

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, approve the project referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

The Hon Kristina Keneally MP
Minister for Planning

Sydney

2008

File No: S07/00277

SCHEDULE 1

Application No: 07_0023

Proponent: Santos NSW (Eastern) Pty Limited

Approval Authority: Minister for Planning

Land: The Wilga Park Power Station (Lot 1 DP 1064422) and land required for the gas flow line, gas gathering and compression facilities and associated infrastructure, generally between the Wilga Park Power Station and the Bibblewindi and Bohena Coal Seam Gas Pilots.

Project: The Narrabri Coal Seam Gas utilisation project, comprising the:

- construction and operation of gas gathering systems at the Bibblewindi and Bohena Coal Seam Gas Pilots;
- construction and operation of gas compression facilities at the Bibblewindi and Bohena Coal Seam Gas Pilots;
- construction and operation of an approximately 32 kilometre buried gas and/or water flow line between the Bibblewindi and Bohena Pilot and the Wilga Park Power Station; and
- the staged expansion and operation of the Wilga Park (base load) gas-fired power station from a capacity of 12 megawatts to 40 megawatts, fuelled by coal seam gas extracted from Petroleum Assessment Lease 2 and Petroleum Production Licence 3.

Major Project: The project was declared a Major Project under section 75B(1)(a) of the *Environmental Planning and Assessment Act 1979*, because it is development of a kind described in clause 24 of Schedule 1 of *State Environmental Planning Policy (Major Projects) 2005*.

KEY TO CONDITIONS

1. ADMINISTRATIVE CONDITIONS	4
Terms of Approval	4
Limits of Approval	4
Statutory Requirements	4
2. SPECIFIC ENVIRONMENTAL CONDITIONS	6
Air Quality Impacts	6
Noise Impacts	6
Soil and Water Quality Impacts	9
Waste Generation and Management	10
Hazards and Risk	10
Traffic and Transport Impacts	11
Flora and Fauna Impacts	11
Aboriginal Objects	11
Historical Relics	11
Visual Amenity Impacts	11
3. ENVIRONMENTAL MONITORING AND AUDITING	12
Air Quality Monitoring	12
Noise Monitoring	13
Hazard Audit Report	13
4. COMPLIANCE MONITORING AND TRACKING	14
5. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT	14
Complaints Procedure	14
Provision of Electronic Information	15
6. ENVIRONMENTAL MANAGEMENT	15
Environmental Representative	15
Construction Environmental Management Plan	15
Operation Environmental Management Plan	16
7. ENVIRONMENTAL REPORTING	17
Incident Reporting	17

Blue type represents February 2011 modifications.

Red type represents March 2012 modifications.

Green Type represents May 2014 modifications.

SCHEDULE 2

Conditions of Approval	The Minister's conditions of approval for the project
Council	Narrabri Shire Council
Department	Department of Planning and Environment
DPI	Department of Primary Industries
Dust	Any solid material that may become suspended in air or deposited
EA	<i>Narrabri Coal Seam Gas Utilisation Project PEL 238, Gunnedah Basin New South Wales Part 3A Environmental Assessment (Project Application 07_0023)</i> , prepared by Eastern Star Gas Pty Ltd and dated May 2008.
EPA	Environment Protection Authority
INP	<i>New South Wales Industrial Noise Policy</i> (EPA, 2000)
Minister	Minister for Planning, or delegate
NOW	NSW Office of Water
OCSG	Office of Coal Seam Gas
OEH	Office of Environment and Heritage
Preferred Project Report	<i>Narrabri Coal Seam Gas Utilisation Project PEL 238, Gunnedah Basin New South Wales Preferred Project Report</i> , prepared by Eastern Star Gas Pty Ltd and dated August 2008.
Publicly Available	Available for inspection by a member of the general public (for example available on an internet site or at a display centre).
Reasonable and feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.
Secretary	Secretary of the Department, or nominee
Secretary's Approval or the agreement or satisfaction of the Secretary	A written approval from the Secretary (or delegate). Where the Secretary's Approval is required under a condition the Secretary will endeavour to provide a response within one month of receiving an approval request. The Secretary may ask for additional information if the approval request is considered incomplete. When further information is requested the time taken for the Proponent to respond in writing will be added to the one month period
Site	Land to which Major Projects Application 07_0023 applies.
Statement of Commitments	<i>Narrabri Coal Seam Gas Utilisation Project PEL 238, Gunnedah Basin New South Wales Final Statement of Commitments</i> , prepared by Eastern Star Gas Pty Ltd and dated August 2008.
Submission Report	<i>Narrabri Coal Seam Gas Utilisation Project PEL 238, Gunnedah Basin New South Wales Response to Submissions to the Environmental Assessment</i> , prepared by Eastern Star Gas Pty Ltd and dated August 2008.

