

**Water Trigger Review
Department of Environment
GPO Box 787
Canberra ACT 2601**

27 January 2016

Submitted via: wtreview@environment.gov.au
and via the Online Submissions process

Dear Sir/Madam,

Integrated AGL Submission on the Review of the EPBC 'Water Trigger' Legislation

In response to the call for stakeholder submissions by the Department of the Environment (DoE) on the operation and performance of the EPBC 'water trigger' legislation, AGL Energy Ltd (AGL) provides the following comments on each of the six Terms of Reference (ToR).

AGL currently operates a coal seam gas (CSG) production wellfield in NSW (the Camden Gas Project) and is completing exploration activities in the Gloucester Basin.

As background, AGL's CSG production and exploration projects are located in the Permian Sydney and Gloucester Basins respectively in NSW. The Camden and Gloucester CSG projects were approved prior to the introduction of the 'water trigger' legislation. The Camden North expansion (now withdrawn) was the only AGL CSG project activity formally referred to DoE to determine whether it was a controlled action under the 'water trigger' legislation. Hence AGL's comments on the review of the 'water trigger' legislation are provided in this context and relate only to:

- Coal seam gas (CSG) activities and proposed developments in NSW; and
- CSG activities in Permian coal basins located across NSW.

TOR 1. Examine the appropriateness of the regulation including whether it is necessary and well targeted

AGL believes that via DPI Water in NSW there is sufficient water resource protection under the Water Sharing Plan (WSP) process that manages allocations to the environment and consumptive users together with application of the Aquifer Interference Policy requirements. There is also increasingly more water resource monitoring, assessment and reporting required under Environment Protection Licences (EPLs) (issued and regulated by the NSW EPA) for CSG activities across NSW.

It is not possible (solely on the basis of water resource impacts) to justify a similar assessment process by Commonwealth departments and committees using the EPBC legislation.

The WSP covering the Camden Gas Project commenced in 2013 while the WSP for the Gloucester Gas Project is planned to commence in 2016. The Aquifer Interference policy was introduced in September 2013, and EPLs for our CSG activities have been in place since 2004 (Camden) and mid 2014 (Gloucester). All these instruments are effectively

managing the produced water generated from CSG production and exploration activities in NSW and protecting overlying water resources.

Environmental water requirements are factored into determining the Long Term Average Annual Extraction Limits (LTAAEL) under the gazetted WSPs which are close to 100% complete across NSW. All consumptive water use is then accounted for and allocated against the LTAAEL; this includes basic rights and incidental water that is captured by mines, petroleum activities and other extractive industries. Water Access Licences (WALs) are required by proponents under the respective WSPs to authorise their pumping activities. As these incidental water uses are captured together with the usual consumptive water uses for stock, domestic, irrigation, industrial and drinking water supplies then all uses (including produced water from CSG projects) are accounted for and there should be no threat to the water resources that are regulated under each WSP.

The water trigger requirement to assess the “impacts of associated salt production and/or salinity” as well as impacts to water resources is somewhat of an anomaly. AGL sees no need to specifically reference salinity in the regulation or associated guidelines. It would only appear to be relevant where reinjection was proposed via Managed Aquifer Recharge (MAR) or produced water disposal was proposed to shallow groundwater or surface water.

TOR 2. Examine the effectiveness of the regulation in protecting water resources from the impacts of coal seam gas and large coal mining projects, including the role and scope of work ascribed to the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC)

The effectiveness of the regulation is not a matter for industry to comment on and is for others to examine and decide. AGL would however emphasise that not all coal basins are the same and not all coal basins are located in areas where there are important water resources. In fact in NSW, most of the sedimentary/fractured rock aquifers in the Permian coal basins are known and mapped as ‘less productive groundwater sources’ by DPI Water rather than highly productive groundwater sources. Many recent industry, agency and research CSG studies of deep groundwater systems in these Permian coal seams in NSW with overlying aquitards have proven there is negligible connectivity with overlying alluvial groundwater sources and surface water features.

If anything, the regulation needs to be more focused on all coal mining with its major surficial and water resource impacts where streams are impacted/diverted, and aquifers are truncated and removed rather than all coal seam gas projects where the landscape is mostly left unchanged, and streams and beneficial aquifers are left intact.

In reviewing the EPBC ‘water trigger’ legislation, the reviewer should also consider the technical conclusions from the independent studies being conducted by CSIRO, Geoscience Australia and others under the Bioregional Assessment Program.

TOR 3. Identify any opportunities to improve the effectiveness of the regulation

Following on from AGL’s comment in TOR 2 above, it is inappropriate in the regulation for there to be a blanket reference to water resources when there are substantial differences in the quality, quantity and linked ecosystems attributes of the groundwater systems located in the different coal basins.

AGL considers there is little need for the regulation in NSW given the low permeability groundwater systems that occur in the deeper coal seams of the Permian coal basins, lack of connectivity with shallow water resources, and the protection measures afforded by the State’s WSP and EPL processes.

However if the EPBC ‘water trigger’ assessment process prevails, then a tiered assessment system whereby low value and less productive groundwater systems with little surface expression are filtered out and are not subject to the ‘water trigger’ or are self-assessed and found to not have a significant impact on water resources is required. If this can’t be accommodated as part of the legislation it should be reflected in any revision to the guidelines.

It is inefficient for DoE and the IESC to be assessing negligible impact developments.



TOR 4. Examine the efficiency of the regulation in protecting water resources from the impacts of coal seam gas and large coal mining projects



The regulation has generated uncertainty for industry and other stakeholders regarding the necessity for new regulatory approvals. For example, some CSG exploration programs that are temporary and small scale that industry has investigated and modelled as having no significant impact on water resources are claimed by others as potentially having a significant impact on water resources. The current solution is to refer the program to DoE to determine whether it is or is not a controlled action.

This uncertainty and the referral process has delayed development applications and work programs due to the necessity for additional technical studies, numerical modelling, independent assessments and legal opinion. As well as the time delays there are associated compliance and delay costs for project activities. AGL's experience is that these can be in the order of hundreds of thousands of dollars even for small work programs.

For AGL, the regulation has not delivered any efficiencies or savings for our CSG projects in NSW.

In addition, bilateral agreements between State and Commonwealth agencies have been implemented to achieve an efficient approval process without diminishing the standard of environmental assessment. This approach should apply to the 'water trigger' process as well.

TOR 5. Identify any opportunities to reduce or simplify the regulation whilst maintaining its effectiveness

Since 2013 in NSW there has been effective environmental assessment and water resource protection under the State's water and environmental legislation, separate WSPs that manage all consumptive uses from a water source, and EPLs that monitor environmental impacts. Consequently AGL believes there is no necessity for a duplicate process under the Commonwealth EPBC Act assessment process.

TOR 6. Identify any recommended appropriate future review points of the regulation

Again the State water management, assessment and reporting processes in NSW are effective measures to manage important water resources and any unforeseen or longer term impacts. AGL believes that no longer term assessment is required under the EPBC 'water trigger' provisions.

If you require any other information regarding AGL's submission, please contact [REDACTED]

Yours sincerely,

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**Technical Specialist - Hydrogeology
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