

**The Protection of the
Environment Operations
(Noise Control) Regulation 2017
Regulatory Impact Statement**



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Summary

The Protection of the Environment Operations (Noise Control) Regulation 2008 (Noise Control Regulation) plays an integral part in managing noise pollution in New South Wales. The main objective of the Regulation is to limit the amount of community noise in neighbourhoods. It applies to typical noise sources in residential areas, such as power tools, garden equipment, air conditioners, sound systems, motor vehicles and marine vessels. The Regulation is enforced by a number of agencies, including local councils, NSW Police, the NSW Environment Protection Authority (EPA) and Roads and Maritime Services.

Noise nuisance can cause stress, sleep disturbance and annoyance and can increase the risk of major health problems. *Burden of Disease from Environmental Noise* published by the World Health Organization (2011) and *The Health Effects of Environmental Noise – Other than Hearing Loss* published by the enHealth Council (2004) confirm that significant health effects are associated with exposure to environmental noise.

As well as the direct effects of noise, people's reactions to noise and how it interferes with their daily activities and communication play an important role in how noise affects an individual's overall health. Noise nuisance can be the cause of serious confrontations within neighbourhoods. The management of problems associated with noise can absorb significant private and public resources.

The review of the Noise Control Regulation provides an opportunity to align it with current community expectations about the control of neighbourhood noise. The review has highlighted a number of areas for improvement, primarily around reducing 'red tape', streamlining the Regulation and aligning it with best practice.

The proposed changes to the Noise Control Regulation are amendments aimed at:

- improving flexibility for compliance with the labelling and limit provisions for noisy equipment and aligning systems with international best practice
- updating the provisions relating to heavy vehicles on road and road related areas as these are now regulated under the Heavy Vehicle National Law
- simplifying the Regulation by removing technical procedures and placing them in a new separate document entitled *Approved Methods for Testing Noise Emissions*
- improving clarity by making minor amendments to definitions
- formalising current assessment procedures for noise from shooting ranges.

Proposed changes

The main changes in the proposed Protection of the Environment Operations (Noise Control) Regulation 2017 are:

Motor vehicles

- Amend the definition of ‘temporary noise reduction device’ to exclude devices that are riveted in place from this definition.
- Update and amend the definition of ‘emergency vehicles’ so it aligns with new Australian Government department names.
- Remove the offences regarding the retail sale of motor vehicle horns exceeding the prescribed requirements. Enforcement is constrained by current purchasing practices (articles ordered over the internet; they can be self installed by owners). Sufficient protection will be retained by applying the more practically enforceable provision that regulates the use of motor vehicle horns and provides protection from inappropriate use of motor vehicle horns and noise nuisances.
- Amend the clauses that make it an offence to sell, use, modify or repair a motor vehicle that has temporary noise reduction packing so that only packing that was legitimately fitted by the vehicle’s manufacturer, or is an equivalent replacement for any such packing fitted by the vehicle manufacturer, is allowed. This aligns with how temporary noise reduction devices are practically dealt with in these clauses, clarifies the intent of the provision and aligns with the Australian Design Rules.
- Amend the clauses that relate to driving, using, modifying or repairing motor vehicles that exceed prescribed levels to exclude heavy vehicles from the offences under these clauses. This removes duplication; heavy vehicles are now regulated under the Heavy Vehicle (Vehicle Standards) National Regulation (NSW).
- Remove the provision regarding affixing defective vehicle labels. In practice authorised officers no longer attach labels to vehicles when issuing a defective vehicle notice.
- Remove the EPA as an enforcement officer for offences relating to use of vehicles on residential premises and in places other than on roads or road-related areas, and the use of refrigeration units fitted to motor vehicles. These clauses are principally enforced by NSW Police and local councils. This change also requires amendment to Schedule 6 of the Protection of the Environment Operations (General) Regulation 2009.

Miscellaneous articles

- Include a new provision that accepts the use of European Union (EU) testing, labelling and limit requirements for equivalent gardening equipment covered by the current Regulation – i.e. labels and limits for mowers, electric line trimmers and lawn edgers; and labels for chainsaws.
- Retain the current NSW testing, labelling and limit requirements but phase in a change to the labelling requirements to align them with the EU requirements so that labelled noise levels are comparable. The proposed change will bring the noise metric (sound power level) in line with that used in the EU and is currently used in New South Wales for air conditioners. The proposed approach will allow the EU testing method or the NSW testing method to be used (with an adjustment factor applied to the test result). Industry will be given two years to transition to the ‘sound power’ noise metric limits and labelling requirements.
- Retain the labelling requirements for domestic air conditioners unchanged. A national approach to labelling of air conditioners is currently being considered as part of the Australian Government’s Minimum Energy Performance Standards (MEPS) scheme¹. If

¹ Department of Industry, Innovation and Science 2016, *Consultation Regulation Impact Statement – Air Conditioners and Chillers*

that scheme is implemented as expected the requirements for labelling in the Regulation will be reviewed for removal.

- Broaden the scope of the provision dealing with time of use of power tools and swimming pool pumps so that it captures items the provision originally intended to capture and does not inadvertently exclude items with similar noise impacts.

Marine vessels

- Retain all provisions unchanged.

Inspection and testing of articles

- Move all technical content, including Schedule 2 and the technical basis documents referred to in this part, into an EPA approved methods document.
- Refer to the new noise metric.

Shooting ranges

- Specify the assessment procedure for noise from shooting ranges.

Appendix 1 presents a clause comparison of the current Noise Control Regulation and the proposed Noise Control Regulation.

Compared to current practice, the proposed Noise Control Regulation imposes no significant extra costs to government, industry and the community. It is likely that, if the Regulation were not remade, State and local governments would need to commit at least the same level of resources to dealing with noise complaints but this would be through less efficient measures that would reduce the benefit for the community and reduce regulatory efficiency. Noise incidents and complaints would be highly likely to rise, as more people will be exposed to offensive noise.

The proposed Noise Control Regulation carries forward provisions that provide an effective foundation for managing neighbourhood noise. The main benefits from managing and reducing noise levels are improved neighbourhood amenity, avoided human health impacts and improved lifestyle opportunities. The proposed amendments are not expected to add significantly to compliance, administration or enforcement costs.

Next steps – making a submission

We welcome written comments on the draft Regulation and Regulatory Impact Statement. The closing date for submissions is 5:00pm on 7 July 2017. Send your submission to:

Noise Regulation Review
Manager
Water and Noise Policy Section
Environment Protection Authority
PO Box A290
Sydney South NSW 1232

Or email to epa.ncr@epa.nsw.gov.au

This Regulatory Impact Statement is available on the Environment Protection Authority's website at

<http://www.epa.nsw.gov.au/noise/noise-regulation-2017-consult.htm>

or from Environment Line, telephone 131 555.

1. Introduction

The Protection of the Environment Operations (Noise Control) Regulation 2008 is due to lapse on 1 September 2017. As required by the *Subordinate Legislation Act 1989*, a review of the current Regulation has been carried out to ensure the most appropriate legislative approach is applied to the current noise issues and problems confronting neighbourhoods.

This report is a Regulatory Impact Statement (RIS) for the making of the proposed Noise Control Regulation, being the Protection of the Environment Operations (Noise Control) Regulation 2017.

1.1 Requirements of the *Subordinate Legislation Act 1989*

The *Subordinate Legislation Act 1989* provides for the staged repeal of statutory rules, including Regulations, every five years. The aim of the Act is to improve the quality of regulatory proposals and to assess the economic and social impacts of the Regulations and other options before they are introduced. This process helps to ensure that Regulations have continuing relevance and provide the best approach to meeting the objectives proposed.

Permission may be sought for extensions of time for the remaking of Regulations. In this case, permission was granted to extend the remake of the current Noise Control Regulation three times while the EPA was pursuing a national approach for the noise labelling and limit requirements in the Regulation. Work on a national approach is likely to take further time due to changes in national departments involved in this work, and it has been decided to proceed with the remake of the Noise Control Regulation while work on a national approach continues. The review of the regulation has been extended until September 2017.

The *Subordinate Legislation Act 1989* relates to the making and staged repeal of subordinate legislation such as Regulations. The Act requires a RIS to be prepared for a Regulation.

A RIS must:

- state the objectives of the Regulation and the reasons for them
- assess the costs and benefits of the proposed Regulation
- identify the other options
- assess the costs and benefits of the other options (including the option of doing nothing)
- evaluate which option will provide the most cost-effective outcome, and
- describe the consultation program to be undertaken.

Where possible, costs and benefits should be quantified. Where quantification is not possible, the anticipated impacts of the proposed Regulation and the other options should be described to facilitate a clear comparison of costs and benefits.

1.2 Better regulation principles

In the NSW Government's *Guide to Better Regulation* (DPC 2009), there are seven principles which characterise good regulation and the minimisation of 'red tape'. These principles are to be followed in the development of every regulatory proposal. Table 1 sets out these principles and how this RIS complies with them.

Table 1: Compliance with the better regulation principles

Principle	RIS compliance
The need for government action should be established	Section 3 details the extent of the neighbourhood noise issue and hence the need for noise control. Section 5.1 and Appendix 2 set out the need for the specific controls the Noise Control Regulation provides. Section s6 identifies specific issues in each part of the Regulation and the need for change.
The objective of government action should be clear	The objective of the Noise Control Regulation is set out in Section 2.1. The objective of the proposed changes are discussed in Section 6. Appendix 2 discusses the objective and need for clauses that will be retained unchanged.
The impact of government action should be properly understood by considering the costs and benefits of a range of options, including non-regulatory options	The costs and benefits of the proposed changes are considered and assessed and alternatives discussed where appropriate in Sections 5 and 6 and Appendix 2.
Government action should be effective and proportional	The Regulation is designed to ensure only those areas that require government action are addressed.
Consultation with business and the community should inform regulatory development	The proposed Regulation has been developed taking account of preliminary consultation with key stakeholders. Section 1.3 details the consultation that has already taken place as well as the consultation process for this RIS.
The simplification, repeal, reform or consolidation of the current regulation should be considered	The changes proposed are of a minor nature and aim to simplify, clarify and repeal requirements as much as possible. Removal of technical information from the Regulation will simplify it and consolidate all measurement information into one separate document.
Regulation should be periodically reviewed and, if necessary, reformed to ensure its continued efficiency and effectiveness	The Regulation will be regularly reviewed to ensure it continues to meet the demands of the community in New South Wales. The Regulation will be amended as necessary where national approaches are implemented for noise labelling of articles.

1.2.1 ‘One on, two off’ policy

In addition to the above, the ‘one on, two off’ policy was introduced by NSW Government in 2011 to reduce red tape and regulatory costs for business and the community. The policy aims to ensure that:

- for every new principal legislative instrument introduced, two must be repealed
- the regulatory burden must not increase.

This does not apply for remakes such as this that do not substantially increase burden (e.g. remaking a Regulation as is or with minor changes only), or for legislation that implements national regulatory reforms or for appropriation Acts.

1.3 Consultation

The objective of the consultation process is to provide key stakeholders with an opportunity for direct input into the proposed Noise Control Regulation. The key partners in the delivery of the Regulation are the other government agencies with a regulatory role (NSW Police, Roads and Maritime Services) and local government. All partners were contacted to determine how they would like to participate in the review and to identify their initial views about the performance of the current Regulation and any areas needing improvement. The EPA also sought the views of Local Government NSW and Environmental Health Australia as peak bodies of local government and local government officers respectively.

The EPA:

- wrote to all local councils offering to meet and seeking direct input and advice
- met with councils as requested
- held a workshop on the Noise Control Regulation at a conference for local council rangers
- met with Local Government NSW
- carried out an online survey of council environmental health officers in collaboration with Environmental Health Australia and Local Government NSW (2015).
- met with representatives of NSW Police.

Councils have indicated the Regulation is effective, but also that operational constraints have limited its implementation. These include councils’ inability to respond to after-hours incidents and the time taken to gather evidence and undertake regulatory action. Specific results of the online survey (2015) are reported under the relevant sections of this RIS. A summary of the survey feedback and a list of councils that participated in the survey is contained in Appendix 3.

Initial input from NSW Police indicates the majority of noise-related calls received from the public relate to noise from parties and amplified music and that officers tend to issue verbal warnings and noise abatement directions in the first instance when managing noise complaints. NSW Police has provided data for this RIS from its management systems on noise-related activities.

The information in this RIS also draws from the considerable work and consultation already undertaken since 2008 through different Australian Government forums regarding a national approach for noise limits and labelling requirements for air conditioners and outdoor power equipment. This included considerable consultation with key industry associations: the Airconditioning and Refrigeration Equipment Manufacturers Association of Australia (AREMA) and Outdoor Power Equipment Association (OPEA). The EPA led the work on a national approach and commissioned a survey, conducted by AECOM in 2011 of 818 people

in Australia, designed to estimate the extent of noise impacts from various noise sources affecting neighbourhoods.

More recently, the EPA has provided feedback to the Australian Government Department of Industry, Innovation and Science regarding the inclusion of noise labelling for air conditioners in its Minimum Energy Performance Standards (MEPS) scheme. The EPA has also had recent discussions with OPEA which confirmed its support for maintaining a regulatory framework that provides a level playing field for industry.

Shooting range stakeholders were consulted about the approach to measuring noise from target shooting ranges to update and include the method from the EPA document “Target Shooting Ranges: Application Note for Assessing Noise Compliance” in the draft regulation.

This RIS, together with the proposed Noise Control Regulation, are available for public comment until 5:00pm on 7 July 2017. The documents are available on the EPA website at <http://www.epa.nsw.gov.au/>

Comments will be sought on this RIS and proposed Noise Control Regulation through:

- advertising the exhibition of the RIS and proposed Noise Control Regulation on the NSW Government [Have Your Say website](#)
- notifying key stakeholders by mail and email
- additional targeted consultation with key stakeholders as requested.

2 Legislative and policy context

2.1 Management of environmental noise in New South Wales and the role of the Regulation

The *Protection of the Environment Operations Act 1997* (POEO Act) and the Protection of the Environment Operations (Noise Control) Regulation 2008 (Noise Control Regulation) provide the principal legal framework for managing unacceptable environmental noise in New South Wales. The POEO Act broadly identifies appropriate regulatory authorities for regulating noise, provides for the regulation of noise from scheduled premises via environment protection licences and provides broad regulation and enforcement tools for managing noise from non-scheduled premises and offensive noise in general, including making a series of noise-related offences. It provides for the use of noise directions, orders and notices to be used in various situations where offensive noise has been emitted, including neighbourhood noise issues, and makes it an offence to sell certain articles that emit more noise than prescribed levels or that are not fitted with prescribed noise control equipment. The POEO Act provides for the making of Regulations where required that will assist in meeting the objectives of the Act.

The main objective of the Regulation is to supplement the tools in the Act by providing more specific tools and requirements for managing noise in neighbourhoods. The Regulation seeks to establish an appropriate balance between the community’s right to peace and quiet and the community’s right to carry out legitimate, although potentially noisy, activities.

Other legislation such as the *Liquor Act 2007* and *Companion Animals Act 1998* also play a role in reducing noise from sources affecting neighbourhoods e.g. noise from hotels and liquor-licensed premises and barking dogs.

The Protection of the Environment Operations (General) Regulation 2009 provides for the administration of environment protection licences, identifies appropriate regulatory authorities for certain activities and locations and supports the Noise Control Regulation by identifying:

- the enforcement agencies responsible for the provisions in the Regulation
- the penalty notice amounts payable.

2.1.1 The Noise Control Regulation

The Noise Control Regulation:

- provides for the sale and use of various motor vehicle and motor vehicle accessories devices such as horns and alarms
- sets prescribed limits for motor vehicles
- regulates noise emitted as a result of the use of marine vessels
- sets time limits for the use of certain articles on residential property including gardening equipment, air conditioners, power tools and pool pumps, where the noise caused can be heard in a habitable room of another residence
- prohibits the selling of certain articles that emit noise above prescribed levels, such as lawn mowers, edge cutters, string trimmers and brush cutters
- requires labelling of certain other noise emitting articles such as chainsaws, air conditioners, air compressors, pavement breakers, garbage compactors
- provides for the inspection and testing of certain articles
- provides enforcement agencies with supplementary control options including on-the-spot fines for certain offences and the power to issue other types of notices.

2.1.2 POEO Act

The main provisions within the POEO Act related to enforcement of noise issues are listed below.

The Act prohibits:

- the sale of articles emitting more than the prescribed noise (section 136); articles and limits are prescribed in the Noise Control Regulation
- the sale of articles not fitted with the prescribed noise control equipment (section 137); articles and limits are prescribed in the Noise Control Regulation
- emission of noise from plant that is not maintained in an efficient condition or not operated in a proper and efficient manner (section 139)
- emission of noise through processing or otherwise dealing with materials (including raw materials), except where those materials are dealt with in a proper and efficient manner (section 140).

The Act defines offensive noise 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:

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

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 Act provides various powers for authorised officers including:

- powers of investigation
- the power to issue penalty infringement notices
- the power to undertake a court prosecution for breaches of the Act, the Noise Control Regulation or conditions on a licence, notice or direction.

