

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development
Minutes – Meeting 13, 10-12 December 2013**

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10-12 December 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
Mr Jim McDonald
Professor Dayanthi Nugegoda
Professor Craig Simmons

APOLOGIES

Emeritus Professor Angela Arthington (day 3)
Ms Jane Coram (day 1 from 1.15pm and day 2 from 11am-3pm)
Dr Andrew Johnson (day 1 until 12.30 and day 3)

OFFICE OF WATER SCIENCE (OWS) - SECRETARIAT AND SUPPORT

Suzy Nethercott-Watson
Peter Baker
Crystal Bradley
Caryn Scott
Milica Milanja

OTHER STAFF OF THE DEPARTMENT OF THE ENVIRONMENT

Fiona Beynon (Days 1-3: Item 2) Office of Water Science	Anna-Liisa Lahtinen (Days 1-3: Item 2) Office of Water Science
Gayle Milnes (Days 1-2: Item 3) Office of Water Science	Scott Lawson (Days 1-2: Item 3, 5.2) Office of Water Science
Edwina Johnson (Day 1: Item 4) Office of Water Science	Bruce Gray (Day 2: Item 3) Office of Water Science
Max Collett (Days 1-3: Item 2) Office of Water Science	Sophie Alexander (Day 2: Item 5) Office of Water Science
Kimberley Hammond (Day 1: Item 5) Office of Water Science	Christine McKnight (Days 1-3: Item 2) Office of Water Science
Rachel Bowman (Days 1-3: Item 2) Office of Water Science	Anu Datta (Days 1-3: Item 2) Office of Water Science
Pamela Finger (Day 2: Item 3) Office of Water Science	Emily Turner (Days 1-3: Item 2) Office of Water Science

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Natasha Amerasinghe (Days 1-3: Item 2) Office of Water Science	Liam Curtis (Days 1-3: Item 2) Office of Water Science
Mitchell Bouma (Days 1-3: Item 2) Office of Water Science	Moya Tomlinson (Days 1-3: Item 2) Office of Water Science
Dane Roberts (Day 2: Item 3.2) Department of the Environment	Olga Braga (Day 2: Item 3.2) Department of the Environment

The meeting commenced at 9.00am on 10 December 2013.

1. Welcome and Introductions

The Chair welcomed Committee members noting apologies from:

- Emeritus Professor Angela Arthington on day 3;
- Dr Andrew Johnson on day 1 (until 12pm) and day 3; and
- Ms Jane Coram on day 1 (from 1.15pm) and day 2 (from 11am to 2pm).

1.1 Acknowledgement of country

The Chair acknowledged the traditional owners, 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 13.

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 Chair noted the following out-of-session items:

- the minutes of the Committee's twelfth meeting (12-13 November 2013) were agreed out-of-session and posted on the Committee's website.

1.6 Correspondence

The Committee noted the status of correspondence to 25 November 2013.

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1.7 Environmental scan

The following developments were reported by the OWS:

- an update on the Australian Government's 'one-stop shop', including the development of assessment bilateral agreements with Queensland and New South Wales;
- the Queensland Competition Authority released a draft report, 'Coal Seam Gas Review', proposing reforms to the regulation of the coal seam gas industry in Queensland;
- the Victorian Premier released the Gas Market Taskforce final and supplementary reports;
- the NSW Government has implemented a hold on exploration and extraction of natural gas from coal seams in 'Special Areas' zones around Sydney;
- an unconventional gas roundtable was held recently in South Australia, which was attended by an OWS representative and a Committee member.

The following developments were reported by the Committee Chair:

- the Committee Chair and an OWS representative held separate meetings with the Commonwealth regulator and with the NSW regulator to discuss the role and work of the Committee; and
- the Committee Chair and an OWS representative met with the Federal Environment Minister following the November Committee meeting.

2. Advice on Projects referred by Governments

2.1 Carmichael Coal Mine, QLD (Supplementary EIS)

The Commonwealth regulator and the Office of the Coordinator-General, Queensland Department of State Development, Infrastructure and Planning requested the Committee's advice in relation to the Carmichael Coal Mine and Rail project, QLD. The proposed project is at the draft Supplementary Environmental Impact Statement (EIS) stage.