1. ADMINISTRATIVE CONDITIONS

Terms of Approval

- 1.1 The Proponent shall carry out the project generally in accordance with the:
- a) Major Projects Application 07_0023;
 - b) *Narrabri Coal Seam Gas Utilisation Project PEL 238, Gunnedah Basin New South Wales Part 3A Environmental Assessment (Project Application 07_0023)*, prepared by Eastern Star Gas Pty Ltd and dated May 2008;
 - c) *Narrabri Coal Seam Gas Utilisation Project PEL 238, Gunnedah Basin New South Wales Response to Submissions to the Environmental Assessment*, prepared by Eastern Star Gas Pty Ltd and dated August 2008;
 - d) *Narrabri Coal Seam Gas Utilisation Project PEL 238, Gunnedah Basin New South Wales Preferred Project Report*, prepared by Eastern Star Gas Pty Ltd and dated August 2008;
 - e) *Narrabri Coal Seam Gas Utilisation Project PEL 238, Gunnedah Basin New South Wales Final Statement of Commitments*, prepared by Eastern Star Gas Pty Ltd and dated August 2008;
 - f) Letter dated 14 October 2008 from Eastern Star Gas Pty Ltd to the Department;
 - g) *Review of Environmental Factors – Temporary Lifted Water Management – Bibblewindi Pond 3* prepared by RPS Australia East Pty Ltd for Eastern Star Gas Limited (A Santos Limited Company) and dated 25 January 2012;
 - h) *Narrabri Coal Seam Gas Utilisation Project (MP 07_0023) Modification 3*, prepared by Santos NSW (Eastern) Pty Ltd and dated November 2013; and
 - i) conditions of this approval.
- 1.2 In the event of an inconsistency between:
- a) the conditions of this approval and any document listed from condition 1.1a) and 1.1h) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
 - b) any document listed from condition 1.1a) and 1.1h) inclusive, and any other document listed from condition 1.1a) and 1.1h) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- 1.3 The Proponent shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of:
- a) any reports, plans or correspondence that are submitted in accordance with this approval; and
 - b) the implementation of any actions or measures contained in these reports, plans or correspondence.

Limits of Approval

- 1.4 This project approval shall lapse five years after the date on which it is granted, unless the works subject of this approval are physically and substantially commenced on or before that time.
- 1.4A Gas may only be received for use at the Wilga Park Power Station from wells located within Petroleum Assessment Lease 2:
- a) for a period of 3 years from the date of approval of Modification 3, in the case of any existing well; and
 - b) for a period of 3 years from the date of commencement of such receipt, in the case of any well which is drilled following the date of approval of Modification 3.

Note: The purpose of this condition is to ensure that the supply of gas to the power station arising from gas flow appraisal at exploration and/or appraisal wells is limited to a reasonable period. Supply of such gas to the power station from wells located within a Petroleum Assessment lease for longer periods would require further modification to this approval.

Statutory Requirements

- 1.5 The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation for 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.

- 1.6 The Proponent may elect to construct the project in discrete work packages or stages. In this case, these conditions of approval may be complied with separately for each discrete work package or stage, as relevant.

2. SPECIFIC ENVIRONMENTAL CONDITIONS

Air Quality Impacts

Dust Generation

- 2.1 The Proponent shall construct the project in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.

Odour

- 2.2 The Proponent shall not permit any offensive odour, as defined under section 129 of the *Protection of the Environment Operations Act 1997*, to be emitted from the site which impacts on any sensitive surrounding receptors.

Monitoring and Discharge Points

- 2.3 For the purposes of this approval, air monitoring/ air discharge points shall be at the exhaust stacks of each stationary reciprocating internal combustion gas generator located on the site. This condition only applies to the operation of the project at a capacity of more than 12 megawatts.

Discharge Limits

- 2.4 The Proponent shall design, construct, operate and maintain the project to ensure that for each generator exhaust stack discharge point, the concentration of each pollutant listed in Table 1 is not exceeded. This condition only applies to the operation of the project at a capacity of more than 12 megawatts, and to avoid any doubt, does not apply during start-up or shut-down.

