

SOUTH EAST AUSTRALIA



# South East Australia Gas Pty Ltd

Annual Report

South Australian Pipeline Licence (PL I3)

2006 – 2007 Licence Year



Port Campbell to Adelaide  
Natural Gas Transmission Pipeline

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*Cover photograph: an aerial view of the pipeline easement in the vicinity of KP357 (west of Padthaway) looking towards the south-east, showing marker posts along the alignment.*

## I.0 SCOPE

In accordance with *Regulation 33.(1)* of the *Petroleum Regulations (SA) 2000*, South East Australia Gas Pty Ltd (SEA Gas) submits this report in relation to its operation of the SEA Gas natural gas transmission pipeline for the period 1 July 2006 – 30 June 2007, which constitutes the licence year. This report details operational compliance against the SEA Gas Statement of Environmental Objectives (SEO) in relation to operational activities along the South Australian portion of the SEA Gas pipeline in accordance with the conditions of Pipeline Licence No. 13, the *Petroleum Act (SA) 2000* and regulations under the Act.

## 2.0 SUMMARY OF REGULATED ACTIVITIES

During the course of the licence year, SEA Gas complied with its licence conditions resulting in no non-compliances against the Statement of Environmental Objectives (SEO) during the reporting period. Operational compliance with licence conditions was consistent with compliance in accordance with the requirements of *Australian Standard AS 2885*.

An administrative non-compliance regarding the deferred submission of the Exercise Shamrock emergency response exercise report was subsequently revoked, as a consequence of an extension being granted to enable retrospective submission of the report, which was initially prepared to comply with Victorian legislative requirements for report submission.

In accordance with Regulation 33.(2)(a) the following regulated activities were conducted during the 2005/06 licence year:

### 2.1 Training

In the course of the licence year the following training was undertaken by SEA Gas Operations personnel and third party maintenance services providers, both by way of third party training providers and 'in house' training, which included but was not limited to the following areas:

- Nominated Permit Holder & Job Hazard Analysis Training (contractors, maintenance personnel and SEA Gas staff);
- Emergency Response and Incident Management;
- Fire Warden Training (SEA Gas personnel);
- Senior First Aid Training (and re-certification) for all operations group and maintenance personnel;
- Field based competency based training and assessment of maintenance personnel;
- *Floboss* computer training (conducted by Emerson);
- Type 'B' water bath heater training for maintenance personnel;
- Elevated work platform training and assessment for maintenance personnel;

## 2.2 Patrol Activities

Scheduled aerial and ground patrols of the pipeline easement (Ref, Table I) and above ground facilities were conducted throughout the licence year. Aerial and ground patrols play a significant role in the detection of unauthorised third party activities along the pipeline easement, coupled with safeguarding security of supply.

Table I – Pipeline Patrol Schedule

Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>Weekly Road Patrol</b> • Williamstown – Pelican Point	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Road Patrol</b> • Iona – Yallamurray • Yallamurray – Pelican Point	✓	✓	✓	✓	✓	✓	✓		✓		✓	
<b>Aerial Patrol</b> • Williamstown - Pelican Point • Iona – Murray Bridge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Security Patrols – Daily</b> • Williamstown, Munno Para and Cavan MLV's	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Additionally, patrol activities validate the presence of fallen and unauthorised removal of marker posts, trench subsidence, erosion, extensions to farm dams and easement regrowth which compromises line of sight. Post patrol remedial actions actioned in accordance with Fault Action Request (FAR) procedures, ensuring rectification of non-complying activities, environmental impacts and reinstatement of infrastructure impacted by third parties.

## 2.3 Operations and Maintenance Activities

Scheduled operations and maintenance activities were conducted throughout the licence year. Maintenance reviews were initiated on a bi-monthly basis throughout the year with key maintenance personnel.

Table 2 –Scheduled Maintenance Activities

Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>Odorant/Gas Sampling &amp; Analysis</b> • Cavan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Gas Chromatograph Calibrations</b> • Cavan • Torrens Island • Pelican Point	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Main Line Valves &amp; Scrapers</b> • Torrens Island • Pelican Point		A✓			Q✓			Q✓			Q✓	

Activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>Facilities</b>												
• Teys Brothers, Naracoorte	A✓				Q✓			H✓		Q✓		
• Dairy Farmers Facility, Jervois		A✓			Q✓			H✓			A✓	
• Cavan			A✓		Q✓			H✓			Q✓	
• Torrens Island		A✓			Q✓			H✓			Q✓	
• Pelican Point		A✓			Q✓			H✓		A✓		
<b>Corrosion Protection</b>												
• Cathodic protection spot potential testing	A✓											
• Surge protection testing												
<b>Compressor Station Inspection</b>												
• Every second week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Coomandook Compressor Station Maintenance</b>			A✓		Q✓			H✓				Q✓

- Q** Quarterly Maintenance      Site inspection; heater inspection; UFM meter validations & meter run switching; CP transformer rectifier unit checks; smoke detector checks; soil and weed management; etc.
- H** Six Monthly Maintenance      As per quarterly maintenance, including water bath heater maintenance at Cavan; Torrens Island, Pelican Point, Dairy Farmers and Teys Brothers.
- A** Annual Maintenance      As per six-monthly maintenance, inclusive of heater maintenance (spark arrestor, water sample & ignition system); mechanical maintenance (Main Line Valves, SV's, Scrapers, Filters, Regulators, PSV's, PV's, Instrument Gas Checks, Electrical Maintenance (Batteries, RCD's, Pressure & Temperature Transducers; Solenoids; Meter Run Switching; Heat Tracing & Hazardous Area Checks), etc.

During the course of the licence year maintenance activities the following significant maintenance activities were initiated:

- Cracked burner nozzles replaced on water bath heaters at Cavan, Torrens Island and Pelican Point;
- Replacement of first and second stage regulations and heater bundle at Teys Brothers facility;
- Installation of flow straighteners on metering runs at Cavan facility;
- Installation of audible and visual alerting beacons at Coomandook, Cavan, Torrens Island and Pelican Point facilities;
- Replacement of corroded studs at Cavan and Pelican Point facilities;
- Replacement of first and second stage regulations at Dairy Farmers facility.

#### *2.4 Cathodic Protection*

An annual cathodic protection survey was conducted during the licence year. The results of this survey indicated that cathodic protection of the SEA Gas pipeline and associated laterals were deemed to be in compliance with the requirements of Australian Standards, *AS 2885.3* and *AS 2832.1*, during the course of the 2006 – 2007 licence year.

A brief anodic excursion was noted at Pelican Point s following a period of ground bed unserviceability, placing this section of the pipeline slightly outside the *AS 2832.1* protection criteria.

As a consequence of a lightning strike, the transformer/rectifier unit at the Yallamurray facility was replaced as a result of unserviceability.

SEA Gas intends to conduct a DCVG (Direct Current Voltage Gradient) survey during the 2007 – 2008 licence year, in order to validate the initial post-construction DCVG survey data.

#### *2.5 Pipeline Pigging*

Pigging operations were not conducted during the course of the 2006 - 2007 licence year. SEA Gas is currently organising an additional cleaning pig run of the pipeline between Iona and Miakite in Victoria and Coomandook to Pelican Point in South Australia, during the 2007 – 2008 licence year.

