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Epic Energy South Australia

Statement of Environmental Objectives

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WHP

Epic Energy South Australia

Whyalla Hydrogen Pipeline

Statement of Environmental Objectives

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ABBREVIATIONS AND GLOSSARY

ABBREVIATIONS

Term	Definition
AAR	Aboriginal Affairs and Reconciliation
AS	Australian Standards
CEMP	Construction Environmental Management Plan
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Cth)
DEM	Department for Energy and Mining (SA)
DIT	Department for Infrastructure and Transport (SA)
EIR	Environmental Impact Report
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
Epic Energy	Epic Energy South Australia Pty Ltd
ER Act	<i>Energy Resources Act 2000 (SA)</i>
ER Regulations	<i>Energy Resources Regulations 2013 (SA)</i>
HJP	Hydrogen Jobs Plan
Operations EMP	Operations Environmental Management Plan
SEO	Statement of Environmental Objectives
WHP	Whyalla Hydrogen Pipeline

GLOSSARY

Term	Definition
Hydrogen storage looped pipeline	Refers to the main looped pipeline which contains the approximate 100 tonne working storage capacity. This pipeline is a ~22.5 km looped line (~45 km in total), commencing and ending at the Whyalla Hydrogen Compressor Station.
Valve station	Refers to the proposed valve station attached to the hydrogen storage looped pipeline, located near the eastern end of the pipeline alignment.
Whyalla Hydrogen Compressor Station	Refers to the compressor station at Site 1, used to compress the hydrogen into storage and to deliver the hydrogen into the power generation facility.
Whallya Hydrogen Pipeline (WHP)	Refers to the proposed hydrogen compression station, looped pipeline and associated facilities in Whyalla, South Australia, and is the subject of this document.

1. INTRODUCTION

1.1. Purpose

This Statement of Environmental Objectives (SEO) has been prepared pursuant to section 99 and 100 of the *Energy Resources Act 2023* (ER Act) and Regulation 12 and 13 of the *Energy Resources Regulations 2013* (ER Regulations) ¹ for the construction and operation of the Whyalla Hydrogen Pipeline (WHP)² located in Whyalla, South Australia (Figure 1-1).

The intent of the SEO is to outline the environmental objectives that are required to be achieved for the construction, operation and decommissioning of the WHP and the criteria upon which the achievement of these objectives will be assessed.

The objectives of this SEO have been developed on the basis of the information provided in the Whyalla Hydrogen Pipeline Environmental Impact Report (EIR) (Epic Energy 2024). ‘Environment’ is broadly defined in the ER Act to include natural, social, cultural and economic aspects. The environmental objectives outlined in this SEO incorporate these aspects.

1.2. Environmental Objectives of the Energy Resources Act

Key objectives of the ER Act are:

- to establish an effective, efficient and flexible regulatory scheme to enable the exploration for, and the recovery, production, transmission, storage and management of, energy resources that encourages and maintains an appropriate level of competition
- to ensure that energy rights and resources are managed for the benefit of the State
- to ensure that the exploration for, and the recovery, production, transmission, storage and management of, energy resources is carried out safely and is ecologically sustainable
- to ensure that regulated activities that may have adverse effects on the environment are properly managed to reduce environmental damage and are carried out in a way that eliminates or limits the risk of significant long term environmental damage
- to ensure that land adversely affected by regulated activities is properly rehabilitated
- to establish appropriate consultative processes with people directly affected by regulated activities including Aboriginal people and the public generally
- to protect the public from risks inherent in regulated activities.

1.3. Scope of the SEO

This document relates to the WHP and applies to:

- construction activities associated with the pipeline and related facilities
- operation and maintenance activities associated with the pipeline and related facilities
- decommissioning activities.

¹ As outlined in Section 2.1.2 of the EIR, the transitional provisions in Schedule 3, clause 3 of the ER Regulations apply and as a consequence, this SEO has been prepared in accordance with the requirements of the Act and Regulations as in force before 11 April 2024.

² For the avoidance of doubt, it has not been prepared to support the construction and operation of the Whyalla Hydrogen Facility which is a separate approval process.