The Act provides the following regulatory tools to facilitate the management of noise by authorised officers:

- Environment protection licences – The activities in Schedule 1 of the Act are required to be undertaken under environment protection licences issued by the EPA. These licences are usually issued with conditions that can, among other things, prescribe noise limits and other noise conditions such as hours of operation. Criteria specified in the conditions are determined by reference to the EPA's various noise control policies.
- Noise control notices – Authorised officers (other than Police) may issue notices prohibiting noise from an activity or a piece of equipment from being emitted above a specified level when measured at a specified point. These notices may also specify the hours during which the noise limit applies. A noise control notice may be applied to a wide range of premises, including industrial, commercial or residential sites. Noise levels and hours of operation that are specified in the notice may be determined by reference to local council or the EPA's noise control policies or guidelines.
- Prevention notices – Prevention notices may be issued by authorised officers (other than Police) to control activities that have been, or are being, carried out in an 'environmentally unsatisfactory manner', and should specify the action to be taken to remedy the problem.
 - Section 95 of the Act defines 'environmentally unsatisfactory manner' as an activity that is 'not carried on by such practicable means as may be necessary to prevent, control or minimise pollution' or an activity that 'is not carried out in accordance with good environmental practice'. The definition of 'pollution' within the Act includes 'offensive noise'. 'Good environmental practice' is generally where an activity is undertaken in accordance with local council or EPA noise control policies or guidelines or in accordance with relevant standards.
 - Fees are payable for the issuing of prevention notices. Also, compliance cost notices may be issued to the recipient of a prevention notice to recover the reasonable costs and expenses incurred by the authority in monitoring and ensuring the action required by the prevention notice is carried out.
- Noise abatement directions – An authorised officer may issue a direction to warn that if the emission of offensive noise continues this will constitute an offence that may result in a fine or court action. These directions are designed for 'one-off' problems such as loud music, where the noise can be reasonably reduced or stopped. A direction may be issued verbally or in writing and lasts for up to 28 days. Under section 282 of the Act the Police may confiscate offending equipment if a noise abatement direction is in force and the direction is being contravened.

The Act enables an individual to independently seek a noise abatement order from the local court. The local court may direct a person to cease the emission of offensive noise if it is satisfied the noise is offensive.

2.2 Responsibility for noise control

The principal noise or noise sources that are regulated in New South Wales are:

- community noise
- motor vehicle noise
- industrial and commercial sites
- railway noise

- marine vessels
- animals.

Essentially, local councils are the regulators of:

- noise from commercial and industrial operations that are not required by the EPA to hold licences (and that are not carried out by public authorities)
- neighbourhood noise from residences, vehicles used off-road, vehicle alarms and sound systems.

Barking dogs are also regulated by councils under the *Companion Animals Act 1998*.

The Police have powers to deal with neighbourhood noise and are typically the main agency for the control of noise from late-night parties, or where safety may be a concern or where council officers are not available.

The EPA regulates noise from activities that are licensed or carried out by public authorities. Activities that require environment protection licences are listed in Schedule 1 of the POEO Act and are typically large-scale industrial operations. The EPA also regulates outdoor concerts held on lands specified in section 90 of the *Protection of the Environment Operations (General) Regulation 2009* and entertainment activities at Olympic Park that are carried out by the State or a public authority. The Olympic Park Authority regulates entertainment activities at Olympic Park that are not regulated by the EPA.

The EPA, NSW Police and Roads and Maritime Services all have roles in controlling noise from motor vehicles. These agencies periodically conduct joint campaigns that include targeting noisy motor vehicles. Roads and Maritimes Services is primarily responsible for regulating noise from heavy vehicles. Councils can also deal with offensive noise from motor vehicle sound systems and noise from motor vehicles on private property.

Roads and Maritime Services regulates noise from motor vessels in navigable waters and premises used in conjunction with vessels that are situated adjacent to, or partly or wholly over, navigable waters. Port Authority of New South Wales officers are also enforcement officers for issuing penalty infringement notices under the Noise Control Regulation.

Marine Parks Authority handles noise from activities and premises in marine parks other than those regulated by the EPA.

Liquor and Gaming NSW administers the operation of liquor-licensed premises under the *Liquor Act 2007* including handling noise complaints and setting noise conditions on licences.

The Australian Government is responsible for managing aircraft noise and manages noise from its own sites, such as Sydney Airport and various defence facilities.

3 Why does neighbourhood noise need government action?

3.1 Sources of noise

Noise is unwanted sound. What constitutes noise may therefore be largely a subjective judgement. While there are undoubtedly sounds that the majority of the population would describe as noise, any perceptible sound might be considered noise by one person but not another. Sound is measured in units called decibels, represented on a logarithmic scale. This means that a 10-decibel increase represents an effective doubling of noise levels. The threshold of hearing is 0 decibels. The threshold of pain is typically taken as 140 decibels.

The range of potential noises or noise sources that can have an impact on neighbourhoods generally includes:

- machinery and equipment commonly used on residential premises, such as amplified musical equipment, intruder alarms, pool pumps, air conditioners and power tools
- transport noise, such as that from road traffic, aircraft, marine vessels and trains
- industrial noise from nearby factories and workshops
- commercial premises such as restaurants and marinas
- animals such as dogs and some birds.

3.2 Neighbourhood noise

The Noise Control Regulation focuses on neighbourhood noise. Neighbourhood noise is generally taken to be noise that results from activities normally conducted in residential areas.

Typical neighbourhood noise sources covered by the Noise Control Regulation include:

- machinery and equipment commonly used on residential premises, such as intruder alarms, pool pumps, air conditioners, power tools, televisions and sound equipment
- individual motor vehicles and motor vessels.

Noise from industrial and commercial sites, aircraft noise, overall road traffic noise not pertaining to individual motor vehicles, and animal noise are not subject to the Noise Control Regulation, but are controlled by the agencies mentioned in Section 2.2 'Responsibility for noise control'.

3.3 Impact of neighbourhood noise

Neighbourhood noise is a serious environmental amenity issue that affects many in the community.

Burden of Disease from Environmental Noise (WHO 2011) and *The Health Effects of Environmental Noise – Other than Hearing Loss* (enHealth Council 2004) identify the significant health effects associated with exposure to environmental noise. Noise nuisance can cause stress, sleep disturbance and annoyance and can increase the risk of major health problems. This ultimately translates into impacts on the health of the community, workforce efficiency and productivity. Noise in neighbourhoods in particular can escalate into serious confrontations. In an Australian Institute of Criminology publication, noise pollution is cited as one of the underlying causes of violent behaviour resulting from personal disputes between neighbours (Hazlehurst KM 1989).

The NSW Neighbourhood Noise Survey (DEC 2004) found that one in three people considered themselves affected by neighbourhood noise and one in eight people were very annoyed or disturbed by it. For flat, unit or apartment dwellers this impact rate almost doubled.

Various types of neighbourhood noise have serious effects on community wellbeing. A 2011 survey of 818 people in Australia, carried out for the *Draft Consultation RIS: Noise Impacts from Air Conditioners and Portable Gardening Equipment* (AECOM 2011), provided estimates on the level of annoyance experienced with different noise sources, as shown in Table 2.

Table 2: Extent of nuisance with various neighbourhood noises

Type of noise	Proportion of population having exposure	Proportion of population annoyed or bothered ¹
Air traffic	45%	11%
Road traffic	67%	27%
Rail traffic	22%	6%
Barking dogs	66%	44%
Noise from sound systems and parties	60%	43%
Noise from garbage collections	64%	21%
Noise from portable gardening equipment	76%	36.5%
Noise from air conditioners	22%	5.7%

Source: AECOM 2011

¹Calculated from proportion of population exposed to noise and proportion of those exposed that are annoyed or bothered.

These survey results indicate the highest percentage of the population are annoyed with noise from barking dogs, noise from portable gardening equipment, noise from sound systems and parties, and road traffic.

3.4 Complaints about noise

The 2004 NSW Neighbourhood Noise Survey found that about one in seven people have made complaints either to neighbours or regulatory authorities about neighbourhood noise.

Local councils, the EPA and NSW Police all receive complaints about noise. Local councils are thought to receive the most noise complaints, but comprehensive data for all New South Wales is not available.

Noise complaints are not necessarily regarded as an accurate measure of the impact of noise. For example, a community noise survey in Western Australia also found that complaint data generally underestimates the number of people affected by noise (WA DEC 2006). Further, the AECOM Survey in 2011 found that of the 35% of the population that was annoyed by portable gardening equipment around 90% did not complain. However, complaints provide a source of data that helps in identifying the noise sources that generate concern in the community. Complaints data can also help to determine noise 'hot-spots' and provide an insight into the effects of noise at an individual level.

3.4.1 NSW Environment Protection Authority

The EPA operates a telephone information and reporting service called Environment Line (131 555) that offers information on a wide variety of environmental topics. Incoming calls are recorded into one of three categories: 'incident reports', 'information calls' and 'motor vehicle-related calls'. If the call to Environment Line is related to noise pollution, and the EPA is the regulatory authority, then the call is recorded as an incident report. However, if the council or another body is the regulatory authority, the call is recorded as an information call and (in the case of councils), the call is referred for further action. In addition to this, there is an EPA

website and ‘Report to EPA’ mobile application (app.) for reporting motor vehicle-related issues.

Figure 1 shows that around 20% of total² incident reports made to the EPA during 2013–14 and 2014–15 financial years, respectively, were related to noise issues. This represents around a 5% increase compared with 2004–05 data³ and shows that EPA-related noise issues are fairly steady with a very gradual minor increase over the past 10 years which is mainly due to increased community concerns regarding noise from mines.

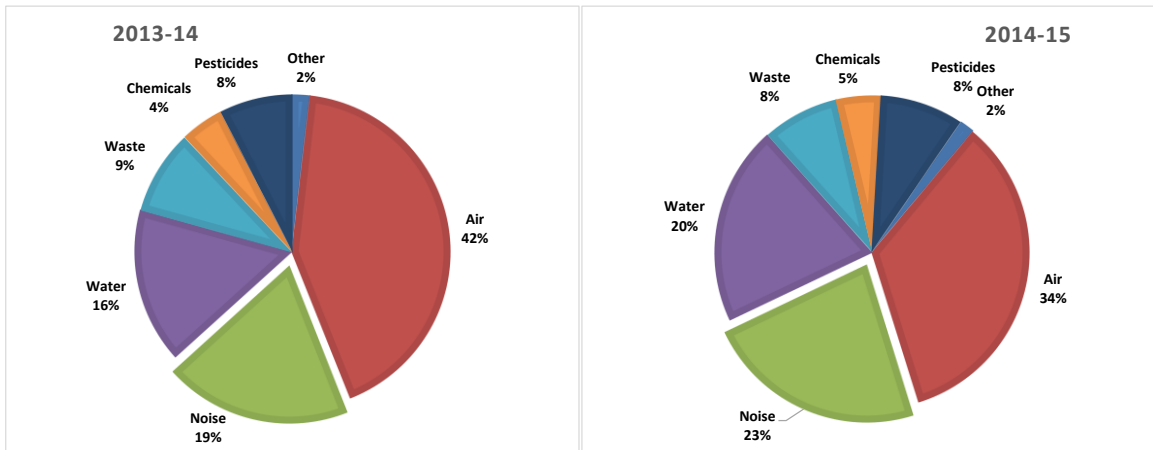


Figure 1: Incident reports to EPA’s Environment Line 2013–14 and 2014–15

During 2013–14 and 2014–15, the EPA received 2630 and 3128 information calls related to noise; these comprised approximately 8% of the total⁴ request for information in each of these financial years. Approximately 75% of all noise-related information calls are referred to councils for action, and most of these are in the Sydney region. Figure 2 shows the types of noise calls (by percentage) that were received by Environment Line in 2013–14 and 2014–15. The main types of noise sources referred to councils were neighbourhood noise (includes all neighbour related noise – people, air conditioners, power tools, parties, music, instruments etc.), transport-related noise (trail bikes, vehicle use at residential premises), commercial noise, local construction noise and animal noise.

² Environment Line data: 8353 incident reports 2013–14 and 7822 incident reports in 2014–15

³ DECC 2007, *Regulatory Impact Statement – Proposed Protection of the Environment Operations (Noise Control) Regulation 2007*

⁴ Environment Line data: 32,012 information calls 2013–14 and 37,085 information calls 2014–15

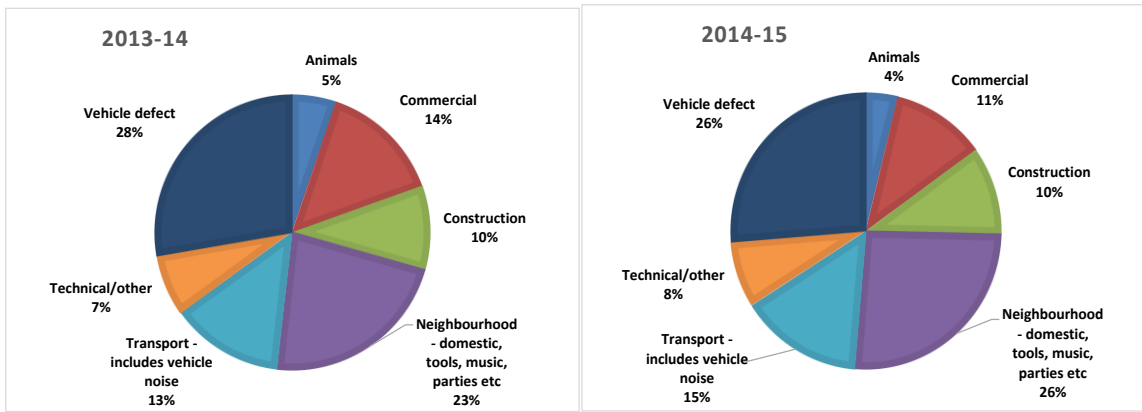


Figure 2: Types of noise-related information calls received by Environment Line

The number of information calls mentioned above represent a 50% decrease in the percentage of noise calls to Environment Line compared with 2004–05 data³. This is mainly due to commencement of EPA’s ‘Ask Environment Line’ website in 2013 which provides questions and answers to the most commonly asked information. Usage data for this website shows that visits to the noise questions comprised 46% and 50% of the total⁵ visits to the site for the 2013–14 and 2014–15 financial years, respectively. The top two most popular questions accessed overall were the times for the residential noise restrictions and what to do about noisy neighbours.

The increased effect of noise on NSW communities is evident in Figure 3, which shows the number of reports by the public to Environment Line, the EPA website and the mobile app of excessive noise from modified exhausts and engines. In 2014–15, 1930 reports were received. There has been a progressive increase in the number of motor vehicle noise reports since 2005 and particularly in the past financial year. This corresponds with a sharper rise in vehicle ownership in New South Wales in 2014–15; see Figure 12.

⁵ Google Analytics for ‘Ask Environment Line’ webpage: 330,684 visits in 2013–14 and 559,844 visits in 2014–15.

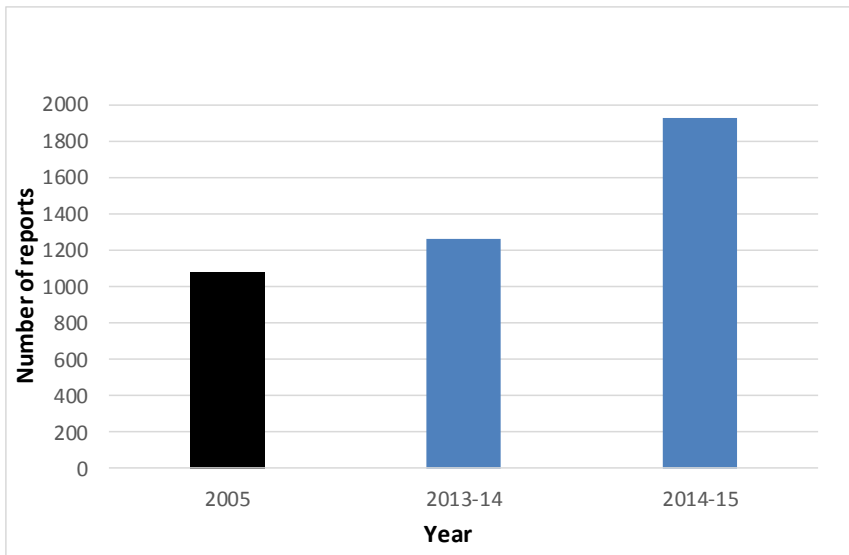


Figure 3: Number of motor vehicle-related noise reports

Sources: 2005 Environment Line data⁶; 2013–14 and 2014–15 totals from Environment Line, EPA website and 'Report to EPA' mobile app

Questions about the impact of road traffic noise on human health were included in the 2009 NSW Health Survey, an ongoing telephone survey of NSW residents that monitors the self-reported health of the population. A total of 10,719 interviews with adults in rural and urban locations revealed that 45.8% of respondents considered they were exposed to road traffic noise. Of those respondents exposed to road traffic noise there were multiple effects which included: annoyance (27.0%), disturbed sleep (18.5%), stress (7.5%), difficulty reading or studying (7.1 %), anxiety (4.3%), headache (4.0%) and depression (1.7%) (Centre for Epidemiology and Research 2010).

Increasing population and population densities create environmental challenges, particularly for noise (EPA 2012). Increasing volumes of road, rail and air traffic and more compact communities are factors that contribute to problems with high noise levels. These factors, together with community expectations for government action, contribute to the consistently high number of noise-related calls to EPA's Environment Line and the high usage of EPA's Ask Environment Line and motor vehicle websites and app.

3.4.2 NSW Police

Figure 4 shows the number of noise complaints reported to NSW Police from 2009 to 2014. This shows a decreasing trend of about an 18% reduction over the six years, however, a considerable number of noise complaints (just over 90,000) were still received in 2014.

