





*Environmental Protection (Noise)  
Regulations 1997*

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**SUMMARY OF THE  
REGULATIONS**

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# PREFACE

Noise can seriously disrupt peoples' lives, causing loss of sleep, interference to activities and emotional stress. Local governments and the Department of Environmental Protection deal with thousands of complaints about neighbourhood noise each year in Western Australia. So it is important that we have in place a fair and effective set of rules to govern noise emissions in this State.

The *Environmental Protection (Noise) Regulations 1997* were gazetted on 31 October 1997, to come into effect on 31 January 1998. These regulations replace the *Noise Abatement (Neighbourhood Annoyance) Regulations 1979*. While the former regulations served the State well, they were never designed to operate under the *Environmental Protection Act 1986*.

The new regulations have been tailored to the *Environmental Protection Act 1986*. The regulations are a "prescribed standard" under sections 51, 62 (4), 65, 74 (3) and clause 22 of Schedule 4 of the Act. Noise emissions which exceed the prescribed standard can be regarded as "pollution" and "unreasonable noise" under Section 3 of the Act.

The regulations are fair. They set noise limits which have been carefully designed to ensure that noise from other premises is kept to acceptable levels. At the same time they are flexible enough to allow for reasonable economic, cultural and social activity to occur.

The regulations will be effective in practice. They set out clear methods for noise assessment and control, providing certainty to industry as to what standard is expected. For the most part, the regulations will still be administered by local governments, as were the former regulations. The clearer guidance in the new regulations should make for more effective enforcement where noise emissions are excessive.

The basis for determining the new assigned noise levels is the land use where the noise is received. The surrounding land uses are also included. This method recognises and protects the quiet surroundings many of us enjoy, while also recognising the influence of industry, commerce and transport on our noise environment. The assigned noise levels also recognise relevant Australian Standards for noise and are generally consistent with the former WA regulations, while providing greater certainty as to the standards to be achieved.

The new regulations have been through a long process of consultation with industry, government and the community. They reflect the valuable input of those groups and the final drafts have received broad support from all quarters. There will be a review of their effectiveness through a further public process over the next two years.

I believe these regulations will greatly improve the management of environmental noise in Western Australia.



(Dr) Bryan Jenkins  
*Chief Executive Officer*  
Department of Environmental Protection

31 October 1997

# OVERVIEW OF THE REGULATIONS

## MAIN FEATURES

- **The regulations deal with -**
  - \* all noise passing from one premises to another, including from one unit to another in a block of units;
  - \* noise from public places as it affects adjacent premises; and
  - \* providing a basis for determining acceptable noise levels in relation to land use.
- **The regulations don't deal with -**
  - \* noise within one premises, eg in a workplace;
  - \* noise from traffic on roads, or trains, except model trains;
  - \* noise from aircraft, except model planes; and
  - \* noise from safety warning devices.
- **Noise can be assessed by two methods -**
  - \* by measurements of the sound levels; or
  - \* by ear, by a police officer or authorised person.
- **Noise from public places is now -**
  - \* under the same rules as noise from premises; and
  - \* subject to a fine of \$200 for a first offence.
- **Assigned noise levels** (the highest noise levels that can be received) have been set differently for -
  - \* noise-sensitive premises, eg residences;
  - \* commercial premises, eg shops, offices; and
  - \* industrial premises, eg factories, mines.noises of different durations, eg a short duration noise like a car in a driveway can be at a higher level.
- **For noise-sensitive premises**, assigned levels are calculated by looking at land use zonings within circles of 100m and 450m radius from the noise receiver, including -
  - \* the proportion of industrial land use zonings;
  - \* the proportion of commercial zonings; and
  - \* the presence of major roads.
- **Non-conforming land uses** can be recognised in the calculation of assigned noise levels.
- **Time of day** also affects the assigned levels for noise-sensitive premises, as follows -
  - \* lowest levels at night (10pm to 7am any day or to 9am Sundays and Public Holidays);
  - \* higher levels during the evenings (7pm to 10pm) and on Sundays and Public Holidays (9am to 7pm); and
  - \* highest levels during the day (7am to 7pm Monday to Saturday).
- **Measured noise levels** are automatically increased if the noise is -
  - \* impulsive, eg banging, thumping;
  - \* tonal, eg whining, droning;
  - \* modulated, eg like a siren; and

## SPECIAL CASES

The new regulations make provision for special cases, to allow reasonable amounts of activities that benefit the community. These activities need not meet the assigned levels. In each case, however, the activity must comply with conditions set in the regulations.