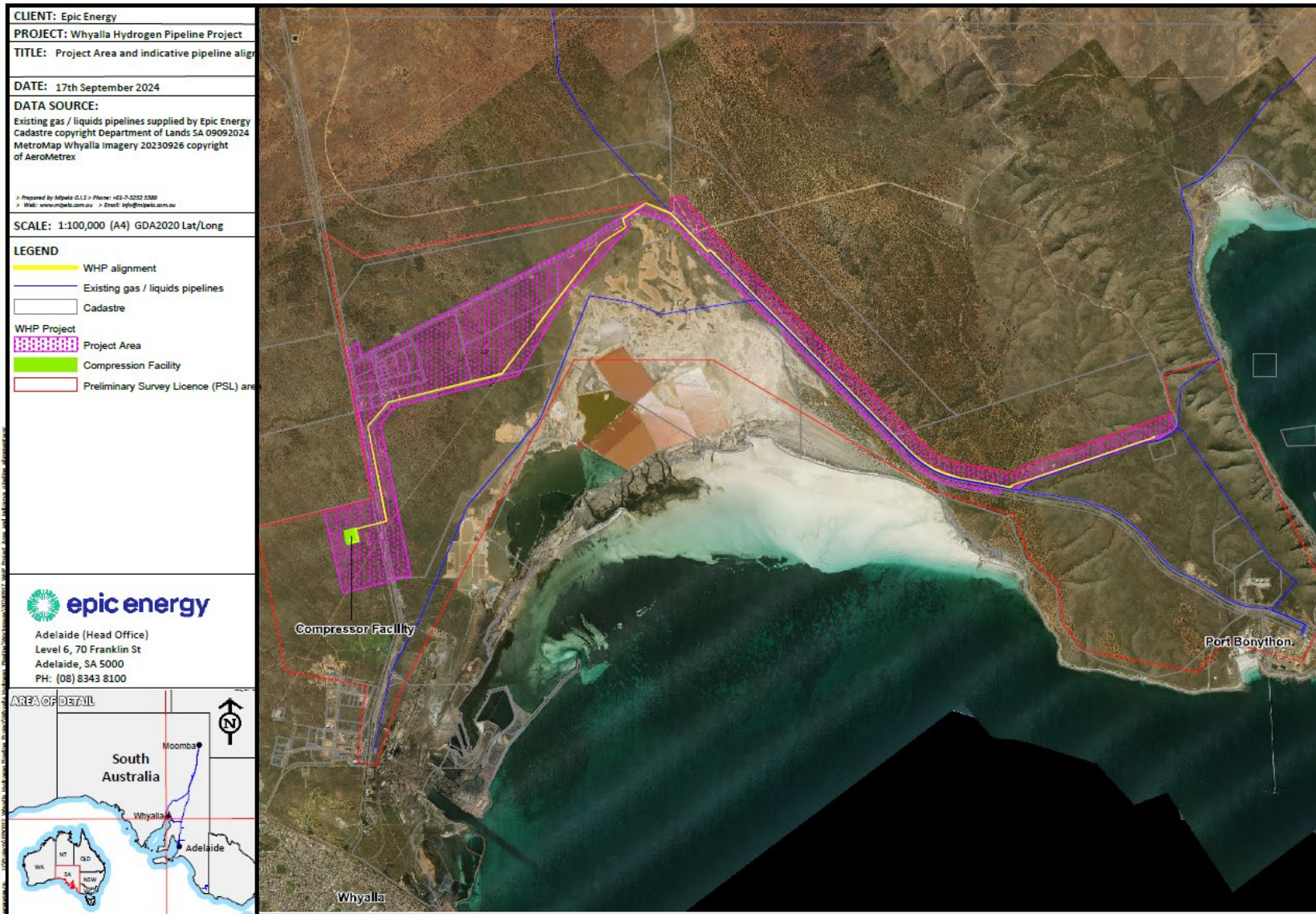


Figure 1-1: Location of the WHP

2. ENVIRONMENTAL OBJECTIVES AND ASSESSMENT CRITERIA

Potential environmental hazards and consequences associated with the construction, operation and maintenance of the WHP have been identified in the EIR. Epic Energy is committed to achieving a range of environmental objectives regarding these potential hazards.

2.1. Operations, maintenance and construction

The environmental objectives for the construction, operation and maintenance of the WHP are:

1. Avoid or minimise disturbance to sites of cultural and heritage significance
2. Avoid or minimise adverse impacts on soils and terrain
3. Avoid or minimise adverse impacts to water resources
4. Minimise adverse impacts to flora and fauna
5. Avoid the introduction and spread of weeds, exotic pest fauna and pathogens
6. Minimise disturbance to third party infrastructure, landholders and land use
7. Minimise impacts of noise
8. Minimise atmospheric emissions
9. Minimise risks to public health and safety
10. Minimise the impacts on the environment of waste storage, handling and disposal
11. Appropriately decommission the pipeline in accordance with regulatory requirements and accepted best practice environmental management.

2.2. Assessment Criteria

The environmental objectives identified above are subject to an assessment to measure the level of achievement. The assessment criteria for each objective are set out in Table 2-1 and include:

- Defined conditions – In many cases the achievement of an objective can be assessed through ensuring defined conditions are met or carried out. Such conditions include:
 - Prohibitions that achieve the objective through the prevention of unacceptable actions
 - Requirements to carry out certain actions in accordance with approved procedures or industry accepted standards.
- Scientific studies / monitoring - In some cases assessment of the environmental objectives may not be possible in the shorter term and may require longer term monitoring and scientific evaluation. In such cases, the assessment criteria may be in the form of longer-term data and information gathering.

Table 3-2 also outlines the controls that are planned to be implemented to ensure that environmental objectives are achieved, in the 'Guide to How Objectives Can be Achieved' column.

3. REPORTING

3.1. Incident Definitions

Section 100(1)(c)(ii) requires an SEO to set out immediately reportable incidents³ and reportable incidents (both within the meaning of section 85 of the Act).