⁶ DECC 2007, *Regulatory Impact Statement – Proposed Protection of the Environment Operations (Noise Control) Regulation 2007*

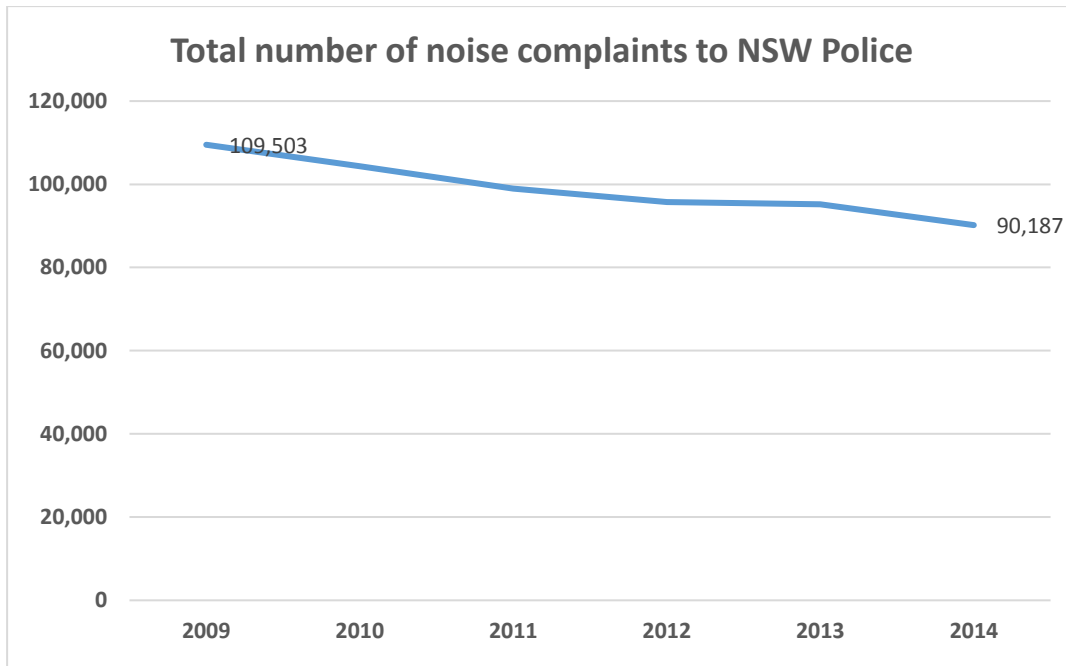


Figure 4: Number of noise complaints to NSW Police

Input from NSW Police has indicated the majority of the calls relate to noise from parties and amplified music. This is apparent from Figures 5 and 6 that show complaints are generally made on the weekends and mostly between the hours of 6pm and 6am with the majority of calls made between midnight and 3am on Friday and Saturday nights.

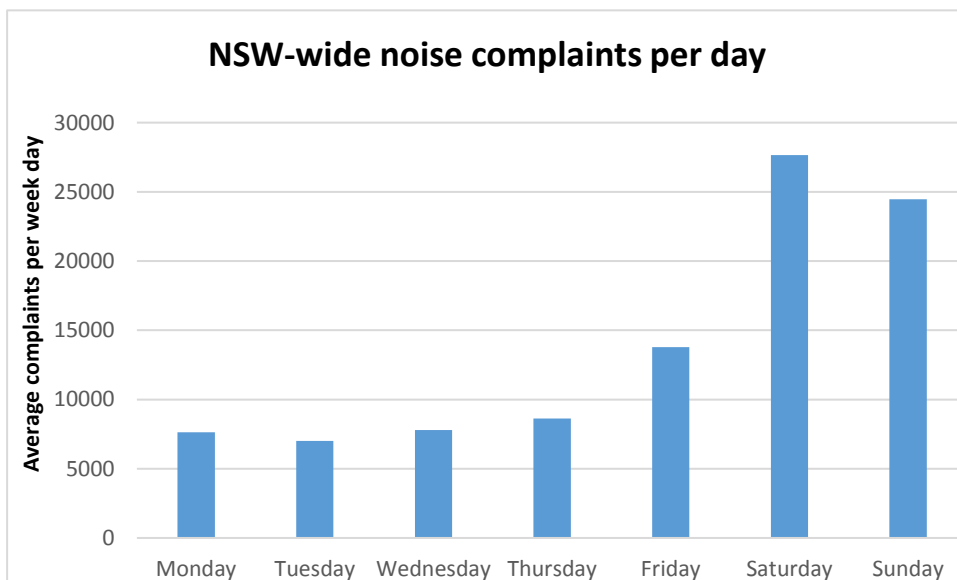


Figure 5: Average number of noise complaints to NSW Police per day of the week

(Based on NSW Police data from 2009–2014 inclusive)

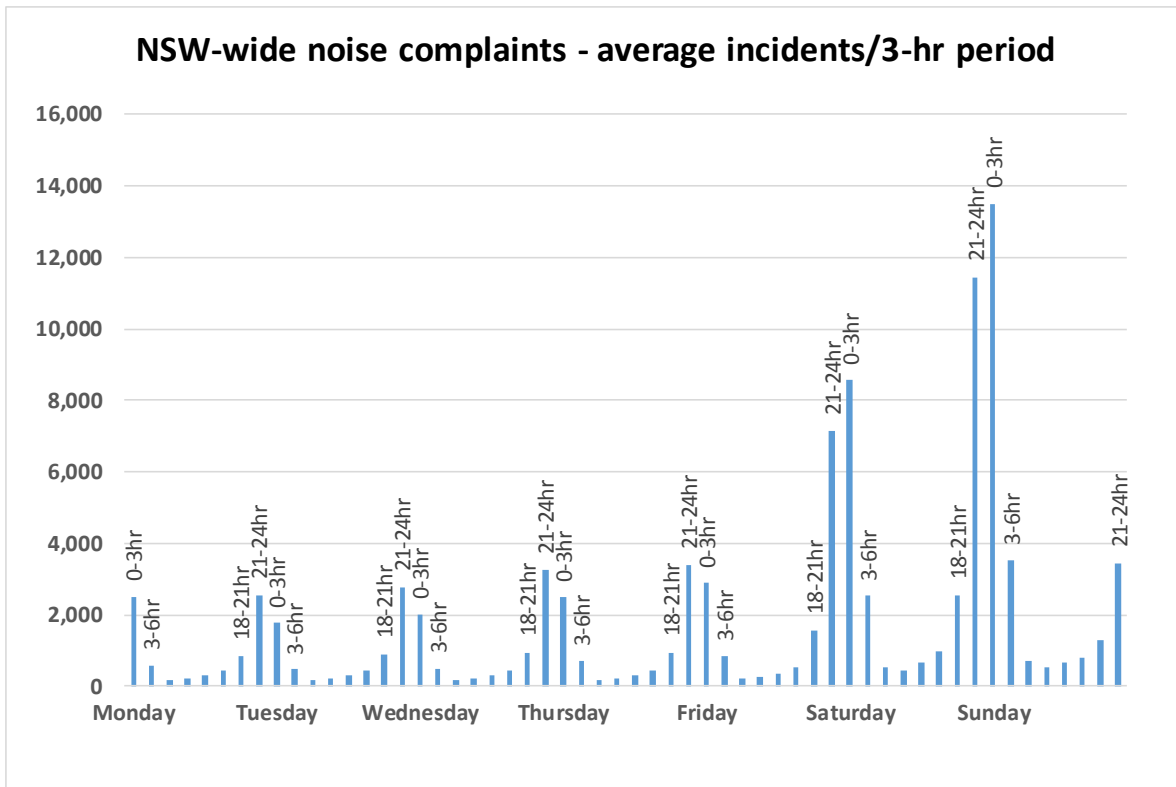


Figure 6: Average number of noise complaints to NSW Police per three-hour period day for each day of the week

(Based on NSW Police data from 2009–2014 inclusive)

3.4.3 Local councils

Local councils have primary responsibility for regulating residential noise, and it is likely that most neighbourhood noise complaints are directed to them. Most councils maintain a database of complaints, but there is no single method for categorising complaints nor a central database covering all NSW councils. Furthermore, all NSW councils do not maintain data in a uniform manner. In general, it is difficult to classify complaints on the basis of particular provisions of the Regulation.

From a review of several State of the Environment Reports⁷ for Sydney, Newcastle and Wollongong councils, an average of around 850 noise complaints per year were received by these councils for the years 2008–09 to 2010–11; see Figure 7. Note the City of Sydney figures do not include the number of complaints specifically received about construction noise which amount to around 300 additional complaints per year.

⁷ 2008–09, 2009–10, 2010–11 State of the Environment Reports for the City of Sydney, Newcastle City Council and 2008–09, 2009–10 and 2011–12 State of the Environment Reports for Wollongong City Council

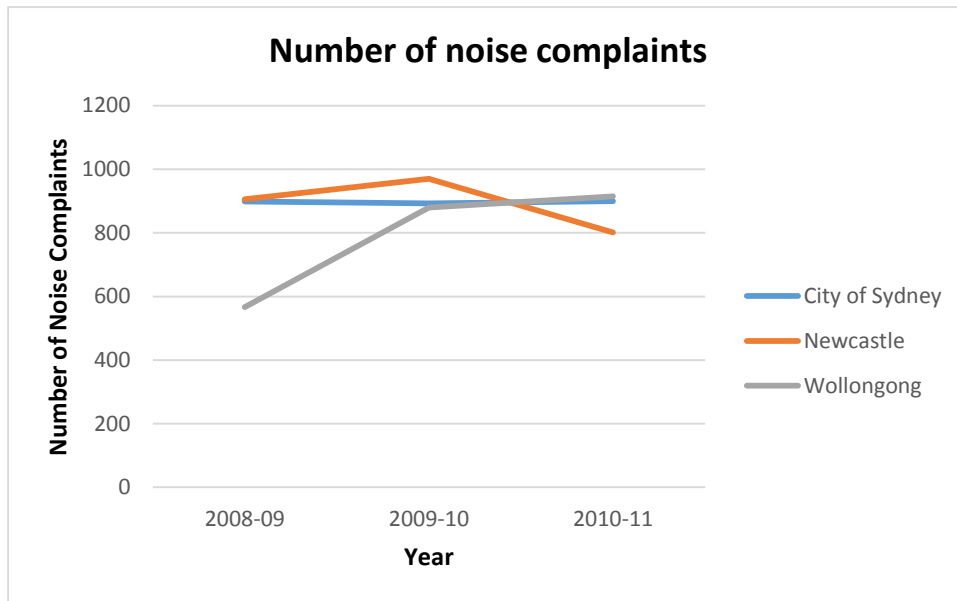


Figure 7: Number of noise complaints received by Sydney, Newcastle and Wollongong councils

The main sources of noise complaints were cited as barking dogs, residential (including amplified music and sound equipment, air conditioners, pool pumps, other animal noise, alarms), plant and machinery from industrial/commercial uses and construction-related activities. Noise from dogs is subject to the *Companion Animals Act 1998* and therefore has not been considered in this review of the Noise Control Regulation.

In the recent EPA online survey (2015), council environmental health officers were surveyed about the types of noise complaints they receive. In the survey they were asked how frequently they received complaints about specific noise issues. Figure 8 shows the types of noise complaints received by respondent councils relevant to the Regulation. The top noise complaints received were:

1. amplified sound equipment
2. air conditioners
3. parties
4. musical instruments
5. pool pumps

Noise sources that are not directly within the scope of the Regulation that were identified by councils have been excluded from Figure 8 as they are dealt with under different legislation, development consent conditions or licence conditions. These include issues such as barking dogs (*Companion Animals Act 1998*) and hotels and other licensed venues (Liquor & Gaming NSW licence conditions).

The survey showed that guidance material provided by the EPA for dealing with a range of noise issues is used and valued by council environmental health officers and assists them identify relevant policies and legislation. Respondents indicated support for guidance material and courses being made more accessible to councils, either through online training or through regional delivery. Respondents also asked for the existing guidance material to be

updated with additional scenarios and solutions such as examples of legal material. The EPA will consult further with councils to improve support material as a part of the implementation of a remade Regulation.

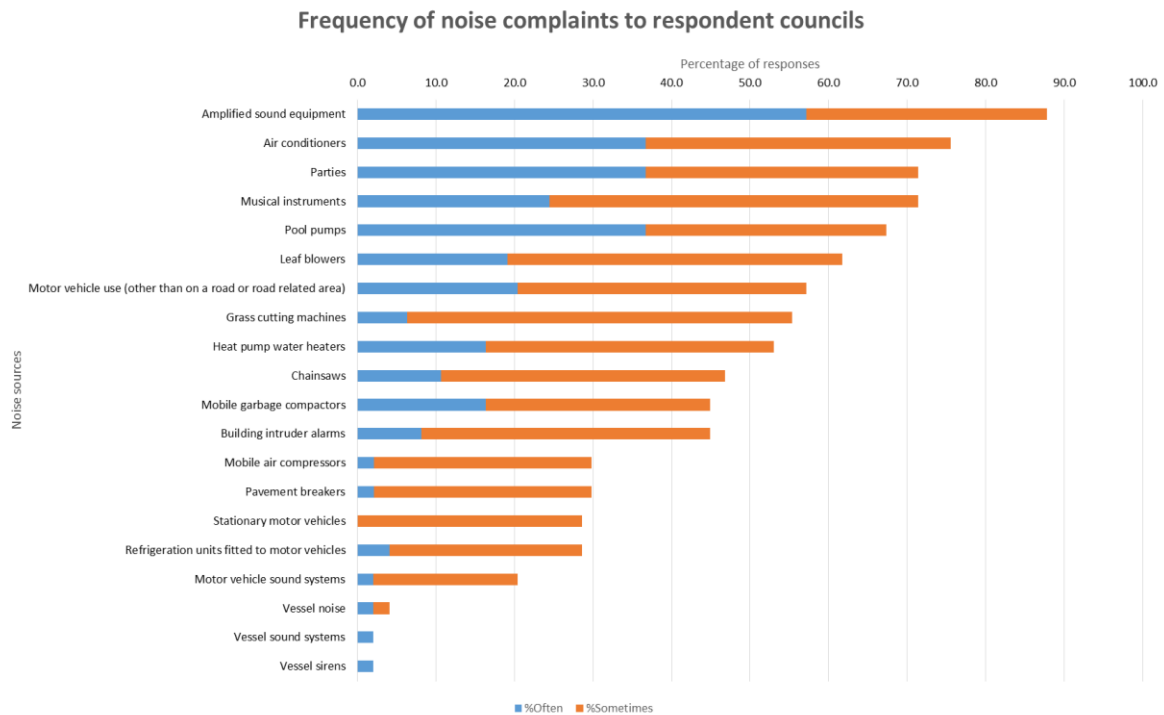


Figure 8: Frequency and type of noise complaints received by respondent councils

(Based on the results of the EPA’s online survey of council environmental health officers in October–November 2015)

3.5 Enforcement, penalties and offences

The current Regulation is largely enforced by officers of local councils, NSW Police, the EPA and Roads and Maritime Services. Officers with enforcement powers are referred to as authorised officers or enforcement officers. The EPA is the appropriate regulatory authority for premises which conduct activities specified in Schedule 1 of the POEO Act and activities carried out by other public authorities. Local councils are generally the appropriate regulatory authorities for non-scheduled activities in their local government areas. NSW Police and Roads and Maritime Services are generally responsible for activities for which it is not practical for the EPA or council to regulate. The principal means of enforcement are outlined below.

3.5.1 Penalty levels

The penalty levels under the Noise Control Regulation were recently reviewed by the EPA as part of a broader review of penalties under EPA legislation and no further change is proposed in this review.

The maximum penalties provided under the Noise Control Regulation for a Court prosecution are \$16,500 for individuals and \$33,000 for corporations. The review found these amounts to be reasonable and in proportion to the seriousness of the offence. However, the review found the penalty notice amounts for on-the-spot fines under the Noise Control Regulation

needed to be increased to account for CPI, to better align with penalty notice amounts for comparable offences related to air pollution and to provide a better deterrent. These were increased by around 50% on 29 August 2014 via the Protection of the Environment Operations (General) Amendment (Fees and Penalty Notices) Regulation 2014.

3.5.2 Noise offences

Over the three financial years from 2012 to 2015, a total of 1227 on-the-spot fines were issued by the EPA, NSW Police and councils for breaches of the Noise Control Regulation with a total face value of \$292,250. Of these, 1223 were related to motor vehicles and 3 to noise from miscellaneous articles. Figure 9 shows the breakdown of the number of fines issued by Police, EPA and councils and total face value for each financial year. Figure 10 shows the proportions of major offences under the motor vehicles category.