Table 1 - Maximum Allowable Discharge Concentration Limits (Air)

Pollutant	Fuel Type	100 Percentile limit (mgm ⁻³)	Reference conditions
Nitrogen dioxide (NO ₂) or nitric oxide (NO), or both (as NO ₂)	Natural Gas	450	dry, 273 K, 101.3 kPa, 3% O ₂ and one hour averaging period

Noise Impacts

Vibration Impacts

- 2.5 The Proponent shall ensure that the vibration resulting from the construction and operation of the project at a capacity of more than 12 megawatts does not exceed the preferred vibration values for low probability of adverse comment presented in *Assessing Vibration: A Technical Guideline* (DECC, February 2006), at any affected residential dwelling.

Construction Noise

- 2.6 The Proponent shall only undertake construction activities associated with the project that would generate an audible noise at any residential premises during the following hours:
- 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;
 - 8:00 am to 1:00 pm on Saturdays; and
 - at no time on Sundays or public holidays.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons.

- 2.7 The hours of construction activities specified under condition 2.6 of this approval may be varied with the prior written approval of the **Secretary**. Any request to alter the hours of construction specified under condition 2.6 shall be:
- considered on a case-by-case basis; and
 - 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
 - accompanied by written evidence demonstrating consultation with the **EPA** in relation to the proposed variation in construction times (including consideration of any comments made by the **EPA**).

Operational Noise Criteria – Power Station

- 2.8 The Proponent shall implement all reasonable and feasible at-source noise control measures at the Wilga Park power station to ensure that the noise contributions from the operation of the power station at a capacity of more than 12 megawatts, does not exceed the maximum allowable noise contributions specified in Table 2, at the following locations:
- all existing sensitive receivers identified in Attachment A;
 - any residential dwelling within the land area shown in Attachment A for which an approval has been obtained under the *Environmental Planning and Assessment Act 1979* at the date of this project approval; and
 - over 25% or more of a vacant allotment within the land area shown in Attachment A in existence at the date of this project approval and for which a dwelling is permissible under the *Environmental Planning and Assessment Act 1979* at the date of this project approval.

The maximum allowable noise contributions apply under wind speeds up to 3 ms⁻¹ (measured at 10 metres above ground level), or under temperature inversion conditions of up to 3 °C/ 100 metres and wind speeds of up to 2m/s at 10 metres above the ground.

Table 2 - Maximum Allowable Noise Contribution

Day 7:00am to 6:00pm Mondays to Saturdays 8:00am to 6:00pm Sundays and public holidays	Evening 6:00pm to 10:00pm on any day	Night 10:00pm to 7:00am Mondays to Saturdays 10:00pm to 8:00am Sundays and public holidays	
L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{A1} (1 minute)
35	35	35	45

- 2.9 For the purpose of assessment of noise contributions specified under condition 2.8 of this approval, noise from the project shall be:
- measured at the most affected point within the residential boundary or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary to determine compliance with the L_{Aeq}(15 minute) noise limits;
 - measured at 1 metre from the dwelling façade to determine compliance with the L_{A1} (1 minute) noise limits; and
 - subject to the modification factors provided in Section 4 of the *New South Wales Industrial Noise Policy* (EPA, 2000), where applicable.

Notwithstanding the above, should direct measurement of noise from the project be impractical, the Proponent may employ an alternative noise assessment method deemed acceptable by the **EPA** (refer to Section 11 of the *New South Wales Industrial Noise Policy* (EPA, 2000)). Details of such an alternative noise assessment method accepted by the **EPA** shall be submitted to the **Secretary** prior to the implementation of the assessment method.

Additional At- Receiver Mitigation

- 2.10 Should the monitoring required under condition 3.5 indicate that the operational noise contributions of the Wilga Park Power Station, following the implementation of all reasonable and feasible at-source mitigation measures in accordance with condition 2.8, exceed the maximum allowable noise contributions specified in Table 2 at the locations identified in conditions 2.8a) and /or 2.8b), the Proponent shall within three months of the date of that monitoring, investigate all reasonable and feasible at-receiver mitigation measures to ensure that the noise contributions specified in Table 2 are not exceeded at the identified locations and make a binding written offer to the landowner regarding the mitigation options that can be implemented on at the property.
- 2.11 The Proponent shall provide written notice to all landowners that are entitled to rights under conditions 2.10 within 21 days of determining the landholdings to which these rights apply. For the purpose of condition 2.11, this condition only applies where operational noise levels have been confirmed in accordance with the condition 3.5.
- 2.12 The Proponent shall bear the costs of any additional at-receiver mitigation measures implemented at an affected landowner or property.
- 2.13 If the landowner refuses to accept the Proponent's offer under condition 2.10 within six months of the date of the Proponent's offer, the Proponent's obligations to provide additional mitigation measures at the property or land shall cease, unless otherwise agreed by the [Secretary](#).
- 2.14 If a landowner has agreed to, or a property has been the subject of the application of at-source noise mitigation measures under condition 2.10 once, the Proponent's obligations to re-consider the landowner or property under the requirements of condition 2.10 shall cease, unless otherwise agreed by the [Secretary](#).
- 2.15 The requirements of conditions 2.10 to 2.14 do not apply if a negotiated agreement consistent with the requirements of Section 8.3 of the INP and agreed to by the [Secretary](#) exists between the Proponent and the relevant sensitive receiver.

