



Newcastle Gas Storage Facility

Preconstruction Audit

For AGL Energy Limited

August 2012

0169504

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AGL Energy Limited

Newcastle Gas Storage
Facility
Preconstruction Audit

August 2012

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Environmental Resources Management Australia Pty Ltd Quality System



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CONTENTS

1	INTRODUCTION	
1.1	PROJECT DESCRIPTION	1
1.2	AUDIT OBJECTIVE	1
1.3	AUDIT CRITERIA	2
1.4	SCOPE OF WORKS	2
1.5	LIMITATIONS OF THIS REPORT	2
2	AUDIT METHODOLOGY	
2.1	METHODOLOGY AND PROCESS	4
2.2	CLASSIFICATION OF AUDIT FINDINGS	5
3	AUDIT FINDINGS	
3.1	COMPLIANCE ASSESSMENT	6
3.2	IMPROVEMENT OPPORTUNITIES	6
4	CONCLUSION	

ANNEX A	AUDIT TABLES	
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LIST OF TABLES

TABLE 3.1	SUMMARY OF IMPROVEMENT OPPORTUNITIES	7
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EXECUTIVE SUMMARY

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned to perform a pre-construction audit for the Newcastle Gas Storage Facility (NGSF) on behalf of AGL Energy Limited (AGL). The primary purpose of the audit was to satisfy the Department of Planning and Infrastructure (DoPI) Ministers' Conditions of Approval (MCoA) B54a which requires a Compliance Tracking Program that includes:

“(a) provisions for periodic reporting of compliance status to the Director-General including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project and within two years of operation commencement”.

The audit included a review of:

- DoPI MCoA; and*
- approval conditions from the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC).*

The audit is limited to a document review only. The implementation of the Construction Environment Management Plan, the associated sub plans and Statement of Commitments (SoC) will be assessed once works have commenced.

No non-conformances were identified. Fourteen improvement opportunities were identified correcting administrative errors in the Sub Plans.

Further audits will be completed to assess the implementation of the plans once construction commences.

Abbreviations and Glossary

Term	Description
AGL	AGL Energy Limited
AQMSP	Air Quality Management Sub Plan
ASSMSP	Acid Sulphate Soil Management Sub Plan
CEMP	Construction Environment Management Plan
CHMSP	Cultural Heritage Management Sub Plan
DGHMHMSP	Dangerous Goods & Hazardous Materials Handling Management Sub Plan
DoPI	Department of Planning and Infrastructure
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities
EPBC	Environment Protection and Biodiversity Conservation Act 1999
ERM	Environmental Resources Management Australia Pty Ltd
ERSP	Emergency Response Sub Plan
FERMSP	Flood Emergency Management Sub Plan
FFMSP	Flora and Fauna Management Sub Plan
GMP	Groundwater Monitoring Program
GMSP	Groundwater Management Sub Plan
MCoA	Ministers Conditions of Approval
NGSF	Newcastle Gas Storage Facility (the 'Project')
NVMSP	Noise and Vibration Management Sub Plan
SMSP	Soil Management Sub Plan
SoC	Statement of Commitments
SWMSP	Surface Water Management Sub Plan
TMSP	Traffic Management Sub Plan
VRMSP	Vegetation Rehabilitation Management Sub Plan
WMSP	Waste Management Sub Plan

INTRODUCTION

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned to perform a pre-construction audit for the Newcastle Gas Storage Facility (NGSF) on behalf of AGL Energy Limited (AGL). The primary purpose of the audit was to satisfy the Department of Planning and Infrastructure (DoPI) Ministers' Conditions of Approval (MCoA) B54a which requires a Compliance Tracking Program that includes:

“(a) provisions for periodic reporting of compliance status to the Director-General including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project and within two years of operation commencement”.

This audit included:

- DoPI MCoAs; and
- approval conditions from the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC).

The audit is primarily limited to a document review. The implementation of the Construction Environment Management Plan (CEMP), the associated sub plans and Statement of Commitments (SoC) shall be assessed once works have commenced.

1.1

PROJECT DESCRIPTION

AGL Energy Limited (AGL) is developing the Newcastle Gas Storage Facility in Tomago New South Wales to meet AGL's peak gas market requirements over winter and to provide additional security of gas supply during supply disruption events. New South Wales currently has no reliable gas storage capacity.

Construction of the Newcastle Gas Storage Facility by CBI includes the gas storage facility site, access road and utility corridor and gas pipeline access corridor (the Project). Additional works by others include construction upgrade and gas pipeline connection to the existing Jemena Gate Station at Hexham and laying of the pipeline to connect to the gas storage facility.

1.2

AUDIT OBJECTIVE

The primary project objectives for the preconstruction compliance audit include the following:

- to determine the extent that AGL and its subcontractors are in compliance with the relevant MCoA and DSEWPaC conditions as they relate to the preconstruction phase of the Project; and
- to make recommendations to address any non-compliances and improvements to the Construction Environment Management Plan (CEMP) and associated sub plans.

1.3 *AUDIT CRITERIA*

The legislative requirements relevant to this audit are included within the following statutory instruments:

- DoPI, Ministers Conditions of Approval MP10_0133 issued 10 May 2012; and
- DSEWPaC Approval EPBC 2010/5752 issued 18 July 2012.

1.4 *SCOPE OF WORKS*

The scope of works for the audit included:

- desktop review of the supporting documents to support compliance with the MCoA and the EPBC Approval conditions; and
- review of the CEMP, and relevant supporting documents, to ascertain the extent to which the MCoA and EPBC Approval requirements are addressed and identification of any improvements to further address these requirements.

1.5 *LIMITATIONS OF THIS REPORT*

The findings of this report are based on the Scope of Work described above. ERM performed the services in a manner consistent with the normal level of care and expertise exercised by members of the environmental auditing profession. No warranties, expressed or implied, are made.

The following was not included in the scope of this audit:

- Statement of Commitments (SoC)- the implementation of the SoC's will be included in the audits completed once construction has commenced; and
- implementation of the CEMP and Sub Plans - these will be included in the audits after construction has commenced.

This report is not intended to be used for the purposes of tendering or programming of works unless used in conjunction with a specification detailing the extent of the works. To ensure its contextual integrity, the report must be read in its entirety and should not be copied, distributed or referred to in part only.

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2.1 METHODOLOGY AND PROCESS

The audit process included the following primary tasks:

- desktop review of the following documents:
 - Construction Environment Management Plan (CEMP) Rev F
 - B1 Groundwater Management Sub Plan (GWMSPP) Rev C
 - B2 Surface Water Management Sub Plan (SWMSPP) Rev C
 - B3 Cultural Heritage Management Sub Plan (CHMSPP) Rev D
 - B4 Vegetation Rehabilitation Management Sub Plan (VRMSPP) Rev C
 - B5 Flora and Fauna Management Sub Plan (FFMSPP) Rev C
 - B6 Soil Management Sub Plan (SMSPP) Rev B
 - B7 Acid Sulfate Soil Management Sub Plan (ASSMSPP) Rev B
 - B8 Noise and Vibration Management Sub Plan (NVMSPP) Rev B
 - B9 Traffic Management Sub Plan (TMSPP) Rev D
 - B10 Air Quality Management Sub Plan (AQMSPP) Rev B
 - B11 Waste Management Sub Plan (WMSPP) Rev B
 - B12 Dangerous Goods & Hazardous Materials Handling Management Sub Plan (DGHMHMSPP) Rev B
 - B13 Emergency Response Sub Plan (ERSPP) Rev B
 - B14 Flood Emergency Response Management Sub Plan
 - Groundwater Monitoring Plan (GMP) Rev B
 - Correspondance supporting compliance with MCoA.
- recommendations for improvements to the CEMP and Sub Plans to better reflect the MCoA requirements.

Findings resulting from an assessment of audit evidence were divided into four categories as follows:

- **Conformance (C):** Adequacy and appropriateness of implementation against audit criteria.
- **Non-conformance Category 1 (NC-1):** Failure to meet the requirements of the audit criteria in terms of legislative requirements, failure to achieve the management performance outcomes identified in documentation, or ineffective environmental management of the activity that represent an *immediate risk* to the environment or reputation of the company.
- **Non-conformance Category 2 (NC-2):** Failure to meet the requirements of the audit criteria in terms of legislative requirements, failure to achieve the management performance outcomes identified in documentation, or ineffective environmental management of the development that does not represent an immediate risk to the environment. These will generally be associated with documentation, records or administrative requirements.
- **Improvement Opportunity (IO):** A finding which is not likely to significantly affect the operation, which do not strictly relate to the scope of the audit of compliance and which could lead to performance improvement.
- **Not applicable (NA):** item has not been evoked and therefore adequacy and appropriateness of implementation against audit criteria cannot be determined.

In addition to the above, the status of the item or approval condition is divided into the following categories:

- **Open** – item has yet to be completed with actions continuing.
- **Closed** – item has been completed and the audit criteria satisfied with no further actions outstanding.

3 *AUDIT FINDINGS*

3.1 *COMPLIANCE ASSESSMENT*

Compliance against the requirements of the MCoA and DSEWPaC Approval conditions were achieved with all requirements' met at the preconstruction phase of the Project.

A full review and audit findings are included in *Annex A*.

3.2 *IMPROVEMENT OPPORTUNITIES*

Improvement opportunities were identified with a summary provided below in *Table 3.1*. These findings are not likely to significantly affect the Project and do not strictly relate to the scope of the audit of compliance but have been identified as they could lead to performance improvement.

