

STATEMENT OF ENVIRONMENTAL OBJECTIVES

| SOUTH EAST AUSTRALIA GAS PTY LTD | | | | | |
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1 Introduction

SEA Gas demonstrated its capability to strategically become the 'energy link' by supplying natural gas into South Australia on 1 January 2004, safeguarding the security of future natural gas supplies to South Australia.

The 685km high pressure natural gas transmission pipeline links Adelaide to the Otway Basin natural gas reserves in Victoria, coupled with providing additional gas supplies into Melbourne, hence completing the eastern connection (Adelaide-Melbourne-Sydney) high pressure natural gas transmission links.

Jointly owned by International Power, APA Group and the Retail Employees Superannuation Trust, the pipeline is operated and maintained by an Adelaide based management team, supported by APA Group maintenance personnel and allied specialist service providers.

The Port Campbell to Adelaide (PCA) pipeline commences at the Iona gas hub (TRU Energy and Woodside Energy gas processing facilities), northeast of the Port Campbell township in Victoria and interconnects with the BHP-Billiton, Minerva gas processing facility. Primarily, the PCA supplies high pressure natural gas to the Adelaide distribution network, Torrens Island power station and Pelican Point Power Station, north-west of Adelaide.

Off take points at Poolajelo in Victoria supplies natural gas into the South East South Australia (SESA) pipeline, which supplies the southeast of South Australia, coupled with off takes at Naracoorte and Jervois, respectively supplying an abattoir and cheese factory.

An additional metering facility was commissioned at Torrens Island during December 2008, enabling SEA Gas to supply natural gas to the Quarantine power station.

2 SEO Update

This revised Statement of Environmental Objectives (SEO) supersedes the previously approved SEO, issued by SEA Gas during November 2002. Based on its *Low Level Supervision* operational status, supported by measurable safety, environmental and regulatory compliance experience, SEA Gas has amended its original SEO to more accurately reflect industry best practice environmental and safety compliance. Application of aligned stated objectives within an operational context, aims to deliver environmental impacts which are As Low As Reasonably Practicable (ALARP).

This revised SEO retains environmental objectives and assessment criteria for construction activities, in order to enable further expansion of the SEA Gas pipeline network to be undertaken as opportunities arise. Likewise, environmental compliance criteria, pertaining to decommissioning of pipeline infrastructure have also been retained within this revised SEO.

3 Scope and Purpose

This revised SEO has been prepared to meet the requirements of *Part 12* of the *Petroleum and Geothermal Energy Act (SA) 2000*, (the Act) and *Part 3* of the *Petroleum and Geothermal Energy Regulations (SA) 2000*, under the Act.

In order to facilitate a common operational standard, the principles of this SEO will be applied equally to all activities associated with the operation of the SEA Gas high pressure natural gas transmission pipeline (inclusive of any subsequent construction activities or future decommissioning), throughout both South Australia and Victoria.

Operational activities shall comply with relevant SEO conditions applicable to the respective South Australian (PL13) and Victorian (PL236) pipeline licences.

This revised SEO outlines the environmental objectives with which operational, construction, and decommissioning activities must conform, and the measurable performance criteria upon which achievement of these objectives will be assessed. Environmental objectives are based on information detailed within the initial Environmental Impact (EIR-SA) and Environmental Effect (EER-Vic) Reports, prepared prior to the construction of the SEA Gas pipeline. Additionally, supplemental operational experience gained by SEA Gas since the formal commencement of pipeline operations on 1 January 2004, has also been included within the SEO.

Safety and environmental management systems have been developed by SEA Gas to ensure legislative compliance; this SEO is a specific management tool which provides a means for operational compliance assessment based on performance measures which are individually detailed on a case by case basis. Additionally the SEO is referenced within a project specific *Construction Safety and Environmental Management Plan (CSEMP)*, which is produced for each development project.

In accordance with *Part 12, Section 99(2)* of the Act, the Minister may decide whether the approved SEO requires revision, and if required, a revised SEO will be prepared by the licensed operator in accordance with the Act and Regulations.

4 Regulatory Definitions

Environment is broadly defined in the Act to include its natural, social, cultural and economic aspects. The environmental objectives outlined in the SEO incorporate these aspects.

The SEO relates to *pipelines* and *petroleum* as defined by the Act. *Pipeline* means a pipe or system of pipes for conveying *petroleum* or another regulated substance from place to place and includes:

- tanks, machinery and equipment necessary for, or associated with, its operation, and
- a part of a pipeline.

Petroleum refers to a naturally occurring substance consisting of hydrocarbon or a mixture of hydrocarbons in gaseous, liquid or solid state.

5 Environmental Management System

The Environmental Effects Report (EER) / Environmental Impact Report (EIR) initially developed for the SEA Gas project identified potential environmental hazards and consequences associated with the construction, operation and future decommissioning of the SEA Gas pipeline and any associated infrastructure. These identified objectives have been reviewed to ensure continued compliance in regard to the management of the physical, biological, social and cultural aspects of the environment. SEA Gas is committed to achieving a range of environmental objectives and goals based on industry best practice management of environmental aspects.

SEA Gas undertakes to adopt measures which will avoid, minimise or mitigate significant environmental impacts in the course of conducting its operational activities, by:

- ensuring that likely adverse effects on the environment are appropriately risk assessed and managed to minimise environmental harm;
- eliminating as far as reasonably practicable the risk of significant long term environmental harm; and
- ensuring that land adversely affected is appropriately rehabilitated.

As an adjunct to the SEO, site specific easement revegetation and management plans for both the Victorian and South Australian sections of the pipeline have been developed to manage site restoration activities.

Future expansions of the SEA Gas pipeline network will feature the development of project specific *Construction Safety and Environmental Management Plan (CSEMP)*. The CSEMP will be underpinned by management systems, inclusive of policies and procedures, intended to provide clear and practical guidance to the construction workforce in relation to environmental compliance. The SEO and the CSEMP, effectively provide an instrument to ensure compliance with stated environmental objectives, ensuring that goals are achieved by assessing performance criteria.

Project specific CSEMP's will be submitted to Energy Safe Victoria and/or Primary Industries and Resources (SA) – Petroleum and Geothermal Group (based on legislative governance of the project area within either Victoria and South Australia), for review and industry comment prior to project commencement.

6 Environmental Objectives

SEA Gas is committed to responsible environmental management during all phases of operational, construction and any future decommissioning activities, and strives to ensure that any potential adverse environmental impacts are appropriately managed in a manner that complies with the requirements of this document and all relevant State and Commonwealth Acts and Regulations.

SEA Gas is committed to achieving its stated environmental objectives in regard to potential environmental or safety hazards. This SEO addresses potential environmental impacts and their associated management objectives, which relate to the operation of the SEA Gas high pressure natural gas transmission pipeline. The following environmental aspects are addressed within the context of the objectives:

- Soils and terrain;
- Water resources;
- Land and water emissions;
- Atmospheric emissions;
- Vegetation and fauna;
- Weeds and pathogens;
- Noise emissions;
- Cultural and historical heritage;
- Disturbance to third party infrastructure, landholders and modified land use; and
- Public health and safety.

Section 7 of this document details the assessment criteria against which these objectives are be assessed.

Environmental assessment and management of SEA Gas construction, operational and pipeline decommissioning activities and their inherent risks, is conducted in accordance with stated environmental objectives, which include defined:

- Environmental Objectives;
- Goals;
- Performance Measures; and
- Assessment Criteria.

Stated objectives are detailed in respect to construction, operational and decommissioning activities, in accordance with licence obligations.

Environmental hazards and consequences are assessed in detail and are tabled in accordance with specific licenced activities, these being:

- Construction;
- Operation; and
- Decommissioning.

6.1 Construction

Objectives for the environmental management of construction activities relating to the SEA Gas high pressure natural gas transmission pipeline or its associated facilities are detailed as follows:

| <i>Environmental Objective</i> | <i>Goal</i> |
|---|---|
| 1. To avoid or minimise adverse impacts on soils and terrain. | 1.1 To minimise soil erosion and sedimentation as a result of construction activities. |
| | 1.2 To prevent soil inversion. |
| | 1.3 To mitigate soil compaction if necessary by remedial action. |
| | 1.4 To identify and avoid acid sulphate soils (ASS) and to have in place strategies for managing exposure. |
| | 1.5 To identify and manage pre-existing site contamination. |
| | 1.6 To reinstate soil and/or terrain as near as practicable to pre-construction contours, profiles or conditions. |
| 2. To minimise and manage impacts to water resources. | 2.1 To minimise short term, and prevent long term interruption or modification to surface drainage patterns. |
| | 2.2 To restrict sediment discharge which enters surface water features. |
| | 2.3 To minimise disruption to third party use of surface waters. |
| 3. To avoid land or water contamination. | 3.1 To prevent the occurrence of spills and to have in place a spill management strategy. |
| | 3.2 To ensure that construction rubbish and waste material are disposed of in an appropriate manner. |
| | 3.3 To prevent adverse impacts as a result of hydrostatic test water, trench water and waste water (e.g. – washdown water). |
| | 3.4 To ensure the safe and appropriate disposal of camp waste water (e.g. – grey water and sewage). |
| 4. To minimise adverse impacts to vegetation and fauna. | 4.1 To minimise clearing of remnant vegetation. |
| | 4.2 To minimise disturbance to and potential for, fauna and livestock entrapment along ROW. |
| | 4.3 To appropriately rehabilitate the easement to as near as reasonably practicable to pre-construction conditions. |
| | 4.4 To achieve a Significant Environmental Benefit (SEB) or Net Gain for native vegetation clearance. |
| 5. To avoid the introduction or dispersal of weeds and pathogens. | 5.1 To avoid the introduction or spread of environmental or proclaimed weeds, animal/plant pathogens, by undertaking appropriate site specific control measures where required. |

| <i>Environmental Objective</i> | <i>Goal</i> |
|---|--|
| 6. To minimise and manage impacts to heritage or culturally sensitive sites and values during construction. | 6.1 To minimise disturbance of identified heritage (archeological and built), and culturally sensitive and vegetation sites. |
| 7. To minimise construction noise. | 7.1 To minimise noise impacts associated with the movement and operation of construction vehicles and equipment. |
| | 7.2 To minimise noise impacts associated with pipeline or facility commissioning activities. |
| 8. To minimise atmospheric emissions. | 8.1 To minimise the generation of dust. |
| | 8.2 To minimise impacts of gas venting activities. |
| 9. To minimise disturbance to third party infrastructure, landholders and land use. | 9.1 To minimise disturbance or damage to infrastructure or land use and to remediate where disturbance cannot be avoided. |
| | 9.2 To minimise disturbance to landholders or land users. |
| | 9.3 To appropriately reinstate and rehabilitate the easement to as near as practicable, pre-construction conditions, to allow continuation of current land use activities post-construction. |
| 10. To minimise the risk to public health and safety. | 10.1 To adequately protect public safety during construction and commissioning activities by adequately managing hazards. |
| | 10.2 To mitigate risk of fire during construction activities. |

