

Extractive Industry
Environmental Effects
Report Guidelines
North East Excavations Pty
Ltd
Basin Creek Quarry
Upgrade, St Helens

May 2021



ENVIRONMENT PROTECTION AUTHORITY

Table of Contents

Instructions	3
Purpose of the Guidelines.....	3
Preparing an EER.....	3
Submission	4
Commonwealth legislation	4
EPA Tasmania Contact	4
Content of EER	5
Part A – Proponent information	5
Part B – Proposal description	5
1 Overview of activity and site.....	5
2 Site layout and development.....	7
3 Description of existing activity	7
Part C – Potential environmental impacts	8
1 Air quality.....	8
2 Water quality (surface, discharge and groundwater).....	8
3 Noise emissions and blasting.....	9
4 Waste.....	9
5 Environmentally hazardous substances.....	9
6 Natural values	9
7 Weeds, pests and pathogens.....	10
8 Environmental Impacts of Traffic	10
9 Monitoring	11
10 Decommissioning and rehabilitation	11
Part D – Summary of proposed management measures	12
Management measures.....	12
Part E – Public and stakeholder consultation.....	12
Appendix A: Other issues and agency contacts	13

Instructions

Purpose of the Guidelines

These guidelines are to assist in preparing an Environmental Effects Report (EER) for an application or proposal referred to the Board of the Environment Protection Authority (the Board).

An EER provides information about the environmental impacts of the proposed activity and is used by the Board under the *Environmental Management and Pollution Control Act 1994* (the EMPC Act).

Where the proposal is for a production increase/intensification/modification of the activity, this EER must provide a case for assessment of the entire activity at the proposed production level/as modified.

Where the proposal is subject to a permit under the *Land Use Planning and Approvals Act 1993* (LUPA Act), information required solely for the purpose of assessment under the relevant Planning Scheme should be supplied to Council either:

- as a separate response to an additional information request from Council under section 54 of the LUPA Act, where the planning application has commenced the environmental assessment process; or
- where it forms part of a combined planning and environmental effects report, distinguished from information supplied for the purpose of the Board's assessment.

Preparing an EER

The EER should be prepared using these guidelines. It should contain five parts as follows:

- Part A – information about the proponent
- Part B – information on the proposal, site and area
- Part C – information on potential environmental impacts
- Part D – description of proposed management measures
- Part E – information about any public consultation undertaken

Any other relevant information may be attached to the EER to support the application. The EER and attachments must be typed, A4 sized and submitted both electronically (in a searchable format) and in hard copy.

All images in the EER must be of high quality, with text readily readable. For ease of comparison all maps, plans, and aerial photographs must be oriented in the same direction as far as practicable, and a north direction arrow and scale included. In the electronic version, all images must be capable of being readily copied and pasted into other documents such as a permit (e.g. all objects in images should be 'grouped').

Finally, the level of detail provided in the EER on each issue should be appropriate to the level of significance of that environmental issue to the proposal.

Issuing of guidelines does not mean that other significant matters that may emerge from environmental studies, public comments or otherwise during the preparation of the EER should be excluded.

After the public consultation phase, additional information may be required in response to public and government agency submissions. This generally takes the form of a supplement to the EER.

Submission

The EER may be mailed, faxed, emailed or file shared to:

Chairperson
Board of the Environment Protection Authority
GPO Box 1550
Hobart TAS 7001

Email: assessments@epa.tas.gov.au

Commonwealth legislation

In addition to State Government requirements, the Commonwealth Government may also have a role in the environmental assessment and approval of the proposed activity. Commonwealth approval is required for an action which is likely to have a significant impact on a matter of national environmental significance or on Commonwealth land.

Information on the Commonwealth environmental legislation can be obtained on the internet at www.environment.gov.au/epbc/ or by calling 1800 803 772.

The EER should include a statement on whether or not Commonwealth approval is likely to be required.

EPA Tasmania Contact

For information about preparing an EER, the assessment and approvals process for level 2 activities and 'called-in' activities¹, and for general advice about air, water and noise pollution and land contamination:

EPA Tasmania
Telephone: (03) 6165 4599
Email: enquiries@epa.tas.gov.au
Website: www.epa.tas.gov.au

See Appendix A for other agency contacts which may be needed to address separate legislative requirements.

¹ 'called-in' activities means level 1 activities referred to the Board under Section 24 of EMPC Act or activities other than level 1 or level 2 referred to the Board under Section 27 of EMPC Act.