Immediately reportable incidents

Section 85(1) of the Act defines an immediately reportable incident as:

- a. an incident arising from activities conducted under a licence specified in the relevant statement of environmental objectives to be an immediately reportable incident
- b. any other matter brought within the ambit of this definition by the Regulations

Reportable incident

Section 85(1) of the Act defines a reportable incident as:

- a. an incident (not being an immediately reportable incident) arising from activities conducted under a licence specified in the relevant statement of environmental objectives to be a reportable incident
- b. any other matter brought within the ambit of this definition by the Regulations

Regulation 32(1) classifies the following as reportable incidents:

- a. an escape of a regulated substance a processed substance, a chemical or a fuel that affects area that has not been specifically designed to contain such an escape; and
- b. an incident identified as a reportable incident under the relevant statement of environmental objectives.

Table 3-1 sets out the potential immediately reportable and reportable incidents relevant to construction, operation maintenance and decommissioning of the pipeline. These definitions are based on standard definitions developed by DEM and Epic Energy.

³ Regulation 12(2) of the ER Regulations as in force before 11 April 2024 applies to the preparation of the SEO (under the transitional provisions in Schedule 3 of the ER Regulations). This Regulation uses the terminology 'serious incident' rather than 'immediately reportable incident' which is used in the current version of the Act. The terminology of the current version of the Act (i.e. 'immediately reportable incident') has been used throughout this SEO for clarity.

Table 3-1: Incident definitions for operation, maintenance and construction (facility and pipeline activities)

Immediately reportable incidents	Reportable incidents
<ol style="list-style-type: none"> 1. A person is seriously injured¹ or killed 2. An imminent risk to public health or safety arises. 3. Serious environmental damage occurs or an imminent risk of serious environmental damage arises. For example: <ol style="list-style-type: none"> a) Damage, disturbance or interference to sites of cultural or heritage significance without appropriate permits and approvals². b) An escape of a regulated substance, process substance, a chemical or a fuel to a water body, or to land in a place where it is reasonably likely to enter a water body by seepage or infiltration, or onto land that affects the health of native flora or fauna species³. c) Detection of a declared weed, animal/plant pathogen or plant pest species that has been introduced or spread as a direct result of activities. d) Removal of rare, vulnerable or endangered flora and fauna without applicable permits and approvals.⁴ e) Any significant alteration of hydrology that affects a significant wetland area. 4. Security of natural gas supply is prejudiced or an imminent risk of prejudice to security of natural gas supply arises⁵ 5. An event that results in a rupture of a pressure containing asset or facility. 6. A regulated activity⁶ being undertaken in a manner that involved or will involve a serious risk to the health or safety of a person emanating from an immediate or imminent exposure to a hazard⁷. 7. Activity on a pipeline easement where the pipeline is contacted and repair action is required⁸. 8. An uncontrolled gas release resulting in the activation of emergency response and/or evacuation procedures of an area in or adjacent to the release, and/or fire or explosion. 	<ol style="list-style-type: none"> 1. An escape of a regulated substance⁹, processed substance, a chemical or a fuel that affects an area that has not been specifically designed to contain such an escape¹⁰ (other than an immediately reportable incident). 2. An event that has the potential to compromise the physical integrity of an asset or facility. For example: <ol style="list-style-type: none"> a) Activity on a pipeline easement that has been identified⁸ as exceeding the pipeline's penetration resistance, determined in accordance with Australian Standard (AS) 2885 or applicable standard. b) Identification of through-wall defect on a pipeline¹¹ or plant component (other than an immediately reportable incident). c) Identification¹² of a partial through-wall defect (e.g. through visual inspection, inline inspection, non-destructive testing) that requires repair or replacement action, or a reduction of the Maximum Allowable Operating Pressure, to maintain safe operation (other than an immediately reportable incident). d) Activity on a pipeline easement with equipment or vehicles that have been identified⁸ as exceeding allowable stress limits, determined in accordance with AS 2885. e) An unapproved¹³ excursion outside of critical design or operating conditions/parameters. f) Failure of a critical procedural control in place to reduce a credible threat to low or as low as reasonably practicable (ALARP).¹⁴ 3. Unauthorised activity on a pipeline easement where the pipeline is contacted but repair action is not required. 4. Malfunction or failure of critical plant or equipment that had (or still has) potential to cause a serious incident. 5. Any event where an excursion outside a culturally cleared area has occurred or the conditions of a cultural heritage clearance¹⁵ have not been complied with (other than an immediately reportable incident).

¹ As per the definition in Section 36 of the *Work Health and Safety Act 2012*.

² Pursuant to *Aboriginal Heritage Act 1988* and *Heritage Places Act 1993*.

³ For reporting purposes, the assessment of ‘reasonably likely to enter a water body by seepage or infiltration’ may require further intrusive assessment. Should delineation of the extent of the release not be achieved within one week of becoming aware of the incident, DEM will be notified of the incident and the proposed site investigation methodology, including time-frames.

⁴ Pursuant to *Native Vegetation Act 1991* (flora) and *National Parks and Wildlife Act 1972* (fauna).