Table 3.1 Summary of Improvement Opportunities

Item No	Assessment Requirement	Comment	Audit Classification
B8	<p><i>Ministers Conditions of Approval MP10_0133</i></p> <p>Prior to the commencement of works with the potential to directly or indirectly affect riparian areas, the Proponent shall engage a suitably-qualified ecologist (required under condition B1) to survey and record the condition of those potentially-affected areas.</p>	<p>This stage of the project crosses a culvert over an ephemeral watercourse which runs to the Hunter River. This condition is therefore relevant to this phase of works.</p> <p>Shawn Capararo from ecoBiological engaged for all pre construction works including riparian clearing.</p>	IO
B9	<p>Within six months of the conclusion of construction activities directly or indirectly affecting riparian areas, the Proponent shall implement a programme to rehabilitate those areas to a standard of equal or better condition than surveyed under condition B8, unless otherwise agreed by the Director-General. Riparian rehabilitation works shall be undertaken in consultation with NOW and DPI (Fisheries).</p>	<p>Table 1-2 of the VRMSP referenced this MCoA as included in Section 1.8 and Table 8-5 but not actually included in the sections stated. Consider adding requirement to relevant sections of VRMSP.</p> <p>Nil riparian areas cleared as at time of audit as works yet to commence.</p> <p>Table 1-2 of the VRMSP referenced this MCoA as included in Section 1.8 and Table 8.4 and 8.5 however not actually include in the sections stated. Consider adding requirement to relevant sections of VRMSP.</p>	IO
B10	<p>Unless otherwise agreed by the Director-General, the Proponent shall monitor and maintain the condition of rehabilitated riparian areas until such time as those areas have been verified by a suitably-qualified ecologist (required under condition B1) as being well-established, in good health and self-sustaining.</p>	<p>Nil riparian areas cleared as at time of audit as works yet to commence.</p> <p>Table 1-2 of the VRMSP referenced this MCoA as included in Section 1.8 and Table 8-5 but not actually included in the sections stated. Consider adding requirement to relevant sections of VRMSP.</p>	IO

Item No	Assessment Requirement	Comment	Audit Classification
B15	<p>During construction, the Proponent shall store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code, strictly in accordance with:(a) all relevant Australian Standards; and(b) DECC's Environment Protection Manual Technical Bulletin -- Bunding and Spill Management.</p> <p>In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement shall prevail to the extent of the inconsistency.</p>	<p>The Dangerous Goods & Hazardous Materials Handling Management Sub Plan does not currently include reference to DECC publication in Section 1.5.2 (Guidelines). A review of the plan indicates that consideration to this publication has been made.</p> <p>Consider adding the DECC reference to the list of guidelines used to develop/relevant to this Plan.</p>	IO
B32	<p>Prior to the commencement of construction of the project, the Proponent shall commission a suitably qualified road infrastructure specialist to assess the condition of all public roads proposed to be traversed by construction traffic associated with the project (including over-mass or over-dimensional vehicles) in consultation with Council and the RMS, and to identify any upgrade requirements to accommodate project traffic for the duration of construction (including culvert, bridge and drainage design; intersection treatments; vehicle turning requirements; and site access), having regard to peak traffic volumes. The Pre-Construction Road Inspection Report shall be submitted to the Director-General prior to the commencement of construction works, clearly identifying recommendations made by the Council and the RMS and how these have been addressed. The Proponent shall ensure that all upgrade measures identified in the report are implemented to meet the reasonable requirements of Council and the RMS, prior to the commencement of construction.</p>	<p>Letter report from Better Transport Futures 6 July 2012 indicating the current road network in the vicinity of the subject site can accommodate the volume and size of the vehicles associated with the construction phase of the Gas Storage Facility and no further road upgrades are required. RMS and PSC were contacted during the writing of the report regarding any potential road upgrades.</p> <p>The report was submitted to DoPI 11 July 2012.</p> <p>The TMSF was sent to PSC for review and comment.</p> <p>Consider sending the report to PSC and RMS for comment and to confirm no road upgrades required.</p>	IO
B44	<p>The Proponent shall:</p> <p>(a) take all reasonable and feasible measures to mitigate off-site lighting impacts from the construction of the project; and</p> <p>(b) ensure that all external lighting associated with construction of the project complies with Australian Standard AS4282 – 1997 – Control of the Obtrusive Effects of Outdoor Lighting.</p> <p>This condition does not apply to lighting required for aviation safety.</p>	<p>Consider adding to CEMP to mitigate off-site lighting impacts from construction of the Project</p>	IO

Item No	Assessment Requirement	Comment	Audit Classification
B46	The Proponent shall undertake all necessary alterations to existing public utility installations to meet the reasonable requirements of, and at no expense to, the relevant public utility authority.	Table 3.2 of the CEMP indicates this is included in Section 5.1.5 Ancillary Facilities Section	IO
B47	The Proponent shall ensure that road surfaces – and any other road-related infrastructure including drainage, street lighting, street furniture or underground facilities – disturbed or damaged during construction, are restored to meet the reasonable requirements of, and at no expense to, the relevant road authority.	Review of Section 5.1.5 indicates this requirement is not discussed. Consider adding to relevant section of report if relevant to this phase of the project. Table 3.2 of the CEMP indicates this is included in Section 5.1.5 Ancillary Facilities Section	IO
B48	The Proponent shall design and provide on-site car parking, driveways, parking bays, vehicular turning areas, letterboxes, landscaping and drainage in consultation with and to meet the reasonable requirements of the relevant local council.	Review of Section 5.1.5 indicates this requirement is not discussed. Consider adding to relevant section of report if relevant to this phase of the project. Table 3.2 of the CEMP indicates this is included in Section 5.1.5 Ancillary Facilities Section	IO
B49	Prior to the commencement of construction, the Proponent shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the project. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to: (a) the status of the project; (b) a copy of this approval and any future modification to this approval; (c) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;	Review of Section 5.1.5 indicates this requirement is not discussed – consider referring to design report if applicable or leave out of Table 3.2 if not relevant to the CEMP Copy of relevant approval – link to DoPI website only – consider addition of the approval directly to this page	IO

Item No	Assessment Requirement	Comment	Audit Classification
B52	<p>(d) a copy of each plan, report, or monitoring programme required by this approval; and</p> <p>(e) details of the outcomes of compliance reviews and audits of the project.</p> <p>The Proponent shall record details of all complaints received through the means listed in condition B51 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:</p> <p>(a) the date and time of the complaint;</p> <p>(b) the means by which the complaint was made (telephone, mail or email);</p> <p>(c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;</p> <p>(d) the nature of the complaint;</p> <p>(e) any action(s) taken by the Proponent in relation to the complaint, including timeframes for implementing the action; and</p> <p>(f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.</p>	<p>Requirements include in CEMP Section 5.2.3 Complaints Handling which was submitted to DoPI for approval</p> <p>Community Engagement Plan refers to Section 6.5.5 for complaint protocol</p> <p>CEMP refers to Section 5.2.3</p> <p>Neither reference includes the actual requirements regarding the complaints register or its required contents</p>	IO
B53	<p>The Proponent shall provide an initial response to any complaints made in relation to the project during construction or operation within 48 hours of the complaint being made. The response and any subsequent action taken shall be recorded in accordance with condition B52. Any subsequent detailed response or action is to be provided within two weeks, or as otherwise agreed by the complainant/ Director-General.</p>	<p>Consider clarifying in Section 5.2.3 that written correspondence should be acknowledged if possible before 48 hours if a contact phone number is given otherwise written acknowledgement within 5 days.</p>	IO
B57f	<p>(f) a Noise Management Plan to manage noise impacts during construction and to identify all feasible and reasonable noise mitigation measures. The Plan shall include, but not necessarily be limited to:</p> <p>(i) details of construction activities and an indicative schedule for construction works;</p> <p>(ii) identification of construction activities that have the potential to generate noise impacts on surrounding land uses, particularly residential areas;</p>	<p>Consider the addition of an OOW protocol as per section viii)</p>	IO

Item No	Assessment Requirement	Comment	Audit Classification
	<p>(iii) details of the requirements for Noise Impact Statement(s) for discrete work areas, including construction site compounds;</p> <p>(iv) identify all sensitive receivers where construction noise goals are predicted to be exceeded;</p> <p>(v) detail what reasonable and feasible actions and measures would be implemented to minimise noise impacts;</p> <p>(vi) consultation with the owner/occupiers of sensitive receivers (including receivers R4 (Tomago Village Caravan Park) and R5 (217 Maitland Road), where construction noise goals are expected to be exceeded, with the aim of identifying and implementing reasonable and feasible noise mitigation and management measures, including where necessary, the consideration of respite periods and alternative accommodation arrangements;</p>	<p>(vii) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise amenity, as well as procedures for dealing with and responding to noise complaints;</p> <p>(viii) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours as defined under this approval, including a risk assessment process under which the Environmental Representative may approve out-of-hour construction activities deemed to be of low environmental risk and refer high risk works for the Director-General's approval. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, and detail a standard protocol for referring applications to the Director-General; and</p> <p>(ix) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported; and, if any exceedance is detected, how any non-compliance would be rectified;</p>	

Item No	Assessment Requirement	Comment	Audit Classification
B57h	<p>h) a Traffic Management Plan to manage traffic conflicts that may be generated during construction. The Plan shall address the requirements of the relevant road authority and shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (i) details of how construction of the project will be managed in proximity to local and regional roads; (ii) details of traffic routes for heavy vehicles, including any necessary route or timing restriction for oversized loads; (iii) measures to minimise and manage traffic noise; (iv) an assessment of sufficient access for emergency vehicles to ensure the proposed traffic arrangements meet the requirements detailed in Guidelines for Emergency Vehicle Access Policy No 4 (NSW Fire Brigades, 2010); (v) demonstration that all statutory responsibilities with regard to road traffic impacts have been complied with; (vi) details of measures to minimise interactions between the project and other users of the roads such as the use of fencing, lights, barriers, traffic diversions etc.; (vii) procedures for informing the public where any road access will be restricted as a result of the project; (viii) procedures to manage construction traffic to ensure the safety of livestock and to minimise disruption to livestock; (ix) speed limits to be observed along routes to and from the site and within the site; and (x) details of the expected behavioural requirements for vehicle drivers travelling to and from the site and within the site. 	<p>Table 1-2 of the TMSP indicates that the requirement to include procedures to manage construction traffic to ensure the safety of livestock and to minimise disruption to livestock is include in Appendix C (Management and Mitigation Actions). Appendix C does not discuss this issue.</p> <p>Although it is unlikely for livestock to be in the Consider adding</p>	IO

CONCLUSION

A preconstruction audit against the DoPI MCoA and the DSEWPaC Approval was completed by reviewing the relevant documents to identify whether AGL and its contractors are meeting current requirements of the approval conditions relevant to the preconstruction phase of the AGL NGSF Project.

No non-conformances were identified. Fourteen improvement opportunities were identified correcting administrative errors in the Sub Plans.

Further audits will be completed to assess the implementation of the plans once construction commence.

