



Noise Regulation Bylaw No. 8856

The Council of the City of Richmond enacts as follows:

PART ONE: INTRODUCTION

1.1 Title

1.1.1 This Bylaw may be cited as the "Noise Regulation Bylaw No. 8856".

1.1.2 Definitions

In this Bylaw,

"Activity Zone" means those areas so described in this Bylaw and so indicated in Schedule A, attached to and forming part of this Bylaw;

"approved sound meter" means an acoustic instrumentation system which:

- (a) is comprised of a microphone, wind screen and recorder which conforms to class 1 or class 2 requirements for an integrating sound level meter as defined by IEC 61672-1 [2002];
- (b) has been field calibrated before and after each sound measurement using a class 1 or class 2 field calibrator as defined by IEC 60942 [2003]; and
- (c) has been calibrated, along with the field calibrator, within the past two years by an accredited lab to a traceable national institute standard;

"City" means the City of Richmond;

"construction" includes

- (a) the erection, alteration, repair, relocation, dismantling, demolition and removal of a building or structure;
- (b) structural maintenance, power-washing, painting, land clearing, earth moving, grading, excavating, the laying of pipe and conduit (whether above or below ground), street or road building and repair, concrete placement, and the installation, or removal of **construction** equipment, components and materials in any form or for any purpose; or

- (c) any work or activities being done or conducted in connection with any of the work listed in paragraphs (a) or (b);

“**Council**” means the City Council of Richmond;

“**daytime**” means

- (a) from 7:00 a.m. to 8:00 p.m. Monday through Saturday;
- (b) from 10:00 a.m. to 6:00 p.m. on a Sunday or **holiday**;

“**dB_A**”, or **A-weighted decibel**, means the unit used to measure the sound pressure level using the “A” weighting network setting on an **approved sound meter**;

“**dB_C**”, or **C-weighted decibel**, means the unit used to measure the sound pressure level using the “C” weighting network setting on an **approved sound meter**;

“**General Manager**” means the General Manager of Engineering and Public Works for the City of Richmond or his or her designate;

“**holiday**” means

- (a) New Years Day, Good Friday, Easter Monday, Victoria Day, Canada Day, British Columbia Day, Labour Day, Thanksgiving Day, Remembrance Day, Christmas Day and Boxing Day or any other statutory holiday that may be declared by the Province of British Columbia; and
- (b) the day named in lieu of a day that is named in paragraph (a) and that falls on a Saturday, Sunday or the following Monday;

“**IEC**” means the International Electro-Technical Commission;

“**impulsive sound**” means **specific sound** that is characterized by brief bursts of **sound** pressure, with the duration of each impulse usually less than 1 second, including without limitation **specific sound** containing “bangs”, “clicks”, “clatters” or “thumps” from hammering, banging of doors and metal impacts;

“**impulsive sound adjustment**” means a 5 **dB_A** increase applied to **specific sound** classified as **impulsive sound** and a 0 **dB_A** increase applied to **specific sound** that is not classified as **impulsive sound**;

“**inspector**” includes the **Medical Health Officer**, the Health Protection Manager, the **General Manager**, a Bylaw Enforcement Officer employed by the **City**, a Peace Officer, and any employee acting under the supervision of any of them;

“**Intermediate Zone**” means those areas so described in this Bylaw and so indicated in schedule A, attached to and forming part of this Bylaw;

“**ISO**” means the International Organization for Standardization;

“**L_{eq}**”, or equivalent continuous sound pressure level, means that constant or steady **sound** level, rounded to the nearest decibel, which, in a specified time period, conveys the same **sound** energy as does the actual time-varying sound level;

“**lawn and garden power equipment**” means any equipment or machinery used in lawn and garden care, including leaf blowers, edge trimmers, rototillers and lawn mowers;

“**measurement time interval**” means the total time over which **sound** measurements are taken, and:

