# Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) Meeting 41, 12-13 December 2016

# MINUTES Canberra

# Attendance and Apologies

IN ATTENDANCE Dr Andrew Johnson (Chair) Professor Craig Simmons 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 Matthew Whitfort

Barbara Musso Emily Grant Ann Hartley Lily Knife

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

| Anthony Swirepik (Item 3, 4.2 and 5.2) | Dr John Higgins (Item 3, 4 and 5.2)       |  |
|--|---|--|
| Office of Water Science                | Office of Water Science                   |  |
| Rod Dann (Item 2, 4.2 and 5.2)         | Natasha Amerasinghe (Item 2, 4.2 and 5.2) |  |
| Office of Water Science                | Office of Water Science                   |  |
| Mitchell Bouma (Item 2 and 5.2)        | Emily Turner (Item 3)                     |  |
| Office of Water Science                | Office of Water Science                   |  |
| Lea Locke (Item 3)                     | Lucy Elliott (Item 2)                     |  |
| Office of Water Science                | Office of Water Science                   |  |
| Moya Tomlinson (Item 3 and 4)          | Jarrod Green (Item 4 and 5.2)             |  |
| Office of Water Science                | Office of Water Science                   |  |
| Peter Baker (Item 3)                   | Bruce Gray (Item 4.2)                     |  |
| Office of Water Science                | Office of Water Science                   |  |
| INVITED GUESTS                         |   |  |
| Julie Burke (Item 3)                   | Emeritus Professor Peter Flood (Item 2)   |  |
| Bureau of Meteorology                  | Former IESC Member                        |  |
| Dr Rebecca Nelson (Item 5.2)           | Steven Lewis (Item 3)                     |  |
| University of Melbourne                | Geoscience Australia                      |  |
| Brent Henderson (Item 3)               | David Post (Item 3)                       |  |
| CSIRO                                  | CSIRO                                     |  |
| Dr Dirk Mallants (Item 4.2)            |   |  |
| CSIRO                                  |   |  |
|  |   |  |

The meeting commenced at 12.45 pm on 12 December 2016.

# 1. Welcome and Introductions

The Chair, Dr Andrew Johnson, 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.

# 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 41.

# 1.4 Action items

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

# 1.5 <u>Confirmation of out-of-session decisions</u>

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

- minutes of the IESC's fortieth meeting on 9 November 2016 were confirmed and agreed for publication; and
- advice on the Lake Vermont Coal Mine Northern Extension Project was finalised and provided to the decision maker.

# 1.6 Correspondence

The IESC noted the status of correspondence to 30 November 2016.

# 1.7 Environmental scan

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

- the Joint Response to the Independent Review of the National Partnership Agreement;
- the Independent Review to the EPBC Act Amendment 2013 Water Trigger;
- the Northern Territory Government announced the final terms of reference for the Hydraulic Fracking Inquiry;
- the South Australian Government tabled the final report to its inquiry into unconventional gas; and
- the Queensland Gasfields Commission Review

# 1.8 Forward Planning Agenda

The IESC noted the forward planning agenda and items due for consideration through to March 2017. The Secretariat was requested to explore possible dates for an IESC field trip in 2017. It was agreed the next meeting would be scheduled for 8-9 February 2017.

# 2. Advice on projects referred by governments

#### 2.1 Advice on New Acland Coal Mine Stage 3

The IESC received a request from the Australian Government Department of the Environment and Energy to provide advice on the New Acland Coal Mine Stage 3 project in Queensland.

The IESC has previously provided advice to the Australian Government and the Queensland Office of the Coordinator-General on the draft Environmental Impact Statement for the proposed New Acland Coal Mine Stage 3 project on the 10 April 2014. On the 10 December 2015, the IESC provided additional advice to the Australian Government on residual matters from the proponent's Additional Information to the Environmental Impact Statement for the proposed New Acland Coal Mine Stage 3 project.