The special cases are:

- **Agriculture** - provided it can be shown that farming vehicles are not unduly noisy, or if used at night, that the work is necessary;
- **Approval where assigned levels can't be met** - intended for some large industrial premises, this regulation allows the Environment Minister to approve a variation to the assigned levels after a public assessment process run by the Environmental Protection Authority (EPA);
- **Bellringing and calls to worship** - provided certain conditions relating to sound levels and times of events are met;
- **Blasting** - provided certain sound levels and hours of blasting are met;

- **Construction sites** - provided the work is carried out -
  - \* between 7am and 7pm on any day which is not a Sunday or Public Holiday
  - \* according to certain good noise control practices; and
  - \* if work is to be done outside these hours, the work must be necessary and be done according to an approved noise management plan.
- **Equipment used on residential premises** - assigned levels will not apply to -
  - \* any equipment that requires the constant presence of an operator, and which has been operating for less than two hours on that day; and
  - \* a musical instrument which has been in use for less than one hour on that day

provided the equipment is used -

  - \* during daytime;
  - \* in a reasonable manner; and
  - \* so as not to unreasonably interfere with neighbours.
- **Outdoor concerts** - the special regulation allows the local council to approve up to two (or possibly more) concerts or similar events at a venue in any 12-month period, under certain conditions.
- **Community activities** - noise management procedures are set out for certain listed activities, eg: crowds cheering at football matches, the Perth Royal Agricultural Show. Assigned levels will not apply to these activities.

## EXPLANATION OF TERMS

Some of the terms used in this document are explained below.

- **Chief executive officer (CEO)** is defined in the *Environmental Protection Act 1986* (“the Act”) as the chief executive officer of the Department of Environmental Protection. As this power is delegated under these regulations to the chief executive officers of all local governments in the state, references to the chief executive officer in these regulations also means the Town Clerk, Shire Clerk or City Manager of the local council, unless otherwise noted.
- **Noise** is defined in the Act to include vibration of any frequency, whether transmitted through air or any other physical medium.
- **Noise level** means the level of noise measured in decibels, or dB. The terms dB(A) and LA mean the noise level measured in decibels with the A-weighting switched in. The A-weighting is an electronic weighting network which approximates the frequency response of the normal human ear.
- **Occupier** is defined in the Act to mean a person who is in occupation or control of a premises, or a part of a premises where there are several occupiers, whether or not that person is the owner of the premises or that part of the premises.
- **Pollution** is defined in the Act to mean direct or indirect alteration of the environment -
  - (a) to its detriment or degradation;
  - (b) to the detriment of any beneficial use; or
  - (c) of a prescribed kind.
- **Practicable** is defined in the Act to mean reasonably practicable having regard to, among other things, local conditions and circumstances (including costs) and to the current state of technical knowledge.
- **Premises** is defined in the Act to mean residential, industrial or other premises of any kind whatsoever and includes land, water and equipment.

# ASSIGNED NOISE LEVELS

## ABOUT ASSIGNED NOISE LEVELS

Assigned noise levels are the levels of noise allowed to be received at a premises at a particular time of the day or night.

The assigned levels form “prescribed standards” under Sections 51, 62 (4), 65, 74 (3) and clause 22 of Schedule 4 of the *Environmental Protection Act 1986*. Causing or allowing noise emissions which exceed the prescribed standard is an offence in itself, and can also be regarded as “pollution” or “unreasonable noise” under Section 3 of the Act.

It is therefore an offence for the noise emitted from a premises or public place to exceed the assigned noise level at another premises. There are some exceptions to this, for which you will need to refer to Pages 10 to 17 of this booklet.

The new assigned noise levels replace those in the *Noise Abatement (Neighbourhood Annoyance) Regulations 1979*, which have been repealed.

The new assigned noise levels have been carefully designed to ensure that noise from other premises is kept to acceptable levels.

There are different assigned levels for -

- \* noise-sensitive premises, eg residences;
- \* commercial premises, eg shops, offices; and
- \* industrial premises, eg factories, mines.

These types of premises are described in more detail on Page 6.

The assigned levels for noise-sensitive premises vary depending on the time of day, being lower at night when people are more sensitive to noise.

For noise-sensitive premises, the assigned levels also depend on how close the house is to industrial and commercial areas and to major roads.

Note that assigned noise levels always apply at the premises **receiving** the noise.

## COMPLIANCE WITH ASSIGNED NOISE LEVELS

**Regulation 7** requires that “noise emitted from any premises when received at other premises must not cause, or significantly contribute to, a level of noise which exceeds the assigned level in respect of noise received at premises of that kind”.

A noise emission is taken to “significantly contribute to” a level of noise if the noise emission is less than a level which is 5dB below the assigned level at the point of reception.

For example, if the assigned level was 40dB(A) and the measured level, including the noise source and other noise, was 44dB(A), then the noise source would not be “significantly contributing” if its level was 35dB(A) or less.

Where it is hard to measure the level of a noise emission at the point of reception, because of other noises, regulation 7 allows it to be determined by either -

- \* measurement at its point of reception with other noises not present; or
- \* calculation based on a noise level measured close to the source of the noise emission.

## NOISE CHARACTER

**Regulation 7** also requires that the noise character must be “free” of annoying characteristics, namely -

- tonality, eg. whining, droning;
- modulation, eg, like a siren; and
- impulsiveness, eg. banging, thumping.

**Regulation 9** sets out objective tests to assess whether the noise is taken to be “free” of these characteristics.

If these characteristics cannot be reasonably and practicably removed, eg. in the case of an emission like music, then a series of adjustments to the measured levels are set out, and the adjusted level must comply with the assigned level. The adjustments are set out below.

