Introduction:

This report is issued in accordance with the requirements of the South Australian, Petroleum and Geothermal Energy Regulations 2000, regulation 33 and concerns the regulated activities conducted under Petroleum Production Licence 21 (PPL21) at the 'Caroline 1' Well. The report covers the period of 1 January 2010 to 31 Dec 2010.

Reg 33 (2) a - Summary of Regulated Activities:

Activities conducted under the licence within the report period included;

- Processing and distribution of Carbon Dioxide, approx. 9,613t
- Routine maintenance and minor plant improvements. The minor improvements included; increased safety through a new lone worker alarm, improvements to refrigeration units and water handling.

Reg 33 (2) b - Compliance with the Petroleum and Geothermal Energy Act and Regulations 2000, the licence and statement of environmental objectives;

Operations at the Caroline 1 Well and associated processing plant have been conducted in accordance with the requirements of the Petroleum and Geothermal Energy Act & Regulations 2000.

After consultation with PIRSA, Air Liquide recognises that the Statement of Environmental Objectives as below will require revision prior to the production licence PPL21 being relinquished or transferred to a third party. Refer also to comments under 'Development Activites'.

With regard to the environmental objectives the following table details progress towards those objectives and their assessment criteria. Refer also to the current Air Liquide, Statement of Environmental Objectives.

Environmental Objective	Status
Avoid groundwater and soil contamination - General	
Chemicals, fuels and oils stored in a contained area on a flat, impermeable surface.	All items stored correctly
Sulphuric acid stored in a contained area.	Portable bund in-situ.

Environmental Objective	Status
Spill response station maintained.	In compliance.
Environmental incident reporting integrated into existing incident reporting systems.	No incidents reported.
Appropriate training in spill response and reporting for employees and contractors undertaken.	Site personnel are trained in spill containment.
Material Safety Data Sheets and spill response procedures posted in appropriate work areas.	All MSDS' are current and are updated routinely as required.
In the event of a spill, appropriate spill response procedures to be followed and the incident reported to the Plant Manager (as per Safety Training Manual).	No spills to report.
Waste volumes recorded and continually reviewed to ensure that waste generation (as a percentage of CO2 production) is not increasing.	Losses are recorded daily. A loss reduction program is ongoing: 2010 actions to reduce losses included; • Automation of water separation from raw CO2, • Replacement of the no 2 cooling tower - will save water and save chemicals for water treatment. Planned 2011 actions include; • Review and update waste management procedures.
Waste generation reviewed and opportunities for reduction identified and documented (by March 2001).	Completed
Use of silica gel phased out and waste generation below 800 kg/year for moisture removal stage of CO2 purification (by March 2001). New product, KC Trockenperlen, has double life of old silica gel.	Objective completed and now KC Trockenperlen has been replaced with activated alumina. Activated alumina has been performing well, no need to replace for several years.

Environmental Objective	Status
Strategy developed for continued waste reduction	Refer above 'Waste volumes …' which provides details of loss reduction strategy. In addition reduced plant throughput has reduced solid waste production proportionally.
Contracts with licensed waste disposal contractors maintained (i.e. activated alumina, activated carbon, Puraspec, sewage, hydrocarbon, and general rubbish).	Contract in place with Cleanaway.
Monitor wellhead pressure and diesel system. Assess casing integrity every two years.	Daily monitoring of pressure in outer casing confirms the integrity of the casing.
Conduct soil analysis in the vicinity of the disused waste pits by March 2001.	Samples and analysis were performed in March 2001 and the results indicated no contamination.
Minimise air emissions	Maintenance program has been implemented and records are kept.
Reduce CO2 losses by 5% from December 2001	Average losses for 2010 were 18.8%. Previous annual averages were: 2009-18.9%; 2008-19.0%, 2007 – 19.6%, 2006 – 20.1%, 2005 – 16.8%, 2004 - 16.5%, 2003 -26.5%, 2002 - 21.6%, 2001 - 27.6%.
Freon gas (R12) phased out by June 2002.	Complete.
Provide a safe working environment for employees, contractors and third parties.	Based on the results of; monitoring of well head by expert consultant, monitoring of wellhead pressure, monitoring of diesel system, safe operation has been achieved. Air Liquide is committed to a zero accidents

