



18 July 2014

**DETERMINATIONS OF THE  
NARRABRI COAL SEAM GAS UTILISATION PROJECT MP07\_0023 MOD 3;  
THE BIBBLEWINDI GAS EXPLORATION PILOT EXPANSION PROJECT SSD 5934; AND  
THE DEWHURST GAS EXPLORATION PILOT EXPANSION PROJECT SSD 6038**

**EXECUTIVE SUMMARY**

The Planning Assessment Commission ('the Commission') has prepared this consolidated project report under the delegation of the Minister for Planning.

The Narrabri Coal Seam Gas Utilisation Project MP 07\_0023 MOD 3 (The Utilisation Mod) was not the subject of a public meeting receiving less than 25 objections while on exhibition. The MOD was referred to the Commission for determination due to reportable political donations.

The Bibblewindi and Dewhurst expansion proposals were the subject of a combined public meeting in Narrabri on Thursday 19 June 2014. The majority of presenters sought to speak to both proposals. Many speakers focused on issues relating to the foreshadowed full scale gas field development of some 850 wells, which is not the subject of the current determinations.

The Commission has elected, in these circumstances, to prepare a single report covering all three determinations in an effort to minimise any confusion.

Following careful consideration of the views expressed at the public meeting, the Secretary's Environmental Assessment Reports as well as agency and public submissions, including the presentations made at the public meeting in Narrabri, the Commission has determined the project modification and the two pilot expansion proposals should be approved subject to recommended conditions.

This determination report provides further detail on the Commission's process, and outlines amendments made in relation to the Secretary's recommendations.

**1. DELEGATION TO THE COMMISSION**

On 9 May 2014 the Narrabri Project modification and the two pilot expansion proposals were referred to the Planning Assessment Commission for determination under Ministerial delegation dated 14 September 2011.

The Department made the applications available on its website, and consulted with a number of government agencies and key stakeholders as set out in section 4 of its reports.

The modification proposal was referred to the Commission due to a reportable political donation. The pilot expansion proposals were referred to the Commission due to both proposals having generated more than 25 objections each when their respective Environmental Assessments were exhibited.

For this determination, Ms Gabrielle Kibble AO, Chair of the Planning Assessment Commission, nominated Mr Brian Gilligan (chair), Mr Alan Coutts and herself to constitute the Commission for the project.

## **2. BACKGROUND**

### *2.1 Narrabri Coal Seam Gas Project*

The Narrabri Coal Seam Gas Project is a coal seam gas project located southwest of Narrabri. The project approval comprises construction and operation of a gas appraisal and retrieval system at pilot sites, construction and operation of gas compression facilities at pilot sites, construction of a 32 km (approximate) buried gas flow line between Bibblewindi and Bohena Pilot and the Wilga Park power station and the staged expansion of the Wilga Park gas fired power station, approved by the Minister for Planning on 8 December 2008.

The project has been the subject of two previous modification applications.

### *2.2 Dewhurst Gas Exploration Pilot Expansion Project*

The Dewhurst Gas Exploration Pilot Expansion Project is located southwest of Narrabri.

The proposed activity will be conducted on behalf of the title holders of Petroleum Exploration Licence (PEL) 238, Santos NSW Pty Ltd and Energy Australia Narrabri Gas Pty Ltd.

The existing approved Dewhurst operation involves a number of wells including three vertical wells; three single-lateral horizontal wells; and a four well pilot program along with surface infrastructure at each of the sites.

### *2.3 Bibblewindi Gas Exploration Pilot Expansion Project*

The Bibblewindi Gas Exploration Pilot Expansion Project is located 40 km's south of Narrabri.

Santos NSW (Eastern) Pty Ltd (Santos) is the coal seam gas (CSG) operator of Petroleum Assessment Lease 2 (PAL 2) for this project proposal.

The existing approved Bibblewindi operation consists of 12 wells with each site incorporating infrastructure (i.e. well heads, skids, separators and remote telemetry units).

