



Department of Primary Industries

OUT16/17235

Mr Robert Byrne
Industry Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Robert.byrne@planning.nsw.gov.au

Dear Mr Byrne

Bourke Small Stock Abattoir (SSD 7268) Comment on the Environmental Impact Statement

I refer to your email dated 10 March 2016 to the Department of Primary Industries in respect to the above matter. Comment has been sought from relevant DPI divisions. DPI Water and DPI Agriculture comments are as follows. Any further referrals to DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

DPI recommends the following Conditions of Consent be included in any determination issued for the Bourke Small Stock Abattoir:

1. The proponent prepares an Operational Management Plan in consultation with DPI Water prior to commencement of activities.
2. The proponent completes groundwater investigations and the development of a groundwater monitoring and management plan in consultation with DPI Water prior to commencement of activities.

Comment by DPI Water

The Department of Primary Industries - Water (DPI Water) has reviewed the exhibited Environmental Impact Statement for the Bourke Small Stock Abattoir. The following comments are provided to assist in determination of the project. Recommended conditions of consent are in Attachment 1.

- DPI Water understands the key activities associated with the project include:
 - o Construction and operation of an abattoir to process up to 6000 head per day.
 - o Construction and operation of ancillary infrastructure including power and water services, roads, buildings and a waste water treatment system.
 - o Wastewater treatment ponds to treat effluent prior to irrigation.

Water Demands and Sources

- The EIS indicates water demands required for livestock watering, meat processing, washdown, dust suppression and staff amenities are predicted to range from 0.77-1ML/d (250-365ML/yr). This is to be supplied by Bourke Shire Council via pipelines

to Council's raw water from the Darling River and to Council's filtered reticulated water.

- Bourke Shire Council have provided a letter confirming the availability of the water supply, advising there is up to 2500ML of spare capacity in their existing water entitlement from the Darling River. Drought modelling completed by the Council indicates water can be provided to the abattoir at full demand levels during drought. Despite this advice, it is recommended provisions be made in either the Council's Drought Management Plan or in the proponent's Operational Management Plan for determining priorities between the abattoir and town water supply requirements in a worst case scenario of inadequate supplies being available to meet all demands.

Wastewater and Effluent Irrigation

- The effluent treatment ponds and effluent irrigation area overlie upper reaches of the Upper Darling Alluvial Groundwater Source where low beneficial category, less productive groundwater occurs sporadically under the proposed site. The risk of impact and its consequence on the potential receptor "Upper Darling alluvial groundwater source" is expected to be minor due to this development. The EIS however has not justified this with established facts or assessed the impact of the development with the minimal impact considerations in the NSW Aquifer Interference Policy.
- The EIS indicates wastewater is to be produced at the rate of 0.7ML/d and is to be treated via a series of four treatment ponds. Each pond is to have a 12ML capacity (60m x 60m and 3-4m deep) and is to be lined with a 1mm synthetic liner to mitigate seepage into the underlying soil and groundwater. Based on no groundwater being intercepted in the soil cores drilled to 8.8m, groundwater is not predicted to be intercepted during pond construction.
- The Effluent Management Study (Appendix K) reported effluent is to be irrigated over a 38ha area which is predicted adequate to manage the nutrient and water demands. The irrigation area is to be bunded to prevent clean runoff entering the site and ongoing monitoring is proposed for soil, surface water and groundwater to manage potential impacts. This concept is supported.
- Section 13 of the EIS included a review of existing bores in the local area to enable consideration of existing groundwater conditions. The closest bore is 1.3km to the east of the site with a standing water level of 8.52m. However this bore is within approximately 1km of the Darling River on grey soils, hence may not be reflective of groundwater conditions at the project site. The test holes drilled were for the soil tests and none of the holes were deep enough to intercept groundwater. The depth of the water table and quality is therefore unknown at this stage.
- Two groundwater monitoring bores are proposed to monitor potential impacts from the wastewater treatment ponds. This concept is supported, however no detail is provided of bore construction, monitoring frequency and the suite of analytes to be monitored. DPI Water recommends this be addressed prior to commencement of the project.

Surface Water

- No drainage lines exist on the site therefore no impact on waterfront land is proposed by the development.
- Stormwater management is to include construction of a 2.8ML storage to collect runoff from building roofs and sealed roads, and clean water is to be diverted around disturbance areas. Separation of clean and dirty water during construction and operation is supported. Adequate stabilisation of clean water diversions and discharge points will need to be addressed in detailed design.

Mitigation and Management

- An Operational Management Plan is proposed following project approval to aid in implementation of the project's commitments. DPI Water supports this approach and requests consultation during its development.
- DPI Water supports the proposed management of erosion and sedimentation impacts in accordance with the guideline, "*Managing Urban Stormwater: Soils and Construction* (Landcom 2004)".
- Installation of groundwater monitoring bores to monitor potential impacts from the wastewater treatment ponds is supported. No mitigation plan is proposed in the EIS.

Recommendations

- Prior to commencement of the project DPI Water recommends the following:
 - o Drill two monitoring bores to intercept the water table in the Upper Darling Alluvial Groundwater Source or to a minimum depth of 20 m below ground level to establish groundwater level and baseline groundwater quality. Complete an assessment of the impact of the development against the minimal impact considerations in the NSW Aquifer Interference Policy.
 - o The proponent in consultation with DPI Water identify the location and timing of the proposed two monitoring bores, depth, slot intervals, monitoring frequency and suites of analytes to be monitored, and development of a mitigation plan in the unlikely event of adverse impact on the groundwater source.

For further information please contact Tim Baker, Senior Water Regulation Officer, (02) 6841 7403, tim.baker@dpi.nsw.gov.au.

Comment by DPI Agriculture

The Department of Primary Industries – Agriculture has reviewed the exhibited Environmental Impact Statement for the Bourke Small Stock Abattoir against the SEARs and the key issues related to the use of effluent water and arrangements for daily and mass animal disposal arrangements.

The following matters are outstanding and should be addressed:

- The EIS notes that land will be available for the mass animal disposal in the area under conditional contract. However, it is recommended that an area within this area is selected and tested for its suitability for purpose to ensure runoff and groundwater is not subject to pollution.
- The irrigation area nominated should consider a buffer area adjacent to the neighbouring property.

For further information please contact Mary Kovac, Resource Management Officer, (02) 6881 1250, mary.kovac@dpi.nsw.gov.au.

Yours sincerely



Mitchell Isaacs
Director, Planning Policy & Assessment Advice
27/4/2016