

DOC19/910702

30 October 2019

Ms Rebecca Sommer
Social and Infrastructure Assessments
Department of Planning, Industry and Environment
GPO Box 39,
Sydney NSW 2001

Dear Ms Sommer

**Western Sydney Stadium Stage 2 Design & Construction – Modification 3 –
Increase in major sporting events, functions and function patrons (SSD 8175 Mod 3)
Advice on the Modification Request**

I am writing to you in reply to your invitation to the Environment Protection Authority (EPA) to provide comment on Venues NSW (the applicant) modification request.

The EPA reviewed the following modification reports in relation to noise and vibration:

- Appendix 1 – *Western Sydney Stadium (Bankwest) – Extra Events Noise Impact Statement*, prepared by Wilkinson Murray, dated 8 September 2019
- Appendix 2 – *Western Sydney Stadium (Bankwest) Noise Impact Assessment*, prepared by Wilkinson Murray, dated 29 August 2019 (NIA)
- Appendix 4 – *Acoustic Compliance Monitoring, Wallabies v Samoa, Bankwest Stadium*, prepared by The Acoustic Group, dated 9 September 2019

The EPA understands that the proposal is to modify the Development Application for the stadium to allow for an increase in major sporting events from 49 to 80 per year and to increase the number of live music performances from three to five per year. The requirement is due to the works being undertaken on the Sydney Football Stadium and Stadium Australia simultaneously, leading to Western Sydney Stadium being the only large capacity stadium available for approximately two years. Following the completion of the works on the other stadiums, the EPA is aware that Venues NSW is seeking to reduce the number of major sporting events from 80 to an increased permanent maximum of 65 per year, and to retain the capacity to host five music events per year.

The EPA notes that the NIA has been undertaken using conservative acoustic assumptions to address the use of internal function spaces. The NIA indicates that the use of all function venues simultaneously under worst-case conditions will result in compliance at the nearest sensitive receiver locations. In reviewing the proposal, the EPA has sought to provide clarity and additional information on the following:

1. The potential impacts of additional events of various types based on monitoring undertaken to date

The EPA notes that sporting event noise monitoring has been carried out for the following events:

- Rugby Union International test match – The Acoustic Group – 7 September 2019
- Rugby League – The Acoustic Group (referred to within Appendix 1) – 10 August 2019

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- Rugby League – The Acoustic Group (referred to within Appendix 1) – 22 August 2019.

The major sporting events hosted at the stadium when monitoring has been undertaken have complied with the current noise limits. As such, the EPA advises that any individual event that is similar to those for which monitoring has been undertaken is also likely to comply with the existing noise limits. The NIA states that given this correlation, it can be expected that all other major sporting events and live music events would comply with the noise levels stated within the NIA.

However, the EPA notes that a live music event has not yet been held and monitored at the site. The noise levels from such an event may yet exceed the noise levels at the adjacent receiver locations. The EPA advises that this may be a risk in approving the changes to the development consent as per the current proposal prior to a music event being monitored on site. Additional information is required to support this proposal (see heading 2 below).

Should the impact of live music events be deemed a significant impact on the community following the first live music event at the venue, the EPA advises that it will be critical to manage the expectations of the community and have management measures in place to manage potential impacts should the additional two performances per year be approved.

2. Additional information required to evaluate the proposal for additional music events

Any approval to increase the number of music events from three to five per year should be subject to compliance monitoring as required under the existing consent.

The existing consent conditions for Western Sydney Stadium are based on L_{Amax} noise levels. This is an instantaneous noise level which can be easily influenced by extraneous noise sources and is challenging to measure when determining compliance. Modifying the existing L_{Amax} noise limit to a $L_{Aeq} (5 \text{ min})$ noise limit has a number of advantages that should be subject to further investigation.

Because it is difficult to compare the L_{Amax} and $L_{Aeq} (5 \text{ min})$, it is recommended that monitoring during future music events should include measurements of both, with a view to amending the existing L_{Amax} noise limit to a $L_{Aeq} (5 \text{ min})$ noise limit. However, it is likely that ongoing measurements of the L_{Amax} will be necessary to account for a noise limit applied at the northern Grey-Head Flying Fox roosting area.

In summary, the EPA advises that the following additional information is required in relation to the proposal:

- noise monitoring report for live music events to include consideration of $L_{Aeq} (5 \text{ min})$ and how this relates to the existing L_{Amax} criterion to identify improvements in noise management; and
- strategies for managing community expectations and the management of potential impacts from additional events.

Should you require clarification of any of the above please contact Anna Timbrell on 9274 6345 or email anna.timbrell@epa.nsw.gov.au

Yours sincerely



SARAH THOMSON
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NSW Environment Protection Authority