

**Submission  
No 889**

## **INQUIRY INTO COAL SEAM GAS**

**Organisation:** Wollondilly Shire Council

**Date received:** 22/11/2011

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**WOLLONDILLY**  
SHIRE COUNCIL

22 November 2011

Ms Madeleine Foley  
Principal Council Officer, Committees  
NSW Legislative Council  
Parliament House  
Macquarie St  
Sydney NSW 2000

Dear Ms Foley

**NSW Legislative Council Inquiry into Coal Seam Gas - Wollondilly Shire  
Council Submission**

Thank you for providing Council with the opportunity to make a submission to the Legislative Council Inquiry into Coal Seam Gas. In providing an extension to the submission deadline, Council was able to consider and endorse a submission at its meeting on 21 November 2011.

Wollondilly Shire Council is concerned the Coal Seam Gas industry may have serious environmental and health impacts on its community. These concerns need to be understood and addressed by the NSW State Government before any further decisions are taken to proceed with the full development of current Coal Seam Gas reserves and the associated infrastructure. We welcome and applaud the Inquiry of the Legislative Council.

In this submission Wollondilly Shire Council advocates for more robust investigation and research into the potential impacts on ecosystems, agricultural lands, human health, waste production and disposal and, in particular, the potential degradation of ground water systems of Coal Seam Gas activities. Council also advocates for more robust approval and legislation and enforced environmental protection and compliance relating to Coal Seam Gas activity.

Council in its submission makes recommendations to the Inquiry and raises concerns and comments in regards to Coal Seam Gas activities. Council looks forward to receiving the outcomes of this Inquiry and appreciates the opportunity to provide input at the public hearing on 9 December 2011, at 10.30 am at the Highlands Golf Club, Mittagong.

If you require any further information or have enquiries regarding aspects of Council's submission please contact Brad Staggs, Council's Manager Environmental Services on (02) 46 771129.

Yours sincerely

Les McMahon  
General Manager

# NSW Legislative Council Inquiry into Coal Seam Gas Wollondilly Shire Council Submission

## Executive Summary

Wollondilly Shire covers approximately 2500 square kilometres, around 65% of that land as National Park or Water Catchment Special Areas including areas within the Greater Blue Mountains World Heritage Area. It has a population of around 45,000 people. It supplies a great deal of the Sydney's fresh produce including fruit, vegetables, dairy, poultry and beef. It also produces many horticultural products including turf, nursery stock and mushrooms. It provides the drinking water for almost 1.5 million people through its waterways and is home to 86 threatened species and 8 threatened ecological communities and acts as an important complex of wildlife corridors.

In 2010 the Community of Wollondilly Shire endorsed its Community Strategic Plan. *Growing Your Future Together – Wollondilly Community Strategic Plan 2030* addresses five key focus areas of Environment, Community, Governance, Economy and Infrastructure and reflects the community hopes (Outcomes) for the Shire for the next 30 years. Of particular interest for this submission is the Communities desired Outcomes for the environment. These are:

- *A community that is surrounded by a built and natural environment that is valued and preserved*
- *A community that has opportunity to engage with and actively care about their natural environment*

Council must ensure that these outcomes are the aim of its activities, as such this submission is compatible with achieving those outcomes.

Wollondilly Shire has hosted mining and extractive industries for decades and the proceeds of that have been important to both the Federal and State levels of Government but also at the local community level in terms of employment but not to Local Government level. During this time the potential effects and concerns of Coal Seam Gas (CSG) activity on the environment was underrepresented but recently issues, not previously raised, are becoming apparent.

As a consequence Wollondilly Shire Council is concerned the CSG industry may have serious environmental and health impacts on its community. These concerns need to be understood and addressed by the NSW State Government before any further decisions are taken to proceed with the full development of current CSG reserves and the associated infrastructure.

Wollondilly Shire Council advocates for more robust investigation and research into the potential impacts on ecosystems, agricultural lands, human health, waste production and disposal and, in particular, the potential degradation of ground water systems of CSG activities. Council also advocates for a more robust approval and legislation and enforced environmental protection and compliance relating to CSG activity.

