



Camden Gas Project Independent Environmental Audit

Audit Period 2010-12

Denise Corish - Lead Auditor

AGENDA

- Background
- Audit Scope and Criteria
- Methodology
- Audit Findings: Category 1 Non-conformances
- Conclusions

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BACKGROUND

- Camden Gas Project
 - Rosalind Park Gas Plant (RPGP)
 - 144 gas wells
 - Low-pressure gas gathering lines and high pressure supply line

- Audit Period
 - July 2010 to 30 June 2012
 - Audit findings reflect conditions and documentation presented from 27 August 2012 to 5 October 2012
 - Information reported externally by AGL after 5 October is reflected in the report to ensure currency

AUDIT SCOPE AND CRITERIA

■ Audit scope

- Scope is defined in a number of development approvals
- *Performance* : environmental performance of the development, including supporting systems
- *Conditions and Licence*: compliance with relevant standards, performance measures and statutory requirements
- Reasonable assurance of performance and compliance

■ Audit criteria

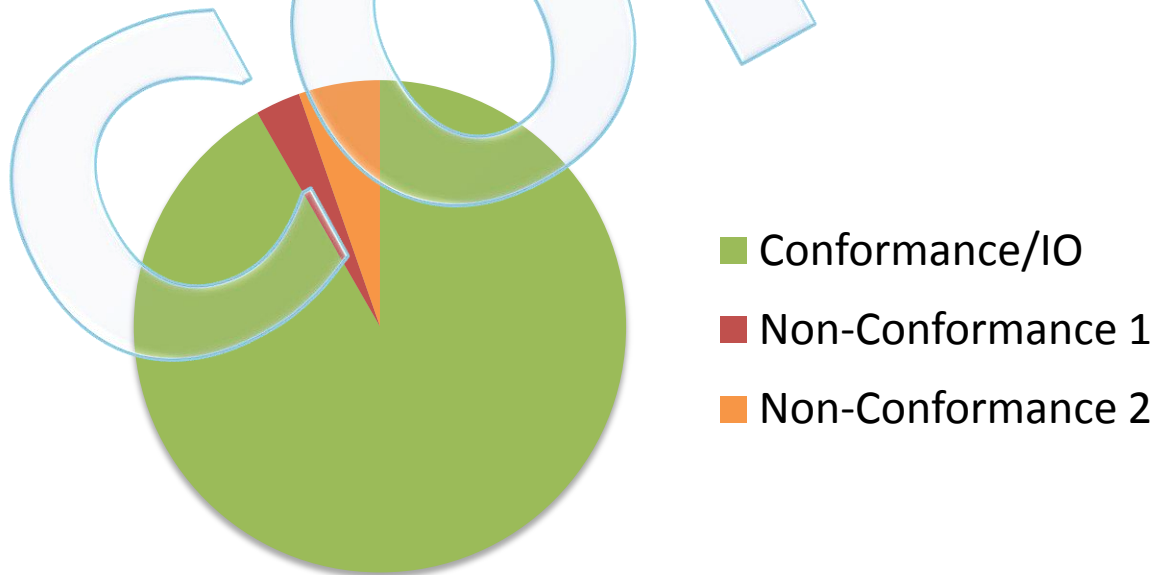
- EPL 12003
- Development/project consents (10)
- Petroleum Exploration Licence (PEL) No. 2
- Petroleum Production Leases (PPL) No. 1, No. 2, No. 4, No. 5, No. 6
- Pipeline Licence No. 30
- Bore Water Licences

METHODOLOGY

Finding	Definition
Conformance	Conformance with all requirements of the condition.
Conformance Improvement Opportunity	Conformance with all requirements of the condition. Additional actions or a modified approach may lead to a performance improvement.
Non-Conformance Category 1	Evidence was inadequate or absent for the audit criteria, resulting in increased likelihood of potential harm to the environment, human health or corporate reputation.
Non-Conformance Category 2	Evidence was inadequate or absent for the audit criteria, resulting in a minor control exposure that is administrative in nature. The matter is unlikely to result in actual or potential environmental, human health or reputational harm.
No Finding	The condition was not activated during the audit period or was closed in a previous audit period.

SUMMARY: CONDITIONS AND LICENCE

- Total number of conditions (inclusive of licences): 1,811
- Total number of conditions activated during audit period: 1,181
 - Conformance/Conformance IO: 1,083 conditions (92%)
 - Non-Conformance Category 1: 35 conditions (3%)
 - Non-Conformance Category 2: 63 conditions (5%)



AUDIT FINDINGS

- Positive findings:
 - EMS is effective in achieving legislative compliance and continual improvement
 - Environmental control measures are largely implemented
- Non-conformance Category 1 Audit Findings:
 - Air monitoring
 - Maintenance and operation of plant and equipment
 - Independent audits
 - Regulatory authority consultation
 - Land subsidence
- Non-conformance Category 2 Audit Findings
 - Reporting
 - Noise management
 - Environmental Management Plan

AIR MONITORING

- Air monitoring is to be undertaken at a defined frequency and the sampling positions are to conform to test method TM-1
- Three non-conformances were identified in relation to:
 - Continuous emissions monitoring
 - Quarterly sampling
 - Sampling positions
- Previously reported matter
- **Recommendation:**
 - Resolve the above matters in consultation with the EPA

MAINTENANCE AND OPERATION OF PLANT AND EQUIPMENT

- Maintaining and operating plant and equipment in a proper and efficient manner is requirement of DA 75- 4-2005 (condition 17) and EPL 12003 (condition O2.1)
- The EPA issued AGL with a Warning Letter in relation to the emission of foam and water during well workover operations at well site SL03 on 17 May 2011
 - The EPA determined that the degasser unit was not being operated in a proper and efficient manner
 - Corrective actions were undertaken by AGL to reduce the likelihood of a reoccurrence
- Previously reported matter

INDEPENDENT AUDITS

- Independent audit requirements include environmental performance, assessment of visual impact, landscaping, compliance reporting, and health and safety hazards
- On a number of occasions, independent audits were not conducted within the required frequency or submitted to the Director-General within the required timeframe
- **Recommendation:**
 - Ensure suitably qualified and approved professionals are engaged to conduct the audits in accordance with the required frequency
 - Engage auditors early enough to allow completion of the audit and submission within the required timeframe

REGULATORY AUTHORITY CONSULTATION

- Consultation with nominated regulatory authorities was not consistently undertaken by AGL in accordance to the consent requirements
 - The EMP was not prepared in consultation with nominated authorities
 - Evidence was not provided to verify consultation occurred with the Rural Fire Service and Councils in the preparation of the Emergency Response Plan
- **Recommendation:**
 - Engage with nominated stakeholders in accordance with consent conditions

LAND SUBSIDENCE

- AGL was required to 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
- A Subsidence Report was prepared in April 2007 by Mine Subsidence Engineering Consultants Pty Ltd
 - Report notes that the risk of subsidence is almost negligible and hence monitoring was not conducted
- **Recommendation:**
 - If AGL is satisfied, based on expert opinion that no subsidence monitoring is required, then they should seek to modify this condition accordingly

CONCLUSIONS

- Substantial compliance with the relevant standards, performance measures and statutory requirements
- Three environmental incidents during the audit period, none of which resulted in actual or potential environmental harm
- Environmental performance may be improved by ensuring all monitoring requirements are completed in accordance with approved programs and the conditions of consent
- Additional assurance would be provided through the timely completion of independent audits as required by the development consents/project approval

QUESTIONS/COMMENTS

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