6.2 Operation

Objectives for the environmental management of operational activities relating to the SEA Gas high pressure natural gas transmission pipeline and its associated facilities are detailed as follows:

| <i>Environmental Objective</i> | <i>Goal</i> |
|--|--|
| 11. To maintain soil stability along the easement. | 11.1 To remediate erosion or subsidence as a consequence of pipeline operations in a timely manner. |
| | 11.2 To prevent soil inversion. |
| | 11.3 To effectively manage soil compaction. |
| | 11.4 To effectively manage impacts of inadvertent acid sulphate soil (ASS) exposure. |
| | 11.5 To identify activities off the easement which may result in soil instability, and to jointly manage potential risks in consultation with stakeholders. |
| 12. To minimise and manage impacts to water resources. | 12.1 To maintain current surface drainage patterns. |
| | 12.2 To minimise disruption to third party users of surface waters. |
| 13. To avoid land or water contamination. | 13.1 To effectively manage spill prevention and to respond to spill events to minimise their impact. |
| | 13.2 To ensure that rubbish and waste material are disposed of in an appropriate manner. |
| | 13.3 To prevent adverse impacts as a result of hydrostatic test water, trench water and waste water (e.g. – washdown water). |
| | 13.4 To ensure the safe and appropriate disposal of facility waste water (e.g. – grey water, sewage). |
| 14. To minimise adverse impacts to vegetation, native fauna and livestock. | 14.1 To promote and maintain regrowth of vegetation along the easement, consistent with the surrounding area, ensuring that line of sight between pipeline marker posts is maintained. |
| | 14.2 To minimise additional clearing of native vegetation during the course of operational activities. |
| | 14.3 To ensure that maintenance activities are planned and conducted in a manner that minimise impacts on vegetation, native fauna and livestock. |
| 15. To prevent the introduction and spread of weeds and pathogens. | 15.1 To ensure that weeds, animal and plant pathogens are managed in a manner that is consistent with the surrounding area. |
| | 15.2 To ensure that vehicle and plant washdown is conducted where appropriate along the easement. |
| | 15.3 Implementation of weed management strategies at facilities in order to minimise fire risk. |

| <i>Environmental Objective</i> | <i>Goal</i> |
|---|---|
| 16. To adequately protect heritage and culturally sensitive sites and values during operational activities. | 16.1 To ensure that identified heritage (archeological and built) and culturally sensitive sites and vegetation are not disturbed, and where new sites are identified, appropriately managed. |
| 17. To minimise noise impacts that may arise from operational activities. | 17.1 To actively liaise with adjoining land users prior to undertaking operational or maintenance activities which may result in noise impacts. |
| 18. To minimise atmospheric emissions. | 18.1 To eliminate uncontrolled atmospheric emissions. |
| | 18.2 To minimise the generation of dust. |
| 19. To avoid unnecessary disturbance to third party infrastructure, landholders or land use. | 19.1 To minimise disturbance or damage to infrastructure or land use and to remediate where disturbance cannot be avoided. |
| | 19.2 To minimise disturbance to stakeholders. |
| | 19.3 To appropriately identify and locate third party infrastructure prior to commencing any excavation activities in the course of operational or maintenance activities. |
| | 19.4 To appropriately reinstate and rehabilitate the easement to as near as practicable prior to disturbance, to permit continued stakeholder operations. |
| 20. To minimise the risk to public health and safety. | 20.1 To adequately protect public safety. |
| | 20.2 To avoid the likelihood of fire as a consequence of pipeline maintenance activities. |
| | 20.3 To prevent unauthorised activity along the easement that may adversely impact safe pipeline operations. |
| | 20.4 To actively educate stakeholders in respect to pipeline safety and emergency procedures. |

6.3 Decommissioning

A high pressure natural gas transmission pipeline can potentially have an indefinite operational lifespan, with the planned life of the SEA Gas pipeline being at least 80 years. However as a pipeline ages the level of maintenance required increases substantially, requiring an assessment of continued economic operation and compliance with safety and integrity requirements. Where it is intended to operate the SEA Gas pipeline beyond the original design life, engineering investigations shall be made in respect to the design, operating conditions and history of the pipeline, to determine the condition and any limits for continued safe operation. The pipeline shall be operated in accordance with all State and Commonwealth legislative requirements and applicable operating standards.

In the event that the infrastructure is no longer deemed commercially viable, the pipeline will be decommissioned in accordance with the AS2885 and legislative requirements of the time.

Typical objectives for the environmental management of any decommissioning activities relating to the SEA Gas high pressure natural gas transmission pipeline infrastructure, its laterals or above ground facilities are detailed as follows:

| <i>Environmental Objective</i> | <i>Goal</i> |
|--|---|
| 21. To appropriately decommission the pipeline in accordance with regulatory requirements and accepted best practice environmental management. | 21.1 To safely decommission the pipeline and associated above ground infrastructure in accordance with appropriate regulatory requirements. |
| | 21.2 To minimise disturbance to stakeholders during decommissioning. |

7 Assessment Criteria

Environmental objectives must be measurable through a validation process which evaluates compliance with the stated environmental objectives and assessment criteria for construction, operation and decommissioning activities, as detailed in Section 12.

Each environmental objective features defined performance measures and associated compliance validation criteria to enable a qualitative assessment to be made to ascertain compliance (or otherwise).

7.1 Professional and Valued Judgments

It is important to note that these environmental objectives and assessment criteria are not intended to be a surrogate for valued or professional judgments, which should be applied in the course of the decision-making process. Rather the objectives and assessment criteria are intended to provide a guide to assist decision-making, whereby the issues that need to be considered and the basis upon which such judgments can be made are clearly outlined to enable stakeholders to comply with stated objectives. The need for valued judgments and professional input into these judgments is an essential component of any assessment which entails addressing complex and sometimes less discernable issues, which may result in environmental impact.

7.2 Risk Assessment

When assessing environmental objectives, identification, analysis, prioritization, mitigation and treatment of environmental hazards shall be managed in manner which attains compliance with stated objectives through the assessment of risk, based on the principles of Australian Standard *AS/NZS 4360 - Risk Management*.

Through a systematic evaluation of risks against stated environmental objectives, a determination will be made of the most effective control method(s) for the risk(s) associated with each hazard. Appropriate management strategies will be developed for each hazard, with due regard to the “hierarchy of hazard controls”:

- Eliminate the hazard at its source;
- Substitute with a less hazardous process;
- Engineering controls to reduce the hazard;
- Administrative controls such as workplace procedures; and
- Use of protective equipment.

This provides a method of systematically evaluating each risk to determine, firstly, if the causal hazard can be eliminated and otherwise, to find the most effective control method for each risk.

8 Reporting

In accordance with *Section 100(1) (d)* of the *Petroleum and Geothermal Energy Act (SA) 2000* (the Act), an SEO should impose reporting obligations on a person carrying out regulated activities. *Regulation 12(2)* requires an SEO to identify events that could arise from regulated activities that could cause either a *serious incident* or a *reportable incident* within the meaning of *Section 85(1)* of the Act.

8.1 Incident Reporting

The required content of incident reports is provided in detail in *Section 32* of the *Petroleum and Geothermal Energy Regulations (SA) 2000*.

Serious Incidents must be reported by the licensee to the Minister as soon as practicable after the occurrence, as per *Section 85* of the *Petroleum and Geothermal Energy Act (SA) 2000* and *Section 32* of the *Petroleum and Geothermal Energy Regulations (SA) 2000*.

Reportable Incidents must be reported by the licensee to the Minister on a quarterly basis within one month of the end of the quarter, as per *Section 85* of the *Petroleum and Geothermal Energy Act (SA) 2000* and *Section 32* of the *Petroleum and Geothermal Energy Regulations (SA) 2000*.

8.2 Serious Incidents

Serious incident means an incident arising from activities conducted under the licence in which:

- a) a person is seriously injured or killed; or
- b) an imminent risk to public health or safety arises; or
- c) serious environmental damage occurs or an imminent risk of serious environmental damage arises; or
- d) security of natural gas supply is prejudiced or an imminent risk of prejudice to security of natural gas supply arises.
- e) Some other event or circumstance occurs or arises that results in the incident falling within a classification of serious incidents under the regulations or a relevant statement of environmental objectives.