- (a) is chosen to best represent the situation causing disturbance;
- (b) is between 1 minute and 30 minutes;
- (c) is chosen to avoid influence from the **residual sound** where possible; and
- (d) may consist of a number of non-contiguous, short term measurement time intervals that add up to 1 to 30 minutes;

“**Medical Health Officer**” means the Medical Health Officer appointed under the *Public Health Act*, SBC 2008, c. 28 or his/her designate, to act within the limits of the jurisdiction of any local board, or within any health district;

“**nighttime**” means any period of any day not specifically defined as **daytime**;

“**point of reception**” means a position within the property line of the real property occupied by the recipient of a **sound** that best represents the location at which that **specific sound**, emanating from another property, is received and the resulting disturbance experienced and is:

- (a) at least 1.2 m from the surface of the ground and any other **sound** reflecting surface; and
- (b) outdoors, unless there is no **point of reception** outdoors because the **specific sound** is within the same building or the wall of one **premises** is flush against another, in which case the **point of reception** shall be within the building where the **specific sound** is received and the resulting disturbance experienced;

“**premises**” means

- (a) the area contained within the boundaries of a legal parcel of land and any building situated within those boundaries; and
- (b) each unit, the common areas of the building, and the land within the apparent boundaries of the legal parcel of land are each separate **premises** where a building contains more than one unit of commercial, industrial or **residential occupancy**;

“**Quiet Zone**” means those areas so described in this Bylaw and so indicated in Schedule A, attached to and forming part of this Bylaw;

“**rating level**” means the **specific sound level** plus the **impulsive sound adjustment** and **tonal sound adjustment**;

“**residential occupancy**” in respect of **premises**, means a dwelling unit located within a building, and includes a room for rent in a hotel or motel;

“**residual sound**” means the sound remaining at a given location in a given situation when the **specific sound** source is suppressed to a degree such that it does not contribute to the **total sound**;

“**sound**” means an oscillation in pressure in air which can produce the sensation of hearing when incident upon the ear;

“**specific sound**” means the **sound** under investigation;

“**specific sound level**” means the equivalent continuous **sound** pressure level or L_{eq} at the point of reception produced by the **specific sound** over the **measurement time interval**;

“**tonal sound**” means **specific sound** which contains one or more distinguishable, discrete, continuous tones or notes including, without limitation:

- (a) **specific sound** characterized by a “whine”, “hiss”, “screech” or “hum”;
and
- (b) music;

“**tonal sound adjustment**” means a 0 – 6 dBA increase applied to **specific sound** classified as **tonal sound** as determined using the approach described in ISO 1996-2 [2007] Annex C and a 0 dBA increase applied to **specific sound** that is not classified as **tonal sound**;

“**total sound**” means the totally encompassing **sound** in a given situation at a given time, usually composed of **sound** from many sources near and far;

“**total sound level**” means the equivalent continuous **sound** pressure level or L_{eq} at the point of reception produced by the **total sound** over the **measurement time interval**; and

“**vehicle**” means a device in, on or by which a person or thing is or may be transported or drawn along a highway, but does not include a device designed to be moved by human power or device used exclusively on stationary rails or tracks.

PART TWO: SOUND LEVELS

2.1 Quiet Zone Permitted Sound Levels

2.1.1 In a **Quiet Zone** a person must not make, cause or permit to be made or caused, any **sound** that has a **rating level** which:

- (a) during the **daytime** exceeds:
 - (i) 55 **dba** or 65 **dbc** when received at a **point of reception** in a **Quiet Zone**;
 - (ii) 60 **dba** or 70 **dbc** when received at a **point of reception** in an **Intermediate Zone**;
 - (iii) 70 **dba** or 80 **dbc** when received at a **point of reception** in an **Activity Zone**; or
- (b) during the **nighttime** exceeds:
 - (i) 45 **dba** or 55 **dbc** when received at a point of reception in a **Quiet Zone**;
 - (ii) 50 **dba** or 60 **dbc** when received at a **point of reception** in an **Intermediate Zone**;
 - (iii) 70 **dba** or 80 **dbc** when received at a **point of reception** in an **Activity Zone**.

