with a compacted capping layer at least 1 metre thick.
A13	Dams and sediment structures must be designed, built, operated and maintained to contain all contents and prevent overtopping, failure or release.
Schedule B – Significant Environmental Values ***Explanatory note:*** *Schedule B outlines the significant environmental values to be protected or enhanced to minimise environmental harm resulting from the mining activities. Negative impacts to these environmental values beyond the authorisations in the standard conditions are considered unlawful environmental harm.*	
B1	Activities must not result in environmental harm to:

	a. an environmental value in a protected area, other than a coordinated conservation area, under the *Nature Conservation Act 1992*; b. an environmental value in a marine park that is classified as a conservation park zone, buffer zone, scientific research zone, marine national park zone or preservation zone, under the *Marine Parks Act 2004*; c. an environmental value in a legally secured offset area under the *Environmental Offsets Act 2014*; d. an environmental attribute of a designated precinct in a strategic environmental area under the *Regional Planning Interests Act 2014*; e. an environmental value in a declared fish habitat area under the *Fisheries Act 1994*; f. a wetland of significant environmental value; g. a watercourse of significant environmental value; and h. an endangered regional ecosystem.
B2	Only low impact mining activities may be undertaken within: a. an area of essential habitat on the essential habitat map for wildlife that is threatened wildlife; b. a koala habitat area under the Nature Conservation (Koala) Conservation Plan 2017, section 7B; c. native vegetation that is within 100m of a wetland of significant environmental values; d. 10m of a defining bank of a watercourse identified on the vegetation management watercourse and drainage feature map; and e. an area where marine plants are located.
B3	Activities within a waterway providing for the passage of fish must maintain a flow path and fish passage.
B4	Prior to carrying out mining activities within an of concern regional ecosystem or an area of high value regrowth vegetation, the location of mining activities must be selected to: a. firstly avoid, then minimise, then mitigate any negative impacts on areas of vegetation or other areas of ecological value; b. minimise disturbance to land that may otherwise result in land degradation; c. minimise isolation, fragmentation or dissection of tracts of vegetation that would lead to a reduction in the current level of ecosystem functioning or ecological connectivity; and d. minimise clearing of mature or hollow bearing trees.
Schedule C – Alluvial mining within a watercourse ***Explanatory note:*** *Schedule E conditions apply to alluvial mining activities occurring within a watercourse authorised under the environmental authority. These conditions are designed to address the environmental risks associated with this activity.*	
C1	Works within a watercourse undertaken for the purpose of winning a mineral from a place where it occurs are permitted provided all reasonably practicable measures are taken to: a. minimise erosion and sedimentation caused by the works; b. ensure that activities do not increase watercourse turbidity downstream of the resource authority; and

	c. stabilise any area disturbed by the works as soon as practicable after the disturbance occurs.
C2	Water used for mining or processing must be managed to prevent the release of sediment to any watercourse.
C3	Mining must not occur continuously along the length of a watercourse.
C4	Mining must be undertaken in sections no longer than 500m, separated by a minimum length of 150m of undisturbed watercourse.
C5	Further mining must not commence in another area until a. rehabilitation of the adjacent mined section is completed; and b. the area is stable and not actively eroding.
C6	Mining must not occur on the outer bend of a watercourse within: a. 5m of the toe of the bank or 3 metres from the top of the bank; and b. 100m downstream of the bend.
C7	Mining waste excavated from a watercourse must be: a. returned to the watercourse from which it was removed; except for material: (i) less than 100mm in diameter; or (ii) used for authorised infrastructure or erosion control; and b. placed so as not to obstruct or alter the normal flow of the watercourse.
C8	Extraction must be limited to alluvial material and must not extend below the natural bed level.
C9	If exposed, acid sulfate soils must be managed in accordance with the current version of the *Queensland Acid Sulfate Soil Technical Manual.*
C10	Disturbed areas of a watercourse must be rehabilitated to achieve: a. a stable landform with no active erosion; b. re-established flow connectivity; and c. re-establishment of native riparian vegetation.
Schedule D – Rehabilitation ***Explanatory note:*** *Rehabilitation activities must be completed in accordance with the conditions of the authority. A surrender application must be supported by sufficient information to decide the application*	
D1	Significantly disturbed land that is no longer required for the ongoing conduct of the mining activity(ies) must be progressively rehabilitated to achieve the standards in condition D2.
D2	Prior to the expiry of the resource authority, the environmental authority holder must ensure rehabilitation is completed so that: a. any infrastructure is removed, unless agreed to in writing by the landholder to remain; and b. any water storages that contain water, the water is of a quality suitable for the intended ongoing use(s) by that landholder; and c. any contaminated land (e.g. contaminated soils, decommissioned dams) is remediated and rehabilitated; and d. the areas are reshaped to a stable landform; and

