



27 May 2021

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Our ref:12552619-73134-4
Your ref:

Proposed residential flat buildings at 43-49 Warriewood Road, Warriewood Acoustic Report for Garbage Collection

1 Introduction

Warriewood Developers Pty Ltd have submitted a development application to redevelop land at 43-49 Warriewood Road, Warriewood. The development proposes the subdivision of 3 lots into 13 lots to include 1 super lot, 11 Torrens Title residential lots and 1 lot containing the creekline corridor, civil works and the construction of two residential flat buildings containing 34 apartments including basement parking, swimming pool. GHD has been engaged to review the potential acoustic impacts arising from waste collection vehicles servicing the residential flat buildings on adjoining residences, subsequent to Northern Beaches Council raising concerns.

2 Review of legislation and policy

2.1.1 POEO Act

The legislation for managing noise impacts in NSW is contained in the *Protection of the Environment Operations Act 1997* (POEO Act). Under the POEO Act 1997, an activity should not omit 'offensive noise' which is defined in the dictionary of the POEO Act as noise:

(a) that, by reason of its level, nature, character or quality, or the time at which it is made, or any other circumstances:

(i) is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is emitted, or

(ii) interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, or

(b) that is of a level, nature, character or quality prescribed by the regulations or that is made at a time, or in other circumstances, prescribed by the regulations.

The POEO Act defines local council as the appropriate regulatory authority for waste collections. The POEO Act does not provide numeric criteria for assessing if noise is offensive, however the EPA does provide an offensive noise checklist in the *Noise Guide for Local Government (EPA, 2013)*.

2.2 Northern Beaches Council noise guidance

As the regulatory authority for waste removal Northern Beaches Council does not impose any published restrictions on residential waste collection however may have their internal policy for managing noise impacts from residential waste collection services that they are responsible for.

2.3 NSW State Government Advice relating to waste collection

The NSW Department of Planning, Industry and Environment provides the following general advice on their website in relation to garbage collection:

Times allowed

Garbage collection is considered an 'essential' service and as such is not subject to any specific legislated time restrictions.

Why Early Morning

Garbage collection is usually scheduled when street traffic is low because this enables work to be completed safely, efficiently and with the least disruption to traffic. Garbage trucks stopping frequently on roads with high traffic volumes can cause danger to both motorists and the garbage collectors. Early morning collection times are used because traffic flows and ambient temperatures are relatively low.

Beeping from trucks

Reverse beeping or an equivalent warning system is compulsory under Occupational Health and Safety Regulations.

Complaints about noise from garbage collection

If you are experiencing excessive noise from garbage collection, it is important to identify where the disturbance is coming from.

Report noise from residential garbage collection to your local council.

If the excessive noise is coming from garbage collections associated with commercial premises you can discuss the issue with the business concerned and let them know you are being affected. If this does not resolve the issue, then you can refer your complaint to the local council to investigate.

What council can do

Most councils use contractors to provide their domestic garbage collection services. Councils can minimise disruption to residents through proper planning and the inclusion of best management practices in their contracts. Councils that have their own collection service should also be implementing these practices. Businesses use contractors for commercial garbage collections and councils can also require these businesses and their contractors to employ best management practices.

Some examples of best practices are:

- *setting appropriate times for the collection*
- *relocating where the collection occurs*
- *building noise barriers for the collection area if it is in one place*
- *using up-to-date equipment which uses 'quieter' technology such as low-noise bin lifters*
- *maintaining garbage trucks to minimise or eliminate noise from exhausts and squeaky brakes*
- *educating drivers and collectors to be employ quiet work practices*
- *Upon receiving complaints, council may be able to negotiate later collection times, alternative collection arrangements, or a rotational roster system whereby one street or suburb is not having an early collection every collection day.*

2.4 NSW EPA Guidance on waste collection

The EPA does not provide any guidance on noise from residential waste collection with the exception of the following paragraph in the *Noise Guide for Local Government (EPA, 2013)*

Noise caused by the normal domestic garbage collection service that council provides through the use of a contractor can be managed by council through the conditions written in to the garbage collection contract. Council can control noise in this way by requiring contractors to use best practice in collecting garbage with adherence to specific collection times. Complaints about noisy garbage collection should lead council to check that contract conditions are being observed.

