

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

**MINUTES – Meeting 12  
12-13 November 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  
Mr Jim McDonald  
Professor Dayanthi Nugegoda  
Professor Craig Simmons

APOLOGIES

Dr Andrew Johnson

OFFICE OF WATER SCIENCE (OWS) - SECRETARIAT AND SUPPORT

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

OTHER STAFF OF THE DEPARTMENT OF THE ENVIRONMENT

Edwina Johnson (Days 1-2: Item 3.1) Office of Water Science	Bruce Gray (Day 2: Items 5.2, 5.3) Office of Water Science
Max Collett (Day 1: Items 2.2, 5.1) Office of Water Science	James Hill (Day 1: Item 5.4) Office of Water Science
Kimberley Hammond (Day 1: Item 4.1) Office of Water Science	Anna-Liisa Lahtinen (Day 1: Items 2.1-2.2) Office of Water Science
Sophie Alexander (Days 1: Item 4.1) Office of Water Science	Christine McKnight (Day 1: Items 2.1-2.3) Office of Water Science
Craig Watson (Day 2: Item 5.2) Office of Water Science	Ben Roudnew (Day 2: Item 5.4) Office of Water Science
Rachel Bowman (Days 1-2: Items 2.1-2.2) Office of Water Science	Anu Datta (Day 1: Item 5.4) Office of Water Science
Emily Turner (Day 1: Items 2.1) Office of Water Science	Liam Curtis (Day 1: Item 2.2) Office of Water Science

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

Mitchell Bouma (Day 1: Items 2.2) Office of Water Science	Moya Tomlinson (Day 1: Item 2.2) Office of Water Science
Fiona Beynon (Day 2: Item 2.2) Office of Water Science	Sneha Satya (Day 2: Item 5.5) National Industrial Chemicals Notification and Assessment Scheme

The meeting commenced at 9.00am on 12 November 2013.

**1. Welcome and Introductions**

The Chair welcomed Committee members and an apology from Dr Andrew Johnson, noting that Dr Johnson provided comments to the Chair for Agenda Item 2.2 on the Galilee Coal project.

**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 12.

**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 eleventh meeting (16-17 October 2013) were agreed out-of-session and posted on the Committee's website.

**1.6 Correspondence**

The Committee noted the status of correspondence to 30 October 2013.

**1.7 Environmental scan**

The following developments were reported by the OWS:

- the Commonwealth Environment Minister has approved, with conditions, the Kevin's Corner Coal Mine project of which the Committee had provided advice;

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

- the Queensland government has released the *Galilee Basin Development Strategy* which includes mention of water management matters for mining in the region;
- the Commonwealth Environment Minister announced the framework for a ‘one-stop shop’ to streamline environmental approvals and outlined the three-step process to achieve this;
- the Remuneration Tribunal has made a decision in relation to remuneration for the Committee;
- the IESC Chair and a member of the OWS met with the Secretary of the Department of the Environment on 12 November to discuss the role of the Committee and provide an update on its work;
- other stakeholder meetings that had taken place since the Committee’s October meeting.

Professor Simmons provided an overview of a report commissioned by the National Centre for Groundwater Research (NCGRT) released on 21 October 2013, which details the role groundwater plays in Australia’s economy.

## **2. Advice on Projects referred by Governments**

### **2.1 Voids**

The OWS presented an update on further investigations into the management of final voids as a result of coal mining including:

- an update on informal discussions that OWS has held with mine closure experts; and
- preliminary outcomes of a literature search on backfilling of coal mining voids in Australia.

Next steps include OWS:

- sourcing and reviewing material suggested by the Committee; and
- preparing a paper that outlines the potential impacts of final voids and backfilled pits on water resources.

The Committee agreed to consider the nature of its specific advice on each project about backfilling of voids being best practice on a case by case basis.

### **2.2 Galilee Coal (Northern Export Facility) Project, QLD (Supplementary EIS)**

The Commonwealth regulator requested the Committee’s advice in relation to the Galilee Coal Mine and Associated Infrastructure Project (Northern Export Facility). The proposed project is at the Commonwealth’s finalised Environmental Impact Statement

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

stage. The Commonwealth and Queensland governments have undertaken a separate but parallel assessment for this project, which was approved by the Queensland government in August 2013.

The proposed project is a new open cut and underground coal mine, located in the Galilee basin, 35 kilometres north of the Alpha township in central Queensland. The proposed mine site is located within the Belyando River catchment, which is part of the Burdekin River catchment in the Galilee Basin.

Matters of interest to the Committee included:

- Cumulative impacts: with many large scale coal mines proposed for the Galilee Basin, the Committee identified that there is an important early opportunity to understand regional systems and develop a regional water model to assist in considering the impacts of these projects;
- The critical role that the Rewan Formation is assigned in restricting drawdown in the Great Artesian Basin and impacts to the Barcardine Springs, and the potential for faulting and other local geological heterogeneities to impact on this;
- Potential uncertainties in surface water impacts, due to limited detail on discharge scenarios, gauging station location and subsidence.

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

## **2.2 Bowen Basin overview**

The OWS and Emeritus Professor Flood provided the Committee with an overview of relevant research and development proposals in the Bowen Basin. The presentation included:

- an overview of approved and possible future coal seam gas and coal mining projects;
- a review of the coal mining and coal seam gas projects the Committee has considered in the Bowen Basin;
- an summary of the regional water resources; and
- an overview of the geology and hydrogeology in the Bowen Basin.