⁵ That is, after taking into account relevant factors on a day and rights and obligations under contracts, a significant curtailment of firm service that detrimentally impacts or is likely to impact upon the security of electricity supply to South Australia or to gas supplies to a significant number of commercial and/or domestic gas users in SA.

⁶ Regulated activity as defined in Section 10 of the *Petroleum and Geothermal Energy Act 2000*.

⁷ Resulting in the issuing of a prohibition notice by SafeWork SA pursuant to Section 195 the *Work Health and Safety Act 2012*.

⁸ For the case where a detailed assessment is required to determine this, DEM recommends the incident be reported initially and amended at a later date if required.

⁹ In gaseous, liquid or solid state, as per *Petroleum and Geothermal Energy Act 2000* definition.

¹⁰ An area assigned during a Hazard and Operability Process (HAZOP) study as a hazardous area for the purpose of gas venting, and designed as such, is considered to be an area specifically designed to contain a gas escape.

¹¹ As per *Petroleum and Geothermal Energy Act 2000* definition, the term ‘pipeline’ includes tanks, machinery and equipment necessary for, or associated with, operation of the pipeline.

¹² For reporting purposes, the incident is considered to have occurred at the time that a decision is made to repair or replace the defect, or reduce the Maximum Allowable Operating Pressure.

¹³ ‘Approval’ as per AS2885 definition. Note that there may be situations where excursions are allowable under AS2885.

¹⁴ As per the Safety Management System process articulated in AS2885. 1-212, or similar risk assessment process.

¹⁵ Note: Cultural heritage clearances are not defined under or referenced by the Aboriginal Heritage Act 1988 and cannot ever authorise impacts to Aboriginal heritage.

3.2. Reporting Requirements

3.2.1. Reporting under the ER Act

It is a requirement under section 85 of the ER Act that ‘immediately reportable incidents’ and ‘reportable’ incidents must be reported to the Minister.

Immediately reportable incidents must be reported to the Minister as soon as practicable after the occurrence, as described in Section 85 of the Act and Regulation 32.

Reportable Incidents must be reported to the DEM on a quarterly basis within 1 month after the end of each quarter, as per Regulation 32.

3.2.2. Reporting to the EPA

Where applicable, incidents causing or threatening serious or material environmental harm under the *Environment Protection Act 1993* (EP Act) must be reported to the Environment Protection Authority (EPA) in accordance with section 83 or 83A of the EP Act.

The reporting obligation under the EP Act does not apply to:

- a. petroleum exploration activity undertaken under the *ER Act*⁴
- b. wastes produced in the course of an activity (not being a prescribed activity of environmental significance) authorised by a licence under the ER Act when produced and disposed of to land and contained within the area of the lease or licence.

3.2.3. Reporting to SafeWork SA

Notifiable incidents (i.e. death, serious injury or illness, or dangerous incidents) must be reported to SafeWork SA in accordance with Part 3 of the South Australian *Work Health and Safety Act 2012*.

⁴ Section 7 of the Environment Protection Act refers to the ER Act under its previous name i.e. the *Petroleum Act 2000*

Table 3-2: Environmental Objectives and Assessment Criteria

Objective	Guide to how objectives can be achieved	Construction	Operation
1. Avoid damage and disturbance to sites and objects of cultural and heritage significance unless authorisation has been obtained under relevant legislation.			
<p>Assessment criteria</p> <ul style="list-style-type: none"> In the event the conditions⁵ of a cultural heritage clearance are not complied with, the incident is appropriately reported⁶, investigated and remediated in consultation with the relevant Aboriginal heritage organisations, including Native Title groups, Recognised Aboriginal Representative Bodies (RARBs), Aboriginal heritage associations, Traditional Owners and Aboriginal Affairs and Reconciliation (AAR) Damage, disturbance or interference to any Aboriginal sites, objects and remains (all as defined under the <i>Aboriginal Heritage Act 1988</i>) is avoided unless authorisation has been obtained under the <i>Aboriginal Heritage Act 1988</i> Any Aboriginal heritage sites, objects and remains discovered during operations have been appropriately reported and responded to, consistent with the <i>Aboriginal Heritage Act 1988</i> 	<p><i>Heritage management plans and procedures</i></p> <ul style="list-style-type: none"> Work and consult with relevant Aboriginal heritage organisations to understand the cultural heritage values of the Project area to Aboriginal people Location of works limited to infrastructure corridors and previously disturbed areas wherever possible to reduce risks of impacts to cultural heritage values, whether known or unknown Cultural Heritage Management Plan developed which includes management controls, cultural heritage monitoring during ground disturbing works and protocols for any discovery of unknown sites, objects or remains Procedures consistent with the relevant obligations under the <i>Aboriginal Heritage Act 1988</i> are in place to appropriately report and respond to any sites discovered during activities Cultural heritage induction for all staff, consultants and contractors for any of Project sites as part of the overarching Project induction, including requirements of the CHMP 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	
	<p><i>Site surveys</i></p> <ul style="list-style-type: none"> Prior to any ground disturbance activities, on-ground cultural heritage survey(s) by qualified heritage experts and in consultation with the relevant Traditional Owner representatives Cultural heritage monitoring by Traditional Owner representatives as agreed for any ground disturbance activities (being clearing and grading and trenching activities), including in areas identified as high risk 	<p>✓</p> <p>✓</p>	
	<p><i>Incident reporting & consultation</i></p> <ul style="list-style-type: none"> If Aboriginal sites, objects and remains are discovered during activities: <ul style="list-style-type: none"> works halt in the vicinity of the discovery 	<p>✓</p>	<p>✓</p>

