

5.0 The environmental impact assessment process

This chapter outlines the environmental impact assessment undertaken for the Ensham Life of Mine Extension Project (the proposed project, hereafter referred to as ‘the Project’), and includes an overview of the assessment methodology and regulatory process for the environmental impact statement (EIS). The EIS process is prescribed under chapter 3 of the *Environmental Protection Act 1994* (Qld) (EP Act), which establishes a number of key steps which the Project must comply with. This chapter also describes the process for making submissions on the EIS, and explains how these submissions are considered in the decision-making process for the EIS.

5.1 Assessment methodology

The purpose of an EIS is to identify potential impacts of a project on people and the environment. Environmental Values (EV) were informed by the EP Act and the Environmental Protection Regulation 2019 alongside values under State legislation such as the *Vegetation Management Act 1999*, the *Nature Conservation Act 1992* and the *Regional Planning Interests Act 2014*. In order to understand relevant EVs, an Environmental Values Workshop was conducted to assess the predicted impacts and benefits of the Project.

To identify potential impacts on EVs, an environmental impact assessment establishes the existing (baseline) conditions, anticipating how these may change in the future, and predicts the potential impacts of a project across a range of environmental aspects. The EIS proposes mitigation measures for any potential impacts identified in the assessment based on established best practices in the industry. Where relevant, the combined impacts are assessed as cumulative impacts and are detailed in **Chapter 6** (Climate) – **Chapter 24** (Scenic amenity and lighting). Priority is given to avoiding impacts, and if this is not possible, then to reducing or abating impacts through control measures or compensation. Where relevant, these avoidance and mitigation measures are detailed in **Chapter 6** (Climate) – **Chapter 24** (Scenic amenity and lighting). Policies and procedures relating to the EIS are detailed in **Chapter 1** (Introduction). Impacts with high or medium probability of causing serious environmental harm are considered critical matters. Critical environmental matters for the Project identified in the Terms of Reference (ToR) and assessed in this EIS include: Land, Water Resources, Water Quality, Flooding and Matters of National Environmental Significance.

Environmental impact assessment has been conducted for the Project in collaboration with the mine planning process. This has ensured that environmental impacts were considered in the assessment of the Project and its alternatives, and allows for appropriate environmental impact mitigation measures to be incorporated into the proposed mine plan and operating procedures.

A multi-disciplinary approach has been adopted in the development of the Project, involving contributions from:

- a program of stakeholder consultation, which was undertaken to identify and address issues of concern to the community and government agencies
- involvement of environmental specialists in mine planning to ensure that environmental constraints were identified and environmental impacts minimised
- an engineering assessment of the Project and its various options to ensure maximum economic benefit and efficient resource recovery.

The key stakeholder issues and concerns were identified early in the Project planning phase and addressed in all stages of the mine planning and environmental impact assessment processes. Community and

environmental concerns were key considerations in the assessment of Project alternatives and development of Project design and operating plans. This process has enabled reasonable and feasible environmental impact mitigation measures to be incorporated into the proposed Project design and operating procedures.

5.1.1 EIS assessment requirements

EVs of the Project are explored in **Chapter 6** (Climate) – **Chapter 24** (Scenic amenity and lighting) of the EIS. The EIS has given priority to the Project's critical environmental matters, as confirmed in the project's TOR, including:

- Land (Refer to **Chapter 8** (Land resources))
- Water resources (Refer to **Chapter 10** (Surface water resources) and Chapter 12 (Groundwater))
- Water quality (Refer to **Chapter 10** (Surface water resources))
- Flooding (Refer to **Chapter 11** (Flooding and geomorphology))
- Matters of national environmental significance (Refer to **Chapter 25** (Matters of national environmental significance)).

Following the identification of specific EVs, baseline information was used to inform the EVs and environmental risks of the Project. Direct and cumulative impacts caused by the Project to EVs were assessed and are included in respective chapters such as Surface Water, Aquatic Ecology, Noise & Vibration, and Air Quality assessments.

Appropriate avoidance and mitigation measures intended to protect EVs were assessed throughout the EIS. Commitments and conditions are consolidated in **Chapter 26** (Commitments) and amended / additional conditions have been proposed in **Chapter 27** based on impact assessments and management measures prepared throughout the respective studies of the EIS.

Sources used to compile the EIS are detailed in **Appendix A-4** (References). Sources consist of third-party reports prepared on behalf of Ensham, publicly available data and Government websites.

5.2 EIS process

The regulatory requirements for an EIS are established under chapter 3 of the EP Act. Under the EP Act, the EIS process has several stages and milestones. The key steps involved in the EIS for the Project include:

- preparation of a voluntary EIS application
- lodgement of a draft ToR and initial advice statement (IAS) for the EIS
- public notification of the draft ToR, during which time the public can make submissions on the draft ToR
- finalisation of the ToR
- preparation and lodgement of the EIS, addressing the requirements of the ToR
- determination from DES on whether the EIS can proceed
- public notification of the EIS, during which time the public can make submissions on the EIS
- response to submissions on the EIS
- assessment by the Department of Environment and Science (DES) under the EP Act and the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- determination of the Environmental Authority (EA) amendment and EPBC Approval, which concludes the EIS process.

In preparing the draft EA, DES provide any person who makes submissions on the EIS an opportunity to decide whether the EA and the final EIS resolve their concerns. Any objections to the draft EA will be heard in the Queensland Land Court. Otherwise, if no objections are made, DES will grant the EA at the same time as the mining lease.

