

acoustic studio

Shaun Prince
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16 October 2009

Dear Shaun

**Cookson Plibrico Relocation Project – Unanderra NSW
Response to Wollongong City Council Assessment Comments
MP-2009/45, 2 September 2009**

Acoustic Studio Pty Ltd has undertaken a noise impact assessment in relation to the proposal to relocate Cookson Plibrico's existing refractory facility in Bulli to a new site at Lot 2 D.P 1064872 Princes Highway & Sylvester Avenue, Unanderra.

The assessment is reported in Acoustic Studio's Noise Impact Assessment Acoustic Report, Issue 1 dated 27 May 2009.

The NSW Department of Planning has, in its letter dated 22 September 2009, included reference to comments made by Wollongong City Council in relation to the noise impact assessment (letter from Wollongong City Council dated 2 September 2009).

Acoustic Studio provides, overleaf, our response to the comments made by Wollongong City Council.

We trust that this information meets your needs at this time. Please contact the undersigned should you require any further information.

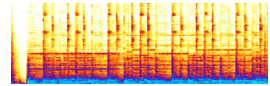
Yours sincerely

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Acoustic Studio response to comments made by Wollongong City Council (letter from Wollongong City Council dated 2 September 2009).

Item 1 : Definition of Day, Evening and Nighttime

The NSW Industrial Noise Policy defines the time periods for Day, Evening and Nighttime.

Nighttime is 10.00 pm to 7.00 am.

The proposed hours of operation of the facility are Monday to Friday, 6.00am to 10.00pm. The operations will occur in two shifts, being 6.00am to 2.00pm and 2.00pm to 10.00pm.

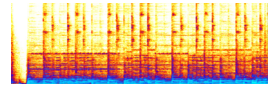
Since the facility only operates for 1 hour of the nighttime period (ie between 6.00am and 7.00am), 'Morning' terminology is used in the assessment report to describe the period between 6.00am and 7.00am when the facility is in use. 'Nighttime' could have equally been used as the terminology for this assessment period, and remain more consistent with the NSW INP terminology.

The NSW INP notes that when dealing with shoulder periods *"...where early morning (5am to 7am) operations are proposed, it may be unduly stringent to expect such operations to be assessed against the night-time criteria – especially if existing background noise levels are steadily rising in these early morning hours..."*.

From the long-term noise monitoring undertaken at the site, it is apparent that the existing background noise levels do steadily rise during the 5.00am to 7.00am time period. This is a combination of traffic noise plus existing industrial activities in the area.

With this in mind, the 6.00am to 7.00am time period has been assessed as a shoulder period, with the Rating Background Level based on the existing background noise levels measured during this 6.00am to 7.00am time period.

Council also notes that a nighttime assessment would be beneficial should the proponent require the operation of late shifts to meet supply demands. We understand from you that this is not required. Therefore, a nighttime assessment has not been undertaken – other than for the nighttime shoulder period between 6.00am and 7.00am when the facility is proposed to operate.



Item 2 : Canterbury Road Residents

The noise impact assessment has identified the Orana Parade residences, 350 m to the north of the site, as the most critical receivers.

These residences are considered to be the most exposed of the surrounding residences (in terms of exposure to noise from the proposed site) since the topography of the area creates a direct line-of sight between the site and some of the Orana Parade Residences.

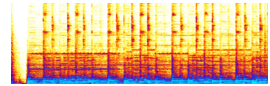
The topography of the area, plus existing buildings, is such that the non-industrial developments to the south, east and west, including the Canterbury Road properties, are naturally screened/shielded from the site.

This results in a lower exposure of these properties to operational noise from the proposed site. This can be seen in the noise contour diagram provided in Figure 1 (provided in response to WCC Item 3).

We also note that, between the proposed site and the Canterbury Road properties – directly opposite the residences on the opposite side of Canterbury Road, there is an existing industrial building. In addition to providing acoustic screening of the Canterbury Road properties from the proposed site, this industrial building is also likely to be establishing a background noise level at the Canterbury Road property boundaries which is *higher* than at the Orana Parade residences.

Therefore, Acoustic Studio considers that compliance with all relevant noise limits at the Orana Parade Residences will ensure compliance with all relevant noise limits at all other residences around the site – including the Canterbury Road properties.