#### *2.6 Noise Emissions*

During the course of the 2006 - 2007 licence year, third party noise complaints were not recorded in relation to SEA Gas licenced activities.

#### *2.7 Pipeline Location and Referral Services*

During the course of the 2006 - 2007 licence year 365 enquiries were received (a 29% decrease in comparison to the previous year) via the Freecall 1100, “*Dial Before You Dig*” asset referral service.

Of these 202 were deemed to have a potential to affect the pipeline and were referred to field staff for on site assessment.

During the course of the licence year, there were 87 supervised inspections/site supervision of third party activities in close proximity to the pipeline, which were deemed to have the potential to compromise the integrity of the pipeline.

#### *2.8 Emergency Response*

In accordance with Victorian legislative requirements (two emergency response exercises per year) SEA Gas conducted two emergency response exercises during the course of the 2006 – 2007 licence year in conjunction with its maintenance service provider.

*Exercise Shamrock* (10 November 2006) and *Exercise Benchpress* (14 December 2006) respectively enabled SEA Gas to assess partial mobilisation of equipment and personnel to a simulated leakage incident.

Observations and remedial actions arising from these exercises have contributed towards the continuous improvement and familiarisation with the SEA Gas Emergency Response Plan, in accordance with management of change processes, in the course of operational activities.

SEA Gas formally submitted the *Exercise Shamrock* report to PIRSA in accordance with sub-Regulation 31(3) of the *Petroleum Regulations (SA) 2000*.

Submission of this report to PIRSA was delayed (following initial submission to the Victorian regulatory authority) in order to permit re-formatting of the report to suit South Australian legislative requirements. This late submission incurred a technical breach of licence conditions, which was subsequently withdrawn following the granting of a retrospective extension for submission.

### **3.0 REGULATORY COMPLIANCE**

In accordance with the requirements of the *Petroleum Regulations (SA) 2000*, regulation 33.(2)(b), SEA Gas complied with its regulatory obligations in accordance with the requirements of the *Petroleum Act (SA) 2000* and *Petroleum Regulations (SA) 2000*, in respect of Pipeline Licence No. I3; and its ensuing Statement of Environmental Objectives (SEO – Ref. Appendix A).

During the course of the 2006 – 2007 licence year, eight incidents (Ref. Appendix B) were reported to Primary Industries and Resources, South Australia (PIRSA) – Geothermal and Petroleum Group. These incidents occurred along the South Australian section of the SEA Gas pipeline and primarily related to unauthorised third party activities, which did not result in damage to pipeline infrastructure. Notwithstanding the fact that no immediate damage was incurred, unauthorised third party activities along the pipeline easement pose a significant risk to public safety and the continued supply of natural gas to South Australia.

SEA Gas was alerted to these incidents in the course of its pipeline operations and scheduled stakeholder contact activities, necessitating a need for heightened communication to third party stakeholders in respect of the safety implications and commercial losses that may be suffered by the wider community in the event of compromised pipeline integrity.

Other than the incidents detailed above, no ‘serious’ incidents (as defined in the *Petroleum Act (SA) 2000*) occurred during the licence year. Therefore, notwithstanding these incidents, SEA Gas considers its operations to be compliant in respect of the legislative requirements of the *Petroleum Act (SA) 2000* and *Petroleum Regulations (SA) 2000*, its Pipeline Licence (PLI3) conditions and its Statement of Environmental Objectives.

### **4.0 RECTIFICATION OF NON-COMPLYING ACTIONS**

During the course of the licence year there were no residual non-complying actions which required rectification. As a consequence of an increase in unauthorised third party incursions along the pipeline, SEA Gas continues to review its stakeholder consultation protocols, with a view to increasing public awareness in relation to activities which are conducted along the pipeline easement, with a view to enhancing public safety and ensuring continued supply security by reducing risks to as low as reasonably practicable (ALARP).

## 5.0 MANAGEMENT SYSTEM AUDITS

In accordance with Regulation 33.(2)(d) the following management system audits were conducted during the 2006 - 2007 licence year, both internally by SEA Gas and by third party auditors. Where applicable, audit observations, recommendations and corrective actions were actioned to ensure close out following each audit.

### 5.1 Health and Safety

During the course of the licence year a series of audits were conducted to measure and validate compliance of SEA Gas operational activities throughout both Victoria and South Australia, against applicable legislative requirements, policies, procedures and contractual requirements (pertaining to operational activities conducted by maintenance services providers during the 2006 - 2007 licence year).

Additionally, the primary maintenance services provider conducted an independent audit of its maintenance sub-contractor to confirm compliance with contractual and legislative obligations. An abridged overview of audits conducted during the licence year is detailed below:

Audit Scope	Auditor	Summary of Observations & Actions
<u>Facilities Audit (internal)</u> <ul style="list-style-type: none"> <li>▪ Inspection of 17 SEA Gas facilities along the pipeline, throughout Vic &amp; SA to ensure compliance with <i>TECH-PO-001 Safety &amp; Operating Plan</i></li> </ul>	SEA Gas	<ul style="list-style-type: none"> <li>✓ Compliance with OHSE (Occupational Health, Safety &amp; Environmental) legislative requirements.</li> <li>✓ Continuous improvements implemented at facilities based on audit observations, JHA (Job Hazard Analysis) reviews, procedural reviews and hazard reports/suggestions from workforce.</li> </ul>
<u>Operational Audit of Maintenance Services Provider</u> <ul style="list-style-type: none"> <li>▪ Compliance with <i>TECH-PO-001 Safety &amp; Operating Plan</i></li> <li>▪ Contractual requirements</li> </ul>	SEA Gas	<ul style="list-style-type: none"> <li>✓ Improvements to Emergency response spares and equipment logistics.</li> <li>✓ Training of additional stores and logistics personnel to provide added redundancy and emergency response availability.</li> </ul>
<u>Operational Audit of Maintenance Sub-Contractor</u> <ul style="list-style-type: none"> <li>▪ Compliance with <i>TECH-PO-001 Safety &amp; Operating Plan</i></li> <li>▪ Contractual requirements</li> </ul>	APA Group	<ul style="list-style-type: none"> <li>✓ Improvements initiated to maintenance scheduling and management procedure.</li> </ul>
<u>Annual Legislative Audit</u>	Energy Safe Victoria	<p>The following observations were noted:</p> <ul style="list-style-type: none"> <li>✓ All elements of the safety management system are up to date and appropriately managed.</li> <li>✓ References to 'date completed' in relation to facilities audits should be removed as this aspect is managed in the <i>Compliance Action Register</i> - completed.</li> <li>✓ Corrective actions highlighted during internal inspections should be closed out in a timely manner – ongoing based on an assessment of risk.</li> </ul>

Audit Scope	Auditor	Summary of Observations & Actions
		A non-conformance arose in respect of the adequacy of contractor inductions. SEA Gas has since reviewed its contractor induction procedure and developed an interactive contractor induction and safety awareness training and assessment package, which is linked to the permit to work management system.
<u>OHSE Management System Audit</u> <ul style="list-style-type: none"> <li>▪ Review of SEA Gas Health, Safety and Environmental Management System</li> </ul>	Safety Management Services (SA)	The following observations were noted: <ul style="list-style-type: none"> <li>✓ Copies of MSDS (Material Safety Data Sheets) to be made available at remote sites – completed</li> <li>✓ Copies of relevant policies &amp; procedures to be made available at remote sites – completed</li> <li>✓ JHA training to be considered – completed (included in training package).</li> <li>✓ Speed limits to be placarded at facilities where vehicles can be operated with the site.</li> </ul>

Audits conducted by SEA Gas (internal and external), its maintenance services provider, Energy Safe Victoria and specialist consultants, validated contractual and legislative compliance in accordance with applicable South Australian and Victorian requirements.

