

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development (IESC)
Minutes – Meeting 24, 10-11 December 2014**

**MINUTES – Meeting 24
Dialogue Business Centre, Canberra ACT**

Attendance and Apologies

IN ATTENDANCE

Ms Lisa Corbyn (Chair)

Professor Craig Simmons (Deputy Chair)

Dr Andrew Boulton

Ms Jane Coram

Emeritus Professor Peter Flood

Dr Tom Hatton (by teleconference Day 1 and to 10.30am on Day 2)

Dr Jenny Stauber

APOLOGIES

Dr Andrew Johnson

OFFICE OF WATER SCIENCE (OWS) - SECRETARIAT AND SUPPORT

Gayle Milnes

Sean Lane

Jason Smith

Helen Vooren

OTHER STAFF OF THE DEPARTMENT OF THE ENVIRONMENT

Dr Diana Wright First Assistant Secretary Science Division	Peter Baker Office of Water Science (by video conference)
Sophie Alexander (Item 1) Office of Water Science	Craig Moore (Item 2) Office of Water Science
Ben Roudnew (Item 2) Office of Water Science	Joseph Henry (Item 2) Office of Water Science
Phillipa Higgins (Item 2) Office of Water Science	Mitchell Bouma (Item 2) Office of Water Science
Emily Turner (Item 2) Office of Water Science	Natasha Amerasinghe (Item 2) Office of Water Science
Rod Dann (Item 2) Office of Water Science	Kim Bennett (Item 2) Office of Water Science
Carl Zimmerman (Item 2) Office of Water Science	Moya Tomlinson (Item 2, 4) Office of Water Science
Dr Trevor Dhu (Item 3) Geoscience Australia	Dr David Post (Item 3) CSIRO
Ms Bronwyn Ray (Item 3) Bureau of Meteorology	Dr Brent Hendersen (Item 3) CSIRO

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development (IESC)
Minutes – Meeting 24, 10-11 December 2014**

Dr Neil Viney (Item 3) CSIRO	Dr Russell Crosbie (Item 3) CSIRO
Dr Luk Peeters (Item 3) CSIRO	Edwina Johnson (Item 3) Office of Water Science
James Hill (Item 3) Office of Water Science	Craig Watson (Item 3) Office of Water Science
Anthony Swirepik (Item 3, 4) Office of Water Science	

OBSERVERS

Charles Edlington (Item 2) Sustainable Water Development Department of the Environment	
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The meeting commenced at 9.00 am on 10 December 2014.

1. Welcome and Introductions

The Chair, Lisa Corbyn, welcomed members of the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) to the meeting. The Chair noted that this was the first meeting with new members Dr Tom Hatton, Dr Jenny Stauber and Dr Andrew Boulton.

Apologies were received from Dr Andrew Johnson.

1.1 Acknowledgement of country

The Chair acknowledged the traditional owners, past and present, on whose land this meeting was held.

1.2 Declaration of interest

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

1.3 Confirmation of agenda

The IESC endorsed the agenda for Meeting 24.

1.4 Action items

Completed items were noted. A number of follow-up items were listed on the agenda for this or later meetings.

1.5 Confirmation of out-of-session decisions

The Chair noted the following out-of-session item:

- Minutes of the IESC's twenty-third meeting (12 November 2014) were agreed out-of-session and posted on the IESC's website.

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development (IESC)
Minutes – Meeting 24, 10-11 December 2014**

1.6 Correspondence

The IESC noted the action taken and status of correspondence to 30 November 2014.

1.7 Environmental scan

The Office of Water Science (OWS) provided an update on developments since the November IESC meeting including an update on the common themes that have emerged from a series of separate meetings held between the Chair and the Commonwealth, Queensland and New South Wales regulators; outlines of recent approvals and conditions for projects that the IESC has previously provided advice (the South Galilee Coal project and the Russell Vale Colliery Longwall); and the recent announcement of an Inquiry into Unconventional Gas (Fracking) in South-east South Australia.

1.8 Forward Planning Agenda

The IESC noted the forward planning agenda and items due for consideration through to June 2015.