Annex A

Audit Tables

Table 1 Compliance Assessment – Ministers Conditions of Approval MP10_0133 (dated 10 May 2012)

Item	Assessment Requirement	Stage/timing	Responsibility	Compliance Status	Reference/ Comment
TERMS OF APPROVAL					
PART A – ADMINISTRATIVE CONDITIONS					
A1	The Proponent shall carry out the project generally in accordance with the: (a) Environmental Assessment;(b) Preferred Project Report;(c) Statement of Commitments; and(d) conditions of this approval. Note: the general layout of the project is shown in Appendix 1	All	AGL CBI	Open	Noted
A2	If there is any inconsistency between the documents in condition A1, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency with the documents listed under condition A1.	All	AGL CBI	Open	Noted
A3	The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:(a) any reports, strategies, plans, programmes, reviews, audits or correspondence that are submitted in accordance with this approval; and(b) the implementation of any actions or measures contained in these documents	All	AGL CBI	Open	Noted
LIMITS OF APPROVAL					
A4	This project approval shall lapse five years after the date on which it is granted, unless any works the subject of this approval have physically commenced before that time.	All	AGL	Open	Project approval date 10 May 2012
A5	The gas pipeline component for the project shall follow corridor option 2 as shown in Figure 1.2 – Conceptual Project Layout in the EA. To avoid any doubt, other corridor options shown in that figure are not approved.	Design	AGL	Compliance Closed	Option 2 has been adopted

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
STAGING					
A6	Construction of the project may be undertaken in discrete work packages or stages. Where that occurs, these conditions of approval need only be complied with to the extent that they are relevant to that discrete work package or stage. Prior to the commencement of relevant construction or operation activities, the Proponent shall submit a Staging Report to the Director-General which: (a) describes the stages; and (b) identifies the relevant conditions of approval for each stage and how these will be addressed across and between the stages of the project.	Pre-construction Construction	AGL	Compliance Open	Staging Plan (Document No: NGSF-WPOE-NAS-PM-PLN-0001). Correspondence to DG submitting report a) 10 stages described (Section 3) b) Appendix 1 includes spread sheet which identifies which approvals apply to each stage
A7	With the approval of the Director-General, the Proponent may submit any strategy, plan or programme required by this approval on a progressive basis for discrete work packages or stages.	Pre-construction Construction	AGL & CBI	Open	Noted
STATUTORY REQUIREMENTS					
A8	The Proponent shall ensure that all necessary licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation of the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the site at all times during the project.	All	AGL & CBI	Compliance Open	EPBC Approval obtained (2010-5752) 18 July 2012 EPL20130 issued to CBI for chemical storage and petroleum and fuel production 10 July 2012 Construction Certificate pending
COMPLIANCE					
A9	The Proponent shall ensure that employees, contractors and subcontractors, and visitors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	All	CBI	Compliance Open	Refer to Induction Content Audit completed 15 August 2012. Minor improvement opportunities identified to further enhance content.

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
PUBLICLY AVAILABLE INFORMATION					
A10	Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request	Pre-construction Construction	AGL/CBI	NA Open	Plans to be uploaded onto website once approved by DoPI
STRUCTURAL ADEQUACY					
A11	The Proponent 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. For the purpose of section 75S(2)(b) of the Act, the relevant provisions, as defined in section 75S(1A) of the Act apply to this approval.	Pre-construction Construction	CBI	Compliance Open	Schedule 3, Basis of Design, Appendix C Section 75S(2)(b) requires private certifier to sign off on buildings/structures. AGL has engaged the services of Barker Ryan Stewart a Newcastle-based multidisciplinary town planning, engineering and private certification consultancy to assist AGL in satisfying the certification requirements for the project. Barker Ryan Stewart has in turn engaged the local firm NewCert as the Principal Certifying Authority. At this point in time, the certification requirements for Stage 1 - Site Preparation have been identified and are in progress. The requirements for the subsequent Stages will be developed progressively.
SUBDIVISION					
A12	In undertaking the subdivision approved under this approval, the Proponent must comply with the requirements of the Environmental Planning and Assessment Act 1979 relating to the issue of a Subdivision Certificate (the relevant provisions referred to under section 75S(2)(b) of the Act, which continues to apply to the project).	Pre-construction	AGL	Compliance Closed	Survey Plan - Subdivision of Lot 105 DP 1125747 and easement over Lot 4 DP 1043561 - survey dated 27 March 2012

Item	Assessment Requirement	Stage/timing	Responsibility	Compliance Status	Reference/ Comment
A13	The Proponent shall consult with and address all reasonable requirements of Port Stephens Council in preparing its application for a Subdivision Certificate for the project.	Pre-construction	AGL	Compliance Closed	Email to PSC 29 Dec 2012 with subdivision plan and s88B instrument attached. PSC reply from Amanda Gale 6 January 2012 stating 88B instrument and Linen Plan provide an easement which legally satisfies the concern made by Council.
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT					
A14	The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation or rehabilitation of the project.	All	AGL - operation and rehabilitation stage CBI - construction stage	Open	Noted - all management plans with implementation to be monitored during activities
INCIDENT REPORTING					
A15	The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within seven days of becoming aware of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.	All	CBI to notify immediately as per POEO Act requirements AGL to liaise with agencies after initial notification	NA Open	Nil incidents recorded - works yet to commence on site
A16	The Proponent shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition A15 of this approval, within such period as the Director-General may require.	All	CBI - implementation AGL - active governance over corrective actions taken by CBI	NA Open	Nil incidents recorded - works yet to commence on site

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
PART B – PRIOR TO AND DURING CONSTRUCTION					
BIODIVERSITY					
B1	The Proponent shall employ a suitably-qualified ecologist to attend site clearing and vegetation removal works, and any activities with the potential to directly or indirectly impact on the biodiversity of the project site or surrounding land during construction. The ecologist shall be employed for the purpose of identifying and advising on potential ecological impacts, including appropriate mitigation and management, as required under these conditions of approval.	Pre-construction Construction	AGL	IO Closed	Shawn Capararo from EcoBiological appointed. FFMSP – Appendix B, Table 8-1 (general Construction), Table 8-6 (Pre-clearing Protocol) and Table 8-9 (Vegetation Clearing Protocol) IO – edit table references to reflect correct table number in Table 1-2 CoA of FFMSP
Management of Impacts on Flora					
B2	The Proponent shall take reasonable and feasible steps to minimise the area of native vegetation clearing required for the project. Areas of vegetation to be cleared as part of the project shall be clearly demarcated prior to the commencement of clearing activities. Procedures for the minimisation and management of vegetation clearing shall be detailed in the Flora and Fauna Management Plan required under condition B57.	Pre clearing	AGL to engage ecologist CBI	Compliance Open	AGL received letter from ecoBiological on 14-May-12 outlining steps taken to comply with the condition. The Flora & Fauna Management Sub Plan contains details on clearing. The CCFMP has been submitted to the Director-General as part of the CEMP.
B3	The Proponent shall construct the project in a manner that avoids direct and indirect impacts to those areas mapped as “(4) – Freshwater Wetland Complex” and “(7) – Phragmites Rushland” in Figure 7 – Vegetation Communities in Ecological Assessment: Newcastle Gas Storage Facility Project (ecoBiological, May 2011), included as Appendix 7 to the EA. The suitably-qualified ecologist required under condition B1 shall be engaged for the purpose of advising on measures to avoid potential direct or indirect impacts.	Pre-construction - Stage 2 Construction	AGL CBI	Compliance Open	Vegetation communities map included as Figure 1 in FFMSP The areas referred to in this condition are relevant to the pipeline construction and crossing over the Hunter River which is part of Stage 2 therefore will be include in the management phase for this phase of the works.

Item	Assessment Requirement	Stage/timing	Responsibility	Compliance Status	Reference/ Comment
B4	<p>Prior to the commencement of construction, appropriately timed and targeted surveys should be undertaken to determine the absence/presence of the following taxa for which general baseline vegetation surveys are not considered appropriate:</p> <p>(a) Tall Knot-weed (<i>Persicaria elatior</i>);</p> <p>(b) Small Water-ribbons (<i>Maundia triglochinooides</i>); and</p> <p>(c) Horned Pondweed (<i>Zannichellia palustris</i>).</p> <p>Any impacts on these taxa must be included the Biodiversity Offset Strategy under condition B13 and Biodiversity Offset Package under condition C2.</p>	Pre-construction	AGL	Compliance Closed	Letter from ecoBiological on 14-February-12 confirming the survey work undertaken and compliance with this condition
B5	<p>Prior to the commencement of vegetation clearing works, the site shall be subject to further confirmatory survey work to determine the number of Earp's Gum individuals to be removed. The number, quality and extent of these individuals shall be used to inform the Biodiversity Offset Strategy under condition B13 and Biodiversity Offset Package under condition C2.</p>	Pre-clearing	AGL	Compliance Closed	Letter from ecoBiological on 14-May-12 confirming the survey work undertaken and compliance with this condition.
B6	<p>Prior to the commencement of vegetation clearing works, the site shall be subject to further confirmatory survey work to determine the hollow-bearing trees to be removed. The number and quality of these tree hollows shall be used to inform the Biodiversity Offset Strategy under condition B13 and Biodiversity Offset Package under condition C2.</p>	Pre-clearing	AGL	Compliance Closed	Letter from ecoBiological on 14-May-12 confirming the survey work undertaken and compliance with this condition.

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
B7	With the exception of clearing necessary for the gas pipeline access corridor, and access road and utility corridor, on the site, the Proponent shall ensure that vegetation mapped as "Preferred Koala Habitat" in Figure 12 - Revised Koala Habitat Mapping in Ecological Assessment: Newcastle Gas Storage Facility Project (ecoBiological, May 2011), included as Appendix 7 to the EA, is not directly or indirectly affected in the carrying out of the project.	Pre-construction Construction	AGL CBI	Compliance Open	CEMP - Appendix A6 includes environmental constraints map. Construction area to be delineated with temporary fencing Appendix B Tables 8-9 & 8-12 FFMSP - Appendix B
Riparian Areas					
B8	Prior to the commencement of works with the potential to directly or indirectly affect riparian areas, the Proponent shall engage a suitably-qualified ecologist (required under condition B1) to survey and record the condition of those potentially-affected areas.	Pre-clearing	AGL	IO Open	Primarily refers to Stage 2 of the Project. There is one culvert crossing for this stage therefore reference to this condition is required. Shawn Capataro from ecoBiological engaged for all pre construction works including riparian works. VRMSP Table 1-2 listing compliance with the MCoA refers to Section 1.8 and Table 8.5 as addressing the requirement however check indicates not actually included in these references. Consider adding the requirement to appoint a suitably qualified ecologist to the relevant section of the VRMSP
B9	Within six months of the conclusion of construction activities directly or indirectly affecting riparian areas, the Proponent shall implement a programme to rehabilitate those areas to a standard of equal or better condition than surveyed under condition B8, unless otherwise agreed by the Director-General. Riparian rehabilitation works shall be undertaken in consultation with NOW and DPI (Fisheries).	Pre-construction Construction	AGL	IO Open	Nil riparian areas cleared as at time of audit as works yet to commence Table 1-2 of the VRMSP referenced this MCoA as include in Section 1.8 and Table 8.4 and 8.5 however not actually include in the sections stated. Consider adding requirement to relevant sections of VRMSP.