2.2 Intermediate Zone Permitted Sound Levels

2.2.1 In an **Intermediate Zone** a person must not make, cause or permit to be made or caused, any **sound** that has a **rating level** which:

- (a) during the **daytime** exceeds:
 - (i) 60 **dba** or 70 **dbc** when received at a **point of reception** in a **Quiet Zone**;
 - (ii) 60 **dba** or 70 **dbc** when received at a **point of reception** in an **Intermediate Zone**;
 - (iii) 70 **dba** or 80 **dbc** when received at a **point of reception** in an **Activity Zone**; or

- (b) during the **nighttime** exceeds:
 - (i) 50 **dB**A or 60 **dB**C when received at a **point of reception** in a **Quiet Zone**;
 - (ii) 50 **dB**A or 60 **dB**C when the prescribed **point of reception** is outdoors or 55 **dB**C when the prescribed **point of reception** is indoors in an **Intermediate Zone**;
 - (iii) 70 **dB**A or 80 **dB**C when received at a **point of reception** in an **Activity Zone**.

2.3 Activity Zone Permitted Sound levels

2.3.1 In an **Activity Zone** a person must not make, cause or permit to be made or caused, any **sound** that has a **rating level** which:

- (a) during the **daytime** exceeds:
 - (i) 60 **dB**A or 70 **dB**C when received at a **point of reception** in a **Quiet Zone**;
 - (ii) 65 **dB**A or 75 **dB**C when received at a **point of reception** in an **Intermediate Zone**;
 - (iii) 70 **dB**A or 80 **dB**C when received at a **point of reception** in an **Activity Zone**; or
- (b) during the **nighttime** exceeds:
 - (i) 50 **dB**A or 60 **dB**C when received at a **point of reception** in a **Quiet Zone**;
 - (ii) 55 **dB**A or 65 **dB**C when received at a **point of reception** in an **Intermediate Zone**;
 - (iii) 70 **dB**A or 80 **dB**C when received at a **point of reception** in an **Activity Zone**.

2.4 Summary of Permitted Sound Levels by Zone

2.4.1 For convenience, the outdoor **sound** level limits set out in sections 2.1 to 2.3 are summarized in the table in Schedule B, attached to and forming part of this Bylaw.

2.5 Properties Where Specific Modifications or Exceptions to Rating Levels Apply

2.5.1 Properties listed in Schedule C of this Bylaw are subject to the rating levels set-out in Schedule C. Except as modified or excepted in Schedule C, the rating levels in sections 2.1 – 2.3 of this Bylaw apply to such properties.

2.6 Assessment at Locations Affected by Residual Sound

2.6.1 Where the **total sound level** exceeds all of the prescribed **sound** limits identified in sections 2.1 to 2.3 and is influenced by the **residual sound** at the **point of reception** such that the **specific sound** cannot be accurately measured, the **specific sound** should be measured at distances close to the source and then predicted at the **point of reception** using an internationally accepted calculation standard such as ISO 9613-2.

2.7 Role of Inspector

2.7.1 Any **inspector** may measure **sound** levels with an **approved sound meter**, and may enter at all reasonable times upon any real property, to determine compliance with the provisions of Part Two of this Bylaw.

PART THREE: PROHIBITED TYPES OF NOISE

3.1 Noise Disturbing Neighbourhood

3.1.1 Subject to other provisions of this Bylaw:

- (a) a person must not make or cause a **sound** in a street, park, plaza or similar public place which disturbs or tends to disturb the quiet, peace, rest, enjoyment, comfort or convenience of persons in the neighbourhood or vicinity;
- (b) a person who is the owner or occupier of, or is in possession or control of, real property must not make, suffer, or permit any other person to make, a **sound**, on that real property, which can be easily heard by a person not on the same **premises** and which disturbs or tends to disturb the quiet, peace, rest, enjoyment, comfort or convenience of persons in the neighbourhood or vicinity.

