Environmental Impact Statement
Project Specific Guidelines
For
Bluestone Mines Joint Venture Pty Ltd
Permanent Non-Acid Forming Aggregate Storage Facility
Renison Bell, Tasmania

December 2020

EPA TASMANIA

ENVIRONMENT PROTECTION AUTHORITY

Contents

1. Information for the Proponent

Purpose

The *Environmental Management and Pollution Control Act 1994* (the EMPC Act) requires the Board of the Environment Protection Authority (the Board) to provide guidance to the proponent about what should be included in the case for assessment.

The Board assesses the environmental aspects of the proposal, while the relevant Planning Authority (Council) assesses planning aspects. The Board has authorised EPA Tasmania to undertake administrative tasks and establish the information base to inform decision making on its behalf.

These project specific guidelines have been prepared based on a Notice of Intent for the proposed Permanent Non-Acid Forming Aggregate Storage Facility by Bluestone Mines Joint Venture Pty Ltd.

Instructions

- This document must be read in conjunction with the *General Guidelines for the preparation of an Environmental Impact Statement* (the General Guidelines).
- The General Guidelines provide detailed instructions on preparing the Environmental Impact Statement (EIS) as well as other information to be provided to the Board for its assessment. These Guidelines are available on the EPA website at http://epa.tas.gov.au/assessment/assessment-process/guidance-documents.
- Please ensure you refer to the latest version of the General Guidelines by downloading them directly from the EPA website link above.
- This project specific guidelines document:
    - identifies the key issues which must be addressed in the EIS;
    - the minimum survey requirements and studies required as part of the EIS for key issues; and
    - other information to be supplied for the purpose of the Board's assessment, in addition to that required by the General Guidelines, for both key issues and other issues.

The EIS should be prepared using a risk-based approach. Not all issues nominated in the guidelines will have the same degree of relevance to all proposed activities. Depending on the nature of the proposed activity and its location, some issues may be more relevant than others. **The level of detail provided on each issue should be appropriate to the level of significance of that environmental issue to the proposal.** Refer to the General Guidelines for further instructions on preparing the EIS.

The issue of guidelines should not be interpreted as excluding other matters that emerge as significant from environmental studies, public comments or otherwise during preparation of the EIS. The assessment process may also change the level of risk associated with some of the issues. The level of detail provided in the EIS may therefore change to reflect the level of significance of that environmental issue to the proposal.

NOTE: An assessment cannot proceed to public consultation until the Board has received an EIS that meets the requirements of the General and Project Specific Guidelines, and provides sufficient information to assess the proposed activity (subject to any additional information required in response to public consultation).

Further information on the Environmental Impact Assessment (EIA) process is provided in the *Guide to EIA* available on the EPA website at http://epa.tas.gov.au/assessment/assessment-process/guidance-documents.

2. Key Issues

The key issues identified for this proposal, which should be the focus of the EIS, are:

Key Issues	
1	*Waste rock management.*
2	*Water impacts associated with construction and operation of the facility.*

Please refer to the General Guidelines and Sections 3 and 4 below for the information requirements associated with these key issues.

3. Survey and Study Requirements for Key Issues

The following surveys and studies will be required as part of the EIS.

Key Issue	Surveys Required	Studies Required	Relevant Section(s) of General Guidelines
1. Waste rock management	• Waste rock geochemical test work, including mineralogy, acid-base accounting (ANC, MPA, NAPP), NAGpH, kinetic test work, elements of concern (including sulphide), alkalinity and acidity, and potential for leaching of metals and salts under near neutral pH.		6.5
2. Water impacts	• Assessment of the potential for surface water drainage and seepage from the ASF to impact on water quality within the Lower Crusher Dam and Ring River both during operations and post closure.		6.2

4. Key Issue Information Requirements

The following information is required in addition to the requirements of the General Guidelines for key issues. Some of these requirements will support completion of the surveys and studies as detailed above.

The section numbers correspond to the relevant section of the General Guidelines.

