HYDROGEN AND RENEWABLE ENERGY ACT 2023

Environmental Impact Assessment Criteria

Pursuant to Section 60(1) of the *Hydrogen and Renewable Energy Act 2023* (the Act) I, Paul De Ionno, Acting Executive Director, Regulation and Compliance Division, Department for Energy and Mining, do hereby publish the following document as having been approved as the environmental impact assessment criteria under the Act.

Documents:

Energy Regulation
Department for Energy and Mining
Environmental Impact Assessment Criteria: Requirement under Part 4 of the *Hydrogen and Renewable Energy Act 2023*
October 2024

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South Australian Resources Information Gateway (SARIG)
map.sarig.sa.gov.au

This report is also available on the department's website.

Disclaimer

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CONTENTS

Purpose

This document establishes the criteria and framework, for the purpose of Part 4 of the *Hydrogen and Renewable Energy Act 2023* (the Act), upon which the environmental impact of an authorised operation must be assessed. Through providing environmental impact assessment criteria, this framework ensures assessments are consistent, informed, transparent and auditable.

Under Part 4, Section 60 of the Act, the Minister must, by notice of Gazette, determine criteria (the environmental impact criteria) against which the environmental impact of an authorised operation is to be assessed. This impact assessment must be prepared by the licensee and be included as part of the Environmental Impact Report (EIR) submitted by the licensee as required under Section 61 of the Act.

An EIR as prescribed under the *Hydrogen and Renewable Energy Regulations 2023* (the Regulations) must include:

- a description of the authorised operations to be undertaken and the location at which the operations are to be undertaken;
- a description of the specific elements of the environment that can reasonably be expected to be affected by authorised operations, with particular reference to the environment and existing land uses;
- data relating to biodiversity within the area of land to which the report relates that can reasonably be expected to be affected by authorised operations;
- an assessment of the cultural and heritage values of Aboriginal and Torres Strait Islander persons and other persons within the area of land to which the report relates which could reasonably be foreseen to be affected by authorised operations, and the public health and safety risks inherent in undertaking those operations (insofar as these matters are relevant in the particular circumstances); and
- if required by the Minister-an assessment of the continuity of supply with respect to hydrogen.
- information on consultation that has occurred in accordance with the approved consultation plan, including specific details about relevant issues that have been raised and any response to those issues (but not including confidential information).

In the Act, environment is broadly defined to include:

- land, air, water (including both surface and underground water and sea water), organisms, ecosystems, flora, fauna and other features or elements of the natural environment;
- buildings, structures and other forms of infrastructure and cultural artefacts;
- existing and potential land use;
- public health, safety and amenity;
- the heritage, aesthetic or cultural values of an area; and
- the economic or social impact on an area.

Therefore, all references to environment in this document incorporates the above aspects.

In accordance with the objects under Division 4 of the Act, environmental impact assessments are utilised by the Department for Energy and Mining (DEM) to ensure that any proposed authorised operations that may have adverse effects on the environment are properly managed by the proponent to avoid or reduce environmental damage and are carried out in a way that eliminates (as far as reasonably practicable) the risk of significant long term environmental damage.

In accordance with Section 60 of the Act, the following is considered the Environmental Impact Assessment Criteria. All information required under the Environmental Impact Assessment Criteria must be presented within the EIR.

ENVIRONMENTAL IMPACT ASSESSMENT CRITERIA

A licensee developing an Environmental Impact Report (EIR) in accordance with Section 61(d) must include an assessment against the Environmental Impact Assessment Criteria outlined below.

1. Elements of the Environment

Regulation 32(2)(a) requires that the licensee, in their EIR provide a description of the authorised operations to be undertaken and the location at which the operations are to be undertaken.

Regulation 32(2)(b) requires that a licensee, in their EIR provide a description of the specific elements of the environment that can reasonably be expected to be affected by authorised operations, with particular reference to the environment and existing land uses.

Under the Environmental Impact Assessment Criteria, the licensee **must**, for each element of the environment identified:

- provide a summary of any relevant issues or considerations raised by stakeholders, and any relevant legislated or recognised standards in relation to the element of the environment; and
- identify all potential environmental receptors.

2. Potential Impact Events

The licensee must identify potential impact events associated with the proposed authorised operations during each phase of the proposed operations (during construction, operation, decommissioning and rehabilitation) and how they are relevant to element(s) of the environment. Both typical events during these operations as well as atypical events (including but not limited to human error, extreme weather events, equipment failure, or discharges above normal operating levels) must be considered.

For the purpose of the environmental impact assessment, a potential impact event is the combination of a source, a pathway and an environmental receptor.

The source, pathway and environmental receptor of each potential impact event **must** be identified prior to the implementation of any control measures.

For each potential impact event identified, the licensee **must** provide:

2.1 *Source*

A description of the source of the potential impact event.

2.2 *Pathway*

A description of the potential pathway by which an identified environmental receptor can be exposed.

2.3 *Environmental Receptor*

A description of the environmental receptors that may reasonably be expected to be adversely impacted by the source prior to the implementation of any control measures.

