

**Independent Expert Scientific Committee on Coal Seam Gas and
Large Coal Mining Development (IESC)
Meeting 59, 6-7 March 2019**

**MINUTES
Canberra**

Attendance and Apologies

IN ATTENDANCE

Dr Chris Pigram (Chair)
Professor Craig Simmons
Dr Jenny Stauber
Dr Andrew Boulton
Professor Wendy Timms
Professor Jennifer Davis
Associate Professor Rory Nathan
Professor Joan Esterle (via teleconference)

SECRETARIAT AND SUPPORT

Jo Brennan
Peter Baker (Day 1)
Kelly Strike
Elesha Curran

STAFF OF THE DEPARTMENT OF THE ENVIRONMENT AND ENERGY

Sarah Brown (Items 1, 2, 3.3) Office of Water Science	Carl Zimmermann (Items 1, 2, 3.2) Office of Water Science
Mio Kuhnen (Items 1, 2) Office of Water Science	Les Betland (Items 1, 2) Office of Water Science
Jason Smith (Items 1, 2) Office of Water Science	Benjamin Klug (Items 1, 2) Office of Water Science
Lee-Anne Shepherd (Item 3.5) National Environmental Science Program	

The meeting commenced at 9.00am on Wednesday 6 March 2019.

1. Welcome and Introductions

The Chair, Dr Chris Pigram, 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 land this meeting was held.

1.2 Disclosure of interest

Before the meeting commenced, Committee members completed a Declaration of Interests for the meeting and a project advice specific declaration for the Tahmoor South Extension.

Declarations of actual, potential or perceived conflicts of interest are recorded at *Attachment A*.

1.3 Confirmation of agenda

The Committee endorsed the agenda for Meeting 59.

1.4 Action items

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

1.5 Confirmation of out-of-session decisions

The IESC noted that:

- advice on the Surat North CSG Project was finalised consistent with the Committee's deliberations. The advice was provided to the decision makers and published within statutory timelines; and
- minutes of the Committee's fifty-eighth meeting on 30 – 31 January 2019 were agreed out of session and published.

1.6 Correspondence

The Committee noted the status of correspondence to 21 February 2019.

1.7 Forward planning agenda

The Committee noted the forward planning agenda. It was agreed the next meeting be scheduled for 9-12 April and will coincide with an IESC site visit to the Surat Basin in Queensland.

1.8 Environmental scan

The Office of Water Science provided an update on developments since the January meeting, including:

- Leigh Creek Energy In-Situ Gasification Project; and
- environmental regulatory reform in the Northern Territory.

2. Advice on projects referred by governments

2.1 Tahmoor South Extension, Tahmoor Coal Pty Ltd/SIMEC

The proposed Tahmoor South coal mining project is a longwall -mining extension to the existing underground Tahmoor Coal Mine, approximately 80 kilometres southwest of Sydney in the Southern Coalfields of New South Wales (NSW). It is proposed that up to four million tonnes per annum of run-of-mine coal (coking and thermal) will be extracted from 2023 to 2035. The proposal also includes expansion and upgrades of existing surface infrastructure.

The proponent (Tahmoor Coal Pty Ltd/SIMEC), the NSW Department of Planning and Environment, and the Australian Government's Department of the Environment and Energy have identified a range of potential impacts to water resources. These potential impacts would be primarily concentrated in the catchment of the Bargo River. The Bargo River flows into the Nepean River, adjacent to the Metropolitan Special Area, which provides drinking water to Sydney. Conservation areas to the west of the mine include Thirlmere Lakes National Park, which has been subject to a number of studies and an Inquiry relating to water level variations in the lakes and the potential cumulative impacts of multiple land-use activities, including mining.

The Committee reviewed and discussed the information provided, and considered the key potential impacts of the proposed project to be:

- changes to groundwater and surface water hydrology and water quality due to ground movement comprising subsidence and other mining induced ground movements including strata deformation, surface fracturing and near-surface fracture networks, upsidence, valley closure, shear and bed plane movements;
- reduced flow and pool persistence in watercourses in the project area, particularly in Tea Tree Hollow, Dog Trap Creek and their tributaries due to surface cracking and near-surface fracture networks;
- possibly irreversible changes to surface water ecosystems, groundwater-dependent ecosystems and water-dependent species (including several *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)-listed species);
- groundwater drawdown that will potentially affect numerous private bore users (existing modelling indicates that more than two metres of drawdown could occur in approximately 120 bores); and
- cumulative impacts associated with past, current and future mining in the context of all land and water uses in the region.

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 Faults Explanatory Note Post-workshop Discussion

The Committee discussed the recent IESC workshop: Characterisation and groundwater modelling of geological faults zones held in Sydney on 14-15 February 2019. The Committee noted that the next steps will be to hold targeted meetings with the coal industry, before drafting the explanatory note.

3.2 IESC Fact Sheet on the Use of Environmental Tracers

The draft fact sheet on the use of environmental tracers was discussed by the Committee. The Committee provided alterations and additions to the fact sheet. The fact sheet will be discussed at the next meeting.

3.3 IESC Advice that Highlights Examples of Good Practice in Environmental Impact Statements

The Committee discussed the large number of caveats in identifying examples of good practice in Environmental Impact Statements and agreed to integrate the discussion into the Committee's Industry Workshop in June 2019.

3.4 Industry Workshop and Future Stakeholder Event

The Committee discussed the scope of hosting an Industry Workshop in June 2019. The Committee agreed to the proposed scope for consultation with proposed participants.

The Committee also discussed possible timing, feasibility and themes for a larger stakeholder event in the second half of 2019.

3.5 Presentation on the National Environmental Science Program

Ms Lee-Anne Shepherd from the Department of the Environment and Energy provided an update on the National Environmental Science Program.

Close of Meeting

The Chair thanked everyone for their contribution to the meeting.

The meeting closed at 4.00pm on Thursday 7 March 2019.

Next Meeting

The next meeting is scheduled for 9-12 April and will coincide with an IESC site visit to the Surat Basin in Queensland.

Minutes confirmed as true and correct:

Dr Chris Pigram

IESC Chair

23 March 2019

Item(s)	IESC member	Disclosure	Determination
2.1	Professor Wendy Timms	<p>I consider that there may be a possible conflict of interest in relation to project advice arising from a perceived conflict of interest with a research grant that I co-lead at Thirlmere Lakes.</p> <p>My involvement was/is:</p> <ul style="list-style-type: none"> • Co-author of journal paper 2016. This independent research was funded by the UNSW Australian Centre for Sustainable Mining Practices (ACSMP), with no input or funding from Glencore, then-owner of Tahmoor. • Co-lead of research, 2017-2019, NSW environmental trust research project. <p>My role is focused on co-leading the geology and geophysics investigations at Thirlmere Lake.</p>	No actual or perceived conflict of interest exists in relation to the Tahmoor Project and Professor Timms participated fully in the preparation of the advice.