Wollondilly Council at it Ordinary Meeting of 21 /11/2011 unanimously resolved:

***“That the following submission of recommendations be made to the Legislative Council Inquiry into Coal Seam Gas”***

***Wollondilly Shire Council recommends that The NSW Government should:***

- 1. Impose an immediate moratorium on all further Coal Seam Gas development until it can be demonstrated that the industry will not have any unacceptable social and environmental impacts.***
- 2. Implement a robust, transparent and independent assessment of the environmental impacts of Coal Seam Gas extraction***
- 3. Establish an Assessment Commission to undertake this independent assessment.***
- 4. Investigate the impact of the levels of water extraction on the aquifers, surface waters and their connectivity and the security of the water resource for both consumptive and environmental purposes in the short, medium and long term.***
- 5. Investigate concerns about the use and disposal of salt and other materials contained within coal seam gas generated waste and waste water and develop systems to ensure its reduction, treatment and disposal compliance.***
- 6. Develop robust regulations for the Coal Seam Gas industry ensuring parity to Local Government Planning controls and other environmental regulations, including State controls, placed on landholders and the community including water access rights.***

### **Inquiry into Coal Seam Gas - Terms of Reference**

In this Submission Wollondilly Shire Council will be addressing the following points from the Legislative Council Inquiry into Coal Seam Gas - Terms of Reference:

- 1. The environmental and health impacts of CSG activities including:**
  - a. Effect on ground and surface water systems**
  - c. Effects relating to hydraulic fracturing**
  - e. Nature and effectiveness of remediation required under the Act**
  
- 2. The economic and social implications of CSG activities including those which affect:**
  - a. Legal rights of property owners and property values**
  - b. Food security and agricultural activity**
  - c. Regional development, investment and employment, and State competitiveness**
  - e. Local Government including provision of local/ regional infrastructure and local planning control mechanisms**

## Wollondilly Shire Council's Position

### 1. Terms of Reference points - 1a,c,e and 2a,b,c,e

Wollondilly Shire has been the subject of CSG exploration and extraction in the Cawdor and Menangle areas for over a decade. Through the subtle introduction and growth of this technology into the Shire there are now 76 CSG wells in this area. Until recently, this activity predominately attracted community concerns regarding property access rights, property security, property values and amenity issues such as impacts of flaring, noise, aesthetics and access construction. Primarily these concerns were "above ground" issues.

Conversely some residents have embraced the presence of this activity on their land regarding those "above ground" impacts as acceptable.

Over recent years though, the science and informed opinion is pointing to the more sinister aspects of CSG exploration and extraction including aquifer interference, aquifer contamination, geological instability and waste generation and disposal. None of which were strongly considered in the past.

This is of extreme concern to the community of Wollondilly and the Council.

These concerns raise important questions such as:

- Why was an industry which required the taking of unknown and untested environmental risks permitted to take place in Wollondilly Shire and why has it been allowed to continue even after the potential environmental risks became apparent to the regulators?
- What unknown or non retractable damage has occurred to the aquifers, geology, waterways and soils of Wollondilly due to previous CSG activities and how will that ever be evaluated or managed?
- What social and/or economic impacts could these damages have on the community? Has tourism, primary production or social harmony been adversely effected by having a CSG presence in Wollondilly?
- What are to be the future impacts on the social, economic and environmental assets of Wollondilly given the existing and approved CSG activities within the Shire and the "image" of an area that they portray?

Neither Wollondilly Shire Council nor our community want to be asking the same questions in another decade about another area potentially affected by CSG activity.

Wollondilly Shires environment has already experienced permanent damaged from mining and extractive industry activity due to the poor understanding of the relationships and interactions between the methods of these industries and the natural environment. This is still evident with the cracking of the Cataract and Georges Rivers, the water loss in Thirlmere Lakes and numerous local creeks as well as the cracking of local rock formations.

Given the relevant science and opinion, this Council cannot assume that damage to aquifers and geology of Wollondilly has not occurred due to CSG activity already

being undertaken in the Shire. Therefore Council has a responsibility to the community under the Precautionary Principle to ensure that, within its powers, no further environmental damage occurs.

A moratorium on CSG activity is essential until it can be established beyond any doubt whatsoever that the environment and the community can survive and thrive with CSG mining in its midst.

### **Council Recommendation 1**

***The NSW Government should:***

***impose an immediate moratorium on all further Coal Seam Gas development until it can be demonstrated that the industry will not have any unacceptable social and environmental impacts.***

## **2. Terms of Reference points – 1a,c,e**

Wollondilly now has the legacy of the potential damage of a decade of CSG activity which may never be identified or quantified.

The State Government should be held accountable for that legacy due its lack of foresight, planning and understanding of an industry before giving it access to exploit and potentially damage our environment, social fabric and economic base.

