

# Environmental Guidance Note – Out of Hours Construction Noise

HSE DOCUMENT

## General

Construction noise can be generated by plant and equipment depending on the nature of the work and impacts can vary subject to the proximity of receivers, the surrounding weather conditions and the type and duration of the works.

This Guidance Note has been compiled to assist staff and contractors to seek approval for noise generating work outside the work site approved construction hours detailed in the approval document. Recommended noise limits for construction works are subject to the time of day (refer to Table 1) and the surrounding environment noise amenity levels, which is assumed to be 35 dB(A) during the daytime, and 30 dB(A) for the evening and night, unless a site specific noise study is undertaken.

Any noise generating work outside standard hours requires strong justification and may require community liaison/negotiation if the estimated noise generation will be above the rating background level (RBL). Works outside standard construction hours should be limited to the RBL plus 5dB.

Noise generating work outside standard hours does not require written approval, so long as the works are for:

- Works or delivery of materials outside standard hours requested by police or other authorities for safety reasons,
- Emergency work to avoid the loss of lives and/or property, and
- Works timed to correlate with system planning outages,

Noise generating works other than those above, requires justification in accordance with the *INCG (2009)* and may require written consent. Any approval granted would be for set times outside the standard hours, based on site sensitivity, need and justification.

Project specific assessments may be undertaken prior to works commencing to enable the altering of working patterns or to meet other project specific requirements (i.e 3 on/1 off). Refer to the Out-of-Hours (OOH) Work Request form on the WIRE.

- This includes an assessment of nearest receptors, the noise generating potential of the proposed works and plant required, and the times extended construction hours are required. Transgrid has developed a noise calculator to assist with this process.
- This desktop noise assessment will also include required controls that need to be adhered to prior to working outside 'Standard hours'.
- Contact your E-BP for assistance in completing this assessment.

## Table 1: Recommended Quantitative Noise Management Levels and Mitigation / Controls for Residential Receivers

(adapted from EPA Interim Construction Noise Guidelines)

Time of day	Minimum assumed RBL <sup>1</sup> dB[A]	Noise Management Level LAeq (15 min) <sup>2</sup>	Standard Noise Mitigations / Controls
<b>Recommended standard hours:</b> <b>Monday to Friday 7 am to 6 pm</b>  <b>Saturday 8 am to 1 pm</b>  <b>No work on Sundays or public holidays</b>	Day 35	RBL + 10 dB[A]	Assess the potential noise generation of the works, Identify potentially affected receivers and determine if noise impacts are likely, Notify affected properties and stakeholders prior to works commencing (refer to the Project environmental approval for details of notifications required and keep records for the duration of the project), Maintain a complaints register for any noise complaints received, The worksite must have signage with a 24 hour contact number, Schedule work to minimise noise generation outside standard hours,
	Evening 30	or	
	Night 30	if in a highly noise affected area 75 dB[A] <sup>3</sup>	
<b>Outside recommended standard hours</b>		RBL + 5 dB[A] <sup>3</sup>	Minimise use of multiple noise generating tools or plant concurrently, Ensure machines aren't idling when not in use, Consider site setup to avoid excessive reversing alarms, Avoid dropping materials from a height, Avoid metal on metal contact on equipment, Provide respite periods for high impact receivers, Consider location of sensitive receivers prior to site setup, and Install portable screening around noise generating activities.

<sup>1</sup> Minimum assumed RBL used from Noise Policy for Industry (2017).

<sup>2</sup> Noise levels apply at the property boundary that is most exposed to construction noise, and at a height of 1.5 m above ground level. If the property boundary is more than 30 m from the residence, the location for measuring or predicting noise levels is at the most noise-affected point within 30 m of the residence. Noise levels may be higher at upper floors of the noise affected residence.

<sup>3</sup> If works are likely to exceed the Noise Management Level LAeq (15 min) a formal noise assessment may be required.

If you are unsure or require additional information contact the Environment Manager for advice.