## **3. APPLICATIONS**

The proposed modification by Santos NSW (Eastern) Pty Limited ('Santos') sought approval for:

### *1.1. Narrabri Coal Seam Gas Project*

- The installation of a riser on the existing buried gas flow line, which would allow materials (gas and liquids) to be diverted to the Leewood Produced Water Facility;
- The use of the gas flow line for concurrent transfer of liquids to the Leewood Facility from the Bibblewindi Facility and Tintfields Ponds; and
- The use of coal seam gas from all existing or future wells within its Petroleum Assessment Lease (PAL) 2 or Petroleum Production Lease (PPL) 3 at the Wilga Park Power Station.

### *1.2. Pilot Expansion Applications*

The Proponent has submitted two separate applications, to modify and expand its operations at its facilities within the Bibblewindi State Forest and at the sites referred to as Dewhurst.

The proposals by Santos NSW (Eastern) Pty Limited ('Santos') seek approval for:

#### *i. Dewhurst Gas Exploration Pilot Expansion Project*

- The expansion of two existing exploration pilot well sets, namely Dewhurst 13-18H and Dewhurst 26-29;
- Two new wells:-
  - i. Dewhurst 30 – a vertical well
  - ii. Dewhurst 31 – a tri-stacked lateral well
- Installation of surface infrastructure at the two new well sites including two 10 metre wide service corridors between Beehive Road and the Dewhurst 30 & 31 well pad areas;

- Operation of the two new wells in addition to the existing wells, management of the water and gas produced during operation; and
- Decommissioning and rehabilitation of pilot wells and ancillary infrastructure or suspension of wells for potential future use.

#### 1.3. *Bibblewindi Gas Exploration Pilot Expansion Project*

- Two new exploration wells within the site of the existing 12 well multi-lateral Pilot site.
  - i. Bibblewindi 31 – a vertical well
  - ii. Bibblewindi 32 – a lateral well
- Installation of surface infrastructure at the two new well sites. Access will be via existing roads within the Bibblewindi State Forest;
- Operation of the two new wells in addition to the existing wells, management of the water and gas produced during operation; and
- Decommissioning and rehabilitation of pilot wells and ancillary infrastructure or suspension of wells for potential future use.

### 4. **DEPARTMENT'S ASSESSMENT REPORT**

The Secretary's Environmental Assessment Reports provided an assessment of the following key issues:

#### 4.1 *UTILISATION MODIFICATION*

- Corrosion risks associated with the construction material of the proposed riser;
- Leakage or rupture risks associated with the proposed transfer of liquids;
- The transfer and use of gas from existing pilots wells; and
- The resource appraisal period.

The Department concluded that the proposal was of a minor nature and was unlikely to increase environmental impacts. Subsequently, the Department stated it is satisfied that the proposed modification is in the public interest and should be approved.

#### 4.2 *PILOT EXPANSIONS*

The Secretary's Environmental Assessment Reports provided an assessment of the following key issues:

- Potential impacts on water resources including (Dewhurst and Bibblewindi):
  - Surface water systems and users;
  - Groundwater systems and surrounding users;
  - Groundwater dependent ecosystems; and
  - Cumulative groundwater impacts;
- Potential impacts on biodiversity including (Dewhurst):
  - Fauna, vegetation and flora; and
  - Indirect and cumulative impacts to biodiversity;
- The design and integrity of the gas wells (Dewhurst and Bibblewindi).

The reports concluded that the proposals were limited to exploration and resource appraisal activities over a relatively short time (3 years). Further, the proposals would require limited vegetation clearing and would not significantly impact on biodiversity values.

The Department acknowledged there may be indirect impacts associated with the projects however these could be mitigated to an extent such that the development would maintain biodiversity values in the area.

The Assessment Reports recommended the projects be approved, subject to conditions.

## **5. MEETINGS**

### **1.1. DEPARTMENT OF PLANNING AND ENVIRONMENT**

The Department briefed the Commission on the three coal seam gas projects on Wednesday 21 May 2014, where the following matters were discussed:

- Background to the applications;
- Coal seam gas operations;
- Water;
- Biodiversity; and
- Integrity of infrastructure.