⁵ Note that cultural heritage clearances are not defined under or referenced by the *Aboriginal Heritage Act 1988* and cannot ever authorise impacts to Aboriginal heritage

⁶ This may include compliance with reporting obligations pursuant to s.20 of the *Aboriginal Heritage Act 1988*

Objective	Guide to how objectives can be achieved	Construction	Operation
<ul style="list-style-type: none"> Aboriginal and Non-Aboriginal cultural heritage sites have been identified and avoided. 	<ul style="list-style-type: none"> advice sought from the Barngarla Determination Aboriginal Corporation, a qualified heritage consultant or AAR mitigation measures implemented to ensure the discovery is avoided (If the works cannot be re-located to avoid the Aboriginal site, object or remains, authorisation would be obtained under the <i>Aboriginal Heritage Act 1988</i>). Aboriginal heritage discoveries reported to AAR on behalf of the Minister in accordance with section 20 of the <i>Aboriginal Heritage Act 1988</i>. Items of potential non-Aboriginal cultural heritage value discovered during works will be reported to the relevant authorities (e.g. local Council, Heritage SA within the Department for Environment and Water) 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
	<p><i>Monitoring & compliance</i></p> <ul style="list-style-type: none"> Records relating to management/avoidance of any identified sites of cultural heritage significance kept and available for audit. Where damage, disturbance or interference to Aboriginal sites, objects or remains discovered during activities is unavoidable, then agreement would be reached pursuant to section 19N of the <i>Aboriginal Heritage Act 1988</i> or if agreement was not reached, an application for authorisation pursuant to section 23 of the <i>Aboriginal Heritage Act 1988</i> would be required to be sought from the Minister for Aboriginal Affairs. 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓
2. Avoid or minimise adverse impacts on soils and terrain			
<p><i>Assessment criteria</i></p> <ul style="list-style-type: none"> No significant uncontrolled soil erosion due to pipeline construction activities Erosion along the right of way is consistent with the surrounding environment No un-remediated subsidence on the right of way No evidence of subsoil on surface (colour/texture) 	<p><i>Erosion and subsidence</i></p> <ul style="list-style-type: none"> Preventative erosion control measures implemented and monitored in susceptible areas Temporary silt fencing, filtration and sediment control measures implemented and monitored in susceptible areas (e.g. ephemeral drainage lines) along the right of way Minimising time between clear and grade and subsequent restoration in areas susceptible to erosion During heavy rainfall suspend activities likely to result in erosion and sedimentation if their effects cannot be adequately controlled 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓

Objective	Guide to how objectives can be achieved	Construction	Operation
<ul style="list-style-type: none"> No visual evidence of soil compaction (e.g. hard soil, local water pooling and failure of revegetation to successfully establish) following right of way remediation No evidence of likely acid sulfate soil exposure (e.g. odour, discoloration, vegetation death) 	<ul style="list-style-type: none"> Compact trench to a level consistent with surrounding soils Erosion or subsidence rectified in accordance with relevant guidelines and operational procedures Water discharged on stable ground, with no evidence of erosion as a result of discharge Right of way reinstatement in accordance with CEMP or operational procedures to ensure appropriate placement of topsoil and sub-surface material 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p></p> <p>✓</p> <p>✓</p> <p>✓</p>
<ul style="list-style-type: none"> No contamination due to mobilisation or exposure of acid sulfate soils Surface contours along the right of way are consistent with adjoining land with the exception of berms and contour banks to manage erosion 	<p><i>Soil inversion</i></p> <ul style="list-style-type: none"> Separate stockpiling of topsoil and sub-surface material during excavation Trench and right of way reinstatement in accordance with CEMP or operational procedures to ensure appropriate placement of topsoil and sub-surface material 	<p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p>
<p><i>Fuel and chemical handling and storage</i></p> <ul style="list-style-type: none"> Fuels and chemicals are stored and handled safely and appropriately No spills or leaks outside areas designed to contain them that result in land or water contamination. 	<p><i>Soil compaction</i></p> <ul style="list-style-type: none"> Ripping of identified compacted areas during reinstatement Restricting all vehicles and equipment movements to the right of way or designated access tracks and roads 	<p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p>
<ul style="list-style-type: none"> Any escape of fuels or chemicals to land is either immediately contained and removed or assessed in accordance with <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> guidelines and remediated in a timely manner 	<p><i>Acid sulfate soil and contaminated soil (if discovered)</i></p> <ul style="list-style-type: none"> Adherence to excavation procedures in the CEMP or operational procedures in relation to acid sulfate soil management Administrative controls in place to manage existing identified site contamination 	<p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p>
	<p><i>Training, monitoring and compliance</i></p> <ul style="list-style-type: none"> Construction workforce training and induction related to SEO and CEMP requirements Records of induction/training regarding SEO and CEMP Requirements Regular (e.g. annual) land survey to look for evidence of impacts to soil or water resources within or downstream from the right of way Inspections undertaken as part of regular patrols, following specific works or significant weather events 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p></p> <p></p> <p>✓</p> <p>✓</p>

