

FINAL REPORT

Independent Environmental Audit  
AGL Gas Production (Camden)  
Operations Pty Ltd  
Stage 1 and Stage 2

*Prepared for*

**AGL Gas Production (Camden) Pty Ltd**


AGL, Rosalind Park  
Lot 35 Medhurst Road  
Gilead, NSW

18 December 2007

JOB NUMBER 43177447

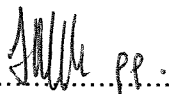
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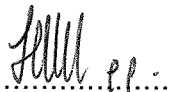
  
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## 1.1 Background

URS Australia Pty Ltd (URS) was engaged by AGL Gas Production (Camden) Operations Pty Ltd (AGL) to undertake an independent environmental audit of the Camden Gas Project Stage 1 and Stage 2, near Camden, New South Wales (NSW).

A joint venture between AGL and Sydney Gas (Camden) Operations Pty Ltd, referred to as the Camden Gas Project Joint Venture, commenced on 1 February 2006 with AGL being the Operator of the joint venture.

The independent environmental compliance audit is required to meet the consent conditions for both Stage 1 and Stage 2 of the Project. The requirement for the audit is set out in Development Application (DA) 15-1-2002i for Stage, 1 and in DA 282-6-2003i for Stage 2. The requirements of these two DAs are as follows:

- Stage 1 of the development - DA 15-1-2002i (dated 23 July 2002) (Schedule 3), Condition of Consent No. 37:

*“Within two years of the date of this consent and every two years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full costs of an Independent Environmental Audit. The Independent Environmental Audit shall:*

- (a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General;*
- (b) be consistent with ISO 14010 – Guidelines and General Principles for Environmental Auditing, and ISO 14011 – Procedures for Environmental Auditing, or updated versions of these guidelines/manuals;*
- (c) assess the environmental performance of the development, and its effects on the surrounding environment;*
- (d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;*
- (e) review the adequacy of the Applicant’s Environmental Management Plan; and*
- (f) recommend measures or actions to improve the environmental performance of the development, and/or its environmental management and monitoring systems.”*

DA No. 15-1-2002i, dated 23 July 2002 and modification dated 16 May 2006 relate to Stage 1 of the Camden Gas Project. Subsequent to issue of this Development Consent the second DA was approved for the Camden Gas Project under Section 80 of the Environmental Planning and Assessment Act 1979, namely Kay Park DA 246-8-2002-i issued on 20 September 2002. DA 246-8-2002i (Condition of Consent No.12) requires the subject development to be included in the Independent Audit required under DA 15-1-2002i.

- Stage 2 of the development - DA 282-6-2003i (dated 16 June 2004) (Schedule 5), Condition of Consent No. 10:

*“Within two years of the date of this consent and every two years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full costs of an Independent Environmental Audit. The Independent Environmental Audit shall:*

- (a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General;*
- (b) be consistent with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing, or updated versions of these guidelines/manuals;*
- (c) assess the environmental performance of the development, and its effects on the surrounding environment;*
- (d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;*
- (e) review the adequacy of the Applicant’s Environmental Management Plan; and*
- (f) recommend measures or actions to improve the environmental performance of the development, and/or its environmental management and monitoring systems.*

DA 282-6-2003-I dated 16 June 2004 with modification dated 26 August 2004 and modification dated 16 May 2006 relate to Stage 2 of the Camden Gas Project. Subsequent to issue of this DA the following three DAs were approved for the Camden Gas Project under Section 80 of the Environmental Planning and Assessment Act 1979. Each of these DAs requires the subject developments to be included in the Independent Audit required under 282-6-2003i. The DAs are as follows:

- Mount Taurus and Menangle Park - DA-183-8-2004i, 16 December 2004 (Condition of Consent No.25);
- Glenlee - DA 9-1-2005, 26 May 2005 (and modification dated 16 May 2006), (Condition of Consent No.44); and
- Sugarloaf - DA 75-4-2005, 07 October 2005 (Condition of Consent No.58).

In addition to the above four DAs, a fifth DA has been issued for the Elbethel area DA 171-7-2005. No work described in DA 171-7-2005 has reportedly been undertaken to date and therefore is not subject to this audit.

Development described in DAs and modifications issued to AGL since June 2006 have not been included in this audit as they are not within the audit period of July 2004 to June 2006.

## **1.2 Audit Objectives**

The objectives of the audit of each of the developments were to:

- assess the environmental performance of the development, and its effects on the surrounding environment;
- assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;

- review the adequacy of the Applicant's Environmental Management Plan; and
- recommend measures or actions to improve the environmental performance of the development, and/or its environmental management and monitoring systems.

The assessment of compliance with relevant standards, performance measures and statutory requirements was undertaken through an assessment of compliance with the six Development Consents issued for the Camden Gas Project Stage 1 and Stage 2, which appear to incorporate the majority of the key environmental requirements of the two Environment Protection Licences (Ref: 12003 and 11713) and the requirements of the Petroleum Production Leases, 3A permits and S90 Consents.

The audit period is from July 2004 to June 2006.

Issues relating to health, safety and community are outside the scope of the audit, except where they are directly related to environmental issues.

### **1.3 Audit Methodology**

The audit methodology comprised:

- A site inspection and interviews on 11 December 2006;
- Review of relevant documentation provided by AGL;
- Submission of a Draft Report to AGL outlining the audit findings;
- Submission of a Final Report to AGL, incorporating comments on the Draft report.

### **1.4 Personnel and Timing**

Alison Pilgrim, Associate Environmental Scientist with URS Australia Pty Ltd (URS), conducted the audit.

Alison is registered by RABQSA as Certified Lead Auditor for Environmental Management, Site Contamination Assessment and Compliance Auditing.

AGL personnel interviewed comprised Aaron Clifton, Field Environment and Safety Officer.

### **1.5 Format of Report**

The format of this report is as follows:

- Section 1 is introductory and defines the scope and nature of the audit;
- Section 2 describes the AGL Camden Gas Project operations as observed during the site inspection;

- Section 3 provides an assessment of the environmental performance of the Project and its effects on the surrounding environment;
- Section 4 provides an assessment against the relevant standards, performance measures and statutory requirements. Where findings were found to be in non-compliance, these results have been summarised in this Section (Appendix A provides the results of the assessment against the six DAs); and
- Section 5 provides a review of the adequacy of the Environmental Management Plan.

Where measures or actions to improve the environmental performance of the Project, and/or the environmental management and monitoring systems are recommended these are provided in Sections 3 to 5 of this audit report.

This section provides a brief description of the history of the Camden Gas Project, Stage 1 and Stage 2, and a description of the operations at the time of June 2006.

The Camden Gas Project field operations for Stage 1 and Stage 2 can be described as follows:

- Civil earth works to construct well sites and access roads;
- Drilling, fracing and installation of gas wells;
- Installation of the gas gathering lines in trenches;
- Separation of water from the gas at the wellhead location (if required);
- Transportation of the gas to either the Ray Beddoe Treatment Plant (RBTP) or the Rosalind Park Gas Plant (RPGP) via the gas gathering system;
- Treatment, odorising and pressurising of the gas to achieve marketable quality;
- Transport of the gas by pressurised pipeline to the AGL network; and
- Rehabilitation after well and gas gathering line construction activities and final rehabilitation after decommissioning of wells and Plants

Ancillary activities include administrative facilities and maintenance workshop and washbay at RPGP.

## **2.1 Stage 1 Operations**

### **2.1.1 Brief History**

Located 65 kilometres (km) south-west of Sydney in the Camden region of NSW, Sydney Gas developed Stage 1 of the Camden Gas Project comprising the first two Petroleum Production Leases (PPL) in New South Wales.

Exploration activities in the Camden region commenced in 1998 and since that time an extensive program of geological surveys and exploration drilling has been completed.

In Stage 1, the construction of the Ray Beddoe Treatment Plant (RBTP) and successful first gas delivery into the AGL distribution network in May 2001, lead to Sydney Gas applying for Development Consent and PPL 1.

Further appraisal led to the addition of three production wells in 2002 under PPL 2, bringing the total of drilled production wells in the Stage 1 development to twenty-five. Twenty one of those wells drilled have produced gas, with 10 of these wells considered significant producers of gas.



**2.1.2 Operations Summary Stage 1 - July 2004 to June 2006**

During the audit period (July 2004 to June 2006), development within the Camden Gas Project Stage 1 comprised the following:

- Drilling of one well at Logan Brae No. 11 (LB11). A modification to DA 15-1-2002i was issued for the construction, drilling and operation of this directional well from LB09;
- Relocation of the Johndilo storage area to a new pipe lay down area on the Logan Brae property; and
- Rehabilitation of the Johndilo Offices and storage area to pasture.

No further development was undertaken during the reporting period for Stage 1.

**Table 2-1** summarises the current status of Stage 1 operations as of June 2006.

Table 2-1 – Current Status of Operations (June 2006) – Stage 1

Well Name	DA	Date Completed	Status June 2006
AP01*	15-1-2002i	2000	Gas Producer
JS01*, 03 , 04	15-1-2002i	2000	Gas Producer
JS02	15-1-2002i	2000	Plugged and abandoned
JD01 and 11	15-1-2002i	1999	Gas Producer
JD02*	15-1-2002i	1999	Plugged and abandoned
JD04, 05 and 06	15-1-2002i	1999	Gas Producer
JD7A	15-1-2002i	1999	Gas Producer
JD03	15-1-2002i	1999	Activity suspended
JD07	15-1-2002i	2003	Plugged and rehabilitated
JD09 and 10	15-1-2002i	1999	Plugged and abandoned
LP01	15-1-2002i	2000	Not completed
LB05, 06, 07, 09 and 10	15-1-2002i	2001	Gas Producer
LB01, 02, 03	15-1-2002i	-	Approved – Not Drilled
LB04 and 08	-	-	Approved under PEL 2 – Not Drilled
MH01	15-1-2002i	-	Not completed
KP01, 02, 03	246-8-2002-i	2002	Gas Producer
LB11	15-1-2002i (modification)	-	Not yet completed
Ray Beddoe Treatment Plant*	15-1-2002i	2001	Operational
Johndilo Site Office*	15-1-2002i	Constructed - 2000 Rehabilitated - 2005	Land fully rehabilitated and returned to landowner

\*Wells (or areas) marked with an asterisk in column one of the table were observed by URS during the site visit on 11<sup>th</sup> December 2006.

## 2.2 Stage 2 Operations

### 2.2.1 Brief History

Camden Gas Project, Stage 2 commenced commercial gas sales on 16 December 2004 under PPL 4 and is currently in an expansion phase.

As part of the progressive development of this gas field wells have been drilled and proven in Wandinong, Glenlee, Menangle Park, Rosalind Park, Mt Taurus and Elizabeth Macarthur Agricultural Institute (EMAI) and is commencing drilling in Sugarloaf Farm. Further works are planned in Glenlee, Spring Farm, EMAI, Menangle Park, El Bethel and Razorback.

### 2.2.2 Camden Gas Project Stage 2 - July 2004 to June 2006

During this reporting period (July 2004 to June 2006), Stage 2 construction saw the Rosalind Park Gas Plant (RPGP) start commissioning in November 2004 and start gas sales in December 2004. Other works included drilling operations as follows:

- Mt Taurus wells, MT01 - 10 were drilled, completed and connected to the RPGP;
- EMAI wells, EM02 – 20 & 40 were drilled, completed and connected to the RPGP;
- EMAI wells, EM1V and 1H, recently renamed to, EM21 and EM22, were connected to the RPGP;
- Wandinong wells, WG01 - 03 were connected to the RPGP;
- Glenlee wells, GL02 and GL04 - 11 were connected to the RPGP. GL03 was plugged and abandoned;
- Menangle Park wells, MP13 - 17 were connected to the RPGP;
- Rosalind Park wells, RP02 - 12 were connected to the RPGP; and
- Sugar Loaf wells, SL2 and SL3 were drilled and fraced;

Progressive rehabilitation of these works has occurred during this time and is now entering the monitoring phase.

**Table 2-2** summarises the current status of Stage 2 operations as of June 2006.

Table 2-2 – Current Status of Operations (June 2006) – Stage 2

Well Name	Date Completed	Status June 2006
Rosalind Park Gas Plant*	Commissioned in November 2004 and gas sales started in December 2004	Operating
RP01	Incomplete	Approved - Not Drilled.
RP02, 03, 04, 05, 06, 07, 08, 09, 10, 11* and 12	2003	Gas Producer
GL01.	Incomplete	Approved - Not Drilled.
GL03	2003	Plugged and Abandoned
GL02*, 04*, 05*, 06*, 07, 08*, 09 and 10*.	2003	Gas Producer
GL11*	2005	Gas Producer
MP13, 14, 15, 16 and 17*	2003	Gas Producer
WG01, 02 and 03*	2003	Gas Producer
WG04, 05* and 06	2003	Activity suspended
EM02, 03*, 04*, 05*, 06, 07*, 08, 09, 10, 11*, 12*, 13*, 14*, 15, 16*, 17*, 18, 19, 20	2005	Gas Producer
EM21-22	2002	Gas Producer (Renamed horizontal drilling R&D holes, EM1H and EM1V)
EM 40	2006	Gas Producer
MT01, 02, 03, 04, 05, 06*, 07, 08, 09, 10*	2004	Gas Producer
SL1, SL4, SL5, SL6, SL7	Incomplete	Approved – Not Drilled
SL2* and SL3	Incomplete	Production Testing

\*Wells (or areas) marked with an asterisk in column one of the table were observed by URS during the site visit on 11<sup>th</sup> December 2006.

# Environmental Performance and Effect on Surrounding Environment

## SECTION 3

This Section addresses the requirement to assess the environmental performance of the project and its effects on the surrounding environment as required by DA 15-1-2002i Condition of Consent No. 37 and DA 282-6-2003i Schedule 5, Condition of Consent No. 10:

*“(c) assess the environmental performance of the development, and its effects on the surrounding environment”*

This section provides a review of the environmental performance through consideration of the following:

- Air quality
- Erosion and sedimentation
- Surface/ground water pollution
- Contaminated or polluted land and hydrocarbon contamination
- Threatened flora and fauna
- Rehabilitation
- Weeds
- Operational noise
- Visual/light pollution
- Aboriginal and natural heritage
- Bushfire management.

The environmental performance of the development (Stage 1 and Stage 2) has been assessed through a review of environmental performance data, such as monitoring results presented in the AEPR, for the audit period (July 2004 to June 2006) and observations made by URS during the site visit on 11<sup>th</sup> December 2006.

AEPRs for both Stage 1 and Stage 2 have recently been provided to DoP for the period July 2004 to June 2006. In an effort to avoid repeating the content of the AEPRs here, the following sections summarise the key issues and provide an assessment of environmental performance during the audit period.

### **3.1 Stage 1 – Summary of Environmental Performance**

Overall, no significant ongoing environmental issues were identified during the audit in relation to Stage 1 of the project during the audit period.

### ***Development***

During the audit period activities in Stage 1 of the Project comprised the construction of one well (Logan Brae No. 11), and rehabilitation of the Johndilo offices and storage area to pasture. Production operations included gas extraction from approximately eighteen wells, and direction of the gas to the Ray Beddoe Treatment Plant.

The location of the former Johndilo office was observed at the time of the site visit to have been returned to pasture, to the satisfaction of the site owner.

### ***Air Quality***

At the Ray Beddoe Treatment Plant, one exceedance of the site's Environment Protection Licence air emission limit for Nitrogen Oxide occurred in 2005. This exceedance was reported to the DEC and no exceedances have been recorded since.

### ***Operational Noise***

Noise has been monitored at four locations around the Ray Beddoe Treatment Plant. In June 2006, monitoring results were able to demonstrate only partial compliance with the Environment Protection Licence limits. An internal review of operations has reportedly been unable to identify any operational changes which could contribute to an increase in site noise. There have reportedly been no complaints with regards to operational noise, and AGL is continuing to work with the EPA to reduce site noise. It is understood that the Ray Beddoe Treatment Plant will cease operations in early 2007.

### ***Aboriginal and Natural Heritage and Threatened Flora & Fauna***

There has been limited construction during the audit period and no Aboriginal artefacts have been identified and no threatened flora and/or fauna have been identified.

### ***Erosion and Sedimentation***

The potential for erosion and sediment issues appeared to be low given the limited construction undertaken during the audit period. All wells observed during the site visit were operational and had been rehabilitated. No significant erosion or sediment issues were noted.

### ***Contaminated or Polluted Land and Hydrocarbon Contamination***

No significant contamination issues were identified during the audit.

# Environmental Performance and Effect on Surrounding Environment

## SECTION 3

### **Weeds**

No significant weed invasion issues were noted to be related to AGL's operations.

### **Community**

Unrelated community complaints (Stage 1 and Stage 2) were recorded between August 2004 and February 2005, which were subsequently actioned. The details of the complaints are provided in the following table:

Report No.	Complaint	Complainant	Date	Action Taken
007-04	Administrative issues within the Community Consultation Committee, and degraded condition of an area of council road on Old Razorback Rd where SGO had previously tidied as part of a community project.	Available upon request	24 August 2004	Administrative issues corrected, and road complaint forwarded to Wollondilly Shire Council to appropriately action.
008-04	SGCO activities taking place on Mt Taurus well site 9, approved to continue after the 6.00pm curfew	Available upon request	28 October 2004	Operations Manager explained to complainant that this was a very unusual circumstance and that SGCO did obtain Department of Primary Industry (DPI) approval to carry on this activity.
009-04	Well MT4 was being flowed back/dewatered post fracing and unpredictably kicked resulting in a loud whoosh of gas/water slugging to the pit.	Available upon request	08 November 2004	SGCO to ensure that all wells are shut in and dewatered only during SGCO standard hours of operation.
001-05	Complaint on behalf of complainant regarding the movement of an SGO light truck leaving the Johndilo site at 01.00pm on the 26 December 2004 and returning to the Johndilo site at 01.35pm on the 26 December 2004.	Available upon request	30 December 2004	As from 04 January 2005, AGL ceased all administrative operations from the Johndilo site. Furthermore, AGL intends to cease all workshop/yard related operations from the Johndilo site by the 01 April 2005.
002-05	Disturbance to residents during a brief plant shut down.	Available upon request	17 February 2005	Works completed to rectify the root cause of the plant shut down.  Residents were telephoned by AGL to offer apologies for the disturbance.
003-05	Landowner was not notified prior	Available upon request	12 May	Padlocked was immediately

Report No.	Complaint	Complainant	Date	Action Taken
	to authorised AGL preliminary activity on property. Property entry gate was incorrectly padlocked on departure of the property.	request	2005	replaced to correct position.  All personnel associated with preliminary site activities must provide one day's notification prior to undertaking any activity on any property.

**Compliance**

The two DAs which cover the Stage 1 development contain a total of one-hundred and twenty four (124) conditions. The audit identified the Stage 1 Development to be in non-compliance with three (3) of these conditions. These are detailed in Table 4-3.

In summary, no significant environmental issues have been identified in relation to Stage 1 of the Camden Gas Project during the audit period.

**3.2 Stage 2 – Summary of Environmental Performance**

Overall, no significant ongoing environmental issues were identified during the audit in relation to Stage 2 of the project during the audit period.

**Development**

During the audit period Stage 2 of the Project was in a period of expansion with the drilling and/or connection of wells on the Mt Taurus property, EMAI property, Wandinong property, Glenlee property, Menangle Park property and Rosalind Park property. Two wells on the Sugar Loaf property were drilled and fraced.

Operations included gas extraction from approximately sixty (60) wells with gathering lines to Rosalind Park Gas Plant for treatment, odourising and pressurising.

**Air Quality**

The AEPR reported that levels of Nitrogen Oxides in gas emissions from the Rosalind Park Gas Plant exceeded the Environment Protection Licence (EPL) limits for the first quarter of 2005. Monitoring between February 2005 and June 2006 indicated that that RPGP was compliant with the EPL limits. No other exceedances in air pollutants were recorded during the audit period.

### ***Erosion and Sedimentation***

During the site visit twenty-two wells and the Rosalind Park Gas Plant site were observed within the Stage 2 development. No significant areas of erosion were observed. Rehabilitation of the operational wells was observed in most cases.

### ***Contaminated or Polluted Land and Hydrocarbon Contamination***

No significant contamination issues were identified during the audit.

### ***Weeds***

No significant weed invasion issues were noted to be related to AGL's operations.

### ***Bush Fire Management***

Bushfire hazard measures have been implemented around the Rosalind Park Plant as required by Development Consent Conditions, with the exception of the provision of a 20 m asset protection zone. This is because the Rosalind Park Plant is adjacent to a riparian area with vegetation protection requirements preventing the provision of a 20 m asset protection zone. It is recommended that confirmation from the NSW Rural Fire Service is obtained to determine if in the absence of the 20 m asset protection zone alternative bushfire hazard measures in place are sufficient to meet RFS's requirements.

### ***Lighting***

An independent audit was undertaken by Distinctive Landscape Planning (August 2005). The report provided some recommendations to minimise lighting effects from the Rosalind Park gas plant. The recommendations have reportedly been addressed. No complaints regarding visual/light pollution have reportedly been received.

### ***Threatened Flora and Fauna***

The Cumberland Plain Snail was reported to be identified in one area and translocated. No other threatened flora and/or fauna were reportedly identified during the audit period.

### ***Aboriginal and Natural Heritage***

Aboriginal artefacts were reported to be managed in accordance with the EHSMs, Environmental Assessments and Development Consent Conditions.



### **Noise**

Noise monitoring undertaken during the audit period indicated that, after additional mitigation measures were installed at the site, levels were within the EPL limits. No noise complaints were reported to have been received. A noise monitoring program was submitted to the DEC, in accordance with consent conditions. The DEC have recently provided their comments and the noise monitoring program will be finalised in 2007.

### **Visual Amenity**

Management of visual amenity is primarily concerned with the Rosalind Park Gas Plant. Rehabilitation works have continued with six monthly monitoring undertaken by URS and recommendations continuing to be implemented. No complaints regarding visual amenity have reportedly been received during the audit period. Monitoring results and actions to address recommendations are provided in the AEPR.

### **Environmental Incidents**

No significant environmental incidents reportedly occurred during the audit period.

### **Community**

Refer to Community section in Stage 1 above.

### **Compliance**

The four DAs which cover the Stage 2 development contain a total of three-hundred and nineteen (319) conditions. The audit identified Stage 2 of the development to be in non-compliance with fourteen (14) of these conditions, and compliance to be indeterminate with twenty (20) conditions, as outlined in **Table 4-4** below.

The majority of non-compliances identified were of an administrative nature. Some exceedances in EPL pollutant limit requirements occurred during the audit period, but with the exception of oily wastewater levels, appear to currently be in compliance (as of June 2006). Indeterminate compliance was generally due to evidence not being available at the time of the site visit, partly due to the recent change in management from Sydney Gas to AGL with records in the process of being transferred.

In summary, no significant ongoing environmental issues have been identified in relation to Stage 2 of the project during the audit period.

This Section addresses requirement to assess whether the development is complying with the relevant standards, performance measures, and statutory requirements as required by DA 15-1-2002i Condition of Consent No. 37 and DA 282-6-2003i Schedule 5, Condition of Consent No. 10:

*“(d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements”*

The following table identifies the leases, licences and approvals in place for the Camden Gas Project (Stage 1 and Stage 2) at the end of the reporting period, the issuing / responsible Authority, dates of issue, duration (where limited) and relevant comments.

### 4.1 Consents, Leases and Licences

The standards, performance measures and statutory requirements with which the Camden Gas Project Stage 1 and Stage 2 are required to comply with are outlined in the consents, leases and licences listed in **Table 4-1** and **Table 4-2** below.

Table 4-1 Statutory Requirements –Stage 1

Requirement	Date of Requirement
Petroleum Exploration Licence No.2 (PEL), issued by the Department of Primary Industries	27 March 2006 to 28 March 2011
Petroleum Production Lease (PPL) No.1, issued by the Department of Mineral Resources (now the Department of Primary Industries)	2 September 2002 (for a period of 21 years - the lease holder shall relinquish areas where no wells have been drilled within 10 years of granting this lease)
Petroleum Production Lease (PPL) No.2, issued by the Department of Mineral Resources (now the Department of Primary Industries)	10 October 2002 (for a period of 21 years)
Conditions of Consent for DA 15-1-2002i (file no. S00/00945), issued by the NSW Department of Planning. The requirements of the Environment Protection Licence No. 11713 have been incorporated into this Condition of consent:	23 July 2002 (for a period of 21 from date of granting of the production lease). If after 5 years of the date of this consent any well that is subject of this consent has not yet been drilled or completed, then the applicant shall surrender the approval for that well. A Notice of Modification was issued dated 16 May 2006.
Environment Protection Licence No.11713, issued by the Environment Protection Authority, incorporated into the Department of Environment and Conservation (DEC)	Issued January 2003, anniversary date 17 September, review date 17 September 2011.
Conditions of Consent for DA 246-8-2002i (file no. S02/01615), issued by the NSW Department of Planning	20 September 2002 (for a period of 21 years from date of granting of the production lease)
Licence to Keep Dangerous Goods at Ray Beddoe Treatment Plant, issued by WorkCover NSW (file no. 35/034946)	Issued 9 November 2005, renewal date 9 November 2006

# Compliance with Relevant Statutory Requirements

## SECTION 4

Table 4-2 Statutory Requirements – Camden Gas Project Stage 2

Requirement	Date of Requirement
Petroleum Exploration Licence No.2 (PEL), issued by the Department of Mineral Resources (now the Department of Primary Industries).	27 March 2006 to 28 March 2011 The only exploration during June 2004 to June 2006 is applicable to Mount Taurus, as per requirements in letter from DMR (now DPI) dated 28 May 2004.
Petroleum Production Lease (PPL) No.1, issued by the Department of Mineral Resources (now the Department of Primary Industries).	2 September 2002 (for a period of 21 years - the lease holder shall relinquish areas where no wells have been drilled within 10 years of granting this lease)
Petroleum Production Lease No.4 (PPL), issued by the Department of Mineral Resources (now the Department of Primary Industries).	6 October 2004 (for a period of 21 years)
Conditions of Consent for DA 282-6-2003-i, issued by the NSW Department of Planning. The requirements of the Environment Protection Licence and 3A Permit have been incorporated into this Condition of Consent:	16 June 2004 (for a period of 21 years) a Notice of Modification was issued dated 16 May 2006
Environment Protection Licence No.12003, issued by the Environment Protection Authority, incorporated into the Department of Environment and Conservation (DEC), for hazardous, industrial or group A waste generation or storage (>100-500T) and petroleum refining (>200,000 to 500,000 T).	Issued September 2003, anniversary date 22 December, review date 22 December 2007
3A Permit (Ref: PAR9012498), for well site EM19, gas gathering lines and access roads, issued by the Department of Infrastructure, Planning and Natural Resources (now Department of Natural Resources – DNR) under the Rivers and Foreshores Improvement Act 1948, relating to DA 282-6-2003i.	3 March 2005 to 3 March 2006
3A Permit (Ref: PEN0000063), for EMAI gathering line, issued by the Department of Infrastructure, Planning and Natural Resources (now Department of Natural Resources – DNR) under the Rivers and Foreshores Improvement Act 1948, relating to DA 282-6-2003i.	31 August 2004 to 31 August 2005
3A Permit modification (Ref: PAR9012498), for well site EM19, issued by the Department of Infrastructure, Planning and Natural Resources (now Department of Natural Resources – DNR) under the Rivers and Foreshores Improvement Act 1948, relating to DA 282-6-2003i.	29 November 2004 to 29 November 2005
Conditions of Consent for DA-183-8-2004i, issued by the NSW Department of Planning.	16 December 2004 (for a period of 21 years)
Conditions of Consent for DA 9-1-2005, issued by the NSW Department of Planning.	26 May 2005 (for a period of 21 years) a Notice of Modification was issued dated 16 May 2006
Conditions of Consent for DA 75-4-2005, issued by the NSW Department of Planning.	07 October 2005 (for a period of 21 years or expiry date of PEL No.4)

Requirement	Date of Requirement
3A Permit (Ref: SRW279 issued by the Department of Natural Resources – DNR) under the Rivers and Foreshores Improvement Act 1948, for well site SL05, gathering system and access roads, relating to DA 75-4-2005.	17 October 2005 to 17 October 2006
Pipeline Licence No.30, issued by Department of Energy, Utilities and Sustainability, under NSW Pipelines Act 1987.	19 May 2004 (for a period of 20 years)
Bore Water Licence relating to Lot 62 DP 735555 (Licence No: 10BL159415), issued by Department of Natural Resources under the Water Act 1948.	9 June 2005 to 8 June 2010
s90 Consent with Salvage (Consent No: 2148) for EMAI 2 and EMAI 3, issued by Department of Environment and Conservation (DEC) under the Environmental Planning and Assessment Act 1979.	Issued 21 March 2005
s90 Consent with Salvage (Consent No: 2310) for Wandinong Well Site 04 (Aboriginal Site: 552-2-3053), issued by Department of Environment and Conservation	Issued 23 September 2005
s90 Consent with Salvage (Consent No: 2173) for Sugarloaf Farm Well Sites (Aboriginal Sites: 52-2-3049 and 52-2-3046), issued by Department of Environment and Conservation (DEC) under the Environmental Planning and Assessment Act 1979.	Issued 26 October 2005

The audit comprised an assessment of compliance with the six Development Consents issued for Stage 1 and Stage 2, which appear to incorporate the majority of the key environmental requirements of the two Environment Protection Licences (Ref: 12003 and 11713) and the requirements of the Mining Leases, 3A permits and S90 Consents.

## 4.2 Conditions of Consent (CoC) Compliance

The status of the Camden Gas Project performance, during URS's audit, in respect of each of the Conditions of Consent is presented in Appendix A.

Performance categories in respect of compliance are defined as follows:

- Compliant - currently in compliance;
- Non-compliant - currently not in compliance;
- Not applicable - condition of consent not applicable at time of audit;
- Indeterminate - it has not been possible to determine whether compliance exists.

Comments are listed beside each condition to explain aspects of the audit review. Where considered relevant, observations have been made regarding specific compliance issues.

In general, no specific or rigorous assessment of documents required as part of meeting the CoC has been undertaken during the assessment, particularly where they have been signed off by other parties (for example DoP).

A summary of the non-compliance issues identified in the assessment against the consent conditions is provided in Section 4.2.1 below.

Issues identified in the EMAI construction audit (URS, 2004) have not been reported again here. Non-conformances identified during the EMAI construction audit and the status of actions to address those findings are reported in the Annual Environmental Performance Report for Stage 2.

## 4.2.1 Conditions of Consent Assessed as ‘Not Compliant’, or Compliance ‘Indeterminate’

DoP conditions of consent (CoC) not considered to be in compliance or for which compliance was indeterminate are listed below in **Table 4-3** for Stage 1 and **Table 4-4** for Stage 2. The basis for lack of compliance or indeterminate compliance is provided in the tables. Further details are provided in Appendix A.

The two DAs which cover the Stage 1 development contain a total of one-hundred and twenty four (124) conditions. The audit identified Stage 1 to be in non-compliance with three (3) of these conditions, as outlined in **Table 4-3** below.

Since the audit the non-compliance issues for Stage 1 have been closed out. This action is provided in the last column of the table.

Table 4-3

Conditions of Consent Not in Compliance or Compliance is Indeterminate – Stage 1

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 15-1-2002i  Schedule 3 CoC No.37	Non-compliant.	Within two years of the date of this consent and every two years thereafter, the Applicant shall commission and pay the full costs of an Independent Environmental Audit.	SAI Global were appointed to undertake the first audit within two years of the consent being issued on the 23 July 2002. Due to availability, the audit was not undertaken until the first quarter of 2004/ 05.	This audit fulfils the requirements of the second biannual audit. No further action required.	None required.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 15-1-2002i  Schedule 3 CoC No.38 & 39	Non-compliant.	The applicant shall comply with the noise criteria specified.	Noise has been annually monitored at locations A, B, C and D, but not F, E, G and M. In June 2006, monitoring results were unable to demonstrate compliance with EPL Limits. An internal review of operations has been unable to identify any operations changes which could contribute to an increase in site noise.  There have been no complaints in regards to operations noise, however, AGL is continuing to work with the EPA to reduce site noise.	Continue negotiations with the EPA. It is understood that AGL plans to shutdown the RBTP facility in early 2007.	The RBTP facility was shut down in February 2007.
DA 15-1-2002i  Schedule 3 CoC No. 88	Non-compliant.	Air emission concentration limits.	All results were compliant with EPL limits, except for NO <sub>x</sub> levels monitored in June 2005. Scheduled routine maintenance works and further monitoring has since demonstrated continued compliance.	No action recommended.	No action recommended.

# Compliance with Relevant Statutory Requirements

## SECTION 4

The four DAs which cover the Stage 2 development contain a total of three-hundred and nineteen (319) conditions. The audit identified Stage 2 of the development to be in non-compliance with fourteen (14) of these conditions, and compliance to be indeterminate with twenty (20) conditions, as outlined in **Table 4-4** below.

Since the audit, some issues which were identified to have been in non-conformance or compliance was indeterminate have been addressed. This action is provided in the last column of the table.

Table 4-4 Conditions of Consent Not in Compliance or Compliance is Indeterminate – Stage 2

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 3 Condition 11	Indeterminate	The Applicant shall run verticality logs for new gas wells located within coal exploration titles	The verticality logs have reportedly been developed for all wells installed, however these were not observed during the site visit.	Confirm compliance with this CoC.	Due to wells being vertical, geophysical logs with callipers are run as a more suitable tool instead of verticality logs. Logs from each well are kept in hard copy format in the well files in the office.
DA 282 Schedule 3 Condition 13	Indeterminate	The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.	Confirmation has reportedly been received from the building manufacturer (ATCO) that all buildings comply with the requirements of the Building Code of Australia. This confirmation was not observed during the site visit.	Confirm compliance with this CoC.	Atco fax dated 28 Sept 06 available for viewing.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 3 Condition 15 & 17 Schedule 2 DA-183-8- 2004-i Condition 6 Schedule 2 DA 9-1-05 Condition 7	Indeterminate	The Applicant shall provide Camden Council, Campbelltown City Council and Wollondilly Shire Council with the Geographical Positioning System (GPS) co-ordinates and digital survey data for gas well sites and gas gathering systems within their respective Local Government Area, in a format suitable to each of these Councils, within two months of the completion of the gas wells and gas gathering system	Confirmation has reportedly been received by AGL that this requirement has been previously fulfilled. However, evidence was not available at the time of the site visit.	Confirm compliance with this CoC.	Evidence available – SGL letters.
A 282 Schedule 3 Condition 16 & 17 Schedule 2 DA-183-8- 2004-i Condition 7 Schedule 2 DA 9-1-05 Condition 8	Indeterminate	The Applicant shall provide Camden Council, Campbelltown City Council and Wollondilly Shire Council with the wellhead configurations of each gas well within two months of the gas well being completed or two months from the date of this consent, whichever is the later.	Confirmation has reportedly been received by AGL that this requirement has been previously fulfilled by Sydney Gas. However, evidence was not available at the time of the site visit.	Ensure that all correspondence is fulfilled and documented for future wells with a similar requirement.	Ensure that all correspondence is fulfilled and documented for future wells with a similar requirement.



# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 3 Schedule 2 DA-183-8- 2004-i Condition 8 Schedule 2 DA 9-1-05 Condition 9	Indeterminate	The Applicant shall implement reasonable measures to screen gas wells GL 4, GL 5 and GL 10 and the interconnecting gas gathering line from the Banksia Garden picnic area within the Mount Annan Botanic Garden. The Applicant shall undertake such measures to the satisfaction of the Director-General	<p>During the audit it was observed that two of the three wells GL5 and GL10 were screened from the Botanic Garden by existing vegetation. Some vegetation was observed to screen GL4 although it may be visible from the Gardens.</p> <p>No requirement to provide additional screening to that naturally present has reportedly been requested by the Botanic Garden to date.</p>	It is recommended that the Botanic Gardens are contacted to ask whether the existing vegetation is a sufficient screen or whether additional screening is required to meet the requirements of this CoC. If no additional screening is required by the Botanic Gardens it is recommended that this is recorded and filed by AGL, or any actions requested implemented.	AGL to confirm requirements with Botanic Gardens and obtain response in writing if no further screening around the three wells required.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 11	Indeterminate.	<p>The Applicant shall record the frequency of the operation of the flare and shall make this information available for inspection by the Director-General on request.</p> <p>(f) comparison of the frequency, night-time frequency, duration and estimated light level of each type of flare event with the flare events predicted in Table 2 of the following report: URS (2003) "Sydney Gas Proposal Stage 2 Coal Seam Methane Project Visual Assessment of Lighting and Flare" prepared by URS for Sydney Gas dated 6 November 2003."</p>	<p>A record of the frequency of the operation of the flare is maintained in accordance with this CoC and a copy provided with the AEPR.</p> <p>However the requirement of (f) does not appear to be included in the flare log.</p>	<p>Continue to minimise flaring and in the event of flaring, record the details of all such flaring.</p>	<p>The RPGP is operated and manned 24 hours per day, seven days per week. As an Operational Standard, if an operational problem is anticipated, the gas source is cut by shutting in wells immediately, minimising flaring events.</p>

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 29	Indeterminate	The Applicant shall ensure that noise from the normal operation of the premises, excluding flaring events, must not exceed the noise limits.	<p>A review of noise monitoring reports within the audit period indicates that the requirements of this CoC are generally met. Some minor exceedances have been recorded within the audit period of up to 39 dB(A).</p> <p>However, the last attended noise monitoring within the audit period (May 2006) states the following: measurements indicated that the site contribution to noise levels at the residence was 30 dB(A). The weather data confirmed wind speed and direction at the time of the measurement to be 3.22 m/s and east south easterly. This is within the day time noise limit of 37 dB(A).</p> <p>No noise complaints have reportedly been received by AGL.</p>	Continue to monitor noise emissions and investigate any future exceedances to ensure the noise limits are met.	Additional noise mitigation has now been installed. Monitoring indicates compliance.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 34 & 35 & 38	Non-compliant	The Applicant shall prepare and implement a Construction and Well Maintenance Noise Management Protocol to be used for the duration of the project.	A Noise Management Plan for the Camden Gas Project Stage 2 (ERM, December 2004) was prepared. It is understood that the EPA have recently provided comments and the plan is being compiled by an acoustic consultant (Wilkinson Murray).	Construction and Well Maintenance Noise Management Protocol to be completed and implemented.	To be actioned.
DA 282 Schedule 4 Condition 40	Indeterminate	The Applicant must submit a noise compliance report to the EPA and the Department within one month of commissioning of the Gas Treatment Plant and on an annual basis with the Annual Return required by the EPA's licence to assess the project's compliance with the noise limits in Conditions 29 and 31. The noise monitoring must be conducted in accordance with Condition 42	The Gas Treatment Plant was commissioned in December 2004 and a noise compliance report was prepared (ERM, Ref: 0022362RP2, May 2005), this appears to be after the one month required by the CoC.  Following this, quarterly noise compliance reports were submitted to the EPA as a means of reporting results more frequently. In the event of a non compliance, results are duplicated and reported in the Annual Returns.	Ensure quarterly or annual noise compliance reports are prepared and submitted with the Annual Return to the DEC.	Following this, quarterly noise compliance reports were submitted to the EPA as a means of reporting results more frequently. In the event of a non compliance, results are duplicated and reported in the Annual Returns.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 42	Indeterminate	Within six months of the date of this consent, the Applicant shall submit a detailed Noise Monitoring Program for the development to the Director-General for approval prior to commissioning.	A Noise Monitoring Program was submitted to the DEC and comments recently received. A meeting with the DEC is due in February 2007 to finalise the program.	Finalise Noise Monitoring Program with the DEC	To be actioned.
DA 282 Schedule 4 Condition 44	Indeterminate	The Applicant shall obtain the prior approval of the Director-General for the redrilling and/or additional fracing of a gas well.	Re-fracing of one well has been undertaken. Well RP-11 was refraced in March 2006. Approval was obtained for this well dated 7 February 2006 from Glyn Macdonald, Senior Inspector of Coal Mines, Department of Primary Industries. It was not confirmed whether prior approval was also obtained from the DG of DoP.	Ensure that prior approval from the DoP is obtained prior to re-fracing or additional fracing of wells.	To be actioned.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 48	Non-compliant	For each discharge point specified in the table below, the Applicant shall ensure that the concentration of a pollutant discharged at that point does not exceed the concentration limit specified for that pollutant in the table, and where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges	Exceedance in NOx at discharge point No.1. Reported in the annual return to the NSW EPA. Value of 1,012 mg/m3 (limit of 461 mg/m3).  It is suspected that the high NOx level was due to the operation of the engine under-loaded. The June value was compliant and reflected the much higher production rate and consequent increase in gas engine load.	No further action necessary, continue to monitor continuously and quarterly	All subsequent results have not exceeded the concentration limit.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 58	Non-compliant.	For each monitoring/ discharge point or utilisation area specified in the tables below (by a point number, the Applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The Applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns	As requested in Condition 63, air emissions monitoring as required by Condition 58 on a quarterly basis is for the first 12 months of the operation of the Gas Treatment Plant. Due to an unresolved decision between SGL and EPA, the fifth round of quarterly monitoring was not completed.  Detection limits for sulphuric acid mist and sulphur trioxide were on a number of occasions set outside of the concentration limits specified in the EPA licence due to laboratory analysis restrictions. All affected samples showed readings below the detection limits.	A laboratory is now used which can analyse sulphuric acid mist and sulphur trioxide within licence concentration limits.	No further action required.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 59	Non-compliant.	For each monitoring/discharge point or utilisation area specified below (by point number), the Applicant must monitor (by sampling and obtaining results by analysis) each parameter specified in Column 1. The Applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns	Correspondence was submitted to the DEC (EPA) on 19 August 2004, demonstrating the combustion performance of the horizontal flare. As the flare predominantly operates in a pilot mode, it is reported to be impractical and of limited value to sample the flare. Analysis of flare emissions are to be based on the above report and plant availability data.  No further sampling has since been requested from the DEC.	It is recommended that AGL request an EPL variation if DEC are satisfied that the monitoring of the flare is not practical.	AGL are working with the DEC to have the EPL varied and the flare monitoring removed



# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 66 & 67	Indeterminate	Except as may be expressly provided for by a licence under the Protection of the Environment Operations Act 1997 in relation to the development, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997 in carrying out the development.	<p>All sites are reportedly constructed in accordance with the site specific, approved Soil and Water Management Plans (SWPMs).</p> <p>At the time of the site visit there were no wells approved during the audit period that were in the process of installation.</p> <p>Two wells were observed to have recently been installed (GL13 and GL15). These wells were approved since June 2006 and outside of the audit period. However, GL13 had a pit for collecting water in place. The pit liner was observed to contain a couple of small holes. Water was evident outside of the pit, however, it could not be determined whether this was from the well. A sample of the water was taken by AGL at the time of the audit.</p>	<p>Confirm if the water outside of the collection pit was from the well (at well no. GL13).</p> <p>Improve stormwater controls for in-seam drilling where larger quantities of water than that for vertical drilling is produced.</p>	To be actioned.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
			<p>Water management at GL15 (also approved outside of the audit period) also appeared to require some improvement as collection ponds were observed to be full with evidence of some spillage outside of the lined pits with well development water.</p>		

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 72	Indeterminate	Subject to any express provision to the contrary in this licence, the Applicant shall undertake monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area or taken off-site in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	<p>Off-site discharges comprise the release from the sedimentation pond at the Rosalind Park Treatment Plant and off-site disposal of process water from the Treatment Plant.</p> <p>Before releasing the sedimentation pond water, it is visually checked for suspended solids and oils/grease. Discharge from the sedimentation pond has reportedly occurred twice during the audit period. However, no written records of water quality are kept.</p> <p>Process water from the power plant is sampled prior to collection for off-site disposal to an appropriately licensed facility.</p>	Document and record discharge events from the sedimentation pond including a record of visual inspection.	Water is no longer discharged from the sediment pond but is retained on site for use in the event of a grass fire.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 88	Non-compliant	The Applicant shall provide a report of the Indigenous Heritage Monitoring undertaken for the Stage 2 project to NPWS and the Director-General within two months of the Heritage Monitoring being completed.	A copy of the Heritage Monitoring was reportedly provided to the NPWS (now part of the Department of Environment and Conservation NSW - DEC) within two months, however, it was reportedly not provided to the DG.  The report has since been forwarded to the DG.	No further action recommended.	No further action required.
DA 282 Schedule 4 Condition 90	Indeterminate	The Applicant shall ensure roadside plantings for sites EM 16, EM 18, EM 19 and EM 20 are strengthened using the species outline provided in the report titled "Statement of Heritage Impact for Land within the Elizabeth Macarthur Agricultural Institute NSW Agriculture, Menangle" by Geoffrey Britton dated September 2003.	AGL are currently waiting for advice from the EMAI land manager as to if and where the plantings are required.	To obtain advice from the EMAI land manager as to if and where plantings are required.	Plantings were completed in consultation with the EMAI Manager.
DA 282 Schedule 4 Condition 93	Indeterminate	The Applicant shall submit to the Director-General one month prior to the commissioning of the plant, or within such period approved by the Director-General, a compliance report detailing compliance with Conditions 91 and 92.	As this CoC applies to CoC No. 91 (pre-construction) DIPNR approved this CoC in a letter dated 26 November 2004, subject to conditions. Evidence to indicate how these conditions were met was not observed.	Provide evidence of compliance with DIPNR's comments, dated 26 November 2004.	To be actioned.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 97	Non-compliant	The Applicant shall ensure that the storage, handling, and transport of:  Dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code; and  Explosives are carried out in accordance with the requirements of DMR.	At the time of the site visit improvements to Dangerous Goods storage appeared to be required, in particular signage and segregation.	It is recommended that a Dangerous Goods audit is undertaken against the requirements of the Occupational Health and Safety Act 2000 and Regulation 2001 (particularly Chapter 6A) and relevant standards.	To be actioned.
DA 282 Schedule 4 Condition 100	Non-compliant	The quantity of hazardous and/or industrial and/or Group A waste stored at the premises must not exceed 9,000 L at any one time.	The EPA has been notified (5 July 2006) that the current generation and on-site storage volume is exceeding licence limits (of 500 T and hence the CoC limit of 9,000 L) due to changes in the oily waste water separation process.	AGL to continue liaisons with EPA and DOP and request an Environment Protection Licence variation if levels are to remain above licence limits.	To be actioned.
DA 282 Schedule 4 Condition 101	Non-compliant	The quantity of hazardous and/or industrial and/or Group A waste generated and/or stored at the premises must not exceed 85,000L per year.	The EPA has been notified (5 July 2006) that the current generation and on-site storage volume is exceeding licence limits (of 500 T – and hence also the CoC limit of 85,000 L) due to changes in the oily waste water separation process.	AGL to continue liaisons with EPA and DOP and request an Environment Protection Licence variation if levels are to remain above licence limits.	To be actioned.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 4 Condition 102	Non-compliant	The quantity of non controlled aqueous liquid wastes generated at the premises must not exceed 3,000,000 L per year.	Non controlled aqueous liquid wastes generated comprise saline water produced from the drilling and fracing of wells. This water is re-used on site and any excess water is disposed off-site. The quantity of water required to be disposed can exceed 3,000,000 L per year if sufficient number of wells are drilled and fraced and there is no availability for reuse.	Continue liaisons with DoP and EPA and consider requesting an Environment Protection Licence variation if levels are to remain above licence limits.	To be actioned.
DA 282 Schedule 4 Condition 115	Indeterminate	The Applicant shall implement the following bushfire hazard measures at the site:  (b) Provision of a 20 metre asset protection zone managed as an inner protection area, around the perimeter of the Gas Treatment Plant and gas well sites;	The requirements have been implemented except for (b). The RGP site is adjacent to a riparian area with protection requirements and also contains extensive tree plantings, both of which are required by Condition 13.	Confirm with NSW Rural Fire Service that in the absence of the 20 m asset protection zone alternative bushfire hazard measures in place are sufficient to meet their requirements.	To be actioned.
DA 282 Schedule 5 Condition 4	Non-compliant	The Applicant shall review and update the OEMP annually, or as directed by the Director-General.	The OEMP (EHSMP) has not been updated when additional DAs have been issued.	Develop a schedule to ensure that the Operations EHSMP is updated annually.	To be actioned.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 282 Schedule 5 Condition 9	Indeterminate	Within one month of completion of the audit, the Applicant must submit a copy of the audit report to the Director-General, the NSW Heritage Office and NSW Agriculture.	Sydney Gas has confirmed that a copy of the audit was forwarded to Department of Planning, but all correspondence details could not be located.	No further action.	No further action.
DA 282 Schedule 8 Record Keeping	Non-compliant	O5.13 The licensee must record and retain all information related to each consignment of waste.	Evidence that the oily wastewater has been received by the waste treatment plant at Windsor is not always maintained on site.	Ensure that the waste receiver provides a copy of the signed waste transfer documentation.	This requirement has now been removed from the site's Licence.
DA 282 Schedule 8 Reporting Periods	Indeterminate	Regular reporting R4.2 The licensee must supply to the EPA, for each transporter that transported waste from the licensee's premises, the information as set out in Appendix 2, table 1. R4.3 The licensee must supply to the EPA, for each destination within NSW which received waste from the licensee, the information as set out in Appendix 2, table 2. R4.4 Reports to the EPA in accordance with R4.2 and R4.3 shall be supplied.	All waste details are recorded and maintained onsite, however, AGL's waste contractor supplies the EPA with all waste transport and disposal information.	The information required by the NSW EPA during this period should be supplied and future quarterly reports submitted.	This requirement has now been removed from the site's Licence.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 9-1-2005 Condition 10	Indeterminate	The Applicant shall comply with the following in the construction of the gas gathering system pipeline:  (g) the Department shall be notified on the completion of any trenching works.	Compliance with the CoC was generally observed. Sydney Gas is unable to locate correspondence to confirm that DoP were notified upon completion of trenching works.	No further action.	No further action.
DA 9-1-2005 Condition 14	Indeterminate	The Applicant shall obtain a Part 3A Permit prior to the commencement of any crossing of a stream by the gas gathering line	It was not confirmed if a 3A Permit was required under this DA.	Confirm whether a 3A Permit was required under this DA, and if so whether it was obtained.	A 3A permit was not required.
DA 9-1-2005 Condition 15	Non-compliant	Except as may be expressly provided for by a licence under the Protection of the Environment Operations Act 1997 in relation to the development, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997, in carrying out this development.	The EPL had not been updated to include the development under this DA. However, a variation was submitted and the current licence now includes the Glenlee development.	No action recommended.	The works subject to this condition were completed pre this audit.



# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 9-1-2005 Condition 33	Non-compliant.	Three months after commencement of operation of the development, the Applicant shall submit to the Director-General a compliance report detailing compliance with Condition 32, including:  dates of study/plan/system completion/submission and commencement of construction and commissioning;  actions taken or proposed, to implement recommendations made in the studies/plans/systems; and  responses to any requirement imposed by the Director-General under Condition 35	A compliance report was not observed for the development subject to this condition.	Confirm whether a compliance report exists for development subject of this condition.	To be actioned.

# Compliance with Relevant Statutory Requirements

## SECTION 4

CoC No.	Non Compliant / Indeterminate	Summary of CoC Requirement	Comment on Non-Compliance	Recommended Action	Action Undertaken by AGL (since audit)
DA 75-4-2005 Condition 28	Indeterminate	Prior to construction of the wellhead, the Applicant shall provide a Report to the Department from an independent and suitably qualified person approved by the Director-General, to confirm that the design and operation of the wellhead complies with the Department's Locational Guidelines - Development in the Vicinity of Operating Coal Seam Methane Wells (May 2004) for an Automatically Controlled Well (with Separator/Optional Pump). In particular, the Report shall confirm that all safety related systems required by the Guidelines have been included.	Evidence was not available at the time of the site visit to confirm compliance with this CoC. Sydney Gas has confirmed compliance with this condition but could not find correspondence.	No further action.	No further action.
DA 183-8-2004-I Condition 9	Non-compliant	Except as may be expressly provided for by a licence under the Protection of the Environment Operations Act 1997 in relation to the development, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997, in carrying out this development.	The EPL was not updated to include the activities under this DA, however, a variation request was submitted and the Mount Taurus development is now included in EPL No. 12003.	No action recommended.	The works subject to this condition were completed pre this audit.

# Review Adequacy of the Environmental Management Plan

This Section addresses the requirement to assess the adequacy of the applicant's Environmental Management Plan as required by DA 15-1-2002i Condition of Consent No. 37 and DA 282-6-2003i Schedule 5, Condition of Consent No. 10

*e) review the adequacy of the Applicant's Environmental Management Plan.*

## 5.1 Adequacy of Environmental Management Plan (s)

The Camden Gas Project (Stage 1 and Stage 2) has five Environmental Health & Safety Management Plans (EHSMPs). These are as follows:

- EHSMP Drilling Operations – 17 August 2006;
- EHSMP Gas Gathering System Construction – 28 March 2006;
- EHSMP Operations – 13 May 2006;
- EHSMP Rosalind Park Construction – 29 June 2004;
- EHSMP Gas Sales Pipeline Construction – 29 June 2004.

The EHSMPs were approved by DMR (now DPI), DIPNR (now DoP), and EPA (part of DEC) in April 2004 with the EHSMP Rosalind Park Construction and EHSMP Gas Sales Pipeline Construction approved in June 2003.

A brief review of the EHSMPs indicated that the majority of the requirements of the Conditions of Consent are covered by these plans. However, it was also noted that the EHSMPs are relatively generic and field specific environmental management controls are reported to be incorporated into the EHS Induction on a field-by-field basis. A suggestion is to incorporate this level of detail within the EHSMPs on a field-by-field basis

It was noted that environmental performance at Camden is reliant on the experience and knowledge of a few key members of staff, particularly that of the Field Environment and Safety Officer. Since AGL took over the management of the Camden Gas operations in February 2006, the AGL Environmental, Health and Safety Management System (known as Lifeguard) has begun to be implemented. It is expected that further implementation of a documented environmental management system will assist in future environmental management of the Camden operations and reduce reliance on the knowledge of individuals.

URS Australia Pty Ltd (URS) has prepared this report for the sole use of AGL Gas Production (Camden) Pty Ltd in accordance with the usual care and thoroughness of the consulting profession. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this report. It is prepared in accordance with the scope of work and for the purpose outlined in the Proposal dated 6 October 2006 (Ref: Env\_248).

The methodology adopted and sources of information used by URS are outlined in this report. URS has made no independent verification of this information beyond the agreed scope of works and URS assumes no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided to URS was false.

This report was prepared between December 2006 and December 2007 and is based on the information available at the time of the site inspections and information provided between December 2006 and January 2007. URS disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

The audit findings are based upon a limited one day site visit including a half day site tour and a review of documentation made available to URS by AGL. The areas visited were limited to those outlined in Section 2 of this audit report.

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Appendix A  
Status of Compliance with Conditions  
of Consent

**DETERMINATION OF A DEVELOPMENT APPLICATION  
FOR STATE SIGNIFICANT, DESIGNATED AND  
INTEGRATED DEVELOPMENT  
UNDER SECTION 80 OF THE  
*ENVIRONMENTAL PLANNING AND ASSESSMENT ACT  
1979***

I, the Minister for Planning, under Section 80 of the Environmental Planning and Assessment Act 1979, approve the Development Application referred to in Schedule 1, subject to the conditions in Schedule 3 and 4.

The reason for the imposition of the conditions is to:

- (i) Minimise any adverse environmental impacts associated with the development;
- (ii) Provide for the on-going environmental management of the development; and
- (iii) Provide for regular monitoring and reporting on the development.

Andrew Reshaug MP  
**Minister for Planning**

**Sydney,**

**2002**

**File No. S00/00945**

## **SCHEDULE 1**

**Development Application:** DA No. 15-1-2002-i

**Applicant:** Sydney Gas Operations Pty Limited

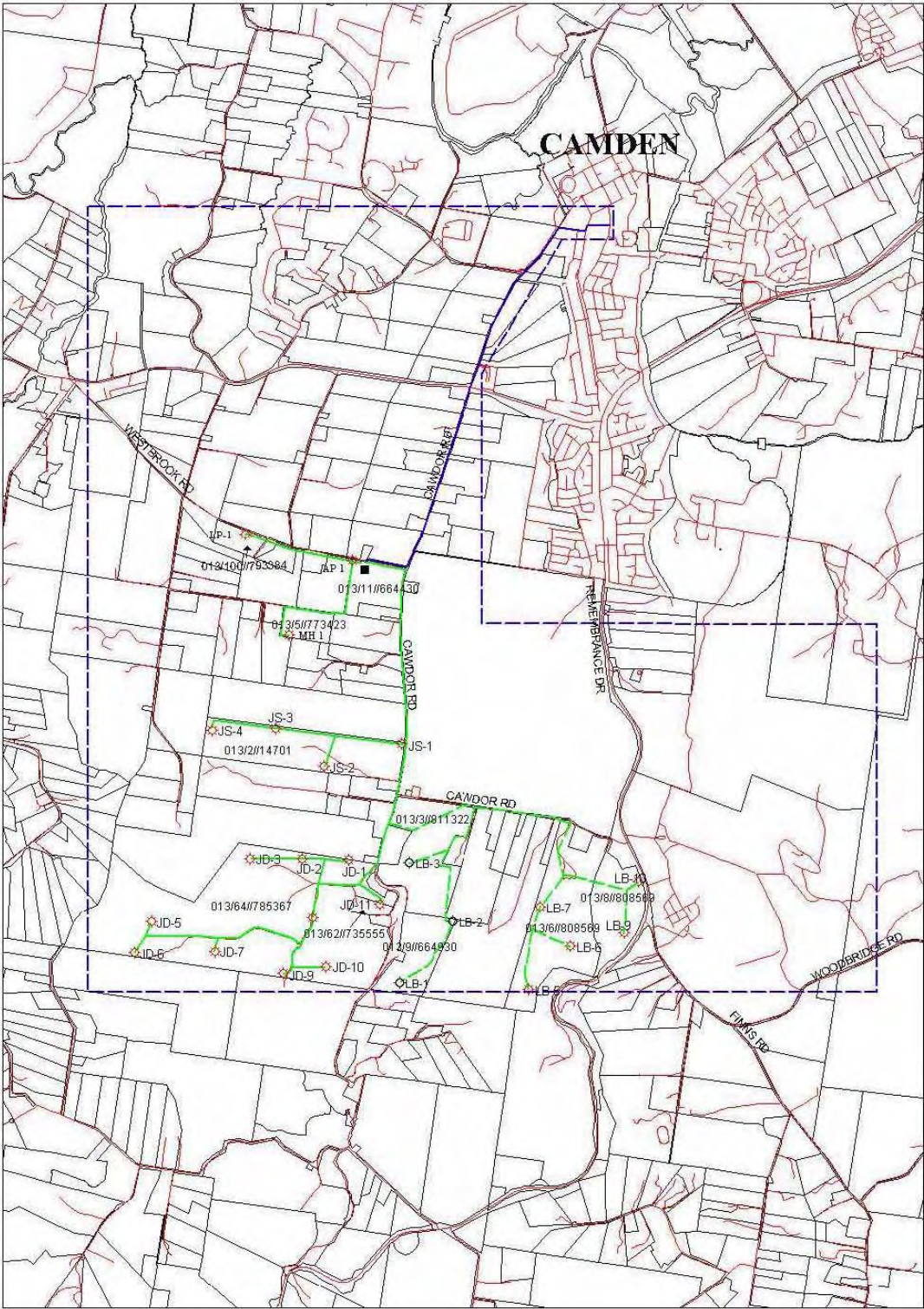
**Consent Authority:** Minister for Planning.

**Land:**

<b>FACILITY</b>	<b>PROPERTY DP NUMBER</b>
Apap 1 (AP-1)	013/11/664430
Joe Stanley 1 (JS-1)	013/2/14701
Joe Stanley 2 (JS-2)	013/2/14701
Joe Stanley 3 (JS-3)	013/2/14701


Joe Stanley 4 (JS-4)	013/2/14701
Johndilo 1 (JD-1)	013/64/785367
Johndilo 2 (JD-2)	013/64/785367
Johndilo 3 (JD-3)	013/64/785367
Johndilo 4 (JD-4)	013/64/785367
Johndilo 5 (JD-5)	013/64/785367
Johndilo 6 (JD-6)	013/64/785367
Johndilo 7 (JD-7)	013/64/785367
Johndilo 9 (JD-9)	013/64/785367
Johndilo 10 (JD-10)	013/64/785367
Johndilo 11 (JD-11)	013/62/735555
Lipscombe 1 (LP-1)	013/100/793384
Logan Brae 1 (LB-1)	013/9/664930
Logan Brae 2 (LB-2)	013/9/664930
Logan Brae 3 (LB-3)	013/3/811322
Logan Brae 5 (LB-5)	013/6/808569
Logan Brae 6 (LB-6)	013/6/808569
Logan Brae 7 (LB-7)	013/6/808569
Logan Brae 9 (LB-9)	013/6/808569
Logan Brae 10 (LB10)	013/6/808569
Mahon 1 (MH-1)	013/5/773423
Treatment Plant	013/11/664430
Site Office	013/64/785367

The Gathering System (coloured green) and the Pilot Project Pipeline (coloured blue) in the map titled "Sydney Gas Operations Pty Ltd Camden Gas Project Petroleum Assessment Lease 1".

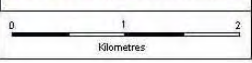


**SYDNEY GAS OPERATIONS PTY LTD  
CAMDEN GAS PROJECT  
PETROLEUM PRODUCTION LEASE 1**

LEGEND	
	Roads
	Completed Production Wells
	Core Holes
	Treatment/Compression Facility
	Gathering System
	Proposed Gathering System
	Pilot Project Pipeline
	Property DP Number
	Petroleum Production Lease



**SYDNEY GAS COMPANY**



0 1 2  
Kilometres



**Proposed Development:** The continued operation of the Camden Coalbed Methane project.

The proposal involves:

- Operation of the existing 20 production wells;
- Operation of 5 additional wells not yet completed and/or drilled;
- Operation of the existing and proposed gas gathering system;
- Operation of the existing gas treatment plant;
- Production of up to 93,000 GJ/month from the treatment plant;
- Sale and distribution of gas to the AGL gas network; and
- Operation of the existing site office and pipeyard depot.

**State Significant Development:** The proposed development is State: Significant development by virtue of a Declaration made by the Minister for Planning on 19 December 2001 under Section 76A of the *Environmental Planning and Assessment Act 1979*.

**Integrated Development:** The proposal requires an additional approval from the Environment Protection Authority under the *Protection of the Environment Operations Act 1997*. Consequently it is classified as Integrated Development under Section 91 of the *Environmental Planning and Assessment Act 1979*.

**BCA Classification:**

Treatment Plant – Westbrook Road, Cawdor	
Class 5	- Demountable Office
Class 10	- Gas Works
	Infrastructure and Storage Containers
Office/Depot – 455 Razorback Road, Cawdor	
Class 5	- Demountable Office
Class 10	- Storage Containers and All Shelter Demountable Buildings

## SCHEDULE 2

### DEFINITIONS

<b>The Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>The Applicant</b>	Sydney Gas Operations Pty Ltd
<b>DA</b>	Development Application
<b>Day</b>	Between 7.00am and 6.00pm Monday to Saturday and 8.00am to 6.00pm Sundays and Public Holidays
<b>The Department</b>	The Department of Planning
<b>The Director-General</b>	The Director-General of the Department of Planning, or her delegate
<b>DLWC</b>	Department of Land and Water Conservation
<b>DMR</b>	Department of Mineral Resources
<b>EIS</b>	Environmental Impact Statement
<b>EPA</b>	Environment Protection Authority
<b>Evening</b>	Between 6.00pm and 10.00pm
<b>GJ</b>	Gigajoule
<b>LAEQ15min</b>	Average noise level, when measured over a 15 minute period
<b>Licence</b>	<i>Environment Protection Licence under the Protection of the Environment Operations Act 1997</i>
<b>Night</b>	Between 10.00pm and 7.00am Monday to Saturday and 10.00pm and 8.00am Sundays and Public Holidays
<b>PAL 1</b>	Petroleum Assessment Lease No. 1
<b>POEO Act</b>	<i>Protection of the Environment Operations Act 1997</i>
<b>Production Lease</b>	Petroleum Production Lease under <i>the Petroleum (Onshore) Act 1991</i>
<b>PRP</b>	Pollution Reduction Program

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## SCHEDULE 3

### CONDITIONS OF CONSENT

#### GENERAL

##### Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction or operation of the development.

<b>Evidence sighted:</b>
No significant issues were identified during the audit.
<b>Compliance status:</b>
Compliant.

##### Terms of Approval

2. <sup>1</sup>The Applicant shall carry out the development generally in accordance with the:
  - (a) DA submitted to the Department on 31 January 2002;
  - (b) *Camden Coalbed Methane Project Petroleum Production Operations – Environmental Impact Statement for the Sydney Gas Company (four volumes)*, dated December 2001 and prepared by Harvest Scientific Services;
  - (c) Letter from Sydney Gas Company dated 4 April 2002 to the EPA in relation to community complaints, lot and DP details of the treatment plant, wells and infrastructure, and map showing existing well locations;
  - (d) Letter from Sydney Gas Company dated 8 April 2002 to the EPA in relation to background noise level monitoring;
  - (e) Letter from Sydney Gas Company dated 11 April 2002 to the EPA in relation to achievable noise levels, operational flaring noise, and ongoing maintenance issues;
  - (f) Letter from Sydney Gas Company dated 11 April 2002 to the EPA in relation to nitrogen dioxide impact assessment and odour issues;
  - (g) Letter from Sydney Gas Company dated 12 April 2002 to the EPA in relation to the 3 additional wells, and maintenance activities;
  - (h) Letter from Sydney Gas Company dated 16 April 2002 to the EPA in relation to noise monitoring, noise levels, operational flaring noise, construction and maintenance activities, nitrogen dioxide assessment, and odour impact assessment;
  - (i) Letter from Sydney Gas Company dated 29 May 2002 to Planning NSW in relation to the risk assessments and drawings for the Westbrook Road to Camden Pipeline; and
  - (j) Conditions of this consent.

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<sup>1</sup> Incorporates an EPA General Term of Approval

**Evidence sighted:**

It was reported that the development was undertaken in accordance with the above.

**Compliance status:**

Compliant

**Period of Approval**

3. This approval is for a period of twenty one (21) years from the date of granting of the production lease.

**Evidence sighted:**

Noted.

**Compliance status:**

Compliant.

**Special Conditions of Approval**

4. The Applicant shall submit a development application for a new treatment plant within two (2) years of the date of this consent. Upon the commissioning of the new treatment plant the Applicant shall cease production from the Ray Beddoe Treatment Plant and proceed to rehabilitate the site in accordance with the Site Rehabilitation Management Plan.

**Evidence sighted:**

A DA was issued for the Rosalind Park gas plant.

**Compliance status:**

Compliant.

5. If after five (5) years of the date of this consent any well that is the subject of this consent has not yet been drilled or completed, then the Applicant shall surrender the approval for that well.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

6. At the expiration of ten (10) years from the date of this consent, the Applicant shall submit to the Director General a reserve report covering the petroleum production lease (PPL) area.

The report shall be prepared by an independent petroleum expert in accordance with relevant definitions approved by the Society of Petroleum Engineers and/or the World Petroleum Congress.

In the absence of a proven reserve, the Applicant shall make a further submission to the Director-General justifying why production should continue.

After reviewing this report, the Director-General may direct the Applicant to carry out certain actions (including the closure and rehabilitation of certain wells).

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

**Note:** The Production Lease to be granted by the Department of Mineral Resources will apply to the PAL 1 area, which is a much larger area than that which the development consent applies to. This consent applies to the land and structures identified in Schedule 1, being the wells, treatment plant, site depot, gas gathering system and pipeline. To minimise the impact of the development on the area, the Production Lease will include a condition which requires the Applicant to relinquish areas that have not been tested for gas production within 10 years of the granting of the lease. The Production Lease would include a condition which requires the Applicant to submit a development application for development of the Stage II production area within 3 years of the date of the production lease.

### Further Approvals

7. Nothing in this consent permits the drilling and operation of any additional wells (beyond the approved 25 wells) or a new treatment plant. These shall be the subject of another development consent or development consents.

**Evidence sighted:**

No additional wells have reportedly been drilled without a DA.

**Compliance status:**

Compliant.

**Note:** The drilling of new gas wells within the production lease area and the production of gas from them, and a new treatment plant would require development consent under the Environmental Planning and Assessment Act, 1979.

### Redrilling and Refracting Management Plan

8. For the purposes of this consent the redrilling and/or additional fraccing of a well does not constitute wellhead maintenance.

**Evidence sighted:**

No redrilling or additional fraccing has reportedly occurred.

**Compliance status:**

Not applicable.

9. The Applicant shall obtain the approval of the Director-General for the redrilling and/or additional fraccing of a well.

**Evidence sighted:**

No redrilling or additional fraccing has reportedly occurred.

**Compliance status:**

Not applicable.

10. The Applicant shall prepare a Redrilling and Refraccing Management Plan in consultation with the Department of Mineral Resources for redrilling and/or refraccing of an existing well. The Plan shall be submitted to the Director-General no later than one month prior to the commencement of the work or within such period as agreed by the Director-General. The Plan shall include, but not necessarily be limited to:

- (a) a description of all the activities to be undertaken on the well site during the redrilling and/or refraccing work;
- (b) details of how the environmental performance of the work will be monitored and what actions will be taken to address identified adverse environmental impacts;
- (c) reference to the relevant parts of the Environmental Management Plan required under condition 15 of this consent;
- (d) compliance with all the relevant environmental performance requirements of this consent; and arrangements for complaints handling procedures during the redrilling/refraccing work.

The Applicant shall give written notification of the proposed redrilling/refraccing work to potentially affected residences and other noise sensitive receivers at least fourteen days prior to work commencing.

**Evidence sighted:**

No redrilling or additional fraccing has reportedly occurred.

**Compliance status:**

Not applicable.

## Compliance

11. Throughout the life of the development, the Applicant shall secure, renew, maintain, and comply with all the relevant statutory approvals applying to the development.

**Evidence sighted:**

Noted. A list of the relevant statutory approvals are provided in the main text of this audit report.

**Compliance status:**

Compliant.

12. The Applicant shall take all reasonable steps to ensure that all of its employees, contractors and subcontractors are made aware of, and comply with, the conditions of this consent relevant to their respective activities.

**Evidence sighted:**

The requirements are included in the approved EHSMPs.

**Compliance status:**

Compliant.

13. <sup>2</sup>The Applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the Protection of the Environment Operations Act, 1997, having regard to the matters in section 83 of that Act.

**Evidence sighted:**

AGL Australian Gas and Light Company (AGL) is considered to be a 'fit and proper person' (ABN 95 052 167 405) and holds an Environment Protection Licence (No.12003) for the Camden Gas Project Stage 2.

**Compliance status:**

Compliant.

## PRODUCTION OPERATIONS PLAN

14. The Applicant shall prepare a Production Operations Plan (POP) for the approval of the Department of Mineral Resources. The POP shall have regard to the conditions of this consent and the licence under the POEO Act. The POP will form the basis for the:
- (a) ongoing operations and environmental management; and
  - (b) ongoing monitoring of the development.

A copy of the POP shall be forwarded to the Department within fourteen days of the DMR's acceptance.

**Evidence sighted:**

A POP was re-submitted in November 2004.

**Compliance status:**

Compliant.

## ENVIRONMENTAL MANAGEMENT

<sup>2</sup> Incorporates an EPA General Term of Approval

## Environmental Management Plan

15. <sup>3</sup>The Applicant shall prepare and implement an Environmental Management Plan (EMP) to provide an environmental management framework, practices and procedures to be followed during the drilling and operation of the development. The EMP shall be prepared in consultation with the relevant authorities (EPA, DMR, DLWC). The EMP shall include, but not necessarily be limited to:
- (a) identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
  - (b) a description of the roles and responsibilities for all key personnel involved in the drilling and operation of the development;
  - (c) the overall environmental policies and principles to be applied to the operation of the development;
  - (d) standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
  - (e) management policies to ensure that environmental performance goals are met and to comply with conditions of this consent; and
  - (f) include the following detailed plans:
    - Noise Management Plan;
    - Soil and Water Management Plan;
    - Water Quality Management Plan;
    - Traffic Management Plan;
    - Vegetation and Landscape Management Plan;
    - Waste Management Plan; and
    - Site Rehabilitation Management Plan

<b>Evidence sighted:</b>
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EHSMPs have been developed and approved.
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<b>Compliance status:</b>
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Compliant.
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16. The EMP shall be submitted for the approval of the Director-General within three months of the date of this consent, or within such period otherwise agreed by the Director-General.

<b>Evidence sighted:</b>
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EHSMPs have been developed and approved.
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<b>Compliance status:</b>
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Compliant.
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17. The Applicant shall supply a copy of the EMP to the EPA, DLWC, DMR, Wollondilly Council and Camden Council within fourteen days of the Director-General's approval. The Applicant shall ensure that a copy of the EMP is publicly available.

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<sup>3</sup>Incorporates an EPA General Term of Approval



**Evidence sighted:**

The EHSMPs were reported to have been supplied to the above – pre this audit period.

**Compliance status:**

Not applicable within this audit period.

18. The Applicant shall review and update the EMP regularly, or as directed by the Director-General.

**Evidence sighted:**

The EHSMPs (Drilling, Operations, and Gas Gathering System construction) were reviewed in 2006.

**Compliance status:**

Compliant.

**Note:** Submission of a copy of the approved Plan to other Government agencies does not mean that their approval is required. The Plan is for the information of the agency

**Noise Management Plan**

19. The Applicant shall prepare and implement a Noise Management Plan for the whole site. The Plan shall include, but not necessarily be limited to:
- (a) identification of the potential sources of noise during drilling and operation;
  - (b) the noise criteria for these activities;
  - (c) details of what actions and measures would be implemented to ensure that these operations would comply with the relevant noise criteria;
  - (d) describe how the effectiveness of these actions and measures would be monitored during the life of the development, clearly indicating who would conduct the monitoring, how often this monitoring would be conducted, how the results of this monitoring would be recorded and reported to the Director-General, and if any non-compliance is detected; and
  - (e) describe what procedures would be followed to ensure compliance.

**Evidence sighted:**

A noise management plan is understood to have been prepared but is now incorporated into the EHSMPs

**Compliance status:**

Compliant.

## Soil and Water Management Plan

20. <sup>4</sup>The Applicant shall prepare and implement a Soil and Water Management Plan (SWMP) for the whole site. This plan shall include, but not necessarily be limited to:
- (a) the measures to be implemented to minimise the potential for soil erosion and the discharge of
  - (b) sediment and other pollutants to lands and/or waters during drilling activities;
  - (c) the measures to be implemented to mitigate the impacts of stormwater run-off from and within the site following the completion of drilling activities;
  - (d) demonstrate that erosion and sedimentation control measures will conform with, or exceed, the relevant requirements and guidelines contained in the Department of Housing's Managing Urban Stormwater: Soils and Construction;
  - (e) consistency with the stormwater management plan for the catchment, should one exist, or with the EPA's Managing Urban Stormwater: Council Handbook should a stormwater management plan for the catchment not exist;
  - (f) measures to rehabilitate erosion-affected areas and areas the subject of excavation, including tree, shrub and/or cover crop species and implementation; and
  - (g) management procedures for all surface and groundwater collection and storage structures on the site, including a maintenance program for associated infrastructure (eg. pipes, pumps, dam walls, etc.) and a program for desilting of those structures, where relevant.

<b>Evidence sighted:</b>
SWMPs have been approved for all wells.
<b>Compliance status:</b>
Compliant.

## Water Quality Management Plan

21. The Applicant shall prepare and implement a Water Quality Management Plan for the whole site. This plan shall include, but not necessarily be limited to:
- (a) provide details of an appropriate soil sampling and monitoring program to ensure that areas used for waste water application do not lead to an unacceptable build-up of salts within the soil profile;
  - (b) implement a program of regular testing of waste water quality for compounds, nutrients and metals, as outlined in Table 7.8 of the EIS; and
  - (c) details of the well maintenance procedures to ensure the integrity of the well isolation components to prevent the cross contamination of groundwater aquifers.

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<sup>4</sup> Incorporates an EPA General Term of Approval

**Evidence sighted:**  
Pre-audit period.

### **Traffic Management Plan**

22. The Applicant shall prepare and implement a Traffic Management Plan for the whole site. This plan shall include, but not necessarily be limited to:
- (a) Identification of the potential traffic and transport impacts associated with the development and measures to limit traffic movements in the PAL 1 area;
  - (b) restrictions on the movement of heavy vehicles during school pick-up/drop-off times;
  - (c) details of traffic management measures associated with the construction of pipelines within public roads; and
  - (d) measures to reduce the transportation of plant material and/or dirt off site.

**Evidence sighted:**  
Pre-audit period.

### **Vegetation and Landscape Management Plan**

23. The Applicant shall prepare and implement a Vegetation and Landscape Management Plan for the whole site. This plan shall include, but not necessarily be limited to:
- (a) measures to protect mature trees as part of the well drilling or gas gathering pipeline construction activities;
  - (b) details of all landscaping to be undertaken on the site;
  - (c) ensure that tree and shrub species used for landscaping of the site are indigenous to the locality; and
  - (d) details of a program to ensure that all landscaped areas are maintained in a tidy, healthy state.

**Evidence sighted:**  
Pre-audit period.

### **Waste Management Plan**

24. The Applicant shall prepare and implement a Waste Management Plan for the whole site. This plan shall include, but not necessarily be limited to:
- (a) measures to minimise the production and impact of waste produced at the site during drilling and operation;
  - (b) implementation of waste reduction, reuse and recycling principles;
  - (c) details of the reuse and recycling of waste water produced/collected on the site, including collection and handling procedures;

- (d) details of appropriate disposal methods in the event that reuse and recycling are not available or are not practicable; and
- (e) programs for involving and encouraging employees and contractors to minimise domestic waste production on the site and reuse/recycle where appropriate.

**Evidence sighted:**

Pre-audit period.

**Site Rehabilitation Management Plan**

25. The Applicant shall prepare and implement a Site Rehabilitation Management Plan for the whole site. This plan shall include, but not necessarily be limited to:

- (a) details of the staging and timing for rehabilitation works;
- (b) ongoing management strategies to ensure the success of rehabilitation works;
- (c) details of the establishment of vegetation and all landscaping to be undertaken including flora species, location of grassed areas, garden beds and other vegetated areas, and mature height and width measurements of all flora species; and
- (d) the measures to remediate sites following the decommissioning of the wells, pipelines and treatment plant.

**Evidence sighted:**

Currently being developed.

**Compliance status:**

Compliant.

**PERFORMANCE REPORTING**

**Condition Report**

26. The Applicant shall prepare a Condition Report on residences and structures that may be potentially affected by drilling/fracing work, including the redrilling and refracing of an existing well.

The Applicant shall undertake an inspection of the residence and/or structure prior to work commencing, and a follow up inspection within one month of the completion of the work. The Applicant shall take immediate action for repair of any damage to the residence or structure as a result of the work and to avoid any further damage. A copy of the Condition Report shall be submitted to the Director-General and the DMR after completion of the work.

**Evidence sighted:**

Pre-audit period.

## Incident Reporting

27. The Applicant shall notify the EPA, DMR and the Director-General of any incident with significant off-site impacts on people or the biosphere environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the Director-General, the EPA, DMR, Wollondilly Council and Camden Council within seven days of the date on which the incident occurred.

<b>Evidence sighted:</b>
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No incidents have been reported.
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<b>Compliance status:</b>
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Not applicable.
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28. The Applicant shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with condition 27 of this consent, within such period as the Director-General may agree.

<b>Evidence sighted:</b>
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No incidents have been reported.
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<b>Compliance status:</b>
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Not applicable.
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## Complaints Register

29. The Applicant shall record details of all complaints received in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:
- (a) the date and time, where relevant of the complaint;
  - (b) the means by which the complaint was made;
  - (c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
  - (d) the nature of the complaints;
  - (e) any action(s) taken by the Applicant in relation to the complaint, including any follow-up contact with the complainant; and
  - (f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the EPA or the Director-General upon request. The Applicant shall also make summaries of the register, without details of the complainants, available for public inspection.

<b>Evidence sighted:</b>
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Complaints are recorded in accordance with this CoC and recorded in the AEPR.
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<b>Compliance status:</b>
---------------------------

Compliant.

### **Risk Assessment**

30. Within six months from the date of this consent, the Applicant shall submit a compliance report to the Director-General confirming that the recommendations (1 to 17) made in the Quantified Risk Assessment dated September 2000 by McCracken Consulting have been satisfactorily implemented. Where a recommendation has not been implemented or completed, justification must be provided in the compliance report.

**Evidence sighted:**  
Pre-audit period.

31. Within six months from the date of this consent, the Applicant shall submit a compliance report to the Director-General confirming that the actions (1 to 66 and A to SS) arising from the HAZOP study report dated May 2001 by McCracken Consulting have been satisfactorily implemented. Where an action has not been implemented or completed, justification must be provided in the compliance report.

**Evidence sighted:**  
Pre-audit period.

32. Within six months from the date of this consent, the Applicant shall submit for approval by the Director-General, a document setting out a comprehensive Safety Management System, covering all operations on site and associated transport activities involving hazardous materials. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures. Records shall be kept on site and shall be available for inspection by the Director-General on request. The Safety Management System shall be developed in accordance with the Department of Urban Affairs and Planning's Hazardous Industry Planning Advisory Paper No. 9 "Guidelines for the Development of Safety Management Systems".

**Evidence sighted:**  
Pre-audit period.

### **EPA Annual Return**

33. The applicant shall provide an Annual Return to the EPA in relation to the development as required by any licence under the POEO Act. In the return the Applicant shall report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of fees (administrative fees and where relevant, load based fees) that are payable. If load based fees

apply to the activity the Applicant will be required to submit load based fee calculation worksheets with the return.

**Evidence sighted:**

Annual returns were observed on the EPAs publicly accessible website to have been submitted.

**Compliance status:**

Compliant.

**Annual Environmental Performance Reporting**

34. Within twelve months of the date of this consent, and annually thereafter during the life of the development, the Applicant shall submit an Annual Environmental Performance Report to the Director-General. This report shall include, but not be limited to:

- (a) the standards, performance measures and statutory requirements the development is required to comply with;
- (b) an assessment of the environmental performance of the development to determine whether it is complying with these standards, performance measures, and statutory requirements;
- (c) copy of the Complaints Register for the preceding twelve month period and indicating what actions were (or are being) taken to address these complaints;
- (d) indication of what actions were taken to address any issue and/or recommendation raised by the Community Consultative Committee;
- (e) provision of the detailed results of all the monitoring required by this consent; and
- (f) review of the results of this monitoring, identifying any non-compliance and any significant trends in the data and if any non-compliance is detected, describe what actions and measures would be carried out to ensure compliance, clearly indicating who would carry out these actions and measures, when they would be carried out, and how the effectiveness of these measures would be monitored over time.

**Evidence sighted:**

AEPRs have been submitted as required.

**Compliance status:**

Compliant.

35. The Director-General may require the Applicant to address certain matters identified in the Annual Environmental Performance Report. Any action required to be undertaken shall be completed within such period as the Director-General may agree.

**Evidence sighted:**

Actions required are reported on in subsequent AEPRs.

**Compliance status:**

Compliant.

36. The Applicant shall also submit a copy of the Annual Environmental Performance Report to the EPA, DMR, DLWC, Wollondilly Council and Camden Council. The Applicant shall make a copy of the Report publicly available.

**Evidence sighted:**

Evidence that the most recent AEPR was sent to the Councils, EPA and DPI was observed, dated 20 December 2006.

**Compliance status:**

Compliant.

**Independent Environmental Audit**

37. Within two years of the date of this consent and every two years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full costs of an Independent Environmental Audit. The Independent Environmental Audit shall:

- (a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General;
- (b) be consistent with ISO 14010 – Guidelines and General Principles for Environmental Auditing, and ISO 14011 – Procedures for Environmental Auditing, or updated versions of these guidelines/manuals;
- (c) assess the environmental performance of the development, and its effects on the surrounding environment;
- (d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
- (e) review the adequacy of the Applicant’s Environmental Management Plan; and
- (f) recommend measures or actions to improve the environmental performance of the development, and/or its environmental management and monitoring systems.

Within two months of commissioning the audit, the Applicant must submit a copy of the audit report to the Director-General and the EPA and the DMR. The Director-General may require the Applicant to address certain matters identified in the report and any comments received from the EPA and DMR . Any action required to be undertaken shall be completed within such period as the Director-General may agree.

**Evidence sighted:**

SAI Global were appointed to undertake the first audit within two years of the consent being issued on the 23 July 2002. Due to availability, the audit was not undertaken until the first quarter of 2004/ 05.

**Compliance status:**

Non-compliant.

**Recommended action:**

No action recommended.



## ENVIRONMENTAL PERFORMANCE

### Noise Limits

38. The Applicant shall comply with the noise criteria specified in the table below.

**Table 1 – Noise Limits (dB(A))**

Location (identified in Fig 10.1 of the EIS)	Day L <sub>AEQ15min</sub>	Evening L <sub>AEQ15min</sub>	Night L <sub>AEQ15min</sub>
Receiver Locations B, C and F	37	37	37
Receiver Locations D, E and G to M	37	37	35
Any other residential receiver	35	35	35

**Evidence sighted:**

Independent noise tests at the Ray Beddoe Treatment Plant (RBTP) in June 2005 showed that noise levels are compliant with the Development Consent conditions or are within acceptable EPA field measurement tolerances (2dB). However, noise tests undertaken in June 2006 showed that noise levels are marginally in excess of Development Consent conditions. Interpretation of noise levels when interference by road traffic, aircraft and local wildlife occurs has made reliable statements of compliance difficult. AGL has undertaken a review of all operations since June 2006 monitoring, but has been unable to identify any changes in operations which would contribute to an increase in site noise. Although there have been no complaints made in regards to noise from the RBTP, AGL is continuing to work with the EPA to reduce site noise.

No noise complaints have reportedly been received.

The RBTP facility was closed in February 2007.

**Compliance status:**

Non-compliant.

**Recommended action:**

No further action.

39. For the purposes of assessment of noise levels specified in this consent, noise from the development shall be:
- measured at the most affected point on or within the residential boundary or, where the dwelling is more than 30m from the boundary, at the most affected point within 30m of the dwelling to determine compliance with the LAEQ15min, LAEQday, LAEQevening and LAEQnight noise limits;
  - subject to the modification factors provided in Section 4 of the NSW Industrial Noise Policy; and
  - measured using the “FAST” response on the sound level meter.

**Evidence sighted:**

Noise has been annually monitored at locations A, B, C and D, but not F, E, G and M.

In June 2006, monitoring results were unable to demonstrate compliance with EPL Limits. An internal review of operations has been unable to identify any operations changes which could contribute to an increase in site noise. Although there have been no complaints in regards to operations noise, AGL is continuing to work with the EPA to reduce site noise.

The RBTP facility was closed in February 2007.

**Compliance status:**

Non-compliant.

**Recommended action:**

No further action.

40. Notwithstanding condition 39 of this consent, should direct measurement of noise from the site be impractical, the Applicant may employ an alternative noise assessment method deemed acceptable by the EPA (refer to Chapter 11 of the NSW Industrial Noise Policy). Details of such an alternative noise assessment method accepted by the EPA shall be submitted to the Director-General prior to the implementation of the assessment method.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable.

41. All noise limits specified as part of this consent apply under:

- (a) wind speeds up to 3m/s at 10 metres above ground level; and
- (b) temperature inversion conditions of up to 3<sup>0</sup> C/100m.

**Evidence sighted:**

Noted.

**Compliance status:**

Noted to be considered in noise reports.

## Noise – Well Maintenance

42. The Applicant shall apply all feasible and reasonable noise mitigation measures to planned well maintenance activities in order to achieve the noise limits specified by this consent. Where the noise limits are not achievable the Applicant shall implement management practices as necessary to minimise the potential noise impacts. These management practices are to include, but not be limited to:
- (a) appropriately informing affected residences and other relevant parties at least two weeks in advance of any planned well maintenance activities and updating the information as required;
  - (b) documenting and implementing any specific work practices the Applicant will employ to limit noise;

- (c) documenting the feasible and reasonable noise mitigation measures that will be undertaken to reduce noise impacts from planned well maintenance activities; and
- (d) conducting noise monitoring where appropriate.

**Evidence sighted:**

It was reported that well maintenance is not a significantly noisy operation. All maintenance is undertaken during day time hours.

**Compliance status:**

Compliant.

**Noise – Drilling Impacts**

43. The Applicant shall implement management practices as necessary to minimise the potential noise impacts from drilling work at wells LB-1, LB-2 and LB-3. These management practices are to include, but not be limited to:
- (a) identifying all potentially affected noise sensitive receivers (including residences, schools, commercial premises and noise sensitive equipment) that may be affected by drilling work at these wells;
  - (b) predicting potential noise levels from the proposed well drilling methods where appropriate;
  - (c) identifying and implementing all reasonable and feasible noise mitigation measures to reduce any drilling noise impacts;
  - (d) documenting and implementing any specific work practices the Applicant will employ to limit noise; conducting noise monitoring where appropriate; and
  - (e) appropriately informing affected residences and other relevant parties at least two weeks in advance of any drilling work at wells LB-1, LB-2 and LB-3 and updating the information as required.

**Evidence sighted:**

Wells LB-1, LB-2 and LB-3 have not been drilled.

**Compliance status:**

Not applicable.

**Hours of Operation**

44. All site preparation works and construction activities and specifically those works involving the drilling of wells LB-1, LB-2 and LB-3, except where the Applicant has reached an agreement with all potentially affected residences and other noise sensitive receivers to conduct drilling works outside these hours, shall be restricted to the following times:
- (a) from 7.00am to 6.00pm, Monday to Friday inclusive;
  - (b) from 8.00am to 1.00pm on Saturdays; and
  - (c) at no time on Sunday or a public holiday.

**Evidence sighted:**

Wells LB-1, LB-2 and LB-3 have not been drilled.

**Compliance status:**  
Not applicable.

45. Notwithstanding condition 44 of this consent, the specified hours of operation also apply to:
- (a) planned maintenance activities at any of the wells;
  - (b) planned deliveries to the treatment plant; and
  - (c) planned maintenance activities at the treatment plant.

except where the Applicant has reached an agreement with all potentially affected residences and other noise sensitive receivers, to conduct maintenance works outside these hours.