Adjustment where noise emission is not music these adjustments are cumulative to a maximum of 15 dB			Adjustment where noise emission is music	
Where tonality is present	Where modulation is present	Where impulsiveness is present	Where impulsiveness is not present	Where impulsiveness is present
+5 dB	+5 dB	+10 dB	+10 dB	+15 dB

## ASSIGNED LEVELS

**Regulation 8** defines three types of assigned levels:

- **L<sub>A max</sub>** assigned level means a noise level which is not to be exceeded at any time;
- **L<sub>A1</sub>** assigned level means a noise level which is not to be exceeded for more than 1% of the time, eg. for more than one minute in 100 minutes (one hour 40 minutes); and
- **L<sub>A10</sub>** assigned level means a noise level which is not to be exceeded for more than 10% of the time, eg. for more than ten minutes in 100 minutes.

The idea of having three assigned levels is to allow for brief louder noises, such as a car going up a driveway.

The time period over which the noise levels can be assessed must be between 15 minutes and four hours and must allow for a representative assessment of the noise emission.

The table below sets out the assigned levels for different types of receiving premises and different times of the day.

The method for calculating the influencing factor on which the assigned levels are based is shown, with a worked example, on Pages 6 to 8 of this booklet.

For further information on the measurement of noise levels, see Page 9 of this booklet.

## TABLE OF ASSIGNED NOISE LEVELS

Type of premises receiving noise	Time of day	Assigned level (dB)		
		L <sub>A10</sub>	L <sub>A1</sub>	L <sub>A max</sub>
Noise sensitive premises at locations within 15 metres of a building directly associated with a noise sensitive use	0700 to 1900 hours Monday to Saturday	45 + influencing factor	55 + influencing factor	65 + influencing factor
	0900 to 1900 hours Sunday and public holidays	40 + influencing factor	50 + influencing factor	65 + influencing factor
	1900 to 2200 hours all days	40 + influencing factor	50 + influencing factor	55 + influencing factor
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays	35 + influencing factor	45 + influencing factor	55 + influencing factor
Noise sensitive premises at locations further than 15 metres from a building directly associated with a noise sensitive use	All hours	60	75	80
Commercial premises	All hours	60	75	80
Industrial and utility premises	All hours	65	80	90

The “influencing factor” is calculated for each noise-sensitive premises receiving noise. It takes into account the amount of industrial and commercial land and the presence of major roads within a 450m radius around the noise receiver.

The influencing factor will range from zero to about 20 in most cases. So for an influencing factor of zero, that is, where there is no industry or commerce and no major road, the L<sub>A 10</sub> assigned level for the period 7am to 7pm Monday to Saturday would be 45dB(A) at locations within 15 metres of a building directly associated with a noise-sensitive use, that is, within 15 metres of the residence. If the influencing factor is calculated to be 7dB(A), that is, where there is some industry or commerce or a major road, the L<sub>A 10</sub> assigned level at this time would be 45 + 7 = 52dB(A).

The method of calculating influencing factors is shown on the following pages, with a worked example.

# DETERMINING ASSIGNED LEVELS

## DEFINITION OF TYPES OF PREMISES

Before using the assigned noise levels table to determine assigned levels, you should check whether the type of premises receiving the noise is industrial and utility, commercial or noise sensitive.

The various types of premises referred to in the table of assigned noise levels are defined in Schedule 1 to the regulations. Here is a summary of them:

### Industrial and utility premises -

- Premises used for providing water, electricity, communications, etc;
- Premises used by aircraft or ships, as a freight yard or for passenger transport;
- Industrial premises;
- Mine sites and quarries;
- Waste disposal sites; and
- Offices, grounds and caretakers' residences which are part of the above.

### Commercial premises -

- Offices and retail shops;
- Premises in or from which meals or food are sold to the public;
- Service stations;
- Indoor amusement centres eg theatres;
- Outdoor amusement centres;
- Hotels which don't provide accommodation;
- Health centres;
- Hospitals with 150 or more beds;
- Centres for community meetings;
- Testing laboratories;
- Veterinary clinics, kennels and the like; and
- Offices, grounds and caretakers' residences which are part of the above.

### Noise sensitive premises -

- Premises occupied solely or mainly for residential or accommodation purposes;
- Rural premises;
- Caravan parks and camping grounds;
- Hospitals with less than 150 beds;
- Rehabilitation centres, care institutions and the like;
- Educational institutions;
- Premises used for public worship;
- Hotels which provide accommodation to the public;
- Premises used for aged care or child care;
- Prisons and detention centres; and
- Any other premises not referred to above under industrial and utility or commercial premises.

## HOW TO DETERMINE ASSIGNED LEVELS FOR NOISE-SENSITIVE PREMISES

You will note from the table that the assigned levels for noise-sensitive premises rely on an "influencing factor". The influencing factor is designed to take into account the amount of commercial, industrial and transport activity around the receiving premises. Here is how to work it out:

**Step 1** - Obtain a council zoning map covering an area up to 500 metres from the receiving point;

**Step 2** - Draw two circles around the receiving point, of 100 metres radius and 450 metres radius;

**Step 3** - Work out the percentage of each circle which is taken up with Industrial zonings and Commercial zonings. Note that the industrial and commercial areas in the inner circle are also counted in the outer circle;

**Step 4** - Add up the percentages as follows:

$$(\% \text{ industrial in small circle} + \% \text{ industrial in large circle}) \times 1/10 = I$$

$$(\% \text{ commercial in small circle} + \% \text{ commercial in large circle}) \times 1/20 = C$$

**Step 5** - Work out the Transport Factor as follows:

- Major road (more than 15,000 vehicles/day) in small circle, TF = 6
- Major road in large circle, TF = 2
- For each secondary road (6,000 - 15,000 vehicles/day) in small circle, TF = 2

Note: TF cannot be more than 6;

**Step 6** - Add I, C and TF from Steps 4 and 5 to obtain the Influencing Factor; and

**Step 7** - Now fill in the table of assigned levels by adding in the Influencing Factor to obtain the  $L_{A10}$ ,  $L_{A1}$  and  $L_{Amax}$  assigned levels.

