

26 April 2013

Ms Mary O'Kane
NSW Chief Scientist and Engineer
By email: csgreview@chiefscientist.nsw.gov.au

Dear Ms O'Kane

Independent Review of Coal Seam Gas in New South Wales

As a community legal centre specialising in public interest environmental and planning law, EDO NSW welcomes the opportunity to comment on the NSW Chief Scientist and Engineer's review of coal seam gas (CSG) activities in NSW. This submission focuses the Terms of Reference (ToR) where EDO NSW believes there is opportunity for stronger interface between science and law, and areas where scientific principles are inadequately captured by the current regulatory framework. As such, our submission is limited to commenting on the first three ToRs. We also attach two recent submissions to further assist the independent CSG review:

- **Attachment A:** EDO NSW Submission on draft CSG exclusion zone provisions¹
- **Attachment B:** Australian Network of Environmental Defender's Offices (ANEDO) submission to COAG Standing Council on Energy and Resources (SCER) on the SCER's *Draft National Harmonised Regulatory Framework for CSG*.²

ToR 1 - Undertake a comprehensive study of industry compliance involving site visits and well inspections. The Chief Scientist's work will be informed by compliance audits undertaken by regulatory officers, such as the Environment Protection Authority and other government agencies

EDO NSW provides free initial legal advice on an environmental or planning law issues. EDO NSW deals with around 1,200 telephone inquiries per annum, with about 65% coming from regional and rural NSW. Through this service, EDO NSW has received a number of requests for advice from clients who are concerned about the failure of companies undertaking CSG activities to comply with regulatory conditions. In many cases the community has reported these concerns to either the Environmental Protection Authority (EPA) or the Department of Trade & Investment (DTI) but, in the communities view, the issues have been inadequately investigated and reported on.

For example, a May 2012 report by conservation groups highlighted a number of breaches of petroleum exploration licence conditions from unauthorised discharges of CSG water and treated water in and around the Bimblewindi Water treatment plant.³ A key finding of that report was that "(d)espite claiming to be undertaking a comprehensive investigation of coal seam gas operations in the Pilliga from early August 2011, the NSW Government failed to identify or act on the major breaches that were reported by environment groups after that

¹ Available at: www.edo.org.au/edonsw/site/pdf/subs/130412CSGexclusionzonesSEPPamendment.pdf.

² Available at: www.edo.org.au/edonsw/site/pdf/subs/130228CSG_draft_national_framework_ANEDO.pdf.

³ Northern Inland Council for the Environment & the Wilderness Society, "The Truth Spills out: A case study of Coal Seam Gas Exploration in the Pilliga", May 2012.

date". This was also highlighted in the NSW Legislative Council inquiry into CSG in 2011-12. As a consequence of this demonstrated regulatory failure, EDO NSW strongly encourages the Chief Scientist to go beyond consideration of government agency compliance audits and include consideration of CSG compliance issues raised by adjacent land holders and community organisations.

ToR 2 - Identify and assess any gaps in the identification and management of risk arising from coal seam gas exploration, assessment and production, particularly as they relate to human health, the environment and water catchments

Need for full environmental assessment

Given the nature of CSG activities where pilot production can have the same kinds of environmental effects as full-scale production, albeit on a smaller scale, EDO NSW recommends that all CSG projects should require a full environmental impact assessment prior to approval. In 2012, EDO NSW assisted the Fullerton Cove Residents Action Group (FCRAG) to bring legal proceedings against the DTI in relation to the approval of Dart Energy's coal seam gas pilot project in Fullerton Cove. The proceedings were based on the fact that, in FCRAG's opinion, DTI did not consider any groundwater assessment or consider an appropriate ecological assessment before granting approval for the project. The project site is next to the Hunter Estuary Reserve, an internationally listed wetland which is home to many migratory birds. FCRAG also argued that a full Environmental Impact Statement (EIS) was required, including mandatory public consultation, which had not been prepared for Dart's project. More information on this matter is available on the EDO NSW website but a summary of the issues raised is replicated here:

Justice Pepper found that the Department's failure to obtain or consider any groundwater assessment before approving the pilot project under Part 5 of the EPA Act did not amount to legal error. In making this finding, her Honour took into account several factors, including that it was a pilot project only, and that the Department had knowledge of the geology of the area generally. The Court also found that even though no '7-part test' for threatened species and ecological communities was carried out, it was sufficient for the Department to have 'general regard' to the 7-part test for threatened species. Finally, the Court found that this pilot project was not likely to have a significant effect on the environment and therefore no EIS was required.

