



Government of **Western Australia**  
Department of **Water and Environmental Regulation**

## Technical (Review) Report

Advice on the Environmental Noise DA Report for the  
proposed restaurant and brewery development – 1248  
Karnup Rd, Serpentine, prepared for the Shire of Serpentine  
Jarrahdale

Department of Water and Environmental Regulation  
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### **Acknowledgements**

For more information about this report, contact

Environmental Noise, Department of Water and Environmental Regulation.

## Document control

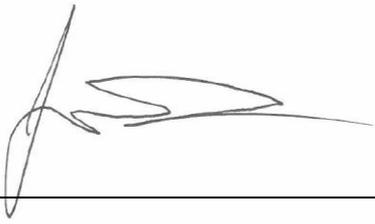
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## 1. Introduction

This advice was prepared for the Shire of Serpentine Jarrahdale in response to a request for comment dated 28 April 2022 on the JDAP Application – Restaurant and Brewery at 1248 Karnup Road, Serpentine.

## 2. Documentation

In support of this request, the Shire made the following documents available which form the basis of this technical expert advice. The Shire did not request any specific advice.

Material / document name	Author	Date
Environmental Noise DA Report: Proposed Brewery – 1248 Karnup Rd, Serpentine (Proj No. 22004) – Prepared for Bright Tank Brewery Co.	Gabriels Hearne Farrell Pty Ltd	17/02/2022
Development Application: Lot 201 (1248) Karnup Road, Serpentine – Restaurant and Brewery (Use Not Listed) – prepared for Bright Tank Brewery Co.	Taylor Burrell Barnett	20/04/2022

## 3. Advice

The Environmental Noise Branch (ENB) of the Department of Water and Environmental Regulation has reviewed the Environmental Noise DA Report prepared by Gabriels Hearne Farrell Pty Ltd (GHF), as well as the Development Application, and provides the following comments.

According to the proposed Development Plan, the proposal is the development of a ‘Restaurant’ and a ‘Brewery’ on a rural site. The ‘Brewery’ building, which is attached to a large hospitality venue that may serve up to 1000 patrons, will not generally be publicly accessible. The hospitality venue will have interior dining spaces at ground level, an outdoor dining area located on the ground floor level to the eastern side of the building and alfresco areas at the first floor level along the eastern and western edges of the building. There will also be an outdoor bar area (Terrace Bar) located at the first floor level between the brewery building and the hospitality building. A children’s playground is also proposed on the western side of the hospitality venue. The proposed hours of operation for the hospitality venue will be 11:00am to 10:00pm Fridays; and 7:00am to 10:00pm on Saturdays and Sundays.

GHF state that the brewery operations would not produce any noteworthy noise emissions, other than standard mechanical services (e.g. exhaust fans). ENB agrees with this statement.

There is an existing house located on the same lot as the proposed brewery on 1248 Karnup Road, which is at least 400m to the proposed hospitality venue. ENB notes that noise generated from the proposed hospitality venue does not need to comply with the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations) at this residence.

There are several neighbouring residences located around the proposed development, with the closest at 409 Rapids Road, which is about 350m from the proposed hospitality venue. All other neighbouring residences are at least 600m from the proposed development.

The methodology of the noise modelling and assessment conducted by GHF seems correct. The predicted patron/crowd noise levels at the neighbouring sensitive receivers also seem reliable. Based on GHF's assessment results, noise levels generated by patrons and crowds at the proposed hospitality venue will meet the evening assigned noise level of 40 dB(A) ( $L_{A10}$ ) at all neighbouring sensitive receivers.

The modelled results from the amplified music within the venue indicate that with all windows and doors open, amplified noise levels will be able to comply with the evening assigned noise level at neighbouring sensitive receivers, except the closest one at 409 Rapids Road, when the volume of the music is limited to 85 dB(A) at the perimeter of the internal space. Compliance with the evening assigned noise level at all neighbouring sensitive receivers will be achieved if the music level is capped to 83 dB(A) at the perimeter of the internal space.

GHF's modelling also demonstrates that noise from live band performances can also be managed to comply with the evening assigned noise level at all neighbouring residences, when all external windows and doors are closed and the maximum music level is capped to 95 dB(A) at the perimeter of the internal space. GHF also indicated that if in the future, the proponent wished to extend live band performances beyond 10:00pm, the internal music level would need to be capped to 90 dB(A) after 10:00pm.

ENB's review of the modelled noise levels of the above-mentioned operational scenarios and the noise compliance conclusions indicates that they are reliable and reasonable. The modelled and assessed results for other scenarios, such as noise from speakers within the alfresco areas; noise from patron vehicles; noise from waste collection and food trucks; and noise from mechanical plants, also seem reliable and reasonable. ENB agrees that noise emissions from the proposed development will be able to be managed to comply with the Noise Regulations.

ENB has also noted that, based on the proposed operation hours, the hospitality venue will open from 7:00am on Sunday. It should be noted that the time period before 9:00am on Sunday is regarded as night-time in Noise Regulations. Noise emission levels need to comply with the night-time assigned noise level of 35 dB(A) for that period of time. Although it may be reasonable to assume that there will not be much activity and hence limited noise emissions in the period before 9:00am on Sunday, the proponent may need to be made aware that they are required to manage their noise emissions before 9:00am on Sunday morning.

## 4. Limitations

Technical expert advice in any field is subject to various limitations. Important limitations to the advice include:

- No computer modelling was undertaken to verify the results predicted by GHF.