

Mining & Industry Projects
Department of Planning and Infrastructure
GPO Box 39, Sydney, NSW 2001
email: plan_comment@planning.nsw.gov.au

7 February 2013

Dear Sir/Madam,

Submission of Objection: Camden Gas Project Stage 3, Project Application 09_0048

The Nature Conservation Council of NSW (NCC) welcomes the opportunity to comment on the Camden Gas Project Stage 3.

NCC is the peak environment body for New South Wales, representing over 100 organisations across the state. We have long-standing experience in state environmental assessment and planning and are extremely concerned with the AGL proposal to extract coal seam gas (CSG) in the south western Sydney region.

This project would install up to 66 coal seam gas (CSG) wells across Campbelltown's Scenic Hills from Denham Court in the north to Mount Annan in the south, and into Camden's newest suburbs. The associated storage tanks, lateral wells, pipelines and access roads will industrialise these residential Sydney suburbs and irreparably damage the Scenic Hills area.

NCC objects to the proposal on the following grounds.

Camden Gas Project has been operating for 10 years and the impacts on groundwater, air quality and the local community have not been adequately monitored. AGL has been operating under an Environmental Protection Licence (EPL No. 12003), yet it has been allowed to self-monitor its compliance, self-investigate incidents and self-report the outcomes. This lack of independent assessment and monitoring makes it impossible to know the true impacts of these operations. Third party consultants and external laboratories that are engaged and paid by the industry lead to a conflict of interest and are not independent.

Health risks

Fracking, the process of pumping a mix of water, sand and toxic chemicals into the coal seam at pressures sufficient to crack the rock and allow the gas to flow, and storage of water extracted as part of the pumping process is very risky. Large volumes of contaminated water are stored in holding ponds that have in other areas burst or overflowed, releasing contaminants into the environment. The human health risks, especially to people living within a few hundred metres of drilling sites, are unknown.

A NSW Parliamentary inquiry into CSG mining has shown that of the 23 chemicals used in fracking, only two have been assessed and those two chemicals have not been assessed for their use in hydraulic fracking.¹

As of December 2011, 85% of the production wells in the Camden Gas Project had been fracked with inadequate monitoring of its impacts, especially on water. AGL claims the horizontal wells in the proposed Stage 3 will reduce the need for fracking, yet it has reserved the right to frack these wells in the future. Recent information obtained under freedom of information laws revealed that fracking was more likely to be used during coal seam gas drilling near Sydney than in many other gas fields around Australia.²

Due to risks associated with fracking, NSW Health has called for a “comprehensive assessment of potential risks to human health” in relation to CSG drilling in south-western Sydney.³

Recent ambient air studies in Colorado, Texas, and Wyoming, USA show the unconventional natural gas extraction process “results in direct and fugitive air emissions of a complex mixture of pollutants from the natural gas resource itself as well as diesel engines, tanks containing produced water, and on-site materials used in production, such as drilling muds and fracking fluids”.⁴

Impacts on air quality from the AGL expansion are unknown and need to be adequately assessed and mitigated before any expansion can occur.

Threats to water resources

CSG wells punch through freshwater aquifers, extract massive volumes of groundwater and produce millions of litres of contaminated wastewater laced with carcinogens, salts and heavy metals. The development of the Camden Gas Project poses a serious risk of toxic chemicals and wastewater entering and contaminating the local bore water supplies and water catchments.

Risks to water resources in the Sydney region from the proposed project have not been adequately assessed. While AGL claims the geology of the Sydney Basin is well known, their rationale for constant modification of prior stages of the Camden Gas Project seems to contradict this.

The blowout of their Menangle gas well in 2011 has put AGL under scrutiny for their CSG operations in the area. AGL failed to report the incident and it only came to light by accident when a television crew was filming in the area. The water, foam and methane headed in the direction of the Sydney Upper Canal, an essential part of the Sydney Water Catchment supply.⁵ The incident also highlights the risk of wellhead blowout in CSG mining.

Inappropriate development

The Environmental Impact Assessment for the project relies on clause 7(2) of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (Mining SEPP) to establish that the project is permissible on land zoned Environmental Protection

¹ New South Wales Parliament Legislative Council General Purpose Standing Committee No. 5, *Inquiry into coal seam gas, 2012. (Report No. 35)*, p.71.

