

File No.: 04-1000-20-2020-347

July 30, 2020

s.22(1)

Dear <mark>s.22(1)</mark>

Re: Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")

I am responding to your request of June 19, 2020 for:

The testing procedures and equipment used to conduct noise by-law violation testing in regard to mechanical unit noises and whether there is a third party sound engineer or consultant that is certified / approved to conduct testing that is recognized by the City. Regarding Noise Control By-law 6555 and these provisions: <a href="https://www.htttps://wwww.https://wwwww.https:/

All responsive records are attached. Some information in the records has been severed, (blacked out), under s.22(1) of the Act. You can read or download this section here: <u>http://www.bclaws.ca/EPLibraries/bclaws\_new/document/ID/freeside/96165\_00</u>.

Please note the Manager of Property Use Inspections confirmed there are no third party sound engineers or consultants endorsed by the City, and that tests and readings are performed by City inspectors using the Quest Technologies 2200 sound meter along with the Quest Technologies QC-10 sound calibrator.

Additionally, the Noise Control By-law captured as part of the records in the "Community Noise Enforcement" manual appears as it would have on March 12, 2013. To view the current consolidated Noise Control By-law, please visit: <u>https://vancouver.ca/your-government/noise-control-bylaw.aspx</u>.

Under section 52 of the Act you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your request. The Act allows you 30 business days from the date you receive this notice to request a review by writing to: Office of the Information & Privacy Commissioner, info@oipc.bc.ca or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number assigned to your request (#04-1000-20-2020-347); 2) a copy of this letter; 3) a copy of your original request for information sent to the City of Vancouver; and 4) detailed reasons or grounds on which you are seeking the review.

Please do not hesitate to contact the Freedom of Information Office at <u>foi@vancouver.ca</u> if you have any questions.

Yours truly,

Cobi Falconer, FOI Case Manager, for

[Signature on file]

#### Barbara J. Van Fraassen, BA Director, Access to Information & Privacy

Barbara.vanfraassen@vancouver.ca 453 W. 12th Avenue Vancouver BC V5Y 1V4

\*If you have any questions, please email us at <u>foi@vancouver.ca</u> and we will respond to you as soon as possible. Or you can call the FOI Case Manager at 604.871.6584.

Encl.

:kt



COMMUNITY SERVICES GROUP Licences and Inspections Inspections

#### Property Use Noise Measurement Report Noise Control By-Law 6555

Primary Address				IR:	EN:	
Date of Measurement		Measured I	Measured By:			
Address of Sound Sou		Noise Zone	:   Activity  Interview	ermediate 🗆 Quiet		
Address of Recipient	_			Noise Zone	:  a Activity  a Interest  b I	ermediate 🛛 Quiet
Weather Conditions:	Sunr	ny 🗆 Cloudy	Overcast	Ground Wet	Other	
Temperature:		Wind Velocity:		Time Take	n:	
Wind Screen: 🗆 Yes	🗆 No	Windmeter:	□ Yes □	No Other/Not	e :	
Calibration/Battery Ch	ecks: ⊏	Before: Time _ Pass (114.0)	0/ 0	After :Time Pass	□ Every Hr: □ Pass	Time
Description of Instru	mentatio	on:				
	Kit #	Make	Model #	ANSI Type	Serial #	Last Certified
Sound Level Meter	-	Quest	2200	2		
Sound Level Calibrator		Quest	QC-10	N/A		
Description of Sound S	Source:	<ul> <li>Continuous</li> <li>Amplified</li> </ul>	□ Non-C □ Non-A	ontinuous 🛛 🖛	Mechanical 🛛	Construction
Description of Duty Cy	cle: (If ap	plicable)		Relevant	By-Law section(s)	
Description and Locati	on of Ba	ckground Sound	8: (Fairly Constan	t in Nature)		

Description and Location of Extraneous Sounds: (Intermittent in Nature and Not from Source Facility)\_

#### Measurement of Background Sound:

Start Time	Finish	Reading (dBA/dBC)	Type of Residual (Source Off, Walkaway, Behind Barrier, Similar Neighborhood)	Measurement Location

#### Measurement of Total Sound:

Start Time	Finish	Reading (dBA/dBC)	Duration (min)	Corrected Source Level	Measurement Location

#### Findings/Comments:

Lic & Insp - N004 (Revised March 2011)

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# COMMUNITY NOISE ENFORCEMENT



JUNE 2013

RUTGERS

THE STATE UNIVERSITY OF NEW JERSEY NOISE TECHNICAL ASSISTANCE CENTER DEPARTMENT OF ENVIRONMENTAL SCIENCES

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# **COMMUNITY NOISE ENFORCEMENT**



A manual to accompany the certification course: "Community Noise Enforcement." The certification conferred by this course is recognized in jurisdictions throughout the United States and internationally.

