

**Submission  
No 408**

## **INQUIRY INTO COAL SEAM GAS**

**Organisation:** Gloucester Shire Council

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**Reference:** JM  
**Contact:** Glenn Wilcox

7 September 2011

Hon Robert Brown MLC  
Committee Chair  
Parliament House  
Macquarie Street  
SYDNEY, NSW, 2000

Dear Sir

### **COAL SEAM GAS INQUIRY**

Reference is made to the General Purpose Standing Committee No.5 and the terms of reference of the Inquiry into Coal seam Gas. On behalf of Gloucester Shire Council and the community it represents, we would like this submission to be included in the inquiry. Council's submission is based on the terms of reference within Point 1: the environmental and health impacts of coal seam gas activity, Point 2: the economic and social implications of coal seam gas activities and Point 4: the interaction of the Act with other legislation and regulations, including the Land Acquisition (Just Terms Compensation) Act 1991.

#### **Background**

Exploration and mining has historically been viewed by Governments and communities as a very valuable employment and income generation industry. This is still the case, however, the collective knowledge and awareness of the public has been increasing over the last decade where governments need to take a greater proactive role in the assessment of impacts and outcomes of exploration and mining activities.

The world wide recognition that climate change is occurring and that mining and the use of mine products is playing a role in the future temperature increases has drawn recognition from the community that a greater detail of social and community interaction is required at the development and planning stages of both exploration and mining assessments.

Mining has always had a social and community responsibility and in many regional towns provided direct support to social and sporting groups and provided capital assistance for the development or offset of impacts identified by the community.

Council has formulated a policy in relation to the exploration and extension of mining and petroleum activities in the Gloucester Valley. This policy States:

*Council recognises the economic benefits and responsible environmental management of past and current mining operations within the Shire, however, despite economic benefits, any extension and new mining proposals will **not** be supported;*

- *unless stringent environmental and social expectations are met*
- *unless extensive community consultation has taken place*
- *if the aesthetics of the Shire are comprised in any way*

- *if the proposal is located in a State Conservation Area*  
(Resolution 21<sup>st</sup> May 2008)

Council has also made a submission to the Federal Minister for Sustainability, Environment, Water, Population and Communities, The Hon Tony Burke MP;

*requesting that he not approve AGL's first stage concept, until, according to the Australian Government's National Water Commission's position paper ( December 2010), the risk of significant long term and adverse impacts on adjacent surface and ground water systems are understood and are adequately managed and regulated.*  
(Resolution 16 March 2011)

In recent years the focus of social responsibilities has changed from a need to look at capital infrastructure, to the need to identify and review the cumulative impacts on individuals and society generally. The lines of responsibility to comment and negotiate on exploration and mining applications are shifting from the public agencies to the general community. Companies proposing to undertake exploration or mining need to ensure that a complete assessment is undertaken to identify not only the impacts on regions but also the impacts on individuals, their lifestyles and their futures. These assessments shall allow a greater community interaction and identify concerns in the areas following.

#### **Point 1: the environmental and health impacts of coal seam gas activity**

Comments in this section are based generally on the terms of reference for this section.

#### **Effect on Ground and Surface Water systems**

Council notes that the NSW Government has recently released documents on the Aquifer interference. It is also noted that as part of this document that extensive works are required by mining, petroleum and other groups to make accurate determinations of aquifer activity, ground water movement and impacts generally on a ground water system.

This approach is a good commencement point for aquifer recognition and impacts and to make a greater assessment on the availability of water, the potential impacts on other users and the economic and environmental impacts to a community. This includes the area of fracking and the impacts that may result to rock structures dividing aquifers and the transfer of water across aquifer systems.

#### **Effects related to the Use of Chemicals**

Council would like to note the NSW Governments action to ban BTEX Chemicals in the drilling and fracking process. Although it is noted that NSW has not been using these chemicals; that legislation to ban such is a positive step.

As part of the review of this industry activity, information should be made available to the general public about the natural existence of BTEX products that occur and are found in drill material and waste water. This issue is considered to be important in the provision of correct information to the general public as it demystifies a very complex mining system with facts through education.