The Court's finding in this case highlights significant problems with leaving the assessment of those impacts up to Part 5 of the EPA Act for CSG pilot projects. This is particularly problematic because most CSG exploration (including pilot production) involving 5 or fewer wells is assessed under Part 5. The judgment confirms that Part 5 of the EPA Act is unable to properly deal with assessment of CSG pilot projects, particularly when it comes to groundwater. If CSG pilot production can be approved under Part 5 without a groundwater study, it is difficult to see how the community can have any confidence that groundwater impacts are being rigorously assessed, or indeed at all. It is important that the new planning system addresses these deficiencies.⁴

Embedding ecologically sustainable development

Through comments on the current NSW Government planning review process, EDO NSW has highlighted the need to embed ecologically sustainable development (ESD) throughout strategic planning and decision making.⁵ Achieving ESD will only be possible if cumulative impacts are considered in project assessment and management decisions are made on a catchment or aquifer scale.

⁴ Fullerton Cove judgment highlights need for CSG law reform, available at <http://edonsw.wordpress.com/>

⁵ EDO NSW "Submission on A New Planning System for NSW – Green Paper", September 2012. Available at: http://www.edo.org.au/edonsw/site/pdf/subs/120914A_New_Planning_System_for_NSW.pdf

As stated in a recent submission on draft State Environmental Planning Policy (SEPP) amendments dealing with Coal Seam Gas Exclusion Zones,⁶ EDO NSW believes that appropriate cumulative impact assessment is currently a major gap in the environmental assessment process. EDO NSW recommends that prior to any CSG project approval, research should be conducted to identify a region's environmental baselines, and limits to the environment's carrying capacity for all environmental features, including aquifers. Once these baselines have been established, project approvals should only be granted where mining or any other development will not compromise the catchment's limits and capacity.

This proposal for a catchment-centred management approach is consistent with EDO recommendations on harmonising national CSG regulation,⁷ and reflects the findings of a recent review of CSG regulation by the former NSW Natural Resources Commissioner.⁸ A cumulative impact assessment tool developed by the Namoi Catchment Management Authority (CMA) is a practical example of this approach. The Namoi tool uses comprehensive environmental baseline data to establish the carrying capacity of the landscape, and then models the cumulative impact of potential mining developments to see what activities can take place without exceeding this capacity.⁹ As Dr Williams notes in his review, 'Unfortunately the current legislative arrangements in NSW mean that the outputs of the Namoi CMA tool will have no legislative power.'¹⁰ EDO NSW recommends the Government *adopt and legally integrate* such catchment-centred tools and approaches in the planning system.

EDO NSW remains concerned about the lack of specific protection or strategic recognition of environmental land uses and ecological values beyond water.¹¹ This is despite recent investment in strategic mapping and assessment of 'High Conservation Value' areas in NSW through the Government's Strategic Regional Land Use Policy process.¹² In establishing environmental baselines, EDO NSW strongly recommends the protection scientifically-defined High Conservation Value lands.

ToR 3 - Identify best practice in relation to the management of CSG or similar unconventional gas projects in close proximity to residential properties and urban areas and consider appropriate ways to manage the interface between residences and CSG activity

⁶ EDO NSW "Submission on Coal Seam Gas Exclusion Zones in NSW – draft Mining SEPP amendments", April 2013. Available at:

<http://www.edo.org.au/edonsw/site/pdf/subs/130412CSGexclusionzonesSEPPamendment.pdf>

⁷ ANEDO "Draft National Harmonised Regulatory Framework for Coal Seam Gas 2012", February 2013.

http://www.edo.org.au/edonsw/site/pdf/subs/130228CSG_draft_national_framework_ANEDO.pdf.