Editor Eric M. Zwerling, M.S., INCE, ASA Director, Rutgers Noise Technical Assistance Center

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# Vancouver June 2013

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# 3 BACHGNOUND - STRADS NOISE IN THE FENUMONIMENT

# & EXTRANSEOUS- SPING NOOF NOISE NOT NORMAL TO BACKGROUND NOISE + SHOULD BETAKEN OUT OF ULTIMATE READING.

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#### Introduction

Unregulated sources of noise can have impacts far beyond the obvious transitory nuisance, and complainants may be enduring more than simple annoyance. Exposure to loud noise has been shown to result in uncontrollable stress which can result in alterations in mood as well as hormonal and nervous system changes in healthy subjects (Brier, 1987; Babish, 2003). A lack of control over noise results in a variety of neurobiological and behavioral alterations, a phenomenon known as "learned helplessness" (Brier, 1987). It has been demonstrated that blood pressure is reproducibly elevated in response to intermittent loud noise (Sawada, 1993). The noxious stimulus of noise has been used as a laboratory model for producing stress because it results in the same biological and physiological responses as other stressors (Suter, 1992). Noise has been clearly implicated in sleep disturbance (Lukas, 1977), resulting in a cascade of negative effects (WHO, 2009). The stress, tension and fatigue associated with long-term exposure to noise has destroyed marriages, cost people their jobs and forced other people to sell their houses at significant losses (RNTAC, 1991-2013).

In 1974, the United States Environmental Protection Agency estimated that nearly 100 million Americans lived in areas where the daily average noise levels exceeded its identified safe  $L_{dn}$  (Day Night Level) of 55 dB (EPA, 1974). In 1990, that estimate had risen to 138 million people (Eldred, 1990).

In a 2003 study, 23% of the population of the Netherlands, a densely populated jurisdiction similar to the urban and suburban areas of Vancouver, described themselves as "highly disturbed by noise during sleep," as compared to five years earlier when that number was 19% (WHO, 2009).

In 2005, Canada Health conducted a nation-wide survey and asked: "over the past 12 months or so, when you are at home, are you bothered, disturbed or annoyed by noise from outside your home?" In their sample of 5,232 individuals, 23.7% responded that they were moderately, very or extremely annoyed (Michaud, 2005).

While most enforcement officers may have no jurisdiction over noise sources such as aircraft, road noise and railroads, we can still improve the quality of life for complainants who are exposed to a whole range of noise sources. It is equally as important to educate the regulated community as to what their legal responsibilities are. Once it has been demonstrated that a noise source is not in compliance with the applicable by-law, there exists significant leverage to gain compliance.

The course "Community Noise Enforcement," and this manual by the same name, have been designed to aid enforcement officers, the regulated community and noise consultants to gain a clear understanding of applicable noise ordinance, and the

requirements for their proper enforcement. They are both geared towards realworld enforcement situations, and the possible tactics that might be used to challenge the validity of an enforcement action. Attention to detail is vital.

The certification conferred by this course is required of all enforcement officers in the State of New Jersey, and is also recognized in jurisdictions across the entire United States and internationally.

We sincerely appreciate this opportunity to assist you in bringing a better quality of life to the residents of the beautiful city of Vancouver.

Eric M. Zwerling, M.S., INCE, ASA Director, Rutgers Noise Technical Assistance Center

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Breier, A., A. Margot, D. Pickar, et al. 1987. Controllable and Uncontrollable Stress in Humans: Alterations in Mood and Neuroendocrine and Psychophysiological Function. Am. J. Psychiatry 144:1419-1425.

Eldred, K. M. 1990. Noise at the Year 2000. In: Berglund, B. and Lindvall, T., eds. Noise as a Public Health Problem, Vol 5, Swedish Council for Building Research, Stockholm.

EPA, 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. EPA 550/9-74-004, U.S. EPA, Washington, D.C.