### **1.2. PROPONENT**

The Commission met with the proponent Santos NSW (Eastern) Pty Ltd (refer Attachment 2) on Wednesday 18 June 2014 for a briefing at which the proponent outlined the history of the modification and project proposals.

Santos briefed the Commission on the existing operations at the Gas Pilot sites with the following key points being discussed:

- The application histories, proposed projects and consultation to date;
- The scope of concerns raised by the community;
- Impact mitigation and minimisation measures;
- Biodiversity;
- Water Resources;
- Design and integrity of wells; and
- Draft conditions as recommended by the Department.

The briefing by the proponent also included general background information relating to coal seam gas exploration and production.

The Commission also undertook a site inspection of the three existing coal seam gas exploration operations and the surrounding locality on this date.

### **1.3. NARRABRI SHIRE COUNCIL**

The Commission met with Councillors and officers from Narrabri Shire Council (refer Attachment 2) on Wednesday 18 June 2014. Narrabri Shire Council is generally supportive of the proposal however issues were raised by individual Councillors related primarily to the Dewhurst and Bibblewindi project proposals.

The Councillors outlined concerns as follows:

- If approved, appropriate baseline monitoring should be conditioned in addition to trigger levels;
- Fracking. While not proposed with the current applications, if the proponent does intend to utilise fracking, then a new application should be required;
- An independent ombudsman should oversee compliance if the projects are approved;
- The region is one of the preeminent agricultural areas in the State so monitoring of water resources needs to be robust;
- The proponent should make existing baseline monitoring data available on its website; and
- Management measures should be conditioned, including bunding of basins to cater for overflow events.

The Councillors also noted:

- The Bibblewindi and Dewhurst projects could set the benchmark for future applications if the monitoring regime is conditioned, and implemented, appropriately;
- Gas wells have been in the region for over 25 years with no adverse impacts on existing water systems;

- Council met with representatives of the Office of Coal Seam Gas who advised Council the location of the proposed bores is not within the Great Artesian Basin (GAB) and would therefore not be re-charging into the GAB;
- The anti-coal seam gas lobby do not complain about the use of fracking within the mining industry (underground mining operations);
- The local community, including farmers, support the industry; and
- There is a lack of strategic regional planning to address the State's needs.

#### **1.4. PUBLIC MEETING**

On Thursday 19 June 2014 the Commission held a public meeting to hear the community's views on the Secretary's assessment report and recommendations.

The meeting was well attended with approximately 80 attendees including the registered speakers. Speakers included representatives of special interest groups, environmental groups and local landholders. The speakers list is provided in Appendix 1.

The major concerns raised at the meeting and in the submitted written comments are summarised in Appendix 2.

#### **1.5. OFFICE OF COAL SEAM GAS**

The Commission met with representatives of the Office of Coal Seam Gas (OCSG) on Tuesday 8 July 2014 to discuss issues raised at the public meeting.

The submissions on the proposals had been reviewed by the OCSG however the OCSG stated that concerns raised by the community have already been considered and where required, conditions recommended.

The OCSG advised the Commission it had engaged a hydrologist who for the past six months, has been working in the Gunnedah basin region.

The OCSG is satisfied the proponent is using cutting edge technology, including the measures provided at the Leewood facility, which has been proven to be effective in maintaining water quality in the gas extraction process.

The Commission sought clarification on the community concern that fracking might be undertaken by the proponent. The OCSG advised the Commission that due to the geology in the area, fracking would not be used as a gas extraction process. Horizontal in-seam drilling was more suitable for the project location.

#### **1.6. NSW OFFICE OF WATER**

The Commission met with representatives of the NSW Office of Water (NOW) on Tuesday 15 July 2014 to discuss issues raised at the public meeting.

NOW did not consider it feasible or necessary for the proponent to develop a class 2-3 model to support the pilot projects particularly within the 6 month timeframe stipulated under the Department's recommended conditions.

NOW confirmed a Class 2/3 model would be required for a major project to be considered.

Due to the relatively low risk and impact of the projects currently being considered, NOW advised it is satisfied the modelling provided in support of the proposals was adequate.