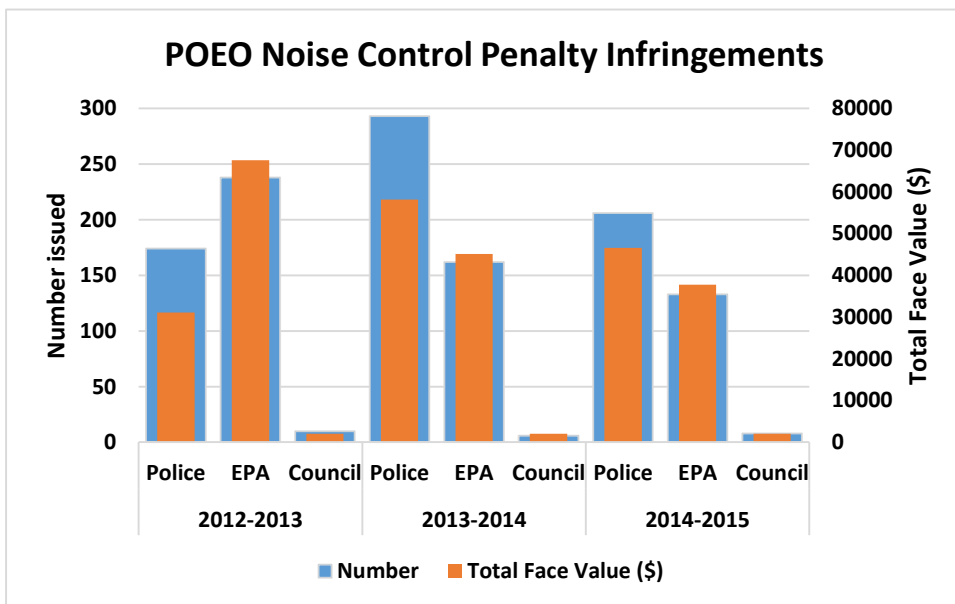


Figure 9: Breakdown of fines issued by Police, the EPA and local councils

(Based on State Debt Recovery Office data for 2012–13, 2013–14 and 2014–15)

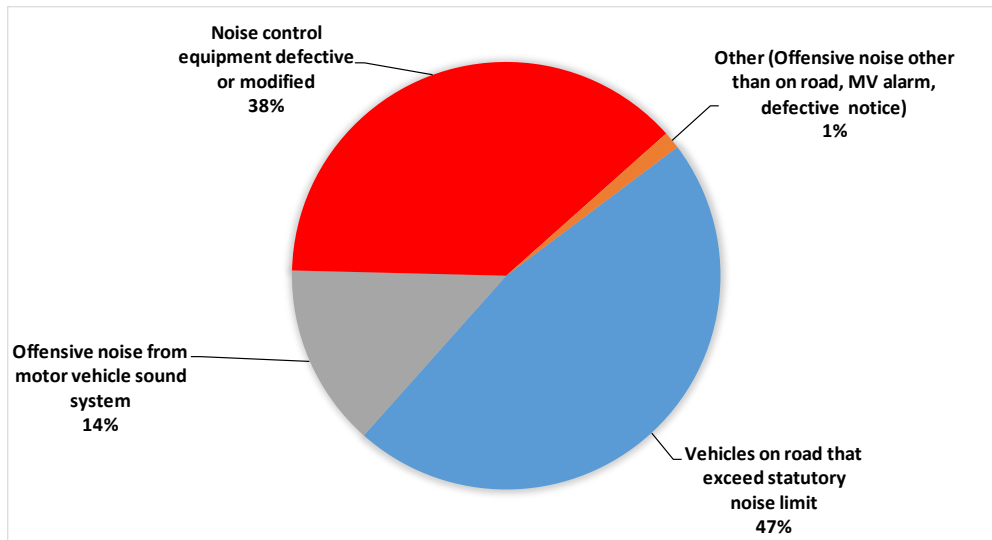


Figure 10: Major categories of fines issued for motor vehicle offences 2012–13 to 2014–15

(Based on State Debt Recovery Office data for 2012–13, 2013–14 and 2014–15)

In addition to fines issued under the Noise Control Regulation a considerable number of fines were issued by NSW Police and councils under provisions of the POEO Act, namely the provisions dealing with noise abatement directions. In total, 1302 fines were issued for contravention of noise abatement directions over the past three financial years. These were mainly issued by NSW Police with a small proportion issued by councils. Noise abatement directions are often used to address noise from parties and amplified music that contravene requirements set out in the Noise Control Regulation.

The negligible number of fines issued in relation to noise from miscellaneous articles and marine vessels is consistent with councils' approach of relying on the Noise Control Regulation as a deterrent in their compliance activities.

3.6 Social costs of noise pollution

The adverse environmental impacts of noise on human health and economic activity result in productivity losses, health care costs, effects on property values and loss of psychological wellbeing (Berglund & Lindvall 1995).

In its review of the health effects of environmental noise the enHealth Council⁸ concluded the health effects of noise probably operated through a number of different pathways, including direct effects, interference with cognitive processes, and people's reactions to interference with daily activities and communication. It is generally agreed there is sufficient evidence that noise adversely affects annoyance, sleep disturbance, children's school performance and cardiovascular health. Children, people with existing physical and mental illness, and the elderly are considered most susceptible to noise⁹.

Measuring the economic and social costs of noise pollution is a difficult task. Most studies to date have focused on road traffic noise and aircraft noise rather than comprehensive assessment of all noise sources. The most common indicators used to estimate the social costs of noise are:

- differences in market values of properties (hedonic pricing)

⁸ enHealth Council (2004)

⁹ enHealth Council (2004), World Health Organization (2011)

- expenditure on abatement measures
- expenditure on avoidance and prevention
- costs of health care and production losses
- willingness-to-pay estimates based on surveys.

Noise generated by road traffic has been demonstrated to affect property values adversely. A study by Ableson (1996) estimated that a 1-decibel (A-weighted) increase in traffic noise resulted in property values in Sydney decreasing by between 0.14% and 1.26%. For an average priced house in Sydney this would represent a decrease of between \$1400 and \$12,608¹⁰.

There have been numerous studies internationally that seek to value these costs with willingness-to-pay (WTP) approaches to value noise reductions being one example. They generally find a relationship between the proportion of gross domestic product (GDP) or per capita income that would be paid to alleviate noise levels. Close and Apelbaum (2001) noted a Swedish study suggesting a willingness to pay A\$2500 per window for soundproofing and a 1% to 3% increase in rent for a fully soundproofed building.

Quinet (1993) summarised the social costs of various studies and estimated that the costs of noise pollution ranged between 0.2% and 2% of GDP. For New South Wales the cost of noise pollution would be between \$953 million and \$9,529 million¹¹.

A more recent study by Milieu Ltd (2010) reported mean WTP per person per year to eliminate road/rail noise annoyance for six European countries; see Table 3. These values are significant particularly considering the population under consideration.

Table 3: Mean WTP per person per year to eliminate road/rail noise annoyance at five different noise annoyance levels

Annoyance level	Road^{1,2}	Rail^{1,2}
Not annoyed	\$13.90	\$25.90
Slightly annoyed	\$63.60	\$65.50
Moderately annoyed	\$145.60	\$101.50
Very annoyed	\$144.60	\$85.00
Extremely annoyed ³	\$138.10	\$117.10
Urban – all annoyance levels	\$82.70	\$79.50
Rural – all annoyance levels	\$83.70	\$54.90

Source: Milieu Ltd (2010)

Notes:

- 1 Mean values for six European countries (Germany, Hungary, Norway, Spain, Sweden and the UK)
- 2 Values have been converted from Euro (2005) to Australian dollars in 2010
- 3 Lower estimates were obtained for this annoyance level because affected persons took actions to avoid noise such as moving house.

¹⁰ Based on a median Sydney house price of \$1,000,616; Domain House Price Report June Quarter 2015 (Domain Group 2015)

¹¹ Based on NSW Gross State Product of \$476,434 million 2012–13 (ABS Cat. No. 5220.0, State Accounts, 2012–13)

The Australian Institute of Criminology has found the largest proportion of violent behaviour in contemporary society results from personal disputes between family members, neighbours and workmates. It cites the underlying causes include unemployment or other economic hardships, environmental and noise pollution, infringements of privacy and close urban living, retirement, and rapid social change in neighbourhoods (Hazelhurst 1989).

These studies demonstrate that noise pollution imposes a serious and significant effect on the community. They also suggest a clear role for regulation to correct market failure¹², as cost impacts are not usually borne by those creating them.

A reliable measure of these impacts in dollar terms continues to be difficult to determine. In lieu of firm dollar estimates of impacts, every effort has been made to describe in physical terms the benefits of particular noise reductions.

4 The proposed Regulation

The EPA considers the Regulation continues to be required for managing neighbourhood noise. Based on an analysis of issues and feedback from stakeholders, the EPA proposes to remake the current Regulation with some changes designed to improve clarity and enforceability and bring it in line with best practice and other regulatory settings.

Table 4 outlines the key changes proposed. The clauses that will be carried forward unchanged into the proposed Regulation are set out in Appendix 2.

Table 4: Outline of key changes under the proposed regulation

Clause (from 2008 Regulation)	Summary of change	Effect
Preliminary		
Clause 3 (Definition – Temporary Noise Reduction Device)	Remove ‘riveted’ devices from those that are excluded from the definition.	The change clarifies the expectation that only permanent purpose-built noise reduction devices are appropriate.
Clause 3 (Definition – Emergency vehicle)	Replace reference to Australian Customs Service with reference to Australian Border Force to reflect agency changes.	Updates agency name to align with definition in the soon-to-be-remade Road Transport (Vehicle Registration) Regulation 2007.
Sale of motor vehicles and motor vehicle accessories		
Clauses 6 and 7 (Retail sale of new motor vehicle horns)	Remove these clauses. Changes in purchase options make it difficult to regulate the sale of new motor vehicle horns. Installation and the use of horns is the main noise issue.	Removes ineffective clauses. Clause 21 sufficiently addresses the installation and misuse of inappropriate horns.

¹² Market failure refers to a situation where the market system results in a socially undesirable outcome such as noise pollution. Market failure is often cited as a reason for government intervention to bring about outcomes more in line with community preferences (Quinet 1993).

Clause (from 2008 Regulation)	Summary of change	Effect
Use of motor vehicles and motor vehicle accessories		
Clauses 12, 18 and 19 (Noisy vehicle offences on road and road-related areas)	Exclude heavy vehicles (as defined under the Heavy Vehicle National Law) from the offences under these clauses. The Heavy Vehicle (Vehicle Standards) National Regulation (NSW) sets standards and requirements for heavy vehicles on road and road-related areas.	Removes duplication of regulation for heavy vehicles
Clauses 5, 18 and 19 (Sale, use and repair of vehicles – reference to 'temporary noise reduction packing')	Clarify that 'temporary noise reduction packing' does not include packing that was fitted by the vehicle's manufacturer nor an equivalent packing.	Improves enforceability of current provisions.
Clause 27 (Defective vehicle labels)	Remove this clause as authorised officers no longer affix labels to defective vehicles. The issuing of defective vehicle notice to owners (clause 26) is sufficient.	Removes superfluous clause and reflects current practice.
Clause 5(2), 18(2) and 19(2) – defence to clauses within 6 months of commencement	Remove these clauses as defence date has passed.	Removes obsolete clauses.
Schedule 6 POEO (General) Regulation – enforcement agencies for clauses 14 and 15 of the Noise Control Regulation	Remove EPA as one of the enforcement agencies for offences relating to the use of vehicles in residential areas. These clauses are primarily enforced by NSW Police and local councils.	Reflects current practice and tidies the POEO (General) Regulation.
Sale of miscellaneous articles		
New provision (Noise labels on articles)	Make articles bearing the European Union marking of conformity (that is, CE label stating guaranteed sound power level) compliant with the NSW labelling and testing requirement for specified items.	Removes requirement to again test and label items (mowers, electric line trimmers and edgers and chainsaws) that have already been tested and labelled for the European market.
Clauses 39–43 (Limits on grass-cutting machines)	Convert maximum noise limits to equivalent sound power level limits. Industry has two years to convert to the new noise metric. A conversion factor will be provided separately to avoid the need for re-testing of currently compliant articles.	Consistency with the noise metric used for air conditioners and that used internationally for articles.
Clauses 44 and 46–48 (Labels on chainsaws, mobile air compressors, pavement breakers, mobile garbage compactors)	Convert noise metric for label to sound power level. Industry has two years to convert to the new noise metric for labels on these items. A conversion factor will be provided separately to avoid the need for re-testing of currently compliant articles.	Consistency with the noise metric used for air conditioners and that used internationally for articles.

Clause (from 2008 Regulation)	Summary of change	Effect
Use of miscellaneous articles		
Clause 50 (Use of power tools and equipment)	Broaden the scope of the provision to apply to pumps generally (not just swimming pool pumps) and extend the definition of power tool to be more inclusive.	Reflects original intent to control the use of a range of power tools and pumps. Removes unintended limitations and loop holes and improves clarity and enforceability. No cost implications as the clause limits the times of use of these articles in residential settings.
Inspection and testing of certain articles		
Clauses 55 and 56 (Measuring instruments and extraneous noise) Schedule 2 (Testing procedures)	Move the contents of these clauses and Schedule and the technical basis documents referred to in clause 54 to an EPA approved method publication.	Simplifies the Regulation. Aligns with the approach used for other EPA Regulations. Ensures all technical measurement and testing requirements are contained in a single comprehensive document.
Clauses 54(1)–(4) and 54(6)–(7) (Determining noise levels of articles)	Replace references to Schedule 2 (including parts) and technical basis documents with reference to a new document (to be gazetted) – <i>Approved Methods for Testing Noise Emissions</i> .	Consequential change following on from the above.
Clauses 54(2)–(4) and 54(6)–(7) (Determining noise levels of articles)	Replace references to noise metric with sound power level.	Reflects change to new noise metric.
Assessment of noise from shooting ranges		
New clause	Prescribe assessment procedure for noise from shooting ranges as outlined in new Schedule 1.	Formalises current assessment procedure currently contained in <i>Target Shooting Ranges: Application Note for Assessing Noise Compliance</i> (EPA 2015b).
New Schedule 1	Contains assessment procedure for shooting ranges.	No change to assessment of noise from shooting ranges. Increases certainty.

5 Options to achieve objective

Three options were considered in developing the proposed Regulation:

- Option 1: Do nothing – let the current Regulation lapse
- Option 2: Remake the current Regulation
- Option 3: Make the proposed Regulation

5.1 Option 1 – No noise regulation

The discussion below outlines the implications of allowing the Noise Control Regulation to lapse without being remade. This provides a baseline from which the current and proposed Regulation can be assessed.

The repeal of the Noise Control Regulation would greatly impact on the regulatory tools available to address neighbourhood noise issues (e.g. times of use of air conditioners, power

tools, sound systems) discussed in Section 3. Council and police officers would have to rely on POEO Act notices and directions and on negotiation or mediation efforts to resolve noise impacts. There would be no time limits or noise limits on the use of articles and a subjective test for offensive noise would be the only basis for taking action. This would result in inconsistency of approach to managing noise, uncertainty in the community about what was acceptable and the potential for increasing community conflict.

Also, the POEO Act would be the only statutory instrument for directly controlling motor vehicle and vessel noise. Under this scenario, EPA's responsibilities for regulating noise from motor vehicles (currently specified in the Noise Control Regulation) would fall to councils and the Police. There would be no specific requirement that motor vehicles are maintained in a manner that results in noise emissions remaining consistent with the Australian Design Rules for noise. Motor vehicle and vessel noise, such as that from sound systems and defective noise control equipment, would have to be regulated by using POEO Act notices and directions. The inherent limitations and problems of notices and the resulting implications for neighbourhood noise are discussed below.

This situation would create a layer of complication and inefficiency. There are over 152 councils in New South Wales, and individual approaches to regulate noise from motor vehicles would create cross-jurisdictional inconsistencies. It would add pressure to councils to devise their own policies in this area and would also result in uncertainty in the public's mind as to what the local rules were for neighbourhood noise control. Furthermore, recognition of Australian Government requirements for in-service vehicles under the Australian Vehicle Standards Rules would be difficult at a local government level, given the number of councils in New South Wales. Furthermore, council officers are not equipped to pull over suspected non-compliant vehicles and conduct noise tests. Police policy is not to conduct quantified noise testing. Thus in-service testing of motor vehicles would likely not occur.

5.1.1 Coverage of noise problems

Noise abatement directions may be issued under the POEO Act to require a person to stop causing an offensive noise. While this may be a suitable tool for one-off noisy situations it is not effective nor efficient for a continuing noisy situation, for example a noisy air conditioner or a continually sounding building intruder alarm. Here, the Regulation aims is to achieve an improved noise environment in a neighbourhood setting rather than to require complete cessation of noise. Noise abatement directions apply immediately but may be issued only if an authorised officer deems the noise 'offensive'. Noise may not always be deemed 'offensive noise' as defined in the POEO Act. Repealing the Regulation could result in undesirable situations where no action could be taken to address a continuing noise problem where inappropriate equipment design and use are causing the noise impacts. The inability to address excessive noise may increase annoyance and sleep disturbance and potentially exacerbate health problems.

5.1.2 Difficulties with noise control notices for vehicles

A noise control notice may be issued under the POEO Act to address a noisy situation, however, this would not be an effective tool to use for regulating mobile noise sources such as motor vehicles with loud sound systems or defective noise control equipment. Noise control notices require a person to comply with a specified noise level at a specified place and time. Although they may be issued to drivers of motor vehicles, enforcement of these notices would be difficult. Council officers do not have the power to stop a vehicle and

perform a noise measurement. The Police would require additional training to perform this task and are not authorised to issue notices. Inefficiencies associated with setting individual requirements in noise control notices issued for essentially the same motor vehicle noise issue and the enforcement difficulties discussed make noise control notices a cumbersome tool for this purpose. There would be increased social costs associated with excessive noise, as outlined in Section 3.6.

5.1.3 Difficulties with noise abatement directions for vehicles

Noise abatement directions may be issued to drivers (occupiers) of motor vehicles or marine vessels when the vehicle or vessel emits offensive noise; the directions stay in force for 28 days from the issue date. As with noise control notices, noise abatement directions must be issued to the occupier, and the vehicle or vessel must be stopped so the occupier can be identified. The issue of the direction does not require any substantial noise-measuring expertise. In most circumstances noise abatement directions served on motor vehicles would not be effective due to the mobile nature of the premises. For instance, an authorised officer in one jurisdiction may issue a verbal or written direction to a driver of a noisy vehicle. Should the driver move to another jurisdiction and breach the direction, it would be logistically difficult for another enforcement agency to track the offence and carry out the follow-up enforcement action.

5.1.4 Noise levels over time

The absence of the Noise Control Regulation would probably result in an increase in noise levels over time, as importers and manufacturers of motor vehicles, vessels and articles (such as grass-cutting machines, chainsaws, domestic air conditioners, mobile air compressors, pavement breakers, mobile garbage compactors and building intruder alarms) would no longer be required to meet prescribed noise limits. For example, edge cutters manufactured or imported between 1982 and 1984 were permitted a maximum noise level of 78 dB(A), whereas under the current Noise Control Regulation this has been reduced to 75 dB(A). The Regulation effectively prohibits the sale of vehicles and products that emit excessive noise. Without the Regulation in place, articles with the potential for extensive noise disturbance are likely to make their way into the marketplace. Most importantly, there would be no effective means to ensure the noise emitted by vehicles remains consistent with the requirements set out under the Australian Design Rules for those vehicles when newly manufactured or imported.

Although manufacturing processes are unlikely to change immediately, the absence of the Regulation would mean there would be no incentive in place to encourage manufacturers to produce quieter vehicles and products. Regulatory prescriptions can add impetus to technological developments that reduce noise. Regular reviews of the prescribed levels of noise limits for articles are likely to require manufacturers to consider noise emissions when designing new products.