	e. the areas are re-profiled to: i. backfill voids where possible; and ii. achieve contours consistent with the surrounding landform; or iii. activity specific condition E1; and f. surface drainage lines are re-established; and g. topsoil is reinstated; and h. the area is capable of supporting a land use that is similar to the surrounding area or a land use agreed to in writing by the landholder.
Schedule E – Specific rehabilitation requirements for clay pit and dimension stone mining	
E1	Significantly disturbed land that is no longer required for the ongoing conduct of the mining activity(ies) must be rehabilitated to ensure the areas are re-profiled to: a. contours consistent with the surrounding landform where possible; or b. eliminate sharp benches to blend profiles into the surrounding landform.

General Obligations

For requirements for the surrender of an environmental authority refer to the *Environmental Protection Act 1994*.

In addition to the requirements found in the conditions of this ERA standard, you must also meet your obligations under the *Environmental Protection Act 1994*, and the regulations made under the Act. For example, you must comply with the following provisions of the Act:

- the general environmental duty (section 319), including special provision for activities involving industrial chemicals (section 319A);
- duty to notify environmental harm (section 320-320G); and
- duty to restore the environment (section 319C).

Unless specially authorised by a condition of this ERA Standard, this ERA Standard does not authorise:

- an act that causes serious or material environmental harm (sections 437 - 439) or an environmental nuisance (section 440)
- an act that contravenes a noise standard (section 440Q)
- a deposit of a contaminant, or release of stormwater run-off, mentioned in section 440ZG of the EP Act, or
- placing a contaminant where environmental harm or nuisance may be caused (section 443).

For more information search ‘ERA standard’ on the Business Queensland webpage (www.business.qld.gov.au).

Definitions

Defined terms in this document are underlined the first time they appear, and their definitions are provided in Appendix 3.

References to Other Documents

References in this document to laws, regulations, standards, policies, programs, guidelines and similar documents and instruments are to the current version of those documents and instruments, as amended or replaced from time to time.

Relationship with Other Legislation

This Standard does not remove, replace, or limit the need to comply with the *Mineral Resources Act 1989* or any other applicable legislation.

This Standard does not authorise the take of water and does not remove the requirement to obtain any approvals required under the *Water Act 2000*.

Appendix 1: Constrained land

Areas of land constrained for the eligibility criteria of the ERA Standard for mining activities on a mining lease (Eligibility Criteria and Standard Conditions for mining activities on a mining lease):

1. a protected area under the *Nature Conservation Act 1992*, other than a resources reserve, a nature refuge or a coordinated conservation area under that Act.
2. a marine park under the *Marine Parks Act 2004* that is classified under that Act as a conservation park zone, buffer zone, scientific research zone, marine national park zone, or preservation zone.
3. a declared fish habitat area under the *Fisheries Act 1994.*
4. a legally secured offset area under the *Environmental Offsets Act 2014.*
5. a mapped endangered regional ecosystem identified in the database known as the 'Regional ecosystem description database' published on the department's website.
6. a wetland in a wetland protection area shown on the map of Great Barrier Reef wetland protection areas.
7. a wetland of high ecological significance shown on the map of Queensland wetland environmental values.
8. a designated precinct in a strategic environmental area.

