

Advice to decision maker on coal mining project

Proposed action: Collingwood Coal Project and Taroom Coal Project, Qld.

Requesting agency	Department of Sustainability, Environment, Water, Population and Communities
Date of request	1 May 2012
Project title	Collingwood Coal Project (EPBC 2012/6236) and Taroom Coal Project (EPBC 2012/6237)
Summary of request	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> .
	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 the adequacy of the Terms of Reference for the Collingwood and Taroom Coal projects, specifically:
	 likely operational impacts and flood risks within the project area and downstream on aquatic and riparian habitat features, including waterway form and features (e.g. riffles, deep pools, snags etc), abundance of prey / forage species such as <i>Vallisneria</i> sp. beds, water quality, stream flow parameters and terrestrial riparian habitat trees;
	 likely impacts associated with the diversion of Back Creek into Juandah Creek (for Taroom Coal Project only); and
	 removal of farm dams, wetlands and waterholes within the project site, in the context of removing potential habitat for migratory species.

Advice

Given the nature and proximity of these projects (less than 50km apart) and fact that they are proposed by the same proponent, the interim committee agreed to provide one set of advice that covers both projects.

- 1. In general, the interim committee considers that the "draft Terms of Reference for an Environmental Impact Statement" for both projects represent a reasonable start.
- 2. Noting, however, the suite of current and impending projects within the Surat basin, particularly the North Surat, the Environmental Impact Statements for both projects should give greater weight to an assessment of the potential cumulative impacts of developments in this region.
- 3. The interim committee suggests that the terms of reference require the proponents to assess cumulative impacts in accordance with the practices and procedures set out in the Mineral Council of Australia's Water Accounting Framework for the Minerals Industry.

- 4. In addition, the interim committee recommends that the Terms of Reference should be revised to require that the proponents for both projects include as part of their Environmental Impact Statement:
 - a. more specific water resource information, namely:
 - i. baseline details on water assets, including environments supported by those assets
 - ii. a site water balance for each asset, complemented by a regional water balance
 - iii. an assessment of how the proposed project will change both the site and regional water balances. The interim committee suggests that the water balance analysis could include (but not necessarily be limited to) the following information:
 - : usage of the surface water and identified aquifer(s)
 - : an assessment of regional water assets
 - : critical dependencies of the identified aquifer(s) and extent of hydrological interconnectivity
 - : an understanding of the structural and dynamic ground and surface water systems (including recharge and discharge)
 - : an assessment of the quality of information and data for the identified systems.
 - b. a risk matrix that incorporates key hazard elements; an assessment of the likelihood and consequence of each hazard element occurring and identification of residual risk following the application of mitigation measures. Key hazards could include:
 - i. lack of baseline information to inform/measure:
 - : direct impact on the water resources and vulnerable assets
 - : indirect impacts on environment that is supported by the water resource
 - : consequential impacts
 - : cumulative impacts
 - ii. lack of adequate proposed monitoring and/or demonstrated capacity to manage environmental consequences
 - iii. likelihood of subsidence uncertain and/or not adequately monitored or managed
 - iv. likelihood of disruption to aquifer flow or creation of aquifer interconnectivity uncertain and/or not adequately monitored or managed
 - v. draw down of water table not adequately monitored or managed
 - vi. co-produced water or mine water not adequately monitored or managed
 - vii. groundwater dependent ecosystems significantly impacted
 - viii. likelihood of surface water adversely impacted
 - ix. possibility of drinking water and irrigation supply contamination.
 - c. assessment of the overall acceptability of the impacts of the project in light of the residual uncertainties and risk profile.

Date of 28 May 2012 advice