² As stated in letter and associated materials from NSW Chief Scientist and Engineer Mary O’Kane, to Resources and Energy Minister Chris Hartcher.

³ Industry and Investment NSW. *Identification and review of standards for hydraulic fracturing, Mine Safety Performance Branch*, November 2011. .

⁴ Lisa M. McKenzie, Roxana Z. Witter, Lee S. Newman, John L. Adgate. “Human health risk assessment of air emissions from development of unconventional natural gas resources”, *Science of the Total Environment*. Accepted Feb 2012, in press.

⁵ Scenic Hills Association press release, http://scenichills.org.au/doc/SHA_Media_Release_10-8-11.pdf

(Scenic) under Camden Local Environment Plan 48 and Campbelltown Local Environment Plan (District 8) (Camden and Campbelltown LEPs).

Specifically, clause 7(2) of the Mining SEPP provides that petroleum production development can be carried out with consent on land which development for the purposes of agriculture or industry may be carried out (with or without development consent). Agriculture is permitted in the Environmental Protection Zones of the Camden and Campbelltown LEPs.

Permissibility alone does not mean that development should go ahead in a particular area. It is important to consider the proposed development in the context of the objectives of the zone and its impact on the environment.

In this case, it is proposed to carry out petroleum production development in Environmental Protection (Scenic) zones. While agriculture is permitted in these zones, agriculture is not the primary purpose of those zones. The Environmental Protection (Scenic) zoning recognises the environmentally sensitive nature of the zone and aims to protect the scenic value of the land.

This, together with the environmental and health impacts of the development outlined in this submission, some of which are still uncertain, provide compelling reasons why this development should not be permitted to go ahead.

The size of the proposed well clusters and any fracking of horizontal wells are both new and untested in the proposed site and will therefore be entirely experimental with unknown outcomes on health and property, including the possibility of subsidence under many urban properties. The consequent impact on land and house values for existing land and homeowners may be devastating. Additionally, the project will clear at least 4.88 hectares of native shrubland.⁶

Many local residents in the Camden and Campbelltown area have expressed their deep concerns and opposition to having such a mining operation occurring in their neighbourhood. A series of recommendations to the project were put forward by the Campbelltown City Council that were not heeded by AGL, leading the council to oppose the project.⁷

Contribution to climate change

Extraction, processing and combustion of CSG, together with fugitive emissions, can result in total carbon emissions comparable with extracting and burning coal. Recent research from Southern Cross University has revealed high levels of methane leakage from gas fields. The university's investigation into fugitive methane gas leakage in the Tara area found methane emissions in the area were 3.5 times greater than in the surrounding area⁸. Methane is 72 times more potent than carbon dioxide as a greenhouse gas over a 20 year period⁹. The release of substantial amounts of methane, in addition to methane flares at wellheads, industrial development and the burning of coal seam gas, contribute to dangerous climate change.

Developing projects that generate new greenhouse gas emissions directly conflicts with state and federal policies to address climate change. Furthering fossil fuel development is irresponsible given

⁶ AECOM (on behalf of AGL Energy Limited). *Camden Gas Northern Expansions Submission Report*, October 2012, page 33.

⁷ Campbelltown City Council, Reports of the Planning and Environment Committee Meeting, 7.30pm, Tuesday, 7 December, 2010. p.12-27, <http://scenic hills.org.au/doc/CCC-141210-pePARTONE.pdf>

⁸ *Submission on National Greenhouse and Energy Reporting (Measurement) Determination 2012 - Fugitive Emissions from Coal Seam Gas*, Dr Issac Santos and Dr Damien Maher, Southern Cross University

⁹ International Panel on Climate Change. (2007). *IPCC Fourth Assessment Report*. Cambridge, UK & New York, USA: Cambridge University Press, p.212.

global greenhouse gas emissions continue to rise and Australia is already suffering from the impacts of a warming climate including, increased floods, droughts and heat waves.

Conclusion

This project poses significant threats to the health of the community, the region's water resources and the climate. We urge the NSW Department of Planning and Infrastructure to recommend that the Camden Gas Project Stage 3 not be approved.

We recommend that the NSW Government prohibit mining and gas operations in residential areas, on public lands and in drinking water catchments.

Sincerely,

Katherine Smolski
Campaigns Director
Nature Conservation Council