Lukas, J. 1977. Measures of Noise Level: Their Relative Accuracy in Predicting Objective and Subjective Responses to Noise During Sleep. USEPA Report No. 600/1-77-010. February 1977.

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Sawada, Yukihiro. 1993. Reproducible increases in blood pressure during intermittent noise exposure: underlying haemodynamic mechanisms specific to passive coping. Eur. J. Appl. Physiol. 67:367-374.

Suter, A. 1992. Noise Sources and Effects. Sound and Vibration. V.26. Jan., 18-38.

World Health Organization. 2009. Night Noise Guidelines for Europe. Copenhagen, Denmark.

#### ASSORTED NOISE IMPACTS

#### NOISE PRODUCES ELEVATED BLOOD PRESSURE, FASTER HEART RATES AND INCREASED NEUROENDOCRINE HORMONE LEVELS

#### NOISE HAS BEEN USED BY THE PHARMACEUTICAL INDUSTRY TO INDUCE STRESS FOR DRUG TRIALS

#### NOISE CAN CAUSE REGULAR AND PREDICTABLE STRESS ON THE HUMAN BODY

#### PERCEIVED LACK OF CONTROL - THE "LEARNED HELPLESSNESS" SYNDROME

PEOPLE DO NOT GET USED TO NOISE - THE BODY CONTINUES TO REACT

#### NOISE EFFECTS THE QUANTITY AND QUALITY OF SLEEP

WHEN SLEEP IS DISTURBED, WORK EFFICIENCY AND HEALTH MAY SUFFER

NOISE MAY AGGRAVATE EXISTING DISEASE

THE SICK AND ELDERLY ARE MORE SENSITIVE TO DISRUPTIVE NOISE

THE FETUS IS NOT FULLY PROTECTED FROM NOISE

NOISE DISRUPTS THE EDUCATIONAL PROCESS & HINDERS LANGUAGE DEVELOPMENT

NOISE CAN OBSCURE WARNING SIGNALS, CAUSING ACCIDENTS TO HAPPEN

NOISE INTERFERES WITH CONVERSATION AND SOCIAL INTERACTION

NOISE DISRUPTS THE PEACEABLE ENJOYMENT OF ONE'S PRIVATE PROPERTY

#### NOISE CAN CAUSE EXTREME EMOTIONS AND BEHAVIOR

ANTI-SOCIAL BEHAVIOR CAUSED BY NOISE MAY BE MORE PREVALENT THAN IS REALIZED

THERE ARE DOCUMENTED CASES OF NOISE-INDUCED ARSON - ASSAULT - MURDER - SUICIDE

# SOUND

Sound waves are a series of compressions and rarefactions within a medium



Propagation of a sound wave due to a vibrating body

# NOISE

Occurs when these sound waves reach a sensitized receptor



# **PROPERTIES OF SOUND**



Displacement-time graph of a sound wave

## INTENSITY

The bigger the compression, the larger the amplitude, the more the energy, the 'louder' it is.

dB- Decibel The unit of measure and reporting.

The decibel scale is logarithmic, 3 dB = a doubling of intensity. However, 10 dB = a doubling of perceived loudness (6 dB at the lowest frequencies).

SPL (dB) = 20 log 10 P Measured / P Reference

The average threshold of human perception is 20 micropascals ( $\mu$ Pa) or 0.0002 microbar -this is set as the reference number-

Therefore, O (zero) decibels is the average threshold of human hearing, not the absence of sound pressure.

0 dB threshold of hearing - - - 130,140 dB threshold of pain



Fig. 5-3. Examples of some typical sound levels, expressed in micropascals on the left side of the scale and decibels on the right. (From Bruel & Kjaer, 1984, reproduced with permission.)



Fig. 3.5 Sound pressure levels of representative sounds and noises.

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# PROPERTIES OF SOUND FREQUENCY (PITCH)

Unit of Measure Hertz (Hz) – cycles per second

Range of Human Hearing - 20 Hz to 20,000 Hz

Humans are most sensitive to 1000 Hz to 4000 Hz





The audible frequency range of various musical instruments and volces. Only the fundamental tones are included; the partials go much higher. The very low piano and organ notes are perceived largely through their partials. Not shown are the many high-frequency incidental noises produced by the instruments. C. G. Conn. Ltd., Ook Brook, Illinois.