Council is calling for the state government to undertake an assessment of the environmental impacts of CSG activities albeit a decade late for Wollondilly Shire, and determine whether the industry can actually operate in our community within the principle of Neutral or Beneficial Environmental Gain at a local level as well as at broader levels. Council feels that it could not support proposals that did not result in neutral or beneficial environmental gains.

### **Council Recommendation 2**

***The NSW government should:***

***Implement a robust, transparent and independent assessment of the environmental impacts of Coal Seam Gas extraction***

## **3. Terms of Reference points – 1a,c,e and 2a,b,c,e**

The role of Wollondilly Council throughout the history of CSG presence in the shire has been primarily one of a community advocate, asset owner (road reserves) and observer as it has had virtually no approval or regulatory delegation. Councils are virtually, by way of planning legislation, given virtually no powers in relation to CSG activities.

In general, the community nor the Councils responsible for areas containing CSG reserves, are able to independently undertake the research or science to

understand the impacts of having a CSG industry operating within the Local Government Area, prior to it being approved by the State Government.

Although there may be inherent similarities or differences in geology and hydrology which could assist in scientific appraisal of CSG proposals there are also subtle localised factors which need to be considered beyond general "models". Councils and the community should not be relied on to be the only interested parties to undertake the research, science, lobbying or management planning which protects the localised environment.

The social and economic impacts of CSG are also broad but are likewise very specific to the community in which the CSG activity may operate. Wollondilly, for example, relies on tourism stemming from its rural atmosphere, scenery and landscape and its natural bushlands and waterways. Each of these may, and are, adversely affected by CSG activities. Similarly, the impacts on agriculture from aquifer interference are potentially a localised issue with localised impacts rather than a project based issue.

Council considers that it is the responsibility of the proponents, the approver and the regulator to prove their is neutral or beneficial gain to the environment for each CSG proposal from the whole of project impact down to the social, environmental and economic impacts of each individual well, road and pipeline.

Council considers that a CSG Assessment Commission should be appointed and that for it to be successful and credible it must be neutral and equally representative of the effected community's, industry experts, Local Government and the independent science community. The Assessment Commission needs to operate and be seen to operate with the best interest of the effected community's and environments being the default position. It should operate and be mandated to consider the Precautionary Principle and the Neutral or Beneficial Environmental Gain principle in all its decisions and undertake independent, robust and transparent assessments. CSG development should only proceed if it is found to be in both the local and broader public's long term interest, given the array of unacceptable social and environmental risks.

### **Council Recommendation 3**

***The NSW Government should:***

***Establish an Assessment Commission to undertake this independent assessment of CSG proposals in NSW***

#### **4. Terms of Reference points – 1a,c,e and 2a,b,c,e**

Wollondilly Shire Council is proactive in the protection of Sydney's water assets, participating and contributing to various consultative mechanisms of the Sydney Catchment Authority, Hawkesbury Nepean Catchment Management Authority and the Office of the Hawkesbury Nepean to ensure the Wollondilly community and its environment are represented in decision making regarding these water assets.

Wollondilly Shire is a water provider to Sydney, having over 60% of the Shire acting as catchment for over 1.5 million people. The provision of this water in a healthy condition and in a sufficient volume is a State, if not National, priority and should not be compromised by CSG activity. Council is concerned that poor CSG activities will compromise that water supply through damaging or contaminating surface and/or groundwater systems.

The intricate web of watercourses within the Shire include two of the largest recreational waterways in Sydney, the Georges and Nepean Rivers. These watercourses and other smaller ones, often linked to aquifers, are an inherent aspect and attraction of the Shire's landscape. Damage to the surface or groundwater systems will compromise this attraction and recreational resource.

These watercourses also provide the life blood for the Shire's agriculture and horticultural industries, which provide approximately 15 - 20% of Sydney's fresh produce. In many cases these watercourses and aquifers are a primary source of water for household use as well. The continued provision of groundwater through bores is vital in maintaining many agricultural operations within the Shire.

The creeks also act as the veins that maintain Wollondilly as a haven for wildlife and provide the links between the Great Dividing Range and Greater Blue Mountains World Heritage Area to the Illawarra Escarpment. They act as habitat for the 86 Threatened species occurring in the Shire and their quality and quantity of water has direct influences downstream to habitats in the Sydney Basin. The Community, Council and the State Government invest substantial resources in the protection of these habitats and corridors and this investment of time, money and commitment should not be compromised by poor CSG activity.