## **3. Bioregional assessments**

### **3.1 Bioregional Assessment Programme Progress**

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

- partner agencies have been asked to develop options to accelerate the delivery of products in the Galilee subregion following the Committee's October meeting;

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

- OWS is working with the Gloucester Council on arrangements for community information sessions on 28 November 2013, prior to technical workshops which are scheduled for 12 December 2013;
- initial thinking regarding the scope and timing of the baseline for developments; and
- an update on progress with the information platform.

Following discussion of the approach to the bioregional assessment in the Gloucester Basin subregion, it was agreed that a half day workshop would be held in the first quarter of 2014 to allow the Committee to have a more in-depth discussion about the application of the methodology in different subregions.

#### **4. Communications**

##### **4.1 Annual review of IESC activities**

The Committee considered a draft annual review, which was prepared by the OWS based on the outline and direction agreed by the Committee at its September 2013 meeting.

The Committee:

- commented on the draft publication and agreed that individual members would provide editorial changes to OWS;
- requested the report be revised to cover the 12-month period from December 2012 to December 2013;
- noted that a finalised draft would be provided at the December 2013 meeting for the Committee's endorsement; and
- agreed to release the annual review on the Committee's website and circulate electronically to stakeholders.

#### **5. Research**

##### **5.1 Update on Research Programme**

The Committee noted that:

- peer reviews for most of the critical science reviews are nearing finalisation and the OWS intends to publish several reviews by the end of the year;
- expert workshops to further scope the proposed new research projects will be held in late November and early December and Committee members will be invited to attend; and
- the Committee's advice to the Commonwealth Environment Minister on research priorities will be published on the Committee's website.

The Committee agreed to:

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

- the proposed approach for the Research Sub-Committee and the Committee to provide advice at the start, midway point, and at the end of each of the new research projects; and
- regular “hot science topics” to be included on the Committee’s agenda on a quarterly basis. The first topic proposed is ‘modelling’ and is scheduled for February 2014.

**5.2 Existing Research: Knowledge Projects – Peat Swamps**

The OWS provided the Committee with an update on the status of the three projects related to peat swamps: *Monitoring of Ecological Changes; Longwall Mining – predicting subsidence, buffer distance and mine design options; and Mitigation and Remediation Techniques.*

The Committee noted:

- the status of the three peat swamp related projects and the key findings to date;
- that next steps include peer and state reviews, with the expectation that the finalised reports will be made available to the Committee to review in February 2014; and
- that, dependent on the findings of peer reviews, it is proposed that all three final project reports be made public in March 2014.

**5.3 Existing Research: Knowledge Projects – Monitoring and management of subsidence**

The *Monitoring and Management of Subsidence Induced by Longwall Coal Mining* project was commissioned by the OWS in July 2012 on the advice of the Interim Committee.

The OWS briefed the Committee on the four project objectives and the status of reports that have been prepared for each of these objectives.

The Committee provided comment on the project objectives and key findings to date, along with a recommendation that the Executive Summary be rewritten to provide a substantive summary of the conclusions.

The Committee noted that final versions of the reports would be provided to members in April 2014, with a view to publication in May 2014.

**5.4 Fact sheets**

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

The Committee noted that in response to Committee feedback at the October 2013 meeting, revised versions of the following factsheets were sent out for technical review and end user testing with the view to make them publically available in December 2013: *Hydraulic Fracturing in Australian Coal Seam Gas Operations; Surface Water and Groundwater Connectivity – Coal Seam Gas; Surface Water and Groundwater*

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

*Connectivity – Coal Mining; Longwall Coal Mining and Subsidence; and Coal Seam Gas Development and Subsidence.*

The Committee commented on the initial draft version of the factsheet—*Managing Co-produced Water*. The Committee:

- requested that OWS provides some more descriptive material in the fact sheet, to enable the audience to put information about co-produced water and salt into context;
- agreed that a generic glossary of terms for factsheets would be useful;
- agreed that individual members provide any further edits directly to OWS.

#### 5.5 NICNAS products and IESC review

At the Committee's invitation, Sneha Satya from the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) updated the Committee on the *National Assessment of Chemicals Associated with Coal seam Gas Extraction* project. The presentation included a detailed overview of the assessment scope, the project deliverables and the status of the literature review.

The Committee provided comments on the approach to the project and noted that OWS is working with NICNAS to finalise these reports with a view to making them available to the public in December 2013. OWS expects to receive the literature review from NICNAS in the week beginning 4 November 2013 and to make the report available to Committee members for information and comments from mid-November 2013.

## 6. Close and other business

### 6.1 Forward planning agenda

The Committee considered the forward agenda and discussed possible topics for consideration at the December 2013 meeting.

### **Close of Meeting**

The Chair thanked everyone for their contributions to the meeting.

### **Next Meeting**

The next meeting will be held over three days on 10-12 December 2013 in Canberra.

The meeting closed at 4.00pm on 13 November 2013.

Minutes confirmed as true and correct:

Ms Lisa Corbyn  
Committee Chair

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

**Attachment A**

<b>Item(s)</b>	<b>Committee member</b>	<b>Disclosure</b>	<b>Determination</b>
5	Craig Simmons	I consider that there may be a possible conflict of interest in relation to agenda item 5—Research, because NCGRT is a potential provider of research.	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 IESC is not making decisions on specific research projects at this meeting and therefore there is no conflict of interest.