The proposed project is to expand the New Acland Coal Mine located approximately 35 kilometres northwest of Toowoomba, extending the mining period by up to 12 years.

The proposed project is located in the Lagoon Creek Catchment and the Clarence-Moreton Basin of Queensland. Lagoon Creek is an ephemeral creek that flows into Oakey Creek, which is part of the larger Condamine River Catchment of the Murray-Darling Basin. The proposed project would involve creation of three open cut pits to increase production of coal from the Walloon Coal Measures from 4.8 Mtpa to 7.5 Mtpa of thermal product coal.

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

- Groundwater modelling
- Surface water monitoring
- Assessment of final voids
- Relevant aspects of the Maranoa-Balonne-Condamine bioregional assessment

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.

#### 3. Bioregional Assessment Programme

#### 3.1 Bioregional assessment update

An update was provided to the IESC on the delivery of bioregional assessments. This included the presentation of Gloucester surface water and receptor impact modelling results and timetables for external review of products.

The IESC noted the update.

## 4. Research

#### 4.1 Research program update

An update was provided on key activities in the research program, including the National Assessment of Chemicals Associated with Coal Seam Gas Extraction in Australia and the Eco-hydrological responses to coal seam gas extraction and coal mining project which will be finalised shortly.

The IESC noted that the Eco-hydrological research was recently presented at the national conference of the Ecological Society of Australia.

A summary of responses to the draft revised Research Priorities was presented to the IESC, with a majority of the responses supportive of the revised Research Priorities. The IESC requested the Office of Water Science to continue with consultation.

The IESC noted the update and advised the OWS that it was important to invest in activities to encourage uptake of findings from the OWS research program.

#### 4.2 Presentation Bore and well induced inter-aquifer groundwater connectivity

Dr Dirk Mallants from the CSIRO presented to the IESC on the findings from the Bore Integrity research projects commissioned by the Office of Water Science on the advice of the IESC.

The Chair thanked Dr Mallants for the presentation.

#### 5. Other Business

# 5.2 <u>Presentation Regulating the cumulative impacts of groundwater withdrawals: Australia</u> and further afield

Dr Rebecca Nelson Senior Lecturer, Melbourne Law School presented to the IESC on research into natural resources laws that regulates the cumulative environmental impacts of groundwater withdrawal in Australia.

The Chair thanked Dr Nelson for the presentation

#### 5.3 Groundwater modelling uncertainty discussion

Dr Glen Walker led a discussion on uncertainty in groundwater flow modelling predictions within Environment Impact Statements. Members noted a slight change in the approach to this work ahead of a further discussion to be scheduled in early 2017.

#### 5.4 Arrangements for new IESC Chair

Dr Andrew Johnson advised he would be retiring from the IESC in early 2017 and that arrangements are underway for a new IESC Chair. Dr Johnson thanked the IESC for their contribution and support.

Professor Craig Simmons, on behalf of the IESC, expressed gratitude for Dr Johnson's leadership and service to the IESC.

#### **Close of Meeting**

The Chair thanked everyone for their contribution to the meeting.

# Next Meeting

The next meeting is scheduled for 8-9 February 2017 in Canberra.

The meeting closed at 3.00 pm on Tuesday 13 December 2016.

Minutes confirmed as true and correct:

Dr Andrew Johnson IESC Chair 22 December 2016

Attachment A

| Item(s) | IESC member | Disclosure                         | Determination             |
|---------|-------------|------------------------------------|---------------------------|
| 3       | Dr Andrew   | I consider that there may be a     | No actual, potential or   |
|         | Johnson     | possible conflict of interest in   | perceived conflict of     |
|         |             | relation to Agenda Item 3          | interest exists and       |
|         |             | Bioregional Assessments arising    | Dr Johnson participated   |
|         |             | from Bureau of Meteorology's       | fully in the meeting.     |
|         |             | involvement in the Bioregional     |                           |
|         |             | Assessment Programme.              |                           |
| 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.                  |