## 5.2 Environment

SEA Gas conducted environmental monitoring of the pipeline easement throughout the 2006 - 2007 licence year, in order to assess progress of revegetation activities to ensure compliance with stated environmental objectives, coupled with assessing the success of post construction environmental regeneration.

Reportable incidents and observations relating to environmental audits and inspections were communicated to PIRSA in the course of quarterly reporting. Where applicable, corrective actions were implemented to ensure continued compliance with the SEO.

## 6.0 REPORTS AND DATA

In accordance with Regulation 33.(2)(e) the following reports and data were forwarded to PIRSA – Geothermal and Petroleum Group in relation to regulated activities conducted in the course of the 2006 - 2007 licence year:

- Pipeline Licence No. 13 - Annual Report for 2005 - 2006 licence year;
- Appendix C – Statement of Expenditure, in respect of the 2005 - 2006 Annual Report;
- Quarterly incident report (reporting period January – March 2007);
- Quarterly incident report (reporting period April – June 2007);
- Exercise Shamrock report; and
- Fitness for Purpose Report;

No reportable incidents were recorded during the respective July – September 2006 and October – December 2006 quarterly reporting periods.

## 7.0 INCIDENT MANAGEMENT

In accordance with Regulation 33.(2)(f) a summary of reportable incidents is detailed at Appendix B, in conjunction with an overall assessment and analysis of the incidents in accordance with Section 33.(2)(f)(i). The effectiveness of actions taken to rectify non-compliances with the obligations imposed by the Petroleum Act and Regulations or the licence is also detailed in this section in accordance with Regulation 33.(2)(ii), in order that similar occurrences may be minimised and that the risk of recurrence of non-compliances are adequately mitigated.

Notification to PIRSA – Geothermal & Petroleum Group of operational incidents occurs in the course of quarterly reporting during the licence year, inclusive of incident management strategies. During the course of the licence year, there were eight reportable incidents (Ref. Appendix B)

## 8.0 RISK MANAGEMENT

SEA Gas reviewed its operational risk assessment, based on Australian Standard AS 2885 during the 2005 – 2006 licence year in compliance with Regulation 33(2)(g). Subsequently, this review did not reveal any incremental threats to the pipeline or its associated facilities, other than those previously identified during the pipeline design and construction phases of the SEA Gas project.

This review was also to confirm that action items to be implemented SEA Gas, which were assigned during the initial pipeline risk assessment, had been implemented. The risk assessment review found that all action items had been implemented by SEA Gas including critical procedures, equipment and safe systems of work.

A formal five-yearly risk review of the entire pipeline will be conducted during the 2007 – 2008 licence year (ref. Section 9), enabling the identification of any emergent risks.

Assessment of construction and operational risks associated with the respective Naracoorte and Jervois lateral pipelines did not identify any additional threats to the safe operation of these laterals, which have not otherwise been previously identified and managed in the course of SEA Gas pipeline operational activities.

Credible operational risk elements have been reduced to As Low as Reasonably Practicable (ALARP), and include:

- Unauthorised third party activities or unauthorised land use changes,
- Unauthorised use of heavy machinery in the vicinity of the pipeline, and
- Heightened security alerts in light of the Australian Government’s counter terrorism advices.

SEA Gas has implemented the following risk management strategies to maintain defined risks to ALARP, measures include:

- Aerial and ground monitoring of easement activities,
- Security patrols & electronic surveillance of facilities,
- Permit to Work System & Safety Induction Systems,
- Pipeline and Safety Awareness programmes,
- Land ownership and use notification system,

- Landholder & stakeholder contact programme,
- Participation in state forums for external threat management,
- Participation in pipeline industry operations forums
- 1100 Dial Before You Dig & Dig safe internet based asset information systems,

## **9.0 PROPOSED OPERATIONAL ACTIVITIES 2007 - 2008 LICENCE YEAR**

In accordance Regulation 33.(2)(h) SEA Gas proposes to conduct the following operational activities during the 2007 – 2008 licence year:

- Scheduled maintenance of pipeline facilities and infrastructure;
- Cleaning pig run of the pipeline between Iona and Miakite in Victoria and Coomandook to Pelican Point in South Australia.
- Replacement of the gas immersion heater bundle at the Dairy Farmers facility.
- Ongoing replacement of studs at metering facilities.
- Internal inspection of water bath heater shell, and process pipes to ascertain susceptibility to corrosion;
- Monitoring of cathodic protection systems including buried corrosion resistance coupons;
- Upgrading of pipeline marker signage between Casterton, Vic and Coomandook, SA;
- Ongoing restoration of the pipeline easement in accordance with revegetation programmes;
- Environmental monitoring;
- Stakeholder contacts;
- Scheduled aerial and ground patrols of the pipeline easement;
- Pipeline awareness seminars and emergency response training for emergency services, utilities and safety critical stakeholders;
- Mobilisation emergency response exercise featuring an in-field excavation; and
- Release of revised Crisis Management Plan;
- SEO review (completed during November 2007);
- Risk review of entire pipeline to be progressively conducted during 2007 – 2008 licence year (PIRSA & ESV to be invited to participate); and
- DCVG (Direct Current Voltage Gradient) pipeline coating survey of the entire pipeline (data from this survey will form the basis for future 'pipeline pigging' programs).

## **10.0 VOLUME OF REGULATED SUBSTANCE TRANSPORTED**

In accordance with Regulation 33.(2)(k) the volume of regulated substance (i.e. – natural gas) transported by SEA Gas in the course of the 2006 – 2007 licence year, was approximately 60 PJ.

## **II.0 STATEMENT OF ANNUAL EXPENDITURE**

In accordance with Regulation 33.(3)(a)-(f) information relating to SEA Gas expenditure is provided as “Commercial In Confidence” in accordance with subregulation 33(5) of the Petroleum Regulations 2000, where public disclosure is not required in accordance with subregulation 33(3).

A statement of expenditure is detailed at Appendix C (Restricted Distribution) and is attached under separate cover.