## WORKED EXAMPLE OF ASSIGNED LEVELS

### SAMPLE CALCULATION OF ASSIGNED NOISE LEVELS FOR A NOISE-SENSITIVE PREMISES

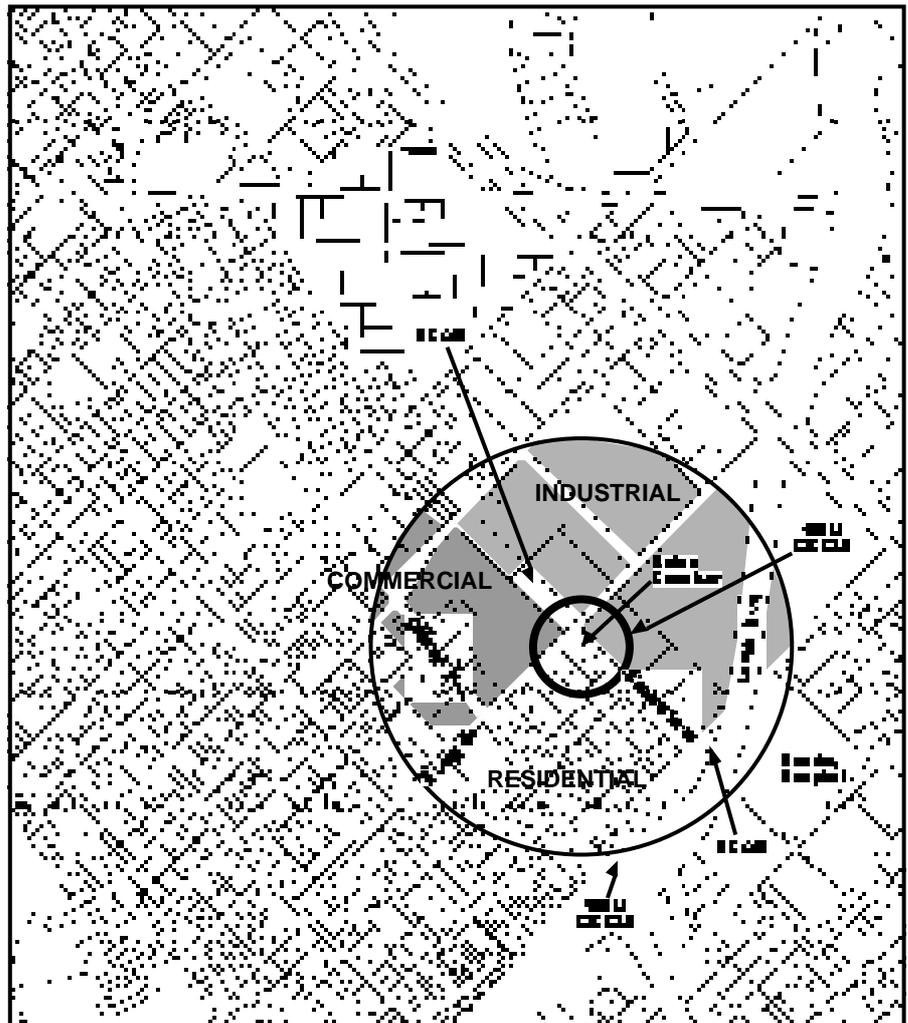
The receiving point is a residence at the corner of Ewing Street and Davies Lane, Bentley.

**Steps 1 and 2** - Obtain a zoning map and draw two circles around the receiving point, of 100 metres radius and 450 metres radius.

**Step 3** - Percentages of industrial and commercial zonings -

% industrial in small circle	= 20%
% industrial in large circle	= 34%
% commercial in small circle	= 15%
% commercial in large circle	= 16%

Note: Bentley Hospital is zoned for special purposes, so the land area is assessed according to the definition of types of premises (see Page 6). As the hospital has 250 beds, the land is taken to be commercial.