In addition, the absence of noise controls would mean there would no longer be direct controls on the use of vehicles and vehicle accessories such as alarms, or on the use of articles such as lawn mowers and brush cutters. The effect of the current Noise Control Regulation is to control the anti-social behaviour of operators of potentially noisy machinery and vehicles. Reliance on POEO Act notices to control such behaviour would be inefficient and onerous on enforcement agencies such as councils and the Police when compared with the scale of the noise issues.

5.1.5 Summary

The repeal of the Noise Control Regulation would result in a reduction in overall effectiveness of neighbourhood noise controls, as enforcement measures would be less effective even if State and local government agencies committed the same resources to enforcement. Removal of the Regulation would therefore impose increased health and social costs associated with higher levels of neighbourhood noise.

5.2 Option 2 – Remake the current Regulation as it is

Under this option the current Regulation would be remade without changes. While the current Regulation provides adequate tools for addressing neighbourhood noise issues there are a number of areas where it could be improved to increase clarity, enforcement efficiencies and flexibility in compliance. There are also areas that need updating to reflect new legislation and agency changes and remove duplication where necessary. The areas requiring change are identified in the following sections discussing the proposed Regulation.

5.3 Option 3 – Make the proposed Regulation

The proposed Protection of the Environment Operations (Noise Control) Regulation 2017 involves making a number of changes to the current Regulation designed to improve its workability. This is the preferred option and will be explored in detail in Section 6.

The clauses that will be carried forward into the proposed Regulation unchanged are discussed in Appendix 2.

6 Analysis of the proposed Regulation

6.1 Motor vehicles and motor vehicle accessories

Part 2 of the current Regulation deals with the sale and use of motor vehicles and motor vehicle accessories.

The sale provisions are intended to prevent noisy vehicles and accessories from being sold in New South Wales. The use provisions address the noise nuisance resulting from improper or unreasonable use of vehicles and accessories once they are in service. The Regulation aims to address the nuisances that affect the community most, and to provide a basis for regulatory authorities to control noise from mobile sources. It also aims to provide a clear basis for people using vehicles and accessories to understand their responsibilities in relation to noise impacts.

The inspection and testing provisions allow regulatory authorities to require vehicles to undergo testing if they create a nuisance by emitting noise in excess of the prescribed levels for vehicles, through modifying noise reduction equipment, having defective noise reduction equipment or installing motor vehicle accessories that do not comply with the Regulation or the POEO Act. The prescribed levels of noise for vehicles align with the noise levels prescribed by the Australian Design Rules for Vehicles with an allowance for deterioration of noise reduction equipment over time or slight variation in the effectiveness of replacement parts. The aim is to ensure that vehicles continue to meet Australian Design Rules over time.

The EPA regularly participates at joint compliance operations and continues to work closely with NSW Police and Roads and Maritime Services to reduce the number of noisy vehicles operating on NSW roads. During 2014–15 the EPA participated in 12 compliance operations

which resulted in 116 penalty notices being issued for excessive noise and 20 penalty notices being issued where vehicles were found to have emission control equipment removed or disconnected. One hundred and forty-seven defective vehicle notices were issued requiring vehicle owners to rectify their vehicle or face suspension of vehicle registration (EPA 2015a).

Driving-related problems were the most commonly cited neighbourhood and social problem in 2010–11 (AIC 2012). For example, it is estimated that 44% of people believed that dangerous driving was a large social problem while 37% thought the same about noisy driving.

The growth in ownership of motor vehicles has been steadily increasing since the late 1990s together with an increase in the population. This increase in the number of motor vehicles is increasing the overall acoustic emissions from this sector. The proposed Regulation will continue to ensure the necessary environmental protections are in place to prevent the growth in vehicles causing a disproportionate growth in noise.

As shown in Figure 11, in New South Wales registered motor vehicle ownership has grown significantly over the past five years with a 12% increase from 2010 to 2015. As at 31 January 2015 there were 5,247,199 motor vehicles registered in New South Wales (ABS 2015a). Figure 12 shows vehicle ownership relative to population in New South Wales.

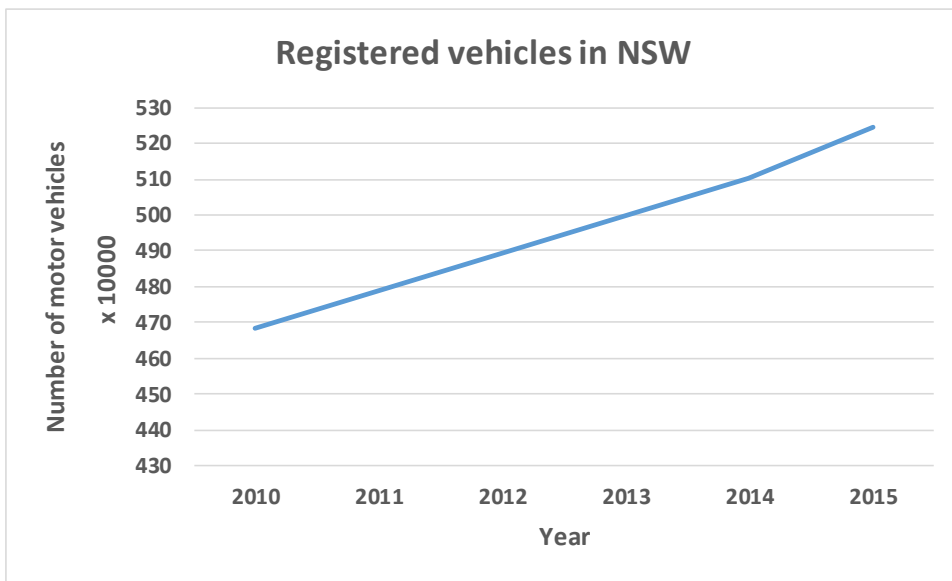


Figure 11: Growth in registered vehicle ownership in New South Wales 2010 to 2015

Source: ABS 2015a

New South Wales had the largest share of the Australian fleet in the 2015 motor vehicle census with 5.2 million vehicles or 29.1% of all registered vehicles (ABS 2015a). Victoria had the second largest share with nearly 4.6 million vehicles (25.4%) followed by Queensland with 3.8 million vehicles (20.9%). The Northern Territory had the smallest share with 0.2 million registered vehicles (0.9%).

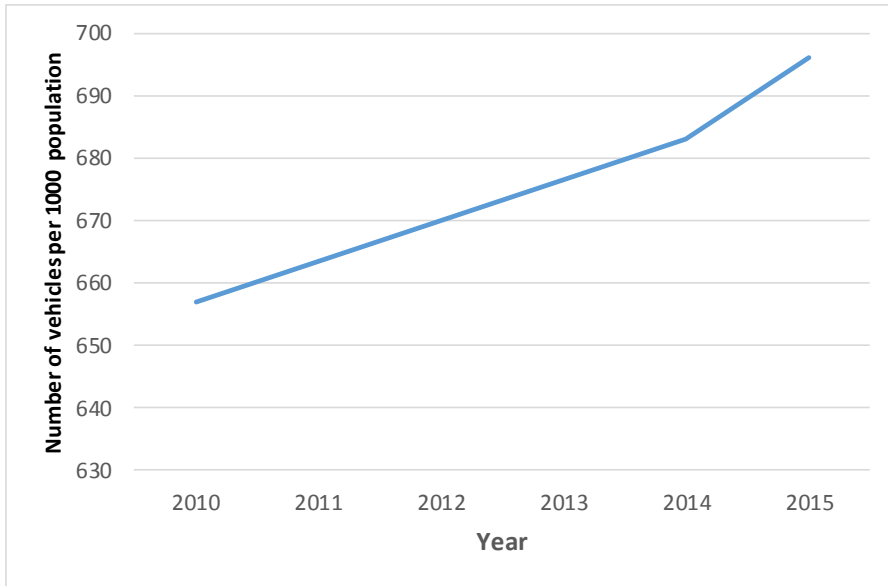


Figure 12: Number of vehicles per 1000 population in New South Wales

Source: ABS 2015a

Figure 13 shows a steady increase in the sale of new vehicles in New South Wales.

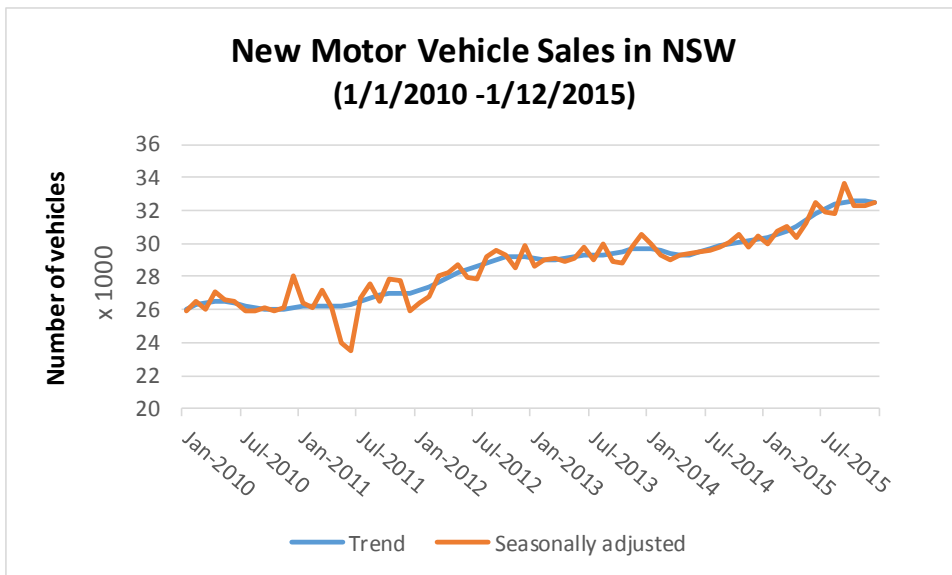


Figure 13: Sales of new motor vehicles in New South Wales

Source: ABS 2015b

Australian Bureau of Statistics data (2015a) shows the average age of total motor vehicles in New South Wales is steadily increasing. In 2010 the average age of motor vehicles in New South Wales was 9.5 years and in 2015 was 9.7 years.

The growth in the number of vehicles on the road is likely to be correlated with increases in the number of offences arising out of the use of those vehicles.

A survey of 818 people in Australia (AECOM 2011) found that 67% had exposure to road traffic and 27% were annoyed or bothered by the noise. Noise exposure from road traffic

noise is influenced by the presence of noisy vehicles that have not been properly maintained or have been illegally modified – factors that are addressed in the Regulation.

In order to address the annoyance for the public from the noise associated with motor vehicles, penalty notices are provided for in the Regulation. These cover a range of offences and are administered by NSW Police, the EPA and local councils. In 2013–14, the EPA issued 162 noise infringement notices for motor vehicle-related offences. This compares with 293 for other NSW government agencies (mainly NSW Police) and 5 for local councils.

The Noise Control Regulation prevents the sale and use of motor vehicles and accessories that exceed noise limits, exceed set times or produce offensive noise. It also provides for testing and inspection procedures to facilitate compliance and enforcement. The Regulation includes Schedule 1, which prescribes limits for different classes of motor vehicles, and Schedule 2, which describes the noise-testing procedures.

The proposed Regulation will maintain the protections that are established by the current Regulation. Some minor changes are proposed to improve, clarify, modernise, keep in line with best practice and align the Regulation with other legal instruments. The proposed amendments relevant to Part 2 – Motor vehicle and motor vehicle accessories are discussed below.

6.1.1 Definitions

Clause 3 Definitions

Temporary noise reduction device: The current Regulation defines a temporary noise reduction device to include the following exhaust components that reduce noise:

- a. a valve, or other device that is adjustable
- b. a plate, baffle or other device:

that is part of a muffler, resonator or the like, and

- that is not substantially welded or riveted in place.

Various provisions of the Regulation refer to temporary noise reduction devices. There are offences for selling a used motor vehicle or driving or using a motor vehicle with a temporary noise reduction device fitted. There is also an offence for modifying or repairing a vehicle so that a temporary noise reduction device is fitted. The objective of the Regulation in this regard is to limit the potential for noise impacts from vehicles that have noise reduction equipment that can easily be removed.

The EPA proposes to amend the definition of what constitutes temporary in terms of noise reduction devices by removing the words ‘or riveted’ from subclause (b) (ii). The EPA does not consider riveting to be substantially permanent. In order to be substantially permanent a plate, baffle or other device needs to be welded. This proposed change seeks to clarify the expectation that only permanent purpose-built noise reduction devices are appropriate.

Emergency vehicle: The Regulation defines an emergency vehicle to include a vehicle that is being used by the Australian Customs Service. Clause 21 of the Regulation exempts emergency vehicles from offences relating to attaching horns that do not comply with the prescribed standards.

Reference to the Australian Customs Service is no longer valid as the Commonwealth *Customs and Other Legislation Amendment (Australian Border Force) Act 2015* and *Australian Border Force Act 2015* abolished this agency. Functions of the former Australian

Customs Service are now carried out as part of the Australian Government Department of Immigration and Border Protection. Clause 21 and the definition of an emergency vehicle is consistent with Schedule 2 to the Road Transport (Vehicle Registration) Regulation 2007. The EPA proposes to keep the definition of emergency vehicles consistent under both regulations. To achieve this the definition of an emergency vehicle will be amended to remove reference to the former Australian Customs Service and replaced with a reference to vehicles used by the Australian Border Force.

These changes simply clarify and update definitions.

6.1.2 Sale of motor vehicles and accessories

Clauses 6 and 7 (Retail sale of motor vehicle horns): Clauses 6 and 7 control the retail sale of motor vehicle horns by prescribing the type of sound and maximum noise level for different types of horns. Changes in the way consumers purchase motor vehicle horns means they may be bought from interstate and overseas making it difficult to appropriately enforce clause 7 of the Regulation. The actual use of horns is the main issue and individuals rather than sellers are generally the installers.

Clause 21 of the Regulation controls the use of horns by prescribing the type of sound and maximum noise level for different types of horns. The EPA considers that clause 21 provides sufficient protection from inappropriate use of motor vehicle horns and noise nuisances. The EPA is therefore proposing removing clauses 6 and 7 from the Regulation.

6.1.3 Use of motor vehicles and accessories

Clauses 12, 18 and 19 (Noisy vehicle offences on road and road-related areas): These provisions of the Regulation regulate the use of motor vehicles that are noisy on roads and road-related areas. The objective of these clauses is to ensure that motor vehicles used on road and road-related areas meet prescribed noise levels, do not have defective or modified noise control equipment and that repairs or modifications do not result in reduction in the effectiveness of noise control equipment.

Under clauses 12 and 18 of the Regulation, it is an offence to drive or use motor vehicles on road and road-related areas that are over the maximum noise level in Australian Design Rule (ADR) 83/00 or Schedule 1 for that vehicle type, or with defective, unsecured or temporary noise reduction equipment on road or road-related areas. In excess of 1000 penalty infringement notices were issued under these clauses by NSW Police and the EPA in the past three financial years¹³. Under clause 19 of the Regulation, it is an offence to modify or repair a motor vehicle which results in the increase of noise over the vehicle's maximum noise level in ADR 83/00 or Schedule 1 for that vehicle type. Retaining these clauses will ensure authorities can continue to regulate against vehicles that do not comply with prescribed noise levels and the inappropriate modification of vehicles.

Changes are proposed to clauses 12, 18 and 19 in light of new heavy vehicle legislation. The *Heavy Vehicle National Law* commenced on 10 February 2014 and is a single rule book for the registration and use of heavy vehicles on road and road-related areas.

For the purposes of this law, a heavy vehicle is:

- a vehicle with a gross vehicle mass or aggregated trailer mass of more than 4.5 tonnes or

¹³ Based on State Debt Recovery Office data for 2012–13, 2013–14 and 2014–15

- a combination that includes a vehicle with an aggregated trailer mass of more than 4.5 tonnes (s.6).

Clause 3 of the Heavy Vehicle (Vehicle Standards) National Regulation (NSW) (Heavy Vehicle Regulation) prescribes the standards in Schedules 1–3 as the vehicle standards with which a single heavy vehicle or heavy combination must comply for its use on a road and road-related areas. Part 8 Division 3 of Schedule 2 to the Heavy Vehicle Regulation prescribes the maximum noise levels for heavy vehicles certified to ADR 83/00 and those heavy vehicles that are not certified.

As the noise requirements for heavy vehicles are now addressed under the Heavy Vehicle Regulation, it is proposed to amend the Regulation to remove duplicative clauses. In particular the proposed Regulation will exclude heavy vehicles from the noise offences on road and road related areas.

Clauses 5, 18 and 19 (Sale, use and repair of vehicles – reference to ‘temporary noise reduction packing’): Temporary noise reduction packing is ‘packing or other matter in an exhaust system that reduces noise but which is not permanently sealed in the system by way of welding or rivets.’ Subclause 1(b) of clauses 5, 18 and 19 of the Regulation create offences for selling, using, modifying or repairing a motor vehicle that has temporary noise reduction packing.

The aim of these clauses is to prohibit the packing of material into exhaust systems, for example to temporarily achieve compliance with prescribed vehicle noise levels. Temporary packing is not part of the original manufactured product, is unlikely to provide more than a temporary reduction in noise and is not an ongoing solution to reducing noise levels. Often this temporary packing is intended to evade detection at vehicle inspection and thereby achieve compliance for a short period of time. Generally this packing is quickly degraded through exposure to engine exhaust, expelled by pressure from the exhaust or simply removed following testing.

The Australian Design Rules (ADR 83/00) – Annexure 5 to Appendix A – prohibits the use of fibrous materials inside the central tubing of a muffler system unless the vehicle’s manufacturer obtains the required approvals set out in the rules.

In order to make the intent of this clause clearer in the Regulation, the EPA is recommending clauses 5, 18 and 19 be amended to provide that a person does not commit an offence if the temporary noise reduction packing:

- was fitted by the vehicle manufacturer, or
- is an equivalent replacement for any such device fitted by the vehicle manufacturer.