**Evidence sighted:**  
Wells LB-1, LB-2 and LB-3 have not been drilled.

**Compliance status:**  
Not applicable.

46. Condition 44 of this consent does not apply to the delivery of materials outside the specified hours of operation if that delivery is required by, the police or other authorities for safety reasons, and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is provided to the EPA and affected residences as soon as possible, or within a reasonable period in the case of an emergency.

**Evidence sighted:**  
Wells LB-1, LB-2 and LB-3 have not been drilled.

**Compliance status:**  
Not applicable.

47. The hours of operation specified in condition 44 of this consent may be varied with the written consent of the Director-General, if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected.

**Evidence sighted:**  
Wells LB-1, LB-2 and LB-3 have not been drilled.

**Compliance status:**  
Not applicable.

### **Ray Beddoe Treatment Plant –Reduction of Noise**

48. The Applicant shall prepare and submit to the Department and the EPA a Pollution Reduction Program (PRP) for noise designed to meet the following levels at receiver Locations A to M (identified in Fig. 10.1 of the EIS)”
- (a) an LAEQ15min level of 37 dB(A) for the day time period;
  - (b) an LAEQ15min level of 37 dB(A) for the evening period; and

(c) an LAEQ15min level of 35 dB(A) for the night time period.

These levels are to apply at the most affected point on or within the residential boundary of each nominated receiver or, where the dwelling is more than 30m from the boundary, at the most affected point within 30m of the dwelling.

**Evidence sighted:**  
Pre-audit period.

49. If the Applicant determines that the levels set out in condition 48 of this consent cannot be achieved after all feasible and reasonable mitigation measures have been implemented, then the Applicant is to advise the Department and EPA of the levels that can be feasibly and reasonably achieved.

**Evidence sighted:**  
Pre-audit period.

50. The PRP is to be submitted to the Department and the EPA within six months of the date of the consent for the development. PRP implementation is to be undertaken in the period from six months to eighteen months from the date of development consent.

**Evidence sighted:**  
Pre-audit period.

51. The PRP shall include a timetable for the implementation of mitigation measures. If the implementation of mitigation measures is to progress in stages, then the PRP is to specify the noise levels that will be achieved following the implementation of each intermediate stage.

**Evidence sighted:**  
Pre-audit period.

## Odour

52. Environment Operations Act 1997, the Applicant shall not cause or permit any offensive odours to be emitted from the site. For the purposes of this condition, "offensive odour" has the same meaning as provided for by the *Protection of the Environment Operations Act 1997*.

**Evidence sighted:**  
No odour complaints have reportedly been received within the audit period.

**Compliance status:**  
Compliant.

## Water Quality Impacts

53. Except as may be expressly provided for by a licence under the *Protection of the Environment Operations Act 1997*, the Applicant shall

comply with section 120 of the *Protection of the Environment Operations Act 1997* in carrying out the development.

**Evidence sighted:**

No water quality impacts were observed at the time of the site visit.

**Compliance status:**

Compliant.

**Waste Water**

54. Waste water from the construction, installation and operation of wells and associated infrastructure shall only be applied to the following areas:

- (a) dust suppression on any unsealed roads within PAL 1;
- (b) irrigated onto pastures within PAL 1;
- (c) evaporation dam; and
- (d) reinjection into gas wells.

The Applicant shall prepare a detailed feasibility study of reinjection of waste water into a gas well if this method of disposal of waste water is proposed. The approval of the Director-General shall be obtained for reinjection of waste water into a gas well.

Note: Section 120 of the *Protection of the Environment Operations Act 1997* applies to the disposal of waste water. This section refers to the pollution of waters.

**Evidence sighted:**

Re-injection of wastewater is not undertaken.

**Compliance status:**

Not applicable.

55. Spray from waste water application shall not drift beyond the boundary of the waste water utilisation area to which it is applied.

**Evidence sighted:**

Wastewater application is not undertaken.

**Compliance status:**

Not applicable.

56. The Applicant shall ensure that areas proposed to be used for waste water application can effectively utilise the waste water. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the liquids. The Applicant may be required to undertake monitoring of land and receiving waters to determine the impact of waste water application.

**Evidence sighted:**

Wastewater application is not undertaken.

**Compliance status:**

Not applicable.

57. The Applicant shall ensure that all waste water that is used for dust suppression and/or irrigation has a salinity measure that does not exceed 800 µS/cm.

**Evidence sighted:**

Wastewater application is not undertaken.

**Compliance status:**

Not applicable.

**Dust**

58. The Applicant shall ensure that activities are carried out in a manner that will minimise the emission of dust from the site, including traffic generated dust from the site access roads.

**Evidence sighted:**

Dust does not appear to be a significant issue for the operating site. No particularly dusty or unsealed/grassed areas were observed during the site visit.

**Compliance status:**

Compliant.

59. The Applicant shall take all practicable measures to ensure that all vehicles entering or leaving a site, carrying a load that may generate dust, are covered at all times, except during loading and unloading. Any such vehicles shall be covered or enclosed in a manner that will prevent emissions of dust from the vehicle at all times.

**Evidence sighted:**

If shale is required it is wet and not dusty.

**Compliance status:**

Compliant.

60. The Applicant shall take all practicable measures to minimise the generation of wind-blown dust from soil stockpiles.

**Evidence sighted:**

Not applicable – there are no soil stockpiles.

**Compliance status:**

Not applicable.

**Waste**

61. The Applicant shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing or disposal or any waste generated at the site, to be disposed of at the site, except as expressly permitted by a licence

under the *Protection of the Environment Operations Act 1997*. This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the site, if it requires a licence under the *Protection of the Environment Operations Act 1997*.

**Evidence sighted:**

No waste is reportedly received at the site.

**Compliance status:**

Compliant.

62. Notwithstanding condition 61 of this consent, the Applicant may dispose of waste water generated on the site in accordance with condition 54 of this consent.

**Evidence sighted:**

No waste is reportedly received at the site.

**Compliance status:**

Compliant.

Lighting

63. The Applicant shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as to not create a nuisance to surrounding land uses. The lighting must be the minimum level of illumination necessary, and in general accordance with the *Australian Standard 4282 – 1997 Control of the Obtrusive Effects of Outdoor Lighting*.

**Evidence sighted:**

Pre-audit period.

**Gas Flare**

64. The gas flare located at the treatment plant shall be ground-level (ie. Less than 6.1 metres in height), shrouded, provided with automatic combustion air control, automatic shut-off gas valve and automatic restart system.

Note This condition confirms the existing gas flare structure and specifications.

**Evidence sighted:**

The gas appeared to comply with this condition.

**Compliance status:**

Compliant.

**Activated Carbon Filter**



65. The activated carbon filter on the odour control system shall be replaced prior to breakthrough occurring.

**Evidence sighted:**

This is reported to be undertaken.

**Compliance status:**

Compliant.

**Steel Pipeline**

66. The 200 mm steel pipeline shall not be operated above a pressure of 1.05 MPa.

**Evidence sighted:**

The pipeline is reportedly operated below a pressure of 1.05 MPa

**Compliance status:**

Compliant.

67. The Director-General's approval shall be obtained to operate the steel pipeline pressure above 1.05 MPa. An application to operate the steel pipeline at a higher pressure shall be accompanied by:
- (a) a Final Hazard Analysis of the proposal including the entire steel pipeline and those sections of the plant where the operating pressure will be increased. The analysis shall be prepared in accordance with the Department of Urban Affairs and Planning's Hazardous Industry Planning Advisory Paper No. 6 "Guidelines for Hazard Analysis". The existing land use and compliance with NSW criteria shall be clearly demonstrated. Where further risk reduction could be required as a result of changes in land use, additional risk reduction measures shall be outlined; and
  - (b) a Hazard and Operability Study for the proposal, chaired by an independent qualified person approved by the Director-General prior to the commencement of the study. The study shall be carried out in accordance with the Department of Urban Affairs and Planning's Hazardous Industry Planning Advisory Paper No. 8 "Hazard and Operability Studies".

**Evidence sighted:**

Not applicable.

**Compliance status:**

Not applicable.

**Gas Gathering System Pipeline**

68. The Applicant shall comply with the following in the construction of the gas gathering system pipeline:
- (a) excavated trenches shall not be left uncovered overnight, unless adequate fencing and warning lights are erected;

- (b) signs stating the presence of a buried gas pipeline shall be erected periodically along the length of the trench once the pipeline has been laid;
- (c) trenches are to be restored and reseeded with local grass seeds on completion of the work;
- (d) local council traffic guidelines in respect of work carried out on road verges and underneath roads shall be implemented;
- (e) the pipeline shall be constructed in accordance with the AS 3723-1989; and
- (f) the Department shall be notified on the completion of any trenching works.

**Evidence sighted:**

Pre-audit period.

**LPG Storage**

69. The LPG storage and handling system and procedures shall be in accordance with AS 1596-2002 and industry guidelines.

**Evidence sighted:**

A 60,000 L butane tank is present on the Ray Beddoe gas plant property. It was reported that Kleenheat owned, managed and audited the tank. The tank has been removed from the site.

**Compliance status:**

Compliant.

**Indigenous Heritage**

70. Prior to the commencement of site preparation works for the three (3) additional wellheads and the associated gas gathering system, the Applicant shall clearly indicate the locations of known aboriginal relics on the site, and ensure that all employees and contractors are aware of these locations, to prevent the known relics being impacted upon during site preparation and construction.

**Evidence sighted:**

Pre-audit period.

**Cultural Heritage**

71. If, during the site preparation and/or drilling phases of the development, an unexpected archaeological relic is uncovered, excavation shall cease and an excavation permit under the Heritage Act 1977, shall be obtained from the NSW Heritage Office.

Note: a relic is defined under the Heritage Act as any deposit, object or material evidence:

- (a) which relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and
- (b) which are more than 50 years old.

**Evidence sighted:**

Pre-audit period.

**Site Rehabilitation**

72. The Applicant shall ensure the prompt and effective rehabilitation of all disturbed areas of the site following the completion of construction, operations and associated activities and/or the decommissioning of plant, to minimise the generation of wind erosion dust.

**Evidence sighted:**

Initial rehabilitation around wells has been undertaken.

**Compliance status:**

Compliant.

73. The Applicant shall carry out rehabilitation of the site in accordance with the requirements of the DMR and the Site Rehabilitation Management Plan.

**Evidence sighted:**

Initial rehabilitation around wells has been undertaken.

**Compliance status:**

Compliant.

**ENVIRONMENTAL MONITORING**

**Land Subsidence**

74. The Applicant shall implement a program to monitor any potential land subsidence effects of long term extraction of gas (and water) on the groundwater resource in the PAL 1 area. The Applicant shall consult with the DLWC over the implementation of the monitoring program. The monitoring program shall be submitted for the Director-General's approval.

**Evidence sighted:**

Subsidence is reportedly not a significant issue for gas extraction. Trenched areas are monitored after rehabilitation.

**Compliance status:**

Compliant.

**Vibration Impacts**

75. The Applicant shall carry out monitoring of ground vibrations from well drilling activities (including percussion drilling, casing perforation, hydrofracturing operations and air blasts), as recommended by Coffey Geosciences report titled "Camden Coalbed Methane Project Geotechnical Impact Assessment" and dated 5 December 2001. The results of the monitoring shall be submitted to the Director-General.

**Evidence sighted:**

Pre-audit period.

**Air Emissions**

76. For the purposes of this consent air discharge monitoring points, shall be identified as provided in Table 2 below.

**Table 2 – Identification of Air Discharge Monitoring Points**

Discharge Monitoring Point Identification Number	Type of Monitoring Point	Type of Discharge	Description of Location
1	Air emissions monitoring	Discharge to air	TEG reboiler exhaust ( <i>located on the dehydrator unit as shown in Fig. 3.9 of the EIS</i> )
2	Air emissions monitoring	Discharge to air	Flare ( <i>located on the southern corner of the Treatment Plant as shown in Fig. 3.9 of the EIS</i> )
3	Air emissions monitoring	Air	Coal seam methane gas supply to TEG reboiler ( <i>located on the dehydrator unit as shown in Fig 3.9. of the EIS</i> )
4	Air emissions monitoring	Discharge to air	Odour control system exhaust ( <i>located between the dehydrator unit and final gas filter as shown in Fig 3.9. of the EIS</i> )

**Evidence sighted:**

Noted.

**Compliance status:**

Noted.

**Load Limits**

77. The Applicant will be required to pay load based licensing fees once a licence under the POEO Act has been issued. The licence will identify

the assessable pollutants and load limits for each fee-based activity classification. These assessable pollutants will be required to be monitored and pollutant loads calculated in accordance with the EPA's Load Calculation Protocol. The assessable pollutants and load limits applicable to this development are given in Table 3 below.

**Table 3 – Assessable Pollutant Load Limit**

Assessable Pollutant	Load Limit (kg)
Benzene	Applicant to negotiate with the EPA prior to issue of the licence
Benzo (a) pyrene	Applicant to negotiate with the EPA prior to issue of the licence
Fine particles	Applicant to negotiate with the EPA prior to issue of the licence
Hydrogen sulfide	Applicant to negotiate with the EPA prior to issue of the licence
Nitrogen oxides	Applicant to negotiate with the EPA prior to issue of the licence
Sulfur oxides	Applicant to negotiate with the EPA prior to issue of the licence
VOC's	Applicant to negotiate with the EPA prior to issue of the licence

Note – An assessable pollutant is a pollutant which affects the licence fee payable for the licence. The actual load of an assessable pollutant discharged from the premises during the reporting period must not exceed the load limit specified for the assessable pollutants in Table 3.

**Testing Method – Load Limits**

<b>Evidence sighted:</b> Load base licensing fee paid, as noted on EPA website.
<b>Compliance status:</b> Noted.

78. Clause 17(1) and (2) of the Protection of the Environment Operations (General) Regulation 1998 requires that monitoring of actual loads of assessable pollutants listed in Table 3 of condition 78 of this consent shall be carried out in accordance with the testing method set out in the relevant load calculation protocol for the fee-based activity classification.

<b>Evidence sighted:</b> Noted.
<b>Compliance status:</b> Noted.

**Concentration Limits**

79. The Applicant shall ensure that the concentration of each pollutant listed in Table 4 below does not exceed the concentration limits specified for

that pollutant at discharge monitoring point 1. This condition does not authorise the discharge or emission of any other pollutants.

**Table 4 – Point 1 : Concentration Limits**

Pollutant	Units of measure	100 percentile limit	Reference conditions
Nitrogen oxides	g/m <sup>3</sup>	0.35	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>
Sulphuric acid mist and/or sulphur trioxide	g/m <sup>3</sup>	0.1	Dry, 273 K, 101.3 kPa

**Evidence sighted:**

The following information was provided in the AEPR: A level of NO<sub>x</sub> in the Stage 1 (RBTP) Gas Engine Exhaust of 1,788 mg/m<sup>3</sup> was measured during routine annual testing in June 2005. This value is greater than the Environmental Protection Licence 11713 condition of 350 mg/m<sup>3</sup> (L3 Concentration Limits) and is greater than the values measured in 2004 (1,024 mg/m<sup>3</sup>) and 2003 (565 mg/m<sup>3</sup>). The industry standard for this class of equipment in NSW is 2,000 mg/m<sup>3</sup>.

Following scheduled routine maintenance in September 2005, the level of NO<sub>x</sub> in the Gas Engine Exhaust was again measured and recorded a more accurate and compliant reading of 289mg/m<sup>3</sup>. Annual monitoring completed in June 2006 supported this result with a reading of 224 mg/m<sup>3</sup>.

The results of Sulphur Trioxide/ Sulphuric Acid Mist monitoring completed in June 2005 and June 2006 were 0.0021g/m<sup>3</sup> and 0.0013g/m<sup>3</sup> respectively. These results continue to be far less than the Environmental Protection Licence 11713 condition of 0.1g/m<sup>3</sup>.

**Compliance status:**

Non-compliant.

**Recommended action:**

No action recommended.

**Destruction Efficiency**

80. The Applicant shall ensure that each parameter listed in Table 5 below are equal to or greater than the lower limits specified for that parameter at discharge monitoring point

**Table 5 – Discharge Monitoring Point 1: Destruction Efficiency**

Parameter	Units of Measure	Lower limit	Reference Conditions
Volatile organic compound (VOC) destruction efficiency	%	98	N/A

**Evidence sighted:**

The AGL production manager confirmed compliance for TEG reboiler exhaust.

**Compliance status:**

Compliant.

### Combustion Parameters

81. The Applicant shall ensure that each parameter listed in Table 6 below (over the averaging period) is equal to or greater than the lower limit specified for that parameter at discharge monitoring point 2.

**Table 6 – Discharge Monitoring Point 2 : Combustion Parameter**

Parameter	Units of Measure	Lower limit	Averaging Period
Residence time	s	0.6	Instantaneous
Temperature	0C	760	Instantaneous

**Evidence sighted:**

The AGL production manager confirmed compliance for the flare.

**Compliance status:**

Compliant.

### Site Specific Emission Concentration Limit

82. The Applicant shall submit a report to the EPA, which includes a site specific emission concentration limit for sulfuric acid mist and/or sulfur trioxide (as SO<sub>3</sub>) and sulfur dioxide for discharge monitoring point 1. The date of submission of the report shall be negotiated with the EPA prior to the issue of the licence.

**Evidence sighted:**

Pre-audit period.

83. The emission concentration limits shall be developed in accordance with the Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW and utilise the ground-level concentration criteria specified in Table 7 below.

**Table 7 – Site Specific Emission Concentration Limit**

Pollutant	Design Ground-Level Concentration Criteria (ug/m <sup>3</sup> )	Averaging Time	Percentile
Sulfuric acid mist and/or sulfur trioxide (as SO <sub>3</sub> )	27	3 minutes	99.9
Sulfur dioxide	712	10 minutes	100
	570	1 hour	100

**Evidence sighted:**

Noted.

**Compliance status:**

Noted.

## Monitoring Records

84. The Applicant shall record and retain the details of any monitoring required as a condition of this consent or a licence under the POEO Act, in relation to the development or in order to comply with the load calculation protocol.

<b>Evidence sighted:</b>
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Results are maintained.
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<b>Compliance status:</b>
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Compliant.
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85. The monitoring required under this consent for the concentration of a pollutant emitted to the air, shall be carried out in accordance with:
- (a) any methodology which is required under the POEO Act to be used for the testing of the concentration of the pollutant; or
  - (b) if no such requirement is imposed by or under the POEO Act or by the consent or a condition of the licence or the protocol (as the case may be) requires to be used for that testing; or
  - (c) if no such requirement is imposed by or under the POEO Act or by the consent or a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

**Note:** The *Clean Air (Plant and Equipment) Regulation 1997* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "*Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*".

<b>Evidence sighted:</b>
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Noted.
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<b>Compliance status:</b>
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Noted.
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86. All records required to be kept by the licence shall be:
- (a) in a legible form, or in a form that can readily be reduced to a legible form;
  - (b) kept for at least four years after the monitoring or event to which they relate took place; and
  - (c) produced in a legible form to any authorised officer of the EPA who asks to see them.

<b>Evidence sighted:</b>
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Noted.
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<b>Compliance status:</b>
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Noted.

87. The following records shall be kept in respect of any samples required to be collected:

- (a) the date(s) on which the sample was taken;
- (b) the time(s) at which the sample was taken;
- (c) the point at which the sample was taken; and
- (d) the name of the person who collected the sample.

**Evidence sighted:**

This information is reportedly maintained.

**Compliance status:**

Compliant.

**Requirement to Monitor Concentrations of Pollutants Discharged**

88. The Applicant shall determine the relevant pollutant concentrations and emission parameters specified in Table 8 below, at the discharge monitoring points indicated and employing the sampling and analysis method specified. All relevant pollutant concentrations and emission parameters for each discharge monitoring point shall be determined concurrently and at the frequency specified in the table. The discharge monitoring points are specified in condition 76 of this consent.

**Table 8 – Discharge Monitoring Point Pollutant and Parameter Monitoring**

Pollutant	Discharge Monitoring Point	Unit of Measure	Frequency	Sampling Method
carbon dioxide in stack gases	1 and 3	%	Annual	TM-24
carbon monoxide	1	ppm	Annual	OM-1
dry gas density	1 and 3	kg/m <sup>3</sup>	Annual	TM-23
moisture content in stack gases	1 and 3	%	Annual	TM-22
molecular weight of stack gases	1 and 3	g/gmole	Annual	TM-23
nitrogen oxides	1	g/m <sup>3</sup>	Annual	TM-11
oxygen in stack gases	1 and 3	%	Annual	TM-25
sulfur dioxide	1	g/m <sup>3</sup>	Annual	TM-4
sulfuric acid mist and/or sulfur trioxide	1	g/m <sup>3</sup>	Annual	TM-3
temperature	1 and 3	0C	Annual	TM-2
	2	0C	Continuous	TM-2
tertiary butyl mercaptan	4	Note1	Note1	Note1
velocity	1 and 3	m/s	Annual	TM-2
volatile organic compounds (VOC)	1 and 3	ppm	Annual	OM-2
volumetric flow rate	1 and 3	m <sup>3</sup> /s	Annual	TM-2
	2	m <sup>3</sup> /s	Continuous	CEM-6

Note<sup>1</sup> : Units of measure, frequency and sampling method to be approved by the EPA in writing.

**Evidence sighted:**

All results were compliant with EPL limits, except for NO<sub>x</sub> levels monitored in June 2005. Scheduled routine maintenance works and further monitoring has since demonstrated continued compliance.

**Compliance status:**

Non-compliant.
<b>Recommended action:</b> No further action recommended.

89. The selection of sampling positions is to be carried out in accordance with test method TM-1.

<b>Evidence sighted:</b> Noted.
<b>Compliance status:</b> Noted.

### Community Consultative Committee

90. The Applicant shall establish a Community Consultative Committee to oversee the environmental performance of the development. This Committee shall:

- (a) be chaired by an independent chairperson approved by the Director-General in consultation with the Applicant, Wollondilly Council and Camden Council;
- (b) have four community representatives residing in the PAL 1 area;
- (c) have one representative from each council;
- (d) two representatives appointed by the Applicant (including the environmental officer);
- (e) two (2) representatives from a recognised environmental group;
- (f) meet at least quarterly;
- (g) take minutes of the meeting; and
- (h) make comments and recommendations about the implementation of the development and environmental management plans, monitor compliance with conditions of this consent and other matters relevant to the operation of the development during the term of the consent.

Representatives from relevant government agencies or other individuals may be invited to attend meetings as required by the Chairperson.

<b>Evidence sighted:</b> Refer to DA282-6-2003i for Stage 2.
<b>Compliance status:</b> Compliant.

91. The Applicant shall :
- (a) provide the Committee with regular information on the environmental performance and management of the development;
  - (b) ensure that the Committee has reasonable access to the necessary plans to carry out its functions;
  - (c) consider the recommendations and comments of the Committee and provide a response to the Committee and Director-General;
  - (d) provide access for site inspections by the Committee;
  - (e) make the minutes available for public inspection at Camden and Wollondilly Councils within fourteen days of the Committee meeting, or as agreed by the Committee; and

(f) forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations to the Director-General and the DMR within a month of the Committee meeting.

<b>Evidence sighted:</b> Refer to DA282-6-2003i for Stage 2.
<b>Compliance status:</b> Compliant.

92. If required by the Committee, the Applicant shall establish a trust fund or other funding arrangement that may be agreed between the Applicant and Committee, to be managed by the Chair of the Committee to facilitate the functioning of the Committee, and pay \$5000 per annum to the fund or other arrangement, for the duration of operation in the PAL 1 area, or as otherwise directed by the Director-General.

The monies are to be used only if required for the engagement of consultants to interpret technical information and the like. The annual payment shall be indexed according to the Consumer Price Index (CPI) at the time of payment. The first payment shall be made by the date of the first Committee meeting. A record of the finances of the trust fund during each year shall be provided to the Director-General and Applicant by the Chair on each anniversary of the first payment. Any unspent monies shall be returned to the Applicant each year.

<b>Evidence sighted:</b> The fund has not been requested and is therefore yet to be set up.
<b>Compliance status:</b> Not applicable to date.

## SCHEDULE 4 MANDATORY CONDITIONS FOR ALL EPA LICENCES

### ADMINISTRATIVE CONDITIONS Other activities

(To be used on licences with ancillary activities)

This licence applies to all other activities carried on at the premises, including:

- Gas wells and gathering system.

**OPERATING CONDITIONS** Activities must be carried out in a competent manner

Licensed activities must be carried out in a competent manner.

- This includes:

- (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

**Maintenance of plant and equipment**

- All plant and equipment installed at the premises or used in connection with the licensed activity:

- (a) must be maintained in a proper and efficient condition; and
- (b) must be operated in a proper and efficient manner.

**MONITORING AND RECORDING CONDITIONS** Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

- The record must include details of the following:
  - (a) the date and time of the complaint;
  - (b) the method by which the complaint was made;
  - (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
  - (d) the nature of the complaint;
  - (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
  - (f) if no action was taken by the licensee, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made.

The record must be produced to any authorised officer of the EPA who asks to see them.

**Telephone complaints line**

The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in

relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

This condition does not apply until 3 months after this condition takes effect.

## REPORTING CONDITIONS

### Annual Return documents

- What documents must an Annual Return contain? The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

- (a) a Statement of Compliance; and
- (b) a Monitoring and Complaints Summary.

A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the

licensee a copy of the form that must be completed and returned to the EPA.

### Period covered by Annual Return

- An Annual Return must be prepared in respect of each reporting, except as provided below.

Note: The term “reporting period” is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

- Where this licence is transferred from the licensee to a new licensee,
  - (a) the transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
  - (b) the new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

- Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on
  - (a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
  - (b) in relation to the revocation of the licence – the date from which notice revoking the licence operates.

#### Deadline for Annual Return

- The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

#### Notification where actual load can not be calculated (Licences with assessable pollutants)

Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date.

- The notification must specify:
  - (a) the assessable pollutants for which the actual load could not be calculated; and
  - (b) the relevant circumstances that were beyond the control of the licensee.

#### Licensee must retain copy of Annual Return

- The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

#### Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

- Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- (a) the licence holder; or
- (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

A person who has been given written approval to certify a Statement of Compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review this licence.

#### Notification of environmental harm

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act

Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

#### Written report

- Where an authorised officer of the EPA suspects on reasonable grounds that:

- (a) where this licence applies to premises, an event has occurred at the premises; or
- (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event. The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

- The request may require a report which includes any or all of the following information:
  - (a) the cause, time and duration of the event;
  - (b) the type, volume and concentration of every pollutant discharged as a result of the event;
  - (c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
  - (d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
  - (e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
  - (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
  - (g) any other relevant matters.

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

## GENERAL CONDITIONS

Copy of licence kept at the premises or on the vehicle or mobile plant

A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.

The licence must be produced to any authorised officer of the EPA who asks to see it.

The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.

**DETERMINATION OF A DEVELOPMENT  
APPLICATION  
FOR STATE SIGNIFICANT DEVELOPMENT  
UNDER SECTION 80 OF THE**

***ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979***

I, the Minister for Planning, under Section 80 of the *Environmental Planning and Assessment Act 1979*, approve the Development Application referred to in Schedule 1, subject to the conditions in Schedule 3.

The reason for the imposition of the conditions is to:

- (i) Minimise any adverse environmental impacts associated with the development;
- (ii) Provide for the on-going environmental management of the development; and
- (iii) Provide for regular monitoring and reporting on the development.

Andrew Refshauge MP  
**Minister for Planning**

Sydney,

2002 File :

S02/01615

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**SCHEDULE 1**

<b>Development Application:</b>	DA No. 246-8-2002-i
<b>Applicant:</b>	Sydney Gas Operations Pty Limited
<b>Consent Authority:</b>	Minister for Planning.
<b>Land:</b>	Lot 2 DP 594242, Kay Park, 790 Remembrance Drive, Razorback
<b>Proposed Development:</b>	The connection of 3 existing wells (KP1, KP2, and KP3) to the Ray Beddoe Treatment Plant (in accordance with the attached plan), and the continued production and sale of methane gas from the 3 wells.
<b>State Significant Development:</b>	The proposed development is State Significant development by virtue of a Declaration made by the Minister for Planning on 19 December 2001 under Section 76A of the <i>Environmental Planning and Assessment Act 1979</i> .



## SCHEDULE 2

### DEFINITIONS

The Act The Applicant DA The  
Department The Director-General  
DLWC DMR EPA Production Lease

*Environmental Planning and Assessment Act  
1979* Sydney Gas Operations Pty Ltd  
Development Application The Department of  
Planning The Director-General of the  
Department of Planning, or her delegate  
Department of Land and Water Conservation  
Department of Mineral Resources  
Environment Protection Authority Petroleum  
Production Lease under the *Petroleum  
(Onshore) Act 1991*

## SCHEDULE 3

### CONDITIONS OF CONSENT

#### Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction or operation of the development.

**Evidence sighted:**

The wells subject to this development were drilled under a petroleum exploration licence. This DA covers the connection of three wells to the Ray Beddoe Treatment Plant. These were connected pre this audit period. The wells were not observed at the time of the site visit.

No significant issues were reported to have been associated with the connection of the three wells.

**Compliance status:**

Compliant.

#### Terms of Approval

2. The Applicant shall carry out the development generally in accordance with the:
  - (a) DA submitted to the Department on 2 August 2002; and
  - (b) *Sydney Gas Operations Pty Ltd Kay Park CBM Project Prospecting Exploration Licence 2 Statement of Environmental Effects Exploration Drilling & Gas Gathering Operations*, dated 15/4/02 and prepared by Harvest Scientific Services;
  - (c) *Addendum to Report Camden Coal Bed Methane Project – Kay Park Pipeline Archaeological and Heritage Assessment*, dated May 2002 and prepared by New South Wales Archaeology;
  - (d) Conditions of the consent for DA No. 15-1-2002-i dated 23 July 2002; and
  - (e) Conditions of this consent.

**Evidence sighted:**

The connection of the three wells was reported to have been undertaken in accordance with the above.

**Compliance status:**

Compliant.

#### Period of Approval

3. This approval is for a period of twenty one (21) years from the date of granting of the production lease.

**Evidence sighted:**

Noted.

**Compliance status:**

Compliant.

**Redrilling and Refracking Management Plan**

4. For the purposes of this consent the redrilling and/or additional fracing of a well does not constitute wellhead maintenance.

**Evidence sighted:**

No redrilling or additional fracing has been undertaken.

**Compliance status:**

Compliant.

5. The Applicant shall obtain the approval of the Director-General for the redrilling and/or additional fracing of a well.

**Evidence sighted:**

No redrilling or additional fracing has been undertaken without approval.

**Compliance status:**

Compliant.

6. The Applicant shall prepare and submit to the Director-General a Redrilling and Refracking Management Plan (in accordance with Condition 10 of the consent for DA No. 151-2002-i dated 23 July 2002) for the redrilling and refracking of an existing well.

**Evidence sighted:**

No redrilling or additional fracing has been undertaken.

**Compliance status:**

Not applicable.

7. The Applicant shall give written notification of the proposed redrilling/refracking work to potentially affected residences and other noise sensitive receivers at least fourteen days prior to work commencing.

**Evidence sighted:**

No redrilling or additional fracing has been undertaken.

**Compliance status:**

Not applicable.

**Compliance**

8. Throughout the life of the development, the Applicant shall secure, renew, maintain, and comply with all the relevant statutory approvals applying to the development.

**Evidence sighted:**

Statutory approvals are listed in the main text of this report.

**Compliance status:**

Compliant.

9. The Applicant shall take all reasonable steps to ensure that all of its employees, contractors and subcontractors are made aware of, and comply with, the conditions of this consent relevant to their respective activities.

**Evidence sighted:**

The relevant requirements of the CoC are reported to be communicated in inductions.

**Compliance status:**

Compliant.

**Production Operations Plan**

10. The Applicant shall prepare a Production Operations Plan (POP) for the approval of the Department of Mineral Resources. The POP shall have regard to the conditions of this consent and the Environment Protection Licence under the Protection of the Environment Operations Act 1997. The POP will form the basis for the:

- (a) ongoing operations and environmental management; and
- (b) ongoing monitoring of the development.

A copy of the POP shall be forwarded to the Department within fourteen days of the DMR's acceptance.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

**Environmental Management Plan**

11. The Applicant shall amend the Environmental Management Plan required under

Condition 15 of the consent for DA No. 15-1-2002-i dated 23 July 2002, to include the operation of KP1, KP2 and KP3 and the associated gas gathering system.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

**Condition Report**

12. The Applicant shall prepare a Condition Report on residences and structures that may be potentially affected by drilling/fracking work, including the redrilling and refracking of an existing well.

The Applicant shall undertake an inspection of the residence and/or structure prior to work commencing, and a follow up inspection within one month of the completion of the work. The Applicant shall take immediate action for repair of any damage to the residence or structure as a result of the work and to avoid any further damage. A copy of the Condition Report shall be submitted to the Director-General and the DMR after completion of the work.

**Evidence sighted:**

Pre-audit period

**Incident Reporting**

13. The Applicant shall notify the EPA, DMR and the Director-General of any incident with significant off-site impacts on people or the biosphere environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the Director-General, the EPA, DMR, and Wollondilly Council within seven days of the date on which the incident occurred.

**Evidence sighted:**

No incidents have reportedly occurred during the audit period.

**Compliance status:**

Compliant.

14. The Applicant shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with Condition 13 of this consent, within such period as the Director-General may agree.

**Evidence sighted:**

No incidents have reportedly occurred during the audit period.

**Compliance status:**

Compliant.

**Complaints Register**

15. The Applicant shall record details of all complaints received in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:
- (a) the date and time, where relevant of the complaint;
  - (b) the means by which the complaint was made;
  - (c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
  - (d) the nature of the complaints;
  - (e) any action(s) taken by the Applicant in relation to the complaint, including any follow-up contact with the complainant; and
  - (f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the EPA or the Director-General upon request. The Applicant shall also make summaries of the register, without details of the complainants, available for public inspection.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

**Annual Environmental Performance Reporting**

16. The Applicant shall include the operation of KP 1, KP2 and KP3 and the associated gas gathering system, and the conditions of this consent, in the Annual Environmental Performance Report required under Condition 34 of the consent for DA No. 15-1-2002-i dated 23 July 2002.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

## Independent Environmental Audit

17. The Applicant shall include the operation of KP 1, KP2 and KP3 and the associated gas gathering system, and the conditions of this consent, in the Independent Environmental Audit required under Condition 35 of the consent for DA No. 15-1-2002-i dated 23 July 2002.

<b>Evidence sighted:</b>
Refer to DA 15-1-2002i.
<b>Compliance status:</b>
Compliant.

## Noise – Well Maintenance

18. The Applicant shall apply all feasible and reasonable noise mitigation measures to planned well maintenance activities in order to achieve the noise limits specified by Condition 38 of the consent for DA No. 15-1-2002-i dated 23 July 2002. Where the noise limits are not achievable the Applicant shall implement management practices as necessary to minimise the potential noise impacts. These management practices are to include, but not be limited to:
- (a) appropriately informing affected residences and other relevant parties at least two weeks in advance of any planned well maintenance activities and updating the information as required;
  - (b) documenting and implementing any specific work practices the Applicant will employ to limit noise;
  - (c) documenting the feasible and reasonable noise mitigation measures that will be undertaken to reduce noise impacts from planned well maintenance activities; and
  - (d) conducting noise monitoring where appropriate.

<b>Evidence sighted:</b>
Noise mitigation measures are included in the approved EHSMPs. No noise complaints have been reported.
<b>Compliance status:</b>
Compliant.

## Noise – Drilling Impacts

19. The Applicant shall implement management practices as necessary to minimise the potential noise impacts from any redrilling and refracturing work. These management practices are to include, but not be limited to:
- (a) identifying all potentially affected noise sensitive receivers (including residences, schools, commercial premises and noise sensitive equipment) that may be affected by drilling work at these wells;
  - (b) predicting potential noise levels from the proposed well drilling methods

- where appropriate;
- (c) identifying and implementing all reasonable and feasible noise mitigation measures to reduce any drilling noise impacts;
- (d) documenting and implementing any specific work practices the Applicant will employ to limit noise; conducting noise monitoring where appropriate; and
- (e) appropriately informing affected residences and other relevant parties at least two weeks in advance of any drilling work and updating the information as required.

**Evidence sighted:**

Pre-audit period.

**Water Quality Impacts**

20. Except as may be expressly provided for by a licence under the *Protection of the Environment Operations Act 1997*, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997* in carrying out the development.

**Evidence sighted:**

No issues identified.

**Compliance status:**

Compliant.

**Waste Water**

21. Waste water from the construction, installation and operation of wells and associated infrastructure shall only be applied to the following areas:
- (a) dust suppression on any unsealed roads within the site;
  - (b) irrigated onto pastures within the site;
  - (c) evaporation dam; and
  - (d) reinjection into gas wells.

The Applicant shall prepare a detailed feasibility study of reinjection of waste water into a gas well if this method of disposal of waste water is proposed. The approval of the Director-General shall be obtained for reinjection of waste water into a gas well.

**Evidence sighted:**

The wells were drilled pre-audit period.

22. Spray from waste water application shall not drift beyond the boundary of the waste water utilisation area to which it is applied.



**Evidence sighted:**

Water is not applied to a utilisation area.

**Compliance status:**

Not applicable.

23. The Applicant shall ensure that areas proposed to be used for waste water application can effectively utilise the waste water. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the liquids. The Applicant may be required to undertake monitoring of land and receiving waters to determine the impact of waste water application.

**Evidence sighted:**

Water is not applied to a utilisation area.

**Compliance status:**

Not applicable.

24. The Applicant shall ensure that all waste water that is used for dust suppression and/or irrigation has a salinity measure that does not exceed 800  $\mu\text{S}/\text{cm}$ .

**Evidence sighted:**

Wastewater is not used for dust suppression.

**Compliance status:**

Not applicable.

**Dust**

25. The Applicant shall ensure that activities are carried out in a manner that will minimise the emission of dust from the site, including traffic generated dust from the site access roads.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

26. The Applicant shall take all practicable measures to ensure that all vehicles entering or leaving a site, carrying a load that may generate dust, are covered at all times, except during loading and unloading. Any such vehicles shall be covered or enclosed in a manner that will prevent emissions of dust from the vehicle at all times.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

27. The Applicant shall take all practicable measures to minimise the generation of wind-blown dust from soil stockpiles.

**Evidence sighted:**

Not applicable during audit period.

**Gas Gathering System Pipeline**

28. The Applicant shall comply with the following in the construction of the gas gathering system pipeline:

- (a) excavated trenches shall not be left uncovered overnight, unless adequate fencing and warning lights are erected;
- (b) signs stating the presence of a buried gas pipeline shall be erected periodically along the length of the trench once the pipeline has been laid;
- (c) trenches are to be restored and reseeded with local grass seeds on completion of the work;
- (d) local council traffic guidelines in respect of work carried out on road verges and underneath roads shall be implemented;
- (e) the pipeline shall be constructed in accordance with the AS 3723-1989; and
- (f) the Department shall be notified on the completion of any trenching works.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

**Site Rehabilitation**

29. The Applicant shall ensure the prompt and effective rehabilitation of all disturbed areas of the site following the completion of construction, operations and associated activities and/or the decommissioning of plant, to minimise the generation of wind erosion dust.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

30. The Applicant shall carry out rehabilitation of the site in accordance with the requirements of the DMR and the Site Rehabilitation Management Plan.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

**Community Consultative Committee**

31. The Applicant shall include the operation of KP1, KP2 and KP3 and the associated gas gathering system, and the conditions of this consent, as a matter for the consideration of the Community Consultative Committee (established under Condition 90 of the consent for DA No. 15-1-2002-i dated 23 July 2002).

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

**Environment Protection Licence**

32. The Applicant shall seek a variation to the Environment Protection Licence issued by the EPA for the Petroleum Production Lease No.1 area, to include the operation of the Kay Park wells (KP1, KP2 and KP3) and associated gas gathering system.

**Evidence sighted:**

Refer to DA 15-1-2002i.

**Compliance status:**

Compliant.

## ANNEXURE "A"

### CONDITIONS OF DEVELOPMENT CONSENT

#### SCHEDULE 1

<b>Development Application:</b>	DA No. 282-6-2003-i
<b>Applicant:</b>	Sydney Gas Operations Pty Limited
<b>Consent Authority:</b>	Minister for Infrastructure and Planning
<b>Land:</b>	Refer to <b>Appendix A</b>
<b>Proposed Development:</b>	<p>The Camden Gas Project Stage 2 includes:</p> <ul style="list-style-type: none"><li>• Construction and drilling of 20 wells located on the EMAI Site;</li><li>• Operation and production of gas from the existing (drilled) 23 wells and 20 wells to be constructed (a total of 43 wells);</li><li>• Construction and operation of the gas gathering system;</li><li>• Construction and operation of the gas treatment plant, associated workshop and office facilities; and</li><li>• Production of up to 14.5 petajoules per annum from the gas treatment plant.</li></ul> <p>The location of the Gas Wells, the Gas Gathering System (coloured yellow and blue) and the Gas Treatment Plant as shown in <b>Figure 1</b> "Sydney Gas Camden Gas Project Stage 2 Site Plan" (<b>Appendix B</b>).</p> <p>The location of the crossings of the Gas Gathering System and locations for Part 3A Permits as shown in <b>Figure 2</b> "Camden Gas Project Stage 2 – RFI Act 3A Permit Areas" (<b>Appendix B</b>).</p> <p>The location of the proposed access roads and gas gathering lines as shown in <b>Figure 3</b> "Sydney Gas Camden Gas Project Stage 2 – Location of Access Roads within the EMAI" (<b>Appendix B</b>).</p> <p>The location of the gas gathering system within the EMAI as shown in <b>Figure 4</b> "Sydney Gas Camden Gas Project Stage 2 – Location of Gas Gathering System within the EMAI" (<b>Appendix B</b>)</p>
<b>State Significant Development:</b>	The proposed development is State Significant development by virtue of a Declaration made by the Minister for Infrastructure and Planning on 13 June 2003 under Section 76A of the <i>Environmental Planning and Assessment Act 1979</i> .
<b>Integrated Development:</b>	<p>The proposal is classified as integrated development under Section 91 of the <i>Environmental Planning and Assessment Act 1979</i>, as it requires additional approvals under the:</p> <ul style="list-style-type: none"><li>• <i>Protection of the Environment Operations Act 1997</i>;</li><li>• <i>Rivers and Foreshore Improvement Act 1948</i>; and</li><li>• <i>Mine Subsidence Compensation Act 1961</i></li></ul>
<b>Designated Development:</b>	The proposal is classified as designated development, under Section 77A of the <i>Environmental Planning &amp; Assessment Act 1979</i> , because it is "petroleum works" and therefore meets the criteria for designated development in Schedule 3 of the <i>Environmental Planning &amp; Assessment Regulation 2000</i> .

**BCA Classification:**

Class 1A:	Living Quarters
Class 8:	Demountable Office and Control Room/MCC
Class 8:	Steel Structure Workshop
Class 8:	Compressor Structure
Class 10:	Storage Containers and All Shelter Demountable Building
Class 10A:	Plant Skids – TEG and Meter Skid
Class 10A:	Toilet Blocks

*Note:*

- 1) *To find out when this consent becomes effective, see Section 83 of the Act;*
  - 2) *To find out when this consent is liable to lapse, see Section 95 of the Act; and*
  - 3) *To find out about appeal rights, see Section 97 of the Act.*
-

## SCHEDULE 2

### DEFINITIONS

AEPR	Annual Environmental Performance Report
The Applicant	Sydney Gas Operations Pty Ltd
BCA	Building Code of Australia
CCC	Community Consultative Committee
DA	Development Application
Day	Between 7.00am and 6.00pm Monday to Saturday and 8.00am to 6.00pm Sundays and Public Holidays
The Department	The Department of Infrastructure, Planning and Natural Resources
The Director-General	The Director-General of the Department of Infrastructure, Planning and Natural Resources, or her delegate
DEC	Department of Environment and Conservation
DMR	Department of Mineral Resources
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	Environment Protection Authority (now incorporated within the DEC)
EMAI	Elizabeth Macarthur Agricultural Institute
Evening	Between 6.00pm and 10.00pm
GTA	General Term of Approval
L <sub>AEQ15min</sub>	Average noise level, when measured over a 15 minute period
Land	Land means the whole of a lot in a current plan registered at the Land Titles Office at the date of this consent.
Licence	Environment Protection Licence under the <i>Protection of the Environment Operations Act 1997</i>
Minister	Minister for Infrastructure and Planning
MSB	Mine Subsidence Board
Night	Between 10.00pm and 7.00am Monday to Saturday and 10.00pm and 8.00am Sundays and Public Holidays
NPWS	National Parks and Wildlife Service (now incorporated within the DEC)
PEL	Petroleum Exploration Licence
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Production Lease	Petroleum Production Lease under the <i>Petroleum (Onshore) Act 1991</i>
Protected Land	Land and material that is in or within 40 metres of the top of the bank or shore of "protected waters"
PRP	Pollution Reduction Program
RTA	Roads and Traffic Authority
Site	Land to which the DA applies

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# SCHEDULE 3

## ADMINISTRATIVE CONDITIONS

### Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction or operation of the development.

**Evidence sighted:**

AGL has committed to 'Environment and Ecological Sustainable Development' as outlined in the Environmental Impact Statement for the Development.

Evidence of this commitment and practicable measures taken by AGL were observed during the site visit.