Objective	Guide to how objectives can be achieved	Construction	Operation
	<ul style="list-style-type: none"> • Compliance auditing of right of way (i.e. – assessment of erosion susceptibility and effectiveness of engineering controls; assessment of vegetation reestablishment, etc) • Disturbance checklist for pipeline excavations signed off to indicate soil profiles appropriately reinstated following the completion of works / excavations. • Photo point or drone monitoring to validate compliance before and after specific works (e.g., excavation or land disturbance) • Ensure that personnel are trained in spill prevention and response procedures 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
	<p><i>Fuel and chemical handling and storage</i></p> <ul style="list-style-type: none"> • All hazardous substances stored in appropriate vessels and containment areas; used and disposed of in accordance with AS 1940 and the Australian Dangerous Goods Code • Bunding designed in accordance with EPA Guideline 080/16: <i>Bunding and spill management</i> • Bunded areas constructed to incorporate adequate freeboard to mitigate the potential of stormwater to mobilise potentially contaminating materials to land or water • Safety Data Sheets maintained for all hazardous materials • Use of appropriate spill prevention methods including self-bunded temporary storage and utilisation of dedicated machinery refuelling and servicing areas, drip trays and spill mats. • All minor spills or leaks are contained, cleaned up, reported, investigated and corrective / preventative action implemented where necessary • Any uncontained spills with larger scale impact are assessed and remediated (where required) using a risk- based approach, consistent with the principles of the <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> and in accordance with the <i>South Australian Guidelines for Assessment and Remediation of Site Contamination</i> (November 2019), where appropriate • EPA notified of contamination in accordance with Section 83 and 83A of the <i>Environment Protection Act 1993</i> 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

Objective	Guide to how objectives can be achieved	Construction	Operation
3. Avoid or minimise adverse impacts to water resources			
<p>Assessment Criteria</p> <ul style="list-style-type: none"> • Surface drainage profiles restored and maintained to pre-development conditions • No long-term modification to surface drainage patterns • No adverse impacts (e.g. downstream ecology or land use) resulting from watercourse flow reductions or diversions <p><i>Fuel and chemical handling and storage – refer to Objective 2</i></p>	<ul style="list-style-type: none"> • Identification of sensitive areas for avoidance of surface drainage impacts • Implementation of sedimentation and erosion controls (see Objective 2) • No stockpiling of materials in ephemeral drainage lines • Stabilisation, reinstatement of ephemeral drainage lines • Water Affecting Activity Permit(s) obtained where appropriate (as defined under the <i>Landscape South Australia Act 2019</i>) • Administrative and engineering controls implemented to manage: <ul style="list-style-type: none"> ○ Potential for alteration of groundwater flows (e.g. ensuring adequate trench compaction and use of trench plugs) ○ Construction constraints imposed by shallow groundwater <p><i>Fuel and chemical handling and storage: Refer to Objective 2</i></p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
4. Minimise adverse impacts to flora and fauna			
<p>Assessment Criteria</p> <ul style="list-style-type: none"> • No native fauna casualties that could have reasonably been prevented • Rare, vulnerable, or endangered flora are not removed without necessary permits or approvals • Native vegetation clearance is avoided or minimised • Species abundance and distribution on the rehabilitated right of way is reasonably consistent with surrounding areas (considering time and rainfall dependencies) 	<p><i>Fauna</i></p> <ul style="list-style-type: none"> • Provision of ramps at regular intervals in trench lines and excavations to mitigate against entrapment of fauna or livestock • Daily inspection of open trenches and excavations for trapped fauna and livestock • Identification and flagging of significant fauna habitats that require management or avoidance during construction <p><i>Flora</i></p> <ul style="list-style-type: none"> • Vegetation clearance is minimised • Vegetation clearing is limited to previously disturbed areas or areas of lowest sensitivity where practicable • Vegetation trimmed rather than cleared where possible • Comply with the <i>Native Vegetation Act 1991</i> for any clearance of native vegetation 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