**Table 1
Serious Incident Definitions for Operation (Facility and Pipelines) Activities**

| Serious 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) Disturbance to sites of cultural and/or heritage significance without appropriate permits and approvals². b) An escape of petroleum, 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 and fauna species. 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) Any removal of rare, vulnerable or endangered flora and fauna without appropriate permits and approvals³. 4. Security of natural gas supply is prejudiced or an imminent risk of prejudice to security of natural gas supply arises⁴. 5. An event that compromises the physical integrity of an asset or facility. For example: <ol style="list-style-type: none"> a) Pipeline⁵ or facility failure or rupture. b) Unauthorised activity on a pipeline easement where the pipeline is contacted and repair action is required⁶. 6. An uncontrolled gas release resulting in the activation of gas detection alarms and/or emergency response and evacuation procedures of an area in or adjacent to the gas release, and/or fire or explosion. |

¹ Includes an immediately notifiable work-related injury pursuant to Division 6.6 of the *Occupational Health, Safety and Welfare Regulations 1995* that results in the issuing of a Prohibition Notice by SafeWork SA.

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

³ Pursuant to *Native Vegetation Act 1991* (flora) and *National Parks and Wildlife Act 1972* (fauna).

⁴ 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

⁵ As per Petroleum Act definition, the term 'pipeline' includes tanks, machinery and equipment necessary for, or associated with, operation of the pipeline.

⁶ For the case where a detailed assessment is required to determine this, PIRSA recommends the incident be reported initially and amended at a later date if required.

8.3 Reportable Incidents

Reportable incident means an incident (other than a serious incident) arising from activities conducted under a licence classified under the regulations as a reportable incident.

In accordance with Regulation 32(1), the following are classified as reportable incidents:

- a) an escape of petroleum, a processed substance, a chemical or a fuel that affects an 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 2

Reportable Incident Definitions for Operation (Facility and Pipelines) Activities

| Reportable Incidents |
|--|
| <ol style="list-style-type: none"> 1. An escape of petroleum⁷, processed substance, a chemical or a fuel that affects an area that has not been specifically designed to contain such an escape⁸ (other than a serious incident). 2. An event that has the potential to compromise the physical integrity of an asset or facility. For example: <ul style="list-style-type: none"> a) Unauthorised activity on a pipeline easement where the pipeline is contacted but repair action is not required. b) Unauthorised activity on a pipeline easement with equipment that has been identified⁶ as exceeding the pipeline’s penetration resistance, determined in accordance with Australian Standard (AS) 2885. c) Unauthorised activity on a pipeline easement with equipment or vehicles that have been identified⁶ as exceeding allowable stress limits, determined in accordance with AS2885. d) An unapproved⁹ excursion outside of critical design or operating conditions/parameters. e) Failure of a critical procedural control in place to reduce a credible threat to low or as low as reasonably practicable (ALARP).¹⁰ 3. Malfunction or failure of critical plant or equipment that had (or still has) potential to cause a serious incident. |

⁷ In gaseous, liquid or solid state, as per Petroleum Act definition.

⁸ 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.

⁹ “Approval” as per AS2885 definition. Note that there may be situations where excursions are allowable under AS2885.

¹⁰ As per the Safety Management System process articulated in Australian Standard (AS) 2885.1-2007, or similar risk assessment process.

8.4 Annual Report

SEA Gas will within two months after the end of each licence year (i.e. – 1 July to 30 June as approved by the Minister on 3 June 2004), provide to the Minister (SA) a written Annual Report for the relevant licence year. The Performance and Technical Annual Report will include the requirements under *Regulation 33 (2)* of the Act, as follows:

- a) A summary of the regulated activities conducted under the licence (PL13) during the year;
- b) A report for the year on compliance with the Act, regulations, the licence (PL13) and any relevant Statement of Environmental Objectives;
- c) A statement concerning any action to rectify non-compliance with obligations imposed by the Act, regulations or the licence (PL13) and to minimise the likelihood of the recurrence of any such non-compliance;
- d) a summary of any management system audits undertaken during the relevant licence year, including information on any failure or deficiency identified by the audit and any corrective action that has, or will be taken;
- e) A list of all reports and data relevant to the operation of the Act generated by the licensee during the relevant licence year;
- f) In relation to any incidents reported to the Minister under the Act and regulations during the relevant licensing year, including:
 - i) an overall assessment and analysis of any incidents, including the identification and analysis of any trends that have emerged; and
 - ii) an overall assessment of the effectiveness of any action taken to rectify non-compliance with obligations imposed by the Act, regulations or the licence, or to minimise the risk of recurrence of any such non-compliance.
- g) A report on any reasonably foreseeable threats (other than threats previously reported on) that reasonably presents, or may present, a hazard to facilities or activities under the licence conditions, and a report on any corrective action that has, or will be, taken;
- h) Unless the relevant licence year is the last year in which the licence is to remain in force – a statement outlining operations proposed for the ensuing year;
- i) In the case of a production licence – an estimate of the volume of petroleum likely to be produced, wasted, stored or sold under the licence during the ensuing year, or such longer period as the Minister may require;
- j) in the case of a production licence – an assessment of the development activities proposed to be undertaken under the licence, including the number of completions that are expected to occur, during the ensuing year, or such longer period as the Minister may require; and
- k) In the case of a pipeline licence – the volume of any regulated substance transported through the pipeline during the relevant licence year.

An annual report must be accompanied by a statement of expenditure (the contents of which are not entitled to be inspected by a member of the public and is provided in confidence under *sub-regulation (3) (2)*, on regulated activities conducted under the licence for the relevant licence year. A copy of an annual report shall be provided to the Minister under this regulation and will be kept available for public inspection in a manner determined by the Minister.

9 Definitions

| | |
|---|---|
| Approval | Refers to an approval under the relevant legislation. |
| Activity | Any operation (as defined under <i>Part 3</i> of the <i>Petroleum and Geothermal Energy Act (SA) 2000</i>) necessary or incidental, for conduct of a regulated activity governed by the <i>Petroleum and Geothermal Energy Act (SA) 2000</i> . Such operations include the construction and operation of facilities and pipelines and the undertaking of geophysical surveys. |
| Atypical Incident | Includes the unexpected or unplanned incidents such as mechanical failure of equipment and facilities, and emission discharge levels in excess to those under normal operating conditions. |
| Consequence | The outcome of a particular event. For example, a consequence of a spill event which contaminates soil could be a reduction in soil fertility and hence agricultural value of the land affected by the activity. <i>NOTE: A consequence in this context also includes an outcome of a chain of events.</i> |
| Consistent with Surrounding Land/Area | A qualitative assessment of land condition on the easement to determine if the condition of the easement is similar to that of the adjacent/adjoining land in terms of soil, vegetative, landform, hydrological or other aspects. |
| Construction Activities | Any activity associated with the construction of a pipeline or associated facilities, including detailed survey, fencing, clear and grade, trenching, stringing of pipe, bending, welding, 'jeeping', radiographic testing, joint coating, padding, lowering-in, backfilling, pressure testing, restoration and rehabilitation, installation of signage, inspection and testing, construction of pressure regulation and metering facilities and installation of cathodic protection systems and installations. |
| Easement <i>(NOTE: typically applied to post construction operations)</i> | A parcel of land above a buried pipeline (typically 10 – 25 metres in width) or upon which above ground facilities are constructed, which is accessible by SEA Gas (i.e. – where specific conditions may apply) to undertake licensed activities (e.g. – construction, maintenance or repair activities) in accordance with the <i>Grant of Easement</i> as negotiated between SEA Gas and the landholder. |
| Environment | Is broadly defined (in the Act) to include its natural, social, cultural and economic aspects. |

| | |
|---------------------------------------|--|
| <i>Event</i> | A normal or an atypical incident which occurs in a particular place at a particular time as a result of an activity which could result in adverse environmental consequence(s) to the natural, social or economic environments. |
| <i>Infrastructure</i> | Physical assets which are built on the land (e.g. – roads, power poles, fences, railway, tanks, dams and other services). |
| <i>Landholder</i> | Owner, occupier or user of the land. |
| <i>Landuse</i> | Use of land (e.g. – cropping, grazing, access, industrial, residential, environmentally sensitive, recreational). |
| <i>Line of Sight Clearance</i> | Clearing or removal of vegetation between pipeline marker signage along the easement in order to maintain a clear line of sight between each preceding and subsequent pipeline marker (e.g. – removal of trees along the easement where large trees cannot be retained; vegetation trimmed to a height of 0.5m over the pipeline and to 3m either side of centerline (to ensure that operational obligations that mandate pipeline integrity and personnel safety are not compromised) for the purpose of risk management in accordance with <i>AS2885</i> , whereby by any SEO objective is subservient to this requirement. |
| <i>Minimise</i> | To reduce as far as possible, considering all other factors (e.g. – requirements for safe operations and accessibility). |
| <i>Normal Incident</i> | Includes those associated with the construction, operation and decommissioning of a work site or facility including the releases of emissions under normal operating conditions. |
| <i>Operational Activities</i> | Any activity associated with the operation, inspection and maintenance of the pipeline, easement and associated facilities, including dig-ups, pigging and integrity testing, welding, cathodic protection, inspection and testing, pipeline surveys (including marine and Direct Current Voltage Gradient surveys), patrol activities (foot, vehicle and aerial), vegetation management, erosion and subsidence control, facility maintenance (Main Line Valves, compressor stations, access tracks, Cathodic Protection beds, metering and pressure reduction facilities, storage and use of chemicals, weed control, waste treatment and disposal and inspection and testing. |
| <i>Petroleum</i> | Refers to a naturally occurring substance consisting of hydrocarbon or a mixture of hydrocarbons in gaseous, liquid or solid state. |

Regulated Activity

Regulated activities (in the context of transmission pipeline operations) include construction of a transmission pipeline for carrying petroleum or another regulated substance or operation of a transmission pipeline for carrying petroleum or another regulated substance.

Right-of-Way (ROW)

(NOTE: typically applied to construction activities)

A section of land negotiated between SEA Gas and a third party whereby access is granted through or over the land:

- for the purposes of accessing the pipeline easement; or
- to an area greater than that detailed in the *Grant of Easement*, to conduct licensed activities (e.g. – construction, excavation, equipment storage).

Spill

Uncontrolled or unplanned release or discharge of a hydrocarbon, chemical or hazardous substance.

