Technical Note

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ASSESSING NOISE FROM LICENSED PREMISES – ARE WE ON THE SAME PAGE?

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INTRODUCTION

In New South Wales (NSW), noise from licensed premises, such as pubs, restaurants, nightclubs etc. can be regulated by both the local consent authority (Council or NSW Department of Planning) or via the NSW Office of Liquor, Gaming and Racing (OLGR). The requirements of the consent authority, including any relevant noise criteria that a development needs comply with, should be set out within a development's conditions of consent or notice of determination. A potentially complicating factor is that noise complaints can also be directed and mediated through the OLGR, through the NSW Liquor Act 2007 [1].

The purpose of this discussion note is to present some of the ambiguities and issues when assessing licensed premises. Given the sensitivity of noise emission and disturbances that can be generated by licensed premises, it would be beneficial if supporting documentation is available rather than reliance given to other Standards or policy to justify a specific noise assessment methodology. The OLGR have a standard noise condition which states as follows [2]:

"The L_{A10} " noise level emitted from the licensed premises shall not exceed the background noise level in an Octave Band Centre Frequency (31.5Hz - 8kHz inclusive) by more than 5dB between 7:00am and 12:00 midnight at the boundary of any affected residence.

The L_{A10}^* noise level emitted from the licensed premises shall not exceed the background noise level in an Octave Band Centre Frequency (31.5Hz – 8kHz inclusive) between 12:00 midnight and 7:00am at the boundary of any affected residence.

Notwithstanding compliance with the above, the noise from the licensed premises shall not be audible within any habitable room in any residential premises between the hours of 12:00 midnight and 7:00am.

Interior noise levels which still exceed safe hearing levels are in no way supported or condoned by the NSW Office of Liquor, Gaming and Racing.

*For the purposes of this condition, the L_{A10} can be taken as the average maximum deflection of the noise emission from the licensed premises."

The 'condition' has subsequently been stipulated by NSW consent authorities in development consents. On this basis, it becomes critical that there is consistency and transparency in the application of the standard noise policy.

Unlike noise policy issued by the NSW Department of Environment Climate Change and Water (DECCW), the OLGR condition is not supported by any other documentation or application notes. The purpose of this discussion note is to outline some of issues that are ambiguous or omitted in the condition, and to hopefully invoke discussion and review of the OLGR standard noise condition.

NOISE DESCRIPTOR

The descriptor stipulated by the policy is an L_{A10} and is also qualified or may be considered as the 'average maximum deflection' of the noise emission. It is assumed that the clause in the OLGR condition stems from Australian Standard AS 1055.1-1989 [3], section 3.7 'Average Maximum A-weighted sound pressure $(L_{\rm Amax,T})$ ' for which it is noted in the Standard that the $L_{\rm A10,T}$ is commonly taken to be an approximation of $L_{\rm AMax,T}$. The Standard refers to arithmetically averaging the maximum levels.

The methodology for applying or reporting the 'average maximum deflections' or the time period over which they are to be assessed is not defined in the OLGR condition and therefore the outcomes of any assessment could vary based on the individual assessor's approach, particularly in cases of intermittent noise events.

NSW noise policy has been moving towards consistent use of the L_{Aeq} noise descriptor, which was reinforced with the introduction of the NSW Interim Construction Noise Guideline (ICNG), Department of Environment and Climate Change (DECC) in 2009 [4]. L_{Aeq} is now the primary assessment metric for the assessment of road traffic, rail, industrial and construction noise and is referenced in the following policies:

- NSW Road Noise Policy, DECCW, 2011 [5];
- Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects, DECC, 2007 [6];
- State Environmental Planning Policy (Infrastructure), 2007 [7];
- NSW Industrial Noise Policy (INP), Environment Protection Authority, 2000 [8]; and
- NSW Interim Construction Noise Guideline (ICNG), DECC [4].

It is however noted that reference to maximum levels, impulsive weighting, C-weightings and the like are used in some instances to correct/penalise the measured L_{Aeq} level.

ASSESSMENT TIME PERIOD

An assessment or measurement period is not stipulated in the OLGR condition. In NSW, short-term noise level measurements are generally in the order of 10-15minutes, and as with the INP or ICNG, 15 minutes is the assessment period for intrusive noise impacts. A comparable time period for the assessment of licensed premises is considered reasonable.