However, NOW noted the projects are part of a broader exploration project, and therefore it should be considered that the work undertaken through these pilots should be used to support a future

production project application and that data and information gathered through these pilots should be used to support modelling and assessment of potential impacts from future proposals.

NOW reaffirmed its support for a condition requiring the proponent to revise the Groundwater Monitoring and Modelling Plan in consultation with NOW. The plan is also a requirement of exploration licence PEL 238 which covers these projects. NOW further advised the development of this plan would assist the proponent with the preparation of a Model of the required standard for any future project.

Following consideration of the advice from the NSW Office of Water, the Commission has revised the Department's recommended condition relating to the preparation of a Class 2/3 model.

The Department's recommended condition (for both pilot project proposals) in Schedule 3, Condition 7 was:

### ***Water Management and Monitoring***

7. *Within 6 months of the date of this consent, in consultation with NOW, the Applicant shall:*
- (a) revise its Groundwater Monitoring and Modelling Plan to include a description of the monitoring specific to the development; and*
  - (b) ensure that the groundwater model is developed to a Class 2 or 3 model in accordance with the Australian Groundwater Modelling Guidelines, and to a standard required by the NSW Aquifer Interference Policy;*
- to the satisfaction of the Secretary.*

The Commission's revised condition is:

### **Water Management and Monitoring**

7. Prior to the commencement of drilling activities, in consultation with NOW, the Applicant shall revise its Groundwater Monitoring and Modelling Plan to include a description of the monitoring specific to the development, and provide consideration of the future development of the groundwater model to a Class 2 or 3 model in accordance with the Australian Groundwater Modelling Guidelines and to a standard required by the NSW Aquifer Interference Policy to the satisfaction of the Secretary.

## **6. COMMISSION'S CONSIDERATION**

The Commission has reviewed the Secretary's Environmental Assessment Report and associated documents, including submissions from Narrabri Shire Council, agencies and the public, and the proponent's response.

A number of concerns raised by the community related to the forthcoming major Narrabri coal seam gas project. The Commission is only considering the specific modification and two project proposals which have been referred to the PAC by the Minister. Therefore the Commission will not be expressing any views on the future project other than to state it is of the opinion the fundamental concerns raised need to be considered by the Department when the major project is being assessed.

Notwithstanding this, through these project proposals the Commission considers the proponent has the opportunity to build a level of trust with the community through open and transparent communication. This includes making monitoring data publicly available on its website and ensuring the community is made aware of any potential environmental issues should they arise.

The concerns raised by the community during the public meeting have been summarised in Attachment 2.

The Commission believes key community concerns raised during the public meeting that relate to the projects under consideration can be summarised as follows:

- Lack of baseline data on water and potential water/land contamination;
- Lack of confidence in modelling and monitoring;
- Adequacy of joint sealing in triple stack wells; and
- Fracking.

While the Commission has considered each application on its individual merits, it is also mindful of the connections between the three applications and the implications each will have on the other and therefore has prepared a single report encompassing the three projects.

**i. Lack of baseline data on water and potential water/land contamination;**

The lack of baseline monitoring data on water and the subsequent potential contamination of water resources and soils were raised as concerns by the community.

The proponent is seeking to prove the reserves available in the region. The data acquired through the pilot program would be required to support any future large scale coal seam gas project proposal. While the proponent is required to ensure compliance with the project conditions, the level and quality of data obtained through the exploration program will need to be suitable for consideration when the major proposal is lodged with the Department.

The Commission is satisfied the conditions recommended by the Department address the issues raised and the Commission considers the specific projects under consideration to be minor in nature supporting the existing exploration and pilot program.

**Water Resources**

A key concern raised by the community members is the risk of the extraction process impacting adversely on surface and ground waters. The community is concerned the extraction process would impact on agricultural users; on existing bores and on existing water resources such as the Great Artesian Basin. The community was also concerned that there is a lack of monitoring measures in place.

Potential impacts of concern to people included:

- Possible loss of waters from existing surface streams and shallow aquifers;
- Possible release of contaminants, and therefore contamination, of surface waters and shallow aquifers by substances in coal seam waters and fluids (chemicals); and
- Escape of fugitive gas to the surface and shallow aquifers.