No projects have been forecast for consideration and therefore the IESC will recess for January. Subject to forecasting advice from regulators, the February meeting will be a one day meeting held on 20 February 2015. The meeting dates for March 2015 were agreed to be rescheduled to 10-12 March due to member availability.

Options and itineraries will be scoped during the January recess for a small field trip in April or May 2015 as part of the induction process of new members, and planning will commence on the earlier agreed field trip for August 2015.

2. Advice on Projects referred by Governments

2.1 GLNG Gas Field Development

The Australian Government Department of the Environment and the Queensland Department of Planning and Environment sought the IESC's advice on the Santos Gas Fields Development project which is at the assessment stage.

The proposed project is an extension to an existing coal seam gas operation and is located in southern and central Queensland. The nearest towns include Injune, Miles, Rolleston, Roma, Surat, Taroom and Wandoan. The project application has a total area of 10 676 square kilometres. It is expected that there will be 6 100 new production wells over a 30 year period.

Matters of interest to the IESC included:

- Water supply to Groundwater Dependent Ecosystems, including *Environment Protection and Biodiversity Conservation Act 1999* listed Great Artesian Basin discharge and watercourse springs, endangered ecological communities, and groundwater users.

**Independent Expert Scientific Committee on Coal Seam Gas and
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Minutes – Meeting 24, 10-11 December 2014**

- Cumulative impacts of Surat and Bowen Basin activities, particularly coal seam gas and coal mining, on groundwater pressures and lag-time effects on water resources.
- Hydrological and ecological consequences of surface water discharge into the tributary gully, waterhole and Dawson River potentially impacting the surface water flow regime, geomorphology, water quality and instream biota.
- Changes to groundwater and surface water quality due to direct project activities and management of co-produced water.
- Availability of data and information from investigations and monitoring from the approved GLNG project and Joint Industry programmes.
- Scientific uncertainty associated with local scale impacts and their mitigation, particularly with respect to springs.

Consistent with the Regulations of the EPBC Act, the advice on this project will be published on the IESC's website within 10 business days of being provided to the Department of the Environment and the Queensland Department of Planning and Environment.

2.2 PEL 96 multi-well exploration and appraisal production testing

The South Australian Government Department of State Development sought the IESC's advice on a proposed multi-well Production Test of Deep Coals in the Cooper Basin. This is the first time the South Australian government has referred a project for advice. The project is a short-term six month testing program of up to 10 coal seam gas wells and construction of temporary infrastructure for fracture stimulations. The test site is located approximately 110 kilometres south of Moomba within the Cooper Basin Petroleum Exploration Licence 96 area.

The IESC recognised this project is exploratory in nature and that the current analysis suggests limited impacts to the *Environment Protection and Biodiversity Conservation Act 1999* listed Lake Blanche Springs complex and the small number of water users accessing the Great Artesian Basin in the vicinity of the production test.

Consistent with the Regulations of the EPBC Act, the advice on this project will be published on the IESC's website within 10 business days of being provided to the South Australian Government Department of State Development.

2.3 Presentation on South Australian regulatory approval process

Mr Michael Malavazos (FIChemE), Director Engineering Operations, Energy Resources Division, South Australian Department of State Development presented to the IESC on the *Petroleum and Geothermal Energy Act 2000 (SA)* and the *Petroleum and Geothermal Energy Regulations 2013 (SA)*.

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development (IESC)
Minutes – Meeting 24, 10-11 December 2014**

The licensing and approvals process for exploration, retention and production activities in South Australia was explained, and in particular Stage 2 when the advice of the IESC will be sought.

Also outlined were early findings of the Department of State Development Roundtable Water Balance Study. The IESC expressed that it would be very interested to receive further briefing on the study outcomes once finalised.

The Chair thanked Mr Malavazos for sharing the information regarding the assessment and approval processes in South Australia and for his outline on other activities of interest to the Committee.

2.4 Presentation on changes to QLD legislation

Officials from the Queensland Government (Saji Joseph, Department of Natural Resources and Mines; Lindsay Delzoppo and Terry Loos, Department of Environment and Resources Heritage; and Chris McKenna, Department of the Premier and Cabinet) updated the IESC on the recent changes to the Queensland legislative framework regulating water management, including the Water Reform and Other Legislation Amendment Bill 2014 (Qld), the *Regional Planning Interests Act 2014 (Qld)* and the Regional Planning Interests Regulations 2014 (Qld).