Objective	Guide to how objectives can be achieved	Construction	Operation
<ul style="list-style-type: none"> Significant environmental benefit for native vegetation clearance approved by relevant authority Significant environmental benefit obligation satisfied / implemented No uncontrolled fires resulting from regulated activities 	<ul style="list-style-type: none"> Trimming of native vegetation to be restricted to the minimum necessary to ensure line of sight between pipeline marker posts Rehabilitation in accordance with the CEMP, including the respread of vegetation (including tree branches) and topsoil (in the reverse order of clearance) to facilitate natural regeneration Additional seeding undertaken using selected local species that match the vegetation communities traversed. Seed species selection will favour, where feasible, vulnerable fauna such as Western Grasswren, Southern Whiteface and Malleefowl. Monitor revegetation of the construction right of way until a vegetative cover has been successfully reestablished. Rehabilitation work undertaken where regeneration of vegetation has been inadequate 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓
	<p><i>Disturbance</i></p> <ul style="list-style-type: none"> Where practicable, reduction of right of way width during construction in identified environmentally significant areas Restrict disturbance to the right of way and approved access and work areas Restrict routine maintenance activities to designated facilities, access tracks and public thoroughfares Pre-start environmental assessment for excavations in areas of significant flora or fauna 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓
	<p><i>Training, monitoring and compliance: refer to Objective 2</i></p>		
	<p><i>Fuel and chemical handling and storage: refer to Objective 2</i></p>		
<p>5. Avoid the introduction and spread of weeds, exotic pest fauna and pathogens</p>			
<p><i>Assessment criteria</i></p> <ul style="list-style-type: none"> No new outbreaks or spread of weeds, pests, or pathogens 	<p><i>Vegetation cover</i></p> <ul style="list-style-type: none"> Minimise clearing of native vegetation as much as practicable Maintain native vegetation cover on the right of way where practicable 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓ ✓

Objective	Guide to how objectives can be achieved	Construction	Operation
<ul style="list-style-type: none"> • Presence of weeds and pathogens on the right of way consistent with adjoining land • No reasonable complaints received from landholders in relation to new outbreaks or spread of weeds or pathogens 	<p><i>Vehicle washdown</i></p> <ul style="list-style-type: none"> • Vehicles and machinery washed down and inspected prior to entry/departure from weed/pest affected areas • Vehicle and machinery wash down register 	<p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p>
	<p><i>Weed and pest management, monitoring & compliance</i></p> <ul style="list-style-type: none"> • Implementation of weed, pest and pathogen prevention and management controls • Regular inspections of the facilities, the right of way and adjacent land for identification of weeds. Weed control measures triggered if weeds identified on right of way but not adjacent land • Declared plants/animals reported and managed in accordance with the <i>Landscape South Australia Act 2019</i> and relevant plans • Records maintained of any significant weed outbreaks, including control activities implemented and photo monitoring • Store and dispose of food and waste materials to prevent and avoid attracting pests • Photo point monitoring and compliance auditing as per Objective 2 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
6. Minimise disturbance to third-party infrastructure, landholders and land use			
<p><i>Assessment criteria</i></p> <ul style="list-style-type: none"> • No reasonable landholder complaints left unresolved • Land use activities and infrastructure operation not restricted or disturbed due to pipeline activities unless by prior arrangement • Where disturbance is unavoidable, infrastructure or land use is restored to the satisfaction of the landholder/owner. 	<ul style="list-style-type: none"> • Alignment selection to avoid or minimise impacts to infrastructure and land use • Easement agreements outlining legal responsibilities of Epic Energy and landholders and including site / property specific rehabilitation requirements • Records of communications with landholders or operators of third party infrastructure prior to and during construction and maintenance activities (e.g. excavation), where pipeline activities may disturb or impact on land use or infrastructure • Communications with affected landholders or operators or third party infrastructure prior to and during non-routine work including advice on the nature and schedule of maintenance activities • Use of Before You Dig Australia asset referral system 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

Objective	Guide to how objectives can be achieved	Construction	Operation
<ul style="list-style-type: none"> Duration of disturbance does not exceed agreed timeframe, without prior consultation with landholders No disturbance outside the right of way or approved access and work areas without prior consultation with affected landholders. 	<ul style="list-style-type: none"> Identification of third party utilities and infrastructure on alignment sheets and Geographical Information System (GIS) Construction, maintenance and operational activities restricted to pipeline right of way or permanent easement and approved access and work areas Auditing of easement and photo point monitoring to validate compliance 	<p>✓</p> <p>✓</p> <p>✓</p>	<p></p> <p>✓</p> <p>✓</p>
7. Minimise impacts of noise			
<p><i>Assessment criteria</i></p> <ul style="list-style-type: none"> Pipeline activities during construction, operation and maintenance phases comply with the relevant EPA noise policies and guidelines. No reasonable complaints received in relation to noise impacts 	<ul style="list-style-type: none"> Regular maintenance of vehicles and equipment Vehicles, equipment and machinery operated in accordance with manufacturers' specifications Induction/training of construction workforce regarding noise abatement requirements Construction and maintenance activities that may have an adverse impact on amenity⁷ (e.g. at nearby residences) scheduled within normal working hours (7 am to 7 pm, Monday to Saturday) as far as practicable. Consultation with local residents/landholders/land users when unavoidable out-of-hours or short duration excessive noise will be generated If out-of-hours work may have an adverse impact on amenity, undertake assessment, management, mitigation and consultation consistent with the DIT <i>Guideline for the Management of Noise and Vibration: Construction and Maintenance Activities</i> Operational activities comply with noise requirements under the <i>Environment Protection (Commercial and Industrial Noise) Policy 2023</i> Compliance auditing of operational noise emissions from compression station 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

⁷ For construction activities EPA guideline 425/23 *Construction noise* defines an adverse impact on amenity as an average noise of 45dB(A) or any singular noise event with a maximum noise level of 60dB(A) at a noise receiver (such as a domestic premise).

