

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development (IESC)
Meeting 90, 5 – 6 October 2022**

**MINUTES
Canberra**

ATTENDANCE AND APOLOGIES

IN ATTENDANCE

Dr Chris Pigram (Chair)
Dr Andrew Boulton
Professor Jenny Davis
Dr Jenny Stauber
Associate Professor Phil Hayes
Professor Rory Nathan (Items 1, 2 & 3)
Professor Wendy Timms (Items 1, 2 [5 Oct], 3.1 & 3.2 by videoconference)

APOLOGIES

Distinguished Professor Craig Simmons

INVITED GUESTS

Item 3.1

Professor Grant Hose, Associate Dean Innovation, Macquarie University (by videoconference)

Item 3.2

Dr Paul Boon, Principal, Dodo Environmental (by videoconference)

Item 3.4

Fiona Chandler, Principal Consultant, Alluvium Consulting (by videoconference)

Item 3.5

ENVIRONMENTAL APPROVALS DIVISION

Martin Paull, Director, Southern NSW Assessments
Natasha Amerasinghe, Director, Water Resources Regulatory Support
Carl Zimmerman, Water Resources Regulatory Support
Stuart Jamieson, Water Resources Regulatory Support
Rod Dann, Director, Queensland North Assessments
Kelli Gowland, Queensland North Assessments
Damien O'Connor, Queensland North Assessments
Alexi Williams, Queensland North Assessments
William Dunlop, Victoria Assessments

OFFICE OF WATER SCIENCE (OWS)

Peter Baker, Director

Aimee McAllister

Andriana Stoddart

Aranza Bulnes-Beniscelli

Christina Fawns

Fiona McKenzie-Smith

Frances Knight

Isabelle Francis

James Rae

Jason Smith

Katrina Bourke

Laura Richardson

Mio Kuhnen

Sarah Taylor

Note: OWS attendees include those with full or partial, and in-person or virtual, attendance.

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

Committee members were invited to make disclosures. Committee members also completed a Meeting Declaration of Interests before the meeting commenced. 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 90.

1.4 Confirmation of Out-of-Session Decisions

The Committee noted that:

- minutes of the Committee's eighty-ninth meeting on 30 August – 1 September 2022 were agreed out-of-session and published on 19 September 2022.
- advice on the Isaac River Coal Mine Project was provided to the regulator on 5 September 2022 and published on 19 September 2022.
- advice on the Caval Ridge Mine Horse Pit Extension was provided to the regulator on 5 September 2022 and published on 19 September 2022.
- public consultation on the draft *Information Guidelines Explanatory Note: Subsidence Associated with Underground Coal Mining* opened on 29 August 2022 and will close on 21 October 2022.
- public consultation on the draft *Information Guidelines Explanatory Note: Uncertainty Analysis for Groundwater Models* opened on 26 September 2022 and will close on 18 November 2022.

1.5 Correspondence

The Committee noted the status of correspondence to 19 September 2022.

1.6 Action Items

Ongoing items were noted and updates were 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 9 November 2022 by videoconference.

1.8 Environmental Scan

The OWS reported on recent events.

2. Advice on Projects referred by governments

2.1 Gregory Crinum Coal Mine M-Block Extension Project

Gregory Crinum Coal Mine M-Block Extension (the project) is a proposed expansion of the existing Gregory Crinum Mine (GCM) located in central Queensland. The project will include new areas of both open-cut and underground mining to the east of the currently approved mining. The project is located in an area of extensive current and historical mining activity. Environmental impacts from mining, such as groundwater drawdown, diversion of watercourses, vegetation loss and discharges of mine-affected water (MAW) have occurred and continue to occur in the region. The project will contribute to these existing impacts, increasing cumulative impacts to water resources and biota, including Matters of National Environmental Significance (MNES).

The future coal production rate for GCM, including the project, is unclear although the mine currently produces approximately 2 million tonnes per annum of coking coal for export markets. The project will commence initially with open-cut mining in the northern parts of M-Block (project area) followed by underground mining progressing south and southeast, ceasing in 2049. Historic and current underground mining at GCM has been longwall mining; however, the proponent intends to use the bord-and-pillar technique for this project which should considerably reduce the potential impacts from subsidence.

The project will utilise existing infrastructure at the GCM, including coal handling, storage and transport facilities, surface water management systems and monitoring infrastructure. Details have not been provided on how the proposed operations will be integrated with existing infrastructure such as the surface water management system which may require additional storages within M-Block and pipework to connect the project to the system.

Key potential impacts from this project are:

- groundwater drawdown from dewatering of the open-cut and underground mining areas which may impact groundwater-dependent ecosystems (GDEs);
- changes to groundwater quality during operations from seepage from MAW storages;
- changes to groundwater quality post-mining from seepage from voids and flooded underground workings;
- contribution to surface water impacts from GCM because water produced by the project in M-Block may be a component of the MAW discharges to Crinum Creek; and
- increased cumulative impacts to water resources in and near the project area and downstream.

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 Metagenomics Research Project

Lead researcher Professor Grant Hose presented results from Phases 2 and 3 and the Committee discussed further plans, including the completion of associated reports and the fact sheet.

3.2 Ecohydrological Conceptual Model Explanatory Note

The Committee discussed the draft Explanatory Note with one of the authors, Paul Boon, who gave a presentation.

3.3 Information Guidelines

The checklist content of the IESC's *Information guidelines for proponents preparing coal seam gas and large coal mining development proposals* was discussed by the Committee in relation to *Significant Impact Guidelines 1.3 Coal seam gas and large coal mining developments — impacts on water resources*.

3.4 2023 IESC Stakeholder Forum

The Committee discussed the revised plan for the 2023 stakeholder event with Fiona Chandler, Alluvium Consulting.

3.5 Commonwealth Regulator Roundtable

An informal roundtable discussion was held with invitees from the Australian Government Department of Climate Change, Energy, the Environment and Water. The discussion covered various topics of mutual interest.

4. Close of Meeting

The meeting closed at 4.30 pm on Thursday 6 October 2022.

Next Meeting

The next meeting is scheduled for 9 November 2022.

Minutes confirmed as true and correct:

Dr Chris Pigram AM, FTSE

IESC Chair

14 October 2022