**Compliance status:**

Compliant

### Terms of Approval

2. <sup>1</sup>The Applicant shall carry out the development generally in accordance with the:
  - (a) DA submitted to the Department on 20 June 2003;
  - (b) *Camden Gas Project Stage 2– Environmental Impact Statement for the Sydney Gas Company* (four volumes), dated 19 June 2003;
  - (c) All other documents listed in Appendix C;
  - (d) Drawings No. 32339 SK010 Issue 17 and SK014 Issue 1; and URS Plan LC-0100 Revision G dated 16 June 2004; and
  - (e) Conditions of this consent.

**Evidence sighted:**

The Development has generally been carried out generally in accordance with the above documents. In addition to these documents two modifications and three additional Development Applications have been issued for the Camden Gas Development Stage 2. These additional instruments are as follows:

- Two Notice of Modifications to DA No. 282-6-2003-I dated 26 August 2004 and 16 May 2006;
- DA 9-1-2005, amended by a Notice of Modification dated 16 May 2006;
- DA-183-8-2004i; and
- DA 75-4-2005.

DAs and modifications issued after June 2006 have not been included in this audit period.

**Compliance status:**

Compliant.

3. In the event of an inconsistency between:
  - (a) the conditions of this consent and any document listed from condition 2(a) to 2(d) inclusive, the conditions of this consent shall prevail to the extent of the inconsistency; and
  - (b) any document listed from condition 2(a) to 2(d) inclusive, the most recent document shall prevail to the extent of the inconsistency.

**Evidence sighted:**

Noted.

**Compliance status:**

Compliant.

4. The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
  - (a) Any reports, plans or correspondence that are submitted in accordance with this consent; and
  - (b) The implementation of any actions or measures contained in these reports, plans or correspondence.

<sup>1</sup> Incorporates an EPA General Term of Approval

**Evidence:**

It is a requirement of various Conditions of Consent that DIPNR (now DoP) approve some of the specialist reports prior to commencement of construction. The approval status is provided in the Camden Gas Development Project Commitment Register.

Where DIPNR had commented on reports provided for approval, these comments were observed to have been incorporated into the EMPs. An example was comments made in a letter from DIPNR dated 2 July 2004 which were observed to have been incorporated into relevant EMPs.

**Compliance status:**

Compliant.

**Limits of Approval**

5. This approval is for a period of twenty one (21) years from the granting of the production lease.

**Evidence sighted:**

Noted.

**Compliance status:**

Compliant.

6. The Applicant shall not exceed the maximum production capacity of 14.5 petajoules per annum, from the gas treatment plant.

**Evidence sighted:**

The maximum production capacity of 14.5 petajoules has reportedly not been exceeded. For December 2004 to June 2005 639,231 gigajoules (0.6 petajoules) was reportedly produced, and from July 2005 to June 2006 3,135,484 gigajoules (3.1 petajoules) was produced.

**Compliance status:**

Compliant.

**Special Conditions of Approval**

7. <sup>2</sup>The Applicant must in the opinion of the EPA be a fit and proper person to hold a licence under the *Protection of the Environment Operations Act 1997*, having regard to the matters in s83 of that Act.

**Evidence sighted:**

AGL Australian Gas and Light Company (AGL) is considered to be a 'fit and proper person' (ABN 95 052 167 405) and holds an Environment Protection Licence (No.12003) for the Camden Gas Project Stage 2.

**Compliance status:**

Compliant.

8. <sup>3</sup>Within one month of consent being issued and in any case before the commencement of any construction works causing the Gas Treatment Plant to become scheduled under the *Protection of the Environment Operations Act 1997*, the Applicant must submit, to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2124, a written report containing actual dates for submission of reports where specified in Conditions 126, 56, 62, 63, 43, 60, 85, 86, 71 and 61 of Schedule 4.

**Evidence sighted:**

An Environment Protection Licence has been issued (No.12003) for the Camden Gas Project Stage 2.

**Compliance status:**

Compliant – no further monitoring of CoC required.

9. If after five (5) years of the date of this consent any well that is the subject of this consent has not yet been drilled or completed, then the Applicant shall surrender the approval for that well.

**Evidence sighted:**

Not applicable at this stage of the development.

**Compliance status:**

Not applicable.

<sup>2</sup> Incorporates an EPA General Term of Approval

<sup>3</sup> Incorporates an EPA General Term of Approval



10. At the expiration of ten (10) years from the date of this consent, the Applicant shall submit to the Director-General a reserve report covering the petroleum production lease (PPL) area.

The report shall be prepared by an independent petroleum expert in accordance with relevant definitions approved by the Society of Petroleum Engineers and/or the World Petroleum Congress.

In the absence of a proven reserve, the Applicant shall make a further submission to the Director-General justifying why production should continue.

After reviewing this report, the Director-General may direct the Applicant to carry out certain actions (including the closure and rehabilitation of certain wells).

<p><b>Evidence sighted:</b> Not applicable until 2014.</p>
<p><b>Compliance status:</b> Not applicable.</p>

11. The Applicant shall run verticality logs for new gas wells located within coal exploration titles.

<p>Note: The Petroleum Production Lease that may be granted by the Department of Mineral Resources will apply to the PEL 2 area, which is a much larger area than that which the development consent applies to.</p> <p>This consent applies to the land and structures identified in Schedule 1, being the gas wells, gas treatment plant, associated workshop and office facilities and gas gathering system.</p>
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<p><b>Evidence sighted:</b> The verticality logs have reportedly been developed for all wells installed, however these were not observed during the site visit.</p>
<p><b>Compliance status:</b> Indeterminate.</p>
<p><b>Recommended action:</b> Provide evidence.</p>

**Further Approvals**

12. Nothing in this consent permits the drilling and operation of any additional wells (beyond the approved 43 wells for gas production) or gas gathering lines.

<p><b>Evidence sighted:</b> As of June 2006, 41 of the 43 wells had been installed. Gas well Rosalind Park (RP) 1 and Wandinong (WG) 6 have not been completed.</p>
<p><b>Compliance status:</b> Compliant.</p>

**Structural Adequacy**

13. The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

<p>Note:</p> <ul style="list-style-type: none"> <li>a) Under Part 4A of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.</li> <li>b) Part 8 of the EP&amp;A Regulation sets out the detailed requirements for the certification of development.</li> <li>c) The development is located in the South Campbelltown and Wilton Mine Subsidence Districts. Under Section 15 of the Mine Subsidence Compensation Act 1961, the Applicant is required to obtain the Mine Subsidence Board's approval before constructing or relocating any improvements on the site.</li> </ul>
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<p><b>Evidence sighted:</b> Confirmation has reportedly been received from the building manufacturer (ATCO) that all buildings comply with the requirements of the Building Code of Australia. This confirmation was not observed during the site visit.</p>
<p><b>Compliance status:</b></p>

Indeterminate.

**Recommended action:**  
Provide evidence.

### Public Infrastructure

14. The Applicant shall:
- (a) Repair, or pay the full costs associated with repairing any existing public infrastructure that is damaged by the development;
  - (b) Relocate or pay the full costs associated with relocating any existing public infrastructure that needs to be relocated as part of the development; and
  - (c) Meet the reasonable requirements of Sydney Water and Macarthur Water regarding the construction and operation of the proposed development adjacent to the water mains operated by Sydney Water and Macarthur Water respectively.

**Note:** The Applicant may be required to apply to Sydney Water for a Section 73 Compliance Certificate under the *Sydney Water Act 1994* and to meet Sydney Water's reasonable requirements.

**Evidence sighted:**

There has reportedly been no damage to, or relocation of, any public infrastructure. 'Dial-Before-U-Dig' searches have been undertaken to ensure public infrastructure is avoided.

**Compliance status:**  
Compliant.

### Location of Gas Wells and Gas Gathering Systems

15. The Applicant shall provide Camden Council, Campbelltown City Council and Wollondilly Shire Council with the Geographical Positioning System (GPS) co-ordinates and digital survey data for gas well sites and gas gathering systems within their respective Local Government Area, in a format suitable to each of these Councils, within two months of the completion of the gas wells and gas gathering system.

**Evidence sighted:**

Confirmation has reportedly been received by SGL that this requirement has been previously fulfilled. However, evidence was not available at the time of the site visit.

**Compliance status:**  
Indeterminate.

**Recommended action:**  
Provide evidence.

16. The Applicant shall provide Camden Council, Campbelltown City Council and Wollondilly Shire Council with the wellhead configurations of each gas well within two months of the gas well being completed or two months from the date of this consent, whichever is the later.

**Evidence sighted:**

Confirmation has reportedly been received by SGL that this requirement has been previously fulfilled. However, evidence was not available at the time of the site visit.

**Compliance status:**  
Indeterminate.

**Recommended action:**  
Provide evidence.

17. The Applicant shall provide written notification to the Director-General that it has fulfilled the requirements of Conditions 15 and 16, within two weeks of the information being provided to the Councils.

**Evidence sighted:**

Confirmation has reportedly been received by SGL that this requirement has been previously fulfilled. However, evidence was not available at the time of the site visit.

**Compliance status:**  
Indeterminate.

**Recommended action:**  
Provide evidence.

### Compliance

18. The Applicant shall prepare a Project Commitments Register (PCR) within six months of the date of this consent. The Project Commitments Register shall be submitted to the Director-General for approval. The PCR

shall include all commitments and initiatives referred to in the documents listed in Condition 2(c) (**Appendix C**) and all other documents and supplementary information provided to the Department from the time of DA lodgement to the date of this consent. The PCR shall include, but not necessarily be limited to:

- (a) All commitments and initiatives (environmental, social, economic or project related) that the Applicant has agreed or suggested to implement for this development;
- (b) Timeframe for implementation of the commitment or initiative;
- (c) The responsibility for ensuring that the commitment or initiative is implemented in the manner and timeframe provided by the Applicant; and
- (d) A reference to the document or correspondence that the commitment or initiative was stated by the Applicant.

**Evidence sighted:**

The PCR has been prepared and includes (a) – (d) above. The PCR was approved by DIPNR (in letter dated 26 November 2004). A copy of the PCR was provided in the AEPR 2004 – 2006.

**Compliance status:**

Compliant.

19. The Applicant shall prior to the commencement of substantial construction certify in writing to the Director-General that all the relevant conditions applicable to construction have been complied with.

**Evidence sighted:**

It is considered that the Rosalind Park gas plant and main trunk line are substantial construction.

Refer to CoC No. 20 below.

**Compliance status:**

Compliant.

20. The Applicant shall submit for the approval of the Director-General two weeks prior to the commissioning of the development or within such other period that the Director-General may agree, a compliance report detailing compliance with all the relevant conditions that apply prior to the commissioning of the development.

**Evidence sighted:**

A letter was received from DIPNR (dated 26 November 2004), in response to a request for DIPNR to approve the commissioning of the Development. The letter from DIPNR stated that the Director General (DG) was satisfied that Sydney Gas had complied with all relevant conditions that apply, prior to the commissioning of the Development.

**Compliance status:**

Compliant – no further monitoring of CoC required.

# SCHEDULE 4

## SPECIFIC ENVIRONMENTAL CONDITIONS

### VISUAL AMENITY

#### Visual Performance

1. The Applicant shall implement visual mitigation measures as depicted on the plan "Camden Gas Project Stage 2: Vegetation and Landscape Management Plan" Drawing No LC-0100 Revision G prepared by URS for Sydney Gas dated 16 June 2004 (the "Landscape Design").

**Evidence sighted:**

The mitigation measures have been implemented except for tree plantings in Area A, reportedly due to easement restrictions.

URS monitor the landscape works on a six monthly basis. Three monitoring rounds have been undertaken within this audit period, in August 2005, January 2006 and June 2006. The results of the monitoring and recommendations are provided in the AEPR.

Whilst some actions recommended in the most recent URS landscape monitoring report are required to assist rehabilitation around the Rosalind Park gas plant, AGL appear to be working towards actioning these recommendations.

**Compliance status:**

Compliant.

2. Prior to the commencement of construction of the workshop, office, plant and associated facilities at Rosalind Park, the Applicant shall submit for the approval of the Director-General, a colour scheme (paint colour specifications) for all proposed buildings, fences and associated structures. Colours selected for the facilities (in particular the "Workshop" and "Offices") shall aim to minimise the visual impact of the facility on surrounding land uses and maximise the ability of the facilities to "blend into" the local landscape.

Note: The Applicant where practicable should aim to use darker paint colours on the facilities (such as a dark grey colour).

Wherever practical, the Applicant shall ensure that ground surfaces and stabilisation materials for the facilities at Rosalind Park utilise material in dark shades of colour (such as blue metal and dark coloured mulch).

**Evidence sighted:**

The colour scheme for all proposed buildings was submitted to the DG for approval. All buildings are green and/or grey.

**Compliance status:**

Compliant – no further monitoring of CoC required.

3. The Applicant shall implement reasonable measures to screen gas wells GL 4, GL 5 and GL 10 and the interconnecting gas gathering line from the Banksia Garden picnic area within the Mount Annan Botanic Garden. The Applicant shall undertake such measures to the satisfaction of the Director-General.

**Evidence sighted:**

During the audit it was observed that two of the three wells GL5 and GL10 were screened from the Botanic Garden by existing vegetation. Some vegetation was observed to screen GL4 although it may be visible from the Gardens.

No requirement to provide additional screening to that naturally present has reportedly been requested by the Botanic Garden to date.

**Compliance status:**

Non-compliant.

**Recommendation:**

It is recommended that the Botanic Gardens are contacted to ask whether the existing vegetation is a sufficient screen or whether additional screening is required to meet this CoC. If no additional screening is required by the Botanic Gardens it is recommended that this is obtained in writing and filed by AGL.

#### **Lighting Performance**

4. The Applicant shall take all practicable measures to minimise any off-site lighting impacts from the development.

**Evidence sighted:**

No complaints regarding lighting issues have reportedly been received by AGL.

**Compliance status:**

Compliant.

5. The Applicant shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as to achieve the minimum level of illumination necessary, and in accordance with the *Australian Standard 4282 – 1997 Control of the Obtrusive Effects of Outdoor Lighting*.

**Evidence sighted:**

It is understood that external lighting was directed in accordance with the above AS.

**Compliance status:**

Compliant.

6. The Applicant shall ensure that measures to minimise lighting effects from the operation of the proposed development and the operation of the flare (including under emergency conditions) are implemented as recommended in the following reports (except where inconsistent with the Landscape Design or these conditions):

- (a) Report titled "Camden Gas Plant Stage 2 – Lighting Review with Respect to Obtrusive Effects from Methane Gas Flare" prepared by Bassett Consulting Engineers Pty Ltd for Sydney Gas dated 17 October 2003;
- (b) Report titled "Camden Gas Plant Stage 2 – Lighting Review with Respect to Obtrusive Effects" prepared by Bassett Consulting Engineers Pty Ltd for Sydney Gas dated 14 October 2003;
- (c) Plan titled "Lighting Review to Minimise Obtrusive Light to Mount Gilead Homestead – Drawing No. S5397-E001" prepared by Bassett dated October 2003;
- (d) Plan titled "Camden Gas Plant Phase II proposed Area and Perimeter Lighting Layout-Drawing No. 03-1212-84-301 Revision 2" prepared by Simon Engineering and dated 15 October 2003;
- (e) Report titled "Lighting Scope Camden Gas Phase II" prepared by Simon Engineering, Document Reference No 03 1212 LS-02 dated 13 October 2003; and
- (f) Report titled "Sydney Gas Proposal Stage 2 Coal Seam Methane Project Visual Assessment of Lighting and Flare" prepared by URS for Sydney Gas dated 6 November 2003.

**Evidence sighted:**

An independent audit was undertaken by Distinctive Landscape Planning (August 2005). The report provided some recommendations to minimise lighting effects from the Rosalind Park gas plant. The recommendations have reportedly been addressed.

**Compliance status:**

Compliant.

7. Prior to the commencement of construction of the Gas Treatment Plant, the Applicant must submit to the Director-General or the certifying authority a revised "area and perimeter lighting layout" and "electrical services lighting review" to replace the two plans of this name in the document referred to in condition 6(b) above, taking into account the revisions to the development plans for the Gas Treatment Plant as approved in this consent. The lighting design under these revised plans shall be designed to minimise the effect of obtrusive light on the Mount Gilead Homestead from the Gas Treatment Plant.

**Evidence sighted:**

The DG approved the 'Camden gas Plant Stage 2 – Lighting Review With Respect to Obtrusive Effects Rev 3 by Bassett Consulting Engineers Pty Ltd, dated 28 June 2004', on 2 July 2004.

**Compliance status:**

Compliant.

8. The Applicant must ensure that wherever possible, any scheduled use of the flare occurs during daylight hours.

**Evidence sighted:**

Scheduled use of the flare occurs during daylight hours. The flare log was observed from December 2004 to June

2006. The log indicates that scheduled flaring occurred only during daylight hours.

**Compliance status:**

Compliant.

9. The design of the flare pit must be amended by installing an opaque barrier to a height of 7.5m above the flare tip as depicted on the Landscape Design. The Applicant may remove this barrier with the consent of the owner of Lot 1 DP 807555.

**Evidence sighted:**

An opaque fence to a height of 7.5 m above the flare tip has been installed.

**Compliance status:**

Compliant – no further monitoring of CoC required.

10. The Applicant shall report on the effectiveness of the lighting controls in the AEPR.

**Evidence sighted:**

Lighting controls are reported upon in the AEPR.

**Compliance status:**

Compliant.

11. The Applicant shall record the frequency of the operation of the flare and shall make this information available for inspection by the Director-General on request. The records shall include but not be limited to the following:

- (a) date and time of each flare event;
- (b) duration of each flare event;
- (c) whether the flare operated during daylight or night-time hours;
- (d) the cause for the operation of the flare;
- (e) the number of compressor engines that have been commissioned and operating during the period; and
- (f) comparison of the frequency, night-time frequency, duration and estimated light level of each type of flare event with the flare events predicted in Table 2 of the following report: URS (2003) "Sydney Gas Proposal Stage 2 Coal Seam Methane Project Visual Assessment of Lighting and Flare" prepared by URS for Sydney Gas dated 6 November 2003."

**Evidence sighted:**

A record of the frequency of the operation of the flare is maintained in accordance with this CoC and a copy provided with the AEPR. However the requirement of (f) does not appear to be included in the flare log.

**Compliance status:**

Indeterminate.

**Recommendation:**

Continue to minimise flaring and in the event of flaring record the details of all such flaring.

**Landscaping design**

12. The site shall be landscaped as shown on the Landscape Design and this landscaping shall be maintained for the life of the development.

**Evidence sighted:**

Landscaping has been undertaken in accordance with the Vegetation Landscape Management Plan. The landscaping was completed in February 2005 and maintained in-house.

**Compliance status:**

Compliant.

**Vegetation and Landscape Management Plan**

13. The Applicant shall prepare and implement a Vegetation and Landscape Management Plan for the Gas Treatment Plant site and the gas well sites. The plan shall include, but not necessarily be limited to:

- (a) reasonable measures to protect mature trees as part of the well drilling, gas gathering system and Treatment Plant Site construction activities;
- (b) a landscape strategy detailing the design and proposed planting of trees and shrubs to be undertaken;
- (c) ensuring that tree and shrub species used for landscaping of the site are indigenous to the locality;
- (d) details of a program to ensure that all landscaped areas are maintained in a tidy, healthy state;
- (e) measures intended to maximise the screening of infrastructure from views from the Mt Gilead property through planting and other measures;

- (f) details of the visual appearance of all new buildings, structures and facilities (including paint colours and specifications). New buildings shall be constructed so as to present a neat and orderly appearance and to blend as far as practicable with the surrounding landscape;
- (g) Details of any necessary irrigation system to ensure that adequate supplies of water are made available to all landscaping on site, the trees between the site and Menangle Creek and the trees located on the southern boundary of the Gas Treatment Plant site;
- (h) Details of any necessary methods to be employed in the establishment of trees on cut batters in the event that the excavated surface is not conducive to the planting of vegetation of the type displayed in the Landscape Design;
- (i) provision for assessing and regularly monitoring the health of the trees in the Menangle Creek riparian zone adjacent to the Gas Treatment Plant site. The objective of the monitoring is to determine the health of the trees and to recommend measures (if required) to improve the health of the trees;
- (j) reasonable measures to ensure that mature trees within the riparian corridor along Menangle Creek are retained and protected;
- (k) details of proposed screening works including supplementary planting along the border of the site with Menangle Creek;
- (l) reasonable measures to minimise the impacts of the gas wells on the cultural heritage landscape of the EMAI;
- (m) details of a monitoring program to assess the effectiveness of all visual impact mitigation measures, particularly the measures used to minimise the visual impacts on the Mount Gilead Homestead; and
- (n) reporting the results of the visual impact monitoring in the Annual Environmental Performance Report. The monitoring results will specifically identify any remedial measures required.

The Vegetation and Landscape Management Plan must be submitted and approved by the Director-General prior to commencement of construction on the Gas Treatment Plant site.

**Evidence sighted:**

In accordance with Condition of Consent Schedule 4 Clause 13, AGL prepared a Vegetation and Landscape Management Plan (VLMP). The VLMP was submitted and approved by DIPNR (now DoP) on 2 July 2004.

**Compliance status:**

Compliant – no further monitoring of CoC required.

14. As part of an independent audit required under condition 18, the Vegetation and Landscape Management Plan must make provision for ensuring that landscaping of the Gas Treatment Plant site and surrounds is maintained in an adequate condition by providing details of a monitoring program. Monitoring must be carried out pursuant to the monitoring program every 6 months for the first two years from the commencement of planting and thereafter every 2 years by an independent and suitably qualified and experienced arborist whose appointment has been approved for the purposes of this condition by the Director-General. The monitoring program must include the following features:

- (a) identification of mature trees surrounding the site which afford screening of the Gas Treatment Plant from Mt Gilead Homestead;
- (b) provision for assessing and regularly monitoring the health of landscaping on the site and the trees in the Menangle Creek riparian zone adjacent to the Gas Treatment Plant site. The objective of the monitoring is to determine the health of the trees and to recommend measures (if required) to improve the health of the trees;
- (c) Description of the health of each tree identified under condition (a);
- (d) Recommendation of reasonable measures to ensure that mature trees within the riparian corridor along Menangle Creek are retained and protected, including trees that lie within the transmission line easement to the East of the site;
- (e) Recommendation of any watering or fertilising that needs to be implemented to maintain the landscaping and surrounding trees;
- (f) Recommendation of how to manage the landscaping to promote the maximisation of growth to maturity.

The results and recommendations of the monitoring program must be submitted to the Director-General at the conclusion of each stage of monitoring.

**Evidence sighted:**

Monitoring of the implementation of the VLMP is undertaken by URS. Three monitoring rounds have been undertaken

during this audit period - in August 2005, January 2006 and June 2006.

The results and recommendations are reported at the conclusion of each stage of monitoring and also reported in the AEPR.

The status of actions to address recommendations are reported in the AEPR.

**Compliance status:**

Compliant.

15. (a) The existing trees shown on the Landscape Design adjacent to the southern boundary of the Gas Treatment Plant site, must be retained. They must not be lopped or trimmed except on the advice of an independent arborist whose appointment has been approved for the purposes of this condition by the Director-General that the proposed work is reasonably necessary for safety reasons. The trees must be maintained in a healthy condition.
- (b) If any of the trees described in this condition ceases to provide screening of the quarry from the Mount Gilead Homestead, as a result of the Applicant's activities (other than trimming or lopping undertaken on the advice of the arborist), the Applicant must provide alternative screening to the satisfaction of the Director-General.

**Evidence sighted:**

- a) The existing trees have been retained.  
b) Not applicable as of June 2006.

**Compliance status:**

Compliant.

16. Prior to the commencement of construction on the Gas Treatment Plant site the Applicant must secure the right to implement on land outside the Gas Treatment Plant site for the life of the development any necessary mitigative or screening measures proposed for the Gas Treatment Plant as part of the Vegetation and Landscape Management Plan or as required by this Consent.

**Evidence sighted:**

Landowner consent (R.E. Blooms and Sons Ltd) was observed to have been received on the 10 June 2004.

**Compliance status:**

Compliant.

17. For the purpose of avoiding possible detrimental impact on vegetation screening of the Gas Treatment Plant from the Mt Gilead Homestead due to any clear felling of trees in the area marked "A" on the Applicant's Plan Map Ref M240212 dated 16 June 2004 ("Applicant's Plan") by the holder of the electricity transmission line easement over Lot 1 DP 807555 ("Holder"), the Applicant shall carry out any reasonable and necessary trimming and lopping of those trees provided the Holder requests the Applicant in writing to carry out this trimming and lopping and undertakes in return to refrain from the clear felling of those trees within 5 years of the date of this Consent.

**Evidence sighted:**

No request to trim or lop trees has been made to AGL.

**Compliance status:**

Not applicable.

**Independent Audit**

18. The Applicant shall commission and pay the full cost of an Independent Audit of the performance of the mitigation measures implemented to prevent and minimise visual impacts of the proposal including landscaping, preservation of existing trees, and night-lighting effects. The audit must be conducted within 6 months of the commissioning of the proposed development and every 2 years thereafter, unless the Director-General directs otherwise. This audit must:
- (a) Be conducted by an independent landscape expert who is suitably qualified and experienced and whose appointment has been approved by the Director-General;
- (b) Assess the performance of the visual mitigation measures with specific reference to the effectiveness of mitigation measures in screening the development and lighting from the development from the Mount Gilead Homestead;
- (c) Review the adequacy of the Vegetation and Landscape Management Plan;
- (d) Recommend actions or measures to improve the performance of the visual mitigation measures and the adequacy of the Vegetation and Landscape Management Plan (if required); and
- (e) Be submitted to the Director-General; and



- (f) Be implemented to the satisfaction of the Director-General.

**Evidence sighted:**

AGL commissioned Distinctive Landscape Planning (August 2005) to undertake an independent audit in the form of a Visual Impact Assessment (VIA). The scope of the VIA was to undertake an assessment of the final report for the VLMP, and assess the performance and mitigation measures implemented by AGL and the monitoring conducted by URS.

**Compliance status:**

Compliant.

19. Within 2 months of commissioning this audit the Applicant shall submit a copy of the audit report to the Director-General and provide a detailed response to any of the recommendations in the audit report. A copy of the Independent Audit, and/or the results and recommendations of any monitoring carried out under condition 14, will be provided to the owner of Lot 1 DP 807555 by the Director-General upon request.

**Evidence sighted:**

The report was submitted to the DG. As of June 2006 no comment has been received to date.

**Compliance status:**

Compliant.

**FLORA AND FAUNA**

**Raptor Breeding Zones at EMAI**

20. The Applicant shall ensure that the drilling of gas wells and the construction of the gas gathering system and any related activities do not occur within 100 metres of the Raptor Breeding zones.

**Evidence sighted:**

The Raptor Breeding Zones are only located within the EMAI. The operations are 100 m outside of the raptor breeding zones, locations were chosen in consultation with the land manager of EMAI.

**Compliance status:**

Compliant – no further monitoring of CoC required.

21. The Applicant shall only drill and “fracc” wells EM 5, EM 7, EM 8, EM 9, EM 11 and EM 12 during the months of February and/or March or such other period as agreed by the Director-General.

**Evidence sighted:**

The above listed wells were only drilled and fraced during February and March 2005. Daily drilling reports for each of the listed wells were available to confirm this to be the case.

**Compliance status:**

Compliant – no further monitoring of CoC required.

22. The Applicant shall ensure that gas gathering lines connecting well sites listed in Condition 21 shall be constructed outside the breeding seasons of raptor species.

Note: The above condition provides protection for breeding raptor species on the EMAI, in proximity to the stated wells, through ensuring activities that are likely to generate noise are conducted outside of the breeding season of raptor species.

**Evidence sighted:**

The above listed wells (CoC No. 21) were connected during February and March 2005.

**Compliance status:**

Compliant.

**Flora and Fauna Protection Measures**

23. The Applicant shall implement best practice flora and fauna management.

**Evidence sighted:**

The following has reportedly been undertaken to support best practice flora and fauna management:

- A flora and fauna assessment was undertaken as part of the EIS. No significant species were identified in the EIS at the Rosalind Park gas plant.
- 98% of the sites have been located in paddocks to minimise impact to flora and fauna.

- No trees have been removed as part of the Development.
- Significant efforts have been implemented to protect raptor breeding areas in the EMAI area by restricting drilling, fracking and connection of wells outside of the breeding seasons (ie during February and March 2005).
- Individual Cumberland Plain Snails were translocated by an expert (licensed by the NSW EPA to do so) where they were identified during a fauna and flora survey in an area adjacent to the Cumberland Plain Woodland. The area where the snails were removed has been fenced and operations in this area restricted to within the fence.
- The Environmental Health and Safety Management Plans include requirements to protect fauna, control weeds, pathogens and pest species.

**Compliance status:**

Compliant.

24. The Applicant shall take all practicable measures to minimise potential flora and fauna impacts of the proposed development.

**Evidence sighted:**

Refer to above

**Compliance status:**

Compliant.

25. The Applicant shall ensure that trenches constructed during the construction of gas gathering lines are not left open overnight unless otherwise agreed by the Director-General.

**Evidence sighted:**

It is a requirement of the EHSMP that trenches built for installing gas gathering lines are not left open overnight. If unexpected circumstances occur where a trench is required to be left open, barriers are installed and an access ramp is maintained to allow trapped fauna to escape. A trench which is required to be left open over night would be checked in the morning for potentially trapped fauna.

No formal approval by the Director-General is obtained if trenches have to be left open under unexpected circumstances.

It is understood that no trenches described under this DA remain to be constructed.

**Compliance status:**

Non-compliant.

**Compliance status:**

Discuss with the DG whether the current management of leaving trenches open overnight under unexpected circumstances is acceptable to the DoP for trenches built under future DAs.

26. The Applicant shall not remove mature trees as part of this development unless otherwise agreed by the Director-General.

**Evidence sighted:**

No trees have reportedly been removed as part of the Development as of June 2006.

**Compliance status:**

Compliant.

27. The Applicant shall employ a suitably qualified ecologist with specific experience in identifying the Cumberland Plain Snail, during the construction period of the development. The ecologist shall monitor and examine areas for the presence of the threatened Cumberland Plain Snail, during the clearing for the proposed development.

**Evidence sighted:**

Sydney Gas employed Joanne Stokes and Glenn Muir of Australian Museum Business Services to translocate the Cumberland Plain Snail within the EMAI. A task specific licence was issued by the NSW EPA for the translocation under Section 132C of the National Parks and Wildlife Act 1991.

**Compliance status:**

Compliant.

28. The Applicant shall prepare a translocation strategy for the threatened Cumberland Plain Snail which will be submitted for the Director-General's approval prior to construction. The Translocation strategy shall be implemented should any individuals or populations of the Cumberland Plain Snail be identified.

**Evidence sighted:**

The DG approved the Translocation Strategy (letter dated 2 July 2004) for the gas gathering system, subject to the Strategy incorporating and implementing physical measures to prevent harm to a population in its current or new

location.

The area where the snails were removed from was fenced off and access/work restricted to this area.

**Compliance status:**

Compliant.

**NOISE**

**Noise Impact Assessment Criteria**

29. The Applicant shall ensure that noise from the normal operation of the premises, excluding flaring events, must not exceed the noise limits in the table below:

Receiver Location	Day	Evening	Night	Flaring (anytime)
	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>A1</sub> (1minute)
R1 Medhurst Street Gilead	35	35	35	45
R7 Mt. Gilead Gilead	37	36	36	45

**Evidence sighted:**

A review of noise monitoring reports within the audit period indicates that the requirements of this CoC are generally met. Some minor exceedances have been recorded within the audit period of up to 39 dB(A).

However, the last attended noise monitoring within the audit period (May 2006) states the following: measurements indicated that the site contribution to noise levels at the residence was 30 dB(A). The weather data confirmed wind speed and direction at the time of the measurement to be 3.22 m/s and east south easterly. This is within the day time noise limit of 37 dB(A).

No noise complaints have reportedly been received by AGL.

**Compliance status:**

Indeterminate

**Recommended action:**

Continue to monitor noise to ensure the noise limits continue to be met.

30. For the purposes of condition 29 and 31:

- (a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public holidays;
- (b) Evening is defined as the period 6pm to 10pm;
- (c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays; and
- (d) The receiver locations R1 and R7 are as shown in Figure 5.1 of the Environmental Noise and Vibration Study by Environmental Resources Management Australia Pty Ltd dated June 2003 which accompanied the Environmental Impact Statement for the project.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable.

31. Noise from flaring events, must not exceed the noise limits in the table below:

Location	Duration of each Event	Expected Type Of Event (2)	Daytime	Evening	Night
			L <sub>Aeq,15min</sub>	L <sub>Aeq,15min</sub>	L <sub>Aeq,15min</sub>
R1 Medhurst Street	> 2.5 hours 15 min – 60 min	Spill Valve Compressor Blowdown (ESD)	35 40	35 40	35 35

	6 min – 15 min	Compressor Blowdown (shutdown and unload)	42	42	37
	> 2.5 hours	Spill Valve	37	36	36
	15 min – 60 min	Compressor Blowdown (ESD)	42	41	40 (1)
R7 Mt. Gilead	6 min – 15 min	Compressor Blowdown (shutdown and unload)	44	43	37

1. Where ESD flare events exceed a frequency of occurrence of 1 per 21 days or duration higher than 15 minutes per event to a reduced flow rate of less than 0.5mmscf/d for each event, a lower limit of 36dB(A) Leq 15 minute applies at night.
2. Definition: A flaring event is taken to be any gas flow to the flare greater than that which is necessary to maintain the pilot flame.

**Evidence sighted:**

The most recent noise monitoring report (ERM, June 2006) states the following: "All flare events reported did not include any associated loud initial noise (eg PSVs or other emergency shutdowns) during the permanent noise monitoring period (25 February 2005 to 28 February 2006). The flare records provided show a total of 75 records between 23 December 2004 and 12 May 2006. Attended noise measurements reported previously of intentionally triggered flares for both spill valve and ESD show that related noise at Mt Gilead (R7) is inaudible against a background of 32dB(A)L90. Therefore noise for all flare events recorded are expected to be below 32dB(A)."

This monitoring indicates that the site is in compliance with this CoC.

**Compliance status:**

Compliant.

32. Noise from the premises is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling (rural situations) where the dwelling is more than 30m from the boundary to determine compliance with the  $L_{Aeq(15 \text{ minute})}$  and  $L_{Aeq(\text{period})}$  noise limits in Conditions 29 and 31.

Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.

The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

**Evidence sighted:**

Continuous monitoring is undertaken at the Mt Gilead residence. The results are documented in the quarterly noise monitoring reports. Noise monitoring reports were observed dated May 2005, July 2005, October 2005, December 2005, and June 2006.

**Compliance status:**

Compliant.

33. The noise emission limits identified in Conditions 29 and 31 apply under meteorological conditions of:
- Wind speed up to 3m/s at 10 metres above ground level; or
  - Temperature inversion conditions of up to 3°C/100m and wind speed up to 2m/s at 10 metres above the ground.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable.

**Noise – Construction and Well Maintenance**

34. The Applicant shall prepare and implement a Construction and Well Maintenance Noise Management Protocol to be used for the duration of the project. The Protocol must include, but is not necessarily limited to:
- (a) noise compliance standards;
  - (b) community consultation;

- (c) advance notice to affected members of the community for planned well maintenance activities;
- (d) complaints handling monitoring/system;
- (e) site contact person to follow up complaints;
- (f) mitigation measures;
- (g) the design/orientation of the proposed mitigation methods demonstrating best practice;
- (h) construction times;
- (i) contingency measures where noise complaints are received; and
- (j) monitoring methods and program.

**Evidence sighted:**

A Noise Management Plan for the Camden Gas Project Stage 2 (ERM, December 2004) was prepared. It is understood that the EPA have recently provided comments and the plan is being compiled by a consultant Wilkinson Murray.

**Compliance status:**

Non-compliant.

**Recommended action:**

Construction and Well Maintenance Noise Management Protocol to be completed and implemented.

**Noise – Drilling Impacts**

35. The Applicant shall implement management practices as necessary to minimise the potential noise impacts from drilling work at gas wells located on EMAI. These management practices are to include, but are not limited to:

- (a) identifying all potentially affected noise sensitive receivers (including residences of EMAI staff) that may be affected by drilling work at these wells;
- (b) predicting potential noise levels from the proposed well drilling methods where appropriate;
- (c) identifying and implementing all reasonable and feasible noise mitigation measures to reduce any drilling noise impacts;
- (d) documenting and implementing any specific work practices the Applicant will employ to limit noise; conducting noise monitoring where appropriate; and
- (e) appropriately informing affected residences and other relevant parties at least two weeks in advance of any drilling work at the gas wells and updating the information as required.

**Evidence sighted:**

Noise impacts from drilling are reportedly managed through site selection, rather than implementing noise minimisation practices. Noise is managed through site selection by limiting drilling works to beyond 200 m of a residential property. It is a requirement of the Petroleum Act that this distance is maintained for safety purposes, unless permission is granted by the owner to work closer.

No noise complaints have reportedly been received from EMAI.

**Compliance status:**

Indeterminate.

**Recommended action:**

Refer to CoC 34.

**Hours of Operation**

36. Planned maintenance activities at any of the wells must only be conducted between:

- 7am and 6pm on weekdays; and
- 8am and 1pm on Saturdays (excluding Public Holidays).

This condition does not apply to the delivery of material outside the hours of operation permitted by the EPA's licence, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is to be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

**Evidence sighted:**

No works have reportedly been undertaken outside of these times.

**Compliance status:**

Compliant.

**Flare – Measures to Reduce Noise**

37. The Applicant must implement the following noise mitigation options to prevent noise impacts from flare operation:

- Noise mitigation options 1 through to 9 (exclusive of option 8) must be implemented to prevent undue noise impacts at Receiver Location R7 (Mount Gilead residence) as referred to in Table B.1 titled "Flare Mitigation Options – Mt. Gilead (R7)" in the Letter Report titled 'Stage 2 Coal Bed Methane Project – Response to the EPA's Request for Flare Noise Details' from Environmental Resources Management Australia to Sydney Gas Ltd dated 22 October 2003.
- Measures identified in the report "Amendment to Statement of Evidence – Compressor Blow Down Systems" by Gary Scott dated 11 June 2004.

**Evidence sighted:**

Noise mitigation measures have reportedly been implemented in accordance with the above reports. In addition to the above requirements a wall around compressor 1 cooling fans has been installed and silencers installed on top.

**Compliance status:**

Compliant.

**Operational Noise Management Plan**

38. The Applicant shall prepare and implement a Noise Management Plan for the whole site. The Plan shall be submitted to the Director-General for approval within six months of the date of this consent. The Plan shall include, but not necessarily be limited to:
- identification of the potential sources of noise during drilling and operation;
  - the noise criteria for these activities;
  - details of what actions and measures would be implemented to ensure that these operations would comply with the relevant noise criteria;
  - describe how the effectiveness of these actions and measures would be monitored during the life of the development, clearly indicating who would conduct the monitoring, how often this monitoring would be conducted, how the results of this monitoring would be recorded and reported to the Director-General, and if any non-compliance is detected; and
  - describe what procedures would be followed to ensure compliance.

**Evidence sighted:**

A Noise Management Plan (dated December 2004 by ERM) was submitted to DIPNR (DoP) on 12 October 2004.

**Compliance status:**

Non-Compliant –evidence of approval of the Noise Management Plan by DoP was not available for review.

**Recommended action:**

Provide a copy of the Noise Management Plan to DoP once complete and approved by DEC.

**Operating Conditions**

39. The Applicant shall undertake the development in a way that minimises the noise generated by the development.

**Evidence sighted:**

Refer to CoC No. 34 above.

**Compliance status:**

Refer to CoC No. 34 above.

**Monitoring**

40. The Applicant must submit a noise compliance report to the EPA and the Department within one month of commissioning of the Gas Treatment Plant and on an annual basis with the Annual Return required by the EPA's licence to assess the project's compliance with the noise limits in Conditions 29 and 31. The noise monitoring must be conducted in accordance with Condition 42.

**Evidence sighted:**

The Gas Treatment Plant was commissioned in December 2004 and a noise compliance report was prepared (ERM, Ref: 0022362RP2, May 2005), this appears to be after the one month required by the CoC.

A second annual noise compliance report was not available in 2006 for issue with the Annual Return due in February each year.

**Compliance status:**

Non-compliant.

**Recommended action:**

Ensure annual noise compliance reports are prepared and submitted with the Annual Return to the DEC.

41. Following the first 12 months of continuous noise monitoring, during the life of the Development or as otherwise agreed by the Director-General, the Applicant shall undertake quarterly attended monitoring at the Mt Gilead Homestead to the satisfaction of the Director-General, in accordance with the NSW Industrial Noise Policy and AS 1055: "Acoustics – Description and Measurement of Environmental Noise".

**Evidence sighted:**

Quarterly attended noise monitoring has been undertaken by ERM to date (reports dated May 2005, July 2005, October 2005, December 2005, June 2006).

**Compliance status:**

Compliant.

42. Within six months of the date of this consent, the Applicant shall submit a detailed Noise Monitoring Program for the development to the Director-General for approval prior to commissioning. The Noise Monitoring Program must be prepared in consultation with the EPA and must include: a detailed noise monitoring protocol for evaluating compliance with the limits in conditions 29 and 31. The protocol must include consideration of monitoring under meteorological conditions as required by condition 33 and must provide for installation and use of a continuous noise monitoring system for the first 12 months of operation capable of identifying the source of dominant noise at R7 Mt Gilead, subject to the agreement of the owners and occupiers of this residence. In addition, meteorological conditions must be obtained for the time of noise monitoring. This is to include wind speed and direction as well as data suitable for quantifying the presence or otherwise of temperature inversions. The Applicant must comply with the Noise Monitoring Program at all times during operation of the development.

**Evidence sighted:**

A Noise Monitoring Program was submitted to the DEC and comments recently received. A meeting with the DEC is due in February 2007 to finalise the program.

**Compliance status:**

Non-compliant.

**Recommended action:**

Finalise Noise Monitoring Program with the DEC.

**Noise Monitoring Report - Flare**

43. <sup>4</sup>The Applicant must submit to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2124 within seven months of commissioning of the Gas Treatment Plant, a report on noise from operation of the flare in the first 6 months of operation of the plant. The report must assess the compliance of noise levels during the range of flaring incidents experienced since commissioning, with the noise limits provided in Conditions 29 and 31. The noise monitoring must be undertaken in accordance with the Noise Monitoring Program in condition 42. Where during the first six month period all flare types identified in Condition 31 have not occurred, noise measurements shall be carried out of a simulation of the remaining events by applying the appropriate flow rates in order to assess compliance.

The report must contain the following information:

- A listing of each incident when the flare operated including the duration, gas discharge rate and cause of the incident;
- The temperature and volume data for each flare event, as required by Condition 59;
- The results of noise measurements for flare operation for each flare type event, as required by Condition 31,
- The results of noise measurements for flare operation for each flare event for receivers at location R7; and
- An assessment of compliance with noise limits provided in Condition 31. The noise monitoring must be undertaken in accordance with Condition 42.
- Where noise levels do not comply with Condition 31, noise mitigation measures to ensure compliance.

Modification to the control system to reduce gas flow at the flare is considered a practical noise mitigation measure.

**Evidence sighted:**

Permanent noise monitoring was undertaken during the reporting period (ERM). All flare events reported did not include any associated loud initial noise (eg PSVs or other emergency shutdowns) during the permanent noise monitoring period (25 February 2005 to 28 February 2006).

The flare records show a total of 79 records between 23 December 2004 and 5 July 2006.

Attended noise measurements reported previously of intentionally triggered flares for both spill valve and ESD show that related noise at Mt Gilead (R7) is inaudible against a background of 32dB(A)L90. Therefore noise for all flare

<sup>4</sup> Incorporates an EPA General Term of Approval

events recorded are expected to be below 32dB(A).  
The charts indicate that during flare events Lmax noise is in the vicinity of 67dB(A) or higher at R7 Mt Gilead. However, Lmax levels before or after such flares are also around this value or higher.  
A comparison between Lmax noise at R7 and that at the Intermediate location indicates common occurrences of R7 Lmax higher than that at the Intermediate location. This comparison suggests the Lmax at R7 is generally associated with extraneous sources (i.e. other than the site).

**Compliance status:**  
Compliant

### **Redrilling and Refracting Management Plan**

Note: For the purposes of this consent the redrilling and/or additional fraccing of a well does not constitute wellhead maintenance.

44. The Applicant shall obtain the prior approval of the Director-General for the redrilling and/or additional fraccing of a gas well.

**Evidence sighted:**

Re-fraccing of one well has been undertaken. Well RP-11 was refracted in March 2006. Approval was obtained for this well dated 7 February 2006 from Glyn Macdonald, Senior Inspector of Coal Mines, Department of Primary Industries. It was not confirmed whether prior approval was also obtained from the DG of DoP.

**Compliance status:**  
Non-compliant.

**Recommended action:**

Ensure that prior approval from the DoP is obtained prior to re-fraccing or additional fraccing of wells.