3 Assessment of noise from waste collection

Noise associated from residential waste collection should not be considered offensive due to the following characteristics:

- is considered an 'essential' service by the community and regulators and is a typical noise source associated with a residential environment
- it occurs infrequently, once per week on a regular basis generally in the morning period
- when collection does occur, it is limited to several minutes at each site
- modern well maintained waste collection vehicles have reduced engine, exhaust, brake and lifting mechanism noise

Although waste collection should not be considered, it is recommended that noise barriers should be considered in the design to minimise noise from waste collection at adjacent residences. The waste collection point is located between the proposed subdivision on Lorikeet Groove and the apartments which form part of the proposed development. The plans provides include a cross section of the waste collection area which is shown in Figure 1. It is recommended that the following noise barriers with an area mass of minimum 15 kg/m² be considered in the design:

- 1.8 m noise barrier separating the waste collection area from the proposed development ground floor apartments, which provide an effective height of 2.4 m
- 2.1 m noise barrier on the property boundary separating the waste collection area from the adjacent subdivision on Lorikeet Grove. (Increased from 1.8 m as shown in Figure 1)

It is worth noting that with the inclusion of the 2.1 m noise barrier on the boundary, the noise levels at the subdivision on Lorikeet Grove are likely to be less than if the waste collection occurred on Lorikeet Grove, as shielding to the street frontage would not be possible.

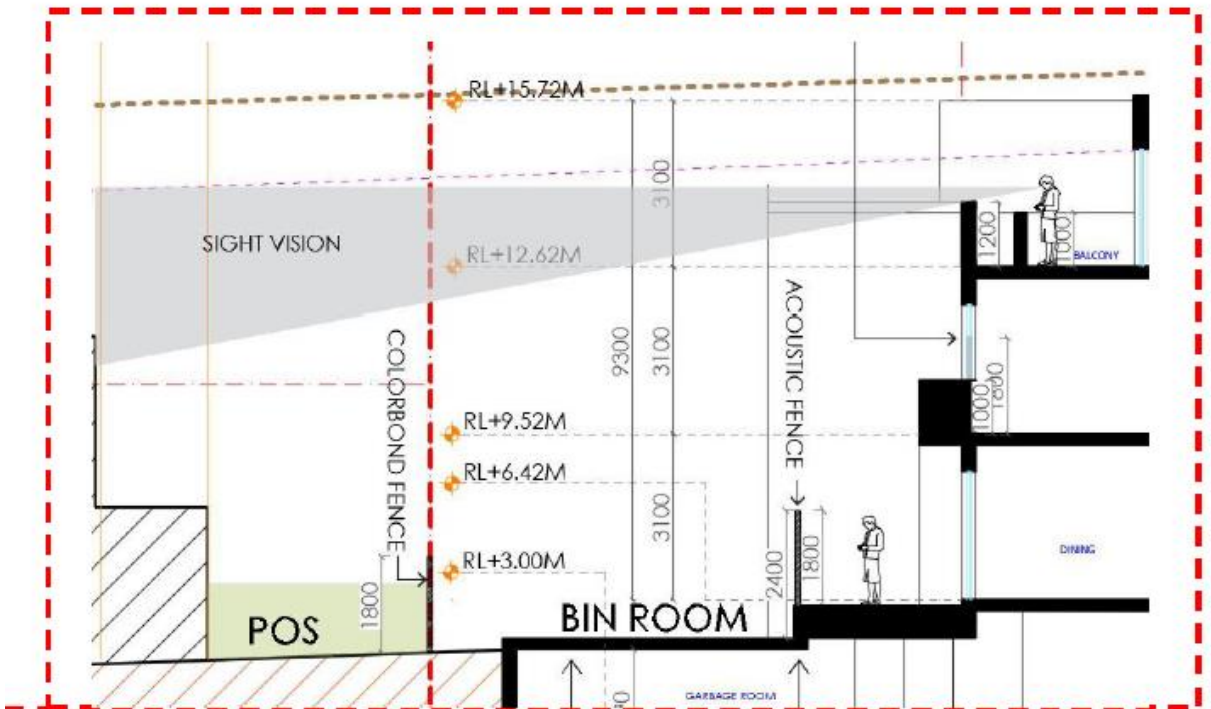


Figure 1 Cross section of waste collection area

4 Conclusion

Waste collection is considered an 'essential' service and due to the characteristics of the activity, should not give rise to offensive noise. Recommendations have been provided in the form of noise barriers to minimise noise from waste collection at adjacent residences.

Sincerely
GHD

A handwritten signature in black ink, appearing to read "Evan Milton". The signature is written in a cursive style with a large initial 'E'.

Evan Milton
Technical Director – Noise and Vibration
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