The proposed project is a new open cut and underground thermal coal mine, located in the Galilee basin, approximately 160 kilometres north-west of the town of Clermont. The proposed mine site is located within the Belyando River catchment, part of the Burdekin River Catchment.

Matters of interest to the Committee included:

- Groundwater Model: in particular the setting of boundaries on the western side of the groundwater flow model and the integrity of the Rewan Formation;

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- Understanding the role that the Rewan Formation plays in relation to the GAB and potential impacts to the Doongmabulla and Mellaluka Springs Complexes, including consideration of the potential for faulting.

The Committee's advice will be published separately on the Committee's website, in the context of the regulator's decision.

2.2 Duchess Paradise, WA (Draft Public Environmental Review)

The Commonwealth regulator requested the Committee's advice in relation to the Duchess Paradise Project, West Kimberley Region, WA, at the draft Public Environmental Review (PER) stage.

The proposed project is a new coal mine comprising slot mining and underground operation, located on a pastoral station 175 kilometres south-east of Derby, WA. The proposed mine site is located within the catchment of the Fitzroy River in the Canning Basin.

Matters of interest to the Committee included:

- Potential impacts from surface/groundwater interaction with the Fitzroy River during the dry season;
- Surface water impacts, particularly around discharges and design detail of sedimentation ponds; and
- the site water balance.

The Committee's advice will be published separately on the Committee's website, in the context of the regulator's decision.

2.3 Springsure Creek Coal Project, QLD (Draft EIS)

The Commonwealth regulator requested the Committee's advice in relation to the Springsure Creek Coal Project, QLD, at the draft EIS stage.

The proposed project is for a new underground coal mine, located within the Bowen Basin approximately 40 kilometres south of Emerald in Queensland. Springsure Creek intersects the proposed mine site and connects to the Comet River. The Comet River flows into the Mackenzie River, the Fitzroy River and eventually into the Great Barrier Reef over 450 kilometres downstream.

Matters of interest to the Committee included:

- Groundwater modelling, particularly with respect to the integrity of the Rewan Formation;
- Potential impacts as a result of subsidence on surface and groundwater resources; and

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- Potential impacts to listed ecological communities including Brigalow (*Acacia harpophylla*).

The Committee's advice will be published separately on the Committee's website, in the context of the regulator's decision.

2.4 Meteor Downs South Coal Project, QLD (Draft Preliminary Documentation stage)

The Commonwealth regulator requested the Committee's advice in relation to the Meteor Downs South Coal Project, QLD, at the draft Preliminary Documentation stage.

The proposed project is a new open cut coal mine, located on the Dawson Highway in the Bowen Basin, approximately 25 kilometres west of Rolleston and 45 kilometres south east of Springsure, Central Queensland. Water courses on site form part of the Comet River catchment within the Fitzroy Basin, with several small drainage paths in the project area flowing to Spring Creek in the south Aldebaran Creek to the north.

Matters of interest to the Committee included:

- Results from the investigations that are currently underway or under review including the: hydrogeological conceptualisation; numerical groundwater model; site water balance; and baseline characterisation of water resources as well as water-dependent ecosystems.
- Surface and groundwater interactions; groundwater dependency of surface water bodies, ecosystems and species.
- Potential impacts to Naroo Dam and Spring Creek and threatened species and environmental values.

The Committee's advice will be published separately on the Committee's website, in the context of the regulator's decision.

3. Research

3.1 Update on Research

The OWS updated the Committee on the status of the following background and critical science reviews (CSRs) which have been revised to include comments from peer reviewers in December 2013: bore integrity, co-produced water and its impact on aquatic ecosystems and environmental issues; subsidence and coal seam gas; and hydraulic fracturing.

The Committee:

- agreed to provide feedback on the four CSRs to the OWS with a view to publication in February 2014;

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- noted that peer reviews have been received for another two CSRs on understanding groundwater flow and aquifer connectivity and subsidence and coal mining and these reports are being revised to incorporate peer review comments, with a view to publication in the first quarter of 2014; and
- requested OWS prepare a paper on handling *Mining Risks to Water* CSR for consideration at its February 2014 meeting.

