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Dear Glenn

Tooheys Brewery Noise Criteria Modification

Please see the below responses to questions and comments from DP&I, Auburn Council and EPA from emails dated 22/08/2012 and two emails on 13/09/2012. Responses and comments from the various stakeholders are presented in italics and bold.

Department of Planning & Infrastructure

Additional justification as to why you require an increase in the operational noise limits.

Justification for the non-compliance with the approved noise limits given this is the fourth modification to the original approval and no increase in operational noise limits had been proposed and no non-compliances with the approved noise limits were identified in prior modifications.

In response to both these questions, the original approval for the entire site was sought in 2007 (please see Chapter 12 of the *Upgrade of Tooheys Brewery Environmental Assessment, Volume 1*, (March 2007)) including noise. The assessment identified that the dominant noise from Tooheys brewery at the nearest sensitive receivers (Nyrang street residences) is from the operations at the front of the site (packaging and loading caused by bottle and keg impact). The packaging and bottling area has not been the subject of any modification.

The 2007 EA identified that, at the nearest sensitive receiver,

- L_{A10} noise levels exceeded the 50 dB(A) criterion by between 8 and 12 dB(A) due to existing operational noise sources.
- However, the noise from the 2007 upgrade itself would not exceed the 50dB(A) criterion.

This original EA was approved in 2007 and hence forth the various projects which have been submitted to DP&I for a modification to the existing approval (including the Heineken, Co-generation and WWTP) have all addressed noise and identified that these projects would not contribute to an increase in noise at the nearest residential receivers



beyond the 50dB(A) criterion. That is, should the existing criterion remain, the new plant and equipment would not result in any exceedances. It is the existing (Pre-2007) operations only that result in the exceedance.

In 2009 post-EA approval, a temporary construction criteria of 63 dB L_{Aeq} at residences applied. The criteria then reduced to the EA level of 50 dB L_{Aeq} once construction finished. In 2009 noise levels of 60-61 dB L_{Aeq} at the nearest receiver were measured, and it was noted that noise levels complied because there were temporary criteria in place, but once the construction finished they would likely exceed the 50 dB L_{Aeq} criterion at residences.

In 2011 noise levels were re-measured and measured L_{Aeq} 59-61 dB at the nearest receiver (i.e. essentially the same level as measured in 2009). It was noted that the measured noise level was due to the “existing” brewery (i.e. the Front Loading Road + from the kegging hall) and so the noise levels were not associated with the upgrade area –i.e. that residents would have been exposed to these noise levels for years.

In the EA for the WWTP (Please see Appendix E- Noise, *Tooheys Brewery, Wastewater Treatment Plant, Environmental Assessment* (September 2011)) it is mentioned that as part of a separate assessment Tooheys were negotiating with OEH for an increase in the noise criteria.

Tooheys installed a noise barrier in early 2012 and noise was then measured at 57 dB L_{Aeq} – however these measurements were not undertaken during peak operation times and it was anticipated that some noise levels could be higher for some residences at the busiest time of year – hence Tooheys are proposing that the criteria be set for L_{Aeq} 62 dB(A) to allow compliance year-round.

In summary, the non-compliance to noise criteria was identified in the original EA (March 2007) and assessed in the three previous project modifications, which showed no increase to the overall operational noise at the nearest sensitive receivers, however the operational noise from the front of the Tooheys site still remained over the noise criteria of 50 dB(A).

Therefore, in conjunction with negotiations with the EPA and this current modification, Tooheys is proposing the criteria be set at 62 dB(A) to allow compliance at the nearest sensitive receivers as all reasonable and feasible mitigation measures have been implemented.

In response to this I (DP&I Response – 13/09/12) can advise that the 2007 upgrade approval also applied to the whole of the site including the existing operations and the loading area/site entry that is of concern. I have included Condition 7 from the upgrade approval 06_0303. The approval issued required that;

Surrender of Existing Development Consents:

7. Prior to the commencement of any construction activities associated with the upgrade, the Proponent shall surrender all existing development consents for the site in accordance with Clause 97 of the Environmental Planning and Assessment Regulation 2000.

