

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development
Minutes – Meeting 4, 20-21 March 2013**

**MINUTES – Meeting 4
20-21 March 2013**

Old Parliament House, Canberra

Attendance and Apologies

IN ATTENDANCE

Ms Lisa Corbyn (Chair)
Emeritus Professor Angela Arthington
Ms Jane Coram
Emeritus Professor Peter Flood
Dr Andrew Johnson (in person on Day 1 and by telephone on Day 2)
Mr Jim McDonald
Professor Dayanthi Nugegoda (Day 1)

APOLOGIES

Professor Dayanthi Nugegoda (Day 2)
Professor Craig Simmons

OFFICE OF WATER SCIENCE - SECRETARIAT AND SUPPORT

Suzy Nethercott-Watson
Peter Baker
Robert Gehrig
Jason Smith
Milica Milanja

**OTHER STAFF OF THE DEPARTMENT OF SUSTAINABILITY, ENVIRONMENT, WATER,
POPULATION AND COMMUNITIES (DSEWPaC) AND INVITED GUESTS**

Gayle Milnes (Days 1-2: Items 1.1-1.6, 2.1, 5.1) Office of Water Science	Ben Maly (Day 1: Item 2.1) Office of Water Science
Rachel Ross (Days 1-2: Items 2.1, 3.1, 5.1) Office of Water Science	Kimberly Hammond (Day 1: Item 5.1) Office of Water Science
Kelly Strike (Day 1: Item 2.1) Office of Water Science	Damian Barrett (Day 1: Items 3.1, 3.2) CSIRO
Pete Cotsell (Day 1: Items 3.1, 3.2) Office of Water Science	Ebony Coote (Day 1: Item 5.1) Office of Water Science
Edwina Johnson (Day 1: Items 3.1, 3.2) Office of Water Science	Isaac Defazio (Day 1: Item 5.1) Office of Water Science
Deborah Chen (Day 2: Items 5.1, 5.2) Office of Water Science	Bruce Gray (Day 2: Item 5.1) Office of Water Science

The meeting commenced at 9.00am.

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1. Welcome and Introductions

The Chair welcomed Committee members noting:

- Dr Andrew Johnston would participate in the meeting by teleconference on Day 2
- Apologies from Professor Craig Simmons
- Apologies from Professor Dayanthi Nugegoda on Day 2.

1.1 Acknowledgement of Country

The Chair acknowledged the Ngunnawal and Ngambri people, past and present, on whose land this meeting was held.

1.2 Conflict of Interest

Before the meeting commenced, Committee members completed the Meeting Specific Disclosure of Interest. The determinations recorded at this meeting are available at *Attachment A*.

1.3 Confirmation of Agenda

The Committee endorsed the agenda for Meeting 4, noting that requests for project advices for 3 projects previously listed on the agenda were withdrawn by the Minister by letter dated 12 March 2013 so that the Committee is fully able to reflect the Government intention for new legislative amendments to the Environment Protection and Biodiversity Conservation Act.

1.4 Action Items

Completed items were noted and other items were referred to agenda items for discussion later in the meeting.

1.5 Confirmation of Out-of-Session Decisions

The minutes of the Committee's third meeting (19-20 February) were agreed out-of-session and posted on the IESC website.

1.6 Environmental Scan

The following developments were reported.

Office of Water Science (OWS):

- the Australian Government's proposed amendments to the *Environment Protection and Biodiversity Conservation Act (Cwlth) 1999 (EPBC Act)* to provide greater environmental protection for water resources impacted by coal seam gas and large coal mining developments;
- Recent visits by the OWS to Tamworth and Queensland to discuss bioregional assessments; and

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- Comments sent to the Department of Resources, Energy and Tourism on the National Harmonised Regulatory Framework.

Chair:

- Meeting with the NSW Chief Scientist on the recently commissioned NSW review of coal seam gas activities in NSW.

2. Advice on Projects Referred by Governments

2.1 Minister's Request for Advice

The Committee considered the Commonwealth Environment Minister's 12 March 2013 request for advice relevant to the Australian Government's proposed amendments to the *EPBC Act* on:

- Relevant considerations for determining whether a proposed action will have a significant impact on water resources;
- Elements that could be included in terms of reference for the assessment of controlled actions so as to best ensure necessary information is provided; and
- Elements that could usefully be considered by the regulator in setting conditions of approval for coal seam gas or large coal mining projects when water impacts are found to be significant.

OWS tabled relevant background material to assist the Committee in preparing this advice.

The Committee agreed to review and provide comments on the draft responses out-of-session with a consolidated response to be prepared for consideration and finalisation at the April meeting.

The Committee also requested that OWS provide:

- a contextual map for future project advices that would include relevant information on Bioregional Assessments in the area as well as identifying previous projects assessed to better consider potential cumulative impacts; and
- an updated flow chart on the regulators decision-making stages and timeframes and the public release of the IESC advice for clarity on public availability of the Committee advice.

3. Bioregional Assessments

3.1 Bioregional Assessment Methodology

The Committee discussed the revised Draft Bioregional Assessment Methodology.

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The Committee noted that the five key areas that were identified at the February meeting as needing further work (ecology, monitoring, enduring nature, risk and the diagram of the five phases) had been revised in the current document. Members appreciated the clarity provided by the amendments, provided further feedback and agreed to provide final comments to OWS by 25 March. OWS will circulate a draft explanatory statement on a broader Methodology/Framework for inclusion as a preface/introduction to the document for comment and finalisation out-of-session.

