NSW GOVERNMENT | Department of Primary Industries

07 JUL 2015

OUT15/16271

Mr Thomas Piovesan
NSW Department of Planning and Environment
GPO Box 39
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Dear Mr Piovesan

ProTen Production Complex, Euroley, Narrandera LGA (SSD_6882)
Comment on the Response to Submissions Report

I refer to your email dated 19 May 2015 to the Department of Primary Industries in respect to the above matter.

Comment by NSW Office of Water

The NSW Office of Water has reviewed the exhibited Environmental Impact Statement for the proposed ProTen Poultry Production Complex near Euroley in the Narrandera Local Government Area. The following key comments are provided in addition to recommendations which include requests for additional information. Recommended conditions of approval will be provided following consideration of additional information.

- Appendix H (Flooding Assessment) provides modelled information of the flood extent on the site for the 1 in 100yr ARI flood event and the PMF. An interpretation has been provided of the potential impacts of the project which indicates a local increase in flood heights of 150mm for the 1 in 100yr ARI and a 300mm increase for the PMF. This however has not been confirmed with a detailed hydraulic assessment. Clarification is requested of the project impacts on-site and to the neighbouring properties in terms of changes to the flood extent, flood velocities and flood depths due to the project.
- The EIS states that the four proposed bores are located on Lots 41& 44, DP750898. Figure 1.3 however shows bores to be located on Lots 41 & 1. Clarification is required.
- Although a bore log of the test bore has been provided in the EIS, a pumping test was not undertaken to confirm the yield. Instead, the EIS used extraction information from another bore located 4km away (Chapter 6.6.1). Groundwater yields from bores in the same aquifer can vary within the local area since the geology is variable and as reflected by change to depth to bedrock (logs of NOW monitoring bores GW040862 & GW040957). Uncertainty therefore exists

in the aquifer yields at the project site and therefore the viability of the proposed water supply.

- The EIS does not provide locations of existing bores (users) including their depths and distances from their proposed extraction sites.
- The EIS states that the groundwater drawdown as a result of groundwater extraction within the development site will be minimal, and will be less than two metres at any nearby water supply work, thereby meeting Level 1 impact levels in the NSW Aquifer Interference Policy. The transmissivity (T) value for the aquifer used in the impact assessment is considered high for the local area. Values between 1,000 to 1,500 m^2/d are likely to be more appropriate and were suggested in the advice at adequacy assessment stage.
- The analysis for groundwater drawdown as a result of groundwater extraction within the development site was undertaken for a period of 100 days only. This is considered inadequate. The proponents were advised at the adequacy assessment stage of the need for longer term assessment period of ten years (or 2,000 days).
- It is recommended a meter be required on each bore to account for all groundwater extraction. This could be incorporated into a management plan for monitoring impacts of the project.
- The proposed permanent trade is from a water access licence linked to an existing bore about 4km away, which is considered as a trade within the local area. This is consistent with the Office of Water's existing strategy to manage local impacts in the area. Further, annual extraction limits on bores are used to manage third party impacts in the local area.
- The EIS does not establish depths to water table and water quality of the shallow groundwater source in areas targeted for shed wash & storm water disposal, and in the vicinity of on-site staff amenities and residences, as well as the chemical storage facility. It is therefore not possible to comment on the potential impacts to groundwater or consideration of necessary mitigation or monitoring measures.
- Management of the washdown water from the poultry sheds relies on infiltration into the soil in grassed swales with uptake of nutrients by the grass. Ensuring the nutrient and salt load of this infiltrated washdown water will not result in an impact to the local groundwater source is critical.
- Mitigation measures have been addressed in terms of the production bore construction. However, no commitment has been made to undertake any water table and groundwater quality monitoring.

Recommendations

1. Clarification is included in the flooding assessment of potential impacts on-site and to the neighbouring properties in terms of flood extent, flood depth and flood velocities for the 1 in 100yr ARI event and the PMF. Impacts on neighbouring properties need to be considered in terms of land management practices as well as infrastructure.
2. The EIS be amended to clarify the exact locations of proposed bores (correct Lots/DP numbers).
3. It is recommended that proper pump testing be carried out to confirm bore yields at the proposed sites to confirm water supply security.
4. The locations of all existing bores within 5km including their depths and distances from ProTen's proposed extraction sites are provided.

5. The assessment of potential impacts of 460 ML extraction on nearby bores is considered inadequate and it is recommended that the analytical model be re-run to assess the impact of extraction using modified aquifer parameters and a longer pumping period (i.e. 2,000 days).
6. It is recommended that all groundwater extraction points (bores) are required to be equipped with meters as per required standards.
7. The volume of groundwater extracted from the authorised bores be limited to 460 ML/year through the project approval.
8. As part of the condition of consent all production bores are required to be constructed in accordance with the "Minimum Construction Requirements for Water Bores in Australia, Third Edition, February 2012".
9. The EIS establish pre-development depth to water table and groundwater quality of the shallow groundwater source in areas targeted for shed wash & storm water disposal and in the vicinity of on-site staff amenities and residences as well as chemical storage facility. Shallow piezometers are recommended with regular monitoring for water table depth and quality.

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

Yours sincerely

Kristian Holz
Director Policy, Legislation and Innovation