Timely Manner

A timeframe agreeable with the licensee and an impacted third party, that considers all external factors (e.g. – weather constraints, suitable planting opportunity, accessibility, safe operating conditions)

Transmission Pipeline

A pipeline for conveying petroleum or another regulated substance from a point at or near the place of its production to another place or other places, or a pipeline that forms part of a system of pipelines for that purpose.

Uncontrolled Emission

Discharge to air that is not planned or part of any routine operation or maintenance activity (e.g. – maintenance or operation of valves and equipment).

10 Glossary

| | |
|-----------|---|
| APIA | Australian Pipeline Industry Association |
| APIA Code | Australian Pipeline Industry Association <i>Code of Environmental Practice</i> |
| AS2885 | Australian Standard <i>AS 2885: Pipelines – Gas and Liquid Petroleum</i> |
| ASS | Acid Sulphate Soil |
| CSEMP | Construction Safety and Environmental Management Plan |
| DPI | Department for Primary Industries and Resources (Vic) |
| DSE | Department for Sustainability and Environment (Vic) |
| DWLBC | Department of Water, Land and Biodiversity Conservation (SA) |
| EIR | Environmental Impact Report (prepared in accordance with Section 97 of the <i>and Geothermal Energy Act (SA) 2000 and Regulation 10</i> |
| EMP | Environmental Management Plan |
| EMS | Environmental Management System |
| EPA | Environment Protection Authority (SA & Vic) |
| EPBC | Environment Protection and Biodiversity Conservation Act (Comm.) 1999 |
| ESV | Energy Safe Victoria |
| JSA | Job Safety Analysis |
| HDD | Horizontal Directional Drill |
| PIRSA | Primary Industries and Resources South Australia – Petroleum & Geothermal Group |
| PL | Pipeline Licence |
| SEB | Significant Environmental Benefit |
| SEO | Statement of Environmental Objectives |

11 References

Australian Pipeline Industry Association Ltd (2005) *Code of Environmental Practice – Onshore Pipelines*

Standards Australia AS2885.1: Pipelines – Gas and Liquid Petroleum. Standards Australia

South East Australia Gas Pty Ltd (SEA Gas) (2001) SEA Gas’s Project Environment Effects Report/Environmental Impact Report. Prepared by Ecos Consulting (Aust) Pty Ltd for SEA Gas, October 2001.

South East Australia Gas Pty Ltd (SEA Gas) (2002) SEA Gas Project Pelican Point Extension Environmental Impact Report. Prepared by Ecos Consulting (Aust) Pty Ltd for SEA Gas, October 2002.

South East Australia Gas Pty Ltd (SEA Gas) (2002) SEA Gas Project Statement and Environmental Objectives. Prepared by Ecos Consulting (Aust) Pty Ltd for SEA Gas, November 2002.

Department of Primary Industries and Resources South Australia – Petroleum and Geothermal Group (PIRSA) (2000). *Criteria for Classifying the Level of Environmental Impact of Regulated Activities: Requirements under Part 12 Petroleum and Geothermal Act (SA) 2000.* Primary Industries and Resources of South Australia, Adelaide. <http://www.pir.sa.gov.au>

Australian Standard AS/NZS 4360 – Risk Assessment

12 Objectives and Assessment Criteria

Assessment criteria can be subjective and performance may at times require a degree of professional judgment to assess.

The assessment criteria include specific references relating to 'Performance Measures' which have been included to assist operators in achieving compliance requirements.

