

#### Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) Meeting 73, 3-4 February 2021

MINUTES Videoconference

#### ATTENDANCE AND APOLOGIES

IN ATTENDANCE Dr Chris Pigram (Chair) Dr Andrew Boulton Dr Catherine Moore Professor Craig Simmons (Items 1.1-1.4, 2, 3 and 4) Professor Jenny Davis Dr Jenny Stauber Professor Rory Nathan Professor Wendy Timms

## OFFICE OF WATER SCIENCE (OWS) Peter Baker Alannah Wood Alex Hannan-Joyner James Rae Jason Smith Mio Kuhnen (Items 1.1-1.4, 2, 3 and 4) Misty Dawn Thorose Nicola Smillie Praveen Sebastian Benjamin Klug (Items 1.1-1.4, 3 and 4) Kelly Strike (Items 1, 3 and 4)

INVITED GUESTS Deb Green – Principal Hydrogeologist, Coffey Services Australia Pty Ltd (Item 3.1) Richard Cresswell – Senior Principal Hydrogeologist, Eco Logical Australia (Item 3.1)

The meeting commenced at 9.00 am on Wednesday 3 February 2021.

## 1. Welcome and Introductions

The Chair welcomed members of the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) to the meeting.

# 1.1 Acknowledgement of Country

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

## 1.2 Disclosure of Interests

Before the meeting commenced, Committee members completed the Meeting Specific Declaration of Interests and a project advice specific declaration for the Russell Vale Colliery Revised Underground Expansion Project.

No actual, potential or perceived conflicts of interest were recorded for this meeting.

# 1.3 Confirmation of Agenda

The Committee endorsed the agenda for Meeting 73.

# 1.4 Confirmation of Out-of-Session decisions

The Committee noted that:

- advice on Central Queensland Coal Project was provided to the regulator and published in accordance with agreed timeframes;
- advice on Narrabri Underground Mine Stage 3 Extension Project was provided to the regulator and published in accordance with agreed timeframes; and
- minutes of the Committee's seventy-second meeting on 8-10 December were agreed out-ofsession and published.

# 1.5 Correspondence

The Committee noted the status of correspondence to 1 February 2021.

#### 1.6 Action Items

Ongoing items were noted and an update was provided on the timing of completion.

#### 1.7 Forward Planning Agenda

The Committee noted the forward planning agenda.

It was agreed that the next meeting be scheduled for 10-11 March 2021.

#### 1.8 Environmental Scan

Committee members and secretariat reported back on developments in recent months, including:

- OWS's meeting with Queensland Government on the Central Queensland Coal Project;
- The Commonwealth regulator's request to the OWS to provide comments on technical reports provided by the Hunter Thoroughbred Breeders Association in regards to the Maxwell Underground Coal Mine Project; and
- Release of the Final Report of the Independent Review of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

#### 2. Advice on Projects referred by governments

#### 2.1 Russell Vale Colliery Revised Underground Expansion Project

The proposed Russell Vale Colliery Revised Underground Expansion Project (the "project") is an extension to the existing Russell Vale Colliery, and is located approximately 8 kilometres north of Wollongong, New South Wales. The current proposal is for bord-and-pillar extraction east of Cataract Reservoir, involving only first workings in the Wongawalli Seam and extracting up to 3.7 million tonnes of run-of-mine coal over a five-year period. The project is located within the Cataract Reservoir catchment. Cataract Reservoir is a source of drinking water for Sydney and lies within the Metropolitan Special Area, a restricted-access area designated to protect Sydney's drinking-water catchments. The project is on the Woronora Plateau which supports groundwater-dependent ecosystems (GDEs) such as Coastal Upland Swamps in the Sydney Basin Bioregion. These swamps are listed as Endangered Ecological Communities (EECs) under the EPBC Act and the New South Wales *Threatened Species Conservation Act 1995*.

The IESC previously provided advice on this proposal on 3 December 2019 (IESC-108) and 5 March 2020 (IESC-112) for the New South Wales Department of Planning, Industry and Environment. As part of the previous IESC-112 advice, it was recommended that the quantitative assessment of the risk of pillar failure be independently peer-reviewed by a recognised expert in multi-seam geomechanical stability. For this assessment, a peer review by Professor Bruce Hebblewhite has been presented and the project has been reviewed by the Independent Advisory Panel for Underground Mining Advice. Both reviews propose a number of recommendations which, if adopted, the IESC considers will help support the proponent's predictions that there will be negligible impacts as a result of the project on water-dependent assets, including listed EECs (Coastal Upland Swamps in the Sydney Basin Bioregion) and creeks feeding Sydney's drinking water supply.

Key potential impacts from this project are:

- altered water regimes (including drying) with irreversible effects on EPBC Act-listed swamps;
- long-term effects on Bellambi Gully Creek and nearshore marine environments downstream from the discharge of adit water that exceeds the default guideline values for freshwater aquatic ecosystems for some metals and metalloids in the *Australian and New Zealand guidelines for fresh and marine water quality* (ANZG 2018); and
- long-term impacts on groundwater levels and quality post-mining where discharge from adits may occur in perpetuity.

Consistent with the *Environment Protection and Biodiversity Conservation Regulations 2000,* advice will be published on the IESC's website within 10 business days of being provided to the regulators.

## 3. Other business

# 3.1 Coal Mine Voids, Queensland Scoping Study

Coffey Services Australia Pty Ltd (Coffey) has been engaged by OWS on the advice of the Committee to undertake research into the characterisation of existing and proposed coal mine voids in Queensland. In preparation for the finalisation of the project, invited guests from Coffey and research partner Eco Logical Australia provided a presentation on a draft Scoping Study and associated database.

## 3.2 Subsidence Presentation

Committee member Professor Wendy Timms gave an overview presentation on subsidence and other types of ground movement associated with underground coal mining. The presentation focused on the potential effects of subsidence on groundwater and surface waters, and associated environmental impacts.

# 4. Close of Meeting

The Chair thanked everyone for their contribution to the meeting.

The meeting closed at 1.55 pm on Thursday 4 February 2021.

# Next Meeting

The next meeting is scheduled for 10-11 March 2021.

Minutes confirmed as true and correct:

Dr Chris Pigram AM, FTSE

IESC Chair

12 February 2021