45. The Applicant shall prepare a Redrilling and Refracting Management Plan in consultation with the Department of Mineral Resources for the redrilling and/or refracting of an existing well. The Plan shall be submitted to the Director-General no later than one month prior to the commencement of the work or within such period as agreed by the Director-General. The Plan shall include, but not necessarily be limited to:

- (a) a description of all the activities to be undertaken on the well site during the redrilling and/or refracting work;
- (b) details of how the environmental performance of the work will be monitored and what actions will be taken to address identified adverse environmental impacts;
- (c) reference to the relevant parts of the Environmental Management Plan required under conditions 1 and 2 (Schedule 5) of this consent;
- (d) compliance with all the relevant environmental performance requirements of this consent; and
- (e) arrangements for complaints handling procedures during the redrilling/refracting work.

The Applicant shall give written notification of the proposed redrilling/refracting work to potentially affected residences and other noise sensitive receivers at least fourteen days prior to work commencing.

**Evidence sighted:**

A Refracting Management Plan was prepared (November 2005) and evidence of approval by DMR (now DPI) was observed.

No potentially affected residences were reported to be present of RP11, the only well re-fracted during the audit period.

**Compliance status:**  
Compliant.

### **VIBRATION**

#### **Condition Report**

46. The Applicant shall prepare a Condition Report for all residences or structures (including structures on EMAI) within 25 metres of a wellhead.

The Applicant shall undertake an inspection of the residence and/or structure prior to work commencing, and a follow up inspection within one month of the completion of the work. The Applicant shall take immediate action for repair of any damage to the residence or structure as a result of the work and to avoid any further damage. A copy of the Condition Report shall be submitted to the Director-General and the DMR after completion of the work.



**Evidence sighted:**

There are no wellheads within 25 m of residency or a structure.

**Compliance status:**

Compliant.

**AIR QUALITY****Air Emission Criteria**

47. The Applicant shall ensure that air pollutant emissions from the development do not exceed the following criteria at any privately owned residence.

Pollutant	Averaging Period	Criterion
Nitrogen Dioxide	1 Hour	246 $\mu\text{g}/\text{m}^3$
Nitrogen Dioxide	Annual	62 $\mu\text{g}/\text{m}^3$
Sulphur Dioxide	1 Hour	570 $\mu\text{g}/\text{m}^3$
Sulphur Dioxide	Annual	60 $\mu\text{g}/\text{m}^3$
Sulphuric acid mist	3 minute	33 $\mu\text{g}/\text{m}^3$
Methyl mercaptan	3 minute	0.84 $\mu\text{g}/\text{m}^3$

**Evidence sighted:**

Monitoring for the above is undertaken quarterly. No non-compliances in the above were reported.

**Compliance status:**

Compliant.

48. <sup>5</sup>For each discharge point<sup>6</sup> specified in the table below, the Applicant shall ensure that the concentration of a pollutant discharged at that point does not exceed the concentration limit specified for that pollutant in the table, and where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

**POINT 1, 2, 3**

Pollutant	Units of measure	100 percentile limit	Reference Conditions	Averaging Period
Oxides of Nitrogen	$\text{mg}/\text{m}^3$	461	Dry, 273K, 101.3kPa, 7% O <sub>2</sub>	As per test method
Sulfur Dioxide	$\text{mg}/\text{m}^3$	7	Dry, 273 K, 101.3 kPa	As per test method
Sulphuric acid mist and/or sulphur trioxide	$\text{mg}/\text{m}^3$	3.1	Dry, 273 K, 101.3 kPa	As per test method

**POINT 4**

Pollutant	Units of measure	100 percentile limit	Reference Conditions	Averaging Period
Oxides of Nitrogen	$\text{mg}/\text{m}^3$	110	Dry, 273K, 101.3kPa, 7% O <sub>2</sub>	As per test method
Sulfur Dioxide	$\text{mg}/\text{m}^3$	35	Dry, 273 K, 101.3 kPa	As per test method
Sulphuric acid mist and/or sulphur trioxide	$\text{mg}/\text{m}^3$	1.0	Dry, 273 K, 101.3 kPa	As per test method

**POINT 5**

Pollutant	Units of measure	100 percentile limit	Reference Conditions	Averaging Period
Oxides of Nitrogen	$\text{mg}/\text{m}^3$	13	Dry, 273K, 101.3kPa, 7% O <sub>2</sub>	As per test method
Sulfur Dioxide	$\text{mg}/\text{m}^3$	1042	Dry, 273 K, 101.3 kPa	As per test method
Sulphuric acid mist and/or sulphur trioxide	$\text{mg}/\text{m}^3$	35	Dry, 273 K, 101.3 kPa	As per test method

<sup>5</sup> Incorporates an EPA General Term of Approval

<sup>6</sup> The Location of each Point is defined in Condition 54

Note 1: <sup>7</sup>Concentration limits at points 1, 2, 3, 4 and 5 in the above Condition may be subject to review after the submission of the Air Emissions Reports in compliance with Conditions 62 and 63.

Note 2: Should the proponent seek to revise the concentration limits as specified in condition 48 for oxides of nitrogen, the proponent must demonstrate that:

- the revised emission limit is representative of the proper and efficient maintenance and operation of the equipment;
- the equipment is designed to minimise emissions as far as is practicable and consistent with best practice considering the type of equipment and application;
- the revised emission limit is supported by Manufacturers Design Specification; and
- the revised emission limit does not cause adverse impacts on local air quality. This assessment must be undertaken in accordance with the document: Approved Methods and Guidance for the Modelling and Assessment of *Air Pollutants in NSW*.

**Evidence sighted:**

As of June 2006 discharge point Point No.2 and Point No.3, referring to compressor No. 2 and No.3, are not applicable as these two compressors were not installed during the reporting period.

Exceedance in NOx at discharge point No.1 with a reported value of 1,012 mg/m<sup>3</sup> (limit of 461 mg/m<sup>3</sup>). The exceedances occurred in February 2005 when the plant was working at 15% capacity. It is understood that the high NOx level was due to the operation of the engine under-loaded. The June 2005 and all subsequent quarterly monitoring values (to June 2006) were within the EPL limit, reflecting the much higher production rate and consequent increase in gas engine load.

**Compliance status:**

Non-compliance.

**Recommended action:**

No further action recommended, continue to monitor continuously and quarterly.

49. <sup>8</sup>To avoid any doubt, the above Condition does not authorise the discharge or emission of any other pollutants.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable.

**Combustion Parameters**

50. <sup>9</sup>For each monitoring/discharge point or utilisation area specified in the table below (by point number<sup>10</sup>), the Applicant shall ensure that the parameter is equal to or greater than the lower limits specified for that parameter in the table.

**POINT 7**

Parameter	Units of measure	Lower limit	Averaging period
Residence time	S	*TBD	Instantaneous
Temperature	°C	*TBD	Instantaneous

Note:

\*TBD = To be determined

Note: <sup>11</sup>The limits for residence time and temperature for the main flare will be determined after the Applicant has submitted the report specified in Condition 126 based upon flare design of 98% destruction efficiency for VOCs plus methane and a NOx emission rate as determined in the report specified in Condition 126.

<sup>7</sup> Incorporates an EPA General Term of Approval

<sup>8</sup> Incorporates an EPA General Term of Approval

<sup>9</sup> Incorporates an EPA General Term of Approval

<sup>10</sup> The Location of each Point is defined in Condition 54

<sup>11</sup> Incorporates an EPA General Term of Approval

**Evidence sighted:**  
Refer to CoC 59 below.

**Compliance status:**  
Refer to CoC 59 below.

**Operating Conditions**

51. <sup>12</sup>The Applicant shall undertake the development and maintain the condition of the premises in a way that minimises or prevents the emission of dust generated by the development.

**Evidence sighted:**  
The following measures are undertaken to minimise the emission of dust from the development:

- Use of a water cart on the unsealed access roads as required.
- Restriction on the height of topsoil stockpiles to two metres.
- Restrictions on speed limits. These are communicated in the site induction materials.
- Access is restricted to the access roads, gathering line easements and well head areas.
- Erosion and sediment controls were installed as per the SWMPs.

No complaints of dust emissions have been received by AGL with regards to activities at the Development.

**Compliance status:**  
Compliant.

52. The Applicant shall take all practicable measures to ensure that all vehicles entering or leaving a site, carrying a load that may generate dust, are covered at all times, except during loading and unloading. Any such vehicles shall be covered or enclosed in a manner that will minimise emissions of dust from the vehicle at all times.

**Evidence sighted:**  
No significant transport of loads that may generate dust leave or enter the development areas. Some road base is delivered but is reportedly covered.

**Compliance status:**  
Compliant.

53. The Applicant shall take all practicable measures to minimise the generation of wind blown dust from soil stockpiles.

**Evidence sighted:**  
Soil stockpiles are kept below a maximum height of two metres to reduce wind blow dust.  
Soil stockpiles are vegetated.

The EHSMP for Drilling requires that construction activities shall be monitored to identify excessive dust generation.

Dust from soil stockpiles has not been an issue at the site and no complaints have been received.

**Compliance status:**  
Compliant.

**Monitoring Locations**

54. <sup>13</sup>For the purposes of this consent, the points referred to in the table below are identified for the purposes of monitoring and/or setting of limits for the emission of pollutants to air from that point:

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Description of Location
1	Air emissions monitoring	Discharge to air	Compressor Engine 1 marked 'Engine Exhaust Stack 1' as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing

<sup>12</sup> Incorporates an EPA General Term of Approval

<sup>13</sup> Incorporates an EPA General Term of Approval

			number 4229DG06 (Rev 2) provided to the EPA.
2	Air emissions monitoring	Discharge to air	Compressor Engine 2 marked "Engine Exhaust Stack 2" as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA.
3	Air emissions monitoring	Discharge to air	Compressor Engine 3 marked "Engine Exhaust Stack 3" as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA..
4	Air emissions monitoring	Discharge to Air	TEG Fire Tube marked 'Reboiler Flue' as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA.
5	Air emissions monitoring	Discharge to Air	Reboiler Still Column marked 'Reflux Column Vent' as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA.
6	Air emissions monitoring	Discharge to Air	Carbon scrubber vent discharge stack as shown on Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA.
7	Air emissions monitoring	Discharge to Air	Main Flare marked 'Flare' as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable.

**Testing Method – Concentration Limits**

55. <sup>14</sup>The Applicant shall ensure that monitoring for the concentration of a pollutant emitted to the air required to be conducted by the EPA's General Terms of Approval, or a licence under the *Protection of the Environment Operations Act 1997*, in relation to the development or in order to comply with a relevant local calculation protocol is done in accordance with:
- (a) any methodology which is required by or under the POEO Act 1997 to be used for the testing of the concentration of the pollutant; or
  - (b) if no such requirement is imposed by or under the POEO Act 1997, any methodology which the general terms of approval or a condition of the licence or the protocol (as the case may be) requires to be used for that testing; or
  - (c) if no such requirement is imposed by or under the POEO Act 1997 or by the general terms of approval or a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable.

Note: The *Clean Air (Plant and Equipment) Regulation 1997* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "*Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*".

<sup>14</sup> Incorporates an EPA General Term of Approval

### **Manufacturers Design Specifications**

56. <sup>15</sup>At least 1 month prior to the commissioning of the Gas Treatment Plant, the Applicant shall submit to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2124, a report containing Manufacturers Design Specifications for air emissions from each of the following:

- compressor engine;
- TEG Fire tube; and
- Reboiler still column.

The report must compare the Design Specifications with the limits specified in Condition 48 and 50 to demonstrate that compliance can be achieved.

Note: <sup>16</sup>The objective of this condition is to verify that the equipment installed is designed to comply with the air emissions limits specified in Condition 48.

#### **Evidence sighted:**

The Manufacturers Design Specifications were submitted to the EPA on 16 September 2005, prior to the due date of 1 November 2004.

#### **Compliance status:**

Compliant – no further monitoring of CoC required.

### **Monitoring**

57. Within 6 months of the date of this consent, the Applicant shall submit a detailed Air Quality Monitoring Program for the development to the Director-General, which has been prepared in consultation with the EPA and includes a detailed air quality monitoring protocol for evaluating compliance of the development with the Air Quality Pollutants in Condition 47. The Applicant shall prepare the Air Quality Monitoring Program in accordance with the NSW EPA Guideline "Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales" 20 July 2001 or its latest version.

#### **Evidence sighted:**

The Air Quality Monitoring Program was issued to the DoP on 18 October 2004 and to the EPA on 15 September 2004. An environment Protection Licence was subsequently issued.

#### **Compliance status:**

Compliant – no further monitoring of CoC required.

58. <sup>17</sup>For each monitoring/ discharge point or utilisation area specified in the tables below (by a point number<sup>18</sup>), the Applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The Applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns.

### **POINTS 1, 2, 3**

Pollutant	Units of Measure	Frequency	Sampling Method
Oxides of Nitrogen	mg/m <sup>3</sup>	Continuous	CEM-2
Temperature	oC	Continuous	TM-2
Moisture	%	Continuous	TM-22
Volumetric flow rate	m <sup>3</sup> /s	Continuous	CEM-6
Oxygen	%	Continuous	CEM-3

Note: <sup>19</sup>The requirement for continuous monitoring at Point 1, 2 and 3 in Condition 57 will be reviewed after the submission of the Air Emissions Reports in compliance with Conditions 62 and 63.

<sup>15</sup> Incorporates an EPA General Term of Approval

<sup>16</sup> Incorporates an EPA General Term of Approval

<sup>17</sup> Incorporates an EPA General Term of Approval

<sup>18</sup> The Location of each Point is defined in Condition 54

<sup>19</sup> Incorporates an EPA General Term of Approval

**POINTS 1, 2, 3, 4, 5**

Pollutant	Units of measure	Frequency	Sampling Method
Velocity	m/s	Quarterly	TM-2
Volumetric flow rate	m <sup>3</sup> /s	Quarterly	TM-2
Temperature	°C	Quarterly	TM-2
Moisture	%	Quarterly	TM-22
Dry gas density	Kg/m <sup>3</sup>	Quarterly	TM-23
Molecular weight of stack gases	g/g.mol	Quarterly	TM-23
Oxygen	%	Quarterly	TM-25
Carbon dioxide	%	Quarterly	TM-24
Oxides of Nitrogen	mg/m <sup>3</sup>	Quarterly	TM-11
Sulfuric Acid Mist/Sulfur Trioxide	mg/m <sup>3</sup>	Quarterly	TM-3
Sulfur Dioxide	mg/m <sup>3</sup>	Quarterly	TM-4
Selection of sampling positions	-	-	TM-1

Note: <sup>20</sup>The requirement for monitoring of emissions at Points 2 and 3 only applies after compressor engines 2 and 3 respectively, commence operations.

**POINT 6**

Pollutant	Units of measure	Frequency	Sampling Method
Velocity	m/s	Quarterly	TM-2
Volumetric flow rate	m <sup>3</sup> /s	Quarterly	TM-2
Temperature	°C	Quarterly	TM-2
Moisture	%	Quarterly	TM-22
Dry gas density	Kg/m <sup>3</sup>	Quarterly	TM-23
Molecular weight of stack gases	g/g.mol	Quarterly	TM-23
Oxygen	%	Quarterly	TM-25
Carbon dioxide	%	Quarterly	TM-24
Odour	OU	Quarterly	OM-7
Selection of sampling positions	-	-	TM-1

Note: <sup>21</sup>The requirement for quarterly monitoring at Point 6 may be removed based on odour emission performance after 12 months from commissioning of the gas treatment plant.

**Evidence sighted:**

Monitoring results for points 1, 4, 5 & 6 were observed for five out of the six required monitoring rounds, for reporting period Dec 2004 to June 2006. The 2006 first quarter report was not completed due to an unresolved decision between Sydney Gas and the EPA at the time.

The following monitoring reports (Stephenson's) were observed:

- Quarterly Stack Emission Survey, February 2005;
- Quarterly Stack Emission Survey, June 2005;
- Quarterly Stack Emission Survey, September 2005;
- Quarterly Stack Emission Survey, December 2005; and
- Quarterly Stack Emission Survey, June 2006.

<sup>20</sup> Incorporates an EPA General Term of Approval

<sup>21</sup> Incorporates an EPA General Term of Approval

EPA Monitoring Point 2 (Compressor Engine 2 – “Engine Exhaust Stack 2”) and EPA Monitoring Point 3 (Compressor Engine 3 – “Engine Exhaust Stack 3”) have not been included in monitoring results as both compressors are yet to be installed as part of the Camden Gas Stage 2 Development.

Detection limits for sulphuric acid mist and sulphur trioxide were on a number of occasions set outside of the concentration limits specified in the EPA licence. All affected samples however, showed readings below the detection limits. Furthermore on all other occasions levels of sulphur trioxide and sulphuric acid mist were found to be below the EPA concentration limit.

**Compliance status:**

Non-compliant

**Recommended action:**

It is understood that a laboratory is now used which can analyse sulphuric acid mist and sulphur trioxide within licence concentration limits. It is recommended that future monitoring results are checked to confirm this is the case.

**Monitoring of Combustion Parameters**

59. <sup>22</sup>For each monitoring/discharge point or utilisation area specified below (by point number<sup>23</sup>), the Applicant must monitor (by sampling and obtaining results by analysis) each parameter specified in Column 1. The Applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

**POINT 7**

Parameter	Units of measure	Frequency	Sampling Method
Temperature	°C	Continuous	TM-2
Volume	m <sup>3</sup> /d	Daily during discharge	By Calculation (duration of flaring incident multiplied by the capacity of the unit causing the flaring event)

**Evidence sighted:**

Correspondence was submitted to the DEC (EPA) on 19 August 2004, demonstrating the combustion performance of the horizontal flare. As the flare predominantly operates in a pilot mode, it is reported to be impractical and of limited value to sample the flare. Analysis of flare emissions are to be based on the above report and plant availability data.

No further sampling has since been requested from the DEC.

**Compliance status:**

Non Compliant.

**Recommended action:**

It is recommended that AGL request an Environment Protection Licence variation if DEC are satisfied that the monitoring of the flare is not practical.

**Installation of Air Monitoring Points Report**

60. <sup>24</sup>The Applicant must submit to the EPA’s Manager Sydney Industry PO Box 668 Parramatta NSW 2124, one month prior to the completion of construction of the Gas Treatment Plant, a written report containing plans showing the locations of air monitoring points for discharges from:

- (a) the compressor engines;
- (b) TEG Fire Tube;
- (c) Reboiler Still Column; and
- (d) Carbon scrubber vent stack.

The report must contain the opinion of a qualified air emissions monitoring consultant advising whether the monitoring points comply with TM-1.

**Evidence sighted:**

The Air Monitoring Points Report was submitted to the EPA on 19 August 2004, prior to the due date of 1 November

<sup>22</sup> Incorporates an EPA General Term of Approval

<sup>23</sup> The Location of each Point is defined in Condition 54

<sup>24</sup> Incorporates an EPA General Term of Approval

2004.

**Compliance status:**

Compliant – no further monitoring of CoC required.

**Monitoring Program for Air Based Assessable Pollutants**

61. <sup>25</sup>The Applicant must submit to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2124, one month prior to the completion of construction of the Gas Treatment Plant, a written report containing a program for monitoring of assessable pollutants from the start gas vents.

**Evidence sighted:**

The Monitoring Program was submitted to the EPA on 16 September 2004, prior to the due date of 1 November 2004

**Compliance status:**

Compliant – no further monitoring of CoC required.

**Requirement to Monitor Concentrations of Pollutants Discharged**

**Post Commissioning Air Emissions Report**

62. <sup>26</sup>The Applicant must submit to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2124, within six months of the commissioning of the Gas Treatment Plant, a written report detailing the results of post commissioning source air emissions sampling and analysis undertaken in accordance with the requirements specified in Condition 58 and Condition 59. The report must assess compliance with the limit conditions specified in Condition 48 and Condition 50. The report must also include an assessment of flare operations and report on the results of continuous temperature monitoring and flaring incidents.

Note: <sup>27</sup>The objective of this condition is to demonstrate that the actual emissions are consistent with the design and the air emission limits specified in Condition 48.

**Evidence sighted:**

The first air monitoring report was dated February 2005.

**Compliance status:**

Compliant.

**Quarterly Reporting of Air Emissions**

63. <sup>28</sup>The Applicant must submit the results of quarterly air emissions monitoring as required by Condition 58 on a quarterly basis for the first 12 months of the operation of the Gas Treatment Plant to the EPA's Manager Sydney Industry at PO Box 668 Parramatta NSW 2124. The results must be received by the EPA within one month of the date on which the sampling was undertaken for that quarter.

**Evidence sighted:**

Results were submitted to the EPA.

**Compliance status:**

Compliant.

**Odour**

64. <sup>29</sup>The Applicant must not cause or permit the emission of offensive odours from the premises, as defined under Section 129 of the *Protection of the Environment Operations Act 1997*.

**Evidence sighted:**

There are no odours produced from the gas wells as methane is odourless. Mercaptan is stored at Rosalind Park gas plant for which a Dangerous Goods licence is held with WorkCover NSW.

No odour complaints have reportedly been received by AGL.

**Compliance status:**

<sup>25</sup> Incorporates an EPA General Term of Approval

<sup>26</sup> Incorporates an EPA General Term of Approval

<sup>27</sup> Incorporates an EPA General Term of Approval

<sup>28</sup> Incorporates an EPA General Term of Approval

<sup>29</sup> Incorporates an EPA General Term of Approval



Compliant

65. The Applicant must not cause the emission of detectable mercaptan odour from the premises.

Note: <sup>30</sup>Should odour emissions become an issue, the EPA will consider requiring investigation and implementation of further odour control measures.

**Evidence sighted:**

Regular preventative maintenance is undertaken on the mercaptan filtration system, by the contractor International Chemical Engineers (ICE). The odourant system was last checked in May 2006.

No odour complaints have reportedly been received by AGL.

**Compliance status:**

Compliant.

## SURFACE WATER MANAGEMENT

### Pollution of Waters

66. <sup>31</sup>Except as may be expressly provided for by a licence under the *Protection of the Environment Operations Act 1997* in relation to the development, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997* in carrying out the development.

**Evidence sighted:**

All sites are reportedly constructed in accordance with the site specific, approved Soil and Water Management Plans (SWPMs).

At the time of the site visit there were no wells approved during the audit period that had very recently been installed.

Two wells were observed to have recently been installed (GL13 and GL15). These wells were approved since June 2006 and outside of the audit period. However, GL13 had a pit for collecting water in place. The pit liner was observed to contain a couple of small holes. Water was evident outside of the pit, however, it could not be determined whether this was from the well. A sample of the water was taken by AGL at the time of the audit.

Water management at GL15 also appeared to require some improvement as collection ponds were observed to be full with evidence of some spillage outside of the lined pits with well development water.

**Compliance status:**

Indeterminate.

**Recommended action:**

Confirm if the water outside of the collection pit was from the well (at well no. GL13).

Improve stormwater controls for in-seam drilling where larger quantities of water than that for vertical drilling is produced.

### Management of Waste Water

Note: Section 120 of the *Protection of the Environment Operations Act 1997* applies to the disposal of waste water. This section refers to the pollution of waters.

### Operating Conditions

67. The Applicant shall undertake the development in a way that minimises the potential surface water impacts of the development.

**Evidence sighted:**

<sup>30</sup> Incorporates an EPA General Term of Approval

<sup>31</sup> Incorporates an EPA General Term of Approval

The controls used to manage surface water include the Soil and Water Management Plans (SWPMs).

At the Rosalind Park gas plant the liner of the evaporation pit (for the flare) is tested for integrity.

**Compliance status:**

Refer to CoC 66.

**Monitoring Locations**

68. <sup>32</sup>For the purposes of this consent, the points referred to in the table below are identified for the purposes of monitoring and/or setting of limits for the emission of pollutants to water from that point:

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Description of Location
8	Discharge to waste facility Discharge quality monitoring	Discharge (by tanker) to waste processing facility	Pump connection point at evaporation pond as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA.
9	Discharge to waste facility Discharge quality monitoring	Discharge (by tanker) to sewage treatment plant	Sewage connection point at sewage storage tank as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA.
10	Discharge to waste facility Discharge quality monitoring	Discharge (by tanker) to waste processing facility	Pump connection point for oily water wastes as shown on 'Camden Gas Project Site Plan Location of Emission Points' drawing number 4229DG06 (Rev 2) provided to the EPA.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable.

**Monitoring of Effluent Parameters**

69. <sup>33</sup>For each monitoring/discharge point or utilisation area specified (by point number<sup>34</sup>) in the table below, the Applicant must monitor (by sampling and obtaining results by analysis) each parameter specified in Column 1. The Applicant must use the sampling method, units of measure and sample at the frequency specified in the respective columns.

**POINT 8**

Pollutant	Units of Measure	Frequency	Sampling Method
Total suspended solids	Mg/L	Monthly	Representative
Biochemical oxygen demand	Mg/L	Monthly	Representative
Oil & Grease	Mg/L	Monthly	Representative
Total polycyclic aromatic hydrocarbons	µg/L	Monthly	Representative
Phenols	µg/L	Monthly	Representative
Total organic carbon	µg/L	Monthly	Representative
Total petroleum hydrocarbons	µg/L	Monthly	Representative
Electrical conductivity	µS/cm	Monthly	Representative
Water level in storage	Mm	Monthly	Direct measurement

**Evidence sighted:**

Surface water monitoring results were observed to include the above pollutants, for the period 3 February 2005 to 2

<sup>32</sup> Incorporates an EPA General Term of Approval

<sup>33</sup> Incorporates an EPA General Term of Approval

<sup>34</sup> The location of the Point is defined in Condition 68

June 2006. It was reported that no water was stored in the evaporation pond prior to February 2005. No water has reportedly been taken from the pond or discharged during the reporting period.

**Compliance status:**

Complaint

70. <sup>35</sup>The Applicant must install a measurement device in the Evaporation Pond at the Gas Treatment Plant Site for recording the depth of effluent in the storage for the life of the Evaporation Pond.

**Evidence sighted:**

A ruler was observed to have been installed in the pond.

**Compliance status:**

Compliant.

**Monitoring Program for Water Based Assessable Pollutants**

71. <sup>36</sup>The Applicant must at least one month prior to the completion of construction of the Gas Treatment Plant, submit to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2128, a written report containing a program for monitoring assessable pollutants contained within the following waste streams:

- (a) oily water wastes proposed to be transported to the waste management facilities at Unanderra or Camellia or any other facility which can legally receive such wastes; and
- (b) sewage waste proposed to be transported to the Bargo Ponds or any other facility which can legally receive such wastes.

Note: <sup>37</sup>Monitoring of non controlled aqueous waste is required by Condition 69.

**Evidence sighted:**

The Monitoring Program was submitted to the EPA on 26 August 2004, prior to the due date of 1 November 2004.

**Compliance status:**

Compliant – no further monitoring of CoC required.

**Testing Methods – Concentration Limits**

72. <sup>38</sup>Subject to any express provision to the contrary in this licence, the Applicant shall undertake monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area or taken off-site in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

**Evidence sighted:**

Off-site discharges comprise the release from the sedimentation pond at the Rosalind Park gas plant and off-site disposal of process water from the gas plant. It was reported that water is retained on-site as far as possible.

Before releasing the sedimentation pond water, it was reported that it is visually checked for suspended solids and oils/grease. It is understood that there have two discharges from the sedimentation pond since the Rosalind Park gas plant was commissioned in December 2004, however the events are not recorded.

Process water from the gas plant is sampled prior to collection for off-site disposal to an appropriately licensed facility.

**Compliance status:**

Non-compliant.

**Recommended action:**

Document and record discharge events including a record of visual inspection.

**Gas Gathering System - Stream Crossings**

<sup>35</sup> Incorporates an EPA General Term of Approval

<sup>36</sup> Incorporates an EPA General Term of Approval

<sup>37</sup> Incorporates an EPA General Term of Approval

<sup>38</sup> Incorporates an EPA General Term of Approval

Note: The *Rivers and Foreshore Improvement Act 1948* applies to the proposed development and therefore any excavation, removal of material from the bank, shore or bed of any stream, estuary or lake, or land within 40 metres from the top of the bank will require a Part 3A permit.

73. <sup>39</sup>The Applicant shall ensure that stream crossings B and F, as shown on the plan Camden Gas Project Stage 2 – RFI Act 3A Permit Areas by Sydney Gas (**Figure 2, Appendix B**) are under-bored. The gas pipe is to be at least 2 metres below the bed of the watercourses. The bed and banks of the watercourses are not to be disturbed.

**Evidence sighted:**  
Stream crossing B and F have been underbored.

**Compliance status:**  
Compliant – no further monitoring of CoC required.

74. <sup>40</sup>The Applicant is permitted to trench stream crossings A, C, D, E, J, K, L, M, N, O, X, Y, Z, as shown on plan Camden Gas Project Stage 2 – RFI Act 3A Permit Areas by Sydney Gas (**Figure 2, Appendix B**). The Applicant shall prepare and implement a representative trenched crossing design. The design shall be prepared and implemented by a person(s) with relevant knowledge, qualifications and experience, in consultation with the Director-General. The Applicant shall submit the plan for approval by the Department **prior to the issue of the Part 3A Permit**. The final crossing design is to be presented in plan view and cross section. The cross section is to be at right angles to the direction of flow, is to extend for a **minimum** distance of 10 metres from the top of both banks and is to include the location of all structures associated with the proposed crossing.

**Evidence sighted:**  
A copy of the 3A Permit for crossing D and E was observed dated 31 August 2004. However, the same 3A Permit states that stream crossings on the EMAI are not to be constructed as part of the 3A Permit. There appears to be confusion as to which crossings are within the EMAI and which are not.

It was reported that crossings D and E were inadvertently excluded from the final permit despite DIPNR (now DoP) providing verbal permission during a previous field assessment.

Both crossings have been trenched.

**Compliance status:**  
Non-compliance

**Recommended Action:**  
No further action.

75. <sup>41</sup>The Applicant shall ensure that stream crossing I as shown on plan Camden Gas Project Stage 2 – RFI Act 3A Permit Areas by Sydney Gas (**Figure 2, Appendix B**) is strapped to the Menangle Bridge.

**Evidence sighted:**  
Stream crossing I is strapped to the Menangle Bridge.

**Compliance status:**  
Compliant – no further monitoring of CoC required.

76. <sup>42</sup>The Applicant shall ensure that stream crossing H as shown on plan Camden Gas Project Stage 2 – RFI Act 3A Permit Areas by Sydney Gas (**Figure 2, Appendix B**), is either strapped to the existing road crossing, strapped to an upgraded road crossing, under-bored or consist of a pipe bridge. Should a pipe bridge be proposed, the Applicant shall prepare and implement a design of the crossing which shall be prepared and implemented by a person(s) with relevant knowledge, qualifications and experience, in consultation with the Department. The Applicant shall submit the plan for approval by the Director-General **prior to the issue of the Part 3A Permit**. The final crossing design is to be presented in plan view and cross section. The cross section is to be at right angles to the direction of flow, is to extend for a **minimum** distance of 20 metres from the top of both banks and is to include the location of all structures associated with the proposed crossing.

Note: A Part 3A Permit may be required for a road crossing upgrade.

<sup>39</sup> Incorporates a Department General Term of Approval

<sup>40</sup> Incorporates a Department General Term of Approval

<sup>41</sup> Incorporates a Department General Term of Approval

<sup>42</sup> Incorporates a Department General Term of Approval

**Evidence sighted:**

Crossing H is a pipe bridge - a 3A Permit, dated 3 March 2004 was obtained for Gas Gathering Steam Crossing H.

**Compliance status:**

Compliant – no further monitoring of CoC required.

77. <sup>43</sup>The Applicant shall advise the Director-General of the proposed stream crossing methods located on EMAI, which are to be assessed and approved by the Department **prior to the issue of the Part 3A Permit.**

**Evidence sighted:**

A 3A Permit was observed dated 3 March 2005 for gas gathering stream crossings within the EMAI for B1, C1, G, P, Q, R, S, T, U, V, W, H (Foot Onslow Creek) and A1 (road access crossing).

A copy of the 3A Permit for crossing D and E was observed dated 31 August 2004. However, the same 3A Permit states that stream crossings on the EMAI are not to be constructed as part of the 3A Permit. There appears to be confusion as to which crossings are within the EMAI and which are not (refer to CoC No.74 above).

**Compliance status:**

Compliant.

78. <sup>44</sup>The Applicant shall ensure that works within 20 m of watercourses are to be undertaken during dry weather conditions.

**Evidence sighted:**

Works are not undertaken within 20 m of watercourses during wet conditions. The EHSMP for Gathering Line construction requires that during times of wet weather activities shall be reduced to those that are essential.

**Compliance status:**

Compliant.

79. <sup>45</sup>The Applicant shall ensure that the disturbance to the bed and banks of all watercourses are kept at an absolute minimum during the construction procedure and reinstatement of the site.

**Evidence sighted:**

All sites are reportedly constructed in accordance with the site specific, approved Soil and Water Management Plans (SWPMs).

Disturbance to bed and banks are kept to a minimum.

**Compliance status:**

Compliant.

**Management of Site Water and Sediment Runoff**

80. The Applicant shall implement all practicable measures to minimise soil erosion and the discharge of sediments and water pollutants from the site.

**Evidence sighted:**

A number of measures to minimise soil erosion were observed during the site visit, including the use of sediment fences, and the minimisation of access areas.

A sedimentation dam has been installed at the Rosalind Park Gas plant site.

**Compliance status:**

Compliant.

81. <sup>46</sup>The Applicant shall ensure that the amount of dirty water and sediment from the site entering protected waters, or that is exposed to the flow of protected waters, or that is likely to detrimentally affect water quality, riparian vegetation or habitat or the environment is minimised in a manner acceptable to the Director-General.

**Evidence sighted:**

Potentially dirty water/sediment is generated from the following sources:

<sup>43</sup> Incorporates a Department General Term of Approval

<sup>44</sup> Incorporates a Department General Term of Approval

<sup>45</sup> Incorporates a Department General Term of Approval

<sup>46</sup> Incorporates a Department General Term of Approval

- stormwater run-off from disturbed areas of the site (including the well heads, gathering lines and access roads);
- water produced from the wells during construction; and
- stormwater run-off from the Rosalind Park gas plant.

Stormwater run-off from the well heads is minimised through the use of sediment fences.

No wells were being constructed, approved within the audit period.

A sediment pond is located at the Rosalind Park gas plant to collect stormwater run-off. This water is released once a visual check for suspended solids and oil/grease has been undertaken. Only two discharges were reported to have occurred since December 2004.

**Compliance status:**

Compliant.

82. <sup>47</sup>The Applicant shall implement all relevant site drainage and sediment and erosion control works and measures and any other pollution controls as required by these conditions, prior to the commencement of any other works at the site.

**Evidence sighted:**

Sediment and erosion controls are put in place prior to drilling works begin, as required by DIPNR.

A 'Drilling Operations Compliance Checklist' is completed for each well at each stage of well development. The checklist includes checking that sediment and erosion controls are installed and were observed to have been completed on each checklist for each well.

**Compliance status:**

Compliant.

83. <sup>48</sup>The Applicant shall document in detail the decommissioning of all sediment and erosion controls and any other water diversion structures to the satisfaction of the Director-General. The Applicant shall ensure that the decommissioning meets the requirements of the most recent version of the NSW Department of Housing's publication "*Managing Urban Stormwater: Soils and Construction*" (3<sup>rd</sup> Edition 1998).

**Evidence sighted:**

All sediment and erosion control measures are reportedly monitored and decommissioned in accordance with the NSW Department of Housing requirements

**Compliance status:**

Compliant.

**Soil and Water Management Plan**

84. <sup>49</sup>The Applicant shall prepare and implement a Soil and Water Management Plan (SWMP) for the development. A person, with professional qualifications, knowledge and experience to industry standards, must prepare the SWMP. The Applicant shall seek the Director-General's prior approval of the person to prepare the Plan. The SWMP shall be prepared to the satisfaction of the Director-General **prior to the issue of the Part 3A permit**. This plan shall include, but not necessarily be limited to:

- (a) all works on protected land and in protected waters, and staging and maintenance requirements;
- (b) the measures to be implemented to minimise the potential for soil erosion and the discharge of sediment and other pollutants to lands and/or waters during drilling and construction activities;
- (c) the measures to be implemented to mitigate the impacts of stormwater run-off from and within the site following the completion of drilling and construction activities;
- (d) demonstrate that erosion and sedimentation control measures will conform with, or exceed, the relevant requirements and guidelines contained in the Department of Housing's publication "*Managing Urban Stormwater: Soils and Construction*" (3<sup>rd</sup> Edition 1998) or its latest version;
- (e) consistency with the stormwater management plan for the catchment, should one exist, or with the EPA's *Managing Urban Stormwater: Council Handbook* should a stormwater management plan for the catchment not exist;
- (f) any EPA licence requirements;
- (g) measures to rehabilitate erosion-affected areas and areas the subject of excavation, including the planting of local native tree, shrub and/or cover crop species;
- (h) measures to maintain the soil quality, soil integrity and soil structure of land on the EMAI during the construction and operation of the proposal;

<sup>47</sup> Incorporates a Department General Term of Approval

<sup>48</sup> Incorporates a Department General Term of Approval

<sup>49</sup> Incorporates a Department General Term of Approval

- (i) implement a program of regular testing of waste water quality for compounds, nutrients and metals, as outlined in the EIS;
- (j) provide details of an appropriate soil sampling and monitoring program to ensure that areas used for waste water application do not lead to an unacceptable build-up of salts within the soil profile;
- (k) management procedures for all surface and groundwater collection and storage structures on the site, including a maintenance program for associated infrastructure (eg. pipes, pumps, dam walls, etc.) and a program for desilting of those structures, where relevant;
- (l) details of the well maintenance procedures to ensure the integrity of the well isolation components to prevent the cross contamination of groundwater aquifers; and
- (m) ensuring that saline groundwater which would exceed the ANZECC guidelines for the protection of aquatic ecosystems and irrigation application purposes is contained in lined holding evaporation ponds and dilutes with fresh water prior to any application of the water to the land surface.

**Evidence sighted:**

The Director General approved the EHSMP – Gas Gathering System Construction with the SWMP for the Development, subject to conditions. The SWMPs were approved by DIPNR and 3A Permits issued.

**Compliance status:**

Compliant – no further monitoring of CoC required.

**Evaporation Pond Liner Integrity Evaluation Program**

85. <sup>50</sup>The Applicant must submit at least 1 month prior to completion of construction of the Treatment Plant, to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2124, a written report containing a program for future evaluation of the integrity testing of the liner in the evaporation pond. The report must contain details of an initial evaluation of the liner prior to use and then an on-going program for review of the integrity of the liner.

**Evidence sighted:**

The Evaporation Pond Liner Integrity Evaluation Program was issued to the EPA on 6 September 2004, prior to the due date of 1 November 2004.

**Compliance status:**

Compliant – no further monitoring of CoC required.

86. <sup>51</sup>Within one month of the report above being provided to the licensee, the licensee must submit, to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2124, a copy of each written report containing the results of an evaluation of the integrity testing of the liner in the evaporation pond as specified in the report submitted to the EPA as required by Condition 85.

**Evidence sighted:**

The results of an evaluation of the integrity testing of the liner was submitted to the EPA on 6 September 2004.

**Compliance status:**

Compliant – no further monitoring of CoC required.

**INDIGENOUS HERITAGE**

**Protection of Indigenous Heritage**

87. Prior to the commencement of site preparation works for the gas wells, gas gathering system and the Gas Treatment Plant Site, the Applicant shall clearly indicate the locations of known aboriginal relics on the site, and ensure that all employees and contractors are aware of these locations, to prevent the known relics being impacted upon during site preparation and construction.

**Evidence sighted:**

Aboriginal relics are avoided during the planning process. The locations of sites have been identified on a figure and are highlighted in the field. To reduce the risk of vandalism, the location is not highlighted in the field if there is not considered to be a risk from development works.

**Compliance status:**

Compliant.

88. The Applicant shall provide a report of the Indigenous Heritage Monitoring undertaken for the Stage 2 project to NPWS and the Director-General within two months of the Heritage Monitoring being completed.

<sup>50</sup> Incorporates an EPA General Term of Approval

<sup>51</sup> Incorporates an EPA General Term of Approval

**Note:** Under Section 86 of the National Parks and Wildlife Act 1974, it is an offence to disturb or excavate any land with the purpose of discovering an Aboriginal object without first obtaining a Section 87 Permit.

**Evidence sighted:**

A copy of the Heritage Monitoring was reportedly provided to the NPWS (now part of the Department of Environment and Conservation NSW - DEC) within two months, however, it was reportedly not provided to the DG.

The report has since been forwarded to the DG.

**Compliance status:**

Non-compliant.

**Recommended Action:**

No further action recommended.

**NON-INDIGENOUS HERITAGE**

**Protection of the Heritage Landscape of EMAI**

89. The Applicant shall implement all mitigatory measures listed in Sections 7.1, 7.2 and 7.3 of the report titled "Statement of Heritage Impact for Land within the Elizabeth Macarthur Agricultural Institute NSW Agriculture, Menangle" by Geoffrey Britton dated September 2003.

**Evidence sighted:**

All mitigatory measures listed in the above report have reportedly been implemented.

**Compliance status:**

Compliant.

90. The Applicant shall ensure roadside plantings for sites EM 16, EM 18, EM 19 and EM 20 are strengthened using the species outline provided in the report titled "Statement of Heritage Impact for Land within the Elizabeth Macarthur Agricultural Institute NSW Agriculture, Menangle" by Geoffrey Britton dated September 2003.

**Note:** a relic is defined under the Heritage Act as any deposit, object or material evidence:

- (a) which relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and
- (b) which is more than 50 years old.

**Evidence sighted:**

AGL are currently waiting for advice from the EMAI land manager as to if and where the plantings are required.

**Compliance status:**

Non-compliant.

**Recommended action:**

To obtain advice from the EMAI land manager as to if and where plantings are required.



## **SAFETY AND RISK MANAGEMENT**

### **Risk Assessment**

#### **Pre-Construction Studies**

91. The Applicant shall prepare and submit for the approval of the Director-General at least one month prior to the commencement of construction of the development (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Director-General may agree, the studies set out under subsections (a) to (c) (the pre-construction studies). Construction, other than of preliminary works that do not adversely affect facility safety, shall not commence until approval has been given by the Director-General and, with respect to the fire safety study, approval has also been given by the Commissioner of the NSW Fire Brigades.
- (a) Fire Safety Study
- A fire safety study for the gas treatment plant of the proposed development. This study shall cover relevant aspects of the Department of Infrastructure, Planning and Natural Resources (DIPNR) Hazardous Industry Planning Advisory Paper No. 2, "Fire Safety Study Guidelines". The study shall also be submitted for approval, to the NSW Fire Brigade.
- (b) Hazard and Operability Study
- Updated Hazard and Operability (HAZOP) Studies for the development, chaired by an independent qualified person approved by the Director-General prior to the commencement of the study. The studies shall cover any significant changes to the gas treatment plant or gas wells, since the HAZOPs carried out by Kvaerner E & C (Australia) Pty Limited (report dated 15 November 2002) and Worley Pty Ltd (report dated 13 March 2003). The updated HAZOPs shall be carried out in accordance with the DIPNR Hazardous Industry Planning Advisory Paper No. 8, "HAZOP Guidelines". The reports shall also cover the implementation status of all recommendations arising out of the original studies.
- (c) Final Hazard Analysis
- A final hazard analysis of the development, focusing on design changes since preparation of the preliminary hazard analysis, which significantly affect the risk results. The analysis should be prepared in accordance with the DIPNR Hazardous Industry Planning Advisory Paper No. 6, "Guidelines for Hazard Analysis".

<b>Evidence sighted:</b>
All three studies have been completed and approved by DIPRR (now DoP) on 30 July 2004, 2 July 2004 and 30 July 2004, respectively.
<b>Compliance status:</b>
Compliant – no further monitoring of CoC required.

#### **Pre-commissioning Studies**

92. The Applicant shall develop and submit for the approval of the Director-General, at least one month prior to the commencement of the commissioning of the development, or within such further period as the Director-General may agree, the plans and systems set out under subsections (a) and (b) (the pre-commissioning studies). Commissioning shall not commence until approval has been given by the Director-General. The Applicant shall implement the plans and systems set out under subsections (a) and (b) (the pre-commissioning studies).
- (a) Emergency Plan
- A comprehensive emergency plan and detailed emergency procedures for the development, including the gas wells and gas treatment plant. This plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The plan shall be in accordance with the DIPNR Hazardous Industry Planning Advisory Paper No. 1, "Industry Emergency Planning Guidelines".
- (b) Safety Management System
- A document setting out a comprehensive safety management system, covering all operations on the gas wells, gathering system and gas treatment plant. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures. Records shall be kept on-site and shall be available for inspection by the

Director-General upon request. The Safety Management System shall be developed in accordance with the DIPNR Hazardous Industry Planning Advisory Paper No. 9, "Safety Management".

<b>Evidence sighted:</b> The above two studies have been completed and approved by DIPNR (now DoP) on 9 August 2004 and 29 March 2004, respectively.
<b>Compliance status:</b> Compliant – no further monitoring of CoC required.

#### Compliance Report

93. The Applicant shall submit to the Director-General one month prior to the commissioning of the plant, or within such period approved by the Director-General, a compliance report detailing compliance with Conditions 91 and 92, including:
- (a) dates of study submission, approval, commencement of construction and commissioning;
  - (b) actions taken or proposed, to implement recommendations made in the studies; and
  - (c) responses to any requirement imposed by the Director-General.

