REVERSING ALARMS

Most people would be familiar with the 'beep-beep' sound of reversing alarms, this sound is emitted by tonal alarms which have been commonly installed on large equipment for many years.

Reversing alarms are necessarily loud and the single frequency sound is not easily reduced with distance. This means the noise can be heard at considerable distances from the source where safety is not at risk and can be very annoying for receivers of this sound. In addition, where multiple vehicles are in operation, it can be difficult to distinguish the source of the tonal alarm and which vehicle may be reversing.

Noise from reversing alarms fitted to motor vehicles, mobile plant and earthmoving equipment is required to comply with the *Environmental Protection (Noise) Regulations 1997* except,

1. if it is a requirement under another written law that such an alarm be fitted; and
2. it is not practicable to fit an alarm that complies with both the written law under which it is required to be fitted and emits noise that complies with the noise regulations.

Worksafe require a safe system of work and recommend that mobile plant that works near persons on the ground be equipped with a reversing alarm. New products on the market mean that individuals or companies can meet occupational health and safety requirements whilst also reducing their chance of creating a noise nuisance.

New technology is available that is an improvement on the traditional tonal alarm. It is less intrusive to surrounding properties whilst still maintaining a safe work environment. In fact, it may provide a safer environment as it is easier to perceive the direction that a broadband alarm is coming from due to the nature of its noise.

Broadband Alarms

Broadband reversing alarms generate noise across multiple frequencies. It creates a 'ssh-ssh' type of sound and are sometimes referred to as 'croakers' or 'quackers'. They produce a beam of noise and so are more directional i.e. louder behind the vehicle in the danger zone when compared to other directions. The sound quickly blends in the background noise outside the hazard zone minimizing the disturbance on surrounding properties.

Smart (Self Adjusting or Context Sensitive) Alarms

Smart alarms are self-adjusting. They adjust the output of conventional beepers by constantly measuring the ambient noise. They typically operate at 5dB above background levels. This means if the background noise is low, then the alarm noise level will also be low. As the background noise increase the alarm noise also increases thereby maintaining safety at the work place.

REVERSING ALARMS

Combination Alarms

There are a number of alarm models which feature both the broadband function and are also self-adjusting. This provides the best of both new types of alarms.

Alternative or Additional Measures to Alarms

There are a number of alternatives to alarms that maintain a safe work environment and also comply with Occupational Safety and Health Legislation. Reversing alarms alert pedestrians when a vehicle is moving. However, reverse sensors and cameras alert the vehicle operator when there is an obstacle behind. They can be installed on larger vehicles either as an alternative to an alarm or as an additional safety feature. In addition, the use of spotters (third party observers) and flashing lights may also be considered.

Installation

It is recommended that all alarms regardless of the type, be installed as per the manufacturer's instruction. The location is often critical to the alarms performance (such that the alarm is not blocked) and in general should be located at the rear of the vehicle free from any obstruction. The Department of Environment Regulation recently tested several broadband type alarms and found when installed correctly, all complied with the requirement of ISO 9533:2010.

Where to Obtain These New Alarm Types

The following is a list of known suppliers of these different types of alarms. The City does not support or endorse any of these companies and this information is provided solely for the purpose of enabling further investigation by a potential purchaser. This list is not comprehensive and there may be other suppliers not listed.

Alanco Australia (08) 9358 7000
83-85 Welshpool Road, Welshpool WA 6106
www.alanco.com.au

Australian Warning Systems – (03) 9796 5880
www.warningsystems.com.au

Cooldrive Distrbution – (08) 9347 8333
17 McDonald Crescent, Bassendean WA 6054
www.ishop2.cooldrive.com.au

Elecspess – (07) 3265 1788
www.elecspess.com.au

REVERSING ALARMS

Narva – (03) 9730 6000
www.narva.com.au

PJL Diesel Electric – (08) 9258 7555
1 Granite Place, Welshpool WA 6106
www.pjdiesel.com.au

QLED – (07) 5453 4393
www.qled.com.aw

Rearsense Warning Systems – (02) 9525 9777
www.rearsense.co.nz

Auto Electrical Imports – (07) 3274 3077
129 Kerry Road Archerfield QLD 4108
www.iconic.com

Airdraulic Birco Group – (08) 9258 4144
www.abgpl.com.au

If you require further information about noise, you may contact the City of Nedlands Health Services on 9373 3500.