ASSESSABLE NOISE SOURCES

The OLGR condition applies to activities within the licensed premise, including, patrons and music etc. It is understood that the condition is not to be used for the assessment of noise generated by people arriving and leaving premises, in car parks etc. However following the enforcement of the NSW Smoke-free Environment Amendment Act 2004 [9] in July 2007, an increase in development applications for low capacity outdoor patron and gaming areas has been observed. It could be considered that such areas differ in intensity and character to that commonly associated with licensed premises. In light of these changes it may be prudent to confirm the noise sources to which the condition applies.

It is generally understood that the OLGR condition does not apply to mechanical plant noise. However, whether the $L_{\rm A90}$ should be measured in absence of any mechanical plant from the site is an issue that can provide discrepancy in an assessment.

ASSESSMENT LOCATION

In accordance with the OLGR condition, assessment between 7am and midnight is to be made at the boundary of any residential premises, whilst assessment between 12 midnight and 7am applies both at the boundary, and inside any habitable room with regard to the inaudibility requirement.

No further detail is provided, however it is understood that internal assessment locations may be used pre-midnight where an appropriate external location is not available. This situation may arise, for example, where the receptor location shares a common wall, or floor with the licensed premise.

In addition, for the case of apartment buildings or upper levels of dwellings, external locations may be small, and 'freefield' conditions may not be obtainable. Whether measurements should be adjusted for the effect of facade reflections, or simply the as-measured results assessed, is unclear.

For internal locations, of concern is the size of openings to outside, building construction and modifications to dwellings etc. which may affect the resultant noise level inside a dwelling, and is ultimately outside the control of the licensed premise.

Whether windows and doors should be opened or closed is also of concern. If windows and doors are closed, should any mechanical ventilation be on or off? It is feasible for all possible scenarios to be tested for a thorough assessment; however it is important to define the parameters under which the receptor building has been designed.

ALTERNATIVE CRITERIA APPLIED BY CONSENT AUTHORITY

With the increase in mixed use development, promotion of vibrant city centres and policies such as the City of Sydney Late Night Trading Premises Development Control Plan (2007) [10], it is clear that Consent authorities may need to develop their own controls for managing the balance between potential

noise impacts and vitality of the centres. Where licensed premises are concerned it would be necessary to confirm how any alternative noise conditions (or lack thereof) would be considered should complaints be directed through the Office of Liquor Gaming and Racing.

CONCLUSION

This technical note has presented some of the issues surrounding the application of the standard noise condition issued by the Office of Liquor Gaming Racing. It is hoped that this note may promote discussion within the profession, OLGR and consent authorities, with the aim of providing greater consistency in the assessment of noise emission from licensed premises in the future.

REFERENCES

- [1] http://www.legislation.nsw.gov.au/sessionalview/sessional/ act/2007-90.pdf
- [2] D.B. Armati, Private Communication, 2001.
- [3] Australian Standard AS 1055.1-1989, Acoustics Description and measurement of environmental noise, Part 1: General procedures.
- [4] http://www.environment.nsw.gov.au/resources/ noise/09265cng.pdf
- [5] http://www.environment.nsw.gov.au/noise/traffic.htm
- [6] http://www.environment.nsw.gov.au/resources/ noise/07187rninfra.pdf
- [7] http://www.austlii.edu.au/au/legis/nsw/consol_reg/sepp2007541/
- [8] http://www.environment.nsw.gov.au/resources/noise/ind_ noise.pdf
- [9] http://www.legislation.nsw.gov.au/sessionalview/sessional/ act/2004-110.pdf
- [10] http://www.cityofsydney.nsw.gov.au/development/ documents/PlansAndPolicies/DevelopmentControlPlans/ LateNightTradingDCP311207.pdf



ACOUSTICS 2011, the 2011 Conference of the Australian Acoustical Society, will be held on the Gold Coast in Queensland from 2 to 4 November, 2011. With its theme of "Breaking New Ground", ACOUSTICS 2011 will include plenary sessions addressing the acoustical aspects of major infrastructure projects from transportation and construction in the urban context through to mining. Other major streams will address underwater acoustics, marine bioacoustics, railway noise and vibration and road transport. For further information, see the Congress website:

http://www.mech.uq.edu.au/acoustics2011/.