Appendix 2: Agricultural Research Facility

Name	Description
Applethorpe research station	Lot 249 on BNT1800
Ayr research station	Lot 97 on GS867
Bowen research station	Lot 112 on HR963, lot 1 on RP715403 and lot 39 on SP113324
Bribie Island aquaculture research station	Lot 190 on CG805819 and lot 1 on SP248827
Bundaberg research station	Lot 16 on CK813259
Gatton research station	Lot 189 on CC3307
Hermitage research station	Lots 100, 1304, 156 and 159 on ML2001 and lot 2 on SP156026
J. Bjelke-Petersen research station	Lot 349 on CP904165 and lot 379 on FY2924
Kairi research station	Lot 1 on SP241295
Kennlea research station	Lot 3 on RP58646 and lot 1 on RP904403
Kingsthorpe research station	Lot 2 on RP129751
Leslie research station	Lot 928 on AG2196
Maroochy horticultural research station	Lot 676 on CG5055 and lot 941 on CG6160
Mary Valley research station	Lot 3 on SP186078
Redlands research station	Lots 1, 2, 3, 4, 5 and 43 on SP280786
Redvale research station	Lot 475 on FY2951
South Johnstone research station	Lot 61 on NR6878
Spyglass Beef research station	Lot 4835 on CP858256, lot 1 on OC57, lot 3 on RP841848 and lot 4 on SP233424
Tropical weeds research station and residence	Lot 36 on CP889406, lots 208 and 209 on DV583, lot 197 on DV735 and lot 1 on MPH785
Walkamin research station	Lot 568 on N157284
Wellcamp field research station	Lot 209 on AG3878

Appendix 3: Definitions

Explanatory note: *Where a term is not defined in this document, the definition in the Environmental Protection Act 1994, its regulations and environmental protection policies, then the Mineral Resources Act 1989 and the Acts Interpretation Act 1954 then the Macquarie Dictionary should be used in that order.*

Term	Definition
acid sulfate soil(s)	means a soil or soil horizon which contains sulfides or an acid soil horizon affected by oxidation of sulfides.
alluvial mining	means excavating, in any way, unconsolidated or waterborne or weathered materials (whether or not it is in a watercourse) and processing it by chemical methods or gravity separation to extract minerals from the material.
chemical separation or processing	means chemical separation to extract a mineral from its natural state, where a chemical other than water is used. Chemical separation or processing includes but is not limited to: concentrating, electrowinning, solvent extraction electrowinning (SX-EW), heap leaching, carbon-in-leach (CIL), carbon-in-pulp (CIP). Chemical separation or processing does not include (for example): crushing, grinding, screening, washing (water only), jigging (water only), tabling (water only).
clay pit mining	means excavating— (a) waterborne or weathered material (whether or not it is in a watercourse) to extract clay for a use related to its ceramic properties; or (b) kaolin; or (c) bentonite.
dam(s)	means a land-based structure or a void that contains, diverts or controls flowable substances, and includes any substances that are thereby contained, diverted or controlled by that land-based structure or void and associated works.
endangered regional ecosystem	means an endangered regional ecosystem identified in the database known as the 'Regional ecosystem description database' published on the department's website. Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.
essential habitat	For threatened wildlife, means essential habitat for the wildlife within the meaning of the *Vegetation Management Act 1999*, section 20AC(2). Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.
essential habitat map	has the meaning in section 20AC(1) of the *Vegetation Management Act 1999*. Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.
fish passage	means the ability for fish to move upstream and downstream through a watercourse and between connected habitats without undue obstruction.
flow path	means a continuous route by which water moves through a watercourse, including any channel, depression, culvert, crossing or other structure, that maintains hydraulic connectivity within the watercourse.
hard rock mining	the extraction of ore from underground or open cut pits and the processing of this ore by crushing and or milling, and the use of gravity separation or chemical methods to extract minerals.