**Step 4 - Add percentages**

$$\begin{aligned}
 I &= (\% \text{ industrial small circle} + \% \text{ industrial large circle}) \times 1/10 \\
 &= (20 + 34) \times 1/10 \\
 &= 5.4
 \end{aligned}$$

$$\begin{aligned}
 C &= (\% \text{ commercial small circle} + \% \text{ commercial large circle}) \times 1/20 \\
 &= (15 + 16) \times 1/20 \\
 &= 1.5
 \end{aligned}$$

**Step 5 - Transport Factor**

Albany Highway: 35,000 vehicles/day approximately  
 Leach Highway: 39,000 vehicles/day approximately

As there are major roads (>15,000 vehicles/day) in outer circle - TF = 2

**Step 6 - Add I, C and TF to obtain Influencing Factor**

$$\begin{aligned}
 \text{Influencing Factor} &= I + C + \text{TF} \\
 &= 5.4 + 1.5 + 2 \\
 &= 9 \text{ (rounded to a full number)}
 \end{aligned}$$

**Step 7 - Fill in the table of assigned levels by adding nine to the  $L_{A10}$ ,  $L_{A1}$  and  $L_{A \max}$  assigned levels.**

Part of premises receiving noise	Time of day	Assigned level (dB)		
		$L_{A10}$	$L_{A1}$	$L_{A \max}$
Locations within 15 metres of a building directly associated with a noise sensitive use	0700 to 1900 hours Monday to Saturday	54 (45 + 9)	64 (55 + 9)	74 (65 + 9)
	0900 to 1900 hours Sunday and public holidays	49	59	74
	1900 to 2200 hours all days	49	59	64
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays	44	54	64
Locations further than 15 metres from a building directly associated with a noise sensitive use	All hours	60	75	80

# MEASUREMENT AND ASSESSMENT OF NOISE

## NOISE MEASUREMENT

The way to establish whether or not a noise emission is meeting the assigned level is to carry out sound level measurements. The instrument normally used for this is a sound level meter. Special tape recorders and analysers may also be used. The science of sound measurement calls for certain rules to be put in place in order that the results will be fair and repeatable.

Sound measurements need to be done over a long enough period to enable the assessing officer to determine the  $L_{A \max}$ ,  $L_{A1}$  and  $L_{A10}$  levels of the noise emission over a “representative assessment period” of 15 minutes to four hours.

### PLACE OF MEASUREMENT (Regulation 19)

When the premises receiving the noise has a building or buildings and surrounding land, the noise may be measured either outside the buildings and within the boundary, or inside the buildings, but can only be measured inside if -

- the use of the building is directly associated with the type of premises receiving the noise, for example, the building is an office on a Commercial premises or a house on a noise-sensitive premises; and
- the building is of a type of construction that is typical of buildings so used. For example, one would not carry out a sound measurement inside a tent, as its construction is not typical of a house.

Where the premises receiving the noise is a caravan park or camping ground, measurements are to be made outside of a caravan, camp or park home.

The measurement is taken inside where -

- there is no surrounding land; or
- the noise is coming through a common wall or from another part of the building.

Where a measurement is made inside, the measured level is adjusted by -

- +15 dB if the external doors and windows are shut; or
- +10 dB if the external doors and windows are open.

### MICROPHONE POSITION (Regulations 20 and 21)

The microphone must be at least 1.2 metres above the ground and at least three metres from any other sound reflecting surface, if practicable, to avoid the effect of sound reflections. Indoor measurements must be made at least one metre from any open external window or door.

Measurement of airblast levels during blasting must be done outdoors, with the microphone 1.2 to 1.6 metres above the ground and at least five metres from any other reflecting surface.

### INSTRUMENT CALIBRATION (Regulations 22, 23 and Schedule 4)

Schedule 4 sets out various standards to which the sound measuring instruments must comply.

The instrument must have been calibrated in an approved laboratory within the two-year period immediately preceding its date of use, to check that its performance meets the standards. An approved laboratory is one which has been approved by the CEO of the Department of Environmental Protection, or is registered with the National Association of Testing Authorities (NATA).

Field performance checks must be carried out before and after measurements.

# SPECIAL CONSIDERATIONS FOR INDUSTRY

## NON-CONFORMING USES AND CHANGES OF ZONING (Regulation 10)

A **non-conforming use** is one where, for example, a factory is operating legally on land which is zoned for residential use. This situation occurs where the factory was on that site prior to the rezoning to residential uses.

In doing the calculation of influencing factor to determine the assigned level at a residence near such a factory, it would be unfair to use the actual zoning (residential) in the calculation. To make this situation fair, the regulations allow the **factory land to be treated as industrial** when doing the calculation. The same would apply for a non-conforming use which was commercial on residential land.

There is also a special case **when land is rezoned from industrial or commercial to residential, after these regulations come into effect**. In this case, new residences built on the rezoned land will be treated as noise-sensitive premises, but **the calculation of influencing factor will be done as though the land was still industrial or commercial**. The idea of this is to make sure new residences are not placed too close to existing industrial or commercial premises.

In order to take advantage of the above provisions, the occupiers of the industrial or commercial premises emitting noise must:

- obtain an acknowledgement from the Environmental Protection Authority (EPA) that this regulation affects those premises;
- display a prominent sign at the premises detailing the EPA's acknowledgement;
- lodge a copy of the EPA's acknowledgement with the local council; and
- support the claim to the EPA with statutory declarations covering the relevant facts.

## WHAT CAN BE DONE IF THE ASSIGNED LEVELS CANNOT BE MET (Regulation 17)

There will be genuine cases where the assigned levels cannot reasonably or practicably be met. This could be an existing industry or mine site which is very close to residences. Or it could be a proposed industry or mine site which cannot be located far enough away from residences.

In such cases, the person who believes they cannot reasonably or practicably meet the assigned levels can apply to the Environment Minister for approval to allow the noise emission to exceed or vary from the assigned level.