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
B10	Unless otherwise agreed by the Director-General, the Proponent shall monitor and maintain the condition of rehabilitated riparian areas until such time as those areas have been verified by a suitably-qualified ecologist (required under condition B1) as being well-established, in good health and self-sustaining.	Pre-construction Construction	AGL	IO Open	Nil riparian areas cleared as at time of audit as works yet to commence Table 1-2 of the VRMSP referenced this MCoA as included in Section 1.8 and Table 8-5 but not actually included in the sections stated. Consider adding requirement to relevant sections of VRMSP.
Management of Impacts on Fauna					
B11	<p>Prior to the commencement of vegetation clearing works in the site, the site shall be subject to survey work to identify the presence of Koala (<i>Phascolarctos cinereus</i>) individuals. All Koala individuals identified on the site shall be allowed to self-translocate in the first instance prior to any other translocation methods being considered.</p> <p>If self-translocation proves impracticable, human-assisted translocation will be conducted and the Koalas located on the gas storage facility site shall be translocated to an appropriate, safe location off-site. Survey and translocation of Koala individuals shall be conducted in accordance with the Port Stephens Comprehensive Koala Plan of Management and to meet the requirements of the OEH. If human-assisted translocation is conducted, it shall be undertaken by a suitably qualified and experienced ecologist in Koala management and in accordance with Policy for the Translocation of Threatened Fauna in NSW (NPWS, 2001).</p>	Pre-clearing	AGL CBI	Compliance Open	FFMSP - Appendix B Table 8-12

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
B12	Prior to the commencement of vegetation clearing and construction works, the Proponent shall demonstrate that it has undertaken a programme of trapping on the gas storage facility site with the aim of collecting any New Holland Mouse (<i>Pseudomys novaehollandiae</i>) individuals. All New Holland Mouse individuals shall be translocated to an appropriate, safe location off-site. Trapping, collection and translocation of New Holland Mouse individuals shall meet the requirements of any guidelines issued by DSWEPaC.	Pre-clearing	AGL CBI	Compliance Open	Trapping program outlined in the FFMSP Appendix B Table 8-11
Biodiversity Offsets					
B13	Prior to the commencement of vegetation clearing or construction works, the Proponent shall prepare a Biodiversity Offset Strategy in consultation with the OEH and Port Stephens Council, and for the approval of the Director-General. The purpose of the Strategy shall be to provide high-level direction to guide the development of the Biodiversity Offset Package required under condition C2. The Biodiversity Offset Strategy shall be prepared by a suitably-qualified ecologist consistent with the Biobanking Methodology under the Biobanking and Offsets Scheme outlined in Biobanking Assessment Methodology and Credit Calculator Operational Manual (DECC, 2009), and shall include: (a) consideration of all native vegetation losses and the adequacy of the proposed offset; (b) an offset area for the Earp's Gum commensurate with the area occupied by the Earp's Gum individuals to be removed from the site, and including successful planting of <i>Eucalyptus parramattensis</i> subsp. <i>decadens</i> trees at a ratio of at least 3:1 and the maintaining of these trees until established.	Pre-clearing Pre-construction	AGL	Compliance Open	Offset Strategy report prepared by ecoBiological dated May 2012 Meadow Conservation Area Offset Monitoring Protocol prepared by ecoBiological dated May 2012 Draft Conservation Agreement for Lot 20 at 3 Old Swan Bay Road, Medowie Draft Conservation Agreement for Lot 16 at 218 Old Swan Bay Road, Medowie. Offset Strategy Report: a) Refer Section 3.1 and 3.3 b) Refer Chapter 4. \$ Earp's gums to be replaced. Target of 60 plants established with OEH. Hunter Region Botanic Gardens have identified areas suitable for planting c) As agreed by OEH two large offset areas identified have adequate hollow bearing trees available to mitigate need for nest boxes

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
	<p>(c) an offset ratio for tree hollows of no less than 1:1, to be delivered through nest boxes or other measures agreed with the OEH;</p> <p>(d) habitat offset measures for Koalas (<i>Phascolarctos cinereus</i>) and New Holland Mouse (<i>Pseudomys novaehollandiae</i>);</p> <p>(e) demonstration of how the offset would 'improve or maintain' biodiversity values;</p> <p>(f) the proposed offset ratios and connectivity improvements;</p> <p>(g) proposed management actions;</p> <p>(h) demonstration of how the strategy was prepared in accordance with the OEH's Principles for the Use of Biodiversity Offsets in NSW; and</p> <p>(i) measures to ensure in-perpetuity the conservation commitment.</p>				<p>d) Koala - 11.8ha offset area provided to offset loss of 0.7ha. New Holland Mouse - 25 ha preferred habitat and 80ha sub optimal habitat to replace 12ha sub optimal habitat</p> <p>e) Refer Chapter 5 - improvement of biodiversity values in offset areas</p> <p>f) Refer Chapter 3</p> <p>g) Contained within Voluntary Conservation Agreements</p> <p>h) 13 principles addressed in Chapter 5</p> <p>i) Refer Chapter 3 and Chapter 5</p> <p>To close out this condition require correspondence to OEH and PSC as evidence of consultation with both OEH and PSC.</p> <p>Correspondence from DoPI accepting Strategy</p>
HAZARDS AND RISKS					
B14	<p>The Proponent shall establish and maintain Asset Protection Zones around the project, being no less than 25 metres around the gas plant site and no less than 31 metres around the processing plant and storage tank. The Earp's Gum individuals are to be retained within the asset protection zones where appropriate canopy distances exist. The understory in the vicinity of retained Earp's Gum individuals is to be appropriately managed to minimise fire risk. Details shall be incorporated into the Fire Safety Study required under B16(a).</p>	Pre-construction Construction	CBI - design AGL - review	Compliance Open	Included in FFMSP Appendix B Table 8-5 Bush Fire

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
B15	<p>During construction, the Proponent shall store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code, strictly in accordance with:(a) all relevant Australian Standards; and(b) DECC's Environment Protection Manual Technical Bulletin -- Bunding and Spill Management.</p> <p>In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement shall prevail to the extent of the inconsistency.</p>	Construction	CBI	IO Open	The Dangerous Goods & Hazardous Materials Handling Management Sub Plan does not currently include reference to DECC publication in Section 1.5.2 (Guidelines). A review of the plan indicates that consideration to this publication has been made. Consider adding reference to the list of guidelines used to develop/ relevant to this Plan.
B16	<p>At least one month prior to the commencement of construction of the project, except for construction of those preliminary works that are outside the scope of the hazard studies (including such works as vegetation clearing and site preparation which would not influence or pre-empt the outcomes of the hazards studies), or within such further period as the Director-General may agree, the Proponent shall prepare and submit for the approval of the Director-General the following studies:</p> <p>(a) A Fire Safety Study prepared in accordance with and covering the relevant aspects in Hazardous Industry Planning Advisory Paper No. 2 - Fire Safety Study Guidelines (DoP, 2011) and Best Practice Guidelines for Contaminated Water Retention and Treatment Systems (NSW Government, 1994). The study shall also be submitted for approval to Fire and Rescue NSW and to the Rural Fire Service;</p>	Pre-construction	a) AGL b) CBI c) AGL	Compliance Open	<p>Letter to DoPI dated 19 June 2012 requesting approval to stage Fire Safety Study (FSS), Hazard and Operability Study (HAZOP), Final Hazard Analysis (FHA).</p> <p>Stage 1 - HAZOP, FSS and FHA August 2012 based on final design</p> <p>Stage 2 - update based on final designs - January 2013</p> <p>Letter from DoPI dated 6 August 2012 approving staged approach with following requirements:</p> <ol style="list-style-type: none"> 1. The HAZOP for the second stage should cover the interaction with already installed equipment; 2. The FSS for the second stage should be an update on the FSS for the first stage. (The site must have a single FSS covering the whole site.)

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
B17	<p>(b) A Hazard and Operability Study for the project, chaired by a qualified person, independent of the project, approved by the Director-General prior to the commencement of the study. The study shall be consistent with the Department of Planning and Infrastructure's Hazardous Industry Planning Advisory Paper No.8 - HAZOP Guidelines (DoP, 2011). The study report shall be accompanied by a programme for the implementation of all recommendations made in the report. If the Proponent intends to defer the implementation of a recommendation, reasons must be documented and justified; and</p> <p>(c) A Final Hazard Analysis of the project, consistent with Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis (DoP, 2011). The FHA shall report on the implementations of the recommendations of the Preliminary Hazard Analysis.</p> <p>Construction, other than of preliminary works (including such works as vegetation clearing and site preparation which would not influence or pre-empt the outcomes of the hazards studies), shall not commence until approval under this condition has been given by the Director-General and, with respect to the Fire Safety Study, approval has also been given by Fire and Rescue NSW and the Rural Fire Service.</p> <p>Prior to the commencement of the detailed design of the project, the Proponent shall consult with WorkCover with regard to complying with the regulations applicable to Major Hazard Facilities and shall obtain requirements for the preparation of the Site Risk Assessment and the Safety Case. The Proponent shall comply with all requirements issued by WorkCover.</p>	Pre-detailed design	AGL CBI to assist	Compliance Open	<p>3. The FHA for the second stage should be an update of the FHA for the first stage. (As with the FSS, a single document must cover the whole site.)</p> <p>Meeting with RFS to discuss FSS scheduled 4 September 2012</p> <p>Meeting held with WorkCover on 18-April-2012. Refer to minutes of meeting.</p> <p>Requirements to be checked if included in Site Risk Assessment and Safety Case six months prior to commissioning of project</p>