APPENDIX A – ASSESSMENT OF COMPLIANCE AGAINST SEO OBJECTIVES

Statement of Environmental Objectives - Operational Environmental Objectives & Compliance Outcomes

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
Soils and Terrain <i>(EIR, Section 6)</i>	<ul style="list-style-type: none"> <li>▪ Erosion and sedimentation</li> <li>▪ Soil inversion</li> <li>▪ Soil compaction</li> <li>▪ Soil contamination</li> <li>▪ Disturbance to significant geological features</li> <li>▪ Trench subsidence</li> </ul>	<p>17.a To appropriately minimize and manage adverse impacts to the soils and terrain of the easement</p> <p>17.b To appropriately monitor rehabilitation of soils and terrain on the easement</p>	<p>17.1 To limit the occurrence and extent of trench subsidence, soil erosion and sedimentation and to undertake remediation works where required  <i>Observed trench subsidence and soil erosion were repaired in a timely manner which did not create any further environmental impacts nor any impacts to stakeholders. No off-easement sedimentation was observed during the licence year.</i></p> <p>17.2 To monitor the easement for soil inversion and to undertake remediation works where required  <i>Continued remediation of residual soil inversion sites was initiated in consultation with stakeholders during the course of the licence year.</i></p> <p>17.3 To mitigate soil compaction and to undertake remediation works where required  <i>No residual soil compact impacts were observed during the course of the licence year. In the course of field observations, vegetative regrowth along the easement was consistent with off-easement regrowth in both remnant and broad acre contexts.</i></p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>17.4 To appropriately protect soils from contamination and to plan for the constraints posed by pre-existing soil contamination</p> <p>During the course of operational activities throughout the licence year, soils were appropriately protected against contamination in accordance with procedural, Job Safety Analysis (JSA), Work Permit and risk management strategies.</p> <p>Independent testing of soils at Yallamurray, confirmed that no residual contamination exists at that site following the oil mist incident during the previous licence year. No soil contamination occurred as a consequence of operations during the licence year.</p> <p>17.5 To avoid disturbance to significant geological features</p> <p>Geological features were not disturbed during the course of the licence year.</p>
<p>Groundwater            (EIR, Section 7)</p>	<ul style="list-style-type: none"> <li>▪ Contamination of groundwater</li> </ul>	<p>18.a To appropriately minimize and manage adverse impacts to shallow groundwater resources</p>	<p>18.1 To appropriately protect groundwater quality from contamination by fuel, chemicals, acid sulphate soil leachate or other hazardous substances and remediate to the extent possible if required</p> <p>During the course of the licence year, operational activities did not impact upon groundwater quality as no modification of the landform was initiated. Remediation along the easement, combined with re-vegetation enhanced water quality through improved filtration and reduced turbidity as a result of the installation of erosion mitigation measures along the easement.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
<p>Surface Water <i>(EIR, Section 7)</i></p>	<ul style="list-style-type: none"> <li>▪ Contamination</li> <li>▪ Disruption to third party use of surface waters</li> </ul>	<p>19.a To appropriately minimize and manage adverse impacts to surface water resources</p> <p>19.b To appropriately monitor rehabilitation of surface drainage patterns on easement</p>	<p>19.1 To appropriately protect surface waters from contamination by fuel, chemicals, acid sulphate soil leachate or other hazardous substances and to undertake remediation works where required</p> <p><i>During the course of the licence year, operational activities did not impact upon surface water quality as no modification of the landform was initiated. Remediation along the easement, combined with revegetation enhanced water quality through improved filtration and reduced turbidity as a result of the installation of erosion mitigation measures along the easement.</i></p> <p>19.2 To monitor and remediate long-term interruption or modification to surface drainage patterns resulting from SEA Gas Project activities &amp; remediate if required</p> <p><i>Monitoring of the pipeline easement during the course of the licence year, did not reveal any residual impacts to surface drainage patterns. As a consequence of revegetation and erosion mitigation measures installed along the easement, surface draining has been improved as a consequence of minimised erosive disturbance.</i></p> <p>19.3 Minimise disruption to third party use of surface waters</p> <p><i>During the course of the licence year SEA Gas operational activities did not disrupt third party use of surface waters. Where practicable, SEA Gas consults with third party users to enable the collection of surface water from across the easement to benefit third parties. This has particularly been the case following the installation of erosion mitigation structures along the easement.</i></p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
<p>Watercourse Crossings <i>(EIR, Section 7)</i></p>	<ul style="list-style-type: none"> <li>▪ Crossing restoration</li> <li>▪ Visual impacts</li> </ul>	<p>20.a To appropriately monitor rehabilitation of watercourse crossing locations</p>	<p>20.1 To achieve long term site stability and appropriate site restoration  <i>During the course of the licence year, SEA Gas has continued to monitor the easement to ensure site stability and confirm the continued development of site restoration activities. Validation by 'ground truthing' inspections, road and aerial surveys and consultation with third parties validates restoration objectives.</i></p>
<p>Air Emissions <i>(EIR, Section 8)</i></p>	<ul style="list-style-type: none"> <li>▪ Generation of dust from the easement and access tracks</li> <li>▪ Minor reduction in air quality resulting from vehicle emissions</li> <li>▪ Localised reduction in air quality resulting from emissions from the compressor station and pipeline</li> </ul>	<p>21.a To appropriately minimize and manage adverse impacts to air quality as a result of operations</p>	<p>21.1 To minimise dust emissions  <i>During the course of the licence year dust emissions were managed in accordance with procedural requirements, JHA's and Work Permits, whereby vehicular speeds on unsealed surfaces are minimised in order to minimise fugitive dust emissions.</i>   <i>No third party complaints or internal hazard reports were received during the licence year in respect to this objective.</i></p> <p>21.2 To minimise air quality impacts from emissions from operation equipment  <i>In accordance with greenhouse gas emission reduction strategies, fugitive air emissions were minimised to essential operations and maintenance activities during the course of the licence year.</i>   <i>Additionally equipment is maintained to ensure optimum burning efficiency and elimination of other than scheduled gas releases as a consequence of both maintenance and patrol activities.</i></p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>21.3 To minimise excessive emissions from compressor station operations            During the course of the licence year, emissions from the Coomandook Compressor Station were restricted to the minimum required to operate and maintain the facility in accordance with the requirements of AS2885. No unscheduled or unintentional emissions were released, validation of maintenance records confirms compliance.</p> <p>21.4 To minimise emissions from pipeline and associated infrastructure            During the course of the licence year, emissions from the pipeline and associated infrastructure were restricted to as low as reasonably practicable to safely operate and maintain the infrastructure in accordance with the requirements of AS2885. No unscheduled or unintentional emissions were released, validation of maintenance records confirms compliance.</p> <p>21.5 To ensure the Compressor Station conforms with EPA requirements            During the course of the licence year, emissions from the Coomandook Compressor Station complied with SA EPA requirements in relation to gas burning equipment ≤5MW (4MW actual - validation of maintenance records confirms compliance).</p>
<p>Noise Emissions  <i>(EIR, Section 8)</i></p>	<ul style="list-style-type: none"> <li>▪ Generated operations noise may disturb people, stock and wildlife in the immediate area</li> </ul>	<p>22.a To meet regulatory requirements for noise emissions from the Compressor Station and other pipeline infrastructure</p>	<p>22.1 To minimise noise impacts associated with the movement of operation vehicles and equipment            During the course of the licence year no noise impacts were reported (internally or externally) as a consequence of the movement of operations vehicles or equipment.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>22.2 Minimise noise emissions from the Yallamurray Compressor Station  The Yallamurray Compressor Station has not been constructed – no noise emissions at this site.</p> <p>22.3 Minimise noise impacts associated with operation of the pipeline and associated infrastructure  During the course of the licence year no noise complaints were received in relation to the operation of the pipeline and its associated infrastructure.</p>
<p>Greenhouse Gas Emissions  (EIR, Section 8)</p>	<ul style="list-style-type: none"> <li>▪ Release of Green House Gas Emissions from Compressor Station</li> </ul>	<p>23.a To appropriately manage greenhouse emissions from associated processing plants and pipelines</p>	<p>23.1 To appropriately control and report greenhouse gas emissions  During the course of the licence year, Greenhouse gas emissions were appropriately controlled through minimization of gas venting activities (restricted to essential operations and maintenance activities), coupled with the reporting of greenhouse gas emissions in accordance with reduction strategies and Greenhouse Gas Challenge protocols.  Gas burning equipment (i.e. – water bath heaters and Coomandook Compressor Station) was maintained</p>
<p>Ecology  (EIR, Section 9)</p>	<ul style="list-style-type: none"> <li>▪ Removal of remnant vegetation</li> <li>▪ Spread of ecological weeds</li> <li>▪ Spread of pathogens</li> </ul>	<p>24.a To appropriately minimize and manage adverse impacts to ecological values of the easement</p>	<p>24.1 To avoid clearing of remnant vegetation  During the course of the licence year no remnant vegetation was cleared. In accordance with Sustainable Environmental Benefit (SEB) requirements, SEA Gas initiated significant revegetation along the pipeline easement in conjunction with sponsorship of off-site revegetation activities.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
		<p>24.b To appropriately monitor rehabilitation of the easement</p>	<p>24.2 To avoid the spread of environmental and proclaimed weeds &amp; remediate if required</p> <p>During the course of the licence year no observed or reported spread of environmental or proclaimed weeds was noted. In accordance with the site management plan for restoration of native vegetation, SEA Gas has continued to maintain roadside reserves by eliminating weed species prior to and following planting. Additionally, SEA Gas has continued to emanate weed species from within its facilities along the pipeline route and within broad acre areas (in consultation with landholders and occupiers).</p> <p>Where required, access to suspected weed infested areas features consultation with stakeholders and vehicle/equipment washdown protocols.</p> <p>24.3 To avoid the spread of pathogens &amp; remediate if required</p> <p>During the course of the licence year no observed or reported spread of pathogens was observed or reported along the pipeline route. Where practicable, SEA Gas restricts its operations to facilities and public areas, limiting access to inaccessible areas of the pipeline easement to aerial patrols (fixed wing and helicopter).</p> <p>Where required, access to suspected contaminated areas features consultation with stakeholders and vehicle/equipment washdown protocols.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>24.4 To effectively monitor rehabilitation of the easement &amp; remediate if required</p> <p>During the course of the licence year, scheduled monitoring of the easement during the course of aerial and road patrols, environmental monitoring and landholder consultation activities, was where necessary followed up with site remediation activities to preserve both the natural environment and to ensure adequate depth of cover across the pipeline in accordance with the requirements of AS2885.</p> <p>During the course of the licence year, rehabilitation objectives were achieved (as per the site management plan) and validated by site inspections.</p>
<p>Indigenous Heritage <i>(EIR, Section 10)</i></p>	<ul style="list-style-type: none"> <li>▪ Damage to shallow artifact scatters</li> <li>▪ Damage to significant vegetation (for example scarred trees)</li> </ul>	<p>25.a To appropriately minimize and manage adverse impacts to identified Indigenous heritage sites</p>	<p>25.1 To protect surface and shallow artifact scatters from damage</p> <p>The SEA Gas pipeline easement does not feature any sites which exhibit any visible or sub-surface artifact scatters. Culturally sensitive sites are managed in accordance with defined procedures and are documented within the context of the Environmental Line List (ELL).</p> <p>During the course of the licence year no disturbance to any artifacts occurred as a consequence of SEA Gas operational activities.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>25.2 To avoid damage to culturally significant vegetation</p> <p>SEA manages its vegetation in accordance with the environmental management plan which clearly identifies specific site management protocols for each area of remnant vegetation. During the course of the licence year, SEA Gas has significantly enhanced significant vegetation through management along the easement and sponsorship of off-site SEB sites at South Para River, Pooginagoric Tea Trick Road Reserve, K1 K1, Mount Monster Conservation Park and Naracoorte Caves.</p> <p>Procedures which are linked to JHA's and Work Permits are in place to safeguard the protection of remnant vegetation, requiring the assessment of vegetative impact as a consequence of any operational activity prior to commencement.</p> <p>During the course of the licence year no damage to any vegetation occurred as a consequence of SEA Gas operational activities.</p> <p>25.3 To implement appropriate protocols for dealing with cultural heritage material discovered during operations</p> <p>SEA Gas has in place an environmental policy and supporting procedures, which when applied operationally (JHA's and Work Permits) minimise the likely risk of impact to any unforeseen discovery of cultural heritage material. During the course of pipeline construction, heritage material was not discovered. Subsequent post-construction operational activities are conducted with due consideration for cultural heritage material likelihood, inclusive of consultation with cultural heritage representatives.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>During the course of the licence year cultural heritage material was not discovered during the course of SEA Gas operational activities.</p>