7

From: Master Handbook of Acoustics, F. A. Everest. McGraw Hill 2001.

#### FREQUENCIES, HUMAN RESPONSE AND WEIGHTING SCALES



A, B, and C weighting response characteristics for sound level meters. (ANSI S1 .4-1971.)



Equal-loudness contours of the human ear. These contours reveal the relative lack of sensitivity of the ear to bass tones, especially at lower sound levels. Inverting these curves give the frequency response of the ear in terms of loudness level. (After Robinson and Dadson.<sup>8</sup>)

From: Master Handbook of Acoustics. F.A. Everest. McGraw-Hill. 2001.

The A-scale (dBA) is a weighting system which approximates human perception to sounds of moderate intensity. The A-scale discriminates against low frequencies. While humans are relatively insensitive to low frequency sound at low intensities, we are much more sensitive to those same low frequencies at higher intensities – when they are highly amplified.

#### Conversion of Sound Levels from Unweighted Sound Pressure (flat or Z-scale response) to A- and C-scale Weighting

Frequency (Hz)	A Weighting (dB)	C Weighting (dB)
10	-70.4	-14.3
12.5	-63.4	-11.2
16*	-56.7	-8.5
20	-50.5	-6.2
25	-44.7	-4,4
31.5	-39.4	-3.0
40	-34.6	-2.0
50	-30.2	-1.3
63	-26.2	-0.8
80	-22.5	-0.5
100	-19.1	-0.3
125	-16.1	-0.2
160	-13.4	-0.1
200	-10.9	0
250	-8.6	0
315	-6.6	0
400	-4.8	0
500	-3.2	0
630	-1.9	0
800	-0.8	0
1,000	0	0
1,250	+ 0.6	0
1,600	+ 1.0	-0.1
2,000	+ 1.2	-0.2
2,500	+ 1.3	-0.3
3,150	+ 1.2	-0.5
4,000	+ 1.0	-0.8
5,000	+ 0.5	-1.3
6,300	-0.1	-2.0
8,000	-1.1	-3.0
10,000	-2.5	-4.4
12,500	-4.3	-6.3
16,000	-6.6	-8.5
20,000	-9.3	-11.2

#### 1/3 and 1/1 Octave Bands

\*Note: Center frequencies of 1/1 octave bands appear in bold.

After: The Science and Applications of Acoustics. Daniel R Raichel. Springer. 2000.

## METER AND WEATHER REQUIREMENTS

#### A. General Instrumentation Requirements:

#### 1. Sound Level Meter

Must meet the specifications of ANSI S1.4-1983 or its successor
 Type II (General Purpose) or Type I (Precision)

#### 2. Sound Level Calibrator

- Must meet the recommendation of the sound level meter manufacturer

#### 3. Windscreen

- Must meet the recommendation of the sound level meter manufacturer
- May be spherical or cylindrical
- Made of foamed polyvinyl, open-celled polyurethane or silk covered grid
- Should not distort microphone frequency response by more than:
  - +/- 1.0 dBA Frequency: 20-4,000 Hz
  - +/- 1.5 dBA Frequency: 4,000-10,000 Hz

#### 4. Wind Speed Indicator

- Pressure tube or rotating vane anemometer
- Manufacturer must provide accuracy rating in MPH or percent
- There are relatively inexpensive handheld weather meters available (ex. "Kestrel 3000 Wind Meter," [no endorsement implied]) which can quickly determine wind speed, temperature and relative humidity in the field.

#### B. Weather Conditions:

#### 1. Wind

- Always use windscreen. A sound level meter can misread wind pressure as sound pressure and introduce significant error. A windscreen can also provide some protection to the microphone from dust and accidental impacts.
- Windspeed must be measured at the time and place of sound level measurements.
- Do not take sound level measurements when the windspeed exceeds the manufacturer's recommendations for the meter and the specific windscreen employed. Generally, the limit is 12 MPH. Some manufacturers offer windscreens that can be used up to 25 MPH.

#### 2. Temperature

- At high temperatures the sensitivity of the meter can be permanently altered.
- Low temperatures affect batteries and other electrical components
- The meter should be calibrated when its internal temperature is close to the ambient temperature at which it will be used.
- The ANSI standard states that measurements may not be taken when the ambient temperature is below 14°F or above 122°F.

#### 3. Humidity

- Most sound level meters can be operated up to 90-95% relative humidity.
- Condensation can cause arcing which results in false readings. The error is not subtle, and will be obvious.