We also note that the NSW Industrial Noise Policy considers that isolated residences within an industrial zone are subject to the industrial zone amenity criteria – not the residential zone amenity criteria. This may be relevant if the land-use of the zone occupied by the Canterbury Road properties is industrial.



Item 3 : Noise Contour Diagram

Noise contours are presented in Figure 1. The noise contours indicate the predicted operational noise levels around the site under the typical operating conditions of the facility. This is consistent with Operating Scenario 1 from the Noise Impact Assessment.

The predicted operational noise levels are equivalent continuous sound pressure levels over a 15-minute assessment period, $\text{dBL}_{\text{Aeq}, 15\text{min}}$.

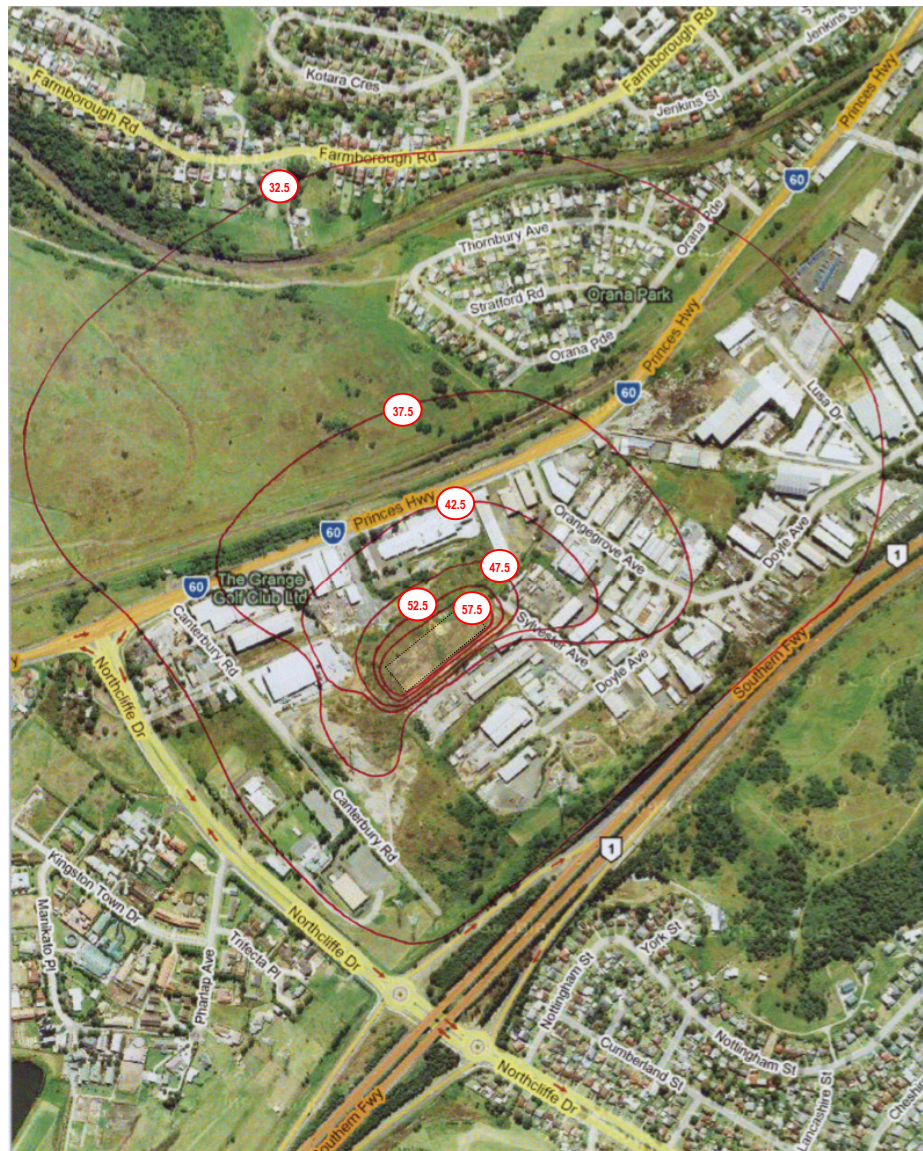


Figure 1 : Operational Noise Contour Diagram - $\text{dBL}_{\text{Aeq}, 15\text{min}}$ at 5 dB intervals.