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15 June 2023

Nikita Mahapatra

Development Manager

Woolworths

Via email: nmahapatra@woolworths.com.au

RE: Odour Assessment - Proposed Woolworths development at Austral South

Dear Nikita,

Todoroski Air Sciences has investigated the potential for odour impacts upon the proposed Woolworths development at Austral South, New South Wales (NSW) (hereafter referred to as the Project). The focus of this letter report is to consider the potential for odour impacts due to nearby poultry operations to result in any adverse odour impacts upon the Project site.

The report has been prepared with consideration of the NSW Environment Protection Authority (EPA) document *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (**NSW EPA, 2022**).

Background

The Project site is located at 330-350 Eighth Avenue and involves the development of a Woolworths shopping complex on the northern portion of the site with the southern portion dedicated to parking. An indicative site layout is presented in **Figure 1**.

The Project site is located within an area designated as a future urban release area in the South West Growth Centre of Sydney known as the Austral Precinct. The rezoning of this area will change the current makeup of the area from low density rural properties and activities including poultry farms and market gardens, to a more urbanised setting with higher density residential housing.

The existing odour generating activities (i.e. poultry farms) are generally not compatible with the rezoning and the proposed Project. This assessment considers the potential for odour impacts due to the nearby identified poultry farms to result in any adverse impacts upon the Project site.

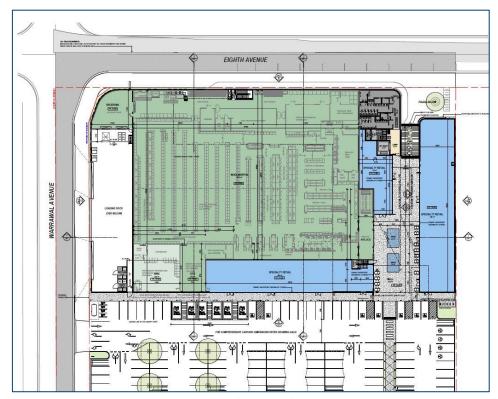


Figure 1: Indicative site layout

Assessment of potential odour impacts

A desktop review of the area surrounding the Project site was conducted to identify any potentially operating poultry farms. The potential poultry farms were identified from available satellite imagery by the elongated shed design characteristic of poultry sheds.

Figure 2 presents the Project location and the potential poultry farms. The poultry farms are identified as:

- → 200 Eleventh Avenue, Austral (located approximately 0.85km north of the Project);
- → 230 King Street, Rossmore (located approximately 1.3km west of the Project); and,
- → 2 Wynyard Avenue, Rossmore (located approximately 1.3km west of the Project).

We note that a number of poultry farms which were located on Kelly Street have since been demolished and replaced with residential dwellings. From the available satellite imagery presented in **Figure 2**, the urban residential development can be seen to have progressed with the Austral Precinct, surrounding the Project site.

Based on the proximity of these approved developments (and other already progressed developments), the Project site is located at a similar spatial distance away from the potential poultry farm and, thus, it can be inferred that if there is no adverse odour experienced at the approved development locations, this would also be the case for the Project site.

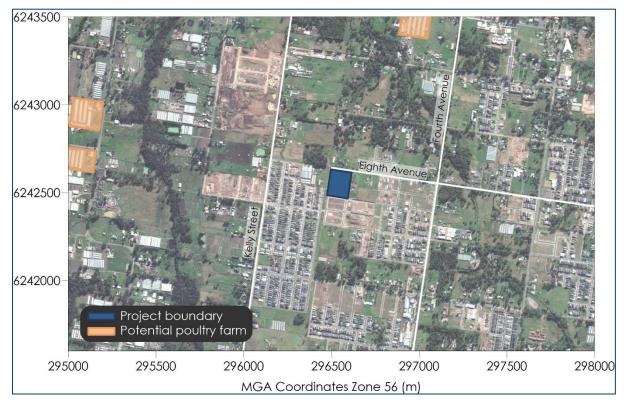


Figure 2: Potential poultry farm operations

Todoroski Air Sciences has previously prepared odour assessments for other development sites in the Austral area including Air Quality Assessment 12 Kelly Street Austral (Todoroski Air Sciences, 2022a) and Air Quality Assessment 68-70 Boyd Street Austral (Todoroski Air Sciences, 2022b). The potential odour impacts associated with the poultry operations at 200 Eleventh Avenue, 230 King Street and 2 Wynyard Avenue have been assessed in these reports and the modelling prediction area used to infer the potential for odour impacts at the Project site.

The dispersion modelling predictions presented as an isopleth diagram showing the 99th percentile noseresponse ground level odour concentrations for the potential poultry farms are shown in Figure 3. The predicted extent of the 2 OU contour in each of the figures are superimposed in a single figure with the Project boundary for reference in Figure 4.

The modelling predictions show no adverse odour impacts would arise at the Project site and that the predicted levels of odour would be below the most stringent NSW EPA criterion of 2 OU (NSW EPA, 2022).

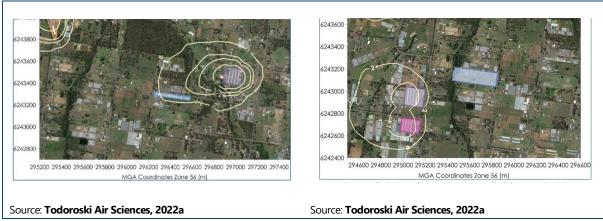


Figure 3: Predicted 99th percentile nose-response average ground level odour concentrations (OU) for potential poultry farms

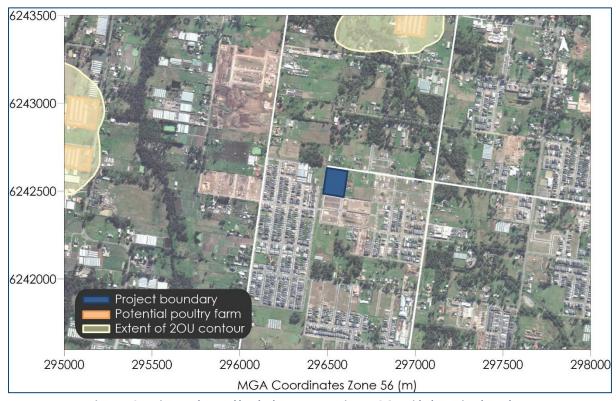


Figure 4: Superimposed ground level odour concentrations at 2 OU with the Project boundary

Summary and conclusions

A desktop review of the area surrounding the Project site has identified urban residential development has progressed near the Project site and the nearest potential poultry farm is located more than 0.8km away. Since there is no adverse odour expected at the approved development locations, it is likely that the Project site would also be free from any such odour.

Dispersion modelling of potential odour impacts associated with the nearby poultry farm were reviewed and indicate that the predicted odour levels be well below the criterion of 2 OU at the Project site.

Overall, the Project site would be suitable for development.

Please feel free to contact us if you would like to clarify any aspect of this report.

Yours faithfully,

Todoroski Air Sciences

Philip Henschke (CAQP)

References

NSW EPA (2022)

"Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales", NSW Environment Protection Authority, August 2022.

Todoroski Air Sciences (2022a)

"Air Quality Assessment – 12 Kelly Street, Austral", prepared for RPS by Todoroski Air Sciences, March 2022.

Todoroski Air Sciences (2022b)

"Air Quality Assessment – 68-70 Boyd Street, Austral", prepared for Craig & Rhodes by Todoroski Air Sciences, December 2022.