

Advice to decision maker on coal mining project

Proposed action: Macarthur Coal (C&M Management) Pty Ltd's Codrilla Coal Project

Requesting agency	Department of Sustainability, Environment, Water, Population and Communities
Date of request	16 March 2012
Project title	Codrilla Coal Project (EPBC 2009/4892)
Summary of request	<p>The Department of Sustainability, Environment, Water, Population and Communities (the department) has assessed this proposed project in accordance with the provisions of the <i>Environment Protection and Biodiversity Conservation Act 1999</i>.</p> <p>The Department sought independent scientific advice from the Interim Independent Expert Scientific Committee on Coal Seam Gas and Coal Mining (the interim committee) as to:</p> <ol style="list-style-type: none"> 1. whether there are likely to be significant water related impacts on Matters of National Environmental Significance as a result of the proposed project 2. whether at a catchment scale, the project has the potential to contribute to groundwater and water quality cumulative impacts and the broader water balance 3. whether the proposed Commonwealth approval notice and Queensland Department of Environment and Resource Management approval conditions are appropriate to mitigate impacts to matters of national environmental significance 4. whether there are any further conditions that should be imposed on the proposal, should it be approved, to manage impacts as described in 1 and 2 above.

Advice

1. The interim committee considers that by itself, this project is not expected to have significant impacts on water-dependent matters of national environmental significance, specifically the Fitzroy River Turtle (*Rheodytes leukops*).
2. In reaching this conclusion, the interim committee took into account the distance between the proposed project site and the known areas of habitat of the Fitzroy River Turtle and additional information requested from Geoscience Australia including a site water balance that indicates:
 - a. there appears to be a low risk to water dependent values and aquifers
 - b. there should be minimal regional impacts to groundwater from the project
 - c. water quality is not expected to be significantly impacted by emergency discharges
 - d. there appears to be a low risk of water pollution resulting from uncontrolled site runoff.

The interim committee's conclusion also assumes the project is managed in accord with the environmental authority issued by the Queensland Government.

3. The interim committee noted that the potential cumulative impacts on the Fitzroy River Turtle in this part of the Bowen Basin could not be determined from the information available.
4. The interim committee expressed some concerns about the completeness of the groundwater modelling undertaken for this project and the insufficient information available to allow a regional water balance to be developed. Given this, the interim committee noted that the full impact on groundwater of dewatering associated with the project is uncertain.
5. The interim committee noted that the project will leave a large void which could act as a sink for local groundwater. The potential impacts of this void on groundwater are not well understood – particularly when considered in the context of the cumulative impact of other large coal mining projects in the area. The interim committee has identified the need for research to address this gap in scientific knowledge and has commenced consideration of how such research could best be undertaken.
6. The interim committee requested that when referring projects to it for advice, the Commonwealth give careful consideration to the likely significance of impact on water resources and relevant matters of national environmental significance to ensure that only those projects that would benefit from the scientific expertise of the Committee are referred.

**Date of
advice**

21 May 2012