<p>Historical Heritage  <i>(EIR, Section 10)</i></p>	<ul style="list-style-type: none"> <li>▪ Disturbance to smaller scattered items occurring on or immediately below the land surface as a result of earthworks</li> </ul>	<p>26.a To appropriately minimize and manage adverse impacts to identified historical heritage sites</p>	<p>26.1 To avoid damage to built heritage  <i>During the course of the licence year built heritage aspects were not damaged as a consequence of SEA Gas operational activities.</i></p> <p>26.2 To implement appropriate protocols for dealing with historical heritage material discovered during operations            SEA Gas has in place an environmental policy and supporting procedures, which when applied operationally (JHA's and Work Permits) provide management protocols for dealing with historical heritage material which may be discovered during operations. Liaison with stakeholders along the pipeline easement, ensures that a consultative management strategy is developed, in response to the management of historical heritage material which may be discovered.            During the course of the licence year, no heritage material was discovered in the course of conducting operational activities along the pipeline easement.</p>
<p>Land Use  <i>(EIR, Section 11)</i></p>	<ul style="list-style-type: none"> <li>▪ Adverse effects to agricultural productivity or other primary production activities in long term</li> </ul>	<p>27.a To appropriately minimize and manage adverse impacts to land use activities during operations</p>	<p>27.1 To prevent adverse effects on stock during operations  <i>During the course of the licence year, SEA Gas operational activities did not affect stock in any manner, as a consequence of low operational impacts and continued liaison with stakeholders along the pipeline easement.</i></p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
	<ul style="list-style-type: none"> <li>▪ Disruption to important land use periods (that is, calving, lambing, breeding, sowing, harvesting or recreation)</li> <li>▪ Spread of noxious weeds and diseases</li> <li>▪ Disruption to conservation, recreational, industrial or other third party land use activities</li> </ul>	<p>27.b To appropriately monitor land use productivity post construction</p>	<p>27.2 To adequately monitor agricultural productivity post construction</p> <p>In the course of its stakeholder consultation process during the licence year, SEA Gas has where appropriate consulted with stakeholders in respect to post construction agricultural productivity.</p> <p>During the course of the licence year post construction and operational activities have not interrupted intended land use, nor spread noxious weeds or diseases. Validation by site inspection and consultative processes ensured compliance during the licence year.</p> <p>27.3 To avoid unacceptable disturbances to landowner assets and infrastructure &amp; remediate if required</p> <p>During the course of the licence year, SEA Gas operational activities did not impinge upon, nor disturb any landowner assets or infrastructure. Conversely, SEA Gas suffered damage to its pipeline marker infrastructure as a consequence of unauthorised interference by landholders, including the installation of unauthorised fencing across the pipeline easement in contravention of the <i>Petroleum Act (SA) 2000</i> and easement agreements.</p> <p>27.4 To adequately protect conservation or recreational values and activities</p> <p>During the course of the licence year SEA Gas has committed significant resources towards the conservation of the natural environment through its SEB commitments; sponsorship of off-site revegetation programs; participation in Red-tailed Black Cockatoo field surveys and sponsorship of community activities, which when combined, contribute towards the protection of conservation and</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>recreational amenities along the pipeline route.</p> <p>27.5 To prevent the spread of weeds and animal and plant pests and diseases, (such as branched broomrape, phylloxera and footrot), and to take appropriate remediation measures where required</p> <p>During the course of the licence year, SEA Gas continued to adopt operational policies and procedures to minimise the spread of weeds and pathogens. Consequently, no spread was reported nor observed.</p> <p>27.6 To avoid adverse effects to residential and industrial activities other pipeline infrastructure</p> <p>During the course of the licence year, SEA Gas did not affect residential or industrial activities in the near vicinity of the pipeline easement. Where identified, potentially conflicting activities were assessed and stakeholders consulted, with a view to ensuring the management of risk in accordance with AS2885 and AS4360 requirements.</p>
<p>Visual Amenity  <i>(EIR, Section 11)</i></p>	<ul style="list-style-type: none"> <li>▪ The success of easement reinstatement and rehabilitation works</li> <li>▪ The presence of above ground facilitates</li> </ul>	<p>28.a To appropriately minimize and manage adverse impacts on visual amenity</p> <p>28.b To appropriately monitor easement rehabilitation to minimise long term visual amenity impacts</p>	<p>28.1 To have a limited long term effect on the landscape values of the local area.</p> <p>During the course of the licence year SEA Gas operational activities did not impinge on the long term effect of landscape values. In the course of revegetation, easement restoration and sponsorship of SEB project sites, SEA Gas continues to significantly improve the landscape and biodiversity along the length of the pipeline and its surrounds.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
<p>Third Party Infrastructure  <i>(EIR, Section 11)</i></p>	<ul style="list-style-type: none"> <li>▪ Disruption or damage to roads and other transport infrastructure or networks</li> <li>▪ Disruption or damage to utility services</li> <li>▪ Disruption or damage to private infrastructure</li> </ul>	<p>29.a To minimise and where practicable avoid impacts to transport networks, private property and to public utilities</p> <p>29.b To appropriately monitor reinstated third party infrastructure</p>	<p>29.1 To minimise damage to road integrity &amp; remediate if required  <i>During the course of the licence year, SEA Gas did not impinge upon any road infrastructure. Routine patrol activities validate this observation.</i></p> <p>29.2 To avoid unacceptable disturbance to local traffic conditions and access  <i>During the course of the licence year, SEA Gas did not unduly disturb any road infrastructure. SEA Gas activities were solely confined to facilities and sections of the easement away from trafficable areas that required disturbance. Routine patrol activities validate this observation.</i></p> <p>29.3 To prevent damage to public utilities &amp; remediate if required  <i>During the course of the licence year, SEA Gas did not damage any public utilities. Routine patrol activities validate this observation.</i></p> <p>29.4 To protect construction personnel safety  <i>No construction activities were undertaken during the course of the licence year.</i></p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>29.5 To contain any damage to private property to agreed levels &amp; remediate if required</p> <p>During the course of the licence year SEA Gas activities did not result in any damage to private property. In accordance with its SEO obligations, SEA Gas installed erosion mitigation structures (and where required revegetated these structures) along sections of the easement on private property, where it was identified that the installation of such structures would reduce the risk of long term depth of cover degradation over the pipeline. In all instances, the stability and productivity improvement offered by such structures, applies a direct benefit to the landholder.</p>
<p>Waste Disposal  <i>(EIR, Section 11)</i></p>	<ul style="list-style-type: none"> <li>▪ Contamination of easement and immediate surrounds</li> <li>▪ Degraded amenity due to presence of waste matter</li> </ul>	<p>30.a To effectively minimise and manage all waste generated during operations and to dispose of all waste in an appropriate manner</p>	<p>30.1 To have a limited effect on the landscape values of the local area</p> <p>During the course of the licence year SEA Gas continued to improve the landscape in the course of implementing its revegetation, SEB and site restoration programme in accordance with the SEO, environmental management plan and AS2885 requirements.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>30.2 To ensure all personnel are aware of appropriate waste minimisation and management protocols</p> <p>SEA Gas conducts inductions for all new employees, contractors and Nominated Permit Holders, inclusive of training in relation to environmental management and best practice during the course of operational activities.</p> <p>During the licence year, SEA Gas launched an interactive DVD based training package to enable more effective training and communication of operational expectations.</p>
<p>Spill Response <i>(EIR, Section 11)</i></p>	<ul style="list-style-type: none"> <li>▪ Soil contamination</li> <li>▪ Water contamination</li> <li>▪ Additional remediation works</li> </ul>	<p>31.a To prevent, minimise and manage spills occurring and during operations.</p> <p>31.b To appropriately monitor remediated spill locations (where applicable)</p>	<p>31.1 To ensure the storage and distribution of hazardous materials and fuels during operation, preventing spillage and contamination &amp; remediate if required</p> <p>During the course of the licence year operational activities were conducted in a manner which minimised the risk of spillage through appropriate handling and storage protocols. Storage areas at compressor stations were upgraded during the licence year to improve handling of all materials and spares at these locations.</p> <p>No spillage or chemical related incidents occurred during the licence year.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
			<p>31.2 To ensure personnel are trained in spill prevention and response procedures</p> <p>SEA Gas and contract personnel are conversant in spill response and containment strategies. Areas in which chemicals are stored and handled feature spill control kits.</p>
<p>Public Safety and Risk <i>(EIR, Section 11)</i></p>	<ul style="list-style-type: none"> <li>A threat to the pipeline can be assumed to include any element which can potentially cause pipeline failure, including threats due to location (including crossing and land use segments) and general threats common to the entire system (for example, corrosion)</li> </ul>	<p>32.a To incorporate operational and maintenance requirements in line with AS 2885.1 to ensure risk level associated with threats is sufficiently dealt, that is, As Low As Reasonably Practicable</p>	<p>32.1 To satisfactorily mitigate all risks through the adoption of the requirements under AS2885.1</p> <p>SEA Gas operations were conducted in a manner which provides compliance with the requirements of AS2885 in relation to threat mitigation. Based on incidents and hazard reports during the licence year, risk based response strategies were formulated to ALARP.</p> <p>During the licence year, unauthorised third party interference of pipeline assets and unauthorised third party operations along the easement resulted in credible threats to safe pipeline operations. SEA Gas, in consultation with PIRSA is managing these issues, with a view to educating third parties in relation to safe operation in the vicinity of pipeline infrastructure.</p> <p>SEA Gas intends to conduct a holistic risk review along the full length of the pipeline during the 2007 - 2008 licence year, following which, any residual risks (other than ALARP) will be managed appropriately to ensure compliance with the requirements of AS2885 and legislative requirements.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
Stakeholder Consultation <i>(EIR, Section 12)</i>	<ul style="list-style-type: none"> <li>▪ Inadequate stakeholder consultation</li> <li>▪ Unresolved operational issues</li> </ul>	33.a To identify and satisfy stakeholders need for information by establishing and maintaining effective two-way communication and resolution of issues during operations	<p>33.1 To provide a mechanism to ensure that landholders and other parties are able to contact SEA Gas regarding operational issues</p> <p>During the course of the licence year SEA Gas undertook a widespread stakeholder consultation programme, inclusive of correspondence and site visits to all landholders, Councils, emergency services, utilities, third party land users (e.g. – Forestry SA, Timbercorp, Land Management Corporation, etc). This ongoing consultative programme strives to promote and further enhance existing safety awareness programs, encouraging third parties to contact SEA Gas prior to commencing any activity in the near vicinity of the pipeline, which may compromise safety.</p> <p>SEA Gas intends to continue with this programme during the 2007 – 2008 licence year and beyond, inclusive of identifying changes in land ownership and educating new stakeholders, in order to promote safe operations through a consultative process.</p>
Unplanned Incidents <i>(EIR, Section 11)</i>	<ul style="list-style-type: none"> <li>▪ Third party damage to pipeline integrity</li> <li>▪ Injury to public or personnel</li> <li>▪ Release of uncontrolled emissions</li> <li>▪ Risk of fire</li> <li>▪ Disturbance to landholder amenity as a result of gas release</li> </ul>	<p>34.a To minimise and manage the occurrence of third party damage to the pipeline, risks to public health and safety</p> <p>34.b To minimise and manage adverse impacts to air</p>	<p>34.1 To effectively manage third party operations in close proximity to the easement in accordance with AS 2885.1</p> <p>SEA Gas continues to subscribe to the 1100 Dial Before you Dig asset referral service and provides on site location and supervision services where requested by third parties.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
		<p>quality and public amenity</p> <p>34.c To adequately ensure the security of production or supply of natural gas</p>	<p>34.2 To effectively maintain pipeline markers and safety signage during Operations            In the course of maintenance activities, a scheduled pipeline marker replacement and re-alignment programme was undertaken during the course of the licence year. Where reasonably practicable and in accordance with the requirements of AS2885, pipeline markers were located in consultation with landholders to enable improved access to broad acre areas without compromising the integrity of pipeline markers.</p> <p>34.3 To adequately protect public safety during uncontrolled releases and other unplanned incidents            No uncontrolled or unplanned gas releases occurred during the course of the licence year.</p> <p>34.4 To adequately reduce the likelihood of fire associated with uncontrolled releases and other unplanned incidents            SEA Gas facilities have been designed to reduce the likelihood of unplanned gas releases, whilst infrastructure has been designed and maintained in accordance with the compliance requirements of AS2885, inclusive of hazardous zone design parameters.</p>