The application will go through a very fair public process, as follows -

- The Minister will refer the application to the EPA for assessment;
- The EPA will assess the application with the assistance of the Department of Environmental Protection (DEP) and report back to the Minister, who will make the decision;
- The EPA will determine the form, content, timing and procedure of the assessment, and can require any person to provide it with information to assist in the assessment;
- The Minister's approval can be for a set period and may include conditions or restrictions;
- The Minister can amend or revoke an approval, but must first ask the EPA to report on the matter;
- Notice of an approval, amendment or revocation of an approval will be published in the WA Government Gazette;
- If a condition of an approval is breached, the approval ceases, and the assigned levels apply; and
- Any person, either the applicant or another person, who disagrees with the Minister's decision may appeal within 14 days of the gazettal.

# SPECIAL CASE REGULATIONS

The next section of this booklet deals with special regulations which have been made to allow for reasonable amounts of economic, cultural and social activity at levels which may exceed the assigned levels, but are within normal community expectations.

## BLASTING NOISE

### HOW THE REGULATION WORKS (Regulation 11)

In the regulation dealing with blasting -

- “**blasting**” is defined as the use of explosives to fracture -
  - \* rock, coal and other minerals for later recovery; or
  - \* structural components or other items to facilitate removal from a site or for reuse
- “**airblast level**” means a noise level resulting from blasting;
- The assigned noise levels set in regulations 7 and 8 do not apply to airblast levels from blasting;
- The regulation on blasting sets specific airblast levels for blasting, which form a “prescribed standard”;
- These airblast levels apply to blasting carried out on any premises or public place; and
- The regulation does not address ground vibration from blasting.

### DAYTIME BLASTING

For blasting carried out between 7am and 6pm on any day which is not a Sunday or public holiday, the airblast level received on any other premises must not exceed -

- \* 125 dB  $L_{\text{linear, peak}}$  for any blast; and
- \* 120 dB  $L_{\text{linear, peak}}$  for nine in any 10 consecutive blasts, regardless of the interval between blasts.

### BLASTING ON SUNDAYS AND PUBLIC HOLIDAYS

For blasting carried out between 7am and 6pm on a Sunday or public holiday, the airblast level received on any other premises must not exceed -

- \* 120 dB  $L_{\text{linear, peak}}$  for any blast; and
- \* 115 dB  $L_{\text{linear, peak}}$  for nine in any 10 consecutive blasts, regardless of the interval between blasts.

### BLASTING AT OTHER TIMES

Airblast levels resulting from blasting on any premises or public place must not exceed 90 dB  $L_{\text{linear, peak}}$  at any other premises outside the periods between 7am and 6pm on any day.

The only exception to this is that explosives which have previously been placed and primed may be fired if necessary to meet a safety requirement of the Department of Minerals and Energy, in which case the levels must meet those given above for daytime and weekend blasting, for the time when the blast was scheduled to be fired.

### MEASUREMENT OF AIRBLAST LEVELS (Regulation 21 and Schedule 4)

See Page 9 of this booklet.

# AGRICULTURAL NOISE

## HOW THE REGULATION WORKS (Regulation 12)

Under the special case regulation dealing with rural activities -

- The assigned noise levels set out in regulations 7 and 8 do not apply to noise emitted from a farming vehicle on rural premises, under certain conditions;
- The “*rural premises*” to which the regulation 12 applies exclude premises used for intensive animal husbandry, poultry farming or dog kennels;
- A “*farming vehicle*” is defined as a motor vehicle which is used for, or in association with, soil preparation and cultivation, land drainage and water management, crop seeding and planting, crop spraying and fertilisation, pest management, produce harvesting or stock management; and
- A “*farming vehicle*” excludes a vehicle used for pumping water for crop or pasture irrigation or stock watering. This is intended to exclude stationary plant, which must meet the assigned levels.

## DAYTIME WORK

The assigned levels for noise do not apply to noise emitted from a farming vehicle on rural premises at any time between sunrise and sunset if the farming vehicle complies with the noise emission limits in ADR 28/01 (see below).

## NIGHT TIME WORK

The assigned levels for noise do not apply to noise emitted from a farming vehicle on rural premises at any time between sunset and sunrise if -

- \* the farming vehicle complies with the noise emission limits in ADR 28/01 (see below); and
- \* the occupier of the premises can show that it was reasonably necessary for the vehicle to be operated at night time. An example of work which was reasonably necessary would be 24-hour seeding after rain.

**ADR 28/01** (Australian Design Rule 28/01) sets out noise emission limits for all types of vehicles. The noise limits to which a farming vehicle would need to comply would be those for goods vehicles intended for off-road use, of the same mass and engine power.

The regulation does not require that all farming vehicles be tested for noise levels. Rather, if there was a complaint about noise from a farming vehicle, the assessing officer could request that a test be done.

If the above conditions are not met, the farming vehicle must meet the assigned levels.

# CONSTRUCTION NOISE

## HOW THE REGULATION WORKS (Regulation 13)

Under the special case regulation dealing with construction sites -

- A “**construction site**” is defined as a premises or public place on which the sole or principal activity is the carrying out of construction work;
- “**Construction work**” is clearly defined as in the *Occupational Safety and Health Act 1994*;
- The assigned noise levels set in regulations 7 and 8 do not apply to noise emitted from a construction site as a result of construction work on Mondays to Saturdays, under certain conditions; and
- Work may be done between 7pm and 7am and on Sundays and public holidays, under a stricter set of conditions.