12.1 Construction Environmental Objectives

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
|--|---|---|---|
| <p>1. To avoid or minimise adverse impacts on soils and terrain.</p> | <p>1.1 To minimise soil erosion and sedimentation as a result of construction activities.</p> | <p>1.1.1 Adherence to administrative controls as detailed in CSEMP in relation to soil management (e.g. – prevention of mass soil movement, protection of soils from contamination, avoidance of significant geological features, adequate compaction to avoid trench subsidence) and ROW reinstatement.</p> <p>1.1.2 Engineering controls (e.g. – temporary silt fencing, filtration and sediment control measures) implemented and monitored in susceptible areas along the ROW.</p> <p>1.1.3 Administrative control of construction workforce (i.e. – induction and training in relation to SEO and CSEMP requirements).</p> <p>1.1.4 Compliance auditing of ROW (i.e. – assessment of erosion susceptibility and effectiveness of engineering controls).</p> <p>1.1.5 Minimising time between clear and grade and subsequent restoration in areas susceptible to erosion.</p> | <ul style="list-style-type: none"> • Erosion along the ROW is consistent with the surrounding environment. • No significant uncontrolled soil erosion as a result of pipeline construction activities. • Land contour and watercourse banks reinstated to pre-construction conditions. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | | 1.1.6 Elimination by avoiding areas prone to land slippage. 1.1.7 Minimising ground disturbance and vegetation clearing to the absolute minimum necessary for safe pipeline construction. | |
| | 1.2 To prevent soil inversion. | 1.2.1 Adherence to administrative controls (<i>TECH-PR-013 Pipeline Excavation & OHSE-PR-013 Environmental Reinstatement Procedure</i>) detail soil management protocols. 1.2.2 Induction of construction workforce inducted in relation to SEO and CSEMP compliance expectations. 1.2.3 Photo point monitoring to validate compliance. | <ul style="list-style-type: none"> No evidence of subsoil on surface (validation may include colour, texture, ribbon length, pH and 'carbonate fizz' testing or chemical analysis). |
| | 1.3 To mitigate soil compaction if necessary by remedial action. | 1.3.1 Engineering controls by ripping of identified compacted areas. 1.3.2 Compliance auditing of ROW. 1.3.3 Elimination by restricting all vehicles and equipment movements to the ROW or designated access tracks and roads. | <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 ROW remediation. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | 1.4 To identify and avoid acid sulphate soils (ASS) and to have in place strategies for managing exposure. | 1.4.1 Administrative control through identification prior to construction of areas which feature a potential for acid sulphate soils. 1.4.2 Adherence to excavation procedures and CSEMP in relation to acid sulphate soil management. 1.4.3 Inadvertently exposed acid sulphate soils encountered during construction are effectively treated. | <ul style="list-style-type: none"> No evidence of likely acid sulphate soil exposure (e.g. odour, discoloration, vegetation death). |
| | 1.5 To identify and manage pre-existing site contamination. | 1.5.1 Administrative controls in place (<i>OHSE-PR-004 Incident & Hazard Management Procedure</i>) to manage identified site contamination. | <ul style="list-style-type: none"> No OHSE incidents in relation to pre-existing site contamination. |
| | 1.6 To reinstate soil and/or terrain as near as practicable to pre-construction contours, profiles or conditions. | 1.6.1 ROW reinstatement in accordance with CSEMP and inclusive of landholder consultation. 1.6.2 Induction of construction workforce in relation to SEO and CSEMP compliance expectations. 1.6.3 Compliance auditing of ROW. 1.6.4 Photo point monitoring to validate compliance. | <ul style="list-style-type: none"> Surface contours along the ROW are consistent with adjoining land. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>2. To minimise and manage impacts to water resources.</p> | <p>2.1 To minimise short term, and prevent long term interruption or modification to surface drainage patterns.</p> | <p>2.1.1 Administrative compliance in accordance with CSEMP and SEO conditions, inclusive of landholder consultation.</p> <p>2.1.2 Induction of construction workforce in relation to SEO and CSEMP compliance expectations.</p> <p>2.1.3 Engineering controls through installation of temporary watercourse crossings in consultation with catchment management stakeholders.</p> <p>2.1.4 Compliance auditing of ROW, inclusive of discharge testing.</p> <p>2.1.5 Photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> • No adverse impacts (e.g. downstream ecology or land use) resulting from watercourse flow reductions or diversions as a result of construction activities. • No evidence of altered watercourse flows following ROW reinstatement. • No evidence of project related erosion of watercourses intersecting or adjacent to construction ROW. • Surface drainage profiles restored to pre-construction conditions or better. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>2.2 To restrict sediment discharge which enters surface water features.</p> | <p>2.2.1 Administrative management guidelines detailed in project specific CSEMP to include:</p> <ul style="list-style-type: none"> ✓ No stockpiling of materials in watercourses/drainage lines; ✓ Use of appropriate sediment and silt control devices; ✓ Installation of permanent berms on slopes; ✓ Minimising period between clearing and reinstatement at or near watercourses; and ✓ Stabilisation, reinstatement and revegetation of watercourses and drainage lines. <p>2.2.2 Induction of construction workforce in relation to SEO and CSEMP compliance expectations.</p> <p>2.2.3 Compliance auditing of ROW.</p> <p>2.2.4 Photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> • Compliance with <i>SA-EPA Environment Protection (Water Quality) Policy 2003</i>. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | 2.3 To minimise disruption to third party use of surface waters. | 2.3.1 Administrative (procedural & consultation with stakeholders) controls to manage potential disruptions. 2.3.2 Minimise disturbance and expeditious reinstatement along sections of ROW which intersect or are adjacent to water bodies 2.3.3 Engineering controls through installation of temporary watercourse crossings. | <ul style="list-style-type: none"> No reasonable complaints received from stakeholders in relation to surface water impacts. |
| | 2.4 To adequately manage groundwater. | 2.4.1 Administrative and engineering controls implemented to manage: <ul style="list-style-type: none"> ✓ Damage avoidance to groundwater infrastructure; ✓ Construction constraints imposed by shallow groundwater; and ✓ Protection of groundwater from acid sulfate soils. 2.4.2 Compliance auditing of ROW. | <ul style="list-style-type: none"> No evidence of project related groundwater impacts arising from construction activities. |
| 3. To avoid land or water contamination. | 3.1 To prevent the occurrence of spills and to have in place a spill management strategy. | 3.1.1 Compliance auditing of ROW to assess soil or water discolouration and vegetation or fauna loss. | <ul style="list-style-type: none"> No spills or leaks in other than areas intended to contain spills. Compliance with: <ul style="list-style-type: none"> ✓ <i>Environment Protection Act (SA) 1993</i> ; ✓ <i>Environment Protection Act (Vic)</i> |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | | <p>3.1.2 Administrative controls to manage spills (OHSE-PR-004 Incident & Hazard Management Procedure):</p> <ul style="list-style-type: none"> ✓ Containment and reporting; ✓ Clean-up and site restoration; ✓ Root cause investigated and corrective/preventative actions are implemented; and ✓ Monitoring initiated where necessary. <p>3.1.3 Engineering controls and administrative controls applied within environmentally sensitive areas along ROW.</p> <p>3.1.4 Administrative controls (procedures and training) to manage spill response/cleanup, inclusive of:</p> <ul style="list-style-type: none"> ✓ Spill response training; ✓ Guidelines for containment of all hazardous substances and liquid waste in appropriate vessels and bunded areas; ✓ Compliance with fuel and hazardous waste standards (storage and use); and | <p>1970; and</p> <ul style="list-style-type: none"> ✓ AS 1940-1993 The storage and handling of flammable and combustible liquids. • No spread of existing soil contamination as a result of pipeline construction activities. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>3.2 To ensure that construction wastes are disposed of in an appropriate manner.</p> | <p>✓ Use of drip trays, spill mats or banded areas for refueling of vehicles and plant.</p> <p>3.2.1 Administrative controls (<i>OHSE-PR-008 Washdown Procedure; OHSE-PR-022 Abrasive Blasting & Painting Procedures Waste</i>) in place for management of critical and general construction waste.</p> <p>3.2.2 Compliance auditing of ROW to validate compliance (rubbish removed from ROW, no spills, no soil discoloration or odour, no third party complaints).</p> <p>3.2.3 Administrative controls applied via waste disposal and listed waste tracking records and chemical manifests. Appropriately licensed contractors used for any hazardous waste disposal and records maintained to ensure appropriate handling and disposal.</p> | <ul style="list-style-type: none"> • No rubbish on ROW. • Waste at construction camps is stored and disposed of in an approved manner. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>3.3 To prevent adverse impacts as a result of hydrostatic test water and waste water (e.g. – washdown water).</p> | <p>3.3.1 Water discharge conducted in a manner that prevents discharge or runoff to watercourses or environmentally sensitive areas.</p> <p>3.3.2 Engineering controls applied to ensure that where practical water is recycled or discharged in a manner that does not result in erosion and that treated sewerage waste water is disposed of onto land, in a manner that prevents entry into water bodies or water courses.</p> <p>3.3.3 Administrative controls applied in relation to water quality (e.g. – corrosion inhibitors, hydrostatic test water additives; washdown waters; discharge method and location, and stakeholder consultation) requirements.</p> <p>3.3.4 CESMP to detail hydrostatic test water disposal management requirements.</p> <p>3.3.5 Water quality testing to be conducted prior to in-situ release of waste water (including pre-excavation dewatering), alternatively waste water to be disposed in an approved manner.</p> | <ul style="list-style-type: none"> • No evidence of impacts to soil, water and vegetation as a result of water disposal (e.g. soil erosion, soil salinity, dead vegetation, water discolouration) • Discharge water complies with either <i>SA-EPA Environment Protection (Water Quality) Policy 2003</i> or <i>Vic-EPA Publication 730 – Guidelines for Environmental Management – Disinfection of Treated Wastewater</i>. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | | <p>3.3.6 Inspection of in-situ sites for evidence of unauthorised off-site, watercourse or environmentally sensitive area contamination.</p> <p>3.3.7 Engineering and administrative controls implemented (e.g. – contaminated soil surveys to identify location, nature and extent of any pre-existing contamination that may influence waste water disposal).</p> <p>3.3.8 Compliance auditing of ROW and construction camps.</p> | |
| | <p>3.4 To ensure the safe and appropriate disposal of camp waste water (e.g. – grey water and sewage).</p> | <p>3.4.1 Containment and disposal of camp waste water in an approved manner (e.g. – Council or commercial waste treatment facility).</p> <p>3.4.2 On site treatment of camp waste water to appropriate water quality standards prior to discharge (e.g. – grey water and effluent) in a manner that prevents entry into water bodies or water courses.</p> <p>3.4.3 Compliance with the relevant local Government regulations and sanitation regulations.</p> | <ul style="list-style-type: none"> No evidence of impacts to soil, water and vegetation as a result of waste water containment or disposal (e.g. soil erosion, soil salinity, dead vegetation, water discolouration). Discharge water complies with the requirements of <i>Public and Environmental Health (Waste Control) Regulations (SA) 1995</i> (i.e. – waste water disposal systems must either comply with the standard for the Construction, Installation and |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | | 3.4.4 Treated sewage wastewater disposed onto land, well away from any place from which it is reasonably likely to enter any waters. 3.4.5 Compliance auditing of ROW and construction camps. | Operation of Septic Tank Systems in SA – SA Department of Health); or <i>Vic-EPA Publication 730 – Guidelines for Environmental Management – Disinfection of Treated Wastewater</i> |