Environmental Objective	Status
	policy. Improvement initiatives for 2010 include; Man down system upgrade, and emergency response
Avoid groundwater and soil contamination - Hydrocarbon Waste	
Hydrocarbon waste is stored in bunded tank. Sludge removed annually.	Volume of sludge has decreased significantly in the last 1-2 years and now removal is done when level in sludge tank is approx 25%.
Hydrocarbon tank and bunded area inspected for spills and leaks	Daily checks have been conducted.
Procedure for hydrocarbon tank and bund maintenance and inspection to be documented.	Confirmed and recorded in daily logs
Hydrocarbon storage tanks and bund to be maintained in a structurally sound condition.	Based on inspections and maintenance conducted the integrity of the storage tanks and bunds is confirmed. Some reinforcing works were conducted this year.
Avoid groundwater and soil contamination - Produced Formation Water	
Sprinkler system is relocated periodically to avoid creation of soakages and areas of die-off.	Daily checks.
A checklist for inspection of grassed areas, "effluent" tanks, hydrocarbon storage tank and bunds developed and implemented.	Daily check. Formation water is now being diluted with bore water to reduce salinity levels.
Liquid waste sampled and analysed for hydrocarbon content, salinity and pH levels every six months.	Tests have been conducted to schedule and all results are within ANZECC guidelines.

Environmental Objective	Status
Water quality monitoring data (hydrocarbon content, salinity and pH) and inspections of discharge (irrigation) water (i.e. signs of "die-off" or surface hydrocarbons on grassed areas) recorded.	Continuous, no indications of die-off or surface hydrocarbons.
Water quality data to be assessed as per ANZECC guidelines for agriculture.	Routine testing system in place.

Reg 33 (2) c – Actions to rectify non-compliance with the Act

Air Liquide are continuing to monitor formation water disposal to ensure there is no contamination of ground water outside accepted limits.

Based on available water salinity data, history of water disposal practices and site observations Air Liquide believes that operations are in accordance with requirements of the Petroleum and Geothermal Energy Act and Environment Protection Act. To enable the planning of decommissioning works and to identify the extent of any site remediation works which may be required, Air Liquide are in the process of implementing a water disposal monitoring program. Recently an environmental consultant has been selected to develop and manage a suitable water monitoring program.

Reg 33 (2) d – Summary of management system audits

The following management system audits were conducted:

- External Audit, SAI Global surveillance audit – conducted 26 October 2010,

Reg 33 (2) e – List of Reports and Data generated

The following table identifies the reports and data relevant to the Petroleum and Geothermal Energy Act 2000 generated during the reporting period;

Report	Status
Production Reports (reg 45 (1)).	Submitted with Royalty return, monthly.
Royalty returns.	Submitted each month.

Reg 33 (2) f – Incidents reported to the Minister

There have been no incidents reported to the minister during the reporting period.

Reg 33 (2) g – Foreseeable Threats

There are no reasonably foreseeable threats to the facilities that require reporting.

Reg 33 (2) h – Operations planned for next year

The proposed operations for the year 1 January 2010 to 31 December 2010 involve continued safe and efficient production of carbon dioxide. It is expected that production volumes will be similar to the previous year. The estimated production 2011 is 9,500t compared to 9,613t which was produced in 2010. The reduction in output is due to depletion of the resource, although this reduction has slowed in the last 1-2 years. No down-hole works are planned.

Reg 33 (2) i – Estimated production volume

The estimated production volume for the period 1 Jan to 31 Dec 2011 is 9,500t.

Reg 33 (2) j – Development Activities

No development activities initiated by Air Liquide are planned for the period 1 January 2011 to 31 December 2011.

Air Liquide have had preliminary discussions with a third party regarding the transfer of the production licence for further petroleum exploration works.

Air Liquide have engaged a specialist to perform a preliminary valuation of the well and licence.

Reg 33 (3) – Statement of Expenditure

A statement of expenditure on regulated activities conducted under the licence for the reporting period is attached to this report.

2/11/11

Mark Bennett, Air Liquide Australia Limited