Any other packing will be non-compliant and trigger the offence.

Clause 27 (Defective vehicle labels): Clause 26 provides for the issuing of defective vehicle notices to owners of non-compliant vehicles. Under clause 27, an authorised officer who issues a defective vehicle notice may affix a defective vehicle label to the front windscreen of a motor vehicle. In practice the EPA no longer attaches labels to vehicles when it issues a defective vehicle notice. It is proposed that clause 27 will be deleted. This will have no material effect on the nature of a defective vehicle notice and simply reflects current regulatory practice. There is no cost associated with this change, however, it is likely this will reduce regulatory effort and result in minor savings in time and administration.

Other amendments to use of vehicles provisions: Clauses 5(2), 18(2) and 19(2) of the Regulation provide a defence to the requirements in those clauses if the offence occurred

within six months of the commencement date of the Regulation as re-made in 2008. As this defence is now obsolete these will be deleted.

Amendment to Schedule 6 of the Protection of the Environment Operations (General)

Regulation 2009: Clauses 14 and 15 relate to the use of vehicles on residential premises and use of refrigerated units on vehicles. In practice the EPA does not regulate these clauses and they are principally enforced by NSW Police and local councils.

As such Schedule 6 of the Protection of the Environment Operations (General) Regulation 2009 will be amended to remove the EPA as an enforcement agency for clauses 14 and 15 of the Regulation.

6.1.4 Cost-benefit assessment

Costs: The proposed changes are minor clarification changes that should not result in additional costs to the community, industry or government compared with the current Regulation.

Benefits: The benefits of preventing noisy vehicles from being available for sale or being used include improved neighbourhood amenity and lower health impacts. The proposed changes will simplify enforcement of various provisions, remove duplication of requirements for heavy vehicles, and reduce red tape in relation to the control of motor vehicle horns.

Assessment: The Regulation helps to prevent excessively noisy cars being available for sale and entering the car fleet in New South Wales and also reduces the number of noisy cars. The proposed amendments provide additional noise benefits compared with the current Regulation due to increased enforcement efficiency.

6.2 Miscellaneous articles

A major objective of the Regulation is to control noise from articles identified as significant contributors to noise in residential areas. These include domestic power tools such as portable gardening equipment, as well as air conditioners and heat pumps and amplified music. The Regulation controls noise from these articles by controls on both their sale and use.

A survey of 818 people in Australia (AECOM 2011) found a high proportion of the population are exposed to neighbourhood noise sources and are annoyed and bothered by these sources as follows:

- 76% of the population had exposure to portable gardening equipment and of those exposed 36.5% were annoyed or bothered by the noise
- 60% had exposure to sound system and parties and of these 43% were annoyed or bothered by the noise
- 22% had exposure to air conditioners and 5.7% were annoyed or bothered by the noise with a relatively long exposure time of up to 6 hours at a time.

In the EPA's recent survey of council environmental health officers, these type of noise sources constituted the top five noise complaints received by the respondent councils – see Section 3.4.

6.2.1 Sale of miscellaneous articles

Under the current Regulation, specified potentially noisy articles are required to have noise labels attached at the point of sale. There are currently no other statutory requirements for noise labels on goods in New South Wales.

Clauses 36 to 48 (Sale of articles): The current provisions generally prohibit the sale of specified articles without the prescribed noise label attached. Clauses 39 to 43 also provide maximum noise levels for the sale of mowers, edge cutters, string trimmers, brush cutters and other grass-cutting machines.

The Regulation requires the following articles to have noise labels attached:

- lawn mowers with cutting widths of between 620mm and 950mm
- ride-on mowers
- edge cutters
- string trimmers
- brush cutters
- other grass-cutting machines
- chainsaws
- domestic air conditioners
- mobile air compressors
- pavement breakers
- mobile garbage compactors.

The objective of the labelling requirement is to assist consumers to select quieter models of equipment and to identify equipment appropriate to particular applications. For air conditioners, noise labelling also supports installers when selecting or recommending the most appropriate model and position for installation of an air conditioner. Standard test procedures in the Regulation provide certainty that manufacturers' claims about noise levels are reliable. Noise labelling may also encourage suppliers to manufacture, import or sell quieter articles as some companies may use this as a marketing advantage and competition could drive down noise levels over time.

Noise limits for outdoor equipment make it clear to manufacturers that articles must not exceed a certain noise limit and puts an absolute ceiling on noise from these articles no matter where or when they are used. The limits imposed on domestic lawn mowers almost halved the perceived loudness of these machines in use in New South Wales from the late 1970s to the mid 1980s (NSW SPPC 1986).

The need for government action on labelling and limit provisions

The effectiveness of the noise labelling and limit provisions of the Regulation and ability to adapt to future developments is complicated and potentially compromised because the scheme does not apply nationally and it does not align with international labelling approaches.

A nationally consistent approach would align with the national nature of the market

Product noise labelling, like the energy rating on whitegoods, is most effective in driving down noise levels from potentially noisy articles when there is high consumer awareness of the scheme and community motivation to choose quieter products. Nationally, the scheme is not well-known by consumers and retail outlets and is therefore not generating any significant pressure on industry for quieter products. As the market for these products is essentially a national one, a national approach to product labelling is the most appropriate.

The EPA has been championing a national approach for labelling of portable gardening equipment and air conditioners through national working groups since 2008. The EPA has liaised with other environment protection agencies as well as the Australian Government.

Currently, the issue of national labelling requirements of portable gardening equipment is being considered under the National Clean Air Agreement as part of its consideration of ‘non-road spark ignition engines’. However, development of a national approach is complex and would not be in place prior to the need to remake the Regulation. The proposed Regulation will retain the current noise limits and labelling provisions for gardening equipment but include changes that will make compliance easier by introducing flexibility and facilitate a move to a national approach if that occurs in the future.

Work on a national approach to labelling requirements for air conditioners is more progressed. The Australian Government’s Department of Industry, Innovation and Science (DIIS) has released a Consultation RIS that proposes including noise on the national energy efficiency labelling requirements for air conditions and heat pumps – the Minimum Energy Performance Standards (MEPS) scheme. In light of this potential future scheme, the labelling requirements for air conditioners sold in New South Wales will be retained unchanged in the Regulation at this time. If noise labelling requirements for air conditioners are incorporated into the MEPS scheme, a future amendment will be made to remove the provision from the Regulation.

International labelling requirements

The overwhelming majority of portable gardening equipment sold in Australia is imported. Therefore, it is highly desirable that any regulation of the noise emissions from this equipment is consistent with that in force in global markets. The European Union (EU) is the only other international jurisdiction with noise labelling and limit requirements for portable gardening equipment¹⁴. The NSW requirements do not align with these, resulting in duplication and additional costs for industry and potentially confusion in the market place. The main areas of difference are:

- the range of products covered by the EU provisions are narrower, with labelling requirements only for internal combustion engine models of string trimmers and lawn edgers
- the noise metric used by the EU is ‘sound power level’ while the NSW provisions for these items use ‘sound pressure level’. Sound power level is the measure used when comparing the amount of noise generated by articles and is used in the Regulation in relation to air conditioners.

Proposed regulation

The proposed Regulation:

- allows the use of European Union (EU) labelling and limit requirements for the gardening equipment that is covered by the current Regulation – labels and limits for mowers, electric line trimmers and lawn edgers; and labels for chainsaws.
- retains the current NSW testing, labelling and limit requirements but phases in a change to the labelling requirements to align them with the EU requirements so that labelled noise levels are comparable
 - the proposed change will also align the noise metric used with that used for air conditioners
 - the proposed approach will allow the EU testing method or the current NSW testing method to be used with an adjustment factor applied to the test result
- retains the labelling requirements for domestic air conditioners unchanged.

¹⁴ European Union 2000, *Outdoor Noise Directive 2000/14/EC*

The proposed approach will give industry greater flexibility to achieve compliance for portable gardening equipment as many suppliers already label for the EU market. Those that do not label and test for the EU market will have the flexibility to use either system for a two-year grace period after which the EU system would apply. The EU scheme noise limits are equivalent or tighter than current NSW requirements and the level of protection provided to the community will continue or improve.

The proposed approach will be achieved through the following changes:

1. A new provision will allow the EU Outdoor Noise Directive¹⁵ ‘CE’ (Conformité Européene) marking of conformity and label of the guaranteed sound power level to be used for the noise labelling and prescribed noise limits of the Regulation:
 - lawn mowers and ride-on mowers (as described in clause 39) – labels and limits
 - electric edge cutters and string trimmers – labels and limits. Note the EU Directive does not set limits for internal combustion engine models (ICE) of edge cutters and string trimmers nor brush cutters so the labelling and limits under the Regulation are to remain. The Regulation does not currently differentiate between electric and ICE models of these articles
 - chainsaws (as described in clause 44) – labels only.
2. The prescribed noise levels for grass cutting machines in clauses 39–43 will be converted to equivalent sound power levels as set out in Table 5. Note that while the numerical limit changes, the use of a different metric means the noise heard by a person does not change.

Table 5: Noise limits for miscellaneous articles, current and new metrics

Article	Current metric Sound pressure level dB(A)	New metric Sound power level dB(A)
Lawn and ride-on mowers clause 39(1)(b), (2)(b)	80	105
Edge cutters clause 40(b)	75	100
String trimmers clause 41(b)	80	105
Brush cutters clause 42(b)	85	110
Other grass-cutting machines clause 43(b)	75	100

3. The labelling requirements for chainsaws (clause 44), mobile air compressors (clause 46), pavement breakers (clause 47) and mobile garbage compactors (clause 48) and associated test methods will be converted to refer to the article’s sound power level.
4. It is intended to give industry until 31 August 2019 to convert to the new noise metric and labelling requirements. That is, retailers can sell items with labels compliant under the current regulatory provisions or the new proposed scheme before 1 September 2019. On and from 1 September 2019, only items with labels displaying the required noise level in terms of sound power level can be sold.

¹⁵ European Union 2000, *Outdoor Noise Directive 2000/14/EC*

Alternatives considered for portable equipment

Repealing the limit and labelling provisions: As outlined in Section 5.1 repealing the limit and labelling provisions would result in an increase in noise levels over time. Without the Regulation in place, articles with the potential for extensive noise disturbance are likely to make their way into the marketplace.

Retaining the current provisions unchanged: Inconsistencies with international best practice would remain. Opportunities to make changes that will facilitate a future national approach would be missed.

Aligning the limit and labelling provisions with the EU Directive: This option would adopt EU requirements in New South Wales. There are considerable differences in the type of equipment covered and prescribed limits that would apply. This would result in increased protection for some products (for example, labelling on leaf blowers) and less protection for others (for example, removal of noise limits for internal combustion engine models of edge cutters, string trimmers and brush cutters). In addition, EU limits are equivalent or more stringent than NSW requirements. A wholesale change to EU Directive requirements would be a significant and complex change – a decision that would be best made at a national level.

Cost-benefit assessment

Suppliers and manufacturers that already label for the EU market will have a reduction in costs as they will no longer need to add another label specifically for the NSW market – estimated at \$2 per article (the cost of opening up a box and putting on a label).

Suppliers and manufacturers that only label for the NSW market will have no upfront cost for up to two years grace period after which they will be required to change their labels to sound power levels.

The proposed changes will:

- increase flexibility for suppliers and manufacturers in complying with the Regulation
- increase compliance (in a survey carried out by DECC in 2010, EU labels were affixed to some items that didn't have NSW labels)
- reduce costs to industry by reducing the need to comply with dual labelling requirements
- ensure environment protection is maintained or improved
- establish a basis for an easier transition to a national scheme that better aligns with EU requirements.

6.2.2 Use of miscellaneous articles

Noise impacts are typically more directly linked to the use, rather than sale, of noisy articles. The provisions relating to the use of noisy articles aim to minimise the impact of specific noise sources in residential premises and public places in a cost-effective manner.

Clauses 50 to 52 (Time limits on the use of certain articles): The current Regulation specifies times at which articles operated on residential premises are not permitted to be audible inside habitable rooms in other residential premises. 'Habitable room' is any room other than a garage, storage area, bathroom, laundry, toilet or pantry. This means that specified items could be used within the limited hours provided that the articles cannot be heard by the neighbours inside their residences. These provisions are designed primarily to protect the community during the more sensitive night hours, most importantly during sleep. However, they do not exclude other courses of action if 'offensive noise' is emitted within the

permitted times of use. For example, a noise abatement direction or prevention notice could be issued if an officer considered that, for example, a musical instrument or leaf blower was causing offensive noise, regardless of the time of day.

The articles subject to time limits on use are:

- power tools and equipment including swimming/spa pool pumps, powered garden tools (including lawn mowers, trimmers, blowers or sweepers, garden mulchers, edge cutters or chippers or shredders), electric power tools, pneumatic power tools, chainsaws, circular saws, gas or air compressors (clause 50)
- musical instruments and sound equipment (clause 51)
- domestic air conditioners and heat-pump water heaters (clause 52).

The limited times of use are the part of the Noise Control Regulation that is most recognised and understood by the community. The NSW Neighbourhood Noise Survey (DEC 2004) found that, of those people who were aware of the existence of the Noise Control Regulation, 33% (one in three) were aware of restrictions on the time of day noise is made. In the EPA's recent online survey of environmental health officers (EHOs)¹⁶, 'time of day' was rated the most important factor leading to noise complaints (over 'length of time', 'loudness' and 'noise character').

Apart from the use of noise abatement directions (POEO Act) this Regulation is the main instrument used by local government and the Police to control noise from residential premises at night. The main advantage of the 'time of use' controls compared with the use of noise abatement directions is the simpler test for compliance (audibility compared with the offensive noise test) and the fact that the set times make the provision relatively easy to understand and apply. EPA's recent survey¹⁷ of council EHOs confirmed there was a high rate of usage of these provisions, with more than 80% of respondent councils indicating they use each of these provisions. Of those that use the provisions, more than 80% indicated they use these to educate potential offenders or in verbal or written warnings. Many council officers have found this to be the most effective use of the Regulation, often eliminating the need for further action. Only up to 15% of respondents used these provisions to issue penalty infringement notices.

Clauses 50 to 52 personal warnings: For all 'time of use' provisions, a warning needs to be given to the person responsible for the noise. It is the warning not being heeded, rather than the noise itself, that causes an offence. The reason for this is that it may be unreasonable for the noise-maker to know whether the noise can be heard inside a neighbour's residence. Currently, a statutory warning may only be given by authorised officers of councils and Police officers and it may be given in verbal or written form. A warning must be given within seven days of the noise occurring and the non-compliant noise must be made within 28 days of the warning being given for an offence to occur.

The need for government action on current warning requirements

In the responses to the EPA's recent survey¹⁸, council EHOs felt it was necessary to enter a complainant's residence to determine audibility, however, they cited a number of problems associated with doing this, including:

- lack of council support for after-hours attendance at noise investigations

¹⁶ EPA's online survey of council EHOs in October–November 2015

¹⁷ EPA's online survey of council EHOs in October–November 2015

¹⁸ EPA's online survey of council EHOs in October–November 2015

- resource burden due to work place health and safety policies that require two officers to attend after-hour incidents
- noise issues being a reduced priority for Police
- misperceptions about the need to perform an ‘offensive noise test’ when only a test of ‘audibility’ is required.

Respondents offered the following suggestions for improving the provision:

- allowing officers to listen at the affected neighbour’s window to test for audibility
- having the complainant keep a log of time and dates of noise
- acting upon noise incident reports only where there is more than one complainant.

Over 80% of respondents supported the extension of the 28-day offence period to periods of greater than two months, with over 25% supporting either an extension to three months or 12 months.

The first three suggestions fall under administrative practices and policies that councils are free to adopt. The EPA’s *Noise Guide for Local Government* (EPA 2013) provides detailed information on the issuing of warnings. In relation to the extension of the 28-day offence period, views are specifically sought on whether this period should be extended. That is, how long a warning should stay in force in relation to noise from power tools and equipment, musical instruments and equipment, and air conditioners and heat pumps.

Proposed Regulation

The current articles subject to limited times of use are proposed to be brought forward into the proposed Regulation unchanged, but with the exceptions below.

Clause 50 Power tools and equipment: The main changes in this clause are to extend the clause to pumps generally and extend the definition of ‘power tool’. Currently the clause defines swimming pool pumps and power tools by listing specific items. Feedback on the use of this clause has shown there are other noisy articles that may fall outside the current definitions. For example, other types of pumps which essentially cause the same noise impacts, and other types of power tools such as high-pressure water cleaners and explosive nail guns. The proposed clause will broaden the definitions as follows:

- ‘Pump’ will be defined to include swimming pool pumps, spa pumps, sump pumps, water coolers that use pumps and other apparatus or machine for raising, driving, exhausting, or compressing fluids, as by means of a piston, plunger, or rotating vanes. The definition will specifically exclude heat-pump water heaters which are regulated under clause 52 of the Regulation.
- The definition of ‘power tools’ will be broadened to make it an inclusive definition so that it includes the power tools in the current definition, power-actuated tools and any other tools falling within the ordinary meaning of a ‘power tool’.

Alternatives considered for time of use provisions

Remove the ‘time of use’ provisions: If the ‘time of use’ provisions were to be removed, neighbourhood noise at night could be controlled by the use of noise abatement directions (POEO Act ss.275–279). However, this involves a more complicated test (the offensive noise test) rather than the straightforward audibility test in the Regulation. Protecting the community from sleep disturbance is one of the most important roles of the Regulation. Sleep disturbance has now been linked to health effects (see Section 3.6), so the removal of a provision that focuses on this type of protection and prescribes the times when this protection should prevail is an undesirable outcome. If the provisions were removed, we

would also lose the ability to specify particular noise sources that have the potential to cause disturbance at night.