Additional Land Acquisition Criteria for Vacant Allotments

- 2.16 Should the monitoring required under condition 3.5 indicate that the operational noise contributions of the Wilga Park Power Station, following the implementation of all reasonable and feasible at-source mitigation measures in accordance with condition 2.8, exceed the maximum allowable noise contributions specified in Table 2 at the location identified in condition 2.8c) by more than 5 dB(A), then the Proponent shall, upon receiving a written request for acquisition from the landowner within two years of the date of that landowner being notified of his/her acquisition rights, acquire the land in accordance with the procedures in conditions 2.17 to 2.21 of this approval.
- 2.17 The Proponent shall provide written notice to all landowners that are entitled to rights under conditions 2.16 within 21 days of determining the landholdings to which land acquisition rights apply. For the purpose of condition 2.17, this condition only applies where operational noise levels have been confirmed in accordance with the condition 3.5.
- 2.18 Within three months of receiving a written request from a landowner with acquisition rights under condition 2.16 of this approval, the Proponent shall make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the project, having regard to the:
 - i) existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - ii) presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date;
 - (b) the reasonable costs associated with:

- i) relocating within the Narrabri local government area;
- ii) obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is acquired; and
- (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Proponent and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the **Secretary** for resolution.

Upon receiving such a request, the **Secretary** shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.

Within 14 days of receiving the independent valuer's determination, the Proponent shall make a written offer to purchase the land at a price not less than the independent valuer's determination.

If the landowner refuses to accept this offer within six months of the date of the Proponent's offer, the Proponent's obligations to acquire the land shall cease, unless otherwise agreed by the **Secretary**.

- 2.19 The Proponent shall bear the costs of any valuation or survey assessment requested by the independent valuer or the **Secretary** and the costs of determination referred to above.
- 2.20 If the Proponent and landowner agree that only part of the land shall be acquired, then the Proponent shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.
- 2.21 The land acquisition rights under condition 2.16 of this approval do not apply to landowners who have sought approval to subdivide their land after the date of this project approval, unless the subdivision is created pursuant to condition 2.20 of this approval.
- 2.22 If a landowner has already agreed to an offer of acquisition under the requirements of condition 2.16, or an offer of acquisition has been made under the requirements of condition 2.16 and refused by the landowner, the Proponent's obligations to re-consider the landowner or property under the requirements of condition 2.16 shall cease, unless otherwise agreed by the **Secretary**.
- 2.23 The requirements of conditions 2.16 to 2.22 do not apply if a negotiated agreement consistent with the requirements of Section 8.3 of the INP and agreed to by the **Secretary** exists between the Proponent and the relevant landowner.

Soil and Water Quality Impacts

- 2.24 Except as may be expressively 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* which prohibits the pollution of waters.
- 2.25 Soil and water management controls shall be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities, in accordance with Landcom's *Managing Urban Stormwater: Soils and Conservation*.
- 2.26 The Proponent shall in consultation with the DPI (Fisheries) ensure that the construction methodology applied for the laying of the gas flow line is such that impacts to waterways (including surface cracking of creek beds through under-boring, stream bank and riparian vegetation disturbance, instream activities) are avoided as far as practicable. Within three

months of completion of construction activities in the vicinity of waterways, the Proponent shall in consultation with the DPI (Fisheries) rehabilitate and restore any disturbance associated with the project at waterways (including to riparian vegetation) to the satisfaction of the **Secretary**.

2.26A Prior to operating the pipeline riser, the Proponent shall amend the *Santos Narrabri Gas Field Produced Water Management Plan, December 2012* to reflect the modifications sought in the document referenced in condition 1.1h), in consultation with NOW and EPA, and to the satisfaction of the Director of OCSG.

Waste Generation and Management

2.27 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 or any waste generated on site to be disposed of at the site, 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.

2.28 The Proponent shall ensure that all liquid and / or non-liquid waste generated and / or stored on the site is assessed and classified in accordance with *Waste Classification Guidelines Part 1: Classifying Waste* (DECC, 2008), or any future guideline that may supersede that document.