## DAYTIME CONSTRUCTION

For construction work carried out between 7am and 7pm on any day which is not a Sunday or public holiday -

- the construction work must be carried out in accordance with control of noise practices set out in section six of Australian Standard 2436-1981 “Guide to Noise Control on Construction, Maintenance and Demolition Sites”;
- the equipment used for the construction work must be the quietest reasonably available; and
- the chief executive officer may request that a noise management plan be submitted for the construction work at any time.

## CONSTRUCTION OUT OF HOURS

For construction work done outside the hours shown above -

- the work must be carried out in accordance with section six of AS 2436-1981;
- the equipment used must be the quietest reasonably available;
- the builder must advise all nearby occupants of the work to be done at least 24 hours before it commences;
- the builder must show that it was reasonably necessary for the work to be done out of hours; and
- the builder must submit to the chief executive officer (CEO) a noise management plan at least seven days before the work starts, and the plan must be approved by the CEO. The noise management plan must include details of -
  - \* **need** for the work to be done out of hours
  - \* **types of activity** which could be noisy
  - \* **predictions** of noise levels
  - \* **control** measures for noise and vibration
  - \* **monitoring** of noise and vibration
  - \* **complaint** response

If a builder failed to comply with these conditions, or with the approved noise management plan, the noise from the construction site would be treated the same as noise from any other premises and would need to meet the assigned levels.

## Australian Standard 2436-1981

Section six of AS 2436-1981 gives practical guidance on noise control measures for construction sites, including the selection and siting of equipment, use of noise barriers and so on.

AS 2436-1981 also gives typical noise levels for construction plant. Where an unduly noisy item caused a problem, the assessing officer could direct that it be repaired or replaced by a quieter item.

# EQUIPMENT USED ON RESIDENTIAL PREMISES

## HOW THE REGULATION WORKS (Regulation 14)

Under the special case regulation dealing with equipment used on residential premises-

- The assigned noise levels set in regulations 7 and 8 do not apply to noise emitted from “specified equipment” used on residential premises, as long as it is used in a reasonable manner and between certain hours; and
- The “*specified equipment*” to which the regulation applies is any equipment which requires the constant presence of an operator for normal use. Specified equipment therefore includes many common household items, including lawnmowers and basketballs. However, equipment which could be turned on and left running, such as an airconditioner, is not specified equipment.

## THE DETAILS

The assigned levels for noise do not apply to noise emitted from residential premises from the use of specified equipment if the following four conditions are met -

- The equipment is used -
  - \* between 7am and 7pm on Monday to Saturday inclusive; or
  - \* between 9am and 7pm on a Sunday or public holiday.

If the specified equipment is used outside these hours, the normal assigned noise levels must be met. Other equipment must meet the assigned levels at all times. An inspector can assess whether a noise emission meets the assigned levels by taking sound level readings.

- The equipment has not been used -
  - \* for more than two hours since the beginning of the relevant day; or
  - \* if it is a musical instrument, for more than one hour since the beginning of the relevant day.
- The specified equipment is used in a reasonable manner; and
- The noise resulting from the use of that specified equipment on those premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of an occupier of premises receiving the noise.

Whether a level of interference is unreasonable or not is a matter that would be decided by the the inspector from the local council.

In deciding this, the test as to whether the noise is unreasonably interfering must be based on -

- the duration of the noise emission;
- how often noise emissions of that type occur; and
- the purpose for which the equipment is used.

If the above conditions were not met, the noise emissions would have to meet the assigned levels.

# BELLRINGING AND CALLS TO WORSHIP

## HOW THE REGULATION WORKS (Regulation 15)

Under the special case regulation dealing with bellringing and calls to worship -

- The assigned noise levels set in regulations 7 and 8 do not apply to noise emitted from bellringing and calls to worship, provided they are done according to certain conditions; and
- The regulation defines the following activities -
  - \* **“amplified call to worship”** means a call or invitation to worship (including the ringing of a single bell or a set of bells) which is amplified or reproduced by the use of electronic amplification equipment;
  - \* **“bellringing”** means the ringing of a set of bells, where not amplified by electronic amplification equipment;
  - \* **“other call to worship”** means any call or invitation to worship (including the ringing of a single bell) other than bellringing or an amplified call to worship

The regulation applies to calls to worship on premises used for religious purposes and bellringing on any premises or public place. It does not apply to bellringing or calls to worship on residential premises.

The conditions applying to bellringing and calls to worship are given below.

## THE DETAILS

- In the case of bellringing, no conditions apply if -
  - \* the bells were in use in the year before 29 December 1995; or
  - \* the sound level of the bells when measured on any other premises is 55dB(A) or less.
- In the case of -
  - \* an amplified call to worship where the sound level when measured on any other premises is 55dB(A) or less; or
  - \* any other call to worship;

the only conditions which apply are that -

- \* the premises on which the worship occurs must be exempt from paying rates under the *Local Government Act 1995* because of their religious use; and
  - \* the call to worship must occur on the premises where the worship is to take place.
- In the case of -
    - \* bellringing with bells which were not in use in the year before 29 December 1995; or
    - \* an amplified call to worship -

where the sound level on any other premises exceeds 55dB(A), the bellringing or call to worship is limited to -

- \* the hours 8am to 7pm on Monday to Friday;
- \* the hours 9am to 7pm on Saturdays, Sundays and public holidays;
- \* 10 minutes on each occasion;
- \* two occasions on any one day;
- \* 12 occasions in any period of two months; and
- \* eight occasions in any month.