Including ‘length of time’ in the ‘time of use’ provisions: The length of time a noise source operates was rated as the second most important factor leading to noise complaints after ‘time of use’ by council EHOs in the EPA’s recent survey¹⁹. Adding an additional restriction on the length of time an article could be used before an offence occurs is considered to add an additional layer of complexity to the provisions and unduly impose on an individual’s right to carry out to certain activities at their home.

Cost-benefit considerations

There are no cost implications with the proposed changes to the ‘time of use’ provisions as they only relate to hours of use. The changes:

- reflect the original intent of the provision to control noise from a range of power tools and pumps
- provide greater equity in controlling noise from a range of pump types that have the same noise characteristics
- remove unintended limitations and loopholes
- provide increased environmental protection
- improve clarity and enforceability.

6.3 Inspection and testing of certain articles

6.3.1 Clauses 54 to 56 and Schedule 2 testing procedures

Clause 54 (Determining the noise level of an article): This provision sets out the procedures for determining the noise level of certain articles.

Clause 54(1)–(4) requires the maximum noise levels for motor vehicle horns, motor vehicle intruder alarms, grass-cutting machines, chainsaws and mobile garbage compactors to be determined in accordance with testing procedures in Schedule 2.

Clause 54(5) requires the maximum noise level of buses, cars, cycles or lorries to be determined in accordance with national testing procedures.

Clause 54(6) requires the sound power level of domestic air conditioners to be determined in accordance with the Australian Environment Council’s (AEC) *Technical Basis for the Regulation of Noise Labelling of New Air Conditioners in Australia* (AEC 1984a).

Clause 54(7) requires the mean noise level of a mobile air compressor or pavement breaker to be determined in accordance with the AEC’s *Technical Basis for the Regulation of Noise Labelling of New Pavement Breakers and Mobile Air Compressors in Australia* (AEC 1984b).

Clause 54(8) indicates the national testing procedures for motor vehicles.

Clause 55 (Measuring instruments): This provision prescribes the measuring equipment to be used to determine the noise levels of motor vehicle accessories, grass-cutting machines, chainsaws or mobile garbage compactors.

Clause 56 (Measurements may be disregarded on account of extraneous noise): This provision requires that measurements are not affected by extraneous noise and provides a test to determine if this is the case.

¹⁹ EPA’s online survey of council EHOs in October–November 2015

Proposed Regulation

Including measurement and testing procedures in the Regulation makes it unnecessarily long and complex. Also, having some measurement methods in the Regulation and others (the technical basis documents) in separate documents is confusing and inefficient. It would be simpler and more convenient to have the technical and measurement requirements together in a single document.

In this regard it is proposed to move the contents of clauses 55 and 56, Schedule 2 and the technical basis documents referred to in the provisions, into an EPA approved method publication. This is similar to the approach in clause 3 of the POEO (General) Regulation 2009 and clause 3 of the POEO (Clean Air) Regulation 2010. The publication is proposed to be entitled *Approved Methods for Testing Noise Emissions*.

To implement the proposals in Section 6.2.1, the new publication will contain a correction factor that converts the sound pressure level results from the current testing procedures to the proposed sound power level metric.

Accordingly, the proposed Regulation will:

1. require the specified noise levels to be determined in accordance with the *Approved Methods for Testing Noise Emissions* prepared by the EPA and published in the Gazette, as in force from time to time, and
2. replace reference to 'maximum noise level' with 'maximum sound power level' in clauses 54(2)–(4) and 'mean sound level' with 'mean sound power level' in clause 54(7).

Cost-benefit assessment

Costs: The proposal to move all the technical measurement requirements out of the Regulation would involve a small administrative cost to the EPA in preparing and gazetting the new approved methods document. This cost would be borne by the EPA under its operating budget.

Benefits: The proposal would simplify the Regulation and ensure all technical measurement requirements are in a single comprehensive document. The approach reflects that used for other EPA regulations.

Assessment: This is essentially an administrative change that would greatly simplify the Regulation with minimal costs.

6.4 Assessment of noise from shooting ranges

The measurement of noise from shooting ranges has some specific technical challenges that can result in difficulties and inconsistent approaches when determining compliance. The EPA published *Target Shooting Ranges: Application Note for Assessing Compliance* in June 2015 (updated October 2015) to provide clarity on the method of determining compliance with noise limits on shooting ranges. The EPA also provides advice to councils when requested on suitable criteria to manage noise from shooting ranges.

Local government is the regulator of impacts from shooting ranges except where the owner or operator is a State or public authority, in which case the EPA is the regulator. Where a shooting range has a development consent, specific noise requirements can be included.

It is important that the noise from shooting ranges is quantified using technically robust methods as gunshot noise has an impulsive character that has technical challenges. The impulsive character of gunshot noise can also be more annoying to some people.

While the publication of guidance on measuring and determining compliance with noise limits provides clarity on the method that should be used, feedback subsequent to the publication of the guidance material indicates that some stakeholders remain concerned that the guidance does not provide a mandated method.

In order to provide the level of certainty sought by stakeholders, it is proposed to formalise the key measurement and analysis components of the Application Note by including these within the Noise Regulation currently being remade.

6.4.1 Cost-benefit assessment

Costs: The proposal to include the key measurement and analysis components of *Target Shooting Ranges: Application Note for Assessing Compliance* (EPA 2015b) will not cause any cost implications as this imposes no change to current practice.

Benefits: The proposal will increase certainty regarding the method to be used for assessing noise from shooting ranges.

Assessment: This is essentially an administrative change that will provide a mandated method for determining compliance with noise limits at target shooting ranges.

7 Conclusion

The proposed Noise Control Regulation is designed to protect the community from unacceptable noise. It aims to seek a balance between the community's right to peace and quiet and the community's right to carry out legitimate activities. The proposed changes aim to ensure the Regulation continues to provide a reasonable level of protection from noise and to improve the efficiency of the Regulation.

The main changes to the regulation of motor vehicle noise include:

- amending definitions and provisions to improve clarity and ensure that offences only occur where warranted in relation to vehicles with defective noise control equipment
- repealing the sale of motor vehicle horns offence because the use provision is sufficient to address impacts from horns
- removing duplication of regulation for heavy vehicles that is addressed under heavy vehicle legislation
- repealing redundant provisions.

The main changes to the regulation of noise from miscellaneous articles include:

- allowing EU-compliant gardening equipment items that are covered by the current regulation to be considered compliant with NSW requirements
- phasing in a change to the EU labelling requirements for gardening equipment over a two-year period and aligning the noise metric with that used for air conditioners
- broadening the scope of the time of use provisions so they don't inadvertently exclude sources that were meant to be captured.

No changes are being proposed to the labelling requirement for domestic air conditioners because this is currently being considered as part of the Australian Government's Minimum Energy Performance Standards scheme.

No changes are being proposed to the regulation of marine vessel noise in the Regulation. The current provisions for noise from marine vessels are considered sufficiently comprehensive and fit for purpose.

A minor new addition is proposed for inclusion in the Noise Control Regulation to formalise the current assessment method for noise from shooting ranges.

The proposed changes are expected to result in cost savings for government (EPA, Police, local councils, Roads and Maritime Services) associated with improved clarity and enforceability of provisions. There would also be some cost savings for industry in relation to the labelling of articles as those that import EU-compliant labelled items will no longer need to provide a separate NSW label (estimated to cost \$2 per article). For the community, there may be increased costs associated with complying with the improved provisions due to increased enforceability, however, there has been no change in the original intent of the requirements.

The proposed Regulation will provide benefits to the government of reduced costs of enforcement and greater clarity of requirements. Industry will also benefit from increased certainty and reduced costs of compliance. The community will benefit from improved neighbourhood amenity and reduction of noise-related health impacts.

Appendix 1 – Clause comparison

Clause/s in proposed Regulation 2017	Description	Clause/s in old Regulation 2008
Part 1 Preliminary		
1	Name of the Regulation	1
2	Commencement	2
3	Definitions	3
Part 2 Motor vehicles and motor vehicle accessories		
Division 1 Motor vehicles that emit noise in excess of prescribed levels		
4	Sale of motor vehicles generally	4(a)
5	Use on roads of motor vehicles capable of emitting noise in excess of prescribed level	12
Division 2 Motor vehicles that emit offensive or other noise		
6	Use away from roads of vehicles that emit offensive noise	13
7	Owners and drivers of vehicles that emit offensive noise when used away from roads	20
8	Use of motor vehicles on residential premises	14
9	Use of refrigeration units fitted to motor vehicles near residential premises	15
Division 3 Motor vehicles with defective or modified noise control equipment		
10	Sale of used vehicles with defective noise control equipment	5(1)(a)–(b)
11	Driving or using vehicles with defective or missing noise control equipment	18(1)(a)–(b)
12	Modification or repair of vehicles causing defective or missing noise control equipment	19(1)(a)–(b)
Division 4 Motor vehicles with unauthorised temporary noise reduction packing		
13	Sale of used vehicles with unauthorised temporary noise reduction packing	5(1)(c)
14	Use of vehicles with unauthorised temporary noise reduction packing	18(1)(c)
15	Modification or repair of vehicles with unauthorised temporary noise reduction packing	19(1)(c)
Division 5 Motor vehicles with temporary noise reduction equipment		
16	Sale of used vehicles with unauthorised temporary noise reduction equipment	5(1)(d), 5(3)
17	Use of vehicles with unauthorised temporary noise reduction equipment	18(1)(d), 18(3)
18	Modification or repair of vehicles with unauthorised temporary noise reduction equipment	19(1)(d), 19(3)
Division 6 Motor vehicle intruder alarms		
19	Sale of motor vehicle intruder alarms generally	8, 9

Clause/s in proposed Regulation 2017	Description	Clause/s in old Regulation 2008
20	Sale of certain alarms that emit dual tone	11(1)(a), 11(2)
21	Sale of certain alarms that emit variable tone	11(1)(b), 11(2)
22	Sale of certain alarms that emit rising tones	11(1)(c), 11(2)
23	Sale of alarms with a panic or override switch	10
24	Use of alarms with panic or override switches	23
25	Alarms that sound for length of time	22, 24
26	Design and construction of alarms	22(1), 25
Division 7 Motor vehicle horns		
27	Attaching certain motor vehicle horns	21(1)
28	Use of certain motor vehicle horns	21(2)
29	Exemptions for emergency-related vehicles	21(3)
30	References to loudness and pitch	21(4)
Division 8 Motor vehicle sound systems		
31	Use of motor vehicle sound systems that emit offensive noise	16
32	Owners and drivers of vehicles in which motor vehicle sound systems that emit offensive noise are used	20
33	Drive or use motor vehicle on road or road-related area if vehicle's sound system emits offensive noise	17
Part 3 Marine vessels		
34	Sounding of sirens from vessels	29
35	Vessels not to emit offensive noise	30
36	Persons in charge or owners of vessels that emit offensive noise	31
37	Noise control equipment to be properly maintained	32(1), 32(3)
38	Noise control equipment not to be removed or rendered less effective	32(2)
39	Use of sound systems on vessels	33
Part 4 Miscellaneous articles		
Division 1 Building intruder alarms		
40	Meaning of 'building intruder alarm'	3
41	Sale of building intruder alarms	49
42	Use of building intruder alarms	53(1)
43	Determining alarm characteristics	53(2)
Division 2 Air conditioners		
44	Labelling of domestic air conditioners with sound power level	3, 45
45	Use of air conditioners on residential premises	52
Division 3 Grass-cutting machines		
46	Meaning of 'grass-cutting machine'	3

Clause/s in proposed Regulation 2017	Description	Clause/s in old Regulation 2008
47	Sale of grass-cutting machines that emit noise in excess of prescribed level	39, 40, 41, 42, 43
48	Labelling of grass-cutting machines with maximum sound power level	37, 38
49	Alternative labelling of grass-cutting machines (until 1 September 2019)	N/A
Division 4 Power tools		
50	Labelling of chainsaws with maximum sound power level	44
51	Use of power tools on residential premises	50
Division 5 Pumps and heat pump water heaters		
52	Use of pumps on residential premises	50
53	Use of heat pump water heaters	52
Division 6 Other motorised articles		
54	Labelling of mobile air compressors with mean sound power level	46
55	Labelling of pavement breakers with mean sound power level	47
56	Labelling of mobile garbage compactors maximum sound power level	48
Division 7 Musical instruments and sound equipment		
57	Use of musical instruments	51
58	Use of electrically amplified sound equipment	51
Part 5 Enforcement through defective vehicle or vessel notices		
59	Issue of defective vehicle notices and defective vessel notices	26(1), 34(1)
60	Form of notices	26(2)–(3), 34(2)–(3)
61	Withdrawal of notices	26(4), 34(4)
62	Use of motor vehicle in breach of defective vehicle notice	26(5)–(6)
63	Use of vessel in breach of defective vessel notice	34(5)–(6)
64	Use of vessel in breach of defective vessel label	35
Part 6 Determining noise levels		
65	Measurements may be disregarded on account of extraneous noise	56(1)
66	Determining maximum noise level of a motor bus, motor car, motor cycle or motor lorry	54(6), 54(8)
67	Determining maximum noise level and noise emission characteristics of motor vehicle intruder alarms and horns	54(1)
68	Determining sound power level of domestic air conditioners	54(6)
69	Determining noise levels of certain accessories	54(2), 54(3), 54(4), 54(7)
70	Method for determining noise levels from shooting ranges	NA – formalises EPA's practice note

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Clause/s in proposed Regulation 2017	Description	Clause/s in old Regulation 2008
Part 7 Miscellaneous		
71	Savings provision	
72	Repeals	
Schedule 1	Prescribed stationary noise levels	3, 4(b) and Schedule 1
Schedule 2	Determining noise levels from shooting ranges	NA – formalises EPA's practice note
Schedule 3	Amendment of Protection of the Environment Operation (General) Regulation 2009	NA

Appendix 2 – Clauses that will be retained in the proposed Regulation

Numbering of clauses in this appendix refer to the Protection of the Environment Operations (Noise Control) Regulation 2008.

A2.1 Preliminary

All definitions under clause 3 are proposed to be carried forward into the proposed Regulation unchanged (either in the definitions section or the specific section they relate to) except for ‘temporary noise reduction device’ and ‘emergency vehicle’ – see Section 6.1.1.

A2.2 Motor vehicle and motor vehicle accessories

Clause 4 (Sale of motor vehicles generally): This clause aims to limit the noise emitted from individual motor vehicles by setting prescribed levels for motor vehicles. Section 136 of the POEO Act makes it an offence to sell a motor vehicle exceeding these levels. Limiting noise from individual vehicles will limit the level of traffic noise hence it is vital the Regulation continues to set prescribed levels.

Clause 5 (Used motor vehicles with defective equipment for sale): Clause 5 of the Regulation creates an offence to sell a used motor vehicle with defective noise reduction equipment. It is important the Regulation continues to provide a deterrent to the sale of vehicles with defective noise control equipment.

Clause 8 (Subdivision applies only to retail sale of new motor vehicle intruder alarms): This clause will remain unchanged. The regulation of motor vehicle intruder alarms will remain limited to new alarms. The intention of this clause is to regulate a minimum standard of alarm for new alarms entering the market. There is no impact of retaining this clause when compared to the current Regulation.

Clauses 9, 10 and 11 (Motor vehicle intruder alarms for sale): Clause 9, 10 and 11 of the Regulation create offences to sell new motor vehicle intruder alarms over the level prescribed (by clause 9), sell an intruder alarm that has a sounding device that is operable by means of a panic or override switch, or sell an intruder alarm with certain sound characteristics. The intention of these clauses is to prevent alarms being sold in the market that produce noise in excess of what is considered acceptable for balancing community amenity with property protection.

Clause 13 (Use of motor vehicles in places other than on road or road-related area): This clause makes it an offence to use a motor vehicle in a place other than a road in a manner that causes offensive noise. It is designed to stop neighbourhood noise impacts caused by vehicles such as trail bikes and off-road vehicles when used on private property and other off-road areas. Retaining this clause will retain the ability of authorities to regulate an activity that can have significant impacts on neighbours.

Clause 14 (Use of motor vehicles on residential premises): This clause requires that a motor vehicle used on residential premises (except when leaving and entering) is not heard inside a habitable room of another residential premise during sensitive hours (that is, early morning and night). For example, revving or idling a car on a residential premises in the

driveway for prolonged periods outside the prescribed hours in a way that causes offensive noise. Retaining this clause will retain the ability of authorities to regulate an activity that can have significant impacts on neighbours.

Clause 15 (Use of refrigeration units fitted to motor vehicles): This clause is intended to control noise from motor vehicles with refrigeration units being used in a residential setting in a way that causes offensive noise. Retaining this clause will retain the ability of authorities to regulate an activity that can have significant impacts on neighbours.

Clauses 16 and 17 (Use of motor vehicle sound systems emitting offensive noise): These clauses are intended to control offensive noise from sound systems in stationary as well as moving motor vehicles. A total of 169 penalty infringement notices were issued by NSW Police and local councils under these provisions in the past three financial years²⁰. Retaining these clauses will retain the ability of authorities to regulate an activity that can have significant impacts on neighbourhood amenity.

Clause 20 (Owners and drivers of motor vehicles involved in excess noise offences): Clause 20 allows the registered owner of a vehicle to pass on the responsibility for an offence under clauses 13 or 16 to the driver of the vehicle at the time the offence occurred. This clause allows for improved enforcement efficiencies, as the vehicles do not necessarily need to be stopped for an on-the-spot fine to be issued. Fines may be issued by mail.

Clause 21 (Motor vehicle horns generally): This clause controls the use of horns by making it an offence to install an excessively noisy horn and to use a motor vehicle with an excessively noisy horn fitted. It prescribes the type of sound and maximum noise level for different types of horns. Retaining this clause is needed to ensure authorities can regulate against excessively noisy horns.