<b>Evidence sighted:</b> As this CoC applies to CoC No. 91 (pre-construction) DIPNR approved this CoC in a later dated 26 November 2004, subject to conditions. Evidence to indicate how these conditions were met was not observed.
<b>Compliance status:</b> Indeterminate.
<b>Recommended Action:</b> Provide evidence of compliance with DIPNR's comments, dated 26 November 2004.

#### Incident Report

94. The Applicant is required within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, to supply a report to the Department outlining the basic facts. A further detailed report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to the Director-General no later than 14 days after the incident or potential incident.

The Applicant shall maintain a register of accidents, incidents and potential incidents. The register shall be made available for inspection at any time by the independent hazard auditor and the Director-General.

<b>Evidence sighted:</b> No incident with actual or potential significant off-site environmental impact has occurred at the site. Two incidents were reported during the reporting period and were reported to the relevant authority. However these incidents had no reported off-site impact.
<b>Compliance status:</b> Compliant.

#### Hazard Audit

95. Twelve months after the commencement of operations of the proposed development or within such further period as the Director-General may agree, the Applicant shall carry out a comprehensive hazard audit of the proposed development and within one month of the audit submit a report to the Director-General. The audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by the Director-General prior to commencement of the audit. Further audits shall be carried out every three years or as determined by the Director-General and a report of each audit shall within a month of the audit be submitted to the Director-General. Hazard audits shall be carried out in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 5, "Hazard Audit Guidelines".

The audit shall include a review of the safety management system and a review of all entries made in the incident register since the previous audit.

Note: The Applicant must comply with the requirements of the most recent version of the "Schedule of Onshore Exploration and production Safety Requirements" published by the Department of Mineral Resources in August 1992 where equipment and/or pipeline are on a Production Lease.

**Evidence sighted:**

A Hazard Audit was undertaken, report dated 8 March 2006 (Pinnacle Risk Management). The report was forwarded to the DoP.

**Compliance status:**

Compliant.

**Crime Risk Performance**

96. The Applicant is required to implement measures to minimise the risk of crime from the proposed development. The Applicant shall implement the following measures prior to the operation of the proposed development.

**Gas Treatment Plant**

The Applicant is required to:

- a) ensure the Plant is closed to community access;
- b) fully enclose the Plant with a 3-metre metal framed chain mesh fence with a 3-strand barbed wire head;
- c) ensure the Plant is gated and manned 24 hours per day;
- d) keep vehicular and pedestrian gates closed at all times (when not in immediate use);
- e) use self-closing and self-locking pedestrian gates;
- f) use gate locking mechanisms that facilitate emergency egress; and
- g) ensure plant staff are adequately trained in undertaking security functions.

**Gas Wellhead Sites**

The Applicant is required to:

- a) install fixed (permanent) perimeter fencing and gates around each well head. The fencing and gates should be 3 metres high (all inclusive) metal framed and topped with a 3-strand barbed wire head; and
- b) keep gates securely hinged and permanently locked, unless otherwise agreed by NSW Police.

**Evidence sighted:**

The requirements of this CoC have been met.

**Compliance status:**

Compliant.

**Dangerous Goods**

97. The Applicant shall ensure that the storage, handling, and transport of:

- (a) Dangerous goods is done in accordance with the relevant *Australian Standards*, particularly *AS1940* and *AS1596*, and the *Dangerous Goods Code*; and
- (b) Explosives are carried out in accordance with the requirements of DMR.

**Evidence sighted:**

Dangerous goods associated with the Camden Gas Stage 2 Development include the following:

- Two freight containers (~32 cubic metres) containing fuel, paints, oils and corrosives;
- Diesel tanks – 800 L on a ute and 500 L on a trailer;
- Triethylene glycol in 4 x 225 L drums under teg unit in banded area;
- Mercaptan (DG Class 3 Flammable Liquid) in ~1,000 L cylinder within a dedicated brick storeroom;
- Oxygen and acetylene cylinders;
- Nitrogen gas cylinders.

Explosives are handled by a contractor and stored off-site.

At the time of the site visit improvements to Dangerous Goods storage appeared to be required. Some issues identified are as follows”

- Alkalis and acids were stored in the same compound without segregation;
- No signage on the outside of the flammables store was present to indicate corrosives were present;
- No water supply was present in the vicinity of the store containing corrosives;
- Storage of gas cylinders without fall protection.

A full Dangerous Goods audit has not been undertaken as part of this audit.

**Compliance status:**

Non-compliant.

**Recommended action:**

It is recommended that a Dangerous Goods audit is undertaken against the requirements of the Occupational Health

and Safety Act 2000 and Regulation 2001 (particularly Chapter 6A) and relevant standards. Relevant standards may include AS1940: The Storage and Handling of Flammable and Combustible Materials and AS3780 The Storage and Handling of Corrosives, and/or AS3833: The storage and handling of mixed classes of dangerous goods in packages and intermediate bulk containers, and any recommendations implemented.

## WASTE

### Operating Conditions

Note: <sup>52</sup>These conditions only apply to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the *Protection of the Environment Operations Act 1997*.

98. <sup>53</sup>The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.

#### **Evidence sighted:**

No waste is reportedly imported to the Camden Gas Stage 2 Development.

#### **Compliance status:**

Compliant.

99. <sup>54</sup>Except as provided by any other condition of this consent, only the hazardous and/or industrial and/or Group A waste listed below may be generated and/or stored at the premises:

- Waste oil/water, hydrocarbons/water mixtures or emulsions.

#### **Evidence sighted:**

Only the above listed hazardous wastes are reportedly generated, observations during the audit confirmed this to be the case.

#### **Compliance status:**

Compliant.

100. <sup>55</sup>The quantity of hazardous and/or industrial and/or Group A waste stored at the premises must not exceed 9000 L at any one time.

#### **Evidence sighted:**

The EPA has been notified (5 July 2006) that the current generation and on-site storage volume is exceeding licence limits (of 500 T) due to changes in the oily waste water separation process.

#### **Compliance status:**

Non-compliance

#### **Recommended action:**

Continue liaisons with EPA and consider requesting an Environment Protection Licence variation if levels are to remain above licence limits.

101. <sup>56</sup>The quantity of hazardous and/or industrial and/or Group A waste generated and/or stored at the premises must not exceed 85,000L per year.

#### **Evidence sighted:**

The EPA has been notified (5 July 2006) that the current generation and on-site storage volume is exceeding licence limits (of 500 T) due to changes in the oily waste water separation process.

#### **Compliance status:**

Non-compliance

#### **Recommended action:**

Continue liaisons with EPA and consider requesting a Environment Protection Licence variation if levels are to remain

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above licence limits.

102. <sup>57</sup>The quantity of non controlled aqueous liquid wastes generated at the premises must not exceed 3,000,000 L per year.

**Evidence sighted:**

Controlled aqueous liquid wastes generated comprise saline groundwater. This waste is re-used on site and excess waste disposed off-site. The quantity of liquid required to be disposed is above 3,000,000.

The EPA has been notified (5 July 2006) that the current generation could exceed licence limits (of 500 T) and DoP limit of 3,000,000 L, due to changes in the oily waste water separation process.

**Compliance status:**

Non-compliance

**Recommended action:**

Continue liaisons with DoP and EPA and consider requesting a Environment Protection Licence variation if levels are to remain above licence limits.

103. <sup>58</sup>The Applicant must ensure that any hazardous, industrial or Group A waste at the premises is assessed and classified in accordance with the EPA's Environmental Guidelines: "Assessment Classification and Management of Liquid and Non-Liquid Wastes" in force as at 1 July 2003.

**Evidence sighted:**

Oily water (waste category J120) from the Rosalind Park gas plant is collected by the contractor Worth Oil every two to three weeks for off-site disposal. The waste is analysed each time a load is collected.

**Compliance status:**

Compliant.

104. <sup>59</sup>The Applicant must ensure that waste identified for recycling is stored separately from other waste.

**Evidence sighted:**

Waste collected for recycling include waste oils from the Rosalind Park gas plant workshop (collected by Nationwide Oil), waste batteries (collected by Campbelltown Sydney Recyclers), and scrap steel, waste paper and cardboard (collected by Thiess). These wastes are stored separately from non-recyclable wastes.

**Compliance status:**

Compliant.

105. <sup>60</sup>Any movement of hazardous, industrial or Group A waste from the premises must be conducted in accordance with the EPA's waste tracking requirements. A copy of these tracking requirements is included in **Schedule 8**.

**Evidence sighted:**

Waste transfer documentation for the oily water (J120) is maintained on site.

**Compliance status:**

Compliant.

**Waste Management Plan**

106. The Applicant shall prepare and implement a Waste Management Plan for the whole site. This plan shall include, but not necessarily be limited to:
- (a) measures to minimise the production and impact of waste produced at the site during drilling and operation;
  - (b) implementation of waste reduction, reuse and recycling principles;
  - (c) details of the reuse and recycling of waste water produced/collected on the site, including collection and handling procedures;
  - (d) details of appropriate disposal methods in the event that reuse and recycling are not available or are not practicable; and

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- (e) programs for involving and encouraging employees and contractors to minimise domestic waste production on the site and reuse/recycle where appropriate.

Key concepts of the plan and management measures should be submitted and approved by the Director-General prior to substantial construction. The plan shall be fully completed and approved by the Director-General prior to commissioning.

<p><b>Evidence sighted:</b> The requirement for a Waste Management Plan is incorporated into the EHSMPs. The EHSMPs were approved on 29 March 2004.</p>
<p><b>Compliance status:</b> Compliant.</p>

**ROADS AND TRAFFIC**

**Roads within EMAI**

107. The Applicant shall not bring into the EMAI site, any roadbase material for new access roads to gas well sites EM 1 to EM 4 (inclusive) and gas well site EM 6 (refer to **Figure 3, Appendix B** for locations of roads).

<p><b>Evidence sighted:</b> It is understood that this CoC was a requirement of the EMAI. However, EMAI have reportedly agreed to the use of off-site road base material rather than using the EMAI shale from it's on-site shale pit as the EMAI did not want the shale used.</p> <p>Permission was reportedly granted from EMAI.</p>
<p><b>Compliance status:</b> Non-compliant.</p>
<p><b>Recommended Action:</b> No further action recommended.</p>

108. The Applicant shall ensure that the existing access roads marked blue on **Figure 3** (Appendix B) (between gas well sites EM 6 and EM 8) are used by light vehicles only.

<p><b>Evidence sighted:</b> The existing road is reportedly only used by light vehicles.</p>
<p><b>Compliance status:</b> Compliant.</p>

109. The Applicant shall ensure that all heavy vehicles only travel along access roads designated for such vehicles.

<p><b>Evidence sighted:</b> Heavy vehicles reportedly only travel along access roads designated for such vehicles. The site induction includes this requirement.</p>
<p><b>Compliance status:</b> Compliant.</p>

110. The Applicant shall ensure that during and immediately following heavy rainfall events, vehicle movements to gas well sites and / or gas gathering systems will cease.

<p><b>Evidence sighted:</b> Following heavy rain events vehicle movements reportedly cease to reduce risk of getting bogged.</p>
<p><b>Compliance status:</b> Compliant.</p>

111. On completion of drilling and fracking activities, the Applicant shall rehabilitate soils affected by compaction. This rehabilitation shall be conducted in consultation with a representative from EMAI.

<p><b>Evidence sighted:</b> Wells observed on EMAI during the site visit were observed to have been rehabilitated.</p>
<p><b>Compliance status:</b> Compliant.</p>

### **Works within the Wollondilly Shire Council Road Reserve**

112. The Applicant shall prepare a Road Reserve Environment Management Plan (EMP) in consultation with Wollondilly Shire Council. The Road Reserve EMP shall be submitted to the Director-General for approval one month prior to the construction of the gas gathering line within the Road Reserve or within such period as approved the Director-General. The Road Reserve EMP shall include:

- (a) Proposed construction methods;
- (b) Soil erosion and sediment control measures for works undertaken during construction and following completion of the works;
- (c) Traffic control plans; and
- (d) Techniques for construction of the gas gathering line across Menangle Bridge.

**Evidence sighted:**

A road reserve plan was reportedly not prepared. However it was reported that the Gas Gathering Line EHSMP has been approved by DIPNR (2 July 2004) and provided a detailed level of environmental management. It was reportedly adopted as best practice for the work. Details of necessary traffic controls were reportedly developed in consultation, and approved by Wollondilly Shire Council.

**Compliance status:**

Compliant.

113. The Applicant shall liaise with Wollondilly Shire Council regarding the proposed crossing of the gas gathering line across Menangle Bridge and undertake the proposed works to the satisfaction of Wollondilly Shire Council.

**Evidence sighted:**

The gas gathering line across Menangle Bridge was reportedly undertaken to the satisfaction of Wollondilly Shire Council.

**Compliance status:**

Compliant.

### **M5 Underbore – Menangle Park**

114. The Applicant shall conduct the underboring of the M5 road to the satisfaction of the RTA. The Applicant shall ensure that the M5 underbore:

- (a) Has a minimum depth of 1.2 metres at the lowest point of the road formation;
- (b) Excavation for the thrust pits are outside the Freeway Reserve; and
- (c) Requires no access from within the Freeway for construction or maintenance purposes;

unless otherwise agreed by the RTA.

**Evidence sighted:**

The underboring of the M5 road was reportedly undertaken to the satisfaction of the RTA.

**Compliance status:**

Compliant.

## **BUSHFIRE**

### **Bushfire Hazard Measures**

115. The Applicant shall implement the following bushfire hazard measures at the site:

- (a) Provision of a two-lane access road to the Treatment Plant area from Menangle Road;
- (b) Provision of a 20 metre asset protection zone managed as an inner protection area, around the perimeter of the Gas Treatment Plant and gas well sites;
- (c) Provision of a dedicated water supply tank of 20,000 Litres for the sole use of fire-fighting; and
- (d) Provision of the location of gas wells, access roads to the gas well sites and access roads to the Gas Treatment Plant Site to the NSW Rural Fire Service.

Note: The terms "Asset Protection Zone" and "Inner Protection Area" as specified in this Condition are defined within the "Planning for Bushfire Protection 2001" Guidelines published jointly by the NSW Rural Fire Service and the former Department of Urban Affairs and Planning (now DIPNR).

**Evidence sighted:**

The above requirements have been implemented except for (b). The site is adjacent to a riparian area with vegetation protection requirements preventing the provision of a 20 m asset protection zone.

**Compliance status:**

Non-compliant.

**Recommended action:**

Confirm with NSW Rural Fire Service that in the absence of the 20 m asset protection zone alternative bushfire hazard measures in place are sufficient to meet RFS's requirements.

**Measures for the Living Quarters Building**

116. The Applicant shall consult with the NSW Rural Fire Service and lodge an application to the NSW Rural Fire Service for any approval or authorisation required in respect to the structure identified as "Living Quarters";

**Evidence sighted:**

The NSW Rural Fire Service have reportedly inspected the living quarters and appeared to be satisfied.

**Compliance status:**

Compliant.

117. The Applicant shall comply with the requirements of any such further approval or authorisation granted by the NSW Rural Fire Service in respect of the structure "Living Quarters."

**Evidence sighted:**

No requirements have been provided from the NSW Rural Fire Service.

**Compliance status:**

Not applicable.

118. The Applicant shall construct and maintain the building "Living Quarters" and the surrounding area in accordance with the requirements of the "Planning for Bushfire Protection 2001" Guidelines published jointly by the NSW Rural Fire Service and the former Department of Urban Affairs and Planning (now DIPNR).

**Evidence sighted:**

The NSW Rural Fire Service have reportedly inspected the living quarters and appeared to be satisfied.

**Compliance status:**

Compliant.

**Bushfire Management Plan**

119. The Applicant shall prepare and implement a Bushfire Management Plan for the whole site. This plan shall be prepared prior to the commissioning of the development and be prepared to the satisfaction of the Rural Fire Service having regard to any standard local government bushfire related requirements. The plan shall be submitted to the Director-General prior to commissioning and include, but not necessarily be limited to:

- (a) adequate fire protection works, fire fighting equipment and hazard reduction measures with particular attention to boundaries of adjoining landholdings;
- (b) an annual report on fire management activities to the Campbelltown Fire Management Committee; and
- (c) the incorporation of relevant bushfire hazard measures and policies of the three Councils.

**Evidence sighted:**

The requirement for a Bushfire Management Plan has been incorporated into the EHSMPs for the Development. The EHSMPs were approved by DIPNR on 29 March 2004.

**Compliance status:**

Compliant – no further monitoring of this CoC required.

**REHABILITATION****Site Rehabilitation Performance**

120. The Applicant shall ensure the prompt and effective rehabilitation of all disturbed areas of the site following the completion of construction, operations and associated activities and/or the decommissioning of plant, to minimise the generation of wind erosion dust.



**Evidence sighted:**

AGL have reported in the AEPR that approximately 63ha have been rehabilitated during the reporting period. During the site visit rehabilitation of disturbed areas had been undertaken.

**Compliance status:**

Compliant.

121. The Applicant shall carry out rehabilitation of the site in accordance with the requirements of the DMR.

**Evidence sighted:**

Rehabilitation is reportedly undertaken in accordance with the EHSMPs, approved by DMR.

**Compliance status:**

Compliant.

122. The Applicant shall ensure that all areas of earthworks associated with the construction of the gas gathering system are rehabilitated to the pre-existing site conditions on completion of construction.

**Evidence sighted:**

Sections of the gas gathering line observed during the site visit appeared to be rehabilitated.

**Compliance status:**

Compliant.

**Rehabilitation of Gas Gathering System - Stream Crossings**

123. <sup>61</sup>The Applicant shall ensure that for all trenched crossings, the natural bed and bank profiles are restored to their original conditions, with smooth and even surfaces following the installation of the gas pipe.

**Evidence sighted:**

Sections of the gas gathering line observed appeared to have smooth even surfaces, however, the majority was covered in vegetation.

**Compliance status:**

Compliant.

124. <sup>62</sup>The Applicant shall stabilise and rehabilitate as soon as possible all disturbed soil surfaces with sterile exotic cover crops and local native grasses. The Applicant is not permitted to use Kikuyu and other invasive grass species.

**Evidence sighted:**

A pasture-type seed mix is reported to be used for rehabilitation where required.

**Compliance status:**

Compliant.

125. <sup>63</sup>The Applicant shall maintain and monitor all rehabilitated riparian zones for a period of at least two years after final planting. Maintenance must include sediment and erosion control, watering, weed control, replacement of plant losses, disease and insect control, mulching and any other requirements for achieving successful vegetation establishment.

Note: The Director-General may require the Applicant to prepare and implement a Vegetation Management Plan and remedial works if disturbance is deemed excessive.

**Evidence sighted:**

It was reported that internal audits are undertaken by AGL. No significant works have reportedly been required post rehabilitation. Riparian areas observed during the site visit appeared to have been rehabilitated.

**Compliance status:**

<sup>61</sup> Incorporates a Department General Term of Approval

<sup>62</sup> Incorporates a Department General Term of Approval

<sup>63</sup> Incorporates a Department General Term of Approval

Compliant.

## CONFIRMATION OF PROJECT COMPONENTS

### Gas Flare Design Report

126. <sup>64</sup>The Applicant shall submit a written report at least one month prior to the commissioning of the flare, to the EPA's Manager Sydney Industry PO Box 668 Parramatta NSW 2124, containing the following information:
- (a) Describe best practice flare design and, in particular, identify flare design and operational conditions that minimise emissions of air pollutants (including VOCs and nitrogen oxides), maximise destruction of hydrocarbons and maximise dispersion of air pollutants;
  - (b) Benchmark the design of the proposed Stage 2 flare against best practice as identified in subclause (a);
  - (c) Assess the ability of the proposed Stage 2 flare to meet a destruction efficiency of 98% for VOCs plus methane;
  - (d) Identify any changes in the design of the proposed Stage 2 flare required to meet the best practice requirements identified in a) and the destruction efficiency and nitrogen oxides emission rate specified in subclause (c) and any difficulties in making these changes; and
  - (e) Using the results of subclauses (a) to (d), identify the optimum temperature and residence time to achieve maximum destruction efficiency for the proposed flare design.

#### **Evidence sighted:**

A gas flare design report was issued to the NSW EPA on 19 August 2004, prior to the due date of 1 November 2004. An Environment Protection Licence was subsequently issued.

#### **Compliance status:**

Complaint – no further monitoring of this CoC required.

Note: This condition confirms the gas flare structure and specifications.

### Gas Gathering System

127. The Applicant shall comply with the following in the construction of the gas gathering system pipeline:
- (a) signs stating the presence of a buried gas pipeline shall be erected periodically along the length of the trench once the pipeline has been laid;
  - (b) trenches are to be restored and reseeded with local grass seeds on completion of the work;
  - (c) local council traffic guidelines in respect of work carried out on road verges and underneath roads shall be implemented;
  - (d) The Applicant shall construct the gas gathering system so as not to impeach lateral water flows;
  - (e) The Applicant shall ensure that no crown or camber remains along the gas gathering systems, following construction;
  - (f) the pipeline shall be designed, constructed and operated in accordance with the Australian Standard for the installation and maintenance of Plastic Pipe Systems for Gas AS 3723-1989; and
  - (g) the Department shall be notified on the completion of any trenching works.

#### **Evidence sighted:**

- (a) Signs indicating the presence of buried pipelines have been erected and were observed during the site visit;
- (b) Trenches are narrow (1 – 2 m wide) and seeding is not reported to be generally required;
- (c) local council traffic guidelines in respect of work carried out on road verges and underneath roads are reportedly implemented;
- (d) These areas are reportedly managed through the 3A Permit system;
- (e) Crown and camber are removed following construction.
- (f) This is reportedly undertaken.
- (g) The Department are reportedly notified upon completion of trenching works.

#### **Compliance status:**

Compliant.

### Menangle Park Urban Release

128. Should the future Local Environmental Plan and/or Master Plan for the Menangle Park urban release area identify the need to relocate any gas gathering lines the subject of this consent to ensure an efficient and

<sup>64</sup> Incorporates an EPA General Term of Approval

environmentally sustainable urban outcome, that infrastructure shall be relocated by, and at the cost of the applicant to the satisfaction of the Director-General following consultation with Campbelltown City Council.

<b>Evidence sighted:</b>
Not applicable as of June 2006.
<b>Compliance status:</b>
Not applicable.

## SCHEDULE 5

### ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

#### CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

1. The Applicant shall prepare and implement a Construction Environmental Management Plan (CEMP) to provide environmental management, practices and procedures to be followed during the drilling and construction phases of the proposed development. A framework plan outlining key practices, procedures and environmental management practices should be approved by the Director-General prior to the commencement of substantial construction. Sub-plans detailing implementation measures shall be submitted for approval at various stages of construction as agreed by the Director-General.

**Evidence sighted:**

The requirement for a Construction Environmental Management Plan (CEMP) was incorporated into the EHSMP. DIPNR approved and EHSMPs for Rosalind Park, and the Gas Gathering System Construction EHSMP in a letter dated 2 July 2004, subject to conditions. The EHSMP for the Drilling Completion and Testing Operations was approved on 26 November 2005.

**Compliance status:**

Compliant.

#### OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN

2. The Applicant shall prepare and implement an Operational Environmental Management Plan (OEMP) to provide environmental management practices and procedures to be followed during the operation of the development. The OEMP shall be forwarded to the Director-General for approval one month prior to commissioning. The OEMP shall include, but not necessarily be limited to:
  - (a) identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
  - (b) a description of the roles and responsibilities for all key personnel involved in the drilling and operation of the development;
  - (c) the overall environmental policies and principles to be applied to the operation of the development;
  - (d) standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved; and
  - (e) management policies to ensure that environmental performance goals are met and to comply with conditions of this consent.

**Evidence sighted:**

The EHSMP - OEHSMP Drilling Completion and Testing Operations, was approved by DIPNR on 29 March 2004.

**Compliance status:**

Compliant – no further monitoring of this CoC required.

3. The Applicant shall supply a copy of the CEMP and OEMP to the EPA, DMR, Camden Council, Campbelltown City Council and Wollondilly Shire Council within fourteen days of the Director-General's approval. The Applicant shall ensure that a copy of the CEMP and OEMP is publicly available.

**Evidence sighted:**

The above organisations were reportedly sent a copy of the EHSMPs (which incorporate the requirements for a CEMP and an OEMP), however, this was not undertaken within the fourteen day timeframe.

**Compliance status:**

Non-compliant.

**Recommended action:**

No action recommended.

4. The Applicant shall review and update the OEMP annually, or as directed by the Director-General.

**Note:** Submission of a copy of the approved Plan to other Government agencies does not mean that their approval is required. The Plan is for the information of the agency.

**Evidence sighted:**

Following on from a review and approval by DMR (DPI), DIPNR (DoP and DNR) and EPA (DEC) in April 2004, the OEMP (Operations EHSMP) was updated in June 2004 to incorporate new company changes. The document was not reviewed again until May 2006. During this period, there were no changes required to be made to the document. Conditions of Consent issued for new field development during this time were continued to be communicated via site specific inductions as specified in the Operations EHSMP.

**Compliance status:**

Non-compliant.

**Recommended action:**

Develop a schedule to ensure that the Operations EHSMP is updated annually.

### ANNUAL ENVIRONMENTAL PERFORMANCE REPORTING

5. Within twelve months of the date of this consent, and annually thereafter during the life of the development, the Applicant shall submit an Annual Environmental Performance Report to the Director-General. This report shall include, but not be limited to:
- (a) the standards, performance measures and statutory requirements the development is required to comply with;
  - (b) an assessment of the environmental performance of the development to determine whether it is complying with these standards, performance measures, and statutory requirements;
  - (c) reporting against the implementation of the Project Commitments Register;
  - (d) copy of the Complaints Register for the preceding twelve month period and indicating what actions were (or are being) taken to address these complaints;
  - (e) indication of what actions were taken to address any issue and/or recommendation raised by the Community Consultative Committee;
  - (f) provision of the detailed results of all the monitoring required by this consent;
  - (g) review of the results of this monitoring against:
    - impact assessment criteria;
    - monitoring results from previous years; and
    - predictions in the EIS;
  - (h) identify any non-compliance during the year;
  - (i) identify any significant trends in the data; and
  - (j) if any non-compliance is detected, describe what actions and measures would be carried out to ensure compliance, clearly indicating who would carry out these actions and measures, when they would be carried out, and how the effectiveness of these measures would be monitored over time.

**Evidence sighted:**

An AEPR has been submitted. The DoP provided comment on the AEPR for 2004 and in response a single AEPR for the period June 2004 to June 2006. was submitted.

**Compliance status:**

Compliant.

6. The Director-General may require the Applicant to address certain matters identified in the Annual Environmental Performance Report. Any action required to be undertaken shall be completed within such period as the Director-General may agree.

**Evidence sighted:**

No comments on the AEPR have been provided to date.

**Compliance status:**

Not applicable.

7. The Applicant shall also submit a copy of the Annual Environmental Performance Report to the EPA, DMR, Camden Council, Campbelltown City Council and Wollondilly Shire Council. The Applicant shall make a copy of the Report publicly available.

**Evidence sighted:**

A copy of the AEPR was reported to be in the process of being sent to the above authorities.

**Compliance status:**

Compliant

**INDEPENDENT ENVIRONMENTAL AUDIT – CONSTRUCTION AT EMAI**

8. The Applicant shall commission and pay the full costs of an Independent Environmental Audit of the construction of the gas gathering system, construction of the access roads and drilling and fracing of gas wells on the EMAI. The objective of the audit is to monitor the performance and effect of construction activities on the EMAI. The Independent Environmental Audit shall:

- (a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General; and
- (b) be consistent with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing, or updated versions of these guidelines/manuals.

The Audit shall:

- (a) assess the environmental performance of the construction of the development on EMAI, and its effects on the surrounding environment;
- (b) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
- (c) consider the Applicant's proposed Construction Environmental Management Plan for the EMAI Site; and
- (d) recommend measures or actions to improve the environmental performance of the construction of the development on EMAI, and/or its environmental management and monitoring systems (if required).

**Evidence sighted:**

An Independent Environmental Audit of the Construction at EMAI was undertaken in accordance with the above requirements (URS, 14 April 2005, Ref: 43177193).

**Compliance status:**

Compliant – no further monitoring of this CoC required.

9. Within one month of completion of the audit, the Applicant must submit a copy of the audit report to the Director-General, the NSW Heritage Office and NSW Agriculture. The Director-General may require the Applicant to address certain matters identified in the report and any comments received from the NSW Heritage Office and NSW Agriculture. Any action required to be undertaken shall be completed within such period as the Director-General may agree.

**Evidence sighted:**

It could not be confirmed if the requirement of this CoC had been met.

**Compliance status:**

Indeterminate.

**Recommended action:**

Confirm if the Independent Environmental Audit of the Construction at EMAI was submitted to Director-General, the NSW Heritage Office and NSW Agriculture.

**INDEPENDENT ENVIRONMENTAL AUDIT - OPERATION**

10. Within two years of the date of this consent and every two years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full costs of an Independent Environmental Audit. The Independent Environmental Audit shall:

- (a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General;
- (b) be consistent with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing, or updated versions of these guidelines/manuals;
- (c) assess the environmental performance of the development, and its effects on the surrounding environment;
- (d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;

- (e) review the adequacy of the Applicant's Environmental Management Plan; and
- (f) recommend measures or actions to improve the environmental performance of the development, and/or its environmental management and monitoring systems.

**Evidence sighted:**

This audit report, due June 2006 meets this requirement for reporting period June 2004 to June 2006, although a few months late.

**Compliance status:**

Compliant.

- 11. Within two months of commissioning the audit, the Applicant must submit a copy of the audit report to the Director-General, EPA and the DMR.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable.

**ASSESSABLE POLLUTANTS – LOAD LIMITS**

- 12. <sup>65</sup>The Applicant shall pay the load based licensing fees once a licence under the *Protection of the Environment Operations Act 1997* has been issued. The licence will identify the assessable pollutants for each fee-based activity classification. These assessable pollutants will be required to be monitored and pollutant loads calculated in accordance with the EPA's Load Calculation Protocol. The assessable pollutants and load limits applicable to this activity are given in the table below.

Assessable Pollutant	Load Limit (kg)
Benzene (air)	47
Benzo (a) pyrene (air)	0.27
Fine particles (air)	460
Hydrogen sulphide (air)	1.6
Nitrogen oxides (air)	103000
Sulphur oxides (air)	3000
Volatile organic compounds (air)	33000
Total suspended solids (water)	360
Biochemical oxygen demand (water)	370
Oil and grease (water)	96
Total PAHs (water)	0.14
Total phenolics (water)	0.1

Note: <sup>66</sup>An assessable pollutant is a pollutant which affects the licence fee payable for the licence.

<sup>67</sup>The above load limits in the table may be revised after submission of annual returns for the first three years of operation of the plant.

Note: <sup>68</sup>Clause 17(1) and (2) of the *Protection of the Environment Operations (General) Regulation 1998* requires that monitoring of actual loads of assessable pollutants listed in Condition 12 (above) must be carried out in accordance with the testing method set out in the relevant load calculation protocol for the fee-based activity classification.

**Evidence sighted:**

The load based licensing fee for the above assessable pollutants has been paid.

<sup>65</sup> Incorporates an EPA General Term of Approval

<sup>66</sup> Incorporates an EPA General Term of Approval

<sup>67</sup> Incorporates an EPA General Term of Approval

<sup>68</sup> Incorporates an EPA General Term of Approval

**Compliance status:**  
Compliant.

#### MONITORING AND RECORDING CONDITIONS

13. <sup>69</sup>The results of any monitoring required to be conducted by the EPA's General Terms of Approval, or a licence under the *Protection of the Environment Operations Act 1997*, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in the conditions below (Condition 14 and 15).

**Evidence sighted:**  
Monitoring results are maintained on site.

**Compliance status:**  
Compliant.

14. <sup>70</sup>The Applicant shall keep all records required to be kept by the licence:
- in a legible form, or in a form that can readily be reduced to a legible form;
  - kept for at least 4 years after the monitoring or event to which they relate took place; and
  - produced in a legible form to any authorised officer of the EPA who asks to see them.

**Evidence sighted:**  
Records are maintained on site.

**Compliance status:**  
Compliant.

15. <sup>71</sup>The Applicant shall keep the following records in respect of any samples required to be collected:
- the date(s) on which the sample was taken;
  - the time(s) at which the sample was collected;
  - the point at which the sample was taken; and
  - the name of the person who collected the sample.

**Evidence sighted:**  
Records are maintained as required.

**Compliance status:**  
Compliant.

#### REPORTING CONDITIONS

16. <sup>72</sup>The Applicant shall provide an Annual Return to the EPA in relation to the development as required by any licence under the *Protection of the Environment Operations Act 1997* in relation to the development. In the Annual Return the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the Applicant will be required to submit load-based fee calculation worksheets with the return.

**Evidence sighted:**  
An annual return was submitted for the Camden Gas Stage 2 Development (Licence No. 12003), received by the EPA on 20 February 2006 for the period 22 December 2004 to 21 December 2005.

**Compliance status:**  
Compliant.

#### COMMUNITY CONSULTATIVE COMMITTEE

17. The Applicant shall ensure the continuation of the existing Sydney Gas Operations Camden Project Community Consultative Committee to oversee the environmental performance of the development. The Committee shall

<sup>69</sup> Incorporates an EPA General Term of Approval

<sup>70</sup> Incorporates an EPA General Term of Approval

<sup>71</sup> Incorporates an EPA General Term of Approval

<sup>72</sup> Incorporates an EPA General Term of Approval



continue to be chaired by an independent chairperson approved by the Director-General in consultation with the Applicant, Camden Council, Campbelltown City Council and Wollondilly Shire Council. The Committee shall:

- (a) have four community representatives residing in the PEL 2 area;
- (b) have one representative from each of the following Councils: Camden Council, Campbelltown City Council and Wollondilly Shire Council;
- (c) meet at least quarterly;
- (d) take minutes of the meeting; and
- (e) make comments and recommendations about the implementation of the development and environmental management plans, monitor compliance with conditions of this consent and other matters relevant to the operation of the Stage 2 development during the term of the consent.

Representatives from relevant government agencies or other individuals may be invited to attend meetings as required by the Chairperson.

**Evidence sighted:**

The Community Consultative Committee (CCC) meets regularly and is chaired by an independent person appointed by the DMR. Minutes of meetings were observed for August 2004, November 2004, February 2005, May 2005, October 2005, February 2006 and May 2006.

**Compliance status:**

Compliant.

18. The Applicant shall:

- (a) Ensure that two of its representatives attend the Committee's meetings;
- (b) Provide the Committee with regular information on the environmental performance and management of the development;
- (c) Ensure that the Committee has reasonable access to the necessary plans to carry out its functions;
- (d) Consider the recommendations and comments of the Committee and provide a response to the Committee and Director-General;
- (e) Provide access for site inspections by the Committee;
- (f) Make the minutes available for public inspection at Camden Council, Campbelltown City Council and Wollondilly Shire Council within fourteen days of the Committee meeting, or as agreed to by the Committee; and
- (g) Forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations to the Director-General and the DMR within a month of each Committee meeting.

**Evidence sighted:**

Meeting minutes were reviewed and were found to comply with the requirements of this CoC.

- (a) Two representatives attend the CCC meetings.
- (b) The CCC are provided with the complaints register the Annual Environmental Management Report and the quarterly operations updates.
- (c) All plans are provided to the CCC.
- (d) Recommendations and comments are considered.
- (e) Site visits are organised.
- (f) Minutes are forwarded to the Local Councils within fourteen days of the CCC meetings.
- (g) Minutes are reportedly forwarded to the DG and the DMR within a month of the CCC meetings.

**Compliance status:**

Compliant.

**COMPLAINTS REGISTER**

19. The Applicant shall record details of all complaints received in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:

- (a) the date and time, where relevant of the complaint;
- (b) the means by which the complaint was made;
- (c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
- (d) the nature of the complaints;
- (e) any action(s) taken by the Applicant in relation to the complaint, including any follow-up contact with the complainant; and
- (f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the EPA or the Director-General upon request. The Applicant shall also make summaries of the register, without details of the complainants, available for public inspection.

**Evidence sighted:**

A complaints register is maintained in accordance with this CoC. Three complaints were received between July 2004 and June 2006.

**Compliance status:**

Compliant.

**COMMUNITY AWARENESS PROTOCOL**

20. The Applicant shall prepare a Community Awareness Protocol to advise nearby residents and appropriate authorities if a leak of mercaptan odourant occurs from the Gas Treatment Plant and/or associated facilities. The Protocol shall detail the circumstances when it will be implemented and describe the procedure and timeframe in which residents and authorities will be notified. The residents and authorities to be notified will be identified in the Protocol. The Applicant shall submit the Community Awareness Protocol to the Director-General for approval one month prior to commissioning of the Gas Treatment Plant.

**Evidence sighted:**

The community awareness protocol has been incorporated into the emergency response plan (page 36). The emergency response plan was approved on 9 August 2004.

**Compliance status:**

Compliant.

# SCHEDULE 6

## MANDATORY CONDITIONS FOR ALL EPA LICENCES

### ADMINISTRATIVE CONDITIONS

#### Other activities

Not applicable.

### OPERATING CONDITIONS

#### Activities must be carried out in a competent manner

Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

<b>Evidence sighted:</b>
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Licensed waste contractors are used to manage waste.
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<b>Compliance status:</b>
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Compliant.
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#### Maintenance of plant and equipment

All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

<b>Evidence sighted:</b>
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Relevant equipment includes continuous air monitoring device on compressor exhaust and noise monitoring devices. These are reportedly calibrated as required.
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<b>Compliance status:</b>
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Compliant.
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### MONITORING AND RECORDING CONDITIONS

#### Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

- The record must include details of the following:
  - a) the date and time of the complaint;
  - b) the method by which the complaint was made;
  - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
  - d) the nature of the complaint;
  - e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
  - f) if no action was taken by the licensee, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made.

The record must be produced to any authorised officer of the EPA who asks to see them.

<b>Evidence sighted:</b>
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A complaints register is maintained and provided in the AEPR.
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<b>Compliance status:</b>
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Compliant.

### Telephone complaints line

The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

This condition does not apply until 3 months after the issue of an environment protection licence.

### Evidence sighted:

A telephone complaints line was observed to be advertised at all well sites.

### Compliance status:

Compliant.

## REPORTING CONDITIONS

### Annual Return documents

#### What documents must an Annual Return contain?

- The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
  - a) a Statement of Compliance; and
  - b) a Monitoring and Complaints Summary.

A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

#### Period covered by Annual Return

An Annual Return must be prepared in respect of each reporting, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

- Where this licence is transferred from the licensee to a new licensee,
  - a) the transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
  - b) the new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

- Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on
  - a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
  - b) in relation to the revocation of the licence – the date from which notice revoking the licence operates.

#### Deadline for Annual Return

The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

### Notification where actual load can not be calculated

Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date.

- The notification must specify:
  - a) the assessable pollutants for which the actual load could not be calculated; and
  - b) the relevant circumstances that were beyond the control of the licensee.

### Licensee must retain copy of Annual Return

The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

### Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- a) the licence holder; or
- b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

<b>Evidence sighted:</b>
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Annual returns have been completed as required.
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<b>Compliance status:</b>
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Compliant.
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### Notification of environmental harm

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act

Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

<b>Evidence sighted:</b>
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No incidents causing or threatening material harm reportedly occurred during the reporting period.
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<b>Compliance status:</b>
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Compliant.
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### Written report

Where an authorised officer of the EPA suspects on reasonable grounds that:

- (a) where this licence applies to premises, an event has occurred at the premises; or
- (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

- The request may require a report which includes any or all of the following information:
  - a) the cause, time and duration of the event;
  - b) the type, volume and concentration of every pollutant discharged as a result of the event;
  - c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
  - d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
  - e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;

- f) (details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
- g) (any other relevant matters.

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

<b>Evidence sighted:</b> No requests from the EPA.
<b>Compliance status:</b> Compliant.

**GENERAL CONDITIONS**

**Copy of licence kept at the premises or on the vehicle or mobile plant**

A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.

The licence must be produced to any authorised officer of the EPA who asks to see it.

The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.

<b>Evidence sighted:</b> A copy of the current licence was held on site.
<b>Compliance status:</b> Compliant.

# SCHEDULE 7

## GENERAL CONDITIONS FOR PART 3A PERMITS DEPARTMENT OF INFRASTRUCTURE, PLANNING AND NATURAL RESOURCES

- 1 Irrespective of the granting of this consent or approval by any other Authority, work is not to commence in, or within a horizontal distance of 40m from the top of the bank of the watercourse/foreshore, without the prior issue of a Part 3A permit by the Department.

**Evidence sighted:**

Two 3A Permits were reviewed. Work commenced prior to receiving the 3A Permit on crossing H. Work is understood to have commenced in early February 2005 at crossing H and the 3A Permit is dated 3 March 2005. A fax from DIPNR was observed dated 12 December 2004 agreeing in principle to crossing H.

**Compliance status:**

Non-compliant. Work commenced on crossing H, requiring a 3A Permit, before the permit was issued. However, a fax from DIPNR was observed dated 12 December 2004 agreeing in principal to the work at crossing H.

**Recommended Action:**

No further action recommended.

- 2 Prior to the issue of the Part 3A permit the applicant must provide the Department with the following:
- A copy of the development consent including all conditions of approval;
  - Plans and/or other documentation (3 copies) that satisfy the Department's General Terms of Approval and recommendations which are included in the consent conditions; and
  - The appropriate permit fee paid to the Department.

**Evidence sighted:**

3A permits were observed to have been obtained.

**Compliance status:**

Compliant.

- 3 Work is to be carried out in accordance with drawings and any management plans required by these conditions and approved by the Department that will accompany the 3A permit.

**Evidence sighted:**

It was reported that work was carried out in accordance with this CoC. A review of plans accompanying 3A Permits was not undertaken by URS as part of this audit.

**Compliance status:**

Compliant.

- 4 Any Part 3A permit issued is to be renewed on an annual basis until all works and all rehabilitation, including maintenance provisions, have been satisfactorily completed in accordance with the permit conditions. Any application for renewal will be lodged at least 1 month prior to the permit expiry date.

**Evidence sighted:**

Not applicable at this stage of the development.

**Compliance status:**

Not applicable.

- 5 Work shall not cause unnecessary damage to, or increase erosion of, the stream bed or banks. The permit holder shall carry out any instructions given by the Department with a view to preventing degradation of the stream bed or banks.

**Evidence sighted:**

No evidence of significant erosion of the stream bed or banks was observed during the site visit.

**Compliance status:**

Compliant (at the time of the site visit).

- 6 Any vegetation or other material removed from the area of works shall be disposed of so that the material cannot be swept back into the stream during a flood.

**Evidence sighted:**

It was reported that no vegetation is disposed but is re-used on site.

**Compliance status:**

Compliant.

- 7 All works proposed must be designed, constructed and operated so they do not cause erosion or sedimentation and to minimise adverse impacts on aquatic and riparian environments.

**Evidence sighted:**

No significant evidence of erosion or sedimentation was observed at the time of the site visit.

**Compliance status:**

Compliant.

- 8 No plastic netting is to be used, for any purpose, in the stream or within the riparian zone unless such netting is of a rapidly biodegradable variety.

**Evidence sighted:**

It was reported that plastic netting is not used.

**Compliance status:**

Compliant.

- 9 Erosion and sediment control measures are required to be implemented prior to any works commencing, and must be maintained for as long as necessary after the completion of works, to prevent sediment and dirty water entering the river system. These measures are to be in accordance with Council's requirements and follow best management practices as outlined in the NSW Department of Housing's *"Managing Urban Stormwater: Soils and Construction"* (1998) manual (the "Blue Book").

**Evidence sighted:**

Sediment control works appeared to be in place, however, because work has reportedly commenced on all 3A permit areas, except for A1 it was not possible to confirm that erosion and sediment control measures were installed prior to the works commencing.

**Compliance status:**

Indeterminate.

**Recommended Action:**

No further action recommended.

- 10 The excavation of soil/spoil and its removal is the responsibility of the permit holder and the owner or occupier of the land.

**Evidence sighted:**

It was reported that no soil/spoil is removed.

**Compliance status:**

Compliant.

- 11 The approval of NSW Fisheries is required for all proposed designs of in-stream works prior to the issue of the Part 3A permit.

**Evidence sighted:**

Sydney Gas reported that DIPNR have requested that NSW Fisheries approve the design for the A1 water crossing only. NSW Fisheries approved the designs in a letter dated 29 November 2004.

**Compliance status:**

Compliant.

- 12 These conditions are issued with the provision that operations shall be carried-out on freehold land. Should operations be on Crown Land, these conditions are null and void and the occupier of Crown Land should contact the Department of Lands to obtain landowner's consent.

**Evidence sighted:**

No activities have reportedly been undertaken on Crown Land.

**Compliance status:**

Compliant.

- 13 Work is to be carried out in accordance with any conditions imposed by other government agencies, provided such conditions do not conflict with these conditions or the conditions on the Part 3A permit.



**Evidence sighted:**

Other government agencies are expected to include the DEC, WorkCover NSW and Wollondilly Shire Council.

URS was not made aware of requirements imposed by other government agencies, other than where they are provided in these Development Consent Conditions and Environment Protection Licence.

**Compliance status:**

Compliant.

- 14 The permit holder and the owner or occupier of the land are responsible for any works undertaken by any other person or company on this site.

**Evidence sighted:**

AGL reportedly accept this.

**Compliance status:**

Compliant.

- 15 The rehabilitation of the area in accordance with the Part 3A permit conditions is the responsibility of the permit holder and the owner or occupier of the land.