Environmental Aspect	Potential Impacts	Primary Objective	SEO Objective & Compliance Outcomes
<p>Emergency Response <i>(EIR, Section 11)</i></p>	<ul style="list-style-type: none"> <li>▪ Injury to public or personnel</li> <li>▪ Damage to third party infrastructure</li> <li>▪ Risk of fire</li> </ul>	<p>35.a To ensure that all emergency responses are immediate, to reduce the severity of any emergency gas release and to follow existing procedures whilst maintaining public and personnel safety as a priority</p> <p>35.b To adequately ensure the security of production or supply of natural gas</p>	<p>35.1 To adequately respond to unplanned emergency incidents  <i>During the course of the licensee year, SEA Gas has exceeded the minimum legislative requirement in respect of emergency response exercises. Additionally, the SEA Gas Emergency Response Plan was revised, inclusive of familiarisation training for all personnel in respect to changes associated with the revised draft.</i></p> <p>35.2 To adequately protect public safety during emergency responses, uncontrolled releases and other unplanned incidents  <i>SEA Gas continues to work closely with emergency services to ensure that public safety remains foremost in the course of emergency preparedness and response.</i>  <i>SEA Gas has in place response strategies to enable the isolation, response and recovery in response to an unplanned incident. It is intended that SEA Gas will exercise with emergency services during the 2007 – 2008 licence year.</i></p> <p>35.3 To adequately reduce the likelihood of fire associated with uncontrolled releases and other unplanned incidents  <i>SEA Gas facilities are maintained to ensure that safety shutdown infrastructure is operable in a fail safe mode. Additionally, SEA Gas sites are maintained in a manner which minimises the risk of combustible materials from vegetative regrowth, with a view to containing within the hazardous zone any fire in the event of and unplanned incident.</i></p>

