

Advice to decision maker on coal mining project

Proposed action: Drayton South Coal Mine (2011/5911)

Requesting agency	Department of Sustainability, Environment, Water, Population and Communities
Date of request	13 December 2012
Date request accepted	13 December 2012
Advice stage	Environmental Impact Assessment - Draft
Summary of request from the regulator	<p>The Department of Sustainability, Environment, Water, Population and Communities (the Department) is currently assessing the proposed Drayton South Coal Project in accordance with the provisions of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (the EPBC Act).</p> <p>The Department notifies the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (the Committee) of an opportunity to comment on the Environmental Assessment Report for the proposed Drayton South Coal Project.</p> <p>Specifically, the Department seeks the advice of the Committee as follows:</p> <ol style="list-style-type: none"> 1. What does the Committee consider to be the potential impacts of the proposed mine on the surface water resources and /or groundwater resources which may support surface habitat in or around the project area? 2. In the context of the above question, does the Committee identify any particular concerns relating to cumulative impacts?

Advice

The Committee was requested to provide advice on the Drayton South Coal Mine in NSW to the Commonwealth regulator at the environmental assessment stage.

1. The Committee notes that the proponent has provided an adequate site water balance for the project. However, the proponent has not provided a regional water balance and as such the cumulative water-related impacts of the proposed development cannot be evaluated. Notwithstanding this, the Committee considers that the site specific impacts may be minimal.
2. The Committee notes that cumulative groundwater drawdown from the Mt Arthur and Drayton South coal mines is predicted to reduce groundwater flows to Saddlers Creek. In addition, the Committee recognises that surface water impacts would be caused by a reduction in catchment flows of 14 per cent or approximately 13 ML per year to Saddlers Creek, where flows are estimated to be approximately 90 ML per year under pre-mining conditions. The Committee notes that a reduction of flows would likely

alter the geomorphic characteristics, habitats and ecological values of the creek.

3. In order to ensure that the Hunter River is not further impacted by saline discharges, the Committee considers that it will be important to confirm the proponent's participation in the Hunter River Salinity Trading Scheme and confirm the capacity of the Scheme to cope with additional saline discharges within the catchment. It is noted that the potential impacts of heavy metals are not discussed in the documentation.
4. The Committee considers that the ecological impact assessment provided for the project to be thorough. The biodiversity offset strategy proposed by the proponent consists of onsite and offsite offsets. The Committee recommends that the regulator review the contribution of the offsets towards a representative water dependent ecosystem; noting that the current offset site is located 75 km north of the proposal and consists of different landform and ecosystem types.
5. The Committee notes that the proposal will remove approximately 180 ha of remnant *White Box – Yellow Box – Blakey's Red Gum Grassy Woodland and Derived Native Grassland* ecological community, which has the potential to cause ecosystem fragmentation and loss of connectivity within the project site. The Committee considers that remaining vegetation, such as groundwater dependent riparian vegetation and River Red Gum and River Oak communities associated with floodplains, would be placed under additional stress, making them more vulnerable when droughts occur.
6. The Committee notes that a reduction in catchment area and surface and groundwater flow is highly likely to adversely affect groundwater dependent riparian and floodplain vegetation and water dependent ecological communities. While the Green and Golden Bell Frog has not been located in field surveys, the Committee notes that the Hunter region is within the species' current distribution. The Committee suggests the 'biodiversity action plan' include a monitoring regime for the rehabilitation of ephemeral streams for likely impacts on water dependent ecosystems, including the Green and Golden Bell Frog.
7. The Committee suggests that the proponent consider further information relating to physical and ecological outcomes of the project. The Committee has asked the Office of Water Science to provide to the regulator specified references for suggested papers which look at these issues within the proposed mine area, and asked that they be passed to the proponent.

Date of advice 1 February 2013