Objective	Guide to how objectives can be achieved	Construction	Operation
	<ul style="list-style-type: none"> ○ Construction hazards identified via Job Hazard Analysis & Permit to Work system ○ Consultation with affected stakeholders prior to and during construction and commissioning activities ○ Workers and visitors complete safety inductions, including health and safety procedures ○ Appropriate fencing and signage for hazardous areas in accordance with AS2885 ○ Driver training and fatigue management for employees ○ Regular fire safety and emergency response training for workers ○ Emergency response plan implemented, and personnel trained ○ Regular review of operating procedures ○ Hazards and incident reporting ● Compliance with the relevant legislation regarding noise and air quality as described in Objective 7 and Objective 8 	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
	<p><i>Fire Safety Management</i></p> <ul style="list-style-type: none"> ● Records detailing fire safety and emergency preparedness for operations and maintenance personnel ● Appropriate fire prevention/control equipment and measures in place during construction and commissioning activities ● Records detailing relevant fire authority permits in relation to Hot Work during fire ban days ● Records of liaison with Country Fire Service (CFS) and provision of pipeline awareness information to Emergency Services 	✓ ✓ ✓ ✓	✓ ✓ ✓
	<p><i>Unauthorised Access</i></p> <ul style="list-style-type: none"> ● Inspection/Patrol activities to identify potential unauthorised access to right of way (aerial and ground) ● All reports of unauthorised activity are investigated 	✓ ✓	✓ ✓

Objective	Guide to how objectives can be achieved	Construction	Operation
10. Minimise the impact on the environment of waste storage, handling and disposal			
<p>Assessment criteria</p> <ul style="list-style-type: none"> Wastes are segregated and transported to an EPA licensed facility for recycling or disposal Reasonable steps are taken to securely contain waste prior to removal from site. All waste disposed of in accordance with the <i>Environment Protection Act 1993</i>, including hazardous waste. No evidence of impacts to soil, water and vegetation as a result of water disposal (e.g., soil erosion, soil salinity, dead vegetation) Discharged water complies with the <i>Environment Protection (Water Quality) Policy 2015</i>. 	<p><i>Waste management</i></p> <ul style="list-style-type: none"> Waste disposal records and chemical manifests maintained Licensed contractors used for hazardous waste disposal and appropriate records maintained Provision of covered bins for the collection, storage and transport of general waste Waste is promptly removed from work areas on the right of way, to designated storage areas, pending recovery, recycling or disposal with regard to the EPA Waste Hierarchy 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓
	<p><i>Wastewater Disposal</i></p> <ul style="list-style-type: none"> Discharge of trench water or hydrotest water is undertaken in a manner that does not cause adverse impacts to soils, surface water or groundwater Water discharged meets appropriate ANZECC criteria at point of discharge and is disposed onto land, well away from any place from which it is reasonably likely to enter any water body Wastewater suitable to be discharged to land prevents discharge or runoff to environmentally sensitive areas or water bodies Water discharged on stable ground, with no evidence of erosion as a result of discharge Records maintained in relation to disposal/discharge method and location. Inspection of water disposal sites for evidence of water entering a watercourse or environmentally sensitive area Wastewater unsuitable to be discharged to land to be managed in accordance with the <i>South Australian Public Health (Wastewater) Regulations 2013</i> and/or contained onsite prior to disposal to an appropriately licensed facility 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ ✓ ✓
	<ul style="list-style-type: none"> <i>Training, monitoring and compliance: refer to Objective 2</i> 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓

Objective	Guide to how objectives can be achieved	Construction	Operation
11. Appropriately decommission the pipeline in accordance with regulatory requirements and accepted best practice environmental management.			
<p>Assessment criteria</p> <ul style="list-style-type: none"> • Pipeline and associated above-ground infrastructure decommissioned to an appropriate standard that addresses the environmental objectives for operations and construction, as appropriate and as required by the legislative requirements of the day. • No reasonable landholder complaints arising from decommissioning activities. • Landholder activities not materially restricted or compromised as a result of decommissioning activities, unless by prior arrangement. 	<ul style="list-style-type: none"> • Records of communications with landholders and affected third parties prior to, during and following decommissioning activities • Pipeline and associated above-ground infrastructure decommissioned to an appropriate standard as required by the legislation and standards of the day • Relevant Environmental Objectives for construction and operation are addressed during decommissioning activities • No above-ground infrastructure evident unless agreement with landholder to take on the ownership and maintenance of the asset 		

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4. REFERENCES

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Government of South Australia, Department for Infrastructure and Transport (2021). *Guideline for the Management of Noise and Vibration: Construction and Maintenance Activities*

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