| 4. To minimise adverse impacts to vegetation and fauna. | 4.1 To minimise clearing of remnant vegetation. | 4.1.1 Elimination, by utilising where practicable previously disturbed areas, to avoid remnant or significant vegetation and to avoid the conduct of work during the <i>Red-tailed Black Cockatoo</i> breeding season. 4.1.2 CSEMP, Environmental Line List (ELL) and alignment sheets identify remnant vegetation requiring management/avoidance 4.1.3 Administrative controls to flag/mark areas of remnant and significant vegetation under the <i>Environment Protection and Biodiversity Conservation Act (Cwth) 1999 (EPBC Act)</i> , (e.g. Curly Sedge at Macarthur, Vic). 4.1.4 Where practicable, retention of living and dead trees (habitat) along the ROW. 4.1.5 Trimming of vegetation by qualified operators in lieu of removal where practicable. | <ul style="list-style-type: none"> Remnant vegetation avoided, and SEB or Net Gain Offsets applied where clearance is required. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | | <p>4.1.6 Disturbance along the ROW to be restricted to approved access and work areas.</p> <p>4.1.7 Where practicable, reduction of ROW width during construction in identified significant areas.</p> <p>4.1.8 Administrative control of vegetation clearance activities, ensuring that applicable permits or clearance consents are obtained as required prior to commencement.</p> <p>4.1.9 Where practicable, provenance seed and plant species are selected in the course of site rehabilitation, prior to the commencement of vegetation clearance.</p> | |
| | <p>4.2 To minimise disturbance to and potential for, fauna and livestock entrapment along ROW.</p> | <p>4.2.1 Identification and flagging of significant fauna habitats that require management or avoidance during construction.</p> <p>4.2.2 Elimination of significant areas through optimum alignment selection which minimises or avoids impacts to nesting or breeding habitats (e.g. - South-eastern Red-tailed Black-Cockatoo, <i>Calyptorhynchus banksii graptogyne</i>).</p> | <ul style="list-style-type: none"> Native fauna and livestock attrition due to construction activities to be As Low As Reasonably Practicable (ALARP). |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | | 4.2.3 Exclusion of livestock from operational areas along the ROW. 4.2.4 Provision of ramps at regular intervals in trench lines and excavations to mitigate against entrapment of fauna or livestock. 4.2.5 Daily inspection of open trenches and excavations for trapped fauna and livestock. | |
| | 4.3 To appropriately rehabilitate the ROW to as near as reasonably practicable to pre-construction conditions. | 4.3.1 Post construction ROW revegetation with Environmental Vegetation Class (EVC) specific provenance species. 4.3.2 Post construction restoration of pasture and broad acre areas along the ROW in consultation with landholders. 4.3.3 Compliance auditing of ROW. 4.3.4 Photo point monitoring to validate compliance. | <ul style="list-style-type: none"> Species biodiversity along the ROW remains as far as reasonably practicable, consistent with pre-construction conditions. <i>NOTE: an assessment of consistency with surrounding areas will take into account that regrowth is a time and rainfall dependant process</i> No reasonable complaints received from landholders in relation to vegetative regrowth along the ROW. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>4.4 To achieve a Significant Environmental Benefit (SEB) or Net Gain, for native vegetation clearance.</p> | <p>4.4.1 Where clearance of native vegetation cannot be avoided significant environmental benefit to be implemented in consultation with stakeholders.</p> | <ul style="list-style-type: none"> • Vegetation offsets are fulfilled in consultation with stakeholders: <ul style="list-style-type: none"> ✓ Significant Environmental Benefit (SEB) is approved by the Native Vegetation Council, SA; or ✓ Net Gain offsets are approved by the Department for Sustainability and Environment, Vic. |
| <p>5. To avoid the introduction or dispersal of weeds and pathogens.</p> | <p>5.1 To avoid the introduction or spread of environmental or proclaimed weeds, animal/plant pathogens, by undertaking appropriate site specific control measures where required.</p> | <p>5.1.1 Administrative controls to minimise spread of weeds and pathogens along ROW, through pre-identification and implementation of management strategies prior to and during construction.</p> <p>5.1.2 Administrative control of vehicle and plant to minimise weed and pathogen spread (<i>OHSE-PR-008 Washdown Procedure</i>) through inspection and washdown prior to entry into/departure from affected areas.</p> <p>5.1.3 Compliance auditing of ROW.</p> <p>5.1.4 Photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> • Presence of weeds and pathogens along the ROW is consistent with, or better than adjoining land. • No new outbreaks or spread of weeds or pathogens. • No reasonable complaints received from landholders in relation to new outbreaks or spread of weeds or pathogens. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>6. To minimise and manage impacts to heritage or culturally sensitive sites and values during construction activities.</p> | <p>6.1 To minimise disturbance of identified heritage (archeological and built), culturally sensitive and vegetation sites.</p> | <p>6.1.1 Identification of know heritage sites along the ROW.</p> <p>6.1.2 Administrative control via pre-construction site surveys and cultural heritage monitoring during clear and grade operations within sensitive areas.</p> <p>6.1.3 Administrative control of heritage sites (<i>OHSE-PR-019 Cultural Heritage Mgt Procedure</i>) during ROW operations, inclusive of management protocols for accidental discovery of cultural heritage material.</p> <p>6.1.4 Administrative controls in relation to acquisition of all necessary approvals, permits and authorisations prior to construction and an operational awareness of notification protocols in the event of accidental or unavoidable site disturbance.</p> <p>6.1.5 Engineering and administrative controls applied in consultation with stakeholders during ROW restoration in sensitive areas.</p> <p>6.1.6 Compliance auditing of ROW.</p> <p>6.1.7 Photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> • No impact to identified heritage sites without prior approval in accordance with applicable legislative requirements: <ul style="list-style-type: none"> ✓ <i>Aboriginal Heritage Act (SA) 1998</i> ✓ <i>Heritage Places Act (SA) 1993</i> ✓ <i>Aboriginal Heritage Act (Vic) 2006</i> ✓ <i>Heritage Act (Vic) 1995</i> • All newly identified sites reported to appropriate authority. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| 7. To minimise construction noise. | 7.1 To minimise noise impacts associated with the movement and operation of construction vehicles and equipment. | 7.1.1 Administrative control of construction noise near residences (must comply with EPA (SA/Vic noise abatement guidelines). 7.1.2 Consultation with local residents/landholders/land users when unavoidable out-of-hours or short duration excessive noise will be generated. 7.1.3 Engineering controls to be applied to vehicles, plant and equipment in order to comply with noise abatement requirements. | <ul style="list-style-type: none"> • ROW activities must comply with EPA noise abatement guidelines unless prior consultation and agreement with stakeholders has occurred. • No reasonable complaints received in relation to noise abatement issues. |
| | 7.2 To minimise noise impacts associated with pipeline or facility commissioning activities. | 7.2.1 Commissioning activities near residences or sensitive land use areas to comply with EPA (SA/Vic) noise abatement guidelines. 7.2.2 Consultation with local residents/landholders/land users when short duration excessive noise will be generated. 7.2.3 Compliance auditing of ROW. | <ul style="list-style-type: none"> • ROW activities must comply with EPA noise abatement guidelines unless prior consultation and agreement with stakeholders has occurred. • No reasonable complaints received in relation to noise abatement issues. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| 8. To minimise atmospheric emissions. | 8.1 To minimise the generation of dust | 8.1.1 Administrative and engineering controls applied to manage site specific dust impacts (e.g. – fugitive dust and use of water trucks and sprayers). 8.1.2 Construction workforce inducted/trained regarding SEO and CSEMP requirements. 8.1.3 Compliance auditing of ROW. | <ul style="list-style-type: none"> No reasonable complaints received in relation to dust management issues. |
| | 8.2 To minimise impacts of gas venting activities. | 8.1.4 Administrative control of gas venting activities to include consultation with stakeholders and emissions tracking for greenhouse gas abatement and reporting purposes. 8.1.5 Compliance auditing of ROW. | <ul style="list-style-type: none"> No reasonable complaints received in relation to gas venting activities. Gas venting to be documented. |
| 9. To minimise disturbance to third party infrastructure, landholders and land use. | 9.1 To minimise disturbance or damage to infrastructure or land use and to remediate where disturbance cannot be avoided. | 9.1.1 Administrative control of ROW agreements, inclusive of access consent and legal responsibilities of both SEA Gas and stakeholders. 9.1.2 Administrative controls (procedural and CSEMP) to restrict disturbance along the ROW to approved access and work areas. | <ul style="list-style-type: none"> Where disturbance is unavoidable or accidental, infrastructure or land use is restored to as near as practicable to the satisfaction of the stakeholder. No disturbance outside the ROW or approved access and work areas Duration of disturbance does not exceed agreed timeframe, without prior consultation with stakeholders. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>9.2 To minimise disturbance to landholders or land users.</p> | <p>9.1.3 Administrative control of stakeholder consultation prior to and during construction/commissioning activities.</p> <p>9.1.4 Eliminate of risk (pre-construction identification and location of third party infrastructure) likely with inadvertent asset disturbance, in consultation with Dial Before You Dig 1100 asset referral service; and consultation with stakeholders for asset location on private property.</p> <p>9.1.5 Compliance auditing of ROW.</p> <p>9.2.1 Administrative control of ROW utilising a permit system to both manage hazards and by restricting disturbance to approved access and work areas.</p> <p>9.2.2 Administrative control of site access in accordance with stakeholder consultation with stakeholders prior to and during construction/commissioning activities.</p> <p>9.2.3 Compliance auditing of ROW.</p> <p>9.2.4 Photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> • No reasonable complaints received in relation to asset disturbance or reinstatement. • Pre-existing land use not restricted or impeded as a result of construction or commissioning activities unless by prior arrangement. • No reasonable complaints received in relation to site disturbance. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>9.3 To appropriately reinstate and rehabilitate the easement to as near as practicable, pre-construction conditions, to allow continuation of current land use activities post-construction.</p> | <p>9.3.1 Administrative control of site specific rehabilitation in consultation with stakeholders.</p> <p>9.3.2 ROW to be rehabilitated with appropriate pasture, cover crops or plantings in consultation with stakeholders.</p> <p>9.3.3 Induction of construction workforce in relation to SEO and CSEMP compliance expectations.</p> <p>9.3.4 Compliance auditing of ROW.</p> <p>9.3.5 Photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> Rehabilitation along the ROW to be reinstated to as near as practicable, to adjoining areas in agreement with stakeholders. <p><i>NOTE: assessment of consistency with surrounding areas will take into account that regrowth is a time and rainfall dependant process</i></p> |
| <p>10. To minimise the risk to public health and safety.</p> | <p>10.1 To adequately protect public safety during construction and commissioning activities by adequately managing hazards.</p> | <p>10.1.1 Administrative and engineering control of construction hazards via Job Safety Analysis & Permit to Work system.</p> <p>10.1.2 Consultation with affected stakeholders prior to and during construction and commissioning activities.</p> <p>10.1.2 Administrative and engineering controls to be applied (e.g. - traffic control, signage, isolations, detours) along to isolate construction workforce and public from hazardous areas.</p> | <ul style="list-style-type: none"> No injuries or incidents involving the public |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | | 10.1.3 Induction of construction workforce and site visitors in relation to SEO and CSEMP compliance expectations. 10.1.4 Project specific Emergency Response Plan to be implemented and exercised. 10.1.5 Compliance auditing of ROW. | |
| | 10.2 To mitigate risk of fire during construction activities. | 10.2.1 Elimination of 'Hot Work' during declared fire bans. 10.2.2 Administrative and engineering control of construction hazards associated with fire dangers, via Job Safety Analysis & Permit to Work system. 10.2.3 Engineering controls and personal protective equipment applied during construction and commissioning activities. 10.2.4 Administrative controls in respect of liaison with Country Fire Service (SA) and Country Fire Authority (Vic). 10.2.5 Induction of construction workforce and site visitors in relation to emergency management procedures. 10.2.6 Compliance auditing of ROW. | <ul style="list-style-type: none"> No construction or commissioning related fires. |