⁸ John Williams Scientific Services Pty Ltd "An analysis of coal seam gas production and natural resource management in Australia - Issues and ways forward", October 2012, recommendations 1 and 2.

⁹ See John Williams Scientific Services, *ibid* (2012), p 102; see further EcoLogical Australia, *Proposed Framework for Assessing the Cumulative Risk of Mining on Natural Resource Assets in the Namoi Catchment*, prepared for Namoi CMA (2011).

¹⁰ John Williams Scientific Services, *ibid* (2012), p 102. The Report continues: 'The existing arrangements in NSW and Queensland and federally do not use an assessment of regional landscape capacity and landscape limits to determine what developments should proceed.'

¹¹ EDO NSW "Submission on Coal Seam Gas Exclusion Zones in NSW – draft Mining SEPP amendments", April 2013. Available at: www.edo.org.au/edonsw/site/pdf/subs/130412CSGexclusionzonesSEPPamendment.pdf.

¹² EDO NSW understands that the term 'High conservation value' has been used in the mapping process agreed between the Office of Environment and Heritage and the Department of Planning during the development of the SRLUP in 2011-12. The term 'high conservation value' has developed internationally (see for example www.hcvnetwork.org) but would need to clear definition in the NSW context. Related terms in NSW include 'environmental conservation zone' and 'environmentally sensitive area' (see, for example, the Mining SEPP cl 3).

The NSW Government recently sought comment on a draft State Environmental Planning Policy (**SEPP**) amendment dealing with Coal Seam Gas Exclusion Zones. The basis of this SEPP is to protect 'critical industry cluster' designated land from CSG activities and also provide a 2km buffer zone around most areas zoned residential. In our submission to that consultation EDO NSW noted that "the proposed exclusion zones for residential and critical industry cluster lands (surface *and* underground) are an important step towards improved strategic land use planning and the resolution of incompatible land uses"¹³. However, we also noted community, scientific and legal concerns about the limits of the proposed exclusion zones.

While EDO NSW is supportive of the draft buffer zones as an initial step, from a scientific perspective, a 2km buffer zone fails to adequately consider the environmental features such as High Conservation Value lands (see above) and aquifers. As stated in that submission,

EDO NSW believes exclusion zones should also apply to important environmental areas. In this context, buffer zones will need to cover the full environmental resource or asset (such as an aquifer) rather than be based on a simple distance measure. The buffer zone will also need to consider connectivity between assets such as groundwater and surface water... EDO NSW recommends that best available scientific information, including geospatial mapping of sensitive areas, should form the basis of exclusion zones – to protect environmental and other land uses (such as 'critical industry clusters'). The two kilometre buffer zones could therefore be extended further on scientific grounds (consistent with the objectives of the national partnership agreement...).

We hope this submission, including the attachments below, are of assistance to the review of CSG in NSW. For further information or assistance, please contact us on (02) 9262 6989.

Yours sincerely,

EDO NSW



Ms Rachel Walmsley
Policy and Law Reform Director

Attachment A: EDO NSW Submission on draft CSG exclusion zone provisions¹⁴



130412CSGexclusionzonesSEPPamendment.

Attachment B: Australian Network of Environmental Defender's Offices (**ANEDO**) submission to COAG Standing Council on Energy and Resources (**SCER**) on the SCER's *Draft National Harmonised Regulatory Framework for CSG*.¹⁵



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¹³ <http://www.edo.org.au/edonsw/site/pdf/subs/130412CSGexclusionzonesSEPPamendment.pdf>

¹⁴ Available at: www.edo.org.au/edonsw/site/pdf/subs/130412CSGexclusionzonesSEPPamendment.pdf.

¹⁵ Available at: www.edo.org.au/edonsw/site/pdf/subs/130228CSG_draft_national_framework_ANEDO.pdf.