Hazards and Risk

Bunding and Spill Management

2.29 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;
- b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
- c) the EPA's Environment Protection Manual Technical Bulletin *Bunding and Spill Management*.

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

Aviation Hazards

2.30 Prior to the commencement of operation of the power station at a capacity more than 12 megawatts, the Proponent shall provide design details of the power station to the Commonwealth Department of Defence, the Commonwealth Civil Aviation Safety Authority and AirServices Australia to demonstrate that the plume rise effects from the power station operating at maximum capacity of 40 megawatts (considering enhanced affects from all generators operating simultaneously) would not exceed a vertical velocity of 4.3 m/s at 110 metres above ground level, unless otherwise agreed to by these agencies.

Prior to the commencement of operation of the power station at a capacity more than 12 megawatts, the Proponent shall provide written evidence to the **Secretary**, demonstrating that the Commonwealth Department of Defence, the Commonwealth Civil Aviation Safety Authority and AirServices Australia have no objection to the design and operation of the project as proposed.

Pre-Construction Hazards Studies

2.31 Prior to the commencement of construction of the project or as otherwise agreed to by the **Secretary**, the Proponent shall prepare and submit for the approval of the **Secretary** a Fire Safety Study for the project, covering all relevant aspects of the Department's publication *Hazardous Industry Planning Advisory Paper No. 2 - Fire Safety Guidelines*. The Study shall specifically cover safeguards to minimise the risks of bush fires due to accidental release of gas at compression stations and other above-ground facilities and the protection of above-ground facilities, particularly the compression stations, in the event of bush fire. The Study

shall be submitted for approval to the Commissioner of the NSW Rural Fire Service prior to submission to the **Secretary**.

Traffic and Transport Impacts

2.32 Upon determining the haulage route(s) for construction materials associated with the project, the Proponent shall commission a qualified person to undertake a Road Dilapidation Report of all roads proposed to be used for construction activities in consultation with relevant road authorities. The Report shall assess the current condition of the roads and detail mechanisms to restore any damage that may result due to traffic and transport related to the construction and ongoing operation of the project. The Report shall be submitted to the relevant road authorities for review prior to the commencement of haulage.

The cost of any restorative work described in the Report or recommended by the relevant road authorities after review of the Report, shall be funded by the Proponent. Such work shall be undertaken at a time as agreed upon between the Proponent and the relevant road authorities. In the event of a dispute between the parties with respect to the extent of restorative work that may be required under this condition, any party may refer the matter to the **Secretary** for resolution. The **Secretary's** determination of any such dispute shall be final and binding on the parties.

Flora and Fauna Impacts

2.33 The Proponent shall ensure that the pipeline corridor width and associated construction related disturbance is limited as far as practicable to minimise the requirement for vegetation clearing and maximise the retention of significant vegetation and mature trees.

2.34 By August 2011, the Proponent shall in consultation with the **North West Local Land Services** and **OEH** finalise (and following approval implement) a compensatory habitat package to offset the value of habitat lost as a result of the project consistent with maintain or improve outcomes, to the satisfaction of the **Secretary**. Unless otherwise agreed to by the **Secretary**, the package shall comprise:

- a) a minimum of 3:1 'like for like' offset of the vegetation communities (Narrow leaved Ironbark *Eucalyptus crebra* Dry Open Forest, Rough-barked Apple *Angophora sp* Dry Open Forest and Red Gum *Eucalyptus dwyeri* Woodland) to be removed or otherwise disturbed on site; or
- b) an offset of an alternate vegetation community of a higher conservation status (such as the Brigalow endangered ecological community) at an equivalent offset ratio agreed to by **OEH**; or
- c) the implementation of in kind management measures or funding for such measures as agreed to by **OEH**; or
- d) a combination of the measures specified in a) to c).

A status update demonstrating progress of the compensatory habitat package is to be provided to the Department by 31 March 2011, and at any other time as requested by the **Secretary**.

Aboriginal Objects

2.35 If during the course of construction the Proponent becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) must cease immediately and the **OEH** informed in accordance with the *National Parks and Wildlife Act 1974*. Works must not recommence until written authorisation from **OEH** advising otherwise is received by the Proponent.

Historical Relics

2.36 If during the course of construction the Proponent becomes aware of any unexpected historical relic(s), all work likely to affect the relic(s) must cease immediately and the **Heritage Division** notified in accordance with the *Heritage Act 1977*. Works must not recommence until the Proponent receives written authorisation from the **Heritage Division** advising otherwise.

