Managing noise from reversing alarms

EPA VICTORIA | Environment Protection Authority Victoria

VICTORIA State Government

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Guidance sheet

Eliminating or reducing the risk of harm from reversing alarms

Description

Reversing alarms or “reversing beepers” are warning devices fitted to vehicles and powered mobile plants. The sound they emit warns people when the vehicle or plant is reversing or is about to reverse.

Movement alarms warn people when a powered mobile plant is engaged. Warning alarms on hoists and cranes are commonly known as travel alarms. These alarms are used to prevent people from being run over or struck by vehicles or a mobile plant.

Powered mobile plant includes cranes, hoists, forklifts and earthmoving machinery such as graders, scrapers, bobcats, rollers, loaders, excavators and bulldozers.

You can listen to broadband and tonal alarms on the EPA NSW website.

Types of reversing alarms

The main types of reversing alarms available commercially are:

Tonal alarms – emit a pulsing tonal “beep beep” sound familiar to many people.

Broadband alarms – emit a pulsing sound in a range of frequencies, sometimes described as a quack or squawk sound.

Self-adjusting alarms – detect the noise level in the area and automatically adjust to be louder. Self-adjusting alarms may emit tonal or broadband sound.

Community members often report disturbance from tonal “beep beep” reversing alarms used at commercial, industrial and construction sites.

Noise from tonal alarms generally carries further than other types of alarms and may disturb people living significant distances from your site.

Other resources

Australian Standards

AS2436:2010	Guide to noise and vibration control on construction, demolition and maintenance sites.
Worksafe Compliance Code: Plant	Provides examples of types of warning devices and the circumstances for their use

More information

See our website: **epa.vic.gov.au/for-business/find-a-topic/noise**

Contact us:
1300 372 842 (1300 EPA VIC) or
contact@epa.vic.gov.au

The actions you take and the controls you decide to implement will support you to comply with your general environmental duty and other duties under the *Environment Protection Act 2017*.

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Interpreter

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If you are deaf, or have a hearing or speech impairment, contact us through the National Relay Service. For more information, visit: **www.relayservice.gov.au**

Controls to help you eliminate or reduce noise

Implementing the following controls may help you eliminate or reduce offsite impacts from reversing alarm noise.

Control options:
• Design your site access and vehicle thoroughfares to minimise vehicles reversing.
• Remove or reduce the need to reverse vehicles and powered mobile plant.
• Modify activities to minimise the amount or duration of reversing required to perform a task while not reducing safety.
• Adopt alternative types of warning devices that meet occupational health and safety (OHS) requirements and are less intrusive or disturbing for neighbours, such as: o flashing or warning lights o broadband reversing alarms o self-adjusting (variable level) alarms o reversing cameras.
• Choose reversing alarms appropriate for the powered mobile plant and where they will be used. Consider differences across alarm models, such as: o loudness (in decibels, dB) o directionality (related to the ability to detect where the sound is coming from) o urgency (related to how well the signal is heeded when it is heard).
• Minimise operating mobile powered plant outdoors for night-time operations.
• Use noise barriers to reduce the noise carrying to sensitive receivers.

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Engaging an acoustic consultant

An acoustic consultant will typically be a person who is eligible for membership of the Australian Acoustical Society. The business a consultant works for will typically be a member of the Association of Australasian Acoustical Consultants.

See Work with an environmental consultant (EPA website) for general information about how to engage a consultant.

These controls are *examples or options only* of what you could put in place to eliminate or reduce the risk of harm to human health and the environment. You can implement other controls, so long as you can demonstrate you have eliminated or reduced the risk of harm as far as reasonably practicable (EPA website).