Clauses 22 to 25 (Motor vehicle intruder alarms): Clause 22 provides interpretation of the meaning of ‘causing an alarm to sound’ and ‘continuous sounding of alarms’ for the purpose of the offences under clauses 23, 24 and 25. Clause 23 requires that a panic or override switch is inoperable when a vehicles’ engine is running or the ignition is on. Clause 24 prescribes sounding periods for car alarms and a tiered regime of penalties according to the duration of the alarm, with penalties increasing as the period of ringing lengthens. Clause 25 regulates the design and construction of alarms by prescribing the maximum noise level for alarms and requiring that alarms cannot be re-armed, except through a manual reset provision. Clauses 22 to 25 will be carried forward into the Regulation unchanged.

Clauses 26 (Defective vehicle notice): Clause 26 provides for the issuing of defective vehicle notices to owners of non-compliant vehicles to facilitate the remedying process. A defective vehicle notice specifies the defect to be rectified and where the vehicle should be taken for inspection and testing.

A2.3 Miscellaneous articles

Clauses 49 and 53 (Sale and use of building intruder alarms)

The Noise Control Regulation impose noise controls on the sale and use of building intruder alarms. Clause 49 prohibits the sale of building alarms that are not constructed to cease sounding (after detection) after five minutes. Clause 53 restricts alarms to sounding for no more than 10 minutes if installed before 1 December 1997, or no more than five minutes if installed on or after 1 December 1997 with manual resetting requirements.

²⁰ Based on State Debt Recovery Office data for 2012–13, 2013–14 and 2014–15

These clauses aim to minimise noise nuisance by stopping the entry into the market, and use of, inappropriate alarm equipment that has the potential for continuing noise nuisance during sensitive night-time sleep hours.

Noise complaints and incidents concerning building intruder alarms appear to have dropped since the last review of the Regulation in 2007. Recent discussions with NSW Police have confirmed that noise from building intruder alarms is not a significant cause of noise complaints. In EPA's recent survey of council environmental health officers, 55% of respondent councils indicated they never or rarely receive complaints about building intruder alarms, 37% indicated they sometimes received noise complaints and only 8% indicated they often receive complaints. Those that did report noise complaints about building intruder alarms were from metropolitan areas.

Clause 49 ensures a product standard on the market that facilitates compliance with the use requirements of the Regulation for intruder alarms.

In clause 53, the rationale for restricting the sounding of alarms to five minutes is to reduce the noise impact without reducing the deterrent value of the alarm system. Police, insurance groups and the NRMA report that the effect of the alarm is greatest in the first few minutes, and that most burglaries are over within 5 minutes. The requirement for manual reset provides for the need for personal intervention, guaranteeing that the resetting process does not result in a repeat sounding of a particular alarm circuit.

The NSW Neighbourhood Noise Survey (DEC 2004) showed that over 90% of people considered it was appropriate for noise to be controlled by limiting the length of time the noise can be made.

EPA proposes to carry forward clauses 49 and 53 of the current Regulation into the proposed Regulation unchanged.

A2.4 Marine vessels

The Regulation also controls noise from marine vessels such as powerboats, personal watercraft and sailing vessels.

Late-night charter operations and personal watercraft such as jet skis are noise sources that can have a substantial impact in waterside residential areas. As of June 2015, there were just over 230,000 registered vessels in New South Wales with over 11,000 of these being personal watercraft²¹. This represents around a 14% growth compared with 2007 figures²².

Roads and Maritime Services (RMS) is the appropriate regulatory authority for controlling noise from vessels in NSW navigable waterways, however, Port Authority of New South Wales enforcement officers, NSW Water Police and local council enforcement and authorised officers also have powers in relation to some provisions. The Marine Parks Authority also has some powers under the Noise Control Regulation for vessels in a marine park. RMS adopts a range of strategies to manage noise from recreational vessels. Its focus, at least in the first instance, is to inform and educate noisy vessel operators of requirements through advice on its website and when attending incidents.

²¹ Boating Industry Association website <http://www.bia.org.au/industry/data.html> – based on NSW Roads and Maritime Services data

²² DECC 2007, *Regulatory Impact Statement – Proposed Protection of the Environment Operations (Noise Control) Regulation 2007*

The EPA is responsible for vessels associated with premises licensed under the POEO Act such as port facilities and any vessels operated by a State or public authority.

Based on data from the State Debt Recovery Office, there have been no penalty infringement notices issued under the Regulation's marine vessel provisions for the past three financial years²³. This reflects the RMS approach of using the Noise Control Regulation as a deterrent.

Noise from shipping operations and cruise terminals is not specifically managed under the Noise Control Regulations as a number of national and international regulatory frameworks apply. Impacts are identified and managed in the context of planning approvals for these activities.

Sirens and offensive noise

Sirens and other audible warning devices are analogous to motor vehicle horns. They provide a warning of imminent danger, particularly in the case of a potential collision. They also have a safety role during periods of low visibility, such as in heavy rain and fog. Radar and radio communications support mariners in avoiding navigational hazards but are not a substitute for audible warning devices in all circumstances.

Clause 29 (Sounding of sirens from vessels): Clause 29 prohibits the use of sirens, whistles, hooters, fog horns or bells, except for the purposes of navigation.

Audible warning devices have a legitimate navigation purpose. Serious noise nuisance from marine vessels, whether it be engine noise or noise from a siren, is not reasonable, as it has the potential to have an adverse effect on a wide range of people in adjacent areas.

No alternatives have been considered. If the Regulation were removed, the use of horns for non-navigational purposes could cause significant noise impacts to nearby residents as well as have undesirable implications for safe navigation. Over 95% of council EHOs that responded to the EPA's recent survey indicated that they rarely, if ever receive noise complaints about vessel sirens.

Clause 30 (Vessels not to emit offensive noise): This clause prohibits offensive noise from vessels.

Both powered and sail vessels can generate noise from ancillary gear such as rigging drives and generators. In some circumstances, that noise can create a noise nuisance and disturb a range of onshore activities including conversation, viewing television, reading and sleeping.

The current provision captures all noisy vessels and offers sufficient protection to the community.

Alternative considered

There are no noise provisions related to the manufacture or sale of vessels in NSW or in the Commonwealth jurisdiction. Currently there are two international systems that prescribe noise levels for vessels:

- a voluntary *Model Noise Act* in the US that can be adopted by individual states
- the EU Recreational Craft Directive 2013/53/EU, which sets the requirements that vessel manufacturers must comply with before being able to offer their product for sale in the EU.

²³ Based on State Debt Recovery Office data for 2012–13, 2013–14 and 2014–15

Prescribing set noise levels for vessels is not viable, as compliance may involve measuring noise from moving vessels and involve considerable resource investment for training and equipping enforcement officers. The offensive noise test is designed to avoid technical and logistical complications associated with measurement. Also, setting state-based requirements for what is essentially a national market would not be effective nor is warranted. In the EPA's recent survey, over 95% of respondent council EHOs said they rarely if ever receive complaints about vessel noise.

Clause 31 (Liability of owner of vessel): This provision makes the owner and the operator of the vessel liable for the offensive noise offence. It also provides for an owner to nominate the operator of the vessel if the owner was not in the vessel at the time of the offence. The provision facilitates efficiencies in enforcement.

Cost-benefit assessment

Costs: Remaking the provisions will not impose any new enforcement or compliance costs. Enforcement officers from Roads and Maritime use the statutory powers of the Regulation as a strong negotiating point with offenders.

Benefits: The current clauses 30 and 31 provide the principal control over noise from boats. Excessive boat noise can cause significant disturbance to residents, recreational areas and commercial districts near waterways. Prohibiting offensive boat noise is one way of reducing the impact of noise. Other ways employed by Roads and Maritime Services include reducing speed limits near sensitive areas and prohibiting particular vessels (such as ski boats) from recreational swimming areas and specified waterways.

For the control of sirens, regulating for the potential misuse of audible warning devices provides a way of reducing noise and potential noise impacts to nearby residents.

Assessment: The actual cost of maintaining the proposed Regulation is expected to be small in comparison with the benefits.

Noise control equipment on vessels

Clause 32 (Noise control equipment to be properly maintained). This provision prohibits the use of vessels with defective noise equipment or noise equipment that is not securely in place. It also makes it an offence for a person to remove or modify a vessel's noise control equipment making it less effective. The objective of the provision is to ensure that noise emissions from vessels do not increase as a result of poor maintenance of noise control equipment, or as a result of inappropriate modification.

No alternatives were considered. This provision was amended at the last review of the Regulation, broadening its coverage to reflect the large range of noise control equipment available on the market for vessels. It will be carried forward unchanged.

Cost-benefit assessment

Costs: No change in enforcement or compliance costs are anticipated with retaining the current provision.

Benefits: The provision allows the easy identification of vessels without noise control equipment or with non-compliant equipment in play. The Regulation provides an appropriate way of reducing noise from marine vessels and improving the amenity of foreshores.

Assessment: The provision provides an effective means of ensuring that vessels are not causing noise impacts. The provision does not impose any additional compliance costs, and at the same time it protects residents from excessive boat noise.

Sound systems on vessels

Music from vessels, particularly at night, can be a problem for shoreline residents. This activity is prevalent along some waterways, particularly those in metropolitan Sydney where there are high levels of commercial activity. Roads and Maritime Services has established a code of conduct (NSW Maritime 2008) in consultation with the charter vessel industry, which applies to party functions and tourist-related activities on Sydney Harbour and other navigable waters. The objective of the code of conduct is to minimise noise impact on residents from recreational activities and tourism-related activities, especially at night.

Clause 33 (Use of sound systems on vessels): This provision prohibits the playing of music on marine vessels in such a manner that it emits offensive noise.

No alternative was considered. This provision was amended at the last review of the Regulation to simplify enforcement of the provision by removing the need for a warning. It will be carried forward unchanged.

Cost-benefit assessment

Costs: No change in enforcement or compliance costs are anticipated with retaining the current provision. Charter vessels generally comply with the provisions of the code of conduct, which encourages commercial boats to limit the output of excessive noise and to avoid sensitive foreshore areas where residents may be affected.

Benefits: The restriction on the use of sound systems on vessels provides important protection for residents, as noise from sound systems has the potential to create significant sleep disturbance. The provision provides a basis for Roads and Maritime Service officers to negotiate an informal settlement of a particular noise complaint and thereby to quickly reduce noise nuisance. The Regulation also provides an important regulatory backing to the code of conduct developed for charter boat operators.

Assessment: The benefits of minimising sleep disturbance of foreshore residents are likely to outweigh the impost on marine vessel users of not creating offensive noise from sound systems.

Defective vessel notices

Clause 33 (Defective vessel notices) and clause 34 (Defective vessel labels): Clause 33 empowers authorised officers to issue defective vessel notices where vessels have defective or missing noise control equipment. It also specifies the required form and content of the notices. An offence occurs when the vessel is operated in contravention of the notice. Clause 34 provides the option for authorised officers to affix a defective vessel labels to vessels with a defective vessel notice in place and specifies the required form and content of the label.

No alternative was considered; these are administrative provisions that facilitate enforcement of the marine vessel noise controls. These provisions are proposed to be carried forward unchanged.

Cost-benefit assessment

These provisions are of a machinery nature that makes the enforcement of the other provisions of the Noise Control Regulation more effective, thereby reducing noise nuisance from marine vessels. Further economic analysis is not required for machinery provisions.

Appendix 3 – Online survey of local council environmental health officers

In 2015 environmental health officers from the following councils participated in an online survey conducted by the EPA in collaboration with Environmental Health Australia and Local Government NSW:

Armidale Dumaresq Council	Liverpool City Council
Auburn City Council	Maitland City Council
Bega Valley Shire Council (2)	Newcastle City Council
Bourke Shire Council	North Sydney Council (4)
Byron Shire Council	Penrith City Council (2)
Campbelltown City Council	Port Macquarie-Hastings Council
City of Canada Bay Council	Port Stephens Council
Clarence Valley Council	Queanbeyan City Council
Coffs Harbour City Council (4)	Randwick City Council
Cooma-Monaro Shire Council (2)	Shoalhaven City Council (2)
Eurobodalla Shire Council (3)	Sutherland Shire Council
Gwydir Shire Council	Tweed Shire Council (3)
Holroyd City Council (4)	Waverley Council (2)
Junee Shire Council	Wingecarribee Shire Council (2)
Kempsey Shire Council	Wollongong City Council
Ku-ring-gai Council	Yass Valley Council
Lake Macquarie City Council (2)	

A total of at least 31 different councils responded to the survey. An additional 21 respondents also participated in the survey but did not state which council they were from.

Key issues in response to the survey

A series of general questions were asked of local council respondents to determine the key issues that local councils face regarding neighbourhood noise. The responses were very thorough and contained a lot of information about general noise issues, specific provisions and suggestions. An overview of the key issues is provided in this Appendix.

Noise sources

Many of the noise issues identified in the survey are either already dealt with under the Regulation (power tools, trail bikes, chainsaws and pool-cleaning devices) or are outside the jurisdiction of the Regulation. These are regulated through either the *Companion Animals Act 1998*, the *Protection of the Environment Operations Act 1997* or through local council conditions of consent under the *Environmental Planning and Assessment Act 1979*. These included such things as EPA-licensed activities, construction noise, business operations,

industrial animal noise (birds, chickens, stock), garbage truck operations, delivery vehicles, rail operations, 24-hour gyms, outdoor events, port activities, fireworks and shooting ranges.

Other noise sources identified are not so easily categorised in terms of which regulatory framework they would fall under. It may be that additional advice on dealing with these 'out of the box' noise sources needs to be provided to help council officers manage these issues.

These issues include:

- loud talking or yelling and other household noises not associated with loud music
- water features
- remote-controlled toys
- bottles in garbage bins
- hand tools (hammering etc.)
- kids recreational pursuits at home (basketball, skating, playing)
- personal trainers.

While some of these come down to being considerate of other neighbours (bottles in bins, hand tools, noisy toys etc.) some of these may be legitimately dealt with through the POEO if the noise meets the offensive noise provisions (loud talking or yelling, personal trainers, children playing and powered toys). The proposed changes to the definition of pumps and power tools under the Noise Control Regulation will also help clarify the regulation of noise from other sources.

Enforcing the Noise Control Regulation

Feedback showed that generally respondents thought there were adequate legislative tools in place to manage noise from noisy equipment and that in many cases notifying people about their responsibilities and rights achieved a suitable outcome. Of particular relevance was the issue of determining if noise was audible within a neighbouring residence.

Respondents agreed it was necessary to determine noise levels from within an affected residence but the some problems were identified for determining a noise offence. The responses indicated that timely attendance at incidents was difficult to achieve given the time of use offences occurred out of council staff normal working hours. This was often coupled with a lack of resourcing and concerns around Workplace Health and Safety for officers entering a house, approaching noisy parties, etc.

Respondents highlighted the difficulty of establishing an offence in two key areas. Firstly, the subjectiveness of the noise assessment for offensive noise – what is offensive, duration and discomfort. There were also challenges in gathering enough information to determine the identity of the offender (e.g. transient holiday makers) and other evidence for issuing warnings or penalty notices (outside working hours / transient nature of noise / response times). The lack of reliability of complainants was also seen as a factor affecting enforcement.

A range of other comments and suggestions were made:

- The ability to issue fines on the spot without warning could be introduced (it was suggested this could possibly be based on a 5dB above background noise test and/or noise being heard within a habitable room).
- Similar rules for non-residential premises could be included (i.e. someone operating noisy equipment in a non-residential setting such as a commercial area or a mobile plant).
- The warning period of 28 days for an offence could be extended.

- Changes to exempt development rules which allow for air conditioning units to be installed without a development application have potentially exacerbated the impacts of noisy air conditioning units.
- Uniformity in time of use restrictions could be improved (e.g. limiting musical instruments to the same time as power tools).
- The time of use restrictions could be tightened (i.e. reducing the time that certain equipment can be used).
- Retailers and suppliers of some noisy equipment could be required to disclose information to consumers on potential noise impacts.
- Greater restrictions on the use of noisy power tools could be introduced, and the hours of use restrictions could be tightened.
- For some business premises, a change of use isn't triggering a development application and necessary noise assessment; this is leading to complaints due to incompatibility of uses.

Additional support for local councils (tools, support material and training)

Responses suggest the guidance material provided by the EPA is appreciated and well-used. There was support for the material and courses to be more accessible to councils – either through online webinars or through regional delivery – especially with cost being a significant factor. Respondents also asked for additional scenarios with solutions and an update of the guidance material.

It was suggested that the EPA provide more educational material for the general community about rights and responsibilities in regard to noise – in particular about what is reasonable noise exposure during normal hours and what isn't. For example, playing some music during the day is acceptable, but playing loud amplified music all day that can be heard in a neighbouring residential premises is not acceptable. The converse of this was also raised. It was felt that some complainants have an unreasonable expectation of a noiseless environment. To manage this it was suggested that guidance be provided to the community about tolerating noise being generated by people going about their legitimate daily business.

There was a request for a standard kit of legal notices for council officers, and for the EPA to promote mediation as a means of achieving better outcomes. One suggestion was to have a local council liaison section in the EPA to help local councils build capacity. Another suggestion was to develop a standard toolkit for sending to disputing parties, early on in a dispute, to educate them about their rights and responsibilities.

Approaches to managing noise

The respondents identified several approaches they use when dealing with noise, and provided suggestions about approaches that could be applied, including:

- consulting more than just the affected resident to determine the level of impact and whether a public nuisance exists e.g. if noise is annoying more than one person
- encouraging upfront discussion about ongoing noise so that complainants know beforehand what to expect; suggesting agreed schedules of use (e.g. motorbike riding, band practice, home handy person)
- having an easy-to-use mediation service to minimise the amount of involvement of regulatory authorities
- introducing a requirement that the complainant must first demonstrate that noise is an issue before making a complaint, or must have approached the neighbour to seek to have the noise stopped
- keeping internal databases or registers

- encouraging complainants to keep noise diaries as a means of determining level of impact
- using merit assessments to assess the public nuisance of a complaint – i.e. determining whether more than one person was affected or was likely to be affected.

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