The Committee noted:

- the update from OWS on the outcome of three expert workshops on ecology, hydrology and chemicals which were held in late November/early December to further scope future potential research projects.

3.2 National assessment of chemicals associated with coal seam gas extraction

At the Committee's invitation, Dane Roberts and Olga Braga from the Department of the Environment's Chemical Assessment Section updated the Committee on the "Environmental Exposure Conceptualisation Report" which outlines the approach that will be used to assess the surface risks to the environment from chemicals associated with coal seam gas extraction.

3.3 Fact sheets

The OWS updated the Committee on the development of Committee fact sheets on key topics.

The Committee noted that five fact sheets have been through end user testing and technical review and that OWS has revised the factsheets to include feedback received as a result of these processes.

The Committee provided further comments to OWS on the following factsheets: *Surface Water and Groundwater Connectivity – Coal Seam Gas; Surface Water and Groundwater Connectivity – Coal Mining; Longwall Coal Mining and Subsidence; and Coal Seam Gas Development and Subsidence.*

The Committee agreed that when finalised, the fact sheets will be made available on the Committee's website.

The Committee also noted that OWS is developing further factsheets for review at the February meeting.

3.4 Bore integrity

The OWS provided the Committee with an update on the status of the bore integrity knowledge project. The project was contracted in June 2012 to identify the risks to and methods for managing bore integrity. The Committee provided comments on the scope of the project and recommended further input be provided via the Research Sub-Committee.

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4. Bioregional Assessments

4.1 Bioregional Assessment Programme Progress

The Committee commented on recent developments relating to the Bioregional Assessments Programme, including:

- OWS's update on the status of contractual arrangements for a number of bioregions;
- the expected extent of technical products in each subregion under contract;
- an indication of the preliminary assessment extent for some priority subregions; and
- the development of an additional nine sub-methodologies that will support the Bioregional Assessment Methodology.

The Committee noted recent stakeholder engagement activities, which have included:

- bioregional assessment presentations given by OWS to the Northern Basin Advisory Committee, Indigenous Advisory Committee and NSW Minerals Council;
- meetings held with members of the Galilee Basin Operators Forum; and
- a Committee member and OWS and programme staff attended community information sessions organised by Gloucester Shire Council on 28 November 2013.

5. Communications

5.1 Review of Information Guidelines

The Committee provided comment on the revised draft of the Information Guidelines, which was amended to address feedback received from the Committee at its meeting in October 2013. The Committee noted that a finalised draft would be provided for endorsement at its meeting in February 2014 following consultation with Commonwealth and State Regulators.

5.2 Annual review of IESC activities

The Committee considered the draft annual review, which had been revised following feedback provided at the Committee's previous meeting in November 2013.

The Committee agreed that, following editorial changes, the Chair would consider the final annual review out of session and the review would be provided to the Minister and published on the Committee's website.

6. Close and other business

6.1 Forward planning agenda

The Committee considered the forward agenda and discussed possible topics for consideration at the February 2014 meeting.

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Close of Meeting

The Chair thanked everyone for their contributions to the meeting.

Next Meeting

The next meeting will be held over two days on 5-6 February 2014 in Canberra.

The meeting closed at 1.30pm on 12 December 2013.

Minutes confirmed as true and correct:

Ms Lisa Corbyn
Committee Chair

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Attachment A

Item(s)	Committee member	Disclosure	Determination
3	Craig Simmons	I consider that there may be a possible conflict of interest in relation to agenda item 3 (Research) arising from National Centre for Groundwater Research and Training (NCGRT) being a potential provider for research projects.	No actual, potential or perceived conflict of interest exists and Craig participated fully in the Committee meeting. The reason for the decision is that the Committee does not make decisions on funding of research projects and is not making decisions on projects at this meeting.
4	Jane Coram	I consider that there may be a possible conflict of interest in relation to agenda item 4.1 arising from Geoscience Australia's involvement in the bioregional assessments.	No actual, potential or perceived conflict of interest exists and Jane participated fully in the Committee meeting. The reason for the decision is that the Committee is not making decisions on bioregional assessments at this meeting, therefore there is no conflict.