#### 4. Precipitation

- Measurements should not be taken under any condition which allows the meter to become wet, such as rain, snow or condensation, unless specifically equipped to do so.
- Even if your jurisdiction's code does not prohibit measurements during precipitation, do not use the meter beyond the parameters recommended by the manufacturer (fog, rain, snow). If these parameters are met, readings may be taken while protecting the meter and the microphone. All readings must be taken in a similar manner.
- Instruments are not waterproof. Waterproof housings are available for some units from the manufacturer for the meter and the microphone.
- The ambient sound levels are significantly higher when it's raining down on horizontal sheet metal surfaces such as automobiles and air conditioners.
- Wet pavement can cause higher sound level readings (tires, etc.).

#### 5. Electromagnetic Fields

- Do not take readings immediately next to electrical transformers, radio or television transmission towers, or power lines, unless the manufacturer states that the meter is properly shielded. These may contribute to internal electrical noise of the sound level meter.

## KNOW <u>YOUR</u> METER. READ YOUR MANUAL.

#### ALWAYS ASSUME THAT COUNSEL FOR THE DEFENSE HAS.

#### 1. Is a warm-up period required for the meter and the calibrator?

Older meters may require a warm-up period of up to 30 seconds.
Newer meters usually require at most a five second warm-up.

#### 2. What scale must you employ for calibration?

- Newer meters generally specify calibration on the A-scale.

# 3. At what angle should you hold the microphone with relationship to the sound source?

- The angle is specific to the microphone, and some meters can be supplied with a range of microphones.

#### 4. What is the stated accuracy of your meter?

- ANSI S1.4-1983 specifies that a Type 1 meter should have an accuracy of +/- 1 dB or better, and a Type II meter should have an accuracy of +/-2 dB or better.

- Newer meters often exceed ANSI standards.

Know that in court it may be assumed that the meter is reading high, at the maximum
of the accuracy range. Take this into consideration when determining whether to
proceed to prosecution.

#### 5. Octave Band Analysis

Does your meter automatically reset to "linear, "flat," or "Z-scale" when you engage the octave filter? Some do not, and if you do not manually select unweighted measurements, you may be taking A-weighted octave band sound pressure level measurements. These measurements can not then be used for enforcement purposes, without correction.
Conversely, if necessary, make sure to reset your meter for A-weighting when returning to broadband measurements. Otherwise, you will be taking unweighted broadband measurements which will be unusable for enforcement purposes.

# LEQ-AVERAGE LEVEL

## CALCULATING SOURCE SOUND LEVELS

#### How do you subtract out the ambient (background) sound?

#### Table 1

#### Correction for Background Noise Levels in Decibels

Difference Between Total Sound Level and Background Noise Level (in dB)	Correction Factor to Be Subtracted From Total Level to Calculate Source Level
0-2	Source < Background, therefor unenforceable
3	3 (but source would equal NR)
4,5	2
6-9	1
10 or more	0

#### Adapted from:

Handbook of Environmental Acoustics. James P. Cowan, 1994. Van Nostrand Reinhold, New York. ISBN 0-442-01644-1





# CALIBRATE ONCE HR.

# CALCULATING SOURCE SOUND LEVELS

#### Total Sound Level - Background Sound Level = Corrected Source Sound Level

#### City of Vancouver

When you're in the field, you take two types of measurements: *background* and *total*. From these measurements you have to *calculate* the source sound level. The potential violation is based solely on the level of noise being emitted from a specific activity; you can't fine someone because they 're operating in a noisy neighborhood. Yet, you can't directly measure the sound level from the activity in question. That's why you have to subtract the background from the total to determine the source sound level.

Here's how it's done:

- 1. Subtract the background level from the total noise level. (total background = "X").
- 2. Using Table I on the previous page, find "X" in the left hand column.
- 3. Match "X" to a number in the right hand column.
- 4. Subtract the number in the right hand column from the total noise level.
- The number you now have is called the CORRECTED (SOURCE) LEVEL, and this is the number that you record on the Noise Report Form.

#### Example A

- 1. You have a total noise level of 69 dBA, and a background level of 63 dBA.
- 69 dBA 63 dBA = 6 dB. This is "X", the number you look for in Table I, left column.
- 3. 6 dB in the left column gives you 1 dB in the right column.
- Subtract 1.0 dB from the TOTAL SOUND LEVEL to get the CORRECTED SOURCE SOUND LEVEL.