### **Health Effects Generally**

Local concerns have been raised in the process of exploration and petroleum approvals and some of these relate to the impacts that occur on human health. These impacts include stress related illness, air quality impacts, noise induced impacts to list the common areas.

The Social impact study guidelines discussed later in this submission would require consultation directly with the community and through the consultative committee process to identify where concerns may be raised and to identify the methods of result collection that may be undertaken to limit or eliminate the impact.

Council has received submissions from its community raising health concerns for all mining and gas extraction areas. The recognition of stress to landowners and occupants is an area that could be dealt with as part of the social impact assessment.

### **Air Quality**

The air quality of an area pre mining (petroleum) exploration is an important element both to human and animal health but also to the living conditions of residents generally in an area. Air quality monitoring to establish the base dust levels help a community to assess long term changes.

The Council would like a preliminary assessment of air quality to be undertaken pre exploration to determine the overall annual air quality to reduce community concerns once the process of drilling and flaring is undertaken. Many communities do not understand the process of flaring and are concerned due to the sight of flames, and combustion elements.

### **Noise**

Noise is an area that can cause disturbance at the petroleum (gas) exploration and production phase. Concern is raised by residents due to the proximity to residential developments. The drilling process, fracking and operation of generation equipment and pumps impacts on local residents and communities. A greater level of detail as to noise emissions and times of operations need to be established as part of the exploration application stage.

### **Point 2: the economic and social implications of coal seam gas activities.**

Comments in this section are based generally on the terms of reference for this section.

### **Social and Community Consideration in the Preparation of Petroleum Applications (Coal Seam Gas and Natural Gas)**

As indicated previously, petroleum or mining developments have been viewed by Governments and communities as a very valuable employment and income generation industry and governments need to take a greater proactive role in the assessment of impacts and outcomes of exploration and petroleum activities at a community level. In recent years the focus of social responsibilities has changed to the need to identify and review the cumulative impacts on individuals and society generally. Council would request that companies proposing to undertake exploration or production activities ensure that a complete assessment is undertaken to identify not only the impacts on whole communities but also the impacts on individuals, their lifestyles and their futures.



### **Cumulative Impact Assessment**

Applications for exploration of Coal Seam Gas and Natural Gas have generally addressed cumulative impacts from a base that assumes that the exploration and general activity is a first in project and is being undertaken from a greenfield site perspective.

Many communities have more than one exploration or petroleum (gas) project occurring at the same time, the cumulative impacts need to be determined reviewing the reality of all activities in a community. Communities establish a base line where services, accommodation and needs are available to meet an acceptable social balance. Major development activities including exploration and petroleum production change the balance of a town or region and generate new impacts on individuals and society.

Many existing exploration or petroleum proponents would be aware of changes they have generated in a community due to the arrival of the company and commencement of activities. It should be noted that both positive and negative impacts are generated, however these impacts can manifest themselves differently depending on who you are in the community. An example of this is the increased expenditure in the accommodation and retail sectors that generally provides the town with an economic benefit; however a landowner in negotiation with a company to allow access to a property and interrupt a traditional lifestyle may see no benefits and may lead down a path to stress related illness.

Communities and individuals that are impacted by exploration or petroleum activity voice their concerns with the local council, the State member or to the government agencies. Exploration and petroleum companies should review the whole of community and regional activities in the preparation of a community impact Statement to identify cumulative impacts. This is important as unrelated projects may increase the need for accommodation or resources in an area eg. the greater Gloucester community has been subject to extensive exploration drilling projects, a petroleum (gas) project, and mine extension and exploration activities occurring at the same time. This has resulted in some social and community disruption because of a lack of accommodation, increased rental costs, reduction in tourism accommodation, increased road transport, social impacts because of large migration of outside work forces and enhanced community uncertainty of activities.