The chief executive officer may ask for a log to be kept recording the date, time and duration of all bellringing or amplified calls to worship.

In the event that bellringing or a call to worship was occurring outside the set conditions, the noise emission would need to meet the normal assigned noise levels. The assessing officer could assess whether the noise emission met the assigned levels by taking sound level readings.

# NOISE FROM COMMUNITY ACTIVITIES

## HOW THE REGULATION WORKS (Regulation 16 and Schedule 2)

Under the special case regulation dealing with noise from community activities -

- The assigned noise levels set in regulations 7 and 8 do not apply to noise emitted from certain specified activities;
- The types of “*exempt noise*” to which the regulation refers are listed in Schedule 2 (see below);
- Where a noise problem occurs with an exempt noise, the regulation sets up a procedure for dealing with it;
- This procedure comes into effect where the chief executive officer is satisfied that -
  - \* a type of exempt noise has increased in its level or in its effect on the environment; or
  - \* a type of exempt noise has, or is likely to have, an adverse effect on the environment that exceeds its benefit to the community;
- In this case, the chief executive officer may issue a “*noise control notice*”, which is a new type of notice defined in the regulation (see below); and
- The regulation does not stop an authorised person from the council or the police taking urgent action under the provisions of the Environmental Protection Act relating to “*unreasonable noise*”, where necessary.

## COMMUNITY ACTIVITIES - EXEMPT NOISE

Schedule 2 to the regulations lists the following activities as exempt noise -

1. Noise emitted by spectators at an organised sporting activity.
2. Noise emitted by participants and spectators at an a meeting or procession which has been authorised under the *Public Meetings and Processions Act 1984*.
3. Noise emitted from church services (as distinct from bellringing or calls to worship, which are covered by regulation 15 - see Page 15 of this booklet) where the worship takes place on land which is exempt from rates because of its religious use.
4. Noise emitted from a recreational or educational activity on educational premises under control of the principal. The activity may use musical instruments but not mechanical equipment.
5. Noise emitted from agricultural shows, fairs, fetes, exhibitions and similar events.

## NOISE CONTROL NOTICE

A noise control notice -

- Is to specify the reason for which it is served;
- May require a person to take measures to control noise;
- May direct a person to apply for an approval to vary the assigned noise levels under regulation 17 (see Page 10 of this booklet for further information);
- May require a person to prepare a noise management plan;
- May be amended by the chief executive officer; and
- May be appealed by a person who is aggrieved by it.

If a person fails to comply with a noise control notice, then the noise ceases to be “exempt noise” and the emitted noise level must meet the assigned noise levels.

# NOISE FROM OUTDOOR CONCERTS

## HOW THE REGULATION WORKS (Regulation 18)

Under the special case regulation dealing with noise from outdoor concerts -

- The assigned noise levels set in regulations 7 and 8 do not apply to noise emitted from “*approved non-conforming events*”. The approval process is described below.
- While the event can be a sporting, cultural or entertainment event that is to be open to the public, in most cases the regulation will be used for outdoor concerts;
- The chief executive officer (CEO) can approve an event if satisfied that -
  - \* its noise emissions would exceed the assigned levels; and
  - \* it would lose its character or usefulness if it had to meet the assigned levels;
- The CEO can set such conditions as the CEO thinks fit;
- If the conditions are not met, then the approval ceases and the noise from the event will have to meet the assigned levels; and
- If the noise then exceeded the assigned levels, action could be taken for an offence. Alternatively, either the council or the police could take action under the provisions relating to “*unreasonable noise*”.

## PROCESS FOR APPROVING EVENTS

- An application for approval must be made at least 60 days before the event.
- The application must be accompanied by a \$500 fee, however this can be reduced or waived if the event is for charitable purposes.
- The conditions imposed may -
  - \* limit the duration of the event and the rehearsals;
  - \* set start and end times for the event and rehearsals;
  - \* set times when the stage, seating, etc can be set up and pulled down; and
  - \* set any other requirements needed to contain the noise impact, including noise limits;
- The promoter must pay a fee for noise monitoring, set by the CEO, if the noise from an approved event is likely to exceed -
  - \* 60dB(A) for a night time event (7pm to 7am); or
  - \* 65dB(A) for a day time event (7am to 7pm)
- The CEO can amend the conditions but must first give the promoter 14 days notice;
- Generally, the CEO is not to approve more than two events in any 12-month period at any venue;
- However, the CEO can approve more than two events if satisfied that the majority of the affected residents have no objection to the holding of the extra events;
- If there are residents affected in more than one local government area, then both local governments must agree on the conditions for the event;
- If they cannot agree, the Environment Minister decides on the conditions for the event; and
- If the noise from two or more venues near to each other affects the same residents, the CEO can treat the venues as one venue.