3.1.2 Subsection 3.1.1 does not apply if a **sound** level may practically be measured and the **sound** level is in compliance with Part Two of this Bylaw.

3.2 Prohibited Types of Noise

3.2.1 The following sounds are prohibited because they are objectionable, or liable to disturb the quiet, peace, rest, enjoyment and comfort of individuals or the public notwithstanding that such sounds may not constitute a violation of any other provision of this Bylaw:

- (a) the **sound** made by a dog barking, howling or creating any kind of **sound** continually or sporadically or erratically for any period in excess of one-half hour of time;
- (b) the **sound** made by a combustion engine that is operated without using an effective exhaust muffling system in good working order;
- (c) the **sound** made by a **vehicle** or a **vehicle** with a trailer resulting in banging, clanking, squealing or other like **sounds** due to an improperly secured load or improperly secured equipment, or due to inadequate maintenance;
- (d) the **sound** made by a **vehicle** horn or other warning device used except under circumstances required or authorized by law;
- (e) the **sound** made by amplified music, whether pre-recorded or live, after 2:00 a.m. and before 8:00 a.m. on any day; and
- (f) **sound** produced by audio advertising which:
 - (i) is directed at pedestrians or motorists on any street or sidewalk; or
 - (ii) can be heard on any street or sidewalk.

PART FOUR: EXEMPTIONS

4.1 Specific Exemptions

4.1.1 This Bylaw does not apply to **sound made:**

- (a) by a police, fire, ambulance or other emergency vehicle;
- (b) by a horn or other signalling device on any **vehicle**, boat or train where such sounding is properly and necessarily used as a danger or warning signal;
- (c) by the use, in a reasonable manner, of an apparatus or mechanism for the amplification of the human voice or music in a public park, public facility or square in connection with a public meeting, public celebration, athletic or sports event or other public gathering, if:
 - (i) that gathering is held under a City issued permit or license or similar agreement; or
 - (ii) that gathering has received prior approval under section 4.2.1;
- (d) by bells, gongs or chimes by religious institutions, or the use of carillons, where such bells, gongs, chimes or carillons have been lawfully erected;
- (e) by works and activities authorized by the British Columbia School Board 38 (Richmond) and conducted by its employees, agents and contractors on

- property owned or operated by British Columbia School Board 38 (Richmond);
- (f) by a parade, procession, performance, concert, ceremony, event, gathering or meeting in or on a street or public space, provided that a permit, licence or similar agreement has been granted by the City for the event;
 - (g) by outdoor athletic activity that takes place between 8:00 a.m. and 10:30 p.m.;
 - (h) by the use, in a reasonable manner, of the **premises** of a Community Care Facility duly licensed under the *Community Care and Assisted Living Act*, SBC, 2002, Chapter. 75, or from the use of a similar institution;
 - (i) by works and activities authorized by the City and conducted by its employees, agents and contractors on property owned (including, without limitation dedicated roads, parks and other public spaces) or operated by the City;
 - (j) by a garbage collection service during the **daytime**;
 - (k) by municipal works including, but not limited to, the construction and repair of streets, sewers lighting and other municipal services, whether carried out during the daytime or during the nighttime by, or on behalf of the City or the Greater Vancouver Regional District or any other public authority, but, unless the General Manager approves otherwise, does not include **construction** carried out under and agreement to install City works as described in section 940 of the *Local Government Act*;
 - (l) by **lawn and garden power equipment**, provided that the use of the **lawn and garden power equipment** takes place:
 - (i) between 7:00 a.m. and 8:00 p.m. Monday through Friday; or
 - (ii) between 10:00 a.m. and 8:00 p.m. on a Saturday, Sunday and **holiday**;
 - (m) by **construction**, provided that it has a **rating level** which does not exceed 85 **dB**A when measured at a distance of 15.2m (50 feet) from that source of **sound**, and only:
 - (i) between 7:00 a.m. and 8:00 p.m. Monday through Friday that is not a **holiday**;
 - (ii) between 10:00 a.m. and 8:00 p.m. on a Saturday that is not a **holiday**; and
 - (iii) between 10:00 a.m. and 6:00 p.m. on a Sunday or **holiday**;