5.2.1 Voluntary EIS application

An application to voluntarily prepare an EIS under the EP Act was submitted to the Queensland DES and approved on 9 June 2020. The application included summary report including preliminary planning and assessment information for the Project. Under section 139 of the EP Act, the EIS will form the application documents for the requirements of chapter 3 of the EP Act.

5.2.2 Terms of reference

The draft ToR together with the IAS for the Project were lodged on 13 July 2020, and publicly notified between 3 August 2020 and 15 September 2020. A public notice was published in The Australian on 1 August 2020, and posted to all affected persons prior to the public notice period.

Seventeen submissions were received on the draft ToR. The final ToR was issued on 12 November 2020.

To simplify assessment against the Project's final ToR, a cross reference describing where each of the ToR requirements has been addressed in this EIS is provided in **Appendix A-3** (Final ToR cross check).

5.2.3 EIS preparation

This EIS has been prepared in accordance with the final ToR and associated technical guidelines for and EIS. The EIS includes the identification of EVs under Commonwealth and State legislation, informed further by an Environmental Values Workshop conducted in December 2019. Baseline technical assessment of EVs occurred across a range of topics including; surface water, groundwater, air quality, ecology, economics, social, cultural heritage and noise. Information used to inform technical studies is detailed in the relevant chapter methodology section and listed in **Appendix A-4** (References).

The assessment of potential impacts as a result of the Project has been undertaken by a multi-disciplinary team of qualified technical specialists from a range of organisations. For identified impacts, relevant mitigation measures have been proposed based on industry standards and Commonwealth and State legislation. Mitigation measures are detailed in **Chapter 26** (Commitment) and **Chapter 27** (Conditions).

5.2.4 Public notification of the EIS and submissions period

Once DES decide if the EIS can proceed to public notification, the general public and government agencies will have a minimum of 30 business days to provide submissions on the EIS. A public notice will be published in one or more newspapers and will also be posted to each of the Project's affected and interested persons. The public notice will include details of where the EIS may be viewed online and where hard copies may be obtained, and the process for making a properly made submission on the EIS.

A properly made submission is one that:

- is written
- is signed by or for each person (signatory) who made the submission
- states the name and address of each signatory
- is made to the chief executive of DES
- is received on or before the last day of the submission period.

The process for making submissions is detailed in **Section 5.3**.

5.2.5 Response to submissions

The Ensham JV partners are the proponents for the project, DES will collate properly made submissions and provide to Ensham JV for consideration. The issues and concerns raised in the submissions will be considered and responses will be provided to DES. Depending on the issues raised in the submissions, Ensham JV may be required to prepare a supplementary EIS report addressing the issues raised.

5.2.6 Assessment under the EP Act and EPBC Act

The Project was determined to be a controlled action (EPBC 2020/8669) under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The controlling provisions are 24D and 24E (A water resource, in relation to coal seam gas development and large coal mining development).

The EIS for the Project will be jointly assessed under the EP Act and the Commonwealth's EPBC Act using the EIS process under the EP Act in accordance with the assessment bilateral agreement between the Australian Government and the State of Queensland.

Once the response to submissions stage is complete and the adequacy of the responses is confirmed, DES will assess the EIS against the requirements of the EP Act. The assessment will be reported in an EIS Assessment Report which will outline the adequacy of the EIS in assessing the final ToR, determine if potential impacts have been appropriately avoided or mitigated, and recommend if the Project should proceed subject to any conditions.

The Commonwealth Department of Agriculture, Water and the Environment (DAWE) will also assess **Chapter 25** (Matters of national environmental significance) of the EIS against the requirements of the EPBC Act. DAWE will provide input into the production of the EIS Assessment Report.

5.2.7 Environmental Authority and EPBC Act determination

Ensham Mine currently operates the existing mine under Environmental Authority (EA) EPML00732813, dated 3 September 2020. The EA amendment application to authorise the Project will be finalised once the EIS Assessment Report is complete. DES will prepare a draft EA based on the information provided in the EIS. A copy of the draft EA will be provided by DES to any person who made a submission on the EIS. Submitters will decide if the EIS and the draft EA adequately addresses their issues or concerns. If required, objections to the draft EA will be heard in Land Court.

5.3 Submissions

The public are welcome and encouraged to make submissions on the EIS during the public notification period.

Submissions will be invited through advertisements in The Central Queensland News.

In accordance with section 55 of the EP Act, submissions should be made to the DES chief executive as follows:

- in writing (hard or electronic form)
- state the name and address of each signatory
- be signed by or for each person making the submission.

Submissions must be received on or before the last day of the submission period stated in the public notification. Submissions should be addressed to:

The Chief Executive

Attention: EIS Coordinator – Ensham Life of Mine Extension Project

State Wide Environmental Assessments

Department of Environment and Science

By post: GPO Box 2454, BRISBANE CITY EAST QLD 4001

By facsimile: (07) 3330 5875

By email: eis@des.qld.gov.au

Copies of the EIS are able to be viewed online at the following locations:

DES Website:

<https://www.qld.gov.au/environment/pollution/management/eis-process/projects/current-projects/ensham-life-of-mine-extension-project>

Idemitsu Resources Australia website:

<https://www.idemitsu.com.au/mining/projects/ensham-life-of-mine-extension-project/>