Essentially this approval would allow the upgrade works and the existing operations and use to be consolidated under the one approval. A consequence of this is that all the existing operations would be required to comply with the conditions of this single approval even though they were not part of the upgrading works.

It appears from what you're saying that Tooheys have not been able to comply with this 50dB noise criteria because of the loading dock operations /site entry area even with the recent mitigation measures, and this has been the case since the 2007 approval. Could you provide some justification/response to this matter?

Tooheys confirms that it has surrendered existing consents under Condition 7 and now operates under a single site wide approval as stated.

In the original consent Environmental Assessment (Please see Appendix E- Noise, *Tooheys Brewery, Wastewater Treatment Plant, Environmental Assessment* (September 2011, Page 84)) the noise levels at the nearest sensitive receivers were 8- 12 dB(A) above the 50 dB (A) noise criteria.

Monitoring and measurements have been undertaken since this time including the most recent noise barrier mitigation measures however installing the barrier only achieved a 1-2 dB reduction in modelled (peak demand) noise levels. This is a minimal decrease when compared with the 13 dB decrease which is needed to reach the 50 dB(A) noise criteria. In conjunction with negotiations with the EPA it has been proposed that, as all reasonable and feasible measures have been implemented to reduce the noise levels, to ensure compliance the noise criteria be increased to be in line with current noise emissions which have not received any complaints. *How long has the exceedance of approved noise limits been operating?*

Noise monitoring undertaken in 2006 (prior to any site wide consent) for the EPL identified the exceedances and a noise minimisation plan developed. Tooheys has been in contact with EPA since this time. The negotiation of new limits represents the next stage in this ongoing consultation.

When did negotiations commence with the Environmental Protection Authority regarding increasing approved noise limits?

The negotiations specifically related to increasing the noise limits commenced with the EPA on the 15th of September 2011.

Measures in addition to the loading dock wall that have been implemented to date to reduce noise levels to residential receivers opposite the site?

The following have been implemented to date to reduce the noise levels at Tooheys Brewery:

- Completed a study on site roadway infrastructure to identify and implement repairs required to reduce noise from forklift movement within the site.
- Limited forklift and truck speed to 10km/h, rolled out toolbox talks to drivers around speed impact on neighbours and we now also complete speed checks on a weekly basis to ensure compliance for vehicles.
- Forklift gas refuelling restricted to 6am-10pm.
- Ensured that procedures in place to close and inspect closure of roller doors on the keg plant during the hours of 2200 – 0700 (7days).
- Ensured that procedures in place to close and inspect closure of roller doors to the bottling plant during the hours of 2200 – 0700 (7Days).
- Annual Environmental toolbox talks held with all personnel to educate about impact of site on environment (including our neighbours).
- Installation of baffling at some bottle hall ventilation grills.
- Loading dock enclosure noise barrier erected in 2012.

Environmental Protection Agency

The EPA has provided no further clarifications. This is as a result of the ongoing negotiations with respect to a licence modification which have been undertaken with EPA since September 2011. Accordingly, at the request of EPA, Tooheys has investigated all

reasonable and feasible measures to mitigate noise emissions from the premise and have installed the noise barrier to attempt to reduce noise at the nearest sensitive receivers.

Auburn Council

Based on the information provided it difficult to determine how/why the original noise criteria was placed on the development consent that was issued in 2007. Based on this it is unclear whether or not the noncompliance identified in the recent acoustic reports is due to a variation of the internal operation or is due to a change in the use of the premise.

The criteria was placed on the development consent in 2007 was in reflection of the EPA licence criteria which had been issued prior to the development consent for the site. The non-compliance has been identified since at least 2006 and is due to ongoing normal operation of the premise. Noise levels have not increased due to changes in the use of the premise as noise has been investigated in the previous 3 modifications for Tooheys brewery since 2007.