69 dBA - 1 dB = 68 dBA \*\*the CORRECTED SOURCE LEVEL \*\*

#### Example B

1. After measuring the background sound level decide which sample set you want to use as your background. Usually, a source-off measurement is used if possible.

Example:	56 dBA Leq		
	55 dBA 57 dBA	CHOOSE THIS ONE	(THE HIGHER BACKGROUND)
			WO AND EXTRANSION

(Continued)

14

LEVEL

# + AFTER REMOINES, THEN THAT READING

IS NOT TOBE TAKEN

#### CALCULATING SOURCE SOUND LEVELS

(Continued)

Now, remember - you must use the higher number in a background set, so the number that you'll use for all further calculations is 57 dBA

BACKGROUND = 57 dBA

- You will have a series of total sound measurements taken while the sound source is on, at the "point of reception," or some other location dictated by the code.. Let's say one reading period gives you a total level of 64 dBA.
- 3. To determine the corrected source level, perform the subtraction: 64 dBA 57 dBA = 7 dB. Look at Table I, and you'll see that 7 dBA in the left column gives you 1 dBA in the right column.

<u>64 dBA - 1 dBA = 63 dBA THIS IS THE CORRECTED SOURCE LEVEL</u> This is what is reported on the Noise Measurement Report, and compared to the permissible limits.

Example C:

Background 62 dBA

63

CALCULATION	CORRECTED SOURCE SOUND LEVEL (dBA)	,
69-64 = 5	69 - 2 = 67	
71-64 = 7	71 - 1 = 70	
77-64 = 13	77	
67-64 = 3	(Unenforceable)	
	<b>CALCULATION</b> 69-64 = 5 71-64 = 7 77-64 = 13 67-64 = 3	CALCULATIONCORRECTED SOURCE SOUND LEVEL (dBA) $69-64 = 5$ $69 - 2 = 67$ $71-64 = 7$ $71 - 1 = 70$ $77-64 = 13$ $77$ $67-64 = 3$ $$ (Unenforceable)

#### **IMPORTANT NOTES:**

- If "X" is 10 dB or greater, THEN NO CORRECTION IS NECESSARY. TOTAL = SOURCE.
- 2) If "X" is less than 3 dB, it means that the source sound level is at or below the background level. Many jurisdictions simply write "U.E." (unenforceable), or "--", or simply leave it blank.
- Do not include your calculations to find "X" on your report form.
   Do include any calculations, if necessary, for arriving at the corrected source.

#### SEE SAMPLE REPORT FORMS

### BACKGROUND NOISE<sup>1</sup> LEVELS Vancouver

There are two critical reasons you need to accurately determine the Background Noise Levels (BNL).

- You must determine the Source Sound Level of the source under investigation and almost every sound source you will investigate occurs within a complex acoustical environment. The Source Sound Level can only be calculated when the Background Noise Level is known.
- When investigating extended hours liquor establishments (6555.11E) the Permissible Noise Limit (PNL) is set relative to the BNL; accurate quantification of the BNL is critical.

Your goal is to isolate and quantify the sound levels of the sound source, alone. In order to accomplish that, you must accurately assess and measure the BNL, which is the sound level of all the sound sources that are relatively constant when observed from the location at which you conduct the compliance measurements (whether that is at the property line of a bar or at the property line of a complainant). The BNL excludes sound from the source under investigation, as well as extraneous sounds which are relatively intense and of short duration (such as airplanes, unmuffled vehicles, etc.).

While taking your measurements, you have to note which sounds constitute the BNL, and which are to be classified as extraneous. Remember, the only BNL sounds that matter are those impacting on the precise location at which you are measuring the source sound level (Total Sound Levels). It doesn't matter whether there's an active cement plant three blocks over if you can't hear it on the complainant's property.

# BACKGROUND NOISE MEASUREMENT METHODS

SOURCE OFF measurements are obviously the truest measure of the BNL. The approach is simple: you take a measurement of the sound levels when the sound source under investigation is

Factory				
	Road			
		A	01:45 - 02	:00 Total Sound

not operating, at the same location at which the Total Sound Level measurements were conducted.