### **Social Impact Study Pre Exploration and Petroleum production**

It is proposed that a Social Impact Study is undertaken pre exploration, and as part of an Environmental Assessment for all new Petroleum projects to determine the community and individual impacts based on a cumulative review of all major development occurring in a local government area and regionally.

As explained above, many people feel disassociated from the exploration and petroleum (gas) process and are threatened by the changes in their communities as new people arrive to work in the locality, run seismic lines or commence drilling programmes. This response is real and can have health implications on individuals and cause a general unsettling of residents.

Any social impact study should review the areas identified in this document as a minimum assessment. There may be local issues identified that require a more detailed review to determine the level of the cumulative impacts or other social impacts.

This document proposes that the development of the requirements for a social impact study would require the petroleum (gas) proponents to use the services of a consultant, who is principally undertaking social impact studies. The consultant would be required to prepare the study for lodgement with the Department as part of the EA for an approval under the EP&A Act. The consultant would need to demonstrate that they have engaged with local and regional community groups, environmental groups, affected land owners, local government authorities, local medical service providers and business organisations.

### **Agricultural Land**

Successive NSW governments have not identified the areas of the State that should be protected from Mining and Petroleum activity or identified the value of agricultural land and the production capacity of the land for food production, stocking or intensive cropping. Agricultural land value is not solely determined by agricultural soil classification as many rural areas have a productive capacity and a local benefit at a higher level than that identified by soil type. Many areas of NSW have local agricultural enterprises that may not be considered viable from a business return perspective but operate as a family business that generates adequate income to allow for families to survive.

In the identification of social impacts, the proponent should be required to undertake an agricultural land use exercise to identify the current land use activities and the benefit to the local and regional community. This exercise would need to identify the potential impacts on land use during the exploration phase and to identify the long term impacts at a local level from the removal or disturbance of land if gas production occurred in an area.

The disturbance factors should look at the relocation of farm operators due to acquisition and the reduction in carrying or production capacity due to the reduction of agricultural land areas. This should be assessed against local economic value statistics rather than State wide to ensure that the local impacts are reflected and to allow the local community to identify the true cost and benefits.

### **Scenic and Environmental Protection Assessment**

An assessment of the scenic and environmental qualities of an area and the liveability of a locality are considered to be a critical part of the assessment process for all exploration and petroleum applications. The scenic quality of an area flows onto the economics of tourism and liveability overall.

A small number of areas within NSW exhibit scenic, environmental and social qualities that would reflect a need for local preservation from the activities of petroleum (gas) production or major projects generally e.g. The Lapstone Escarpment, Kangaroo Valley and the Vale of Gloucester. It should be incumbent upon the Government to identify these areas in consultation with affected communities and prohibit the issue of exploration licenses in these areas.

This may be enhanced by State Planning to require a higher level of scenic, environmental or social land use identification as part of the state wide LEP review

process and to identify historical qualities as well as potential mineral or petroleum resource recovery value.

### **Economic Assessment**

As part of the assessment process for future mining and petroleum production, an economic assessment should be undertaken by State Treasury in association with NSW Planning to identify the cost benefit verses the social benefits at a state level and at a local level due to the areas identified under social impacts.

This review would allow the Government to assess the economic return to it in terms of royalties from a Petroleum Licence, compared to the disruption and effects on nearby residences and the environment particularly if close to townships and places of environmental significance. The assessment of the social, environmental and economic relationships will determine the value of a project to the State, the region and local community and identify if the return of royalties (being the people's share) warrants the disruptive factors identified in social impact assessments.

The Council is aware that coal seam gas and natural gas extraction can only occur where a resource is available and as such the determination of economic benefit to social impact remains a critical stage in the assessment process.

### **Water Security**

The issue of water security at the exploration and production phases of the application process has become a dominant issue across NSW, with many rural communities identifying that drilling programmes and access through properties may generate impacts on surface and subsurface water bodies.

The impact assessment should be required to identify through site inspections and desk top studies, the location of water bodies, aquifers and farm water requirements. The up front acknowledgement of water and the security requirements of land holders would assist to alleviate the concerns of the community and allow the State agencies an ability to make an assessment of water security, potential impacts and environmental protection requirements.