Content of EER

Part A – Proponent information

Complete the following table.

Name of proponent (entity and trading name)	The entity name must be consistent with any intended or current permit application for the activity under the LUPA Act.
Registered address of proponent	
Postal address of proponent	
ABN number	
ACN number (as relevant)	
Contact person's details	Name Telephone number Email address
Consultant engaged to prepare EER (as relevant)	Name Telephone number Email address

If a different entity will operate the quarry or extractive pit, provide similar details for that entity also.

If a consultant has been engaged to prepare the EER, provide the name and contact details of the consultant.

Part B – Proposal description

Where the proposal is subject to a permit application under the LUPA Act, the proposal description and specification of the site must be consistent with the intended or current permit application. Any works or activity that are for the purpose of the proposal (e.g. access works) must be included.

I Overview of activity and site

Complete the following table. Provide text below the table if there is insufficient space.

Proposed Activity

New activity or intensification of existing activity	State if it is an intensification of an existing activity or new activity. Provide written advice from Council as to whether a Planning Permit is required under the LUPA Act, if a planning application has not already been lodged.
Material to be extracted	Describe the product and forecast life of the activity.
Maximum extraction quantity	Provide in cubic metres and tonnes per year (briefly describe any seasonal variation). If it is an intensification, also provide the current extraction limit (cubic metres and tonnes per year).
Maximum processing quantity	Provide in cubic metres and tonnes per year (i.e. crushing, grinding, screening). If it is an intensification, provide the current processing (crushing/screening) limits (cubic metres and tonnes per year). Provide the loose bulk density.
Material extraction and processing	State the method(s) of material extraction and processing. Include a statement as to whether blasting is proposed and how often blasting is likely to occur.
Transport	Describe the proposed transport route (can refer to Location Map, see below), vehicle types, number of vehicle movements (per day), and time of day of vehicle movements.

Stockpiling	Describe the materials that will be stockpiled on site.
Area of disturbance	State: <ul style="list-style-type: none"> • Maximum area of the site proposed to be disturbed (un-rehabilitated) at any given time (hectares). • Total area of land to be cleared over the life of the proposal (hectares).
Major equipment	List all existing and proposed plant and machinery (distinguish between existing and proposed).
Infrastructure	List the existing and proposed buildings, structures, access roads, internal haul roads etc (can refer to the Site Plan, see below) (distinguish between existing and proposed).
Proposal timeline	State the key proposal timeline(s).
Operating hours	State the operating hours.

Location and planning context

Location	State the address of the site, and CTs and PIDs (as applicable) for all titles on which the activity will take place.
Land zoning and tenure	Describe the land zoning and tenure of the site and surrounds. If rezoning is required, provide details.
Use Class and Permissibility	If a permit is required under the LUPA Act, provide the Use Class of the proposed activity and Permissibility of the activity with reference to the relevant Planning Scheme.
Mining lease (ML)	Provide the ML reference number(s) and status (granted/applied for).
Lease area	State the size of the lease area(s).

Rationale for proposal and alternatives

Rationale	Describe the rationale for the proposal
Alternatives	Describe the alternative options that were considered, including benefits and disadvantages (as relevant)

Description of existing site and surrounds

Land Use	Describe the land use of the site and surrounds, distance to the nearest residences in other ownership, and any nearby conservation reserves or recreation areas.
Topography	Describe the topography of the site and surrounds.
Climate	State the annual rainfall and predominant wind direction.
Geology	Describe the geology of the site, including the likelihood that potentially acid forming (PAF) material will be found on site. Describe any geoconservation values on or near the site, e.g. karst.
Soils	Describe the potential to encounter acid sulphate soils and or contaminated soil (from past activities, as relevant).
Hydrology	Describe the waterbodies and aquatic values on site and in the surrounding area. State the distance from the activity to the nearest waterbody.
Natural Values	List the threatened fauna, flora and vegetation communities, including potential habitat for any such species, that are known to occur on or near the site (use the Natural Values Atlas, TASVEG 4.0 ² or results of any relevant survey). State the vegetation types on and near the site.

² Both can be accessed on the internet at: <https://www.naturalvaluesatlas.tas.gov.au/>

2 Site layout and development

Describe the site layout and planned development (staging) of the quarry or extractive pit, including description of proposed benching and development of infrastructure (internal road, drainage, sediment ponds etc) (refer to the figures below as necessary).