Source-off (SO) measurements are always preferable to any other method. Many strategies can be employed to collect such data:

<sup>&</sup>lt;sup>1</sup> As a simple matter of semantics, there is a difference between sound and noise, the latter term generally refers to that which is unwanted, excess or legally violative. While the terms sound and noise may be used interchangeably in the By-law and this text, the distinction should be noted. The By-law defines and refers to "background noise".

- Very simply, ask the source to terminate operations for a few minutes.
- If you know the hours of operation of the source, schedule the measurements so that you can take SO measurements prior to operations or after they terminate for the day (see illustration, previous page).
- If you can discern a duty cycle for the equipment, then take BNL measurements during a low- or off-cycle period. Air compressors turn off after re-pressurizing the tank. HVAC and refrigeration equipment is often controlled by a thermostat. Once demand is satisfied, the unit throttles down or off, affording an opportunity to measure BNL. Some equipment is completely demand operated, such as a garage door opener. If possible, position yourself where you can observe the location from where the demand will arise (in this case, a view of the driveway), and be prepared to conduct your BNL and TSL measurements based upon your observations.
- If the duty cycle of a device is demand driven, it may be weather dependent, and thus more predictable. Any device that provides chilling or cooling may be forced to operate non-stop when the temperature and humidity are high, precluding the collection of SO data. Conversely, if the temperature and humidity are lower, the unit may occasionally cycle off providing an opportunity to collect SO data. If the investigation can wait, scheduling it based upon weather reports may well increase the possibility of SO measurements.
- A useful strategy is to ask the complainant to keep a log of their observations of the sound source and its emissions. Explain that the log will aid you, increasing the possibility of a fruitful investigation and that you need an opportunity to measure the source when it is operating at full load, and also the ambient levels when it is off. If the source is only intermittent in its operation, their records will increase the possibility that you will be there to measure it. Conversely, if the source tends to run relatively constantly, their log may allow you to predict a time when you will be able to collect SO measurements. Their records should include: their subjective evaluation of the relative sound level; day of the week; time of the day; weather conditions; and, any other conditions that they think may be relevant. These records may also assist in establishing a pattern for the purposes of prosecution. As an additional benefit, it is comforting for some complaints to participate in resolving their problem; it gives them some perceived (if not real) control over the matter.
- Sources which emit fluctuating sound levels, such as music, will usually offer short periods of time when the sound levels drop considerably. This may occur: between sets; when a song is winding down; or, a relatively quiet vocal passage in an otherwise loud instrumental piece. Remain aware and vigilant for such an opportunity and jump on it when it presents itself.
- Source sound levels may increase significantly when a door is opened regularly, or a
  thermostatically-controlled fan opens louvers. You may find this at facilities such as a
  distribution center, bar, workshop, or garage. Even if the sound source inside is audible
  or loud when the building is closed, the sound levels may increase to a level that is in
  violation when the door opens.

Note: these procedures are the interpretation of the Rutgers Noise Technical Assistance Center, and are not legally binding in any way wbotyeet/Vancouver - FOI 2020-347 - Page 21 of 80 WALK AWAY measurements work if the sound source under investigation is a point source (a bar, factory, etc.), and the primary source of ambient sound is not another point source. You simply walk along the sidewalk, away from the source under investigation, remaining equidistant to the primary source of ambient sound. Walk until the sound level drops by 10 dB or more, and you can be certain that all of the Total Sound Level is due to the emissions of the source under investigation. If you walk towards a new sound source, that was not present at the location of the Total Sound Measurements, then these measurements should not be used. In the case below, the level of the source (Corrected Source Sound Level) is 74 dBA.

Bar



The choice of location of measurements (both Total and Background) should have some relation to the direction from which the complaints are being lodged.

- If you are investigating an extended hours liquor establishment, the measurements are conducted "at least three metres from any exterior wall of the building" (6555.11E).
- If you are investigating the "operation of power equipment" or "beach screening equipment" the measurements are conducted "at the greater of 50 feet (15.2 metres) or a point of reception" (6555.14)
- If you are investigating the "noise emanating from a source on a street" the measurements are conducted "at the point of reception or at least 6.1 metres from the source... whichever is greater" (6555.9).

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**BEHIND BARRIER** measurements work when the barrier blocks your line of sight to the source under investigation, but not to the primary source of neighborhood residual sound.