**APPENDIX B – REPORTABLE INCIDENTS (2006 - 2007 Licence Year)**

Incident Date & Reference No.	KP	Incident Classification	Root Causes	Corrective Actions	Status
2627	683	Communication	Unauthorised third party interference of Telstra communications cable, resulting in loss of communication to facility, requiring manual monitoring by on-site personnel.	Telstra has investigated this incident. Increased security patrols at SEA Gas facilities.	Closed
5759	290	Communication	Failure of a third party to notify SEA Gas prior to the installation of fencing across the pipeline easement.	Enhanced consultation between SEA Gas and third parties with a view to enhancing pipeline safety awareness and improving public safety by minimising risks of impact upon pipeline infrastructure to ALARP.	Closed
5760	290	Communication	Failure of a third party to notify SEA Gas prior to the installation of fencing across the pipeline easement.	Enhanced consultation between SEA Gas and third parties with a view to enhancing pipeline safety awareness and improving public safety by minimising risks of impact upon pipeline infrastructure to ALARP.	Closed
5761	292	Communication	Failure of a third party to notify SEA Gas prior to the installation of fencing across the pipeline easement.	Enhanced consultation between SEA Gas and third parties with a view to enhancing pipeline safety awareness and improving public safety by minimising risks of impact upon pipeline infrastructure to ALARP.	Closed
IR028	645	Communication	Poor third party procedures whilst working in the vicinity of the SEA Gas pipeline easement, resulting in failure to notify SEA Gas prior to commencement of work.	Improved third party notification procedures. Heightened safety awareness provided by SEA Gas to third party operator.	Closed