Please provide:

- **Location Map** (1:25,000 or other suitable scale), showing the Mining Lease, the nearest residences in other ownership and residential zones within 1.5 km of the proposed activity and within the applicable attenuation distance³, and the transport route(s) to and from the activity. A map of surrounding land uses / tenure should be included.
- **Definition of The Land** on which the activity will take place. The boundary must be consistent with any intended or current permit application under the LUPA Act. If the Land is defined as the whole of an existing defined boundary, the definition of the Land is simply the title reference or lease name (e.g. Mining Lease or Property ID). If the Land is not defined as the whole of an existing defined boundary it may be necessary to define the boundary by reference to specific topographic features and or surveyed grid coordinates.
- **Map of The Land** on which the activity will take place and its boundary; by means of mining lease, land title information, map coordinates or other. Note, the Land as defined by this figure must be consistent with the permit application submitted under the LUPA Act (as relevant), i.e. the Land cannot extend beyond the land titles referenced in the permit application. This figure may be combined with the Site Plan. The boundary of the Land should also be provided to the Board in a geospatial vector format (shapefile or DXF).
- **Site Plan(s)** showing:
 - boundary of site;
 - location of existing and proposed buildings/structures and plant and machinery (include a general location for any mobile plant);
 - location of product, overburden, soil, and waste stockpiles;
 - location and orientation of benches at key stages of development;
 - vegetation types, clearly marking areas to be cleared, and records of any threatened species/vegetation communities;
 - watercourses on and near the site;
 - site water management (drains, settling ponds, bunding etc. (see also Part C Issue 2)); and
 - monitoring points (as relevant).

3 Description of existing activity

- Provide details of any current regulatory approvals (permit⁴, environment protection notice) relating to the existing activity.
- Provide the following in relation to the existing activity:
 - a summary of environmental monitoring results (if any);
 - a summary of public complaints regarding the activity (received by the activity operator and by regulatory authorities);
 - details of breaches of conditions of current regulatory approvals (if any); and
 - details of contraventions of environmental law (if any).

³ Refer to relevant planning scheme or State Planning Provisions

⁴ Permit may also mean a former License to Operate a Scheduled Premises.

Part C – Potential environmental impacts

General note

Where the proposal relates to an existing activity, information from documentation relating to the existing activity (such as previous Environmental Management Plans or survey reports) may be used or referenced in this EER, provided the information is current.

The following is required in the assessment of potential environmental impacts:

1 Air quality

- Description of the likely sources of dust and other air emissions and the potential to create environmental nuisance or harm, taking into consideration:
 - Distance to nearest residences (refer to the Location Map), prevailing winds and other climatic factors;
 - Nature of the material excavated, method of excavation and processing/handling on site; and
 - Site layout (refer to the Site Plan).
- Description of measures that will be employed to reduce the potential for environmental nuisance or harm.

2 Water quality (surface, discharge and groundwater)

- Description of management measures to control surface water and the potential for erosion and sediment loss. Control measures include: minimisation of areas of disturbance; minimisation of stormwater ingress and sediment mobilisation through the use of perimeter drains, cut-off drains and bunding; sediment basins or stilling areas to capture entrained sediment; and swales, rock filters, wetlands or vegetated discharge zones to remove fine suspended sediment. If seepage of water through the quarry floor occurs this needs to be described.
- Identify the dimensions, capacity and other relevant design features of key stormwater infrastructure such as drains and sediment basins, with reference to design rainfall frequency (average recurrence interval) and intensity. Given the proposed intensification of the activity the stormwater management drains and ponds will need to be reviewed. A description of proposed systems, drains, ponds, discharge points and justification of settling pond size estimates needs to be provided (including based on site experience).
- Description of the potential impacts to receiving environment (surface water including areas with potential natural values, groundwater, drinking water, stock water, and irrigation as relevant).
- A text description and plan showing how water will be managed during quarry progression, including drawings or photos as relevant.

3 Noise emissions and blasting

- Description of all noise sources, including the size and power rating for each main piece of equipment (e.g. crusher/screen, loader, excavator, haul truck, rock drill etc).
- Description of the potential for the activity to create a noise nuisance, taking into consideration:
 - Site layout (refer to the Site Plan);
 - Distance to the nearest residences and other noise sensitive premises⁵ (refer to the Location Map);
 - Height/location of noise sources;
 - Frequency of emissions, and
 - Topography.
- Description of noise attenuation measures that will be implemented (as relevant).
- Statement as to whether blasting will be undertaken, and if so, the likely blast charge, frequency of blast events (per year) and discussion of potential for blast effects (ground vibration and air-blast overpressure) to impact nearby residences.

