# Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) Meeting 42, 22-23 March 2017

# MINUTES Canberra

# **Attendance and Apologies**

IN ATTENDANCE

Professor Craig Simmons (Acting Chair)

Dr Glen Walker

Dr Andrew Boulton

Dr Ian Prosser

Dr Wendy Timms

Dr Jenny Stauber

**APOLOGIES** 

Professor Joan Esterle

OFFICE OF WATER SCIENCE - SECRETARIAT AND SUPPORT

Barbara Musso

**Emily Grant** 

Jason Smith

Lily Knife

### OTHER STAFF OF THE DEPARTMENT OF THE ENVIRONMENT AND ENERGY

Anthony Swirepik (Item 3)	John Higgins (Items 3 and 4)	
Office of Water Science	Office of Water Science	
Rod Dann (Item 2)	Natasha Amerasinghe (Item 2)	
Office of Water Science	Office of Water Science	
Bradley Desmond (Item 3)	Emily Turner (Item 3)	
Office of Water Science	Office of Water Science	
Peter Baker (Item 3)	Jarrod Green (Item 4)	
Office of Water Science	Office of Water Science	
Sam Pettett (Item 2)	Taysha Le Compte (Item 2)	
Office of Water Science	Office of Water Science	
Sarah Taylor (Item 2)	Miriam McMillan (Item 4)	
Office of Water Science	Office of Water Science	
Rachel Everett (Item 2)		
Office of Water Science		

## **INVITED GUESTS**

Dr Chris Pigram (Items 1-5)	Julie Burke (Item 3)		
	Bureau of Meteorology		
David Post (Item 3)	Steven Lewis (Item 3)		
CSIRO	Geoscience Australia		
Brent Henderson (Item 3)			
CSIRO			

The meeting commenced at 8.45 am on 22 March 2017.

#### 1. Welcome and Introductions

The Acting Chair, Professor Craig Simmons, welcomed members of the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) to the meeting. An apology was received from Professor Joan Esterle. Dr Chris Pigram was also welcomed to the meeting as an observer.

#### 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 and six-monthly Private Circumstances Declarations. The meeting specific determinations recorded at this meeting are available at *Attachment A.* 

#### 1.3 Confirmation of agenda

The IESC endorsed the agenda for Meeting 42.

#### 1.4 Action items

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

#### 1.5 Confirmation of out-of-session decisions

The Chair noted the following items have been agreed out of session:

- minutes of the IESC's forty first meeting on 12-13 December 2016 were confirmed and agreed for publication;
- minutes of the IESC's teleconference on 20 December 2016 were confirmed and agreed for publication; and
- advice on the New Acland Coal Mine Stage 3 Expansion was finalised and provided to the decision maker.

#### 1.6 Correspondence

The IESC noted the status of correspondence to 28 February 2017.

#### 1.7 Environmental scan

The Office of Water Science provided an update on policy and other developments since the December 2016 IESC meeting, including:

- Commonwealth Government meeting with the Australian gas industry about gas supplies;
- Commonwealth Government considerations for landholders impacted by the development of unconventional gas;
- Commonwealth Government approval for the New Acland coal mine expansion; and

• New South Wales Government considerations for scientific experts in the assessment of the Narrabri Gas Project.

### 1.8 Forward Planning Agenda

The IESC noted the forward planning agenda and items due for consideration through to July 2017. It was agreed the next meeting would be scheduled for 2-5 May 2017 in Queensland and that a field trip would be incorporated.

## 2. Advice on projects referred by governments

### 2.1 Advice on Grosvenor Coal Mine G200s Expansion Project

The IESC received a request from the Australian Government Department of the Environment and Energy to provide advice on Anglo Coal (Grosvenor) Pty Ltd's Grosvenor Coal Mine G200s Expansion Project in Queensland. The proposed project is located in the Bowen Basin.

The proposed project is an extension of the existing Grosvenor Mine, located 150 kilometres southwest of Mackay near Moranbah. The existing Grosvenor Mine has been in operation since 2016. The proposed project includes eight new longwall panels and is predicted to extract 10.5 million tonnes of coal run of mine per annum over six years. The proposed project will utilise existing infrastructure at the Grosvenor and Moranbah North Mines. Discharge of water and reject emplacement will occur at the adjacent Moranbah North Mine.