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
B18	The Safety Case shall be prepared by the Proponent under the Major Hazard Facilities legislation and shall be submitted to WorkCover no later than six months prior to the commissioning of the project, or as otherwise agreed by WorkCover.	Construction Pre commissioning	AGL CBI to assist	NA Open	Safety Case to be prepared six months prior to commissioning
DESIGN PRINCIPLES					
B19	Buildings and car parking associated with the proposed development should be designed with consideration to the general principles and objectives of Crime Prevention through Environmental Design (Australian Institute of Criminology, 1989).	Design	CBI	NA Open	To be checked once final design completed
SOILS, WATER AND HYDROLOGY					
B20	Except as may be expressly provided by an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the Protection of the Environment Operations Act 1997 during construction of the project.	Pre-construction Construction	CBI	Compliance Open	Refer Surface Water Management Sub Plan and Soil Management Sub Plan - application of these plans to be checked once works commence. Included in EPL as Condition L1
B21	Erosion and Sediment controls consistent with Managing Urban Stormwater: Soils and Construction Manual (Landcom, 2004, or its latest version) shall be installed prior to the commencement of soil disturbing works and shall be maintained until such time as the disturbed areas have been rehabilitated.	Pre-construction Construction	CBI	Compliance Open	Refer Section 9 of the Soil Management Plan Sub Plan Site specific Erosion and Sediment Control Plans will be developed progressively.
B22	The Proponent shall carry out rehabilitation of disturbed areas progressively, and as soon as reasonably practicable following disturbance.	Pre-construction Construction	AGL CBI to advise when completed and ready for rehabilitation	Compliance Open	Refer to Vegetation Rehabilitation Management Sub Plan Appendix B - Table 8-5

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
Construction Method					
B23	The Proponent shall apply the gas pipeline corridor construction methods generally in accordance with Table 2.2 of the PPR, at the locations specified.	Pre-construction Construction	AGL	NA Open	Preferred Project Report - to be checked against final design
Flooding					
B24	The Proponent shall ensure that all structures to be constructed below known flood planning levels are constructed of materials and with finishes that are resistant to floodwaters/ tides. Construction of the project shall be undertaken in accordance with the NSW Flood Plain Development Manual (DIPNR, 2005).	Pre-construction Construction	AGL	Compliance Closed	Gas Storage Facility Design above 1 in 100 year flood levels
Groundwater Monitoring Program					
B25	<p>Prior to the commencement of construction, the Proponent shall develop a Groundwater Monitoring Programme in consultation with NOW and HWC and to the satisfaction of the Director-General. The programme shall detail the monitoring strategy that would be implemented to monitor the water quality impacts of the project on beneficial aquifers (including associated groundwater users, surface waters and groundwater dependent ecosystems). The programme shall:</p> <p>(a) identify surface and groundwater monitoring locations demonstrating their appropriateness for obtaining representative water quality and water level data on construction and operational impacts in relation to beneficial aquifers, groundwater users and surface waters</p> <p>(b) provide details of the monitoring points (including location, depth of monitoring, duration and frequency of monitoring and parameters to be monitored);</p>	Pre-construction	AGL	Compliance Open	<p>Groundwater Management Sub Plan - sent in email to DoPI dated 11 July 2012</p> <p>Groundwater Monitoring Program - letter from DoPI dated 10/08/2012 accepting GMP. Correspondence from HWC dated 3 August 2012 and NOW dated 9 August 2012 supporting consultation requirement.</p> <p>Email from HWC 31 October 2011 indicating satisfaction with GMSP.</p> <p>Email to DoPI 9 August 2012 with correspondence attached endorsing GMSP from NOW</p>

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
	<p>(c) identify performance criteria, including monitoring criteria to detect early indicators of drawdown impacts or water quality impacts to beneficial aquifers;</p> <p>(d) identify the frequency of reporting on monitoring results;</p> <p>(e) identify procedures for contingency or remedial action where adverse impacts are identified, such that the adverse impacts are remediated prior to any impact to other groundwater users, and/ or rehabilitation measures applied where the project is identified as adversely affecting any groundwater dependent ecosystems/ communities; and</p> <p>(f) identify mechanisms for the regular review and update of the programme in consultation with NOW and HWC as required.</p> <p>In submitting the programme for the Director General's approval, the Proponent shall provide written evidence of consultation with NOW and HWC on the robustness and acceptability of the monitoring programme, including issues raised by these agencies and how these have been addressed. The programme shall be reviewed and updated at the conclusion of construction activities.</p>				<p>a) GMSP - Groundwater monitoring bore locations - Figure 3. Also refer to Table 2-1. One background and 5 downstream locations (towards Tomago aquifer extraction site) 4 internal locations to obtain background for site. Surface water monitoring locations include in surface water management plan GMP - Section 4</p> <p>b) GMSP - Appendix C includes baseline water quality, depth. Duration and frequency of monitoring include in Table 5-2 Groundwater Monitoring Requirements GMP - Section 4</p> <p>c) GMSP - Performance criteria included in Section 5.1.1 for water quality and changes in water levels (using CUMSUM) GMP - Section 4.2 and Appendix A</p> <p>d) GMSP - Frequency of reporting include in Table 5-1 GMP - Section 4.1</p> <p>e) GMSP - Contingency Plan Flowchart Figure 5 and Appendix E for spills GMP - Section 4.3</p> <p>f) GMSP - Section 3 and Section 5 GMP - Section 4.4</p>

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
<i>Stormwater Management</i>					
B26	<p>Prior to the commencement of construction, the Proponent shall engage an independent and suitably qualified expert to the satisfaction of HWC, to undertake peer reviews of the design, construction and Open maintenance of the stormwater management system. The reviews shall:</p> <ul style="list-style-type: none"> (a) provide HWC with a peer review of the detailed design of the stormwater management system; (b) investigate the constructability, effectiveness and durability of the stormwater management system; (c) be undertaken to ensure that the system is constructed as designed to the schedule agreed between the Proponent and HWC; and (d) provide HWC with inspection reports on the adequacy of the stormwater management system in accordance with the inspections identified in the schedule referred to in (c). <p>The review reports shall be incorporated into the compliance tracking programme required under condition B54 and shall include, but not necessarily be limited to: annual reports of Stormwater systems Performance supplied to HWC.</p> <p>Any faults identified as a result of the inspection reports identified in (d) shall be rectified and re-inspected at the Proponent's expense.</p>	Pre-construction	AGL	Compliance Open	<p>Confirmation email by Axel Hanson from Hunter Water Corporation dated 2-May-12 approving SMEC as the independent peer reviewer.</p> <p>Review of design completed with email received from HWXC 2 May 2012 with recommendations.</p> <p>Meeting held with HWC 20 July 2012 to discuss review and recommendations.</p> <p>Submitted to DoPI on 8 June 0212</p>

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
NOISE					
Construction Hours					
B27	<p>Subject to conditions B28 and B29, construction works (other than horizontal directional drilling (HDD)) that would generate audible noise at any sensitive receiver shall only be undertaken during the following hours:</p> <ul style="list-style-type: none"> (a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive; (b) 8:00 am to 1:00 pm on Saturdays; and (c) at no time on Sundays or public holidays. <p>This condition does not apply in the event of a direction from police or other relevant authority for safety reasons or emergency work to avoid the loss of lives, property and/or to prevent environmental harm.</p>	Pre-construction Construction	CBI	Compliance Open	Noted - hours included in NVMSP. NVMSP sent to DoPI as part of CEMP EPL hours align with MCoA
B28	<p>Any work generating high noise that has impulsive, intermittent, low frequency or tonal characteristics, including jack hammering, pile driving, rock hammering, rock breaking, saw cutting, sheet piling or vibratory rolling, shall only be undertaken:</p> <ul style="list-style-type: none"> (a) between the hours of 8.00 am and 6.00 pm Monday to Friday; (b) between the hours of 8.00 am and 1.00 pm Saturday; and (c) in continuous blocks of no more than three hours, with at least one hour respite between each block of work generating high noise impact, where the location of the work is likely to impact the same receivers; except as otherwise approved by the Director-General. <p>For the purposes of this condition "continuous" includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.</p>	Pre-construction Construction	CBI	Compliance Open	No works anticipated to be outside of standard construction hours – hours of operation in NVMSP Appendix B – Table 8-2

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
B29	<p>Construction outside of the hours specified under condition B27 or B28 may be varied for works as approved through the out-of-hours work protocol required as part of the Construction Noise Management Plan under condition B57 of this approval. Any request to alter the hours of construction shall:</p> <p>(a) be considered on a case-by-case basis;</p> <p>(b) be accompanied by details of the nature and need for activities to be conducted during the varied construction hours and any other information necessary to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site; and</p> <p>(c) require that affected residential receivers are informed of the timing and duration of any construction activities approved under this condition at least 48 hours before that work commences.</p>	Pre-construction Construction	<p>a) CBI</p> <p>b) CBI</p> <p>c) CBI to notify AGL >72 hrs prior to enable AGL to update website</p>	Compliance Open	NVMSP – Appendix B Table 8-2
Construction Noise Criteria					
B30	The Proponent shall implement all reasonable and feasible noise mitigation measures to minimise noise generated by construction of the project, consistent with the requirements of the Interim Construction Noise Guidelines (DECC, July 2009).	Pre-construction Construction	CBI	Compliance Open	NVMSP – Appendix B (all tables)
B31	Prior to the commencement of construction, the Proponent shall undertake a noise assessment to identify all sensitive receivers where the construction noise management goals, exceed the ICNG construction noise goals for that receiver. The results shall be included in the Construction Noise Management Plan required under condition B57 of this approval.	Pre-construction	AGL	Compliance Open	NVMSP – Table 2-1 Sensitive Receivers. Predicted noise impacts included in Section 2.3 Noise and Vibration Assessment – NGSF, Atkins Acoustics and Associates Pty Ltd, May 2011