4 Waste

- Description of the solid and liquid waste that will be produced (e.g. overburden, Potentially Acid Forming material, metal and machinery service wastes, used oils, general refuse etc), and the proposed methods for reuse, recycling, treatment and disposal.

5 Environmentally hazardous substances

- Details of the nature and quantity of environmentally hazardous substances (e.g. fuel, oil, diesel) that will be stored (permanently or temporarily, e.g. mobile refuelling) and or handled on site.
- Description of their storage method and location, and management measures to prevent their release and respond to accidental spills, e.g. provision of spill kits.
- Description of all dangerous goods⁶ and controlled wastes⁷ that will be present on the site, and how they will be managed.

6 Natural values

- Surveys for natural values within the activity area including any values outside the activity area which may be impacted by the activity. Surveys must be undertaken by a suitably qualified person in accordance with the *Guidelines for Natural Values Assessments*. The guidelines can be found at: <http://dpiwwe.tas.gov.au/conservation/development-planning-conservation-assessment/survey-guidelines-for-development-assessments>
 - There are records in the area for flora listed under the *Threatened Species Protection Act 1995* (TSPA) including glossy purplepea (*Hovea corrickiae*), superb greenhood (*Pterostylis grandiflora*) and cane holygrass (*Hierochloa rariflora*). Timing of surveys must allow for identification of any superb greenhood orchid specimens (April to August).

⁵ 'noise sensitive premise' is defined as: residences and residential zones (whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

⁶ Information on controlled waste identification and classification is available on the internet at: <https://epa.tas.gov.au/regulation/waste-management/controlled-waste>

⁷ As defined in the Australian Code for the Transport of Dangerous Goods by Road and Rail.

- *Eucalyptus amygdalina* forest on mudstone (DAM) is mapped as occurring on the property. DAM may grade into *E. amygdalina* inland forest and woodland on Cainozoic deposits (DAZ) on valley flats or be in a mosaic with *E. amygdalina* woodland and forest on sandstone (DAS), both of which are listed under the *Nature Conservation Act 2002*. The presence or absence of these vegetation communities within any areas of impact must be determined.
- There are multiple records of the Giant Velvet Worm (*Tasmanipatus barrette*), which is listed as rare under TSPA, within 2 km of the site. The site is within the known range of the species and Basin Creek is an important location for the species. A targeted survey is required to determine the presence or absence of the species and any habitat.
- There are multiple records of Wedge-tailed Eagle (*Aquila audax subsp. fleayi*) nests, and highly suitable nesting habitat, within 5 km of the mining lease. The presence of any nests within 1 km of the proposal must be determined. Searches for the presence of nests should be undertaken outside of the breeding season (July to January inclusive).
- Description and results of natural values surveys undertaken must be summarised in the EER and the survey report(s) appended.
- Description of potential impacts to threatened fauna, flora and vegetation communities, taking into account:
 - Clearing or disturbing native vegetation and potential habitat for threatened species. Provide details of the vegetation and habitat values to be cleared or disturbed, and the area of vegetation to be affected, in hectares;
 - Movement, noise, or lights during sensitive avifauna breeding seasons;
 - Roadkill from vehicles⁸.
- Description of management measures to mitigate adverse impacts to threatened fauna, flora and vegetation communities where they cannot be avoided. The *Survey Guidelines and Management Advice for Development Proposals that may impact on the Tasmanian Devil (Sarcophilus harrisii)*⁹ should be consulted to determine the need for roadkill management measures.
- Description of potential impacts to geoconservation sites (e.g. karst systems), aquatic or riparian environments and other natural values, and a description of management measures to mitigate such impacts, as relevant.

7 Weeds, pests and pathogens

- List the weeds and diseases known to occur, or likely to occur, on or near the site.
- Describe the potential for migration of weeds and diseases to and from the site, and within the site, and the proposed management measures, as relevant.

8 Environmental Impacts of Traffic

- Description of the potential for transport to and from the site to cause a noise nuisance to residences and other noise sensitive premises in proximity to the Land, taking into account the type, volume and time of transport.
- Description of the potential to cause a dust nuisance as a result of transport along gravel roads in proximity to the Land.

⁸ Information in relation to roadkill risk for Tasmanian Devils can be found at:
https://dpiwwe.tas.gov.au/Documents/Devil_Survey_Guidelines_and_Advice.pdf

⁹ Available on the internet at: https://dpiwwe.tas.gov.au/Documents/Devil_Survey_Guidelines_and_Advice.pdf

9 Monitoring

- Description of proposed environmental monitoring and reporting. Show all proposed monitoring points on the Site Plan (see Part B).