6.2 Water quality (surface and discharge)

- Description of the existing and proposed water management practices associated with the proposed project site.
- Description of best practice environmental management measures for collection and treatment of any drainage from the facility.
- Description of the potential impacts to water quality within the Lower Crusher Dam and the Ring River as a result of the construction and operation of the ASF.
- Description of the proposed monitoring and reporting regime (including water quality parameters, sampling locations and frequencies) to ensure any water quality changes within the Lower Crusher Dam and Ring River are identified.

- Description of proposed water quality triggers, and management actions in response to exceedance of triggers. Describe and justify any proposed changes to existing trigger levels and any changes to current monitoring and reporting regimes.

6.5 Waste rock management

- Description of the lithology and mineralogy and results of geochemical test work characterising waste material that will be placed within the facility. This should include, acid-base accounting (ANC, MPA, NAPP), NAGpH, kinetic test work (including an assessment of lag time for any acid generation), a description of the metals and other elements of concern including sulphur minerals, alkalinity and acidity, and potential for leaching of metals and salts under near neutral pH.
- Discussion of the potential for acid and metalliferous drainage (AMD), neutral metalliferous drainage (NMD) and saline drainage (SD) formation as a result of the management and storage of waste rock within the ASF.
- Provide estimated quantities and production rates of potentially acid forming (PAF) waste rock, non-acid forming (NAF) waste rock and acid consuming (AC) waste rock reporting to the facility and describe methods for sorting wastes including the ore sorters and any other methods proposed.
- Description of waste rock disposal and management practices, including:
    - The type of liner proposed, including maintaining the integrity of the liner
    - Methods of materials delivery
    - Methods to control ingress of rainwater and stormwater
    - Collection of seepage
    - Progressive and final cover including relation to existing topography
    - Outline the performance objectives of the final cover including movement of air and infiltration and movement of water though the structure
    - Outline the proposed final vegetation cover and how this will be managed.

5. Other Information Required

The following information is required in addition to the requirements of the General Guidelines for issues, other than key issues.

The section numbers correspond to the relevant section of the General Guidelines.

2.1 General

- Description of alterations to any mine infrastructure required as a result of the proposed ASF (e.g. access roads, ore sorter, water infrastructure, removal of existing waste or infrastructure to be demolished (as relevant)).
- Description of the maximum quantity of waste rock to report to the facility in both cubic meters and tonnes, as an annual and total amount.
- Describe any proposed changes to site operations that will occur as a result of diversion of material to the ASF (e.g. change in quantity of NAF material available for other uses).
- Describe any changes to the operational site wide sulphide mass balance as the result of ore sorting and storage of materials in the ASF.
- Provide a schematic existing waste rock disposal practices (including the ore and waste rock sorters) and proposed disposal practices, illustrating how site operations will change as a result of the facility.

2.2 Construction

- Details of any proposed site preparation works on site including removal of existing waste stockpiles, demolition of any structures, and temporary and permanent removal of vegetation.
- Construction timeframe.
- Details of drainage and cover systems required for construction.
- Estimates of the quantities and sources of any materials required for construction (such as clays and gravels).

2.5 Site Plan

- A conceptual staging plan including working areas and areas of progressive rehabilitation.

3 Project alternatives

- Discuss proposal alternatives, including the potential for all waste to be stored underground and placement of waste rock in the TSFs.

6.1 Air quality

- Identify and characterise sources of potential dust generation from the construction of the ASF.
- Discuss the potential environmental impact of fugitive dust emissions associated with construction.
- Describe any measures to reduce dust movement from the site.

6.7 Biodiversity and natural values

- It is recommended that strict hygiene procedures be implemented as part of the operations in order to minimise the transportation of weed propagules attached to vehicles or machinery. Information about practical hygiene measures to implement can be

found in Appendix 1 of the DPIPWE (2015) Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania.

- There are no proposed changes to the operating hours or to vehicular movements within, to or from the site. Therefore, there does not appear to be an increased risk of roadkill in relation to the proposed development.

8 Decommissioning and rehabilitation

- A conceptual closure plan for both end of life and also for premature/ unanticipated closure.
- Consideration of long term (post closure) requirements for maintenance including monitoring requirements for any seepage, measures to mitigate settlement and slumping, and the requirement for any vegetation management.

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