- (n) by the nightly cleaning of streets and sidewalks and the collection of garbage from sidewalk refuse bins by or on behalf of the City;
- (o) by public transit or aeronautics;
- (p) by normal farm practices on a farm operation as defined by and protected by the *Farm Practices Protection (Right to Farm) Act*; or
- (q) by an occupant of a strata lot or rental unit used for **residential occupancy** where the source of the sound and the **point of reception** is within the same building.

4.2 Exemptions and Relaxations by Approval

4.2.1 A person may submit an application for an exemption or relaxation from the provisions of this Bylaw to the **General Manager**, in a form and with content satisfactory to the **General Manager** who may allow the exemption or relaxation with or without terms and conditions or refuse the exemption or relaxation provided that the exemption or relaxation is limited to a period of not more than forty-eight (48) hours.

4.2.2 With respect to exemptions or relaxations from the limitations imposed by section 4.1.1(m) of this Bylaw for construction projects, the **General Manager** may grant the exemption if satisfied that:

- (a) the volume of traffic in the area of the proposed construction is such as to cause danger to the workers on the job, or to cause traffic congestion;
- (b) the impact and inconvenience to residents in the area of the proposed construction can be minimized;
- (c) the construction cannot be undertaken efficiently or safely during the normal working day; or
- (d) interruption of any service during normal working day would cause any person undue hardship.

4.2.3 If an exemption or relaxation is granted by the **General Manager** the applicant must, at least forty-eight (48) hours before the start of the exemption period, distribute a notice, in a form and with content satisfactory to the **General Manager**, to all residences within a one hundred (100) metre radius. Such a notice is to include, but will not be limited to, all times and dates, the specific location and general description of the activity.

4.2.4 An applicant who has been refused an exemption or relaxation by a decision of the **General Manager** may apply to have Council reconsider that decision in accordance with the following procedures:

- (a) the applicant may apply by notice to the City Clerk within 14 days of any refusal by the **General Manager** to grant an exemption or relaxation;
- (b) the applicant may address Council in writing or in person concerning the specific exemption or any future exemptions; and
- (c) Council may allow or revise the exemption or relaxation with or without terms and conditions or refuse the exemption or relaxation.

4.3 Modification of Exception of Rating Levels by Bylaw Amendment

4.3.1 A person may, in respect to a specific property or specific properties, submit an application for a modification of this Bylaw in respect to a rating level set out in section 2.1 – 2.3 of this Bylaw to the **General Manager** in a form and with a content satisfactory to the **General Manager** who shall refer the application to Council for consideration with recommendations.

PART FIVE: GENERAL

5.1 Severability

5.1.1 No provision of this Bylaw depends for its validity on the validity of any other provision.

5.2 Offences and Penalties

- 5.2.1 (a) a violation of any of the provisions identified in this Bylaw shall result in liability for penalties and late payment amounts established in Schedule A of the Notice of Bylaw Violation Dispute Adjudication Bylaw No. 8122; and
- (b) a violation of any of the provisions identified in this Bylaw shall be subject to the procedures, restrictions, limits, obligations and rights established in the *Notice of Bylaw Violation Dispute Adjudication Bylaw No. 8122* in accordance with the *Local Government Bylaw Notice Enforcement Act, SBC 2003, c.60*.
- 5.2.2 Every person who contravenes any provision of this Bylaw is considered to have committed an offence against this bylaw and is liable on summary conviction, to the penalties provided for in the *Offence Act*, and each day that such violation is caused, or allowed to continue, constitutes a separate offence.