While some uncertainty is, of course, inevitable in gas extraction operations the groundwater modelling indicated in the Environmental Assessment and supporting documents has provided a degree of assurance that risks such as those outlined above from the specific projects under consideration would be negligible.

The Commission accepts the position, implicit in the Department's recommendation for approval, that it is possible to manage the projects by adaptive management, using modern hydrogeological and drilling techniques, with acceptable minimisation of risks.

The Department's recommended conditions require extensive monitoring of ground waters and surface waters for quantity and quality through the exploration period (3 years) and incorporate a requirement for the proponent to implement measures to ensure the gas wells are constructed and operated to avoid risks of gas leakages and to avoid adverse impacts on beneficial aquifers.

## **Water storage**

The proponent is seeking to transfer produced water through the water gathering system to its Bibblewindi Treatment Facility which is then transferred to the Leewood Produced Water Facility.

Once at the Leewood Produced Water Facility, produced water would be stored in ponds. The proponent advised the Commission it is developing plans to treat produced water at the facility through reverse osmosis or alternative available methods which would be the subject of further approvals. During its meeting with the Commission, NOW advised the proponent has provided a construction timeframe for a water treatment facility.

The proponent confirmed the Leewood Produced Water Facility has holding capacity sufficient for the current project proposals. The Commission also notes the Secretary's recommended conditions include a requirement for extracted water to be stored in ponds with impervious lining to ensure groundwater is not contaminated.

Overall, the Commission agrees with the Department's assessment reports that the water resource concerns have been satisfactorily addressed in the assessment report and through the recommended conditions. It is of the view that the potential impacts can be properly mitigated or adequately managed by the recommended water management conditions.

## **Groundwater Impact Assessment Peer Review**

The community raised concern that the Groundwater Impact Assessment report prepared by Halcrow (dated 5 December 2013), was peer reviewed by Dr Kalf whose peer review report was dated October 2012 which pre-dated the Halcrow report.

The Commission sought clarification from the Department and has been advised Dr Kalf conducted a peer review (Kalf, October 2012) of an initial Groundwater Impact Assessment prepared by Halcrow (dated 25 September 2012). The Halcrow Groundwater Impact Assessment report was subsequently revised to incorporate Dr Kalf's peer review recommendations and the revised Halcrow report (dated 5 December 2013) was made publicly available on the Department's website.

The Commission discussed this issue with officers of the NSW Office of Water who confirmed the Dr Kalf peer review had been conducted on an initial assessment report. NOW acknowledged the December 2013 Groundwater Impact Assessment report had not been further peer reviewed however NOW was of the view it addressed Dr Kalf's peer review recommendations.

## **ii. Lack of confidence in modelling and monitoring**

The community members raised significant concern with the level of monitoring currently in place with the existing operations and the lack of adequate modelling for the project proposals.

Attention was drawn by presenters to a review of the gas extraction industry which is being conducted by the NSW Chief Scientist.

The Commission notes that on the 30 June 2014, the NSW Chief Scientist released the 'Placement of monitoring equipment for water resources in NSW' report which incorporates monitoring issues associated with coal seam gas extraction.

The Chief Scientist's report includes a recommendation that the Government establish a formal process consisting of five parallel but interacting steps relating to the mining and coal seam gas extraction.



The Commission notes a major project proposal is forthcoming. The issues raised by the community, and the recommendations provided by the Chief Scientist, relate to a major project proposal not the current modification and project proposals which are considered by the Commission to be minor in nature and ancillary to the existing exploration program.

During its meeting with the Commission, NOW advised it was of the view the scale of the projects would not provide for a regional monitoring data set, rather the project proposals would provide for pilot specific monitoring that would assist the proponent in effectively managing the individual pilot wells. This monitoring and management strategy would work towards a monitoring and management goal for the forthcoming main project.

The Commission therefore is of the view that the fundamental modelling and monitoring concerns raised by the community and the Chief Scientist will need to be considered by the Department once the major project proposal is lodged.