12.2 Operational Environmental Objectives

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>11. To maintain soil stability along the easement.</p> | <p>11.1 To remediate erosion or subsidence as a consequence of pipeline operations in a timely manner.</p> | <p>11.1.1 Auditing of easement to assess compliance in accordance with <i>South Australian and Victorian Easement Revegetation and Management Plan</i>.</p> <p>11.1.2 Scheduled ground and aerial patrols of the easement, allied with additional patrols following significant weather events.</p> <p>11.1.3 Stakeholder consultation program to validate compliance.</p> <p>11.1.4 Photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> • No un-remediated soil erosion or subsidence along the pipeline easement. • Pipeline operations do not enhance soil erosion on the easement. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | 11.2 To prevent soil inversion | 11.2.1 Induction of operations personnel and contractors in relation to SEO compliance expectations. 11.2.2 Administrative controls applied to maintenance related excavation activities (<i>TECH-PR-013 Pipeline Excavation Procedure</i>) in order to adequately separate stockpiled topsoil away from sub-surface fill during excavation. 11.2.3 Administrative controls applied to reinstatement (<i>OHSE-PR-013 Environmental Reinstatement Procedure</i>) to ensure appropriate placement of topsoil. 11.2.4 Re-establishment of vegetation as a monitoring tool. 11.2.5 Auditing of easement and photo point monitoring to validate compliance. | <ul style="list-style-type: none"> Vegetative cover is consistent with surrounding land. No evidence of subsoil on surface (validation may include colour, texture, ribbon length, pH and 'carbonate fizz' testing or chemical analysis). |
| | 11.3 To effectively manage soil compaction. | 11.3.1 Ripping of identified compaction. 11.3.2 Compliance auditing of easement and photo point monitoring to validate compliance. | <ul style="list-style-type: none"> No visual evidence of soil compaction (e.g. hard soil, local water pooling) or poor re-establishment of vegetation along the easement. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>11.4 To effectively manage impacts of inadvertent acid sulphate soil (ASS) exposure.</p> | <p>11.4.1 Administrative and engineering controls applied (soil & engineering report) prior to conducting excavations, with a view to identifying acid sulphate soils (<i>NOTE: the existing easement does not feature acid sulphate soils</i>).</p> <p>11.4.2 Adherence to excavation procedure (<i>TECH-PR-013 Pipeline Excavation Procedure</i>) in relation to acid sulphate soil management.</p> | <ul style="list-style-type: none"> No evidence of likely acid sulphate soil exposure (e.g. odour, discoloration, vegetation loss). |
| | <p>11.5 To identify activities off the easement which may result in soil instability, and to jointly manage potential risks in consultation with stakeholders.</p> | <p>11.5.1 Regular liaison with stakeholders (landholders, land users, mining applicants, utilities, Shire Councils).</p> <p>11.5.2 Compliance auditing of easement and photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> Surface contours along the easement are consistent with adjoining land. Alteration of surface contours (e.g. - berms, and contour banks to manage erosion) are initiated in consultation with stakeholders. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>12. To minimise and manage impacts to water resources.</p> | <p>12.1 To maintain current surface drainage patterns.</p> | <p>12.1.1 Scheduled ground and aerial patrols of the easement, allied with additional patrols following significant weather events.</p> <p>12.1.2 Regular liaison with stakeholders (landholders, land users, mining applicants, utilities, Shire Councils).</p> <p>12.1.3 Auditing of easement and photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> • Drainage along the easement is maintained to pre-existing conditions or better. • Surface drainage profiles are restored following maintenance activities. |
| | <p>12.2 To minimise disruption to third party use of surface waters.</p> | <p>12.2.1 Liaison with stakeholders regarding potential disruptions.</p> <p>12.2.2 Administrative controls applied by minimising periods of disturbance in consultation with stakeholders, and timely reinstatement where the easement intersects, or is adjacent to water bodies.</p> <p>12.2.3 Engineering controls through the temporary installation of protective measures to prevent flow interruptions or degraded water quality.</p> | <ul style="list-style-type: none"> • No reasonable complaints received from Stakeholders in relation to use of surface waters. <p><i>NOTE: prior to conducting excavation activities pre-start soil analysis is required (Ref. TECH-PR-013 - Pipeline Excavation Procedure), providing data of soil structure, stability and ground water conditions which require management in the course of conducting an excavation.</i></p> |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| 13. To avoid land or water contamination. | 13.1 To effectively manage spill prevention and to respond to spill events to minimise their impact. | 13.1.1 Induction of operations personnel and contractors in relation to SEO compliance expectations. 13.1.2 Stakeholder consultation and easement inspections to assess evidence (inclusive of third party activities) of soil or water discolouration and vegetation or fauna loss. 13.1.3 Administrative controls applied to incident and hazard reports (<i>OHSE-PR-004 Incident & Hazard Management Procedure</i>). 13.1.4 Training of operations personnel in spill and emergency management, and use of engineering controls to mitigate against spill hazards along the easement. 13.1.5 Engineering controls (e.g. - bunded containment) applied to the storage of hazardous substances and waste materials. 13.1.6 Compliance with fuel and hazardous waste standards. | <ul style="list-style-type: none"> No spills or leaks in other than areas designed to contain spills. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>13.2 To ensure that rubbish and waste material are disposed of in an appropriate manner.</p> | <p>13.1.7 Auditing of easement to validate compliance.</p> <p>13.2.1 Administrative controls applied in respect of waste management (storage and collection by accredited service providers).</p> <p>13.2.2 Auditing of easement to validate compliance (waste removed from easement, no spills, no soil discoloration or odour, no third party complaints).</p> <p>13.2.3 Administrative controls applied to waste disposal (e.g. - waste tracking certification, chemical manifests).</p> <p>13.2.4 Appropriately licensed or accredited service providers engaged to provide waste disposal services.</p> | <ul style="list-style-type: none"> No waste on easement, at other than designated storage areas within facilities, pending disposal. Waste is disposed of in accordance with approved protocols (e.g. - <i>Environment Protection Act (SA/Vic)</i>). |
| | <p>13.3 To prevent adverse impacts as a result of hydrostatic test water, trench water and waste water (e.g. - washdown water).</p> | <p>13.3.1 Administrative controls (permit conditions) applied to ensure that waste water is disposed in a manner which prevents discharge or runoff to watercourses or environmentally sensitive areas.</p> | <ul style="list-style-type: none"> Wastewater 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 waters. No evidence of impacts to soil, water and vegetation as a result of water disposal (e.g. soil erosion, soil salinity, vegetation loss, water |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | | <p>13.3.2 Engineering controls applied to ensure that waste water discharge does not result in erosion or ground instability.</p> <p>13.3.3 Administrative controls applied to record management relating to stakeholder consultation, discharge, disposal method, location and water quality testing (including pre-excavation dewatering and washdown water).</p> <p>13.3.4 Auditing of easement to validate compliance.</p> | <p>discolouration, impacts to aquatic fauna).</p> |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>13.4 To ensure the safe and appropriate disposal of facility waste water (e.g. - grey water, sewage).</p> | <p>13.4.1 Waste water disposal systems comply with legislative requirements.</p> <p>13.4.2 Treated sewage wastewater disposed onto land, well away from any place from which it is reasonably likely to enter any waters.</p> <p>13.4.3 Facility and maintenance audits to validate compliance.</p> | <ul style="list-style-type: none"> Waste water complies with the requirements of <i>Public and Environmental Health (Waste Control) Regulations (SA) 1995</i> (i.e. - waste water disposal systems must either comply with the standard for the Construction, Installation and Operation of Septic Tank Systems in SA - SA Department of Health); or Victorian EPA Publication 730 - Guidelines for Environmental Management - Disinfection of treated Wastewater. No evidence of impacts to soil, water and vegetation as a result of wastewater discharge (e.g. soil erosion, soil salinity, dead vegetation, water discolouration). |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>14. To minimise adverse impacts to vegetation, native fauna and livestock.</p> | <p>14.1 To promote and maintain regrowth of vegetation along the easement, consistent with the surrounding area, ensuring that line of sight between pipeline marker posts is maintained.</p> | <p>14.1.1 Elimination of operational impacts by restricting maintenance activities to designated facilities, access tracks and public thoroughfares unless stakeholders have been consulted.</p> <p>14.1.2 Auditing of easement and photo point monitoring to validate compliance with the <i>South Australian and Victorian Easement Revegetation and Management Plan</i>.</p> <p>14.1.3 Stakeholder consultation to validate re-establishment of broad acre areas following maintenance activities.</p> <p><i>NOTE: prior to conducting vegetation trimming along the easement all stakeholders must be consulted (Ref: OHSE-PR-005 Native Vegetation Clearance Procedure).</i></p> | <ul style="list-style-type: none"> Species abundance and vegetative cover along the easement to be as near as practicable to adjoining areas in accordance with site specific management criteria. <p><i>NOTE: assessment of consistency with surrounding areas will take into account that regrowth is a time and rainfall dependant process</i></p> <ul style="list-style-type: none"> No reasonable complaints received from landholders or third party users in relation to adverse impacts to vegetation, native fauna or livestock. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>14.2 To minimise additional clearing of native vegetation during the course of operational activities.</p> | <p>14.2.1 Vegetation is trimmed to ensure line of sight between pipeline marker posts in accordance with AS2885 requirements.</p> <p>14.2.2 Vegetation trimming minimises impacts to flora and fauna.</p> | <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. • Vegetation management within the easement or on adjacent land to the easement is limited to previously disturbed areas unless regulatory approval has been obtained under the: <ul style="list-style-type: none"> ✓ <i>Native Vegetation Act (SA) 1991</i>; or ✓ <i>Flora and Fauna Guarantee Act (Vic) 1998</i>. • Clearing (other than that originally approved) of remnant vegetation to be avoided, or where clearance is required, Significant Environmental Benefit (SEB) is approved by the Native Vegetation Council – SA or Net gain is approved by the Department for Sustainability and Environment – Vic. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>14.3 To ensure that maintenance activities are planned and conducted in a manner that minimise impacts on vegetation, native fauna and livestock.</p> | <p>14.3.1 Administrative controls applied to management of EPBC listed fauna (South-eastern Red-tailed Black-Cockatoo, <i>Calyptorhynchus banksii graptogyne</i>) and vegetation (Curly Sedge, <i>Carex tasmanica</i>).</p> <p>14.3.2 Exclusion of livestock from active maintenance areas along the easement in consultation with stakeholders.</p> <p>14.3.3 Provision of ramps at regular intervals in open trench and other excavations to mitigate against entrapment of fauna or livestock</p> <p>14.3.4 Daily inspection of open trenches and excavations for trapped fauna and livestock during maintenance activities.</p> <p>14.3.4 Prompt reinstatement and re-establishment of cleared vegetation.</p> <p>14.3.5 Auditing of easement and photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> Native fauna, flora and livestock impacts associated with maintenance activities to be restricted to As Low As Reasonably Practicable (ALARP). |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>15. To prevent the introduction and spread of weeds and pathogens.</p> | <p>15.1 To ensure that weeds, animal and plant pathogens are managed in a manner that is consistent with the surrounding area.</p> | <p>15.1.1 Easement patrol activities include identification of weeds and triggering of management measures to minimise spread.</p> <p>15.1.2 Implementation of appropriate management measures for the control of weeds and pathogens on the easement during maintenance activities (e.g. - cathodic protection and coating surveys, excavation, pigging).</p> <p>15.1.3 Auditing of easement and photo point monitoring to validate compliance.</p> | <ul style="list-style-type: none"> • Presence of weeds and pathogens on the easement is consistent with or better than adjoining land. • No new outbreaks or spread of weeds or pathogens. • No reasonable complaints received from landholders in relation to outbreaks or spread of weeds or pathogens. |
| | <p>15.2 To ensure that vehicle and plant washdown is conducted where appropriate along the easement.</p> | <p>15.2.1 Administrative and engineering controls to ensure that vehicles and plant are washed down and inspected (<i>OHSE-PR-008 Vehicle Equipment Washdown Procedure</i>) prior to entry/departure from affected areas.</p> <p>15.2.2 Auditing to validate compliance.</p> | <ul style="list-style-type: none"> • Presence of weeds and pathogens on the easement is consistent with or better than adjoining land. • No new outbreaks or spread of weeds or pathogens. • No reasonable complaints received from landholders in relation to outbreaks or spread of weeds or pathogens. |
| | <p>15.3 Implementation of weed management strategies at facilities in order to minimise fire risk.</p> | <p>15.3.1 Weed management conducted at facilities.</p> <p>15.3.2 Auditing to validate compliance.</p> | <ul style="list-style-type: none"> • Maintenance records, facility inspections and audits. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>16. To adequately protect heritage and culturally sensitive sites and values during operational activities.</p> | <p>16.1 To ensure that identified heritage (archeological and built) and culturally sensitive sites and vegetation are not disturbed, and where new sites are identified, appropriately managed.</p> | <p>16.1.1 Consultation with relevant heritage groups in the event that access is required in other than existing surveyed areas.</p> <p>16.1.2 Administrative controls (surveys and cultural heritage monitoring) applied to significant sites prior to the commencement of maintenance activities.</p> <p>16.1.3 Implementation of cultural heritage management protocols (<i>OHSE-PR-019 Cultural Heritage Mgt Procedure</i>) in the event of accidental discovery of cultural heritage material during operational activities.</p> <p>16.1.4 Notifications to be actioned in the event of accidental discovery of cultural material.</p> <p>16.1.5 Auditing to validate compliance.</p> | <ul style="list-style-type: none"> • No impact to identified sites without prior approval in accordance with applicable legislative requirements: <ul style="list-style-type: none"> ✓ <i>Aboriginal Heritage Act (SA) 1998</i> ✓ <i>Heritage Places Act (SA) 1993</i> ✓ <i>Aboriginal Heritage Act (Vic) 2006</i> ✓ <i>Heritage Act (Vic) 1995</i> • Newly identified sites are reported and managed appropriately. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>17. To minimise noise impacts that may arise from operational activities.</p> | <p>17.1 To actively liaise with adjoining land users prior to undertaking operational or maintenance activities which may result in noise impacts.</p> | <p>17.1.1 Operational activities in the near vicinity of sensitive areas (e.g. – near residences) must comply with EPA (SA/Vic) noise abatement guidelines.</p> <p>17.1.2 Consultation with stakeholders when unavoidable out-of-hours or short duration excessive noise will result in non-compliance.</p> <p>17.1.3 Noise audits to validate compliance.</p> | <ul style="list-style-type: none"> • Compliance with EPA noise abatement guidelines. • No reasonable complaints received in relation to noise abatement issues. |
| <p>18. To minimise atmospheric emissions.</p> | <p>18.1 To eliminate uncontrolled atmospheric emissions.</p> | <p>18.1.1 Administrative controls (e.g. – maintenance procedures and greenhouse gas reduction guidelines) to be adopted.</p> <p>18.1.2 Auditing to validate compliance.</p> | <ul style="list-style-type: none"> • No uncontrolled atmospheric emissions (e.g. due to equipment malfunction, failure or mis-operation). |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | 18.2 To minimise the generation of dust. | 18.2.1 Administrative and engineering control to be applied in relation to site specific dust management requirements (i.e. – fugitive dust and use of water trucks and sprayers). 18.2.2 Induction of operations personnel and contractors in relation to SEO compliance expectations. 18.2.3 Auditing to validate compliance. | <ul style="list-style-type: none"> No reasonable complaints received in relation to dust management issues. |
| 19. To minimise disturbance to third party infrastructure, landholders and land use. | 19.1 To minimise disturbance or damage to infrastructure or land use and to remediate where disturbance cannot be avoided. | 19.1.1 Operational activities restricted to pipeline easement and approved access and work areas 19.1.2 Administrative controls applied (i.e. – consultation with stakeholders) in the course of conducting maintenance activities. 19.1.3 Use of Dial Before You Dig 1100 asset referral system and stakeholder consultation, in the course of conducting maintenance activities. 19.1.4 Auditing of easement and photo point monitoring to validate compliance. | <ul style="list-style-type: none"> Where disturbance is unavoidable or accidental, infrastructure or land use is restored to as near as practicable to the satisfaction of stakeholders. No disturbance outside the easement or approved access and work areas without prior consultation. Duration of disturbance does not exceed agreed timeframe without prior consultation. No reasonable complaints received in relation to disturbance. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | 19.2 To minimise disturbance to stakeholders. | 19.2.1 Administrative and engineering controls employed (i.e. – stakeholder consultation) in the course of conducting maintenance activities. 19.2.2 Stakeholder operations not restricted as a consequence of maintenance. | <ul style="list-style-type: none"> • Pre-existing land use not restricted or impeded as a result of maintenance activities unless by prior arrangement. • No reasonable complaints received in relation to disturbance. |
| | 19.3 To appropriately identify and locate third party infrastructure prior to commencing any excavation activities in the course of operational or maintenance activities. | 19.3.1 Eliminate risk (i.e. – prior Identification and location of other assets) of likely asset disturbance, in consultation with stakeholders. 19.3.2 Administrative management of asset locations through asset referral systems and updates to SEA Gas Geographical Information System (GIS). 19.3.3 Auditing to validate compliance. | <ul style="list-style-type: none"> • No unauthorised disturbance to third party utilities or infrastructure. • No reasonable complaints received in relation to unauthorised disturbance of third party utilities or infrastructure. |
| | 19.4 To appropriately reinstate and rehabilitate the easement to as near as practicable prior to disturbance, to permit continued stakeholder operations. | 19.4.1 Administrative and engineering controls applied to site specific rehabilitation plan implementation in consultation with stakeholders. 19.4.2 Auditing of easement and photo point monitoring to validate compliance. | <ul style="list-style-type: none"> • Vegetative cover along the easement to be as near as practicable to adjoining areas in consultation with stakeholders. <p><i>NOTE: assessment of consistency with surrounding areas will take into account that regrowth is a time and rainfall dependant process.</i></p> |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| <p>20. To minimise the risk to public health and safety.</p> | <p>20.1 To adequately protect public safety.</p> | <p>20.1.1 Elimination of hazards and risk management via Job Safety Analysis & Permit to Work systems.</p> <p>20.1.2 Administrative and engineering controls applied to stakeholder consultation; signage; site isolation; traffic control; emergency response and risk mitigation principles to ALARP.</p> <p>20.1.3 Operations personnel and visitors inducted/trained regarding SEO compliance expectations.</p> <p>20.1.4 Auditing to validate compliance.</p> | <ul style="list-style-type: none"> No injuries or incidents involving members of the public. |
| | <p>20.2 To avoid the likelihood of fire as a consequence of pipeline maintenance activities.</p> | <p>20.2.1 Elimination of hazards and risk management via Job Safety Analysis & Permit to Work systems or cessation of work.</p> <p>20.2.2 Administrative and engineering controls applied to fire hazard mitigation (i.e. stakeholder consultation; reduction in fuel load; fire fighting equipment & training; emergency response and risk mitigation principles to ALARP).</p> | <ul style="list-style-type: none"> No fires as a consequence of maintenance activities. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | <p>20.3 To prevent unauthorised activity along the easement that may adversely impact safe pipeline operations.</p> | <p>20.3.1 Administrative and engineering controls (inspection and easement patrol activities – aerial and ground; stakeholder consultation; Dial Before You Dig asset referral service, signage in accordance with AS2885) applied to activities along easement.</p> <p>20.3.2 Elimination of unauthorised easement activities through root cause investigation of incidents and implementation of mitigation strategies.</p> <p>20.3.3 Active stakeholder education process in respect of pipeline safety and authorised easement activities.</p> <p>20.3.4 Auditing to validate compliance.</p> | <ul style="list-style-type: none"> No unauthorised activity on the easement that has the potential to impact on integrity. |
| | <p>20.4 Maintain an operational relationship with emergency stakeholders to promote a heightened level of preparedness.</p> | <p>20.4.1 Administrative controls (e.g. – emergency stakeholder awareness training; emergency response exercises; and stakeholder consultation).</p> <p>20.4.2 At least two annual emergency response exercises.</p> | <ul style="list-style-type: none"> Emergency response and crisis management tools applied to mitigate emergency management risks; and to minimise likely incident impacts. Effective management of emergency incidents. |