FIRST READING

SECOND READING

THIRD READING

ADOPTED



MAYOR

FEB 13 2012

FEB 13 2012

FEB 13 2012

CITY CLERK

CITY OF RICHMOND
APPROVED. for content by originating Division 
APPROVED for legality by Solicitor 

**SCHEDULE A TO BYLAW 8856
NOISE ZONES**

Category	Quiet Zone	Intermediate Zone	Activity Zone
<p>1. Standard Zoning (subject to Category 4)</p>	<ul style="list-style-type: none"> • Residential Zones commencing with RS, RC, RD, RI, RT, RA • Residential / Limited Commercial Zones commencing with RCL • Institutional Zones commencing with ASY, HC • Mixed Use Zones commencing with CN, CS 	<ul style="list-style-type: none"> • Mixed Use Zones commencing with CDT • Commercial Zones commencing with CL, CC, CA, CEA, CG, CP, CV, CR • Marina Zones commencing with MA1, MA2 • Institutional Zones commencing with AIR, SI • Agriculture & Golf Zones commencing with AG, GC 	<ul style="list-style-type: none"> • Industrial Zones commencing with I, IL, IB, IR, IS
<p>2. Site Specific Zoning (subject to Category 4)</p>	<ul style="list-style-type: none"> • Residential Zones commencing with ZS, ZD, ZT, ZLR, ZHR • Residential (Other) Zones commencing with ZR 	<ul style="list-style-type: none"> • Mixed Use Zones commencing with ZMU • Commercial Zones commencing with ZC • Public Zones commencing with ZIS • Agricultural Zones commencing with ZA 	<ul style="list-style-type: none"> • Industrial Zones commencing with ZI

Category	Quiet Zone	Intermediate Zone	Activity Zone
<p>3. Land Use Contracts (subject to Category 4)</p>	<ul style="list-style-type: none"> • 001-009, 011-021, 023-027, 029-037, 040-050, 052-061, 063, 065-069, 071-077, 081-086, 088-090, 093-102, 104-117, 120-121, 123-125, 129-138, 140-165 	<ul style="list-style-type: none"> • 010, 022, 028, 051, 062, 064, 070, 078, 079, 087, 092, 119, 122, 126, 128 	<ul style="list-style-type: none"> • 039, 091, 127, 139
<p>4. Additional Designations</p>		<ul style="list-style-type: none"> • All parcels that would otherwise be classified as a Quiet District that are in Areas 1A or 2 as outlined in the OCP Aircraft Noise Sensitive Development Table contained in Section 5.4 - Noise Management in the Richmond Official Community Plan Bylaw No 7100 • All parcels bordering a municipal 4-lane roadway, Highway 91 or Highway 99 	<ul style="list-style-type: none"> • All roadways • All railroad rights-of-way

SCHEDULE B TO BYLAW 8856

SUMMARY OF PERMITTED OUTDOOR SOUND LEVELS BY ZONE

		Sound Receiver Zone					
		Quiet		Intermediate		Activity	
		Day	Night	Day	Night	Day	Night
Sound Source Zone	Quiet	55 dBA	45 dBA	60 dBA	50 dBA	70 dBA	70 dBA
		65 dBC	55 dBC	70 dBC	60 dBC	80 dBC	80 dBC
	Intermediate	60 dBA	50 dBA	60 dBA	50 dBA	70 dBA	70 dBA
		70 dBC	60 dBC	70 dBC	60 dBC	80 dBC	80 dBC
	Activity	60 dBA	50 dBA	65 dBA	55 dBA	70 dBA	70 dBA
		70 dBC	60 dBC	75 dBC	65 dBC	80 dBC	80 dBC

Note: the permitted outdoor **dBC** sound level is 10 dB higher than the permitted **dBA** sound level.

SCHEDULE C TO BYLAW 8856

SPECIFIC MODIFICATIONS/EXCEPTIONS TO PART TWO: SOUND LEVELS

Property specific modifications / exceptions to the rating levels in Part Two: "Sound Levels" of the Bylaw are set-out below. Except as modified or excepted below, the rating levels in Part Two: "Sound Levels" apply.

Civic Address of Sound Source	Civic Address of Point of Reception	Permitted Sound Level