



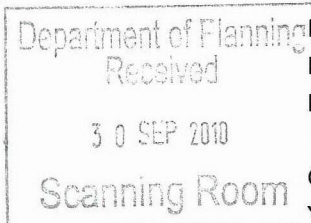
Office of Water



Major Development Assessments
Department of Planning
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**Subject: Riverina Oils and Bio Energy, Integrated Oilseed Processing Facility (MP07_0146 MOD1)
Environmental Assessment**

The NSW Office of Water (NOW) has reviewed the Environmental Assessment (EA) for the Riverina Oils and Bio Energy, Integrated Oilseed Processing Facility (MP07_0146 MOD1).

NOW has a concern that the Director General's Requirements have not been adequately addressed in the EA.

Comments

- 1) The hydrogeological technical report submitted is dated March 2008 and has not been updated to account for the new wastewater storage pond or changes in climatic conditions during 2008 to 2010. The use of average annual groundwater levels and quality data is not adequate to determine seasonal variability of levels and quality within the shallow perched and deeper aquifer; to assess connectivity between these two aquifers; linkage to rainfall; and to establish trigger level criteria. There are a number of NOW monitoring bores within the area which could have been accessed for comprehensive groundwater contours and flow directions to be determined.
- 2) The establishment of impact assessment criteria section of the EA (Section 6.3) has only used guideline levels for Primary Industries (Irrigation) and given no indication for the level of protection these values represent. Due to salinity being an issue in the Murrumbidgee River Catchment, the ANZECC guidelines for freshwater ecosystems needs to be referred to. The EA states that where trigger levels are not provided, an assessment of variation between years was undertaken. This assessment has not been presented in the EA and there is no indication of the number of samples used and from what locations these samples have been collected and when. Using a trigger level for rise in groundwater levels to 3 m or an average 20cm per year over 5 years is inadequate due to the lack of knowledge in the variation of groundwater levels seasonally and connectivity with the perched aquifer which the EA states is located at a depth of approximately 2 metres.
- 3) The site water balance detailing water sources, water consumption, water recycling, the quantity and quality of waste water streams was not addressed in the EA. The EA did provide information on the stormwater collection, rainfall, holding capacity of the waste water storage dam and the water requirements for the crops to be irrigated with the waste water. However there has been no information on the volumes or source of water required for operating the processing facility, estimations of stormwater runoff and a model of this data to provide the information detailing the amount of water in and out of the processing plant for the site balance.

- 4) The monitoring proposed in the Groundwater Management Plan (GMP) for leakage from the wastewater dam on an annual basis is inadequate to detect for any impacts to the groundwater from any potential leakage from the dam.

Recommendations

To adequately assess the EA, NOW requires the following documents to be updated for review.

- 1) Hydrogeology Technical Report
The technical report needs to be updated to include current data from 2008 to 2010 with the following areas to be addressed:
 - a) A map showing the proposed monitoring bores in relation to the wastewater dam including information on bore depths and screen levels,
 - b) updated hydrographs using raw data not average annual data to show seasonal variability and responses to rainfall to be presented as line graphs not bar graphs,
 - c) daily rainfall presented to enable comparison with groundwater levels,
 - d) graphs showing changes in water quality over the baseline period to show any seasonal and locality variations,
 - e) provide groundwater trigger level criteria for all variables based upon guidelines and baseline data, and
 - f) If this data is not available baseline data is to be collected for a period of 2 years for groundwater levels (daily measurements) and quality (monthly and after storm events), to establish variability of groundwater levels and to establish trigger level criteria.
- 2) Site Water balance needs to be determined for all water in and out of the site including the amount and source of processing water.

In addition the Groundwater Management Plan needs amending for the proposed monitoring of the wastewater storage pond for leakage detection. The proposed monitoring on an annual basis needs to be changed to monthly monitoring to ensure minimum impacts to the groundwater due to leakage are detected. Mitigation and contingency measures also need to be incorporated into the WMP for the potential of pond leakage.

If you require further information please contact Jodie Dabovic on 4904 2571 at the Newcastle office.

Yours sincerely



Mark Mignanelli
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