SEA Gas Statement of Environmental Objectives

This is a Quality Controlled Document

OHSE-MAN-001

Review by: December 2014

12.3 Decommissioning Environmental Objectives

A high pressure natural gas transmission pipeline can potentially have an indefinite operational lifespan, however as a pipeline ages the level of maintenance required will increase. The planned life of the SEA Gas pipeline is 80 years. Where it is intended to operate the SEA Gas pipeline beyond the design life, engineering investigation shall be made in respect to the design, operating conditions and history of the pipeline, to determine the condition and any limits for continued safe operation. The pipeline shall be operated in accordance with all State and Commonwealth legislation and applicable operating standards.

In the event that the utility is no longer required, the pipeline will be decommissioned in accordance with the AS2885 and legislative requirements of the time.

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| 21. To appropriately decommission the pipeline in accordance with regulatory requirements and accepted best practice environmental management. | 21.1 To safely decommission the pipeline and associated above ground infrastructure in accordance with appropriate regulatory requirements. | 21.1.1 Administrative management of stakeholders during the course of decommissioning activities. 21.1.2 Engineering controls applied to ensure that no above-ground infrastructure is evident. 21.1.3 Auditing to validate compliance. | <ul style="list-style-type: none"> Pipeline and associated above-ground infrastructure decommissioned to an appropriate standard as required by the legislative requirements of the day. |

| <i>Environmental Objective</i> | <i>Goal</i> | <i>Performance Measures</i> | <i>Assessment Criteria</i> |
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| | 21.2 To minimise disturbance to stakeholders during decommissioning. | 21.2.1 Stakeholder consultation prior to, during and following decommissioning activities. 21.2.2 Stakeholder operations not adversely impacted as a consequence of decommissioning activities. 21.2.3 Auditing to validate compliance. | <ul style="list-style-type: none"> No reasonable stakeholder complaints arising from decommissioning activities. Stakeholder activities not restricted or compromised as a result of decommission activities, unless by prior arrangement. |