Based on the reports provided the noise measurements taken during the compliance report exceed the noise criteria, however the exceedance is not as high as the predicted noise level due to peak demands. Once again based on the information provided it is hard determine if this is consistent with information/noise levels at the time of the original consent.

Yes, the most recent noise monitoring was done during Autumn when demand was less however the noise modelling was slightly noisier as the model was calibrated to be at the peak operational level of the brewery (e.g. Summer). As Arup provided modelling for noise in the original consent as well as ongoing monitoring at Tooheys brewery including this modification then the information in this current modification is consistent with information at the time of the original consent.

The noise reports demonstrate that consideration was given to installing a noise barrier to attenuate noise from the loading dock however the report provides that the predicted attenuation achieved by the barrier would be minimal and not effective.

This noise barrier was installed and the decrease at the nearest sensitive receiver was minimal and the modelling of noise at the nearest sensitive receiver was also minimal and slightly noisier as the model was calibrated to be at the peak operational level of the brewery. Therefore installing the barrier achieved a 1-2 dB reduction in modelled noise levels. This is a minimal decrease when compared with the 13 dB decrease which is needed to reach the current noise criteria

According the information the proposed modification is to increase the noise criteria for the site by 13dB (A) to be in line with the current predicted noise levels.

Yes, this is correct as in conjunction with negotiations with the EPA and this current modification, Tooheys are proposing the criteria be set at 62 dB(A) to allow compliance at the nearest sensitive receivers as all reasonable and feasible mitigation measures have been implemented.

As the site is currently subject to an Environmental Protection Licence issued by the EPA under the provision of the Protection of the Environment Operation Act 1997. This licence contains noise limits for the site in line with the original limits contained in the consent. It is assumed that this application has been referred to the EPA for comments/concurrence.

Yes, the EPA has provided comments and is in support of the modification on the basis of the noise limits those proposed in the modification report.

It is my understanding that to date council has not received complaints from residents regarding noise from the site however this does not mean that noise from the site is not an issue. Consideration should also be given to potential for the changes to the noise criteria resulting in the operation /truck movements increasing which in turn may comply with the criteria but cause new complaints from residents.

No changes are proposed to change Tooheys current operation/ truck movements as a result of this proposed noise criteria. The increase in noise criteria is to ensure compliance with current operations which have not been achieved since at least prior to 2006.

The limited number of complaints could also be a result of the site emitting noise levels consistent with those measured in the compliance report with the predicted noise levels only being emitted on a small number of occasions.

The noise monitoring has shown very similar (within 2 dB) exceedances in noise criteria at the nearest sensitive receiver in every noise monitoring report since 2007, therefore it is unlikely that these increases in noise levels during monitoring or modelling are due to a small number of isolated occasions. As such, the limited number of complaints would seem to suggest that the current noise levels are not emitted on small number of occasions, but on a continual basis.

Based on the history of the site and the limited (or no) complaints being received, Council does not oppose the proposed modification however as the premises is subject to an Environmental Protection licence noise limits contained on the approval for the premises should be in accordance with the licence and/or the recommendations of the EPA.

If proposed noise criteria modification I is approved by DP&I then Tooheys Brewery will submit a variation with the EPA to update the license criteria in conjunction with current negotiations.

Further consideration should also be given to ensuring that the operation of the site including the number of truck movements and noise emitting activities are restricted in line with the current operation of the site.

No increases in operations or truck movement have been proposed as part of this modification. The noise criteria modification is to bring into line the noise criteria to ensure compliance with current operations which have not been achieved since at least prior to 2006.

If there are any further questions or if you would like to arrange a meeting to discuss the above, please feel free to contact me on 02 9320 9339.

Yours sincerely



Melanie Koerner
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