2.4 *Description of Uncertainty*

Describe any significant degree of uncertainty pertaining to the evaluation of sources, pathways and environmental receptors.

3. Confirmation of Impact Events

For each potential impact event confirmed under Criteria 2, the licensee **must** provide:

- an analysis of whether a source, pathway and receptor does exist (and if not, or if it remains uncertain, provide an explanation for the conclusion); and
- information on the estimated frequency of the events that may pose a threat to the environment (source, pathway, receptor exists), and an explanation of the basis on which these events and frequencies have been predicted; and
- a description of the likely impact of the source on the environmental receptor prior to the implementation of any engineering and/or administrative control measures where the impact cannot be eliminated or avoided.

4. Control and Management Strategies and Uncertainty Assessment

For each potential impact event confirmed in Criteria 3, information listed below under Criteria 4.1 and 4.2 must be provided:

4.1 *Control and Management Strategies*

For each potential impact events that cannot be eliminated or avoided, the licensee **must** implement engineering and/or administrative control measures to prevent, manage, control, limit or remedy the potential environmental impacts confirmed in Criteria 3.

The licensee **must**:

- include a description of the strategies proposed to manage, limit or remedy each impact event to as low as reasonably practicable (ALARP);

- demonstrate that the control and management strategies proposed are commensurate with the potential impacts, achieve compliance with other applicable statutory requirements and where relevant promote progressive rehabilitation; and
- ensure the long-term effectiveness of implemented control strategies beyond the construction and operational period, with the goal of achieving little to no ongoing maintenance, therefore allowing for any proposed future licence surrender.

4.2 *Uncertainty Assessment*

The licensee **must** include a description of any significant degree of uncertainty pertaining to the likely effectiveness of the proposed control and management strategies, including but not limited to:

- Lack of current and/or site-specific information (including baseline data), modelling limitations and quality of data;
- Description of any assumptions connected with the identified uncertainty; and
- So far as is relevant, identify the sensitivity to change of any assumption that has been made.

5. Environmental Significance Assessment

For potential impact events confirmed within Criteria 3, the level of significance of these impacts on the receiving environment **must** be considered. The environmental significance assessment of potential impact events is to be considered after relevant engineering and administrative controls outlined in Criteria 4.1 have been implemented (unless there is significant uncertainty pertaining to the likely effectiveness of the control as assessed under Criteria 4.2).

The environmental significance assessment **must** consider the following:

- The level to which a potential impact can be avoided through elimination (prevention);
- The estimated frequency of the potential impact occurring;
- The anticipated duration of the potential impact;
- The extent of the potential impact;
- The severity of the potential impact;
- The cumulative effects (if any) of the potential impact when considered in conjunction with other impacts on the same receptor; and
- The sensitivity of the receiving environment.

A statement to demonstrate the outcome of the significance assessment must be provided.

6. Statement of Environmental Objectives

Regulation 34(1)(a) requires that objectives must be included within the Statement of Environmental Objectives (SEO) that relate to dealing with the impacts on various elements of the environment associated with undertaking the authorised operations.

Regulation 34(1)(b) requires that criteria (assessment criteria) be applied to determine whether or not the stated environmental objective has been achieved in a particular case.

The licensee **must** develop objectives and assessment criteria for each impact event confirmed under Criteria 3.

Section 62(2)(b)(ii) of the Act, requires that an SEO must also set out leading performance criteria, which give an early warning that a control measure strategy may be absent, fail, or be failing.

Where there is a high level of reliance on control measure strategies (as described in Criteria 4) to achieve an environmental objective, corresponding leading performance criteria must be developed.

This document is available for public inspection on the following webpage:

https://www.energymining.sa.gov.au/industry/hydrogen-and-renewable-energy/hydrogen-and-renewable-energy-act/licensing-and-approvals

Dated: 31 October 2024

PAUL DE IONNO
A/Executive Director
Regulation and Compliance Division
Department for Energy and Mining
Delegate of the Minister for Energy and Mining

JUSTICES OF THE PEACE ACT 2005

SECTION 4

Notice of Appointment of Justices of the Peace for South Australia by the Commissioner for Consumer Affairs

I, Stephanie Halliday, Commissioner for Consumer Affairs, delegate of the Attorney-General, pursuant to Section 4 of the *Justices of the Peace Act 2005*, do hereby appoint the people listed as Justices of the Peace for South Australia as set out below.

For a period of ten years for a term commencing on 13 November 2024 and expiring on 12 November 2034:

Darrell Leslie WISE
Ian James WHELLER
Heather Anne WEHR
Peter Upton RUNDLE
Belinda Jane ROBB
Mitchell Emile RECH
Brian Joseph PUMFREY
Richard Alan PRICE
Patrick Geoffrey MCEWEN
Elizabeth Joanne MALCOLM
Anthony Simon MAJSTRENKO
Ian Thomas KENNEDY
Graham Robert HERRMANN
Neville Roy HAILSTONE