Wollondilly Shire's surface and groundwater systems have already experienced permanent damage from mining and extractive industry activity due to the poor understanding of the relationships and interactions between these industries, methods and the natural environment. This is evident with the cracking of the Cataract and Georges Rivers, the water loss in Thirlmere Lakes and numerous local creeks.

Council and the Community do not want this damage to happen anywhere in Wollondilly Shire again.

#### **Council Recommendation 4**

***The NSW Government should:***

***Investigate the impact of the levels of water extraction on the aquifers, surface waters and their connectivity and the security of the water resource for both consumptive and environmental purposes in the short, medium and long term.***

#### **5. Terms of Reference points – 1a,c,e and 2b,e**

The waste water removed from CSG activity is at the expense of the natural water system it breaches and the interrelating systems including surface water. The volumes of water removed through CSG operations should be regulated for both



volumes and quality and the industry should be mandated to reduce the volumes and contaminants produced through CSG activities.

Currently at least three rivers within Wollondilly are subject to the dilution of salt water waste from mining or extraction activities. These are the Georges, Bargo and Nepean Rivers. The facilities producing this waste water, with credit have or are considering alternative avenues of treatment but the discharge into watercourses has, since the commencement of their operations, been the default approved method. This has potentially caused negative impacts on Wollondilly watercourses since these practices commenced. Council is concerned that discharge of waste salt water into watercourses for dilution has unknown immediate or long term impacts and unmanaged risk of toxic contamination to watercourses and that this method may be used by CSG activities.

It can only be assumed that waste salt water derived from the CSG activity in Wollondilly is currently being treated as per the licenses granted but Council, as a regulator itself in various capacities, understands that the growth of an industry often out paces the ability to adequately resource the compliance. Council is concerned that the CSG industry may be nearing or at that point and that with further growth in the CSG industry will lead to increased risks of inappropriate disposal of waste materials. In Wollondilly waste water disposal is generally undertaken through sub contract transporters delivering to a licensed liquid trade waste facility. The increased use of sub contract disposers will increase the risk of inappropriate disposal and the use of sewage treatment plants for treatment of this water is, at best, an impact on already capacity stretched sewerage infrastructure.

### **Council Recommendation 5**

***The NSW Government should:***

***Investigate concerns about the use and disposal of salt and other materials contained within coal seam gas generated waste and waste water and develop systems to ensure its reduction, treatment and disposal compliance.***

### **6. Terms of Reference points – 1a,c,e and 2a,b,c,e**

The issues which are inherent in the current NSW Planning legislation are being recognized and hopefully will be adequately dealt with in the future. One consequence of the flaws in that legislation is the low status awarded the Community and Councils in important decisions in their area or region. The Councils status is lowered from that of a planner and regulator for its community to that of a "submission" writer with the expectation of little influence on the outcome. As such the community loses its voice through Council and observes other interests undertaking activities without the same restrictions, obligations or consequences they would face.

Councils, through their community consultations represent the community interests. This results in the development of The Community Strategic Plan, Councils Planning Instruments, Controls, Policies, Guidelines and strategies such as the Wollondilly Growth Strategy and the Wollondilly Economic Development Plan and therefore the community expectation of desired and appropriate development. The "sidelining" of

these controls and plans for "State" benefit, rather than acknowledging the community expectation for development is, at best, arrogant but at worse compromises all of those processes and plans.

Council is concerned that CSG activity will sterilize land from other appropriate development simply by its presence. Buffer zones and visual and perceived health impacts will effect opportunities for residential development and negatively affect property values. The development of infrastructure such as pipes and roads potentially sterilize land from other uses. Council is also concerned about the impacts of CSG on its own lands and their potential value to the community.

Many residents in Wollondilly pay for their water drawn from bores or from rivers and creeks. They need this for their livelihoods and lifestyles. They pay a premium in license fees to the State Government for that necessity. They are regulated, subject to audit and on occasion cannot access it at all. In the vast majority of cases the water used produces tangible outcomes such as crops or livestock. It appears inconsistent to the current licensing system imposed on our primary producers to allow industries such as CSG to, by consequence of poor or incidental practices, extract water, contaminate it and then dispose of it as a waste by- product while they, the farmers, must treat it as a valuable, expensive necessity.

### **Council Recommendation 6**

***The NSW Government should:***

***Develop robust regulations for the Coal Seam Gas industry ensuring parity to Local Government Planning controls and other environmental regulations, including State controls, placed on landholders and the community including water access rights.***