high value regrowth vegetation	means an area of high value regrowth vegetation within the meaning of the *Vegetation Management Act 1999* that is part of an endangered regional ecosystem, or of concern regional ecosystem, identified in the database known as the 'Regional ecosystem description database' published on the departments website. Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.
low impact mining activities	means mining activities, which do not result in the clearing of native vegetation; removal, destruction or damage of a marine plant; disturbance of threatened wildlife and/or relevant habitat features (e.g. logs, hollows, burrows, nests etc.) that may support threatened wildlife.
marine plant	means a marine plant under the *Fisheries Act 1994*. Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.
material	includes clay, gravel, loam, rock, sand and other substances found in the earth.
mine workings	means an area from which ore or overburden has been extracted, or on which waste rock is stored, that is not— a. substantially rehabilitated to the satisfaction of the administering authority; or b. used for constructing a camp site, road, plant, tailings dam, water storage dam or other infrastructure.
mining waste	means rock, spoil, overburden or the residues resulting from mineral ore processing generated as part of: a. winning mineral from a place where it occurs; or b. extracting mineral from its natural state.
of concern regional ecosystem	means an of concern regional ecosystem identified in the database known as the 'Regional ecosystem description database' published on the department's website. Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.
opal mining	means is the extraction of opal from underground or open cut pits and the processing of this ore by manual separation of opal rock or by using gravity separation methods to extract the opal.
natural bed level	means the bedrock or an older consolidated geological formation located directly below the alluvium of a watercourse as it exists immediately before the commencement of the activity at a particular location, excluding any deposited material (unconsolidated course material i.e. sand, silt and gravel) targeted for extraction
regulated structure	Means any structure in the significant or high consequence category as assessed using the *Manual for assessing consequence categories and hydraulic performance of structures*. A regulated structure does not include a fabricated or manufactured tank or container, designed and constructed to an Australian Standard that deals with strength and structural integrity of that tank or container.

rehabilitation or rehabilitated	means the process of reshaping and revegetating land to restore it to a stable landform and in accordance with acceptance criteria and, where relevant, includes remediation of contaminated land.
shallow pit mining	means extracting and processing material from open cut pits no more than 5m deep.
stable	for a site, means the rehabilitation and restoration of the site is enduring or permanent so that the site is unlikely to collapse, erode or subside.
significantly disturbed	land is *significantly disturbed* if – a. it is contaminated land; or b. it has been disturbed by the activity and human intervention is needed to rehabilitate it – i. to a condition required under the relevant ERA Standard; or ii. if the ERA Standard does not require the land to be rehabilitated to a particular condition – to the condition it was in immediately before the disturbance. Examples of a disturbance to land – • the covering, compaction, exposure, removal or stockpiling of soil or other material • the destruction or removal of vegetation 1. Without limiting (b) above, land requires human intervention to rehabilitate it if – a. the disturbance has made the land more susceptible to erosion; or b. the land use capability or suitability of the land is diminished; or c. the quality of water in a watercourse downstream of the land has been significantly reduced. 2. If land is significantly disturbed land because it is contaminated land, it ceases to be significantly disturbed land if a suitability statement is issued for the land advising the land is suitable for any use. 3. If land is significantly disturbed land under subsection (1)(b), it ceases to be significantly disturbed land if the administering authority is satisfied the land has been rehabilitated— a. to the condition it was in immediately before the disturbance; or b. to another condition decided by the administering authority.
Significant environmental value	has the meaning given to it under the *Environmental Protection Act 1994*
threatened wildlife	Has the meaning provided in schedule (dictionary) of the *Nature Conservation Act 1992* Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.

topsoil	means the surface (top) layer of a soil profile, which is more fertile, darker in colour, better structured and supports greater biological activity than underlying layers. The surface layer may vary in depth depending on soil forming factors, including parent material, location and slope, but generally is not greater than about 300mm in depth from the natural surface.
watercourse diversion	means excavations or a structure that: a. diverts the course of water in a watercourse outside of its bed and banks; and b. may rejoin a watercourse downstream.
Watercourse of significant environmental values	*Watercourse of significant environmental values* means a watercourse in high ecological value waters within the meaning of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.
waters	means all or any part of a creek, river, stream, lake, lagoon, swamp, wetland, spring, unconfined surface water, unconfined water in natural or artificial watercourses, bed and bank of any waters, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and underground water.
waterway providing for the passage	Means a waterway providing for the passage of fish as identified in the *Fisheries Act 1994*.
Wetland of significant environmental values	means - a wetland in a wetland protection area shown on the map of Great Barrier Reef wetland protection areas - a wetland of high ecological significance shown on the map of Queensland wetland environmental values - wetland in high ecological value waters within the meaning of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 Definition may be removed pending inclusion in *Environmental Protection Act 1994* or Environmental Protection Regulation 2019.

Version history

Version	Date	Description
1.00	XX XXX	