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
TRAFFIC AND TRANSPORT					
B32	<p>Prior to the commencement of construction of the project, the Proponent shall commission a suitably qualified road infrastructure specialist to assess the condition of all public roads proposed to be traversed by construction traffic associated with the project (including over-mass or over-dimensional vehicles) in consultation with Council and the RMS, and to identify any upgrade requirements to accommodate project traffic for the duration of construction (including culvert, bridge and drainage design; intersection treatments; vehicle turning requirements; and site access), having regard to peak traffic volumes. The Pre-Construction Road Inspection Report shall be submitted to the Director-General prior to the commencement of construction works, clearly identifying recommendations made by the Council and the RMS and how these have been addressed. The Proponent shall ensure that all upgrade measures identified in the report are implemented to meet the reasonable requirements of Council and the RMS, prior to the commencement of construction.</p>	Pre-construction	CBI AGL - submission of report	IO Open	<p>Letter report from Better Transport Futures 6 July 2012 indicating the current road network in the vicinity of the subject site can accommodate the volume and size of the vehicles associated with the construction phase of the Gas Storage Facility and no further road upgrades are required. RMS and PSC were contacted regarding any potential road upgrades.</p> <p>The report was submitted to DoPI 11 July 2012.</p> <p>The TMSP was also sent to PSC for review and comment.</p> <p>IO - Consider sending the report to PSC and RMS for comment and to confirm no road upgrades required.</p>
B33	<p>A commercial-type vehicular crossing shall be constructed across the public footway at the proposed driveway entrance/ exit to the Hexham receiving station site at the expense of the Proponent. The crossing shall be designed and constructed in accordance with Newcastle City Council's A017 Series (Concrete Vehicular Crossings) design specifications.</p>	Pre-construction Construction	AGL	NA Open	<p>To be included in Traffic Management Sub-Plan for that stage of works</p>
B34	<p>Redundant existing vehicular crossings at the Hexham receiving station site shall be removed at the expense of the Proponent and the public footway and kerb shall be restored to be consistent with existing infrastructure.</p>	Pre-construction Construction	AGL	NA Open	<p>To be included in Traffic Management Sub-Plan for that stage of works</p>

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
AIR QUALITY					
Odour					
B35	During construction, the Proponent shall ensure no offensive odour as defined under the Protection of the Environment Operations Act 1997 is emitted from the project site.	Pre-construction Construction	CBI	Compliance Open	Noted - Project Air Quality Management Sub Plan includes best practise mitigation measures to minimise odour. AQMSP submitted to DoPI for approval with CEMP.
Dust					
B36	The Proponent shall employ reasonable and feasible measures to ensure that construction activities associated the project are undertaken in a manner that minimises or prevents the emission of dust.	Pre-construction Construction	CBI	Compliance Open	Noted - Project AQMSP includes best practise mitigation measures to minimise odour. AQMSP submitted to DoPI for approval with CEMP.
METEOROLOGY					
B37	Prior to the commencement of construction works, the Proponent shall establish a meteorological monitoring station on the site, or at a representative location off-site, for the purpose of continuously monitoring meteorological conditions on the site for the life of the project. The meteorological monitoring station shall be located, operated and maintained to meet the requirements of the OEH. The Proponent may satisfy this condition by demonstrating to the satisfaction of the OEH that it has access to data from an existing meteorological monitoring station, representative of conditions on this site, and operated by a third party.	Pre-construction	AGL	Compliance Open	Refer to letter from TAC on 21-Mar-12 granting access to meteorological monitoring station. Correspondence from OEH approving arrangement required to close out condition

Item	Assessment Requirement	Stage/timing	Responsibility	Compliance Status	Reference/ Comment
HERITAGE					
B38	The Proponent shall employ a suitably-qualified archaeologist to attend site clearing and vegetation removal works within the gas storage facility site and within riparian areas of the Hunter River, and any activities with the potential to directly or indirectly impact on subsurface heritage items. The archaeologist shall be employed for the purpose of identifying and advising on potential Aboriginal heritage impacts, including appropriate mitigation and management, as required under these conditions of approval. Items of heritage significance that may be uncovered during construction of the project shall be managed in accordance with the approved Cultural Heritage Management Plan under condition B57.	Pre-clearing	AGL	Compliance Open	RPS appointed archaeologists - will attend site clearing. Meeting scheduled 21 August with ecologist and clearing contractors to organise timing and liaison between relevant parties.
B39	Registered Aboriginal stakeholders shall be invited to attend site clearing and soil disturbance work to assist in the identification of heritage items, including potential mitigation and management measures.	During clearing	AGL	Compliance Open	Cultural Heritage Management Sub Plan - Section 5.3.1
B40	Where reasonable and feasible, the Proponent shall remove vegetation from the site with the aim of avoiding or minimising the need to disturb the underlying soil.	Pre-construction Construction	CBI	Compliance Open	EWMS - Clearing and Grubbing EWMS - Topsoil stripping and stockpiling FFMSP - Appendix B Table 8-9 point 14
WASTE MANAGEMENT					
B41	The Proponent 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 on the site during construction, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997, if such a licence is required in relation to that waste.	Pre-construction Construction	CBI	Compliance Open	Refer Waste Management Sub Plan (WMSP) - Section 2.1.3 and Appendix A

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
B42	The Proponent shall maximise the reuse and/or recycling of construction waste materials generated on site, to minimise the need for treatment or disposal of those materials outside the site.	Pre-construction Construction	CBI	Compliance Open	Refer Waste Management Sub Plan (WMSP) – all and Appendix A
B43	The Proponent shall ensure that all liquid and/or non-liquid construction waste generated by the project is assessed and classified in accordance with the Waste Classification Guidelines (DECC 2008, or any future guideline that may supersede that document) and where removed from the site is only directed to a waste location lawfully permitted to accept those materials.	Pre-construction Construction	CBI	Compliance Open	Refer Waste Management Sub Plan (WMSP) – Section 2.1.2 and Appendix A
VISUAL AMENITY					
B44	The Proponent shall: (a) take all reasonable and feasible measures to mitigate off-site lighting impacts from the construction of the project; and (b) ensure that all external lighting associated with construction of the project complies with Australian Standard AS4282 – 1997 – Control of the Obtrusive Effects of Outdoor Lighting. This condition does not apply to lighting required for aviation safety.	Pre-construction Construction	CBI	IO Open	Scan of CEMP and Sub Plans indicates nil references to this condition. Consider adding to CEMP to cover off requirement
AIR SAFETY					
B45	At least one month prior to the commencement of construction, the Proponent shall notify the RAAF Aeronautical Information Service of the location and heights of tall structures that are 30 metres or more above ground level within 30 kilometres of an aerodrome, or 45 metres of more above ground level elsewhere.	Pre-construction	AGL	Compliance Closed	Notification letter sent to RAAF on 11 May 2012. Construction planned to commence 27 August 2012

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
INFRASTRUCTURE, SERVICES AMND ANCILLARY FACILITIES					
B46	The Proponent shall undertake all necessary alterations to existing public utility installations to meet the reasonable requirements of, and at no expense to, the relevant public utility authority.	Pre-construction Construction	CBI AGL	IO Open	Table 3.2 of the CEMP indicates this is included in Section 5.1.5 Ancillary Facilities Section Review of Section 5.1.5 indicates this requirement is not discussed. Consider adding to relevant section of report if relevant to this phase of the project.
B47	The Proponent shall ensure that road surfaces - and any other road-related infrastructure including drainage, street lighting, street furniture or underground facilities - disturbed or damaged during construction, are restored to meet the reasonable requirements of, and at no expense to, the relevant road authority.	Pre-construction Construction	CBI AGL	IO Open	Table 3.2 of the CEMP indicates this is included in Section 5.1.5 Ancillary Facilities Section Review of Section 5.1.5 indicates this requirement is not discussed. Consider adding to relevant section of report if relevant to this phase of the project.
B48	The Proponent shall design and provide on-site car parking, driveways, parking bays, vehicular turning areas, letterboxes, landscaping and drainage in consultation with and to meet the reasonable requirements of the relevant local council.	Pre-construction Construction	CBI AGL	IO Open	Table 3.2 of the CEMP indicates this is included in Section 5.1.5 Ancillary Facilities Section Review of Section 5.1.5 indicates this requirement is not discussed - consider referring to design report if applicable or leave out of Table 3.2 if not relevant to the CEMP
COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT					
Provision of Electronic Information					
B49	Prior to the commencement of construction, the Proponent shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the project. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to: (a) the status of the project;	Pre-construction	AGL - update CBI - content	IO-include copy of MCoA onto website rather link to DoPI when uploading plans and other documents	http://agk.com.au/newcastle/index.php/the-project/ a) background for approvals and current status include on project page b) Link to copy of approval included under Environment page

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
	<p>(b) a copy of this approval and any future modification to this approval;</p> <p>(c) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;</p> <p>(d) a copy of each plan, report, or monitoring programme required by this approval; and</p> <p>(e) details of the outcomes of compliance reviews and audits of the project.</p>			Open	<p>c) copy of relevant approval not included on website - link to DoPI website</p> <p>d) plans awaiting approval from DoPI.</p> <p>e) not applicable as nil audits, compliance reviews completed</p>
Community Information Plan					
B50	<p>Prior to the commencement of construction, the Proponent shall prepare and implement a Community Information Plan which sets out the community communication and consultation processes to be implemented during construction and operation of the project. The Plan shall include, but not be limited to:</p> <p>(a) procedures to inform the local community of planned investigations and construction activities, including blasting works (if any);</p> <p>(b) procedures to inform the relevant community of construction traffic routes and any potential disruptions to traffic flows and amenity impacts;</p> <p>(c) procedures to inform the community where work outside the construction hours specified in condition 0, in particular noisy activities, has been approved; and</p> <p>(d) procedures to inform and consult with affected landowners to rehabilitate impacted land.</p>	Pre-construction	AGL to develop plan CBI to implement	Compliance Open	<p>Provided in the Community Engagement Plan (Document no: NGSF-AGL-NAS-PM-PLN-0002) - Section 2</p> <p>a) Section 6.1</p> <p>b) Section 6.1</p> <p>c) Section 6.1</p> <p>d) Section 6.1</p>