Visual Amenity Impacts

- 2.37 Prior to the commencement of construction the Proponent shall provide the **Secretary** with details of the urban design and landscaping measures to be implemented as part of the Wilga Park Power Station to ensure that its visual impacts are minimised as far as practicable to surrounding receptors and roadways. This includes (but is not necessarily limited to):
- the minimisation of the use of reflective building elements and maximising the use of building materials and treatments which visually complement surrounding landuse;
 - ensuring that all external lighting associated with the project is mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, receptors and roadways. The lighting shall be the minimum level of illumination necessary and shall comply with *AS 4282(INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*; and
 - as far as possible, the use of locally occurring indigenous species consistent with the surrounding landscape for landscaping purposes.

3. ENVIRONMENTAL MONITORING AND AUDITING

Air Quality Monitoring

- 3.1 The Proponent shall determine the pollutant concentrations and emission parameters specified in Table 3 below, at each generator exhaust stack discharge point (established in strict accordance with the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales* (DECC, 2007)). Monitoring shall be undertaken during operation of the power station at a capacity of more than 12 megawatts, at the frequency indicated in the Table, unless otherwise agreed by the **EPA**.

Table 3 – Periodic Pollutant and Parameter Monitoring (Air)

Pollutant/ Parameter	Units of Measure	Method	Frequency
Nitrogen dioxide (NO ₂) or nitric oxide (NO), or both (as NO ₂)	mgm ⁻³	TM 11	Upon the commencement of operation of the power station at a capacity of more than 12 megawatts and annually thereafter
Velocity	ms ⁻¹	TM-2	
Volumetric flow rate	m ³ s ⁻¹	TM-2	
Temperature	°C	TM-2	
Moisture content in stack gases	%	TM-22	
Dry gas density	kgm ⁻³	TM-23	
Molecular weight of stack gases	g.gmol ⁻¹	TM-23	
Oxygen	%	TM-25	

- 3.2 Within 90 days of the commencement of operation of the power station at a capacity of more than 12 megawatts and at every stage that new generation capacity is added to the power station or as otherwise agreed by the **Secretary**, and during a period in which the power station is operating under normal operating conditions (considering all operational generators at the time), the Proponent shall undertake point source emission sampling and analysis subject to the requirements listed under condition 3.1 to determine compliance with the stack discharge concentration limits identified in condition 2.4.

In the event that this sampling and analysis indicates that the operation of the project will lead to greater point source emissions than the stack discharge concentration limits detailed in condition 2.4 of this approval, then the Proponent shall, unless otherwise agreed to by the **Secretary**, provide details of remedial measures to be implemented to reduce point source emissions to no greater than the stack discharge concentration limits detailed in condition 2.4 of this approval. A report providing the results of the sampling and analysis as well as details of the remedial measures to be implemented and a timetable for implementation (or justification otherwise) shall be submitted to the **Secretary** for approval within two months of the date of the completion of the sampling and analysis required under condition 3.2. The report must also provide details of any entries in the Complaints Register (condition 5.3 of this approval) relating to air quality impacts.

- 3.3 Within 90 days of the commencement of operation of the power station at a capacity of 40 megawatts or as otherwise agreed by the **Secretary**, and during a period in which the power

station is operating under normal operating conditions (considering all operational generators at the time), the Proponent shall undertake a comprehensive air quality impact assessment in accordance with the methods outlined in *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (DECC, 2005), using actual air emission data collected under condition 3.1 to determine performance against the ground-level concentrations limits for air pollutants predicted in the documents listed under condition 1.1 of this approval at surrounding sensitive receivers.

In the event that this assessment indicates that the operation of the project will lead to greater ground-level concentrations of air pollutants than those predicted in the documents listed under condition 1.1 of this approval, then the Proponent shall, unless otherwise agreed to by the **Secretary**, provide details of remedial measures to be implemented to reduce ground-level concentrations of air pollutants to no greater than that predicted in the documents listed under condition 1.1 of this approval and under no circumstance greater than the limits detailed in the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (DECC, 2005). A report providing the results of the assessment as well as details of the remedial measures to be implemented and a timetable for implementation (or justification otherwise) shall be submitted to the **Secretary** for approval within two months of the date of the completion of the assessment required under condition 3.3. The report must also provide details of any entries in the Complaints Register (condition 5.3 of this approval) relating to air quality impacts.

- 3.4 If the preparation and submission of a report under conditions 3.2 and 3.3 are required at the same time, the requirements of condition 3.2 and 3.3 of this approval may be satisfied with the preparation and submission of a single report.

