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Bindaree Beef

c/- Mitchel Hanlon Consulting Pty Ltd

121 Bridge St (PO Box 1568) Tamworth NSW 2340

11 Jun 2014

Ref: 70Q-13-0318-GCO-516619-0

Attention: Jocelyn Ullman

Bindaree Beef Environmental Impact Statement

Dear Jocelyn,

Vipac Engineers & Scientists prepared the Noise & Vibration and Air Quality technical reports for Bindaree Beef.

Vipac has reviewed the comments received from the NSW EPA dated 22nd May 2014 and this correspondence details our response to the each comment.

If you have any queries, please do not hesitate to contact Vipac on (07) 3377 0400 or michellec@vipac.com.au.

Yours sincerely,

Vipac Engineers & Scientists Ltd

Michelle Clifton

Consulting Scientist

1 AIR QUALITY COMMENTS

Issue 1 – It has not been demonstrated that the TAPM generated meteorological data used in the assessment is site representative.

For this assessment, five consecutive years of site specific meteorogical data was generated using EPA approved TAPM. The reason for this is due to the availability of wind roses. The closest Bureau of Meteorology weather stations where wind roses are available are:

- Moree – located 141 km from Inverell;
- Tentafield – located 158 km from Inverell; and
- Tamworth – located 207 km from Inverell.

These locations are not considered to be representative of the site due to their distance from Inverell. As such, the generated wind roses were not compared to any existing long term wind patterns. TAPM uses large-scale synoptic weather analysis from the Bureau of Meteorology monitoring network to generate local weather data at a finer, local scale resolution which incorporates local topography. As such, the TAPM generated dataset was considered to be the best estimate for weather conditions at Inverell.

Issue 2 – Emissions from the proposed rendering plant have been modelled as volume rather than point emissions.

Reviewing the odour model, the rendering plant was modelled as three point sources to replicate three vents in the roof of the building as shown in the rendering plant plan dated 23.11.2013. This will be clarified as a footnote to Table 6.4 of Vipac's air quality report. As a result, there is no requirement to carry out further odour modelling.

The odour model was based on information provided by MeatEng in February 2014 for the new plant. One of the plans provided (presented in Appendix D of the air quality report) details the odour emissions as either point or non-point odour source.

Issue 3 – It is unclear whether predicted odour impacts have been presented as peak nose response time concentrations rather than one hour.

The peak concentration (one-second average) is mentioned in Section 3.2 of the air quality report. All odour concentrations are a peak nose response, not one hour. This is also clarified in the results section of the report.

Issue 4 – Sensitive Receptors

The peak nose concentration at each sensitive receptor is presented in Table 8.1, which details the modelling results for the current and future operations and the difference in concentration between the two scenarios.

2 NOISE ASSESSMENT COMMENTS

Issue 5 – Background Noise

The Industrial Noise Policy (INP) defines the background noise level as '*the underlying level of noise present in ambient noise when all unusual extraneous noise is removed'*. Additionally, the INP states that *'sound levels contributing to background levels can include sound from nearby traffic, birds, insects, animals, machinery and similar sources if these sounds are a normal feature of the location'*.

Noise monitoring was carried out at three locations surrounding the abattoir. The abattoir currently operates 24/7 and this will not change with the new rendering plant and associated facilities. As such, the noise emission from the abattoir does not cease. The new noise sources are similar in nature to the present noise sources (fans, deliveries etc.).

The Industrial Noise Policy details that noise measurements can be made at an alternative site representative of the noise environment of the receptors. However, the 24/7 nature of the plant, other rural noise sources, limited sensitive receptors and the local topography make this approach unsuitable, therefore it was deemed appropriate to keep the abattoir noise included in the data.

For Location 1 the primary noise source is the road traffic which is reflected in the noise monitoring results which identify a higher L_{Aeq} and L_{A90} for each time period. The night time L_{A90} for Location 1 is 1 dB(A) above the value for Monitoring Location 2. This 1 dB(A) increase can be attributed to road traffic noise. Additionally, the monitoring results for Location 3 are much lower than Locations 1 or 2 despite the operations being audible at this location.

Additionally, when discussing the monitoring locations, the audibility of the plant was minimal above the ambient noise environment and is not considered to be dominant nor intrusive in noise level or character. It should be noted that no noise complaints to Bindaree Beef in the two years prior to the noise assessment being undertaken.

For these reasons, Vipac believes that the noise monitoring results and thus the RBL values are representative of the site. Additionally, using a default RBL of 30 for all sensitive receptors is not considered appropriate, as the plant is present in the ambient noise environment and is a 'normal feature'.

Issue 6 – Modifying acceptable noise levels

See Issue 5 response.

Issue 7 – Maximum noise level criterion during construction activities

Reviewing the report and the calculations, the criterion used for the construction activities was the RBL plus 10 dB for both the $L_{Aeq,\ Day}$ and L_{Amax} predictions as detailed in Section 5.4 of the report, not 75 dB criteria. This will be made clearer in the report.

Issue 8 – Road Noise

An increase in heavy vehicles (HGV) by 10% triggers the requirement to carry out a road noise assessment. However, these conditions are not met.

Present weekday traffic flows are estimated to be 2,900 vehicles per day with ≈15% of these vehicles (430 vehicles), being classed as HGVs. During the construction phase, the increase in *total* traffic flow is 43 vehicles per day, including cars, flat top trays, ridged and articulated trucks. The majority of these additional vehicles will be light vehicles, not HGVs.

The criteria for the road noise is $L_{Aeq,15\ hour}$ + 12 dB, as discussed in Section 6.5, this corresponds to an increase in traffic flow by a factor of 8 (i.e. x8). A road traffic calculation for Monitoring Location 1 was undertaken. The present $L_{Aeq,15\ hour}$ at Monitoring Location 1 is 53.5 dB, increasing the traffic flow to take into consideration the construction traffic, the increased in $L_{Aeq,15\ hour}$ is <1 dB(A). This increase is below the $L_{Aeq,15\ hour}$ + 12 dB criterion, as such a full road traffic noise assessment was not undertaken.

Issue 9 – Wind Rose Data

It has been noted that the 2006 wind roses are different to the 2002-2005 wind roses. The weather conditions (i.e. wind parameters, stability class etc.) for all five years was analysed. The variation in the weather conditions has been taken into consideration during the modelling by predicting noise levels during neutral, prevailing and worst-case weather conditions; as such no additional modelling is required. The variation in wind roses will be discussed in Section 4.3.2 and Section 6 of the report.