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
Complaints Procedure					
B51	<p>Prior to the commencement of construction, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation) or as otherwise agreed by the Director-General:</p> <p>(a) a 24-hour telephone number on which complaints about construction and operational activities at the site may be registered;</p> <p>(b) a postal address to which written complaints may be sent; and</p> <p>(c) an email address to which electronic complaints may be transmitted.</p> <p>The telephone number, postal address and email address shall be advertised in a newspaper circulating in the area of the project, on at least one occasion prior to the commencement of construction; and at six-monthly intervals during construction and for a period of two years following commencement of operation of the project. These details shall also be provided on the Proponent's internet site required by condition B49. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the construction site(s), in a position that is clearly visible to the public.</p>	Pre-construction	<p>AGL - to publicise availability of these communication channels to local community.</p> <p>CBI - to erect signage that is clearly visible to the public</p>	Compliance Open	<p>Provided in the Community Engagement Plan (Document no: NGSF-AGL-NAS-PM-PLN-0002)</p> <p>Project signboards have been erected on site at Hexham and Tomago with contact details</p> <p>a, b, c advertised on project website - details also included in Newspaper advertisement published in:</p> <ul style="list-style-type: none"> • Port Stephens Examiner - 21 June 2012 • Newcastle Herald - 21 June 2012
B52	<p>The Proponent shall record details of all complaints received through the means listed in condition B51 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:</p> <p>(a) the date and time of the complaint;</p> <p>(b) the means by which the complaint was made (telephone, mail or email);</p>	Pre-construction Construction	<p>AGL - to record complaints using Consultation Manager.</p> <p>CBI - details (a) - (d) of any complaints</p>	IO Open	<p>Requirements include in CEMP Section 5.2.3 Complaints Handling which was submitted to DoPI for approval</p> <p>Community Engagement Plan (CEP) refers to Section 6.5.5 for complaint protocol</p> <p>CEMP refers to Section 5.2.3</p>

Item	Assessment Requirement	Stage/timing	Responsibility	Compliance Status	Reference/ Comment
	<p>(c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;</p> <p>(d) the nature of the complaint;</p> <p>(e) any action(s) taken by the Proponent in relation to the complaint, including timeframes for implementing the action; and</p> <p>(f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.</p> <p>The Complaints Register shall be made available for inspection by the Director-General upon request.</p>		<p>received directly by CBI. Need to be recorded and passed on to AGL within 4 hours. CBI to close out actions resulting from complaints in timely fashion.</p>		<p>Neither reference includes the actual requirements regarding the complaints register - consider adding to CEP</p>
B53	<p>The Proponent shall provide an initial response to any complaints made in relation to the project during construction or operation within 48 hours of the complaint being made. The response and any subsequent action taken shall be recorded in accordance with condition B52. Any subsequent detailed response or action is to be provided within two weeks, or as otherwise agreed by the complainant/ Director-General.</p>	<p>Pre-construction Construction</p>	<p>AGL - to respond CBI - to provide assistance/information in preparing responses to complaints</p>	<p>IO Open</p>	<p>Section 5.2.3 Complaints Handling of CEMP indicates following:</p> <ul style="list-style-type: none"> • telephone complaints: verbal response is made within 4 hours; • written correspondence: acknowledged within five working days and a written response within 15 days; • Email or fax: submission acknowledged within 24 hours <p>IO - clarify in Section 5.2.3 that written correspondence should be acknowledged if possible before 48 hours if a contact phone number is given otherwise written acknowledgement within 5 days.</p>

Item	Assessment Requirement	Stage/fining	Responsibility	Compliance Status	Reference/ Comment
COMPLIANCE TRACKING PROGRAM					
B54	<p>Prior to the commencement construction, the Proponent shall develop and implement a Compliance Tracking Programme, to track compliance with the requirements of this approval during the construction and operation of the project and shall include, but not necessarily be limited to:</p> <p>(a) provisions for periodic reporting of compliance status to the Director-General including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project and within two years of operation commencement;</p> <p>(b) a programme for independent environmental auditing in accordance with AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing;</p> <p>(c) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;</p> <p>(d) mechanisms for recording environmental incidents and actions taken in response to those incidents;</p> <p>(e) provisions for reporting environmental incidents to the Director-General during construction and operation; and</p> <p>(f) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.</p>	Pre-construction	<p>AGL - establish processes/procedures to ensure compliance</p> <p>CBI - to provide information as required, implement corrective actions as required.</p>	Compliance Open	<p>Compliance Tracking Program (Document No: NGSF-AGL-NAS-PM-PLN-0016)</p> <p>Compliance Tracking Register (Document No: NGSF-WPPM-NAS-PM-REG-0004-XLS)</p> <p>The relevant section of the CTP which addresses the requirements are as follows:</p> <p>a) Section 2</p> <p>b) Section 3</p> <p>c) Section 4</p> <p>d) Section 5</p> <p>e) Section 6</p> <p>f) Section 7</p>

COSTRUCTION ENVIRONMENTAL MANAGEMENT					
<i>Environmental Representative</i>					
B55	<p>Prior to the commencement of pre-construction or construction activities, the Proponent shall nominate for the approval of the Director-General a suitably qualified and experienced Environmental Representative(s) who is independent of the design, construction and operation personnel. The Proponent shall engage the Environmental Representative(s) prior to construction until at least six months after commencement of operation, or as otherwise agreed by the Director-General.</p>	Pre-construction	AGL	Compliance Closed	<p>The Environmental Representative (Megan McLachlan) has been approved by the Director-General on 25/06/2012.</p> <p>The alternate ER (Hamish Campbell) has been approved by the Director-General on 31/07/2012.</p> <p>Construction activities have not commenced as time of audit (14-16 August 2012)</p>
<i>Construction Environment Management Plan</i>					
B56	<p>The Proponent shall prepare and implement a Construction Environmental Management Plan (CEMP) to outline environmental management practices and procedures to be followed during construction of the project. The Plan shall be consistent with the Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004 or its latest revision). The Plan shall be prepared in consultation with Councils, NOW and HWC and include, but not necessarily be limited to:</p> <p>(a) a description of all relevant activities to be undertaken on the site during construction including an indication of stages of construction, where relevant;</p> <p>(b) identification of the potential for cumulative impacts with other construction activities occurring in the vicinity and how such impacts would be managed;</p>	Pre-construction	CBI (a-c and f-j) (d) - CBI/AGL as per Schedule 8 of Agreement	Compliance Closed	<p>Constriction Environment Management Plan sent to DoPI electronically on 23 July 2012 with hard copies sent via mail with letter dated 31 July 2012</p> <p>Emails to Port Stephens Council dated 8 August 2012. CEMP sent to PSC 24 July 2012, to NOW 24 July 2012</p> <p>a) Section 2.7 Project Schedule</p> <p>b) Section 5.4 Monitoring and Review</p> <p>c) Section 5.4 Monitoring and Review and Section 5.5 Incident Management</p> <p>d) Section 3: Legislative and Other Requirements</p> <p>e) Section 5.2.1: Consultation for CEMP</p> <p>f) Section 4.4: Roles and Responsibilities</p>

	<p>(c) details of any construction sites and mitigation, monitoring, management and rehabilitation measures specific to the site compound(s) that would be implemented;</p> <p>(d) statutory and other obligations that the Proponent is required to fulfil during construction including all relevant approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;</p> <p>(e) evidence of consultation with relevant public authorities required under this condition and how issues raised by the agencies have been addressed in the plan;</p> <p>(f) a description of the roles and responsibilities for all relevant employees involved in the construction of the project including relevant training and induction provisions for ensuring that all employees, contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;</p> <p>(g) details of how the environmental performance of construction would be monitored, and what actions would be taken to address identified potential adverse environmental impacts;</p> <p>(h) specific consideration of relevant measures to address any requirements identified in the documents referred to under condition A1 of this approval;</p> <p>(i) a complaints handling procedure during construction as identified in conditions B51 to B53; and</p> <p>(j) a matrix of construction work method statements (or similar) to be prepared and the anticipated level of risk associated with each to be determined.</p>			<p>g) Section 5.4 Monitoring and Review and Section 5.5 Incident Management</p> <p>h) The CEMP and associated sub plans, environmental work method statements</p> <p>i) Section 5.2.3 Consultation with Stakeholders and Community Engagement Plan</p> <p>j) Section 4.3.4 EWMS and Appendix A8: EWMS Matrix</p>
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B57a	<p>The Construction Environmental Management Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of relevant construction works associated with the project, or within such lesser period otherwise agreed by the Director-General. Construction works shall not commence until written approval of the CEMP has been received from the Director-General.</p> <p>As part of the Construction Environmental Management Plan required under condition B56 of this approval, the Proponent shall prepare and implement the following:</p> <p>(a) a Flora and Fauna Management Plan, prepared in consultation with the relevant Council and with reference to the OEH requirements, to outline measures to protect and minimise loss of native vegetation and native fauna habitat as a result of construction of the project. The Plan shall include, but not necessarily be limited to:</p> <p>(i) plans showing terrestrial vegetation communities; important flora and fauna habitat areas; locations where EECs, native grasses are to be cleared. The plans shall also identify vegetation adjoining the site where this contains important habitat areas and/or threatened species, populations or ecological communities;</p> <p>(ii) methods to manage impacts on flora and fauna species and their habitat which may be directly or indirectly affected by the project, such as location of fencing, procedures for vegetation clearing or soil removal/stockpiling and procedures for locating hollows or installing nesting boxes and managing weeds;</p> <p>(iii) procedures to accurately determine the total area, type and condition of vegetation community to be cleared; and</p> <p>(iv) a procedure to review management methods where they are found to be inadequate</p>	Pre-construction	CBI	Compliance Closed	<p>Flora and Fauna Management Sub Plan</p> <p>a) Email date 8 August 2012 to Port Stephens Council re Fauna Hollow Management. Meeting 2 August discussing all environmental commitments. Email 31 July 2012 with FFMS/SP attached to PSC. Offset strategy also sent through to PSC</p> <p>i. Figure 1 includes ecological communities, Figure 2 species locations for project area and surrounds</p> <p>ii. Section 3.2, Section 4.1 Appendix B</p> <p>iii. Section 2.0</p> <p>iv. CEMP Section 4.0</p>
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B57b	(b) a Cultural Heritage Management Plan, developed in consultation with registered local Aboriginal stakeholders, to outline mitigation and management strategies for items of heritage significance that may be uncovered during construction of the project;	Pre-construction	CBI	Compliance Open	<p>Cultural Heritage Management Sub Plan</p> <p>Correspondence received from Nur Run Gee 12 September 2011 confirming review of draft report with nil comments</p> <p>Correspondence received from Mur-Roo-Ma 8 September 2011 acknowledging review of draft report.</p> <p>Correspondence received from ATOAC (Awabakal) 20 September 2011 acknowledging receipt of draft report. Recommended that groups attained site when current dense vegetation layer removed as well as a few minor edits which are now included in plan.</p> <p>CHMSP includes protocol to be followed during clearing and also if unexpected find encountered after clearing works.</p>
B57c	(c) a Groundwater Management Plan prepared in consultation with NOW and HWC to detail how impacts to groundwater will be avoided and mitigated during the construction and operation of the project. The Plan shall integrate data from groundwater monitoring undertaken as required by condition B25 to set baseline and to establish targets and thresholds for the duration of the project. A contingency plan shall be developed as part of the Groundwater Management Plan in the event that groundwater is compromised during construction, such as through drawdown from horizontal directional drilling;	Pre-construction	CBI	Compliance Closed	<p>Groundwater Management Sub Plan – sent in email to DoPI dated 11 July 2012</p> <p>Email from HWC 31 October 2011 indicating satisfaction with plan.</p> <p>Email to DoPI 9 August 2012 with correspondence attached endorsing GMSP from NOW</p> <p>Refer Condition B25</p>