10 Decommissioning and rehabilitation

- Description of decommissioning and rehabilitation in the event of cessation of the activity, including final land use.
- Description of progressive rehabilitation on site, with reference to the staged development of the quarry/excavation pit (refer to the Site Plans as relevant).

Part D – Summary of proposed management measures

All management measures must be numbered and summarised in a Table in this section (example provided below). They must be written as specific, unambiguous measures for avoiding, minimising and managing the potential environmental impacts identified in Part C.

Management measures

No.	Proposed measure	Timeframe
1	A sediment settling pond capable of containing runoff from a 1 in 20 year storm event as described in Part C, paragraph 2.6 [of the EER].	At least 30 days prior to commencement of operations.
2	Develop a solid waste management plan as described in Part C, paragraph 8.4 [of the EER].	Within three months of approval and prior to treatment or removal of any waste.
3	Construct a noise attenuation barrier as described in Part C, paragraph 9.2 [of the EER].	At least 30 days prior to commencement of operations.

Part E – Public and stakeholder consultation

- Description of consultation with other government agencies, community groups or neighbours that has taken place, or details of any intended consultation that will take place.
- A Guide to Community Engagement is available on the EPA's website at <https://epa.tas.gov.au/assessment/assessment-process/guidance-documents>

Appendix A: Other issues and agency contacts

In addition to a permit under the LUPA Act and the EMPC Act, there may be other legal requirements to allow your proposal to proceed. These may include other permits, licences or landowner consent. You may also need to contact other Government agencies to obtain information for the purpose of assessment under the LUPA Act or the EMPC Act. The following list identifies some of the key agencies you may need to contact.

Note: your proposal may be referred to other agencies in the process of preparing guidelines. Should assessments or approval outside of the Board's responsibilities be required, the respective agency will engage with you to progress them.

Natural values including flora, fauna, and geoconservation values, or permits to deal with threatened species:

Natural and Cultural Heritage Division
Telephone: (03) 6165 4396
Email: conservationassessments@dpipwe.tas.gov.au
Website: www.dpipwe.tas.gov.au

Historic cultural heritage, including State-level site listings, impacts and permits as required under the *Historic Cultural Heritage Act 1995*:

Heritage Tasmania
Telephone: (03) 6165 3700
Email: enquiries@heritage.tas.gov.au
Website: www.heritage.tas.gov.au

Note: Where works are proposed in or in close proximity to a heritage place entered on the Tasmanian Heritage Register or likely to be of heritage significance to the whole of Tasmania, and a permit is required under the *Land Use Planning and Approvals Act 1993*, the proposal will be referred to Heritage Tasmania by the planning authority. There may also be additional sites listed under local planning schemes, impacts on which are assessed by the relevant planning authority.

Aboriginal heritage, including desktop assessment, artefact survey requirements, permits:

Aboriginal Heritage Tasmania
Telephone: (03) 6165 3152
Email: aboriginal@heritage.tas.gov.au
Website: www.aboriginalheritage.tas.gov.au

Note: the proposal will be referred to Aboriginal Heritage Tasmania (AHT) on referral to the Board. If assessments or approvals outside of the Board's responsibilities are required, it is your responsibility as the proponent to engage with AHT to progress them.

Parks and reserves, including where any proposal may impact on land managed by Parks & Wildlife:

Parks and Wildlife Service
Telephone: 1300 827 727
Website: www.parks.tas.gov.au and www.thelist.tas.gov.au

Crown land, including where any proposal may impact on land owned by the Crown:

Property Services
Telephone: (03) 6169 9015
Email: PropertyServices@parks.tas.gov.au
Website: www.parks.tas.gov.au

State roads, including where any proposal requires works on or access from a State-managed road asset:

Department of State Growth
Telephone: (03) 6166 3369
Email: permits@stategrowth.tas.gov.au
Website: www.transport.tas.gov.au

Mining leases:

Mineral Resources Tasmania
Telephone: (03) 6165 4800
Email: info@mrt.tas.gov.au
Website: www.mrt.tas.gov.au

Works impacting natural waterway flow, e.g. dams or fords:

Agriculture and Water Division
Telephone: (03) 6165 3222
Email: Water.Enquiries@dpipwe.tas.gov.au
Website: www.dpipwe.tas.gov.au/water

