

**Submission  
No 487**

## **INQUIRY INTO COAL SEAM GAS**

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**Position:** Deputy Chair  
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## **Community Environment Network Inc.**

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*An alliance of community and environment groups from Lake Macquarie, Wyong and Gosford.*

NSW Coal Seam Gas Inquiry – Legislative Council  
Department of Planning  
GPO Box 39  
SYDNEY  
NSW 2001

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### **Submission: NSW Inquiry Into Coal Seam Gas**

The Community Environment Network works for Ecologically Sustainable Development in Gosford, Wyong and Lake Macquarie and against threats to it. Test drilling has begun for coal seam gas at Catherine Hill Bay in the City of Lake Macquarie, a region with rich biodiversity and cultural values. Another is planned at neighboring Fullerton Cove in the Hunter Estuary an estuarine ecosystem valuable for its rich biodiversity especially as a feeding stopover for migratory birds close to the Tomago Sandbeds a highly valued source of drinking water for Hunter Water.

CEN would like to respond to the NSW Inquiry into Coal Seam Gas.

CEN Response to Terms of Reference:

#### **1. The environmental and health impact of CSG activities**

- a) Impose a moratorium on CSG mining while an environmental strategy for CSG is developed with full community and independent scientific input.
- b) Ban CSG extraction in drinking water catchments, State Conservation Areas and National Parks and assess the potential for cumulative impacts on the Great Artesian Basin.
- c) Require CSG companies to do full independent scientific assessments of the effects of CSG mining on groundwater aquifers before government consent is given. The “Time Machine” centrifuge at the University of NSW Water Research Laboratory in Manly Vale acts as an environmental “time machine” allowing researchers to preview the long-term effects on the groundwater aquifers of activities such as CSG mining. NSW now has this world leading technology enabling industry and government to implement this assessment.
- d) Ensure that gas mining companies are required to obtain a water license from the affected water resource area.
- e) Ban the use of BTEX chemicals in CSG fracking operations until full independent scientific assessments on their toxicity are assessed.
- f) Mandate a safety zone of at least one km around all rivers, wetlands and significant swamp clusters to protect them from further damage from mining under or too close to water courses.
- g) CSG mining represents a serious threat to human health due to potential contamination of drinking water used by humans and for agricultural production with chemicals used in drilling or fracking as well as those present in coal seams.

- h) Human health is at risk from leakage of toxic methane and other gases during gas production and migration of methane into water supplies.
- i) Make mining proposals and activities subject to the provisions of the *Native Vegetation Act 2003*.
- j) CSG is a fossil fuel and a significant source of greenhouse gas pollution. It generates more than 40 times the amount of greenhouse gases per unit of energy generated than solar or wind. CSG is a major contribution to global warming, particularly when fugitive emissions and liquefaction prior to export are fully considered.

## 2. **The economic and social implications of CSG activities**

- a) Local government and local communities are currently excluded from the planning process. Public participation and legal standing are inadequate e.g. Lake Macquarie City Council were not required to give consent to a test CSG drilling at Catherine Hill Bay and Newcastle City Council to a test drilling site at Fullerton Cove a migratory bird feeding habitat.
- b) Food security is threatened by risks to groundwater and loss of prime arable land e.g. Liverpool Plains, Northern Rivers.
- c) CSG mining is likely to negatively impact other industries e.g. tourism, organic farming, vineyards and orchards.
- d) The local community needs to be fully consulted in the planning process.

## 3. **The role of CSG in meeting the future energy needs of NSW.**

- a) CSG is not required for the future energy needs of NSW. Most CSG is mined for export not to meet local energy needs.
- b) Fugitive emission impacts are thought to be large and need to be factored into the greenhouse gas equation.
- c) Renewable energy particularly concentrated solar thermal is a much more sustainable energy source and ideally suited to areas such as Narrabri and Moree with high rates of solar energy and little cloud cover.
- d) The enormous expansion of the fossil fuel industry in NSW is delaying the transition to renewable energy alternatives.

## 4. **The Interaction of the Act with other legislation and regulations, including the Land Acquisition (Just Terms Compensation) Act 1991**

- a) Effective land use planning and regulation is needed in NSW that considers the environmental, agricultural, hydrological and community values of land as well as the economic value in the overall assessment process.
- b) Establish a watch dog body with powers to revoke mining licences where conditions of approval have been breached. This must be an effective government body that can force mining companies to comply with the conditions their mine was approved under. Too often it is left to local residents to enforce conditions and they have little chance against the sort of resources miners can field such as high paid lawyers and scientific experts.
- c) The CSG mining is exempt from environmental statutes such as the Native Vegetation Act 2003 and the Water Management Act 2000. This needs to be reversed immediately.
- d) Legislation controlling activities on public lands are inadequate to prevent CSG mining, which when approved effectively privatizes public lands.

- e) Interaction with Federal legislation at the exploration phase is poorly understood and not enforced i.e. extensive exploration in the Pilliga without Federal government approval first.
- f) A gas Ombudsman is needed to investigate and respond to complaints related to mining and exploration activities.

**5. The impact similar industries have had in other jurisdictions.**

- a) In Queensland there have been significant problems with leaking wells, impacts on groundwater evidenced from drops in bore levels, growing social discord, an exploding well at Dalby, major impacts on natural values near Gladstone, alienation of farmland and clearing of natural vegetation.
- b) Overseas experience: Regular fires associated with CSG wells, pipelines and facilities. Chemicals used in fracking in the US shown to be toxic to humans. Occurrence of an earthquake following fracking near Blackpool, UK caused the closure of the drilling program.
- c) Compliance needs to be strengthened  
Increase the number of compliance officers to at least 6 dedicated fully to the CSG industry so that industry best practice standards are adhered to. Incidents such as the Montara oil and gas spill in the Timor Sea illustrate a culture of minimal inspection and compliance. At Casino there have been a series of methane leaks due to a lack of government oversight. The compliance officers should be able to issue an immediate stop notice, issue large fines or revoke the license to mine where conditions of approval are breached or impacts on the environment are identified.

**6. Federal Regulation CSG Industry**

Regulation of the coal seam gas industry needs to be at the Federal level to ensure national standards especially now that off shore gas exploration has begun in NSW e.g. PEP11 offshore from Port Stephens in 2010.

**7. Improved Environmental Standards**

Environmental standards for exploration and mining need to be improved, more clearly defined and more transparent.

**8. Audit Gas Wells and Drill sites**

Conduct regular audits of gas wells and drill sites across NSW to assess how operators have complied with conditions of approval for their exploration licenses and operational wells.

Thank you for the opportunity for the community to comment on The Legislative Council Inquiry into Coal Seam Gas. The Community Environment Network of the Central Coast of NSW welcomes this opportunity to give feedback.

Yours sincerely,

Avril Lockton  
Deputy Chair, Community Environment Network.