

29 July 2013

James Barker
Assistant Secretary
Regulatory Reform Branch
Department of Sustainability, Environment, Water, Population and Communities
GPO Box 787
Canberra ACT 2601

Dear Mr Barker

Thank you for your letter of 19 July 2013 seeking advice from the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (the Committee) on the draft significant impact guidelines (the guidelines) for the water resources, in relation to coal seam gas and large coal mining development, matter of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The Committee notes that the significant impact guidelines are a policy document intended to provide guidance on the application of the new water related matter of national environmental significance to proponents of current and future coal seam gas and coal mining developments. The Committee's role is to provide independent scientific advice to assist in informing regulatory decisions on coal seam gas and large coal mining developments that are likely to have a significant impact on water resources. The Committee would like to clarify that it does not have the role, as identified in your letter, of ensuring the guidelines improve the understanding of the new water trigger. As such, the Committee's comments on the guidelines are focused on the scientific issues that should be taken into account when determining whether a proposed action will have a significant impact on water resources.

The Committee notes that its advice of 10 May 2013 to the former Minister for Sustainability, Environment, Water, Population and Communities, the Hon Tony Burke MP, has been taken into account and has informed the development of the guidelines.

The Committee has considered the draft guidelines and offers the following additional advice for your use in finalising the guidelines.

General comments

- The guidelines appear to use the terms likely, impacts and significance interchangeably. It is suggested these be reviewed especially to be more rigorous when they are being used in a way which references risk or when the parameters of 'likely' and the scale of 'significance' are utilised.

Guidance on changes to hydrology

- In the Committee's advice of 10 May 2013, the Committee advised that consideration should be given to the impacts that watercourse diversions or impoundments, and landscape modifications, such as large voids and spoil piles could have on groundwater and surface water characteristics and processes. It is not clear how the guidelines have incorporated consideration of this issue and it may be worth reconsidering these for inclusion in the final guidelines (for example by adding these into dot points on the top of page eight).
- The draft guidelines provide examples of how substantial changes to the hydrology of water resources may be observed. The Committee suggests that the reference to 'groundwater table levels' be changed to 'water table levels' in the dot point at the top of page eight.
- The Committee has become aware of the potential for confusion in the interpretation of the concepts of pressure, depressurisation and dewatering, as well as the appropriate application of the concept of depressurisation to aquifers and/or coal seams. It will be important to be very clear in the appropriate use of such terminology in the guidelines.
- The Committee has been advised that an extraction entitlement under a state water resource plan does not necessarily prohibit the likely impacts from coal seam gas or coal mining developments on water resources from being significant. The Committee noted that the relevant section did try to qualify this point (use of the words 'however the impact may still be significant') but that its current expression may be misinterpreted. Therefore it is suggested that this be reviewed and clarified.

Guidance on changes to water quality

- The 'Salt' heading, on Page 9, is limiting and should be removed or changed to reflect that this section is related to a range of water quality issues associated with co-produced water. This includes salinity, as well as temperature, nutrient levels, organic compounds and heavy metals.
- The draft guidelines state that significantly lower volumes of water are being produced in New South Wales compared to Queensland. The need for and intent of this qualifier, which appears to be stating comparative information unrelated to a proponent determining whether a referral is needed, is not clear. If it is to remain, clarification is needed on inclusion of the Surat basin.

Cumulative Impacts

- The EPBC Act definitions of coal seam gas development and large coal mining development includes references to the significance of impacts of a particular development on water resources when considered with other developments, whether past, present or reasonably foreseeable. The requirement to consider cumulative impacts is distinctive for this particular new matter of national environmental significance and the nature of how this is dealt with in a way which helps decide whether a proposed action would trigger a referral (let alone how to consider the matter during assessment) is a new arena for the Commonwealth regulator that would need considerable thought.

Scale

- The Committee suggests changing the reference to aquifer drawn down to aquifer depressurisation as this term is more technically correct.

I trust these comments are useful as you finalise this policy document.

Yours sincerely

A handwritten signature in cursive script that reads "Lisa Corbyn". The signature is written in black ink and is positioned to the left of the typed name.

Ms Lisa Corbyn

Chair