### **iii. Adequacy of joint sealing in triple stack wells**

NOW advised the Commission that the proponent is required to satisfy the relevant monitoring requirements during exploration operations which would identify any failure in the sealing of joints. NOW also advised the ongoing review being conducted by the Chief Scientist would work towards strengthening monitoring of CSG projects ensuring water quality is maintained.

NOW also advised the joint sealing of stack wells would occur below the depth of beneficial aquifers and therefore they would not be impacted by the projects' sealing methods.

#### **Design and Integrity of Infrastructure**

The Commission raised this concern with the OCSG and was advised that the Department's recommended condition requiring wells to be designed in accordance with the applicable Code of Practice would ensure the infrastructure will not fail. The recommended condition would result in the projects maintaining water quality in addition to meeting best practice requirements.

The Commission is satisfied that, with the appropriate conditions being imposed, the project infrastructure will not impact on water quality.

### **iv. Fracking**

One consistent and significant issue of concern raised by the community was the potential for fracking to be used as part of the gas extraction process. The community is concerned the Secretary's Environmental Assessment report does not consider fracking and the potential environmental issues associated with the process including the chemicals used.

The Secretary's Environmental Assessment Report states fracking is not proposed with the current project proposals or modification application and conditions are imposed confirming fracking is not approved as part of these projects.

Should the proponent seek to use fracking as an extraction method in the future, a separate project application would be required.

## **7. Existing Approval Conditions**

The Commission accepts that many of the concerns raised in submissions and at the public meeting relate to existing operations (and therefore conditions) of the approved gas exploration program and that management and compliance with regard to these issues is governed by the current conditions of consent.

The Commission's assessment role is limited to the modifications proposed in the current application and the proposed pilot expansions and their impacts on the overall operations of the exploration program.

## **8. COMMISSION'S DETERMINATION**

The Commission has carefully considered the information available including the Secretary's Environmental Assessment Reports and associated documents including the Preferred Project Reports, submissions made to the Department and to the Commission during the public meeting.

The Commission accepts the modified Narrabri project, as it allows the rational and efficient transfer of water and brine for dust suppression and rehabilitation purposes in addition to enabling the use of gas generated during exploration and appraisal activities, while the location of the works minimises the potential for detrimental impacts on local residents and the environment.

The Commission accepts the Bibblewindi and Dewhurst project proposals provide the opportunity to investigate the potential for securing gas from this region, while the location of the well sites and recommended conditions minimise the potential for detrimental impacts on the environment and existing land uses.

The Commission considers the current proposed modification and pilot expansions to be minor as they are of short duration and are essentially aimed at exploration and resource appraisal and also notes that CSG is regulated under a complex set of consents and approvals.

The Commission sought clarification from the Department and public agencies on specific aspects of the project. The Commission is now satisfied that the impacts of the projects can be adequately minimised, managed and contained through the conditions recommended by the Department which aim to strengthen the land and environmental management measures.

Therefore, the Commission has determined to approve the modification MP 07\_0023 MOD 3 and project proposals SSD 5934 and SSD 6038 as endorsed by the Department subject to the recommended conditions as amended by the Commission as follows:

1. Revise Schedule 3, Condition 7 of SSD 5934 (Bibblewindi Gas Exploration Pilot Expansion) and SSD 6038 (Dewhurst Gas Exploration Pilot Expansion)



Brian Gilligan  
**Member of the Commission (Chair)**



Gabrielle Kibble, AO  
**Member of the Commission**



Alan Coutts  
**Member of the Commission**

# Appendix 1

## List of Speakers at the Public Meeting

### Planning Assessment Commission Meeting

Date: 9.00 am, Thursday, 19 June 2014  
Place: Narrabri Bowling Club, 176 Maitland Street, Narrabri