Noise Monitoring

- 3.5 Within 90 days of the commencement of operation of the power station at a capacity of more than 12 megawatts and at every stage that new generation capacity is added to the power station or as otherwise agreed by the **Secretary**, and during a period in which the power station is operating under normal operating conditions (considering all operational generators at the time), the Proponent shall undertake a program to confirm the noise emission performance of the project. The program shall include, but not necessarily be limited to:
- a) noise monitoring, consistent with the guidelines provided in the *New South Wales Industrial Noise Policy* (EPA, 2000), to assess compliance with the maximum allowable noise contributions specified in Table 2 of condition 2.8 of this approval in relation to the locations specified in condition 2.8; and
 - b) details of any entries in the Complaints Register (condition 5.3 of this approval) relating to noise impacts.

A report providing the results of the program shall be submitted to the **Secretary** and the **EPA** within 28 days of completion of the assessment required under condition 3.5.

Hazard Audit Report

- 3.6 Within 90 days of the events specified below or as otherwise agreed to by the **Secretary**, the Proponent shall commission and submit for the **Secretary's** approval a Hazard Audit Report for the project, prepared in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 5 - Hazard Audit Guidelines*, including a program for the implementation of all recommendations made in the hazard audit report and justification if the Proponent intends to defer the implementation of a recommendation:
- a) the commencement of operation of the power station utilising coal seam gas sourced from the Bibblewindi and Bohena Pilots;
 - b) the commencement of operation of the power station at a capacity of more than 12 megawatts; and
 - c) commencement of operation of the power station at a capacity of 40 megawatts.

The Hazard Audit Report shall be prepared by an independent, qualified person or team that is approved by the **Secretary** to prior to undertaking the audit.

4. COMPLIANCE MONITORING AND TRACKING

- 4.1 Prior to the commencement of construction, the Proponent shall develop and implement a **Compliance Tracking Program** for the project, to track compliance with the requirements of this approval during the construction and operation of the project and shall include, but not necessarily limited to:
- a) provisions for periodic review of the compliance status of the project against the requirements of this approval and the Statement of Commitments detailed in the document referred to in condition 1.1e) of this approval;
 - b) provisions for periodic reporting of the compliance status to the **Secretary** including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project, and prior to the commencement of operation of the power station at a capacity more than 12 megawatts;
 - c) a program for independent environmental auditing in accordance with *AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing*;
 - d) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;
 - e) mechanisms for recording environmental incidents and actions taken in response to those incidents;
 - f) provisions for reporting environmental incidents to the **Secretary** during construction and operation; and
 - g) 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.
- 4.2 Nothing in this approval restricts the Proponent from utilising any existing compliance tracking programs administered by the Proponent to satisfy the requirements of condition 4.1. In doing so, the Proponent must demonstrate to the **Secretary** how these systems address the requirements and/or have been amended to comply with the requirements of the condition.

5. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

- 5.1 Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.

Complaints Procedure

- 5.2 Prior to the commencement of construction of the project, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation):
- a) a telephone number on which complaints about construction and operational activities at the site may be registered;
 - b) a postal address to which written complaints may be sent; and
 - c) an email address to which electronic complaints may be transmitted.

The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public, and which clearly indicates the purposes of the sign and within the project website required under condition 5.4.

- 5.3 The Proponent shall record details of all complaints received through the means listed under condition 5.2 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:
- a) the date and time, where relevant, of the complaint;
 - b) the means by which the complaint was made (telephone, mail or email);
 - c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
 - d) the nature of the complaint;

- e) any action(s) taken by the Proponent in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the **Secretary** upon request.

Provision of Electronic Information

- 5.4 Prior to the commencement of construction of the project, 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 subject to confidentiality. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:
- a) information on the statutory context of project (including on any existing approvals obtained under the *Environmental Planning and Assessment Act 1979* and relationship to mining and petroleum leases) and the current implementation 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;
 - d) a copy of each plan or report required under this approval; and
 - e) details of the outcomes of compliance reviews and audits of the project.

6. ENVIRONMENTAL MANAGEMENT

Environmental Representative

- 6.1 Prior to the commencement of any construction or operational activities, or as otherwise agreed by the **Secretary**, the Proponent shall nominate for the approval of the **Secretary** a suitably qualified and experienced Environmental Representative(s) independent of the design, construction and operation personnel. The Proponent shall engage the Environmental Representative(s) during any construction activities, and throughout the life of the project, or as otherwise agreed by the **Secretary**. The Environmental Representative(s) shall be the Proponent's principal point of advice in relation to the environmental performance of the project and shall have responsibility for:
- a) overseeing the implementation of all environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
 - b) considering and advising the Proponent on its compliance obligations against all matters specified in the conditions of this approval and the Statement of Commitments as referred to under condition 1.1e) of this approval, permits and licences; and
 - c) having the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and, failing the effectiveness of such steps, to recommend to the Proponent that relevant activities are to be ceased as soon as reasonably practicable if there is a significant risk that an adverse impact on the environment will be likely to occur.