The Chair thanked Mr Joseph and the other attendees for their presentation and input to the meeting, and requested that the IESC be kept informed through the OWS of any further developments.

2.5 Flood Management theme sheet

It was agreed to defer discussion on the theme sheet to allow IESC members an opportunity to provide detailed feedback and comments out of session. The OWS was requested to compile member input for discussion at the March 2015 meeting.

A more strategic discussion on priority issues and hot topics as part of the ongoing refining of IESC processes will be scheduled in the forward agenda.

2.6 Review of the IESC Information Guidelines

The IESC discussed the process for the review, the timelines set out and agreed to revise the timetable to allow for IESC members to comment on areas identified as needing further input or revision.

3. Bioregional Assessments

3.1 Bioregional Assessments progress

An update on the status of components and products of the Bioregional Assessment programme was provided to the IESC.

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development (IESC)
Minutes – Meeting 24, 10-11 December 2014**

Feedback was provided on the proposed Coal Resource Development Pathways for the Clarence-Moreton bioregion and for the Maranoa-Balonne-Condamine subregion. Feedback was also provided on the first example of the report covering water accounts and water quality for a subregion.

The inclusion of the Mitchell Energy Victorian Biogas Project, in the Coal Resource Development Pathway being developed for the Gippsland bioregion, was discussed and it was agreed that it was out of scope for this programme.

Correspondence sent to individual IESC members from Dr Cliff Mallett regarding research activities in the Pedirka Basin in South Australia was referred to the meeting for discussion. The IESC requested OWS provide input received from the Bioregional Assessment Science Leadership Group on the issues raised by Dr Mallett to inform a response.

3.2 Bioregional Assessment – proposed scientific approaches

Dr Russell Crosbie, Dr Luk Peeters and other members of the Bioregional Assessment programme partner agencies presented to the IESC on proposed scientific methodologies for surface water modelling, groundwater modelling and propagating uncertainty through models.

Key points discussed included:

- The scale of surface water and groundwater modelling;
- Approach to climate variability within modelling;
- The approach to inclusion of faults within models; and
- Multidisciplinary discussions which are underway to ensure model outputs meet the needs of scientists from other disciplines (such as ecologists).

The Chair thanked Drs Crosbie and Peeters and the other attendees for sharing their insights and requested that the IESC be kept informed of progress of this work.

4. Research

4.1 Update on Research

Progress on the research programme projects and products were reported on and discussed by the IESC, including the new hydrology and ecology research, the peer review of the *Monitoring and management of subsidence induced by longwall coal mining activities* final report and the forecast publication of papers by both the OWS and Geoscience Australia.

Progress on the international peer review of the National Assessment of Chemicals reports was noted and it was understood that the set of final reports will be provided to the IESC for noting early in the New Year.

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development (IESC)
Minutes – Meeting 24, 10-11 December 2014**

Close of Meeting

The Chair thanked everyone for their contribution to the meeting.

Next Meeting

The next meeting is scheduled for 20 February 2015 via teleconference.

The meeting closed at 5.05 pm 11 December 2014.

Minutes confirmed as true and correct:

Ms Lisa Corbyn
IESC Chair

23 December 2014

Item(s)	IESC member	Disclosure	Determination
3,4	Ms Jane Coram	I consider that there may be a possible conflict of interest in relation to agenda items 3 and 4 arising from <i>Geoscience Australia's involvement in these activities.</i>	No actual, potential or perceived conflict of interest exists and Ms Coram participated fully in the IESC meeting. The reason for the decision is that the IESC is not making decisions on funding of research or bioregional assessments and therefore there is no conflict in relation to this meeting.
4	Professor Craig Simmons	I consider that there may be a possible conflict of interest in relation to agenda item 4 (Research) arising from <i>National Centre for Groundwater Research and Training (NCGRT) being a potential provider of R&D.</i>	No actual, potential or perceived conflict of interest exists and Professor Simmons participated fully in the IESC meeting. The reason for the decision is that the IESC is not making decisions on research funding therefore there is no conflict in relation to the meeting.