1. Bevan O'Regan
2. Milton Judd
3. Mark Ogge – The Australia Institute
4. Hugh Barrett
5. Sarah Ciesiolka
6. Debra Briggs
7. Jon-Maree Baker – Namoi Water
8. David Milledge
9. Sarah Moles
10. Jane Judd – Friends of the Pillaga
11. Naomi Hogan – Wilderness Society
12. Nicky Kirby
13. Bea Bleile - Armidale Action on Coal Seam Gas and Mining
14. David Quince
15. Peter Small – Coonabarabran Residents Against Coal Seam Gas (CRAG)
16. Ivan Levant
17. Peter Verwayen – Siding Spring Observatory
18. Victoria Hamilton
19. Jeff Carolan
20. Sarah Moles – Artesian Bore Water Users Association
21. Sarah Moles – Great Artesian Basin Protection Group
22. Julia Borowski
23. Josh Borowski
24. Cherie Robinson
25. Paul Spearim
26. Megan Kuhn – SOS Liverpool Plains
27. Kate Schwager
28. Paul Robert Burton – Our Land Our Water Our Future
29. Crystal Hodgson
30. Lynn Trindall – Narrabri Land Council
31. Heather Ranclaud
32. Pat Schultz
33. Jan Robertson – No Coal Seam Gas Gilgandra District Inc.
34. John Kelley
35. Tony Pickard
36. Sonya Marshall
37. Doctors for the Environment Australia
38. Tony Pickard – People for the Plains

## **Appendix 2**

### **Wednesday 18 June 2014**

#### Santos NSW (Eastern) Pty Ltd Representatives

1. Neale House
2. Anne Moody
3. David Machin
4. Glen Toogood
5. Todd Dunn

#### Narrabri Shire Council Representatives

1. Cr Catherine Redding (Deputy Mayor)
2. Cr John Tough
3. Cr Maxine Booby
4. Cr Catherine Collyer
5. Cr Robyn Faber
6. Mr Paul Bawden – Director of Planning & Development
7. Mr Paul Wearne – Director of Corporate Services

## Appendix 3

### Issues Raised

- Project approval assessments should be undertaken by Local Government, not the State;
- Potential pollution of water resources (including the Namoi and Great Artesian Basin);
- Integrity of infrastructure;
- The potential for fugitive gases to result in health issues;
- Economic impacts not considered in line with the Director-Generals Requirements;
- The growth in demand for gas is due to, and for, export not domestic use;
- The Director-Generals Assessment report does not address greenhouse gas concerns;
- Santos operations in Queensland have been shown to pollute the environment indicating the proponents monitoring/management is not adequate;
- The Narrabri gas project sites have had a litany of pollution incidents including an incident which is under investigation by the EPA (Tintfield wastewater ponds);
- Impacts on air quality (dust, Volatile Organic Compounds (VOC's etc));
- Historical and current monitoring data should be made publicly available;
- Lack of community trust;
- The Gomeri Tribal Nation have not provided approval for access to their lands, noting there is a native title claim currently underway;
- Bibblewindi is a State forest and is therefore Crown Land. Surveys conducted in 2002 as part of the Brigalow project identified 1000 cultural sites. The project EIS states there are no cultural sites within the project;
- The pilot sites should not be used to generate power;
- Lack of social licence;
- There is no plan to treat produce water, only storage of it;
- While the proponent will compensate land owners if water is contaminated, the onus is on land owners to confirm their water supply is polluted;
- If approved, independent audits should be conducted at the proponent's expense;
- All required reports should be made publicly available;
- Current lack of regulatory enforcement;
- A Biodiversity Management Plan should be implemented for the region;
- Cumulative impacts need to be considered;
- The precautionary principle should be implemented;
- As a result of the report of the NSW Chief Scientist, land owners who host pilot bores will not be able to obtain insurance for their properties;
- Property value impacts;
- The proponent's failure to communicate effectively with the community;
- Adequacy of sealing tip off points in triple stack drilling;
- Light pollution which will adversely impact on Siding Springs Observatory;
- Potential for fracking;
- Bush fire related concerns;
- Failure of proponent to disclose chemicals used;
- Impacts on local roads through workforce movements;
- Friction caused in rural community with some landowners receiving compensation from proponent;
- A reverse osmosis plant should be installed and operational prior to exploration occurring;
- The proponent has failed to indicate how the salts generated by the project will be decontaminated and disposed of;
- This is the pre-cursor to the main 850 well project proposal;
- Noise generated by sites and traffic; and
- There should be independent testing of concrete bore plugs, including bacterial resistance.