Construction Environmental Management Plan

- 6.2 The Proponent shall prepare and implement a **Construction Environmental Management Plan** to outline environmental management practices and procedures to be followed during construction of the project and shall include, but not necessarily be limited to:
- a) a description of all activities to be undertaken on the site during construction including an indication of stages of construction, where relevant;
 - b) statutory and other obligations that the Proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
 - c) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:

- i) measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and/ or waters during construction activities, particularly during any construction works at or near drainage lines;
- ii) measures to minimise and manage impacts on native ecology, including minimisation of vegetation clearing; methods to minimise unintended impacts on vegetation to be retained and fauna; topsoil, seed and vegetative material re-use initiatives to be employed; and measures to be undertaken to control weed spread;
- iii) measures to monitor and manage indigenous heritage values on site including involvement of the Narrabri Local Aboriginal Land Council, Pilliga Forest Aboriginal Management Committee and Gomeroi Traditional Owner Group;
- iv) measures to monitor and manage dust emissions;
- v) measures to monitor and control noise and vibration emissions during construction works; and
- vi) measures to monitor and manage traffic impacts in consultation with relevant road authorities including details of traffic routes for heavy vehicles and any necessary route or timing restriction for oversized loads; detailed consideration of measures to be employed to ensure traffic volume, acoustic and amenity impacts along the heavy vehicle routes are minimised; and detailed consideration of alternative routes (where necessary);
- d) a description of the roles and responsibilities for all relevant employees involved in the construction of the project; and
- e) complaints handling procedures during construction.

The Plan shall be submitted for the approval of the **Secretary** no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the **Secretary**. Construction works shall not commence until written approval has been received from the **Secretary**.

Operation Environmental Management Plan

6.3 The Proponent shall prepare and implement an **Operation Environmental Management Plan** to detail an environmental management framework, practices and procedures to be followed during operation of the project. The Plan shall include, but not necessarily be limited to:

- a) identification of all statutory and other obligations that the Proponent is required to fulfil in relation to operation of the project, including all approvals, licences, approvals and consultations;
- b) a description of the roles and responsibilities for all relevant employees involved in the operation of the project;
- c) overall environmental policies and principles to be applied to the operation of the project;
- d) standards and performance measures to be applied to the project, and a means by which environmental performance can be periodically reviewed and improved, where appropriate;
- e) management policies to ensure that environmental performance goals are met and to comply with the conditions of this approval;
- f) specific details of how the following matters will be managed and monitored during operation:
 - i) measures to manage and monitor air quality in consultation with the **EPA** to address the requirements of conditions 2.2 to 2.4 and 3.1 to 3.4;
 - ii) measures to manage and monitor noise and vibration in consultation with the **EPA** to address the requirements of conditions 2.5, 2.8 to 2.23 and 3.5;
 - iii) measures to manage and monitor site water including an operational site water balance, stormwater and waste water management;
 - iv) measures to manage and monitor hazards, including bushfire management; and
 - v) measures to manage and monitor landscaping measures and ecology (including measures associated with the biodiversity offset package required under condition 2.34 and any remnant vegetation onsite);

- g) details of land rehabilitation and decommissioning (including for the pipeline) upon completion of the project;
- h) the environmental monitoring requirements outlined under conditions 3.1 to 3.6 of this approval, inclusive.

The Plan shall be submitted for the approval of the **Secretary** no later than one month prior to the commencement of operation of the project, or within such period otherwise agreed by the **Secretary**. Operation shall not commence until written approval has been received from the **Secretary**.

7. ENVIRONMENTAL REPORTING

Incident Reporting

- 7.1 The Proponent shall notify the **Secretary** of any incident with actual or potential significant off-site impacts on people or the biophysical environment within 12 hours of becoming aware of the incident. The Proponent shall provide full written details of the incident to the **Secretary** within seven days of the date on which the incident occurred.
- 7.2 The Proponent shall meet the requirements of the **Secretary** to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition 7.1 of this approval, within such period as the **Secretary** may require.

<p>Note: Nothing in this approval removes the Proponent's obligation under Section 148 of the <i>Protection of the Environment Operations Act 1997</i> to notify the appropriate regulatory authority (as defined under Section 6 of the <i>Protection of the Environment Operations Act 1997</i>) where a pollution incident occurs in the course of the development so that material harm to the environment is caused or threatened.</p>

Attachment A: Noise Receivers