The IESC reviewed and discussed the information provided and considered the key issues as follows:

- structural damage to the Isaac River through the formation of three subsidence troughs;
- changes to the water quality, water-dependent ecosystems and geomorphology within the Isaac River caused by changes to sediment deposition in some reaches as a result of subsidence in the Isaac River;
- further drawdown and depressurisation of the Tertiary basalt, Tertiary sediments and Permian Coal Measures aquifers; and
- additional cumulative impacts to the groundwater, surface water and ecology of the region.

Consistent with the EPBC Regulations the advice will be published on the IESC's website within 10 business days of being provided to the Australian Government Department of the Environment and Energy.

#### 2.2 Advice on Isaac Plains Mine Extension Development

The IESC was requested by the Australian Government Department of the Environment and Energy to provide advice on the Stanmore IP Coal Pty Ltd Isaac Plains Mine Extension Development in Queensland. The proposed project is located in the Bowen Basin.

The proposed project is an extension to the existing Isaac Plains open cut coal mine and is located approximately 7.3 km north-east of Moranbah, Queensland. The proposed project will comprise five open cut pits directly east of the existing mining lease and will extend the life of the existing mine by 7 years.

The proposed project is located in the upper reaches of the Isaac River catchment and is traversed by three ephemeral creeks that drain into the Isaac River, part of the larger Fitzroy River Catchment.

The IESC reviewed and discussed the information provided and considered the key issues as follows:

- long-term drawdown impacts to the groundwater system which would contribute to an
  existing extensive cumulative drawdown impact associated with other mining operations
  within the region;
- potential long-term impacts associated with the five final voids, including ongoing groundwater losses, poor final void water quality, and the potential to influence ongoing losses from adjacent alluvial systems with associated impacts to riparian vegetation and dependent communities;
- alteration of flow regimes of surface watercourses resulting in impacts to their associated aquatic and riparian ecosystems; and
- potential impacts to downstream water quality and ecosystems from release of mine water

Consistent with the EPBC Regulations the advice will be published on the IESC's website within 10 business days of being provided to the Australian Government Department of the Environment and Energy.

#### 2.3 Project Advice process

The IESC noted that there had been a review to the technical support process in relation to the Supporting Analysis and Draft Advice. The IESC discussed the updated process and agreed that the new process was helpful and needs to be flexible.

### 3. Bioregional Assessment Programme

#### 3.1 Bioregional assessment update

An update was provided to the IESC on the delivery of bioregional assessments (BA), including:

- a demonstration of the BA Explorer tool;
- discussion of draft receptor impact modelling products for Gloucester and the accompanying submethodolology;
- discussion of which hydrological response variables to present for landscape classes; and
- discussion of how to represent receptor impact variables.

The IESC noted the update and provided suggestions on the communication of scientific findings.

#### 4. Research

#### 4.1 Research program update

The IESC considered additional consultation comments on the draft research priorities and finalised its advice to the Minister on research priorities.

An agenda item recommending that the IESC work with the Office of Water Science to prepare a proposal for an IESC-hosted research symposium was discussed. There was general interest in a symposium to share and reflect on key findings and achievements from the research programs of both organisations, and to help clarify future research priorities. It was agreed that the Office of Water Science would work with IESC members on a symposium proposal for consideration at the next IESC meeting.

The IESC noted a presentation from the Office of Water Science on a project in progress to improve the way scientific uncertainty is communicated to non-scientists.

#### 5. Other Business

## 5.2 <u>Presentation by the Australian Petroleum Production & Exploration Association (APPEA)</u>

Dr Malcolm Roberts, Chief Executive, APPEA, presented to the IESC on a range of topics useful to the IESC including the current state of the industry, gas supply and research.

The Chair thanked Dr Roberts for the presentation.

#### 5.3 Field Trip

The IESC are planning a field trip to Queensland in May. Members were updated on arrangements. The IESC advised that they would be keen to meet with relevant local stakeholders while on the trip.

## **Close of Meeting**

The Chair thanked everyone for their contribution to the meeting.

#### **Next Meeting**

The next meeting is scheduled for 2-4 May 2017.

The meeting closed at 3.15 pm on Thursday 23 March 2017.

Minutes confirmed as true and correct:

Professor Craig Simmons Acting IESC Chair 13 March 2017

## Attachment A

Item(s)	IESC member	Disclosure	Determination
4	Professor	I consider that there may be a	No actual, potential or
	Craig	possible conflict of interest in	perceived conflict of
	Simmons	relation to Agenda Item 4 Research	interest exists and
		arising from NCGRT/Flinders as a	Professor Simmons
		current/potential provider of	participated fully in the
		research and development.	meeting.