Issues have been raised in this community as to the potential to discharge water from gas projects to river and creek systems. Concern is raised due to increased salt levels and pH of the water and the changes that may result downstream to other water users.

### **Social Impact Assessment General Comments**

A preliminary assessment has been addressed to identify social impact issues believed to impact on communities by future exploration or petroleum developments. This information is provided to assist the government agencies and future companies to identify the importance of social and community aspects of a development and to allow meaningful consultation with the community.

The following areas would form the minimum requirements for the development of a Social Impact Study for a petroleum (gas) proposal. It should be noted that the information provided by this document would not override or negate any other legal requirements by any other Authority, Act, Regulation or Bylaw or any requirements of the Director General of NSW Planning.

In the development of a Social Impact Matrix, there are many different social impacts that may occur as a result of petroleum developments and only some of these are listed below. The social matrix is used to give guidance as to the types of impacts and benefits of the proposed development. It also highlights areas that require greater attention. The Council would expect that these areas will require an in depth consideration of issues raised and questions needed to target foundation, substance and balance.

Council would also like to request that the Standing Committee consider the need for Social Impact Assessments to be Peer Reviewed. This will provide an independent assessment of the social issues raised by the community or individuals.

### **Community Workshops**

This Council and its community have held a number of workshops over the past five years. Public comments and private submissions identify areas of inclusion in the Social Impact Matrix headings identified below.

- ✚ Accommodation and housing
- ✚ Agricultural land use and impacts (food production, stocking or industrial cropping)
- ✚ Air quality monitoring at PM2.5 levels and general dust identification in the locality
- ✚ Community services and facilities
- ✚ Community structure ( severance, cohesion and identity)
- ✚ Crime and public safety
- ✚ Culture and community values
- ✚ Cumulative impacts of other major projects or exploration activity type
- ✚ Employment
- ✚ Health services
- ✚ Human and animal health issues
- ✚ Impacts on current and future land use
- ✚ Industry resources (local and regional)
- ✚ Interaction between development types and cumulative effects
- ✚ Local economic issues
- ✚ Local government resources ( roads, water, sewer)
- ✚ Population change
- ✚ Recreational and social facilities
- ✚ Risk perception in the community
- ✚ Road infrastructure, potential damage and use levels
- ✚ Social equity
- ✚ Social groups (environmental, women, indigenous, youth, ethnic, aged, etc)
- ✚ Water security and protection

### **Discussion of Social Impact Issues**

The areas identified in this document and the advice provided is to assist the community, petroleum companies and Government agencies to understand the community concerns as to impacts resulting from petroleum (gas) production generally. The companies would need to go into a greater depth of detail in critical areas to assess all impacts.



In any documents developed, the discussion of social impact issues would be from the areas identified in the Social Impact Matrix and would review the nature and extent of impacts based on :

- ✚ Identify the impact categories using the matrix
- ✚ How significant are the impacts ( major or minor)
- ✚ What is the extent of the impacts ( geography, time)
- ✚ Review the local and regional area of the proposal to ensure that impacts in the matrix cover all areas both within the exploration or Petroleum area and adjoining areas where workforce or other social impacts may arise
- ✚ Review the areas where people live in relation to the proposed activity and identify the community social values and characteristics
- ✚ Who may be affected by it ( individuals, groups, communities)
- ✚ Ensure that relevant questions, surveys or interviews have been undertaken to gain a whole of community view.
- ✚ Highlight what data is important to collect and how this is determined in the matrix
- ✚ Provide detailed written comment for each relevant impact category as determined in the matrix
- ✚ Make a summary of the positive and negative effects. Identify the most significant impacts. Use tables, graphs or diagrams to assist in the interpretation of data or information
- ✚ What may be done to limit or eliminate the impact or maximise a benefit

#### **Point 4: the interaction of the Act with other legislation and regulations, including the Land Acquisition (Just Terms Compensation) Act 1991**

##### **Acquisition and Social Equity**

In general, a community takes a realistic position as to petroleum (gas) production and recognises the benefits that coal seam gas can bring to a local and State economy. The communities have also taken a realistic stance as to the impacts that coal seam gas can have on the environment, and the social fabric.