Incident Date & Reference No.	KP	Incident Classification	Root Causes	Corrective Actions	Status
3276	577	Communication	Failure of a third party to notify SEA Gas prior to the progression of site works within close proximity to the pipeline.	Enhanced consultation between SEA Gas and third parties with a view to enhancing pipeline safety awareness and improving public safety by minimising risks of impact upon pipeline infrastructure to ALARP.	Closed
6905	310	Communication	Failure of a third party to notify SEA Gas prior to the installation of fencing across the pipeline easement.	Enhanced consultation between SEA Gas and third parties with a view to enhancing pipeline safety awareness and improving public safety by minimising risks of impact upon pipeline infrastructure to ALARP.	Closed
3152	685	Work Practices	Corrosion of locking washer and movement of flow control valve positioner arm, causing the positioner arm to move sufficiently to cause the flow control valve to move and causing a pressure increase. This pressure increase was within station settings and accordingly did not trigger any station alarms, or shutdown systems, and the station remained in full operation.	As a result of this incident SEA Gas is inspecting all control valve positioner mechanisms to ensure that the pins cannot loosen. SEA Gas is satisfied that the SEA Gas officer who carried out the measurement of the pin barrel that resulted in the incident could not reasonably have foreseen that the pin was loose. However, SEA Gas is reviewing its procedures for inspection of live equipment.	Closed

## APPENDIX C – STATEMENT OF ANNUAL EXPENDITURE

Limited distribution to Primary Industries and Resources – SA, Geothermal and Petroleum Group.

## APPENDIX D – EASEMENT REHABILITATION SUMMARY

In the course of the licence year the following rehabilitation and Significant Environmental Benefit (SEB) activities were conducted along the South Australian section of the SEA Gas pipeline easement

### I. Post-Construction Revegetation Activities

During the 2006 – 2007 licence year SEA Gas initiated site preparation (fencing, weed spraying, mulching), maintenance and revegetation activities at 22 sites along the pipeline easement within South Australia, in accordance with the *South Australian Easement Revegetation and Management Plan*. In excess of 4,000 plants, comprising 37 separate species of local provenance were installed at sites along the easement (all plants were propagated following the collection of native provenance seed) planting during 2007 and 2008.

In the course of its revegetation activities SEA Gas has actively managed its sites in consultation with Forestry SA, Department of Environment and Heritage, local Councils and landholders along the pipeline easement.

### 2. Significant Environmental Benefit (SEB) Projects

In accordance with its post construction environmental obligations the following Native Vegetation Council SEB Projects were initiated during the course of the licence year:

- **Mount Monster Conservation Park Allotment Acquisition** - SEA Gas has provided the SA Department of Environment and Heritage with funding for the acquisition of a 31 Ha allotment adjoining the Mount Monster Conservation Park, which supports endangered Monarto Mintbush (*Prostanthera eurybioides*) species. Acquisition of this allotment for ultimate inclusion into the Mount Monster reserve has met some administrative resistance pending resolution of an third party extractive mineral lease claim at this site.

In response to SEA Gas sponsorship, acquisition of this land parcel was concluded during August 2007.

- **Mosquito Creek Restoration, Naracoorte Caves Conservation Park** – SEA Gas has funded fencing, weed management and revegetation activities along the section of Mosquito Creek which passes through the Naracoorte Caves Conservation Park. Restoration activities have contributed to enhancement of the threatened Blackfish community in Mosquito Creek, which is the major waterway that feeds the Bool Lagoon wetland complex; one of only five Ramsar-listed wetlands of international significance in South Australia. The deep pools associated with the Naracoorte Range section of Mosquito Creek provide important refugia for freshwater-dependent species occupying the creek/wetland complex. The freshwater fish fauna of the Mosquito Creek/Bool Lagoon system is of particular significance, supporting the highest number of taxa recorded for the South East; including two species of national significance and a number of species of restricted distribution in South Australia (Hammer 2002). As such, maintaining the integrity of the creek's habitat is critical for the conservation of biodiversity in the region.

In response to SEA Gas sponsorship, this site continues to be rehabilitate by the *'Friends of the Naracoorte Caves'*, under the auspices of the park manager.

- **Pooginagoric Tea Trick Road Reserve Revegetation** – revegetation of a 3.75 hectare section of road reserve along the Pooginagoric-Tea Trick summer track which features a remnant corridor of threatened woodland habitat was conducted during July 2006. The installation of 8,000 Buloke (*Allocasuarina luehmannii*) species was propagated from provenance seed stock, with additional site maintenance and planting of Buloke and Grey Box (*Eucalyptus macrocarpa*) species scheduled for 2008.

The road reserve between Pooginagoric and Tea Trick supports one of South Australia's most important remnants of Buloke (*Allocasuarina luehmannii*) Woodland (Stokes 1996), an endangered plant community at both the State and National level (DEH 2001, EPBC Act 1999). Around 1.5 km of cleared road reserve currently separates the vegetated roadside from a significant woodland remnant of Buloke and Grey Box (*Eucalyptus microcarpa*) and Inland Blue Gum (*Eucalyptus leucoxylon* ssp. *pruinosa*) at Tea Trick Reserve (Tatiara District Council).

In restoring the linear corridor of threatened woodland vegetation and re-establishing the connectivity between important habitat areas, it is intended that a continuous link will eventually be created between Pooginagoric and Wolseley Common Conservation Parks. This linking of significant remnant vegetation serves to increase available habitat for fauna, particularly woodland birds. In addition, Buloke (*Allocasuarina luehmannii*) is important feeding habitat for the endangered Red-tailed Black-cockatoo (*Calyptorhynchus banksii graptogyne*). Restoration of Buloke feeding habitat is seen as an important action for the recovery of this threatened species.

Additional planting was initiated at this site during the licence year to supplement attrition plantings as a consequence of low rainfall during the 2005 – 2006 licence year.

- **Para Woodland Rehabilitation, Gawler** - over 90% of the original vegetation covering the Northern Adelaide and Barossa catchment has been cleared since European settlement, with little precarious bush remaining in rural areas. Preserving what remains of the native vegetation is essential to longer-term regeneration and longevity of flora and fauna species within the catchment zone.

Native vegetation assists in the preservation of biodiversity, providing habitat for plants and animals, maintaining the water cycle and soil productivity and maintaining water quality (Pikusa 2001).

SEA Gas has funded weed management initiatives within the Para Woodland during 2006 to eliminate woody weeds and African Fountain Grass, within areas of remnant vegetation along the steeply sloping river valleys and lower banks. This initiative has enabled native species to re-establish within these areas with a view to improving biodiversity through the enhancement of vegetation communities and wildlife habitats.

Rehabilitation at this site continues under the auspices of the park manager.

- **Ki-Ki Revegetation Project** – Following a failure to reach a consensus with the landholder in order to safeguard long term biodiversity, SEA Gas initiated off-easement provenance planting on private property at Yumali, following consultation with the Coorong Council and an alternative landholder.

This 1.2 Hectares planting of several provenance species, links into an adjoining roadside corridor of remnant Mallee species, coupled with providing a long term wind break for stock on the property.

SEA Gas will continue to maintain and monitor this site in consultation with the landholder to ensure long term establishment and biodiversity enhancements.