3.2 Bioregional Assessment Framework/Strategic Framework

In light of the incorporation of both the Bioregional Assessment methodology and framework into one document, the Committee agreed to develop a separate, strategic document, which will provide an overview of the Committee's role and explain how its functions with respect to project advice, bioregional assessments and research fit together. This work will be taken forward by the Bioregional Assessments Sub-Committee.

The Committee requested that OWS bring 2 papers to the April meeting:

- Key decisions points and timeframes for Bioregional Assessments; and
- Outline of products from the Outcome Summary (product 5) Phase of the Bioregional Assessment Methodology/Framework.

4. Strategic Items

4.1 Strategic Framework

The Committee agreed to reschedule discussion of the Strategic Framework to the 16-17 April meeting with a view to drawing on the present draft to consider how it might meet the requirements of the Research program and the Strategic Overview of the Committee's work.

5. Research

5.1 Critical Science Reviews

A number of Critical Science Reviews (CSR) were commissioned in mid-2012 by the Office of Water Science on the advice of the interim Committee to provide an overview of the state of the science underpinning coal seam gas and coal mining impact management in key areas. The Committee noted the importance of final reports incorporating critical analysis and identifying knowledge gaps. The Committee considered and provided comments on the following three reviews:

- *Predicting, monitoring, assessing and remediating subsidence and other movement related impacts associated with Coal Seam Gas and Coal Mining Activities (two*

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papers): Revisions are needed to both Cover papers, Executive Summaries and Introductions, inaccuracies and inconsistencies corrected and referencing included;

- *Co-produced water: Options for the management and use of co-produced water, brines and associated salts and heavy metal concentrates:* The approach for identifying Critical Issues was supported and reconsideration of some elements beyond the terms of reference for the Critical Science Review need to be reviewed;
- *Hydraulic fracturing techniques including chemical, risks, toxicology and ecotoxicology reporting:* Less detailed and additional information on use of vertical/horizontal fracking used in the past would be helpful.

The Committee noted areas where this information may assist in identifying knowledge gaps and conditions of approval, where further work was required, including review by state governments as well as peer review. OWS was asked to consider ways to communicate key findings of the reviews. This included developing a Summary Overview, drawing out critical research insights and bringing forward fact sheets.

5.2 Draft Research Plan

The Committee reviewed outcomes from the research consultation workshop held on 19 March. The discussions were informed through a set of research priorities to determine the knowledge acquisition investment strategy:

- Hydrological processes and changes and impacts on ground and surface water;
- Ecosystem response, including thresholds;
- Chemicals synergies and exposure pathways; and
- Cumulative impacts.

The Committee discussed the need to clearly link the research program, knowledge acquisition and baseline information analysis being progressed through the Bioregional Assessments and agreed to the next steps in the process, including the development of a research program, which would outline:

- Principles/criteria;
- Research priorities and key research questions/hypotheses; and
- Management of research.

It was agreed that the OWS would develop material for consideration by the Research Sub-Committee and more detailed consideration at the April meeting.

Meeting Review

1.7 Review of Meeting and Forward Planning Agenda

The Committee agreed revisions to the Forward Planning Agenda including:

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- The April meeting will be reduced to two days, 16-17 April;
- Future meetings (excluding April) will be increased to three days in duration; and
- The proposed field trip will now be planned for July.

The Committee considered the forward agenda and determined the following priorities for agenda discussion in April:

- Finalisation of advice in response to the Minister's Request for advice relevant to the Australian Government's proposed amendments to the EPBC Act;
- Seek a presentation from the Department's Environment Assessment and Compliance Division about its approach to compliance and enforcement post EPBC Act project approval. Specifically, there was discussion about the benefit of understanding any lessons learnt from the three previously approved CSG projects in the Bowen and Surat Basin;
- A draft Committee Communications and Stakeholder Engagement plan;
- In the context of the finalised Bioregional Assessment Methodology consideration is to be given to bioregional assessment phases, products and decision points along with next steps in the Namoi priority assessment; and
- Consideration of research matters including a research plan, reviews of Critical Science Review 2 - Mining risks to water.

OWS outlined the approach now developed for managing meeting requests and correspondence to the Committee. Correspondence reports for information will be provided in each month's Committee papers.

Close of Meeting

The Chair thanked everyone for their contributions to the meeting.

Next Meeting

The next meeting will be held on 16-17 April 2013 in Canberra.

The meeting closed at 3.15pm.

Minutes confirmed as true and correct:

Ms Lisa Corbyn

Committee Chair

April 2013

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Attachment A

Item(s)	Committee member	Disclosure	Determination
3	Andrew Johnson	I consider there may be a possible conflict of interest in relation to agenda item 3 arising from CSIRO interest in supporting the development and implementation of Bioregional Assessments.	<p>No actual, potential, or perceived conflict of interest exists and Dr Johnson participated fully in the meeting.</p> <p>The reason for this decision is the agenda item is solely on the Bioregional Assessment Methodology and no decisions on projects associated with bioregional assessments are being made at the meeting.</p>
3	Jane Coram	I consider there may be a possible conflict of interest in relation to agenda item 3 arising from my agency's (Geoscience Australia) involvement in the development of the BRAM and its potential involvement in the future bioregional assessments.	<p>No actual, potential or perceived conflict of interest exists and Ms Coram participated fully in the meeting.</p> <p>The reason for this decision is the agenda item is solely on the Bioregional Assessment Methodology and no decisions on projects associated with bioregional assessments are being made at the meeting.</p>