The Council understands that communities develop where mining has proved beneficial for employment generation but concerns are raised locally as to long term habitat protection, or concerns about petroleum (gas production) near rivers and water courses or water discharges. Concern has also been raised as to the social issues identified previously. Communities have developed a strong political voice and are collectively gathering, to force change. The Council does recognise that the Government and the petroleum industry is positively working to develop changes and improve consultation with communities to ensure sustainable out comes.

There needs to be a balance between gas exploration and production at a local level so that it does not impact on the lives of people or the environment overall. It is also recognised that exploration and petroleum companies have a State endorsed mandate to undertaken petroleum activities as the royalties provide community benefit. As part of the review into social equity issues surrounding exploration and petroleum activity, it has been recognised that not all land owners wish to move or alternatively can afford to move.

There are examples where CSG and agriculture and/or rural residential living can co-exist. In these instances the Council would like to propose a system of agreed co operation between the petroleum companies and the land owners, where a land owner

can stay within their residence or on their farm and the petroleum company agrees to undertake works or compensation.

Although this concept is not new, the general public are in principle unaware of the various methods of compensation available.

As an example; a land owner due to noise concerns, may request the company to provide sound insulation, air conditioning and double glazed windows as an alternative to acquisition. This may be based on location, life of the mining or gas development or a personal wish to remain on that land.

A land owner may request that for the life of the development that a monthly or yearly compensation amount be paid to offset issues such as noise, vibration or general disturbance factors. It is suggested that this is registered with the land owner and not paid to a tenant or as a lump sum. The agreed monthly or yearly value could then transfer to future owners as ongoing compensation or help an owner offset losses in rental due to disturbance factors.

The area of social equity and acquisition is real in rural areas, because the house and land prices are lower than larger centres or cities. The acquisition of a house for a person and the price paid under the Just Terms Compensation Act may not be sufficient to allow a person or family to relocate to another town or even within the town. Petroleum developments occur on rural land generally and single houses with no land or a just economically viable property cannot receive sufficient compensation to relocate and recommence farming or allow a person to own a dwelling in another location. The acquisition process may be fair but it is not always valid.

Under these conditions, it would be appropriate for the petroleum companies to purchase a similar property or dwelling for the resident as a straight swap or purchase a similar dwelling in a town, regardless of over compensation values, to allow the resident to relocate and not be worse off or substantially disadvantaged. The purchase or acceptance of relocation would need to be in agreement between the two parties and may require the petroleum company to have an independent mediator available to assist in the resolution of issues that arise.

### **Conclusion**

Communities across NSW are seeking changes to how the petroleum (gas) industry progresses. Our local community has raised concerns in many forums, including those undertaken by the Council as to the protection of scenic quality, ensuring that agricultural areas remain productive and for the need for a State wide strategic plan to be developed to locate petroleum (gas) in areas of strategic benefit.

Like many communities, concerns raised by a community are only considered by Government agencies at the approval stage. The inclusion of community concerns at this stage is too late and realistically, the companies have an expectation that they will receive an approval as they have followed the agency requirements. The community is therefore requesting the State Government to be looking forward as to how community attitudes and options are developed to enhance exploration and petroleum (gas) projects and to set a direction for viable petroleum developments across NSW.

As part of the community engagement in the coal seam gas industry, The State Government's Mineral Resources section should develop an up to date educational



package that covers in detail all steps required to be undertaken from exploration, production and community use of the end product. Education and freedom of information will assist individuals and communities to identify and understand the processes behind coal seam gas development, the responsibilities and landowner's rights.

The Council is hopeful that the information contained in this document and the community consultation being undertaken will assist the Government and future companies to acknowledge that a change is required to meet community and individual expectations.

Yours faithfully

Allan Young  
**GENERAL MANAGER**