B57d	<p>(d) a Surface Water Management Plan prepared in consultation with NOW, HWC and the Port Stephens Council (particularly in regard to stormwater being conveyed from the gas storage facility site to Old Punt Road), to detail how surface water and stormwater will be managed on the site during construction and operation of the project. The plan shall include detailed design of all watercourse crossings, culverts and in-stream works, a programme to monitor and manage, and notification and mitigation of identified impacts of watercourse crossings, culverts and instream crossings. In particular, the design for the horizontal directional drilling under the Hunter River shall be provided, including an assessment of the depth of scour for the Hunter River, and demonstration that the HDD will be undertaken below this depth. The plan shall also include use of appropriately sized stormwater controls, in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004). The plan shall include specific measures to avoid sediment-laden stormwater from entering the Hunter River, a monitoring programme for stormwater leaving the site (including the requirements for inspection reports required under condition B26) details of how hydrostatic test water would be disposed, and measures to mitigate contamination of soils and water</p>	Pre-construction Construction	CBI Other	Compliance Open	<p>Surface Water Management Sub Plan – sent in email to DoPI dated 11 July 2012</p> <p>Email from HWC 31 October 2011 indicating satisfaction with plan.</p> <p>Email to DoPI 9 August 2012 with correspondence attached endorsing GMSP from NOW</p> <p>Additional SWMSP to be developed for pipeline works which will include river crossing.</p>
B57e	<p>(e) a Flood Emergency Response Plan prepared in consultation with and to meet the reasonable requirements of Newcastle City Council and Port Stephens Shire Council;</p>	Pre-construction	CBI	Compliance Open	<p>Flood Emergency Response Management Sub Plan sent to DoPI 24 July 2012</p> <p>Correspondence with HDC dated 26 July 2012; Email indicating plan sent through 27 July 2012. Email dated 16 August 2012 chasing up if any comments</p>

B57f	<p>(f) a Noise Management Plan to manage noise impacts during construction and to identify all feasible and reasonable noise mitigation measures. The Plan shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (i) details of construction activities and an indicative schedule for construction works; (ii) identification of construction activities that have the potential to generate noise impacts on surrounding land uses, particularly residential areas; (iii) details of the requirements for Noise Impact Statement(s) for discrete work areas, including construction site compounds; (iv) identify all sensitive receivers where construction noise goals are predicted to be exceeded; (v) detail what reasonable and feasible actions and measures would be implemented to minimise noise impacts; (vi) consultation with the owner/occupiers of sensitive receivers (including receivers R4 (Tomago Village Caravan Park) and R5 (217 Maitland Road), where construction noise goals are expected to be exceeded, with the aim of identifying and implementing reasonable and feasible noise mitigation and management measures, including where necessary, the consideration of respite periods and alternative accommodation arrangements; (vii) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise amenity, as well as procedures for dealing with and responding to noise complaints; (viii) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours as defined under this approval, including a risk assessment process under which the Environmental Representative may approve out-of-hour construction activities deemed to be of 	Pre-construction	CBI (i-iv) & AGL (v) & (vi)	IO Open	<p>Noise and Vibration Management Sub Plan</p> <ul style="list-style-type: none"> i. Table 2-3 ii. Section 2.0 iii. Section 2, Table 2-6 iv. Section 2.0, Table 2-1 v. Appendix B - all tables vi. Section 3.0, Appendix B vii. Appendix B Table 8-1 viii. Appendix B – Table 8-2 – does not include OOH protocol to enable risk assessment and approval by ER of low risk works
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B57g	<p>low environmental risk and refer high risk works for the Director-General's approval. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, and detail a standard protocol for referring applications to the Director-General; and</p> <p>(ix) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported; and, if any exceedance is detected, how any non-compliance would be rectified;</p>	Pre-construction	AGL	Compliance Open	<p>Received confirmation email from Scott Carter (Senior Conservation Manager - Central Region, Aquatic Habitat Protection Unit, NSW DPI) on 28-Mar-12 accepting adequacy of ASS Management Plan</p> <p>Email with ASSMSP attached sent to DPI 22 March 2012, response received form DPI 28 March 2012</p> <p>ASSMSP Table 5-2 refers to additional monitoring GW and SW. Contingency states to stockpile material separately and advice sought.</p> <p>Section 4 and 5 details what to do if ASS or PASS found</p>
B57h	<p>h) a Traffic Management Plan to manage traffic conflicts that may be generated during construction. The Plan shall address the requirements of the relevant road authority and shall include, but not necessarily be limited to:</p> <p>(i) details of how construction of the project will be managed in proximity to local and regional roads;</p>	Pre-construction	CBI	IO Open	<p>Traffic Management Sub Plan</p> <p>i. Section 2.8</p> <p>ii. Appendix A</p> <p>iii. Table 9-4</p> <p>iv. Appendix C Table 9-3</p>

	<p>(ii) details of traffic routes for heavy vehicles, including any necessary route or timing restriction for oversized loads;</p> <p>(iii) measures to minimise and manage traffic noise;</p> <p>(iv) an assessment of sufficient access for emergency vehicles to ensure the proposed traffic arrangements meet the requirements detailed in Guidelines for Emergency Vehicle Access Policy No 4 (NSW Fire Brigades, 2010);</p> <p>(v) demonstration that all statutory responsibilities with regard to road traffic impacts have been complied with;</p> <p>(vi) details of measures to minimise interactions between the project and other users of the roads such as the use of fencing, lights, barriers, traffic diversions etc;</p> <p>(vii) procedures for informing the public where any road access will be restricted as a result of the project;</p> <p>(viii) procedures to manage construction traffic to ensure the safety of livestock and to minimise disruption to livestock;</p> <p>(ix) speed limits to be observed along routes to and from the site and within the site; and</p> <p>(x) details of the expected behavioural requirements for vehicle drivers travelling to and from the site and within the site.</p>				<p>v. Section 1.6, Section 2.0</p> <p>vi. Appendix B</p> <p>vii. Section 3.0</p> <p>viii. Appendix C (nil referral in Appendix C)</p> <p>ix. Appendix C Table 9-2</p> <p>x. Section 3.2</p> <p>IO – addition of condition viii requirements in Appendix C tables</p>
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Table 2 Compliance Assessment –EPBC Approval 2010/5752

Item	Assessment Requirement	Stage/timing	Responsibility	Compliance Status	Reference/ Comment
APPROVAL CONDITIONS					
1	To minimise the risk of construction and operational activities leading to the offsite movement of sediments or contaminants that could adversely affect the Kooragang Nature Reserve (now Hunter Wetlands National Park) wetland of international importance, the person taking the action must implement Conditions B 20 to B26 inclusive (dealing with Soils, Water and Hydrology), and B56 (dealing with a Construction Environmental Management Plan), imposed under the New South Wales Planning Assessment Commission conditions of approval dated 10 May 2012 for Application Number MP10_0133 under the NSW Environmental Planning & Assessment Act 1979	All	CBI AGL	Compliance Open	Refer MCoA B20 – B26 and B56
2	To minimise adverse impacts during construction on listed threatened species and ecological communities, and in particular the New Holland Mouse (<i>Pseudomys novaehollandiae</i>), and Earp's Gum (<i>Eucalyptus parramattensis</i> subsp. <i>decadens</i>), the person taking the action must implement Conditions B 56 (dealing with a Construction Environmental Management Plan), imposed under the New South Wales Planning Assessment Commission conditions of approval dated 10 May 2012 for Application Number. MP10_0133.	Pre-clearing Construction	CBI AGL	Compliance Open	Refer MCoA B56

Item	Assessment Requirement	Stage/timing	Responsibility	Compliance Status	Reference/ Comment
3	To offset the loss of approximately four (4) individuals of Earp's Gum (<i>Eucalyptus parramattensis</i> subsp. <i>decadens</i>) and approximately 15ha of potential habitat for the New Holland Mouse (<i>Pseudomys novaehollandiae</i>), the person taking the action must implement Condition C2 (dealing with a Biodiversity Offset Package), imposed under the New South Wales Planning Assessment Commission conditions of approval dated 10 May 2012 for Application Number MP10_0133.	Pre-commissioning	CBI AGL	Compliance Open	Refer MCoA C2
4	The Biodiversity Offset Package required under conditions B13 and C2 imposed under the New South Wales Planning Assessment Commission conditions of approval dated 10 May Page 2 of 3 2012 for Application Number MP10_0133, must provide for the permanent offsite protection of at least 25ha of optimal habitat for the New Holland Mouse (<i>Pseudomys novaehollandiae</i>) and permanent offsite protection of at least 60 individual Earp's Gum (<i>Eucalyptus parramattensis</i> subsp. <i>decadens</i>) trees.	Pre-clearing Pre commissioning		Compliance Open	Offset Report 60 Earp's gums to be established in Hunter Botanic Gardens in an area of 2.9 ha New Holland Mouse - the offset sites provide permanent protection of at least 25 ha of preferred habitat and approximately 80 ha of sub-optimal habitat, which may become more suitable for this species with appropriate fire management as outlined in the Conservation Agreements for the offset sites. The development of the Gas Storage facility will remove approximately 12 ha of sub-optimal habitat for this species.
5	Within 10 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.	Commencement of Construction	AGL	NA Open	To be completed once construction commences

Item	Assessment Requirement	Stage/timing	Responsibility	Compliance Status	Reference/ Comment
6	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to these conditions of approval, including measures taken to implement management plans required as part of the approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	All stages	AGL CBI	Compliance Open	Document Control is included in Section 4.5 of the CEMP.
7	Within 3 months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of any management plans as specified in the conditions. Non-compliance with any of the conditions of this approval must be reported to the Department at the same time as the compliance report is published.	One year anniversary of commencement	AGL	NA Open	To be completed 12 months after commencement of construction - approximately 27 August 2013

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