**Evidence sighted:**

AGL reportedly accept this.

**Compliance status:**

Compliant.

- 16 Any Part 3A permit granted is not transferable to any other person or company without the written approval of the Department and does not authorise works at any other site.

**Evidence sighted:**

AGL reportedly accepts this.

**Compliance status:**

Compliant.

- 17 Any Part 3A permit granted does not give the holder the right to occupy any land without the owner(s) consent nor does it relieve the holder of any obligation which may exist to also obtain permission from local government and other authorities who may have some form of control over the site and/or the activities proposed.

**Evidence sighted:**

AGL reportedly accepts this.

**Compliance status:**

Compliant.

- 18 Work as executed survey plans of a professional standard shall be provided to the Department upon request.

**Evidence sighted:**

The Department have reportedly not requested survey plans.

**Compliance status:**

Not applicable.

- 19 If, in the opinion of a Department officer, any activity is being carried out in such a manner that it may unnecessarily degrade the riparian zone, stream, lake or foreshore environment, all work shall cease immediately upon oral or written direction of such officer.

**Evidence sighted:**

It was reported that a Department officer is yet to inspect the EMAI site.

**Compliance status:**

Not applicable.

- 20 If the permit conditions have been breached, the permit holder shall restore the site in accordance with the permit conditions and/or as directed by the Department. If any breach of the permit conditions requires a special site inspection by the Department, then the permit holder shall pay a fee prescribed by the Department for this inspection and all subsequent breach inspections.

**Evidence sighted:**

It was reported that no breach of the permit has been conducted.

**Compliance status:**

Not applicable.

21. If works are to cease prior to completion the Department must be notified in writing one month in advance of the cessation of the operation.

**Evidence sighted:**

Not applicable at this stage of the Development.

**Compliance status:**

Not applicable.

# SCHEDULE 8

## EPA WASTE TRACKING REQUIREMENTS

### **O5 Monitoring of waste movements within NSW**

O5.1 Conditions O5.2 to O5.16 apply to the movement of the types of hazardous and/or industrial and/or Group A waste as listed in L5.3, within NSW.

#### **Prerequisites for waste movements**

O5.2 If the waste is transported from the premises, the licensee must ensure that the waste is transported:  
(a) to a place which has been licensed by the EPA to issue consignment authorisation numbers; and  
(c) to a place that can otherwise lawfully accept that class of waste.

O5.3 If the waste is transported from the premises, the licensee must;  
(a) obtain a consignment authorisation number from the consignee;  
(b) complete an approved waste data form in relation to the consigned waste in accordance with the instructions on the form and to the extent required, and give a copy of the form to the person transporting the waste;  
(c) ensure that the waste data form:  
(i) is completed accurately, and  
(ii) is retained for a period of not less than 4 years from the time the form was completed, and  
(iii) is made available for inspection by an authorised officer on request;  
(d) ensure, if the waste is of such an amount as to require the person transporting it to be licensed, that the person transporting the waste is licensed.

#### **Application for a consignment authorisation number**

O5.4 To obtain a consignment authorisation number as required by O5.3 (a), the licensee must apply in writing to the consignee. An application must include the following information:  
(a) a statement identifying the classification of the waste in accordance with the requirements of condition 04.1;  
(b) copies of all information used to classify the waste;  
(c) an estimate of the amount of waste to which the application applies;  
(d) whether the consignment will consist a single load or multiple loads;  
(e) an estimate of the total period required for transportation of the consignment;  
(f) the date of dispatch of at least the first load in the consignment.

Note: The licensee may nominate the dates of dispatch of as many loads as is feasible. This should be discussed with the consignee and will depend on the predictability of the rate of generation of the waste and the likelihood of the need for amendments to the dates nominated. If the waste is predictable, a schedule may be able to be submitted for the entire consignment, however if it is unpredictable, the date of only one future load may be able to be determined at a time (see also O5.9 about amending notified dates).

Note: The requirement for a written application for a consignment authorisation number does not preclude preliminary contact to obtain quotes and/or advice. Such preliminary contact does not require the formal provision of the above information that need only be supplied in the formal application.

O5.5 Once an application for a consignment authorisation number, as set out in O5.4 has been submitted, the licensee must not submit an application for the same consignment to another consignee until notification is received concerning the outcome of the application.

#### **Notification of dates of dispatch of the second and subsequent loads in a consignment**

O5.6 The licensee must provide the consignee with written notification of the date of dispatch of each load of waste.

O5.7 The notification referred to in O5.6 must be received by consignee no later than the date of arrival of the preceding load at the destination.

### **Notification of a final load in a consignment.**

O5.8 Unless the movement of an entire consignment of waste occurs in a single load, by the time the final load in a consignment is accepted at the destination, the licensee must have informed the consignee in writing, that no further loads are to be dispatched under that consignment authorisation number.

Note: The notifications referred to in conditions 05.6 and 05.8 may be attached to the waste data form of the preceding load.

### **Amendments to the nominated date(s) of dispatch**

O5.9 If the date of dispatch for a load of waste is changed, the licensee must give written notification of this to the consignee and nominate a revised date of dispatch.

O5.10 A notification referred to in 05.9 must occur on or before the date of delivery as previously nominated.

Note: More than one amendment to dates of dispatch may occur.

### **Cancellation of consignment authorisations**

O5.11 If the licensee determines that the delivery of a consignment of waste is to be discontinued for any reason, the consignee must be notified in writing before the nominated date of dispatch of the next expected load.

### **Notification of delayed delivery by transporter**

O5.12 If the licensee receives written notification from a transporter who removed waste from the premises specifying a revised date of delivery to the destination which is more than 7 days after the date of dispatch, the licensee must note and record that date.

### **Record keeping**

O5.13 The licensee must record and retain all information related to each consignment of waste.

Note: This includes waste data forms and copies of other documents such as notifications of revised delivery dates, regular and other reports, etc.

O5.14 The records referred to in 05.13 must be kept so that:

- (a) all records relating to individual consignment authorisation numbers are kept physically together;
- (b) consignments transported by each transporter can be readily identified and accessed; and
- (c) consignments sent to each destination can readily be identified and accessed.

Note: The licensee must keep all information for at least 4 years.

### **Exception reporting**

O5.15 The licensee must notify the EPA, in writing, within 48 hours of becoming aware of any suspected breaches of the Act, the Protection of the Environment Operations (Waste) Regulation 1996 or this licence.

O5.16 The licensee must notify the EPA in writing within 48 hours of becoming aware of any of the following:

- (a) the refusal by a person to whom the licensee has applied for a consignment authorisation number in accordance with 05.4 to issue such a number;
- (b) the refusal of a transporter to transport waste after arriving at the licensee's premises for the purposes of transporting that waste;
- (c) a transporter who transports, or attempts to transport, waste without a waste data form completed to the extent required;
- (d) the refusal of a consignee to accept waste from the licensee;
- (e) the failure of the licensee to receive written confirmation of receipt of waste from a consignee within 21 days of dispatch, or where a transporter has provided written notification of a revised date of delivery as set out in 05.12 within 21 days of that date;
- (f) the notification by a transporter of a revised date of delivery which is more than 90 days after the date of dispatch of the waste.

Note: The EPA should be notified of exception reports by sending a facsimile to:

## **O6 Monitoring of interstate movements of controlled wastes**

O6.1 Conditions O6.2 to O6.11 apply to the movement of the types of hazardous and/or industrial and/or Group A waste as listed in L5.3, into and out of NSW.

Note: The requirements of the NEPM apply to the interstate movement of any of the wastes listed in Appendix 1 of this licence.

### **Classification of controlled waste**

O6.2 The licensee must accurately identify the waste, in accordance with 04.1, and determine if the waste is a controlled waste within the meaning of the NEPM.

Note: The waste producer must check with the agency in the State or Territory of destination to determine whether waste is classified as a controlled waste under the NEPM. Unless advised otherwise by the agency of the State or Territory of destination, any waste included in Appendix 1 of this licence is a controlled waste for the purposes of the NEPM.

### **Application for a consignment authorisation**

O6.3 If the waste is transported from the premises to another participating State or Territory, the licensee must comply with all conditions attached to the consignment authorisation issued by an agency or a facility delegated by an agency in the destination State or Territory.

Note: The waste producer is required by the Protection of the Environment Operations (Waste) Regulation 1996 to obtain, prior to the waste being dispatched, a consignment authorisation from an agency, or a facility delegated by an agency, in the destination State or territory to allow the movement of controlled waste.

### **Waste movements**

O6.4 If the waste is transported from the premises to another participating State or Territory, the licensee must ensure that the waste is transported to a place that can lawfully be used as a waste facility for that waste.

O6.5 The licensee must ensure that the waste transporter is licensed as required by the agency of each participating State or Territory through which the waste is transported.

O6.6 The licensee must:

- (a) retain a copy of the waste transport certificate for the waste for a period of not less than 4 years from the time the form was completed, and
- (b) make the copy of the waste transport certificate available for inspection by an authorised officer on request.

Note: The waste producer is required by the Protection of the Environment Operations (Waste) Regulation 1996 to complete a waste transport certificate for the waste. This should be done in accordance with the instructions printed on the certificate and the required copy of the waste transport certificate should be forwarded to the agency in the State of destination.

### **Notification of delayed delivery by transporter**

O6.7 If the licensee receives written notification from the transporter who removed waste from the licensee's premises specifying a revised date of delivery to the destination which is more than 7 days after the date of dispatch, the licensee must note and record that date.

### **Record keeping**

O6.8 The licensee must record and retain all information related to each consignment of waste.

Note: This includes the waste transport certificates and copies of other documents such as consignment authorisations issued by an agency in the destination State or Territory, notifications of revised delivery dates by transporters, regular and other reports, etc.

O6.9 The records referred to in O6.8 must be kept so that:

- (a) all records relating to each consignment authorisation are kept physically together;
- (b) consignments transported by each transporter can be readily identified and accessed, and
- (c) consignments sent to each destination can readily be identified and accessed.

Note: The licensee must keep all information for at least 4 years.  
Exception reporting

O6.10 The licensee must notify the EPA in writing within 48 hours of becoming aware of a suspected breach of the Act, the Protection of the Environment Operations (Waste) Regulation 1996 or this licence.

O6.11 The licensee must notify the EPA in writing within 48 hours of becoming aware of any of the following:

- (a) the refusal by an agency, or facility delegated by an agency, in participating State or Territory to whom the licensee has applied for a consignment authorisation in accordance with 06.3, to issue such an authorisation;
- (b) the refusal of a transporter to transport waste after arriving at the licensee's premises for the purposes of transporting that waste to another participating State or Territory to the extent required;
- (c) a transporter who transports, or attempts to transport, waste to another participating State or Territory without a waste transport certificate completed to the extent required;
- (d) the refusal of a destination in another participating State or Territory to accept from the licensee waste for which a consignment authorisation has been issued;
- (e) the failure of the licensee to receive written confirmation of receipt of waste from a destination in another participating State or Territory within 28 days of dispatch.

Note: The EPA should be notified of exception reports by sending a facsimile to:  
Manager, Hazardous Waste Regulation  
NSW Environment Protection Authority

#### **R4 Regular reporting of transportation of certain wastes within NSW**

R4.1 Conditions R4.2 to R4.5 apply to the transport of hazardous and/or industrial and/or Group A waste within NSW.

##### **Regular reporting**

R4.2 The licensee must supply to the EPA, for each transporter that transported waste from the licensee's premises, the information as set out in Appendix 2, table 1.

R4.3 The licensee must supply to the EPA, for each destination within NSW which received waste from the licensee, the information as set out in Appendix 2, table 2.

##### **Reporting periods**

R4.4 Reports to the EPA in accordance with R4.2 and R4.3 shall be supplied on or before:

- (a) 30 April for the reporting of information relating to wastes transported from the premises between 1 January and 31 March of that year;
- (b) 31 July for the reporting of information relating to wastes transported from the premises between 1 April and 30 June of that year;
- (c) 31 October for the reporting of information relating to wastes transported from the premises between 1 July and 30 September of that year;
- (d) 31 January for the reporting of information relating to wastes transported from the premises between 1 October and 31 December of the previous year.

Note: The EPA should be notified of exception reports by sending a facsimile to:  
Manager, Hazardous Waste Regulation  
NSW Environment Protection Authority

##### **Nil reports**

R4.5 If waste has not been transported from the premises in any reporting period as set out in R4.4 the EPA must be advised in writing by the licensee, by the dates referred to in R4.4 in lieu of reporting as required in R4.2 and R4.3.

#### **R5 Regular reporting of interstate movements of controlled wastes**

R5.1 Conditions R5.2 to R5.5 apply to the movement of hazardous and/or industrial and/or Group A waste as listed in L5.3, into and out of NSW.

Note: The requirements of the NEPM apply to the interstate movement of any of the wastes listed in Appendix 1 of this licence.

### Regular reporting

R5.2 The licensee must supply to the EPA, for each transporter that transported waste from the premises to a destination in another participating State or Territory, the information as set out in Appendix 2, table 3.

### Reporting periods

R5.3 Reports to the EPA in accordance with R5.2 shall be supplied on or before:

- (a) 30 April for the reporting of information relating to wastes transported from the premises between 1 January and 31 March of that year;
- (b) 31 July for the reporting of information relating to wastes transported from the premises between 1 April and 30 June of that year;
- 31 October for the reporting of information relating to wastes transported from the premises between 1 July and 30 September of that year;
- (c) 31 January for the reporting of information relating to wastes transported from the premises between 1 October and 31 December of the previous year.

### Nil reports

R5.4 If waste has not been transported from the premises in any reporting period as set out in R5.3, the EPA must be advised in writing by the licensee, by the dates referred to in R5.3 in lieu of reporting as defined in R5.2.

### Interstate transport of controlled wastes

R5.5 The licensee must comply with the requirements of the NEPM.

<p><b>Evidence sighted:</b> Wastes comprise oily water from Rosalind Plant and waste oils from the workshop. These are disposed and/or reprocessed within NSW. There are reportedly no interstate waste movements from the site. Licensed waste contractors are used to transport wastes</p> <p>Evidence that the oily wastewater has been received by the waste treatment plant at Windsor is not always maintained on site.</p> <p>Quarterly reports do not appear to have been completed during the reporting period as required by the site's EPL.</p>
<p><b>Compliance status:</b> Non-compliant.</p>
<p><b>Recommended action:</b> Ensure that the waste receiver provides a copy of the signed waste transfer documentation</p> <p>Ensure that all quarterly waste reports are supplied to the EPA.</p>

# APPENDIX A

## SCHEDULE OF LAND

FACILITY	PROPERTY DP NUMBER
Gas Well GL 5	1101/883495
Gas Well GL 7	1101/883495
Gas Well GL 8	1101/883495
Gas Well GL 9	1101/883495
Gas Well GL 10	1102/883495
Gas Well WG 1	242/1046971
Gas Well WG 2	242/1046971
Gas Well WG 3	242/1046971
Gas Well WG 4	241/1046971
Gas Well WG 5	242/1046971
Gas Well WG 6	242/1046971
Gas Well RP 1	3/622362
Gas Well RP 2	3/622362
Gas Well RP 3	3/622362
Gas Well RP 4	58/632328
Gas Well RP 5	58/632328
Gas Well RP 6	58/632328
Gas Well RP 7	58/632328
Gas Well RP 8	PT35/230946
Gas Well RP 9	PT35/230946
Gas Well RP 10	2/622362
Gas Well RP 11	2/622362
Gas Well RP 12	2/622362
Gas Well EM 1	11/658458
Gas Well EM 2	11/658458
Gas Well EM 3	11/658458
Gas Well EM 4	11/658458
Gas Well EM 5	11/658458
Gas Well EM 6	11/658458
Gas Well EM 7	11/658458
Gas Well EM 8	11/658458
Gas Well EM 9	PT1/168893
Gas Well EM 10	1/726446
Gas Well EM 11	PT1/168893
Gas Well EM 12	PT1/168893
Gas Well EM 13	1/726446
Gas Well EM 14	PT1/168893
Gas Well EM 15	PT1/168893
Gas Well EM 16	PT1/168893
Gas Well EM 17	PT1/168893
Gas Well EM 18	1/130288
Gas Well EM 19	1/130288
Gas Gathering System – Glenlee	1102/883495, 1101/883495
Gas Gathering System – Wandingong	241/1046971, 242/1046971
Gas Gathering System – Rosalind Park	2/622362, 3/622362, PT35/230946, 58/632328
Gas Gathering System – EMAI	1/130288, 1/726446, 11/658458, PT1/168893
Gas Treatment Plant	PT35/230946



# APPENDIX B

## SCHEDULE OF FIGURES

Figures enclosed in this Appendix include:

- Figure 1 - Sydney Gas Camden Gas Project Stage 2 Site Plan;
- Figure 2 - Sydney Gas Camden Gas Project Stage 2 – RFI Act 3A Permit Areas;
- Figure 3 - Sydney Gas Camden Gas Project Stage 2 – Location of Access Roads within the EMAI; and
- Figure 4 - Sydney Gas Camden Gas Project Stage 2 – Location of Gas Gathering System within the EMAI.

## APPENDIX C

### CONDITION 2(C) - SCHEDULE OF DOCUMENTS

Documents referred to in Condition 2(c) of Schedule 3 include all of the following documents:

- (i) Email from Sydney Gas Operations to the Department dated 21 July 2003 titled "Wandinong Wells Flora and Fauna Reports" and attachments;
- (ii) Letter from Sydney Gas Operations to the EPA dated 22 July 2003 regarding addendum property tables, future urban release areas and waste materials;
- (iii) Email from Sydney Gas Operations to the Department dated 22 July 2003 regarding an amended schedule of property lots in relation to the DA and EIS;
- (iv) Email from Sydney Gas Operations to the Department dated 30 July 2003 regarding addendum Tables of Property Lots and Deposited Plans for inclusion in the Development Application;
- (v) Email from Sydney Gas Operations to the Department dated 31 July 2003 and attached amended gas gathering map;
- (vi) Email from Sydney Gas Operations to the Department dated 11 August 2003 defining the areas of well development and well operation;
- (vii) Email from Sydney Gas Operations to the Department dated 11 August 2003 regarding raptor breeding zones;
- (viii) Email from Sydney Gas Operations to the Department dated 13 August 2003 regarding well head configuration;
- (ix) Letter from Environmental Resources Management Australia to Sydney Gas Company dated 20 August 2003 regarding additional noise information;
- (x) Letter from Environmental Resources Management Australia to Sydney Gas Company dated 22 August 2003 regarding additional air quality impact assessment information;
- (xi) Email from Sydney Gas Operations to the Department dated 27 August 2003 titled "Plant Emissions" enclosing a plan showing the discharge points of the proposed Treatment Plant;
- (xii) Email from Sydney Gas Operations to the Department dated 27 August 2003 and attached "Emission Data for EPA";
- (xiii) Email from Sydney Gas Operations to the Department dated 28 August 2003 with attached plans of gas well sites with respect to heritage sites;
- (xiv) Letter from Sydney Gas Operations to the EPA dated 2 September 2003 with attached "Emission Data for EPA";
- (xv) Letter from Sydney Gas Operations to the Department dated 2 September 2003 concerning flora and fauna issues and attached letter from Wildscapes Eco-Research to Sydney Gas Operations dated 15 August 2003;
- (xvi) Email from Sydney Gas Operations to the Department dated 5 September 2003 enclosing Figure 5 from the Quantitative Risk Assessment for the EIS;
- (xvii) Supplementary Report titled "Statement of Heritage Impact for Land within the Elizabeth Macarthur Agricultural Institute NSW Agriculture, Menangle" prepared by Geoffrey Britton for Sydney Gas Ltd dated September 2003;
- (xviii) Letter from Sydney Gas Operations to the Department dated 10 September 2003 containing plans of the proposed facilities;
- (xix) Email from Sydney Gas Operations to the Department dated 25 September 2003 regarding heights and dimensions of proposed buildings;
- (xx) Letter from Sydney Gas Operations to the Department dated 29 September 2003 regarding Part 3A Permits;
- (xxi) Letter from Sydney Gas Operations to the Department dated 29 September 2003 regarding flora and fauna information;
- (xxii) Letter from Sydney Gas Operations to the Department dated 29 September 2003 enclosing a report titled "Sydney Gas Proposal – Stage 2 Coal Seam Methane Project Visual Assessment" prepared by URS for Sydney Gas, dated 25 September 2003;
- (xxiii) Supplementary report provided by Sydney Gas titled "Camden Gas Plant Site Alternate Assessment" dated 30 September 2003;
- (xxiv) Supplementary report titled "Response to EPA: DA-282-6-2003 Proposed Sydney Gas Stage 2 Coal Bed Methane Proposal" prepared by URS for Sydney Gas dated 21 October 2003;
- (xxv) Letter from Environmental Resources Management Australia to Sydney Gas dated 22 October 2003 titled "Stage 2 Coal Bed Methane project – Response to the EPA's Request for Flare Noise Details";
- (xxvi) Email from Sydney Gas Operations to the Department dated 27 October 2003 and attachments regarding the specifications of the flare;
- (xxvii) Email from Sydney Gas Operations to the Department dated 29 October 2003 with an attachment titled "Camden Gas Project Stage 2 Treatment Plant Footprint";
- (xxviii) Email from Sydney Gas Operations to the Department dated 12 November 2003 regarding the capacity of the Plant and staging of compressor engines;

- (xxix) Letter from Sydney Gas Operations to the Department dated 14 November 2003 enclosing five photomontages of the proposed facilities;
- (xxx) Report titled "Response to EPA: DA-282-6-2003 Proposed Sydney Gas Stage 2 Coal Bed Methane Proposal" prepared by URS for Sydney Gas dated 18 November 2003;
- (xxxii) Report titled "NOx Dispersion Modelling Study – Proposed Camden Gas Project Stage 2 (DA-282-6-2003)" prepared by URS for Sydney Gas dated 20 November 2003;
- (xxxiii) Email from Sydney Gas Operations to the Department dated 24 November 2003 and attached document describing workover operations;
- (xxxiv) Letter from Sydney Gas Operations to Manager Sydney Industry, DEC dated 24 November 2003, titled "NOx Emissions from Stage 2 Plant";
- (xxxv) Letter from URS to Sydney Gas dated 12 December 2003 regarding "NOx emissions from Stage 2 Plant";
- (xxxvi) Facsimile from Sydney Gas Operations to the EPA dated 16 December 2003 titled "Further Requisitions in Relation to Stage 2 of the Sydney Gas Camden Project";
- (xxxvii) Email from Sydney Gas Operations to the Department dated 23 December 2003 containing attachments regarding the status of gas wells, TEG Regeneration Package Emissions Data, Site Plan and Location of Emission Points (Revision 2), letter from Sydney Gas Operations to the EPA dated 23 December 2003 titled "Sydney Gas Operations Pty Ltd Stage 2 – Coal Seam Methane Proposal – General Terms of Approval", and brochure titled "Bentofix with Thermal lock" produced by Geofabrics Australasia Pty Ltd;
- (xxxviii) Email from Sydney Gas Operations to the Department dated 2 January 2004 regarding the Start Gas Vents, stormwater pond and compressor engines;
- (xxxix) Email from Sydney Gas Operations to the EPA dated 5 January 2004 titled "EPA Request for additional information";
- (xl) Email from Sydney Gas Operations to the EPA dated 7 January 2004 titled "Revised GTA's - Sydney Gas Stage 2" and attachments;
- (xli) Email from Sydney Gas Operations to the EPA dated 12 January 2004 titled "GTA's - Sydney Gas Stage 2" and attachments;
- (xlii) Email from Sydney Gas Company to Greg Abood of Department of Environment and Conservation dated 9 January 2004 titled "GTAs- Sydney Gas Camden Project – Stage 2 " with attachments from ERM titled "Stage 2 Coal Bed Methane –GTA Noise limits", attachment from URS titled "EPA Revised Draft GTAs (Version 3) and graph titled "NOx Emissions Levels Between Major Engine Overhauls";
- (xliii) Email from Wendy Gurd of Sydney Gas Company to Greg Abood of Department of Environment and Conservation dated 12 January 2004 titled "GTAs- Sydney Gas Camden Project – Stage 2 "and
- (xliv) Email from Sydney Gas Company to Greg Abood of Department of Environment and Conservation dated 27 January 2004 titled "Sydney Gas – GTAs".

# Development Consent

## Section 80 of the *Environmental Planning & Assessment Act 1979*

I, the Minister for Infrastructure and Planning, under Section 80 of the *Environmental Planning and Assessment Act 1979*, determine the development application ("the Application") referred to in Schedule 1 by granting consent subject to the conditions set out in Schedule 2 (DA-9-1-2005).

The reason for these conditions is to:

- Prevent and minimise any adverse environmental impacts associated with the development; and
- Provide for the on-going environmental management of the development.

Craig Knowles MP  
**Minister for Infrastructure and Planning**

Sydney, 26 May 2005

File No. S02/0229

### SCHEDULE 1

<b>Development Application:</b>	DA 9-1-2005
<b>Applicant:</b>	Sydney Gas Operations Pty Limited
<b>Consent Authority:</b>	Minister for Infrastructure and Planning
<b>Land:</b>	Lot 501/ DP 869561 (Wells GL2, GL4, and GL11 and gas gathering system) Lot 1061/ DP 8013607 (Well GL6 and gas gathering system) Lot 1/ DP 1067320 (Wells EM-1V and EM-1H and gas gathering system) Lot 54 / DP 864754 (gas gathering system) Lot 1101 / DP 883495 (gas gathering system)
<b>Proposed Development:</b>	The Project includes: <ul style="list-style-type: none"><li>• Construction and drilling of well GL11;</li><li>• Construction of a gas gathering system between four wells at Glenlee and two wells at EMAI;</li><li>• Connection of 6 coal seam methane wells to the previously approved Stage 2 Camden Gas Project – Gas Treatment Plant, for the production of methane gas.</li></ul>
<b>State Significant Development:</b>	The proposed development is State significant development by virtue of a Declaration made by the Minister for Infrastructure and Planning on 4 January 2005 under Section 76A of the <i>Environmental Planning and Assessment Act 1979</i> .
<b>Integrated Development:</b>	The proposal is not integrated development.

**Notes:**

*To find out when this consent becomes effective, see Section 83 of the Act;  
To find out when this consent is liable to lapse, see Section 95 of the Act; and  
To find out about appeal rights, see Section 97 of the Act.*

## SCHEDULE 2

### Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction or operation of the development.

**Evidence sighted:**

At the time of the site visit the development described by this DA had been constructed and operational. The development comprised the following:

- Construction and drilling of well GL11;
- Construction of a gas gathering system between four wells at Glenlee and two wells at EMAI;
- Connection of 6 coal seam methane wells to the previously approved Stage 2 Camden Gas Project – Gas Treatment Plant, for the production of methane gas.

During the audit well GL11 was observed and areas of gas gathering between GL02, GL04 and GL11. No significant issues were identified from surface observations at the time of the site visit.

### Terms of Approval

2. The Applicant shall carry out the development generally in accordance with the:
  - (a) DA submitted to the Department on 4 January 2005;
  - (b) "Statement of Environmental Effects – Elizabeth Macarthur Agricultural Institute Horizontal Drilling Project" Sydney Gas Company dated July 2002;
  - (c) "Statement of Environmental Effects – Glenlee Drilling Project Drilling Operations" Sydney Gas Company dated September 2002
  - (d) Letter from Sydney Gas Operations Pty Ltd to the Department dated 13 May 2005, modifying the application to relocate well GL3; and
  - (e) Conditions of this consent.

**Evidence sighted:**

The development was reported to have been undertaken in accordance with the above.

**Compliance status:**

Compliant.

3. This approval is for a period of twenty one (21) years from the granting of the production lease.

**Evidence sighted:**

Noted

**Compliance status:**

Not applicable.

4. The Applicant shall not commence the construction of well GL11 until the Director-General has approved the Drilling and Fracing Management Plan required under condition 37.

**Evidence sighted:**

The EHSMP – Drilling was approved by DMR in 2004, prior to drilling of GL11.

**Compliance status:**

Compliant.

5. The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
  - (a) Any reports, plans or correspondence that are submitted in accordance with this consent; and
  - (b) The implementation of any actions or measures contained in these reports, plans or correspondence.

**Evidence sighted:**

Requirements are reportedly implemented.

**Compliance status:**

Compliant.

6. Nothing in this consent permits the drilling and operation of any additional wells (beyond the approved 6 wells for gas production).

**Evidence sighted:**

Noted.

**Compliance status:**

Compliant.

7. The Applicant shall provide Camden Council and Wollondilly Shire Council with the Geographical Positioning System (GPS) co-ordinates and digital survey data for gas well sites and gas gathering systems within their respective Local Government Area, in a format suitable to each of these Councils, within two months of the completion of the gas wells and gas gathering system.

**Evidence sighted:**

Evidence was not available at the time of the site visit to confirm whether the GPS co-ordinates for GL11 were sent to the Councils.

**Compliance status:**

Indeterminate.

**Recommended action:**

Confirm with Sydney Gas whether GPS co-ordinates were sent.

8. The Applicant shall provide Camden Council and Wollondilly Shire Council with the wellhead configurations of each gas well within two months of the gas well being completed or two months from the date of this consent, whichever is the later.

**Evidence sighted:**

Evidence was not available at the time of the site visit to confirm compliance with this CoC.

**Compliance status:**

Indeterminate.

**Recommended action:**

Confirm with Sydney Gas whether wellhead configuration for GL11 was sent.

9. The Applicant shall provide written notification to the Director-General that it has fulfilled the requirements of Conditions 7 and 8, within two weeks of the information being provided to the Councils.

**Evidence sighted:**

Evidence was not available at the time of the site visit to confirm compliance with this CoC.

**Compliance status:**

Indeterminate.

**Recommended action:**

Confirm with Sydney Gas.

10. The Applicant shall comply with the following in the construction of the gas gathering system pipeline:
- (a) signs stating the presence of a buried gas pipeline shall be erected periodically along the length of the trench once the pipeline has been laid;
  - (b) trenches are to be restored and reseeded with local grass seeds on completion of the work;
  - (c) local council traffic guidelines in respect of work carried out on road verges and underneath roads shall be implemented;
  - (d) the Applicant shall construct the gas gathering system so as not to impeach lateral water flows;
  - (e) the Applicant shall ensure that no crown or camber remains along the gas gathering systems, following construction;
  - (f) the pipeline shall be designed, constructed and operated in accordance with the Australian Standard for the installation and maintenance of Plastic Pipe Systems for Gas AS 3723-1989 (or its latest version); and
  - (g) the Department shall be notified on the completion of any trenching works.

**Evidence sighted:**

Compliance with the above was noted, however it was not confirmed if DoP were notified upon completion of trenching works.

**Compliance status:**

Indeterminate.

**Recommended action:**

Confirm with Sydney Gas.

11. Should the Spring Farm Master Plan for the Spring Farm urban release area, and development of the Garden Gates subdivision in Mt Annan South, identify the need to relocate any gas gathering lines the subject of this consent to ensure an efficient and environmentally sustainable urban outcome, that infrastructure shall be relocated by, and at the cost of the Applicant to the satisfaction of the Director-General, following consultation with Camden Council and Landcom.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

## Hours of Operation

12. The Applicant may conduct construction activities on land owned by Waste Service NSW, during the following hours:

Monday to Friday            7.00 am to 6.00 pm;  
Saturday and Sunday        7.00 am to 6.00 pm. (Excluding Public Holidays)

<b>Evidence sighted:</b>
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These hours were reported to have been complied with during construction activities.
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<b>Compliance status:</b>
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Compliant.
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13. For development carried out on land not owned by Waste Service NSW, the Applicant is restricted to the following hours of construction:

Monday to Friday            7.00 am to 6.00 pm;  
Saturday    8.00 am to 1.00 pm. (Excluding Public Holidays)

<b>Evidence sighted:</b>
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These hours were reported to have been complied with during construction activities.
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<b>Compliance status:</b>
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Compliant.
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## Environmental Management

14. The Applicant shall obtain a Part 3A Permit prior to the commencement of construction of any crossing of a stream by the gas gathering line.

<b>Evidence sighted:</b>
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It was not confirmed if a 3A Permit was required under this DA.
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<b>Compliance status:</b>
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Indeterminate.
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<b>Recommended action:</b>
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Confirm whether a 3A Permit was required under this DA, if so obtained.
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15. Except as may be expressly provided for by a licence under the Protection of the Environment Operations Act 1997 in relation to the development, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997, in carrying out this development.

Note: Section 120 of the <i>Protection of the Environment Operations Act 1997</i> applies to the disposal of washwater.
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<b>Evidence sighted:</b>
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The EPL had not been updated to include the development under this DA. However, a variation was submitted and the current licence now includes the Glenlee development.
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<b>Compliance status:</b>
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Non-compliant.
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<b>Recommended action:</b>
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No recommended action.
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16. The Applicant shall implement all practicable measures to minimise soil erosion and the discharge of sediments and water pollutants from the site.

<b>Evidence sighted:</b>
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No significant soil erosion was observed around GL11 or the gathering line observed at the time of the site visit.
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<b>Compliance status:</b>
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Compliant.
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17. The Applicant shall implement all relevant site drainage and sediment and erosion control works and measures prior to the commencement of any other works at the site.

<b>Evidence sighted:</b>
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Site drainage works were reported to have been installed prior to commencement, and checked using an internal audit checklist. These controls have since been removed upon operation of GL11.
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<b>Compliance status:</b>
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Compliant.
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18. The Applicant shall ensure that the gas gathering system connecting well site EM 1H shall be constructed outside the breeding seasons of raptor species.

**Evidence sighted:**  
EM 1H Gathering Line was installed during March 2005, in compliance with the Raptor Breeding Season requirements.

**Compliance status:**  
Compliant.

19. The Applicant shall undertake the development in a way that minimises the noise generated by the development.

**Evidence sighted:**  
It was reported that the development at Glenlee was not subject to noise issues.

**Compliance status:**  
Compliant.

20. The Applicant is required to prepare and implement a Flood Management Plan for the well within the floodplain for the life of the development. The Flood Management Plan will include (and not be limited to) measures to minimise and mitigate flooding impacts. The Applicant shall submit the Flood Management Plan for the Director-General's approval within one month of the date of this consent.

**Evidence sighted:**  
A flood management plan was reportedly prepared and submitted for review.

**Compliance status:**  
Compliant.

21. The Applicant shall ensure that the route of the gas gathering system follows previously or currently disturbed areas wherever possible.

**Evidence sighted:**  
This is reported to be the case for ease of construction.

**Compliance status:**  
Compliant.

22. The Applicant shall ensure that trenches constructed during the construction of gas gathering lines are not left open overnight unless otherwise agreed by the Director-General.

**Evidence sighted:**  
Refer to DA 282-6-2003i.

23. The Applicant shall not remove mature trees as part of this development unless otherwise agreed by the Director-General.

**Evidence sighted:**  
No mature trees have reportedly been removed.

**Compliance status:**  
Compliant.

24. The Applicant shall implement best practice flora and fauna management.

**Evidence sighted:**  
Refer to DA 282-6-2003i.

25. The Applicant shall take all practicable measures to minimise potential flora and fauna impacts of the proposed development.

**Evidence sighted:**  
Refer to DA 282-6-2003i.

26. The Applicant shall provide landscaping around the well heads using appropriate native species.

**Evidence sighted:**  
Well GL11 has yet to be rehabilitated due to a second well (GL13), approved under a recent DA being constructed adjacent..

**Compliance status:**  
Not applicable to date.



27. The Applicant shall employ a suitably qualified ecologist with specific experience in identifying the Cumberland Plain Snail, during the construction period of the development. The ecologist shall monitor and examine areas for the presence of the threatened Cumberland Plain Snail, during the clearing for the development.

<b>Evidence sighted:</b> The Cumberland Plain Snail was reportedly not identified in the area subject to this DA during a survey.
<b>Compliance status:</b> Compliant.

28. The Applicant shall prepare a translocation strategy for the threatened Cumberland Plain Snail, which will be submitted for the Director-General's approval prior to construction. The translocation strategy shall be implemented should any individuals or populations of the Cumberland Plain Snail be identified.

<b>Evidence sighted:</b> The Cumberland Plain Snail was reportedly not identified in the area subject to this DA during a survey.
<b>Compliance status:</b> Not applicable.

29. The Applicant is required to prepare and implement a Weed Management Plan for the sites for the life of the development. The Applicant shall submit the Weed Management Plan for the Director-General's approval within one month of the date of this consent.

<b>Evidence sighted:</b> A weed management plan was incorporated into the EHSMPs and approved.
<b>Compliance status:</b> Compliant.

30. Prior to the commencement of site preparation works for the gas gathering system, the Applicant shall clearly mark the locations of known Aboriginal relics on the site (using flags, fencing or other appropriate method) and ensure that all employees and contractors are aware of these locations, to prevent the known relics being impacted or disturbed during site preparation and construction.

<b>Evidence sighted:</b> Refer to DA 282-6-2003i
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31. The Applicant shall relocate the section of the gas gathering line east of the Aboriginal relic identified as Clutha 1, to ensure that this the relic is not harmed from installation of the gas gathering line. Details of the relocation of the line shall be submitted to the Director-General for approval.

<b>Evidence sighted:</b> All gathering line relocation works were reportedly undertaken to the approval of the DG.
<b>Compliance status:</b> Compliant.

### Safety and Risk Management

32. The Applicant shall develop and implement an Emergency Plan and Safety Management System for the development. The plan/system shall be submitted for the approval of the Director-General, at least one month prior to the commissioning of the development, or within such further period as the Director-General may agree. Commissioning shall not commence until the Director-General has approved the plan/system.
- (a) Emergency Plan  
A comprehensive emergency plan and detailed emergency procedures for the development shall be prepared in accordance with the DIPNR Hazardous Industry Planning Advisory Paper No. 1, "Industry Emergency Planning Guidelines". The plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development.
- (b) Safety Management System  
A document setting out a comprehensive safety management system, covering all operations on the gas wells and gathering system shall be developed in accordance with the DIPNR Hazardous Industry Planning Advisory Paper No. 9, "Safety Management". The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures. Records shall be kept on-site and shall be made available for inspection by the Director-General upon request. In particular records shall be maintained to demonstrate that management of change procedures were followed for the connection of the new gas lines to the existing network and for the integration of the new wells into the automatic control system.

Note: The Applicant may update the current approved version of the relevant study/plan/system prepared to comply with Schedule 4 Condition 92 of development consent DA-282-6-2003-i, dated 16 June 2004. The updated version shall incorporate and adequately address the relevant aspects of the additional wells and related plant.

**Evidence sighted:**

A copy of the Camden Gas Response Plan and EHSM Plan were reported to have been previously submitted and approved.

**Compliance status:**

Compliant.

**Compliance Report**

33. Three months after commencement of operation of the development, the Applicant shall submit to the Director-General a compliance report detailing compliance with Condition 32, including:
- (a) dates of study/plan/system completion/submission and commencement of construction and commissioning;
  - (b) actions taken or proposed, to implement recommendations made in the studies/plans/systems; and
  - (c) responses to any requirement imposed by the Director-General under Condition 35.
- This report shall verify that:
- (a) The Emergency Plan required under Condition 32(a) is effectively in place and that at least one emergency exercise has been conducted; and
  - (b) The Safety Management System required under Condition 32(b) has been fully implemented and that records required by the system are being kept.
- The report shall include a signed commitment by the Applicant's representative responsible for the operation of the development, that for each study/plan/system:
- (a) The required study/plan/system has been undertaken or prepared to the relevant Hazardous Industry Planning Advisory Panel;
  - (b) All recommendations of each study/plan/system have been implemented; and
  - (c) All safety management system and their associated risk controls have been implemented and are being maintained.

**Evidence sighted:**

A Compliance Report was previously submitted to fulfil the same condition within DA No. 282-6-2003-i. The applicant will consult with the DoP to confirm the suitability of the past report against this condition and then report accordingly.

**Compliance status:**

Indeterminate.

**Recommended action:**

Develop the report in consultation with the DoP.

**Hazard Audit**

34. Twelve months after the commencement of operations of the proposed development or within such further period as the Director-General may agree, the Applicant shall carry out a comprehensive hazard audit of the development and within one month of the audit submit a report to the Director-General.

The audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by the Director-General prior to commencement of the audit. Further audits shall be carried out every three years or as determined by the Director-General and a report of each audit shall, within one month of the audit, be submitted to the Director-General. Hazard audits shall be carried out in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 5, "Hazard Audit Guidelines".

Note: The Applicant may include the three yearly hazard audit of the development with the Hazard Audit required under Schedule 4 Condition 95 of development consent DA-282-6-2003-i, dated 16 June 2004.

**Evidence sighted:**

Refer to DA 282-6-2003i

35. The Applicant shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from recommendations of the studies or reports referred to in Conditions 32 to 34 inclusive, within such time as the Director-General may agree.

**Evidence sighted:**

Refer to DA 282-6-2003i

## Drilling and Fracing Management Plan

Note: For the purposes of this consent the redrilling and/or additional fracing of a well does not constitute wellhead maintenance.

36. The Applicant shall obtain the prior approval of the Director-General for the drilling, redrilling and/or additional fracing of a gas well.

**Evidence sighted:**

No additional drilling, redrilling and/or additional fracing was undertaken during the reporting period.

**Compliance status:**

Not applicable.

37. The Applicant shall prepare a Drilling and Fracing Management Plan in consultation with the Department of Primary Industries for the drilling of a well, or redrilling and/or refracing of an existing well. The Plan shall be submitted to the Director-General no later than one month prior to the commencement of the work or within such period as agreed by the Director-General. The Plan shall include, but not necessarily be limited to:
- (a) a description of all the activities to be undertaken on the well site during the drilling, redrilling and/or refracing work;
  - (b) details of how the environmental performance of the work will be monitored and what actions will be taken to address identified adverse environmental impacts;
  - (c) reference to the relevant parts of the Environmental Management Plan required under condition 41;
  - (d) compliance with all the relevant environmental performance requirements of this consent; and
  - (e) arrangements for complaints handling procedures during the drilling, redrilling and/or refracing work.

**Evidence sighted:**

The EHSMPs incorporated this requirement and were approved.

**Compliance status:**

Compliant.

38. The Applicant shall give written notification of the proposed drilling, redrilling and/or refracing work to potentially affected residences and other noise sensitive receivers at least fourteen days prior to work commencing.

**Evidence sighted:**

No residences were reported to have been affected by GL11.

**Compliance status:**

Not applicable.

## Construction Environmental Management Plan (CEMP)

39. The Applicant shall prepare and implement a Construction Environmental Management Plan (CEMP) to provide environmental management, practices and procedures to be followed during the construction phases of the proposed development. A framework plan outlining key practices, procedures and environmental management practices should be approved by the Director-General prior to the commencement of construction.

**Evidence sighted:**

A copy of the Drilling, Testing and Completions EHSMP and Gas Gathering Line EHSMP have been submitted and approved previously.

**Compliance status:**

Compliant.

40. The Applicant shall consult with the EMAI in the preparation of the CEMP. The CEMP shall identify measures to minimise the impact of construction of the gas gathering system and any related activities, within and adjacent to the Raptor Breeding zones on the EMAI site.

Note: The Applicant may update the current approved version of the CEMP prepared to comply with Schedule 5 Condition 1 of development consent DA-282-6-2003-i, dated 16 June 2004. The updated version shall incorporate and adequately address the relevant aspects of the additional wells and related plant.

**Evidence sighted:**

The EHSMPs for construction activities recognize that there is a level of site specific information for each well field and that these details are communicated through the site specific induction. Measures to minimise impacts on the

EMAI Raptor Breeding zones were included in the EMAI site specific induction.

**Compliance status:**

Compliant.

**Operational Environmental Management Plan (OEMP)**

41. The Applicant shall prepare and implement an Operational Environmental Management Plan (OEMP) to provide environmental management practices and procedures to be followed during the operation of the development. The OEMP shall be forwarded to the Director-General for approval within one month of the date of this consent. The OEMP shall include, but not necessarily be limited to:
- identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
  - a description of the roles and responsibilities for all key personnel involved in the operation of the development;
  - the overall environmental policies and principles to be applied to the operation of the development;
  - standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved; and
  - management policies to ensure that environmental performance goals are met and to comply with conditions of this consent.

Note: The Applicant may update the current approved version of the OEMP prepared to comply with Schedule 5 Condition 2 of development consent DA-282-6-2003-i, dated 16 June 2004. The updated version shall incorporate and adequately address the relevant aspects of the additional wells and related plant.

**Evidence sighted:**

Refer to DA 282-6-2003i

**Annual Environmental Performance Reporting**

42. The Applicant shall include the operation of wells GL2 – 4 inclusive, GL 6, EMAI-1H and EMAI-1V and the associated gas gathering system and the conditions of this consent, in the Annual Environmental Performance Report required under Schedule 5 Condition 5 of development consent DA-282-6-2003-i, dated 16 June 2004.

**Evidence sighted:**

Refer to DA 282-6-2003i

**Independent Environmental Audit – Construction at EMAI**

43. The Applicant shall commission and pay the full costs of an Independent Environmental Audit of the construction of the gas gathering system, construction of the access roads and drilling and fracking of gas wells on the EMAI. The objective of the audit is to monitor the performance and effect of construction activities on the EMAI. The Independent Environmental Audit shall:
- be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General; and
  - be consistent with ISO 19011:2002 -Guidelines for Quality and/ or Environmental Management Systems Auditing, or updated versions of these guidelines/manuals.

