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1 Introduction

The use of bird scaring devices (BSDs) has the potential to create noise nuisance issues for nearby residents, if the BSDs are not located in the right place or are used inappropriately.

The Northern Territory Environment Protection Authority (NT EPA) has received an increase in the number of complaints relating to BSD noise nuisance in recent years. This guideline has been developed in response to the increase in BSD related noise complaints, and to convey what the NT EPA will take into account when assessing whether noise from BSDs is causing environmental nuisance.

It is intended that the guideline will be used where conflicts arise over the use of BSDs.

The objective of this guideline is to provide balance between the ability of primary producers to protect their crops from bird damage and the protection of the surrounding community from associated noise impacts.

This guideline is based on the Environment Protection Authority, South Australia (EPA SA) Audible Bird Scaring Devices - Environmental Noise Guidelines (ISBN 978-1-921125-60-7). The NT EPA will adopt the methodology outlined in the EPA SA guidelines when assessing whether noise from BSDs is causing environmental nuisance.

1.1 Limitations

The NT EPA has prepared this document in good faith, exercising all due care and attention, but no representation or warranty, express or implied, is made as to the relevance, completeness or fitness for purpose of this document in respect of any particular user’s circumstances. Users of this document should satisfy themselves concerning its application to their situation and, where necessary, seek expert advice.

1.2 Legislative Framework

The NT EPA currently administers the Waste Management and Pollution Control Act (the Act). Under the Act it is an offence to cause an environmental nuisance.

The Act defines environmental nuisance as “an adverse effect on the amenity of an area that is caused by noise…and unreasonably interferes with…the enjoyment of the area by persons who occupy a place within the area or are otherwise lawfully in the area”.

Under section 12 of the Act a "person who conducts an activity that causes or is likely to cause pollution resulting in environmental harm…must take all measures that are reasonable and practicable to prevent or minimise the pollution or environmental harm”.

Noise is a form of pollution that may result in environmental harm.

1.3 Review of this guideline

This guideline is due to be reviewed in the first quarter of 2019.

2 Operating limits

Table 1 outlines the operating limits for BSDs. The operating limits in Table 1 apply to a single BSD operating in isolation. To determine the likely impact of multiple BSDs operating in close proximity to each other (on the same or different properties) refer to Appendix 1 of the EPA SA guidelines.
Table 1: BSD Noise Limits

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum noise level from any shot</td>
<td>100 dB(LinPeak)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Maximum number of shots per hour</td>
<td>6&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Hours of operation</td>
<td>Sunrise to sunset</td>
</tr>
</tbody>
</table>

<sup>a</sup> when measured at a noise sensitive receptor  
<sup>b</sup> a shot is classified as either a single shot, or up to 3 shots within 5 seconds

BSDs exceeding the limits specified in this guideline may be considered to be causing environmental nuisance under the Act.

### 3 How to reduce noise impacts from BSDs

#### 3.1 Separation

The greater the distance between BSDs and a noise sensitive receptor (such as a neighbour’s home), the lower the noise level will be at the noise sensitive receptor. Noise levels reduce noticeably for each doubling of distance in between the BSD and the noise sensitive receptor.

In general, a BSD which does not exceed the limits in Table 1 and is positioned 300 metres or more away from a noise sensitive receptor should not be causing environmental nuisance (note: noise levels can vary significantly from one model of BSD to another).

However, noise levels can be affected by the lay of the land (topography) and the weather conditions. The separation distance between a BSD and a noise sensitive receptor may need to be increased if:

- a) there is a valley between the BSD and the noise sensitive receptor; or
- b) the wind usually blows from the BSD towards the noise sensitive receptor.

The separation distance between a BSD and a noise sensitive receptor may be decreased if:

- a) there is a hill between the BSD and the noise sensitive receptor; or
- b) the wind usually blows from the noise sensitive receptor towards the BSD.

#### 3.2 Rotation

Noise levels from BSDs can be reduced by positioning the BSD so it is not pointing directly at a noise sensitive receptor. Noticeable noise reductions at a noise sensitive receptor can be achieved by orientating BSDs away from the noise sensitive receptor.

#### 3.3 Reflection

The construction of localised barriers adjacent to the BSDs that can reflect (e.g. wooden boards) or absorb (straw/hay bales) sound from BSDs can help reduce noise levels at noise sensitive receptors.

#### 3.4 Timing

Where multiple BSDs are operating in the same area, noise nuisance can be reduced by timing the BSD to fire at the same time. This can reduce the number of individual noise
events (i.e. shots). BSD operators should work with other operators in their area to reduce the overall impact from all their BSDs.

3.5 For additional advice
Where a BSD operator cannot meet the limits or separation distances specified in this guideline, the BSD operator should seek advice from:

- the Department of Primary Industries and Fisheries – for advice on alternative methods of bird control; or
- an acoustic engineer – for advice on how to manage noise from the BSD to ensure that it does not have an unreasonable impact on neighbouring properties.

4 Further information

For more information, contact:
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