The Audit shall:

- assess the environmental performance of the construction of the development on EMAI, and its effects on the surrounding environment;
- assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
- consider the Applicant's proposed Construction Environmental Management Plan for the EMAI Site; and
- recommend measures or actions to improve the environmental performance of the construction of the development on EMAI, and/or its environmental management and monitoring systems (if required).

**Evidence sighted:**

Refer to DA 282-6-2003i

Within one month of completion of the audit, the Applicant must submit a copy of the audit report to the Director-General, the NSW Heritage Office and Department of Primary Industries-Agriculture. The Director-General may require the Applicant to address certain matters identified in the report and any comments received from the NSW Heritage Office and Department of Primary Industries-Agriculture. Any action required to be undertaken shall be completed within such period as the Director-General may agree.

Note: The Applicant may include the construction of the development on the EMAI in the audit prepared to comply with Schedule 5 Condition 8 of development consent DA-282-6-2003-i, dated 16 June 2004.

**Independent Environmental Audit – Operation**

44. The Applicant shall include the operation of wells GL2 – 4 inclusive, GL 6, EMAI-1H and EMAI-1V and the associated gas gathering system, and the conditions of this consent, in the Independent Environmental Audit required under Schedule 5 Condition 10 of development consent DA-282-6-2003i, dated 16 June 2004.

**Evidence sighted:**  
Refer to DA 282-6-2003i

# Development Consent

## Section 80 of the Environmental Planning & Assessment Act 1979

I, the Minister for Planning, under Section 80 of the Environmental Planning and Assessment Act 1979, determine the development application ("the Application") referred to in Schedule 1 by granting consent subject to the conditions set out in Schedule 2 (DA-75-4-2005).

The reason for these conditions is to:

- Prevent and minimise any adverse environmental impacts associated with the construction and operation of the development; and
- Provide for the on-going environmental management of the development.

Frank Sartor MP  
Minister for Planning

Sydney,

2005

File No. S02/02299

### SCHEDULE 1

**Development Application:**

DA 75-4-2005

**Applicant:**

Sydney Gas (Camden) Operations Pty Ltd

**Consent Authority:**

Minister for Planning

**Land:**

Lot 2 DP 842735 (Wells SL1, SL2, SL3, SL5, gas gathering system and access roads)  
Lot 3 DP 1007066 (Wells SL4, SL6, SL7, gas gathering system and access roads)  
Lot 2 DP 717439 (gas gathering system and access roads)  
Lot 3 DP 622362 (gas gathering system)  
Lot 58 DP 632328 (gas gathering system)  
Lot 200 DP 1046336 (access roads)

**Proposed Development:**

The Project includes:

- Construction and drilling of 7 wells;
- Construction of a gas gathering system and access roads;
- Connection of the wells to the Stage 2 Camden Gas Project – Gas Treatment Plant; and
- Production of methane gas.

**State Significant Development:**

The proposed development is State significant development by virtue of a Declaration made by the Minister for Infrastructure and Planning on 4 January 2005 under Section 76A of the Environmental Planning and Assessment Act 1979.

**Integrated Development:**

The proposal is classified as integrated development under Section 91 of the Environmental Planning and Assessment Act 1979, as it requires additional approvals under the:

- *Heritage Act 1977;*
- *National Parks and Wildlife Act 1974;*
- *Protection of the Environment Operations Act 1997;* and
- *Rivers and Foreshores Improvement Act 1948.*

**Notes:**

- *To find out when this consent becomes effective, see Section 83 of the Act;*
- *To find out when this consent is liable to lapse, see Section 95 of the Act; and*
- *To find out about appeal rights, see Section 97 of the Act.*

## SCHEDULE 2

### DEFINITIONS

Council	Campbelltown City Council
Department	Department of Infrastructure, Planning and Natural Resources
Director-General	Director-General of the Department of Infrastructure, Planning and Natural Resources
DEC	Department of Environment and Conservation
Site	Land to which the Development Application applies

### ADMINISTRATIVE CONDITIONS

#### Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction or operation of the development.

**Evidence sighted:**

At the time of the site visit only two of the wells described by this DA had been drilled and fraced (SL2 and SL3) with gas gathering line installation restricted to between the two wells. No gas gathering from the Sugar Loaf wells had occurred to date. Pits to collect well water had been replaced by tanks at both locations. No significant environmental harm from the construction of these two wells was observed at the surface, at the time of the site visit.

**Compliance status:**

Compliant.

#### Terms of Approval

2. The Applicant shall carry out the development generally in accordance with the:
  - (a) Development Application submitted to the Department on 18 April 2005;
  - (b) "Statement of Environmental Effects – Camden Gas Project, Sugarloaf Farm Drilling Program, PPL4" Sydney Gas (Camden) Operations Pty Ltd, dated March 2005;
  - (c) Letter from Sydney Gas (Camden) Operations Pty Ltd to the Department dated, 15 May 2005, amending the application to include the link between SL6 and RP3;
  - (d) Letter from Sydney Gas (Camden) Operations Pty Ltd to the Department, dated 20 May 2005, amending the application to relocate SL5;
  - (e) Letter from Sydney Gas (Camden) Operations Pty Ltd to the Department, dated 30 May 2005, providing a response to general public submissions;
  - (f) Letter from Sydney Gas (Camden) Operations Pty Ltd to the Department, dated 17 June 2005,, about the access roads;
  - (g) Letter from Sydney Gas (Camden) Operations Pty Ltd to the Department of Environment and Conservation, dated 10 June 2005, about Aboriginal heritage issues;
  - (h) Letter from Sydney Gas (Camden) Operations Pty Ltd to the Department, dated 11 July 2005, showing the updated plan of Aboriginal and archaeological assessment areas; and
  - (i) Conditions of this consent.

If there is any inconsistency between the above, the conditions of this consent shall prevail to the extent of the inconsistency

**Evidence sighted:**

At the time of the site visit only two of the wells described by this DA had been drilled and fraced (SL2 and SL3) with gas gathering line installation restricted to between the two wells.

**Compliance status:**

Compliant.

3. The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
  - (a) Any reports, plans or correspondence that are submitted in accordance with this consent; and
  - (b) The implementation of any actions or measures contained in these reports, plans or correspondence.

**Evidence sighted:**

Requirements are reportedly implemented.

**Compliance status:**

Compliant.

## Limits on Approval

4. This approval shall lapse within 21 years of the date of this consent or on the expiry date of Petroleum Production Lease No. 4, whichever is the shorter period.

<b>Evidence sighted:</b>
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Noted.
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<b>Compliance status:</b>
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Compliant.
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5. Nothing in this consent permits the drilling and operation of any additional wells (beyond the approved 7 wells for gas production).

<b>Evidence sighted:</b>
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Noted.
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<b>Compliance status:</b>
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Compliant.
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6. If after five years of the date of this consent any well that is the subject of this consent has not yet been drilled or completed, then the Applicant shall surrender the approval for that well.

<b>Evidence sighted:</b>
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Noted.
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<b>Compliance status:</b>
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Compliant.
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7. The access road near SL7 shall only be used in an emergency.

<b>Evidence sighted:</b>
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SL7 had not been drilled at the time of this audit.
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<b>Compliance status:</b>
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Not applicable.
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## Administration

8. Construction shall not commence until the Applicant has obtained a Part 3A Permit under the Rivers and Foreshores Improvement Act 1948, a Licence from the DEC under the Protection of the Environment Operations Act 1997, and an approval under section 60 of the Heritage Act 1977 from the NSW Heritage Council.

Note: The Rivers and Foreshore Improvement Act 1948 applies to the proposed development and therefore any excavation removal of material from the bank shore or bed of any stream estuary or lake or land within 40 metres from the top of the bank will require a Part 3A Permit.

<b>Evidence sighted:</b>
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A 3A permit has reportedly been obtained for SL5, however this has expired. SL5 has not been constructed to date.
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<b>Compliance status:</b>
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Compliant – however, the 3A permit will require renewal prior to work within 40m from the top of a bank.
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9. An application must be made to the DEC under section 90 of the National Parks and Wildlife Act 1974 for approval to destroy the known objects at Sugarloaf Farm Site 1 (Locale 5) and Sugarloaf Farm Site 5.

<b>Evidence sighted:</b>
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A section 90 certificate has been issued and an artefact collected.
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<b>Compliance status:</b>
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Compliant.
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10. The Applicant must, in the opinion of the Environment Protection Authority (EPA), be a fit and proper person to hold a Licence under the Protection of the Environment Operations Act 1997, having regard to the matters in section 83 of that Act.

<b>Evidence sighted:</b>
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AGL Australian Gas and Light Company (AGL) is considered to be a 'fit and proper person' (ABN 95 052 167 405) and holds an Environment Protection Licence (No.12003) for the Camden Gas Project Stage 2.
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<b>Compliance status:</b>
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Compliant.
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11. The premises for the purposes of the Licence under the Protection of the Environment Operations Act 1997, includes the gas gathering system, access roads and gas wells and any associated effluent storages, temporary work areas and infrastructure associated with the gas gathering systems, access roads and gas wells.

**Evidence sighted:**

Noted.

**Compliance status:**

Compliant.

12. The premises also applies to the gas well heads consisting of the area bounded by the fenced enclosure during gas well operation. During well establishment, the premises have a nominal area of 100 metres X 70 metres and is surrounded by fencing. At various times during well head maintenance, the premises at the gas well head comprises an area of dimensions 25 metres X 25 metres.

**Evidence sighted:**

Noted.

**Compliance status:**

Compliant.

13. The Applicant must provide Council with the Geographical Positioning System (GPS) co-ordinates and digital survey data for the gas well sites and gas gathering system in a format suitable to the Council, within two months of the completion of the gas wells and gas gathering system.

**Evidence sighted:**

No wells have been completed under this DA to date.

**Compliance status:**

Not applicable.

14. The Applicant shall provide Council with the wellhead configurations of each gas well within two months of the gas well being completed or two months from the date of this consent, whichever is the later.

**Evidence sighted:**

No wells have been completed under this DA to date.

**Compliance status:**

Not applicable.

15. The Applicant shall provide written notification to the Director-General that it has fulfilled the requirements of Conditions 13 and 14, within two weeks of the information being provided to the Council.

**Evidence sighted:**

No wells have been completed under this DA to date.

**Compliance status:**

Not applicable.

## ENVIRONMENTAL PERFORMANCE CONDITIONS

### Activities Must be Carried out in a Competent Manner

16. The development must be carried out in a competent manner. This includes:

- The processing, handling, movement and storage of materials and substances used to carry out the activity; and
- The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

**Evidence sighted:**

Materials comprise wastewater from the well drilling. This is currently stored in a tanker prior to off-site disposal.

**Compliance status:**

Compliant.

### Maintenance of Plant and Equipment

17. All plant and equipment installed at the premises or used in connection with the development must be maintained and operated in a proper and efficient condition.

**Evidence sighted:**

No equipment associated with environmental performance is associated with the two installed wells.

**Compliance status:**

Not applicable.

### Noise Limits

18. Noise from the operation of the development shall not exceed the sound pressure level (noise) limits presented in the Table below:

Location	Day	Evening	Night	
	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>A1</sub> (1 minute)
Any residential premise	35	35	35	45

**Notes**

- The limits represent the sound pressure level (noise) contribution, at the nominated receiver locations in the table.
- Day is defined as the period from 7.00am to 6.00pm Monday to Saturday and 8.00am to 6.00pm Sundays and Public Holidays.
- Evening is defined as the period from 6.00pm to 10.00pm.
- Night is defined as the period from 10.00pm to 7.00am Monday to Saturday and 10.00pm to 8.00am Sundays and Public Holidays.
- Noise from the site is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary to determine compliance with the noise limits set out in the table.
- Noise from the premises is to be measured at 1 metre from the dwelling facade to determine compliance with the L<sub>A1</sub> (1 minute) noise level in the table.
- Where it can be demonstrated that direct measurement of noise from the premises is impractical, the DEC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).
- The modification factors presented in section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable.
- The noise emission limits identified in the table apply under meteorological conditions of wind speed up to 3m/s at 10 metres above ground level, and temperature inversion conditions.

**Evidence sighted:**

The wells are not operating. This CoC is not applicable to date.

**Compliance status:**

Not applicable.

19. The Applicant shall prepare and implement a Construction Noise Management Protocol for construction of the development. The Protocol shall be submitted for the approval of the DEC and the Director-General at least one week prior to commencement of construction. The Protocol must include but is not limited to:

- (a) A primary objective of attaining a noise goal of  $L_{A10(15\text{ minutes})} 54\text{ DB(A)}$  during all construction activities when assessed at sensitive locations including residences and schools (particularly to avoid noise impacts during exam or other sensitive times);
- (b) Details of the proposed drill rig focussing on the noise emission characteristics for all phases of well establishment, including percussion drilling, setting and casing, and fracturing;
- (c) Identification of sensitive receivers likely to be impacted by noise levels exceeding the noise goal in (a) above;
- (d) Details of proposed best practice mitigation measures to seek achieve the noise goal in (a) above;
- (e) The consideration of best practice mitigation required in (d) above must include but is not necessarily limited to optimum orientation of drill rigs and temporary barriers;
- (f) Community consultation including advance notice of commencement of construction activities and site contact details;
- (g) A system to receive, document, respond, action and monitor complaints; and
- (h) Monitoring methods and program.

<b>Evidence sighted:</b> The above requirements are understood to be incorporated into the EHSMPs.
<b>Compliance status:</b> Compliant.

20. At least one month prior to operation of the development the Applicant shall prepare and submit for the Director-General's approval, a Well Gathering System and Trunk Line Maintenance Noise Management Protocol to be used for the premises for the life of the consent. The Protocol shall include but is not limited to:

- (a) A primary objective of attaining the noise limits in condition 18;
- (b) Community consultation;
- (c) Advance notice to affected members of the community for planned well maintenance activities;
- (d) Complaints handling monitoring system;
- (e) Mitigation measures;
- (f) The design/orientation of the proposed mitigation methods demonstrating best practice;
- (g) Construction times;
- (h) Contingency measures where noise complaints are received; and
- (i) Monitoring methods and programs.

<b>Evidence sighted:</b> Not applicable to date. Also note that there is no trunk line proposed.
<b>Compliance status:</b> Not applicable.

#### Hours of Operation

21. All construction work must be conducted between 7.00am and 6.00pm Monday to Friday and between 8.00am and 1.00pm Saturdays and at no time on Sundays and Public Holidays, unless inaudible at any residential premises.

<b>Evidence sighted:</b> These hours are reportedly adhered to.
<b>Compliance status:</b> Compliant.

22. Planned maintenance activities at any of the wells must only be conducted between:

- (a) 7.00 am to 6.00 pm on weekdays; and
- (b) 8.00am and 1.00pm on Saturdays (excluding Public Holidays)

Note: This condition does not apply to the delivery of material outside the hours of operation under condition 21 if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances prior notification is to be provided to the EPA and affected residents as soon as possible or within a reasonable period in the case of an emergency.

#### Air Quality

23. The Applicant shall carry out the development in a manner that will minimise emissions of dust from the site.

<b>Evidence sighted:</b> These hours are reportedly adhered to.
<b>Compliance status:</b> Compliant.

Note: The Protection of the Environment Operations Act 1997 states that no offensive odour may be emitted from particular premises unless potentially offensive odours are identified in the Licence and the odours are emitted in accordance with conditions specifically directed at minimising the odours are permitted. Where it is appropriate for a Licence to identify and control odours conditions for the Licence should be developed in consultation with Air Policy.

## Water

24. Except as may be expressly provided by a Licence, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.

**Evidence sighted:**

It was reported that there are no discharges of water from the two wells constructed.

**Compliance status:**

Compliant.

Note: Section 120 of the Protection of the Environment Operations Act 1997 applies to the disposal of wastewater.

## Stormwater/Sediment Control

25. At least one week prior to the commencement of construction, the Applicant shall submit for the approval of the Director-General, an Erosion and Sediment Control Plan. The Plan must be implemented and used for the duration of all construction activities associated with the development. The Plan must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters during construction activities. The Plan should be prepared in accordance with the requirements for such plans outlined in the Department of Housing's Managing Urban Stormwater: Soils and Construction.

**Evidence sighted:**

SWMPs have been approved.

**Compliance status:**

Compliant.

## Waste

26. The Applicant must not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing or disposal or any waste generated at the site to be disposed of at the site, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.

**Evidence sighted:**

No waste is reportedly received by the site and none was observed during the site visit.

**Compliance status:**

Compliant.

Note: this condition only applies to the storage: treatment: processing: reprocessing or disposal of waste at the site if it requires an environment protection licence under the *Protection of the Environment Operations Act 1997*.

27. The Applicant must ensure that any hazardous, industrial or Group A waste is assessed and classified in accordance with the EPA's Environmental Guidelines: "Assessment Classification and Management of Liquid and Non-Liquid Wastes".

**Evidence sighted:**

No hazardous, industrial or Group A waste has been generated by the development described by this DA to date. Wastewater from well development is treated as a non-controlled aqueous liquid waste.

**Compliance status:**

Not applicable.

## Safety and Risk Management

28. Prior to construction of the wellhead, the Applicant shall provide a Report to the Department from an independent and suitably qualified person approved by the Director-General, to confirm that the design and operation of the wellhead complies with the Department's Locational Guidelines - Development in the Vicinity of Operating Coal Seam Methane Wells (May 2004) for an Automatically Controlled Well (with Separator/Optional Pump). In particular, the Report shall confirm that all safety related systems required by the Guidelines have been included.

<b>Evidence sighted:</b> Evidence was not available at the time of the site visit to confirm compliance with this CoC.
<b>Compliance status:</b> Indeterminate.
<b>Recommended action:</b> Confirm compliance from Sydney Gas.

29. The Applicant shall develop and implement an Emergency Plan and Safety Management System for the development. The plan/system shall be submitted for the approval of the Director-General, at least one month prior to the commissioning of the development, or within such further period as the Director-General may agree. Commissioning shall not commence until the Director-General has approved the plan/system.

(a) Emergency Plan

A comprehensive emergency plan and detailed emergency procedures for the development shall be prepared in accordance with the DIPNR Hazardous Industry Planning Advisory Paper No. 1, "Industry Emergency Planning Guidelines".. The plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development.

(b) Safety Management System

A document setting out a comprehensive safety management system, covering all operations on the gas wells and gathering system shall be developed in accordance with the DIPNR Hazardous Industry Planning Advisory Paper No. 9, "Safety Management". The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures. Records shall be kept on-site and shall be made available for inspection by the Director-General and the independent auditor upon request. In particular records shall be maintained to demonstrate that management of change procedures were followed for the connection of the new gas lines to the existing network and for the integration of the new wells into the automatic control system.

<b>Evidence sighted:</b> Evidence was reportedly provided by Sydney gas to confirm compliance with this CoC.
<b>Compliance status:</b> Compliant.

Note: The Applicant may update the current approved version of the relevant study/plan/system prepared to comply with Schedule 4 Condition 92 of development consent DA-282-6-2003-i, dated 16 June 2004. The updated version shall incorporate and adequately address the relevant aspects of the additional wells and related plant.

**Compliance Report**

30. Three months after commencement of operation of the development, the Applicant shall submit to the Director-General a compliance report detailing compliance with Condition 29, including:
- Dates of study/plan/system completion/submission and commencement of construction and commissioning;
  - Actions taken or proposed, to implement recommendations made in the studies/plans/systems; and
  - Responses to any requirement imposed by the Director-General under Condition 32.

This report shall verify that:

- The Emergency Plan required under Condition 29(a) is effectively in place and that at least one emergency exercise has been conducted; and
- The Safety Management System required under Condition 29(b) has been fully implemented and that records required by the system are being kept.

The report shall include a signed commitment by the Applicant's representative responsible for the operation of the development, that for each study/plan/system:

- (a) The required study/plan/system has been undertaken or prepared to the relevant Hazardous Industry Planning Advisory Paper;
- (b) All recommendations of each study/plan/system have been implemented; and
- (c) All safety management system and their associated risk controls have been implemented and are being maintained.

<b>Evidence sighted:</b> Not applicable to date.
<b>Compliance status:</b> Not applicable.

**Hazard Audit**

31. Twelve months after the commencement of operations of the proposed development or within such further period as the Director-General may agree, the Applicant shall carry out a comprehensive hazard audit of the development and within one month of the audit submit a report to the Director-General.

The audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by the Director-General prior to commencement of the audit. Further audits shall be carried out every three years or as determined by the Director-General and a report of each audit shall, within one month of the audit, be submitted to the Director-General. Hazard audits shall be carried out in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 5, "Hazard Audit Guidelines".

Note: The Applicant may include the three yearly hazard audit of the development with the Hazard Audit required under Schedule 4 Condition 95 of development consent DA 282 6 2003 i, dated 16 June 2004. The due date for a combined audit shall be the earlier of the due dates for the separate audits.

<b>Evidence sighted:</b> Not applicable to date.
<b>Compliance status:</b> Not applicable.

32. The Applicant shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from recommendations of the studies or reports referred to in Conditions 28 to 31 inclusive, within such time as the Director-General may agree.

<b>Evidence sighted:</b> No requirements are known to have been received.
<b>Compliance status:</b> Not applicable.

## Redrilling and Fracing Management Plan

Note: For the purposes of this consent the redrilling and/or additional fracing of a well does not constitute wellhead maintenance.

33. The Applicant shall obtain the prior approval of the Director-General for the redrilling and/or additional fracing of a gas well.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

34. The Applicant shall prepare a Redrilling and Fracing Management Plan in consultation with the Department of Primary Industries for the redrilling and/or refracing of an existing well. The Plan shall be submitted to the Director-General no later than one month prior to the commencement of the work or within such period as agreed by the Director-General. The Plan shall include, but not necessarily be limited to:

- (a) A description of all the activities to be undertaken on the well site during the redrilling and/or refracing work;
- (b) Details of how the environmental performance of the work will be monitored and what actions will be taken to address identified adverse environmental impacts;
- (c) Reference to the relevant parts of the Environmental Management Plan required under condition 52;
- (d) Compliance with all the relevant environmental performance requirements of this consent; and
- (e) Arrangements for complaints handling procedures during the redrilling and/or refracing work.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

35. The Applicant shall give written notification of the proposed redrilling and/or refracing work to potentially affected residences and other noise sensitive receivers at least fourteen days prior to work commencing.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

## Gas Gathering System

36. The Applicant shall ensure that the route of the gas gathering system follows previously or currently disturbed areas wherever possible.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

37. The Applicant shall ensure that trenches constructed during the construction of gas gathering lines are not left open overnight unless otherwise agreed by the Director-General.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

38. The Applicant shall comply with the following in the construction of the gas gathering system pipeline:

- (a) Signs stating the presence of a buried gas pipeline shall be erected periodically along the length of the trench once the pipeline has been laid;
- (b) Trenches are to be restored and reseeded with local grass seeds on completion of the work;
- (c) Construct the gas gathering system so as not to impeach lateral water flows;
- (d) Ensure that no crown or camber remains along the gas gathering systems, following construction;

- (e) Design, construct and operate the pipeline in accordance with the Australian Standard for the installation and maintenance of Plastic Pipe Systems for Gas AS 3723-1989 (or its latest version); and
- (f) Notify the Department on the completion of any trenching works.
- (g)

<b>Evidence sighted:</b> Not applicable to date.
<b>Compliance status:</b> Not applicable.

**Flora and Fauna**

39. The Applicant shall take all practicable measures to minimise potential flora and fauna impacts of the development.

<b>Evidence sighted:</b> The approved EHSMP covers flora and fauna management.
<b>Compliance status:</b> Compliant.

40. The Applicant shall not remove mature trees as part of this development unless otherwise agreed by the Director-General.

<b>Evidence sighted:</b> No mature trees have reportedly been removed as part of this development.
<b>Compliance status:</b> Compliant.

41. The Applicant shall prepare a translocation strategy for the threatened Cumberland Plain Snail, which will be submitted for the Director-General's approval prior to construction. The translocation strategy shall be implemented should any individuals or populations of the Cumberland Plain Snail be identified.

<b>Evidence sighted:</b> No snails were identified in the area covered by this development.
<b>Compliance status:</b> Not applicable.

42. The Applicant shall prepare and implement a Weed Management Plan for the site for the life of the development. The Applicant shall submit the Weed Management Plan for the Director-General's approval within one month of the date of this consent.

<b>Evidence sighted:</b> The approved EHSMP covers weed management.
<b>Compliance status:</b> Compliant.

**Bushfire Management**

43. The Applicant shall:

- (a) Ensure that the development is suitably equipped to respond to any fires on the site; and
- (b) Assist the Rural Fire Service and emergency services as much as possible if there is a fire on the site.

<b>Evidence sighted:</b> AGL have their own water truck and standpipes. Equipment at wells can be shut down remotely.
<b>Compliance status:</b> Compliant.

44. Prior to operation the Applicant shall prepare a Bushfire Management Plan for the development, to the satisfaction of the Director-General. The Applicant shall consult with Council and the Rural Fire Service in the preparation of the Plan.

<b>Evidence sighted:</b> The requirement for a Bushfire Management Plan has been incorporated into the EHSMPs for the Development. The EHSMPs were approved by DIPNR on 29 March 2004.
<b>Compliance status:</b> Not applicable.



Note: The Applicant may update the current approved version of the Bushfire Management Plan prepared to comply with Schedule 4 Condition 110 of development consent DA 282 6 2003 i, dated 16 June 2004. The updated version shall incorporate and adequately address the relevant aspects of the additional wells and related gas gathering system

### Heritage

45. The Applicant must ensure that should any historical relics be uncovered, excavation or disturbance of the area is to stop immediately and the Heritage Council of NSW is notified within a reasonable time of the discovery or location of these relics. Archaeological assessment and approval, or endorsement, may be required prior to works continuing in the affected area(s) based on the nature of the discovery.

**Evidence sighted:**

No relics have reportedly been identified. The requirement of this CoC is covered in EHSMPs

**Compliance status:**

Not applicable.

46. An Interpretation Study being prepared to the satisfaction of the Director, Heritage Office and executed by the Applicant within 6 months of the date of this approval.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

### Aboriginal Relics

47. The Applicant must ensure that should any Aboriginal objects be uncovered, excavation or disturbance of the area is to stop immediately and the DEC is to be informed in accordance with section 91 of the National Parks and Wildlife Act 1974.

**Evidence sighted:**

No objects have reportedly been identified. The requirement of this CoC is covered in EHSMPs

**Compliance status:**

Not applicable.

48. Prior to the commencement of construction, the Applicant shall clearly mark the locations of known Aboriginal relics on the site (using flags, fencing or other appropriate method) and ensure that all employees and contractors are aware of these locations, to prevent the known relics being impacted or disturbed during site preparation and construction.

**Evidence sighted:**

Not applicable at SL2 and SL3 drilled to date.

**Compliance status:**

Not applicable.

### Sydney Water Supply Canal

49. The Applicant shall carry out the construction and operation of the development in a manner that will not adversely affect the structural integrity of the Upper Canal and associated structures nor impact the quality of water in the Upper Canal. The Applicant shall be responsible for ensuring that all persons involved in the development are informed of these requirements.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

50. The Applicant shall comply with the requirements in Sydney Water's Guidelines on Precautions to be taken when Building Over or Adjacent to Sydney Water's Assets.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

## ENVIRONMENTAL MANAGEMENT AND MONITORING

### Construction Environmental Management Plan (CEMP)

51. The Applicant shall prepare and implement a Construction Environmental Management Plan (CEMP) to provide environmental management, practices and procedures to be followed during the construction phases of the proposed development. A framework plan outlining key practices, procedures and environmental management practices should be approved by the Director-General prior to the commencement of construction.

Note: The Applicant may update the current approved version of the CEMP prepared to comply with Schedule 5 Condition 1 of development consent DA 282 6 2003 i, dated 16 June 2004. The updated version shall incorporate and adequately address the relevant aspects of the additional wells and related plant.

**Evidence sighted:**

Refer to approved EHSMP for drilling.

**Compliance status:**

Compliant.

### Operational Environmental Management Plan (OEMP)

52. The Applicant shall prepare and implement an Operational Environmental Management Plan (OEMP) to provide environmental management practices and procedures to be followed during the operation of the development. The OEMP shall be forwarded to the Director-General for approval within one month of the date of this consent. The OEMP shall include, but not necessarily be limited to:

- (a) Identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all key personnel involved in the operation of the development;
- (c) The overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved; and
- (e) Management policies to ensure that environmental performance goals are met and to comply with conditions of this consent.

Note: The Applicant may update the current approved version of the OEMP prepared to comply with Schedule 5 Condition 2 of development consent DA 282 6 2003 i, dated 16 June 2004. The updated version shall incorporate and adequately address the relevant aspects of the additional wells and related plant.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

### Annual Return

53. The Applicant shall provide an annual return to the EPA in relation to the development as required by any Licence under the Protection of the Environment Operations Act 1997 in relation to the development. In the return the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with Licence conditions and provide a calculation of licence fees (administrative fees and where relevant, load based fees) that are payable.

**Evidence sighted:**

Annual Returns are submitted as required.

**Compliance status:**

Compliant.

### Annual Environmental Performance Reporting

54. Within twelve months of the date of this consent, and annually thereafter during the life of the development, the Applicant shall submit an Annual Environmental Performance Report to the Director-General. This report shall include, but not be limited to:

- (a) The standards, performance measures and statutory requirements the development is required to comply with;
- (b) An assessment of the environmental performance of the development to determine whether it is complying with these standards, performance measures, and statutory requirements;
- (c) Copy of the Complaints Register for the preceding twelve month period and indicating what actions were (or are being) taken to address these complaints;
- (d) Indication of what actions were taken to address any issue and/or recommendation raised by the Camden Gas Project's Community Consultative Committee;
- (e) Provision of the detailed results of all the monitoring required by this consent;
- (f) Identify any non-compliance during the year;
- (g) Identify any significant trends in the data; and
- (h) If any non-compliance is detected, describe what actions and measures would be carried out to ensure compliance, clearly indicating who would carry out these actions and measures, when they would be carried out, and how the effectiveness of these measures would be monitored over time.

Note: The Applicant may include the operation of wells SL1 – 7 and the associated gas gathering system and the conditions of this consent, in the Annual Environmental Performance Report required under Schedule 5 Condition 5 of development consent DA 282 6 2003 i, dated 16 June 2004.

**Evidence sighted:**

Refer to DA 282-6-2003i.

**Compliance status:**

Compliant.

55. The Director-General may require the Applicant to address certain matters identified in the Annual Environmental Performance Report. Any action required to be undertaken shall be completed within such period as the Director-General may agree.

**Evidence sighted:**

Noted.

**Compliance status:**

Not applicable to date.

56. The Applicant shall also submit a copy of the Annual Environmental Performance Report to the DEC, Department of Primary Industries and Campbelltown City Council. The Applicant shall make a copy of the Report publicly available.

**Evidence sighted:**

AEPR submitted to the above.

**Compliance status:**

Compliant.

**Independent Environmental Audit – Construction at Sugarloaf Farm**

57. On completion of all construction works, the Applicant shall commission and pay the full costs of an Independent Environmental Audit of the drilling and fracking of gas wells and construction of the gas gathering system and access roads on the site. The objective of the audit is to monitor the performance and effect of construction activities on the site. The Independent Environmental Audit shall:

- (a) Be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General; and
- (b) Be consistent with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing, or updated versions of these guidelines/manuals.

The Audit shall:

- (a) Assess the environmental performance of the construction of the development on the site, and its effects on the surrounding environment;
- (b) Assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
- (c) Consider the Applicant's proposed Construction Environmental Management Plan; and
- (d) Recommend measures or actions to improve the environmental performance of the construction of the development, and/or its environmental management and monitoring systems (if required).

Within one month of completion of the audit, the Applicant must submit a copy of the audit report to the Director-General and the NSW Heritage Office. The Director-General may require the Applicant to address certain matters identified in the report and any comments received from the NSW Heritage Office. Any action required to be undertaken shall be completed within such period as the Director-General may agree.

**Evidence sighted:**

Not applicable to date.

**Compliance status:**

Not applicable.

### Independent Environmental Audit – Operation

58. Within two years of the date of this consent and every two years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full costs of an Independent Environmental Audit. The Independent Environmental Audit shall:

- (a) Be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General;
- (b) Be consistent with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing, or updated versions of these guidelines/manuals;
- (c) Assess the environmental performance of the development, and its effects on the surrounding environment;
- (d) Assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
- (e) Review the adequacy of the Applicant's Environmental Management Plan; and
- (f) Recommend measures or actions to improve the environmental performance of the development, and/or its environmental management and monitoring systems.

**Evidence sighted:**

This audit has included this DA, despite the development not being in operational stage.

**Compliance status:**

Compliant.

Note: The Applicant may include the operation of wells SL1 – 7 and the associated gas gathering system and the conditions of this consent, in the Independent Environmental Audit required under Schedule 5 Condition 10 of development consent DA 282 6 2003 i, dated 16 June 2004.

### Complaints Register

59. The Applicant shall keep a legible record of all complaints made to the applicant or any employee or agent of the Applicant in relation to pollution arising from any activity of the development. The Register must:

- (a) Record the date and time of the complaint;
- (b) Record the method by which the complaint was made;
- (c) Note any personal details of the complainant or, if no such details were provided, a note to that effect;
- (d) The nature of the complaint
- (e) The action taken by the applicant in relation to the complaint, including any follow-up contact with the complainant; and
- (f) State, if no action was taken by the Applicant, the reasons why no action was taken.

**Evidence sighted:**

Refer to DA 282 6 2003 i, dated 16 June 2004.

**Compliance status:**

Compliant.

The record of a complaint must be kept for at least 4 years after the complaint was made, and must be produced to any authorised officer of the EPA or the Department who asks to see them.

60. The Applicant must:

- (a) Operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted on the site or by the vehicle or mobile plant, unless otherwise specified in the Licence; and
- (b) Notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

**Evidence sighted:**

Refer to DA 282 6 2003 i, dated 16 June 2004.

**Compliance status:**

Compliant.

**Community Liaison**

61. The Applicant shall ensure the continuation of the existing Sydney Gas Operations Camden Project Community Consultative Committee to oversee the environmental performance of the development.

**Evidence sighted:**

Refer to DA 282 6 2003 i, dated 16 June 2004.

**Compliance status:**

Compliant.

# Development Consent

Section 80 of the *Environmental Planning & Assessment Act 1979*

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), approve the Development Application referred to in Schedule 1, subject to the conditions in Schedule 2.

The reason for these conditions is to:

Prevent and minimise any adverse environmental impacts associated with the development; and  
(i.) Provide for the on-going environmental management of the development.

Diane Beamer MP  
**Minister Assisting the Minister for Infrastructure and  
Planning (Planning Administration)**

Sydney,

2004

File No. S02/02299

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## SCHEDULE 1

<b>Development Application:</b>	DA-183-8-2004-i
<b>Applicant:</b>	Sydney Gas Operations Pty Limited
<b>Consent Authority:</b>	Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)
<b>Land:</b>	Lot 1/DP 954424 (Wells MT1 -MT 10 inclusive) Lot 10/DP 1022204 (Wells MP13 -MP17 inclusive)
<b>Proposed Development:</b>	The Project includes: <ul style="list-style-type: none"><li>• Connection of 15 existing coal seam methane wells to the previously approved Stage 2 Camden Gas Project – Gas Treatment Plant, for the production of methane gas; and</li><li>• Construction of a Dam at the MT1 gas well site.</li></ul>
<b>State Significant Development:</b>	The proposed development is State significant development by virtue of a Declaration made by the Minister for Infrastructure and Planning on 13 June 2003 under Section 76A of the <i>Environmental Planning and Assessment Act 1979</i> .
<b>Integrated Development:</b>	The proposal is classified as integrated development under Section 91 of the Environmental Planning and Assessment Act 1979, as it requires an additional approval under the <i>Mine Subsidence Compensation Act 1961</i>

Note:

- 1) To find out when this consent becomes effective, see Section 83 of the Act,
- 2) To find out when this consent is liable to lapse, see Section 95 of the Act; and
- 3) To find out about appeal rights, see Section 97 of the Act.

## SCHEDULE 2

### **Obligation to Minimise Harm to the Environment**

1. The Applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction or operation of the development.

<b>Evidence sighted:</b>
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The Project includes: Connection of 15 existing coal seam methane wells to the previously approved Stage 2 Camden Gas Project – Gas Treatment Plant, for the production of methane gas; and Construction of a Dam at the MT1 gas well site.
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No significant harm to the environment was observed during the site visit of areas visited.
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### **Terms of Approval**

2. The Applicant shall carry out the development generally in accordance with the:
  - (a) DA submitted to the Department on 28 July 2004;
  - (b) “*Statement of Environmental Effects -Harness Racing Drilling Program*” Sydney Gas Company dated 24 June 2003;
  - (c) “*Review of Environmental Effects -Mt Taurus Drilling Program*” Sydney Gas Company dated March 2004; and
  - (d) Conditions of this consent.

<b>Evidence sighted:</b>
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The development was reported to have been carried out in accordance with the above requirements.
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<b>Compliance status:</b>
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Compliant.
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3. The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department’s assessment of:
  - (a) any reports, plans or correspondence that are submitted in accordance with this consent; and
  - (b) the implementation of any actions or measures contained in these reports, plans or correspondence.

<b>Evidence sighted:</b>
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Requests are reported to be complied with.
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<b>Compliance status:</b>
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Compliant.
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4. This approval is for a period of twenty one (21) years from the granting of the production lease.

<b>Evidence sighted:</b>
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Noted
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<b>Compliance status:</b>
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Not applicable.
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5. Nothing in this consent permits the drilling and operation of any additional wells (beyond the approved 15 wells for gas production) or gas gathering lines.

<b>Evidence sighted:</b>
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The 15 wells were permitted under a PEL and have been drilled and are producing gas. No additional wells have reportedly been drilled without consent.
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<b>Compliance status:</b>
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Compliant.
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6. The Applicant shall provide Campbelltown City Council and Wollondilly Shire Council with the Geographical Positioning System (GPS) co-ordinates and digital survey data for gas well sites and gas gathering systems within their respective Local Government Area, in a format suitable to each of these Councils, within two months of the completion of the gas wells and gas gathering system.

<b>Evidence sighted:</b>
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Refer to DA 282-6-2003i
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<b>Compliance status:</b>
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Indeterminate.
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**Recommended action:**

Confirm that the Councils have been sent the GPS co-ordinates for the wells.

7. The Applicant shall provide Campbelltown City Council and Wollondilly Shire Council with the wellhead configurations of each gas well within two months of the gas well being completed or two months from the date of this consent, whichever is the later.

**Evidence sighted:**

Confirmation has been received from SGL that this requirement has been previously fulfilled. However, evidence was not available at the time of the site visit.

**Compliance status:**

Indeterminate.

**Recommended action:**

Confirm that the Councils have been sent the well head configurations.

8. The Applicant shall provide written notification to the Director-General that it has fulfilled the requirements of Conditions 6 and 7, within two weeks of the information being provided to the Councils.

**Evidence sighted:**

Confirmation has been received from SGL that this requirement has been previously fulfilled. However, evidence was not available at the time of the site visit.

**Compliance status:**

Indeterminate.

**Recommended action:**

Confirm compliance with this CoC.

**Environmental Management**

9. Except as may be expressly provided for by a licence under the Protection of the Environment Operations Act 1997 in relation to the development, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997*, in carrying out this development.

**Evidence sighted:**

The EPL was not updated to include the activities under this DA, however, a variation request was submitted and the Mount Taurus development is now included in EPL No. 12003.

**Compliance status:**

Non-compliant.

**Recommended action:**

No recommended action.

Note: Section 120 of the *Protection of the Environment Operations Act 1997* applies to the disposal of wastewater.

10. The Applicant is required to ensure that the Dam at gas well site MT1 is appropriately lined so that waters stored in the dam do not potentially contaminate the surrounding and underlying soils.

**Evidence sighted:**

The Dam at MT1 is reported to be lined. This dam was not viewed during the site visit.

**Compliance status:**

Compliant.

11. The Applicant is not permitted to spray or discharge water from the earth Dam at gas well site MT 1, onto any land or water surface unless it has prior written approval from the Director-General.

**Evidence sighted:**

The water from the Dam at MT1 is reportedly not discharged.

**Compliance status:**

Compliant.

12. The Applicant is required to store and manage the use and disposal of water in accordance with the current version of the Department of Environment and Conservation's

*"Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes."*

**Evidence sighted:**



The wastewater is reported to be disposed as a non-controlled aqueous liquid waste.

**Compliance status:**

Compliant.

13. The Applicant shall undertake the development in a way that minimises the noise generated by the development.

**Evidence sighted:**

The approved EHSMPs include noise mitigation measures.

**Compliance status:**

Compliant.

14. The Applicant is required to prepare and implement a Water Management Plan for the sites and the Dam at MT 1 for the life of the development. The Water Management Plan will include (and not be limited to) ediment and erosion control measures to be implemented prior to the construction of the earth Dam at gas well site MT1. The Applicant shall submit the Water Management Plan for the Director-General's approval within one month of the date of this consent.

**Evidence sighted:**

SWMPs have been approved.

**Compliance status:**

Compliant.

15. The Applicant is required to prepare and implement a Flood Management Plan for the sites for the life of the development. The Flood Management Plan will include (and not be limited to) measures to minimise and mitigate flooding impacts. The Applicant shall submit the Flood Management Plan for the Director-General's approval within one month of the date of this consent.

**Evidence sighted:**

A flood management plan has been submitted for approval.

**Compliance status:**

Compliant.

16. The Applicant is required to prepare and implement a Soil and Water Management Plan for the sites for the life of the development. The Applicant shall submit the Soil and Water Management Plan for the Director-General's approval within one month of the date of this consent.

**Evidence sighted:**

A SWMP has been submitted for each well site and approved by the DG.

**Compliance status:**

Compliant.

17. The Applicant is required to prepare and implement a Weed Management Plan for the sites for the life of the development. The Applicant shall submit the Weed Management Plan for the Director-General's approval within one month of the date of this consent.

**Evidence sighted:**

A weed management plan was prepared and submitted for approval.

**Compliance status:**

Compliant.

### Redrilling and Refracting Management Plan

Note: For the purposes of this consent the redrilling and/or additional fracing of a well does not constitute wellhead maintenance

18. The Applicant shall obtain the prior approval of the Director-General for the redrilling and/or additional fracing of a gas well.

**Evidence sighted:**

No refracting has occurred.

**Compliance status:**

Not applicable.

19. The Applicant shall prepare a Redrilling and Refracting Management Plan in consultation with the

Department of Primary Industries for the redrilling and/or refracching of an existing well. The Plan shall be submitted to the Director-General no later than one month prior to the commencement of the work or within such period as agreed by the Director-General. The Plan shall include, but not necessarily be limited to:

- (a) a description of all the activities to be undertaken on the well site during the redrilling and/or refracching work;
- (b) details of how the environmental performance of the work will be monitored and what actions will be taken to address identified adverse environmental impacts;
- (c) reference to the relevant parts of the Environmental Management Plan required under condition 21 of this consent;
- (d) compliance with all the relevant environmental performance requirements of this consent; and
- (e) arrangements for complaints handling procedures during the redrilling/refracching work.

**Evidence sighted:**

No refracching has occurred.

**Compliance status:**

Not applicable.

20. The Applicant shall give written notification of the proposed redrilling/refracching work to potentially affected residences and other noise sensitive receivers at least fourteen days prior to work commencing.

**Evidence sighted:**

No refracching has occurred.

**Compliance status:**

Not applicable.

**Operational Environmental Management Plan (OEMP)**

21. The Applicant shall prepare and implement an Operational Environmental Management Plan (OEMP) to provide environmental management practices and procedures to be followed during the operation of the development. The OEMP shall be forwarded to the Director-General for approval within one month of the date of this consent. The OEMP shall include, but not necessarily be limited to:
- (a) identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
  - (b) a description of the roles and responsibilities for all key personnel involved in the operation of the development;
  - (c) the overall environmental policies and principles to be applied to the operation of the development;
  - (d) standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved; and
  - (e) management policies to ensure that environmental performance goals are met and to comply with conditions of this consent.

**Evidence sighted:**

Refer to DA No. 282-6-2003i

22. The Applicant shall supply a copy of the OEMP to Campbelltown City Council and Wollondilly Shire Council within fourteen days of the Director-General's approval. The Applicant shall ensure that a copy of the OEMP is publicly available.

**Evidence sighted:**

Refer to DA No. 282-6-2003i

23. The Applicant shall review and update the OEMP annually, or as directed by the Director-General

**Evidence sighted:**

Refer to DA No. 282-6-2003i

**Annual Environmental Performance Reporting**

24. The Applicant shall include the operation of MT1 -MT 10 inclusive and MP13 -MP17 inclusive and the associated gas gathering system and the conditions of this consent, in the Annual Environmental Performance Report required under Schedule 5 Condition 5 of development consent DA-282-6-2003-i, dated 16 June 2004.

**Evidence sighted:**

These areas are included in the AEPR 2004 – 2006.

**Compliance status:**

Compliant.

**Independent Environmental Audit**

25. The Applicant shall include the operation of MT1 -MT 10 inclusive and MP13 -MP17 inclusive and the associated gas gathering system, and the conditions of this consent, in the Independent Environmental Audit required under Schedule 5 Condition 8 of development consent DA-282-6-2003-i, dated 16 June 2004.

**Evidence sighted:**

These areas are included in this audit.

**Compliance status:**

Compliant.