**SIMILAR NEIGHBORHOOD** measurements may be taken if all other methods are unsuccessful. You must make sure that you remain equidistant from the primary source of neighborhood residual sound (such as two blocks from a major road), and in an area where the makeup of the buildings is the same as in the location at the complainant's property.



What if the ambient consists of a road and another source such as a carwash, large airhandling unit or another bar in the distance? A defendant will say, "it's not me, it's them". You have to make sure you measure "them" and subtract "them" out. First, you try to get a source-off measurement, if at all possible (at Location "A" below, where you measured the source under investigation, also), maybe between duty cycles. You can do this when the refrigeration unit cycles on and off or between songs. If that's not working, then you simply go the same distance beyond that second source of ambient ("them"), on the other side, as you were at Location "A". In the illustration below, you can see that both Locations A and B are the same distance from the road and the same distance from "them". If the sound levels at Location "A" are more than 10 dBA above those at Location "B", it's certain that all the sound is from the source under investigation and not from the road or "them", because they have been measured and accounted for.



#### INDOORS

A strict interpretation of the Noise By-law would indicate that investigations may be conducted within the residence of a complainant, when they share a common wall, floor or ceiling with the noise source. This is based upon the By-law's definitions of "point of reception" and "premises". This, however, is just our interpretation. IF indoor measurements are conducted for enforcement purposes in Vancouver, then BNL measurements must be conducted:

Source-off measurements are always preferable to any other method.

Note: these procedures are the interpretation of the Rutgers Noise Technical Assistance Center, and are not legally binding in any way work of Vancouver - FOI 2020-347 - Page 23 of 80

- The sound from the source under investigation should have as little influence as possible on measurements of BNL. That does not mean, however, that the source under investigation must be completely inaudible.
- The measurement of BNL must include all ambient sounds that were present when the
  measurements of Total Sound were conducted. For example, if the measurements of Total
  Sound included traffic outside or air handling inside, then the measurements of BNL must
  contain these, as well. Thus, you can't use BNL measurements taken in a sheltered interior
  hallway if Total Sound measurements were taken in a bedroom whose single-pane windows
  overlook a busy street, filling the room with traffic noise.
- If a SO measurement is not possible, carefully consider what alternative location will yield acoustical conditions that are substantially the same as those at the location at which you measure the Total Sound Levels.

If forced to choose between two poor choices – BNL measurements in a location which is too sheltered, or, BNL measurements in a location which is somewhat contaminated with sound from the source – choose the latter. You must err to the benefit of the potential violator. A higher BNL is to their benefit. That said, don't 'give away the store'.

#### REMEMBER

Accurate measurement of the Background Noise Level is absolutely critical In determining the sound levels emanating from the sound source under investigation, and in some cases sets the Permissible Sound Level Limit.

#### PROCEDURE FOR THE COMPLETION OF A NOISE MEASUREMENT REPORT

### City of Vancouver

NOTE: The procedures outlined within this section should all be performed during an investigation, but they do not necessarily have to be performed in any given order. It is important for you to know what data must be collected for a valid investigation, and then gather that data in the order in which it presents itself during the flow of the investigation.

- Survey the site on foot to confirm that the suspected source is the actual source (a walk-around), and to determine the best locations from which to measure neighborhood residual and background sound levels. If the suspected source is proven to be the source, draw a map of the site on the back of the report form, including the path of the walk-around, the source and the exact points of measurement.
- 2. Record the name and address of the property from which the sound is being emitted, including street number if possible. If the source is not a fixed property, attempt to describe it with identifying characteristics, such as license plate number, and vehicle make and model.
- 3. Fill in day and date of measurement
- 4. Fill in your name and agency
- List the name and title of any responsible party who has been notified of the investigation. Attempt to notify a representative of the management of the facility.
- 6. Determine and record the property zone of both the sound source and the receptor. These zones include: Activity, Intermediate and Quiet. Keep a mental note of the permissible sound level limit that applies in your investigation.
- 7. Describe the noise sources under investigation, including the location of the noise source, the operation of the facility or noise source, and if this measurement represents the normal operation of the noise source. Note whether the sound emissions are continuous or non-continuous, and whether they arise from an amplified source or not. If amplified, is the source commercial or non-commercial? Is the source an extended hours liquor establishement? Do the source and the receptor share a common wall? All of these factors influence the permissible limits (see code).
- Describe any background (ambient) sounds which are fairly constant, including their location. Once you have categorized a specific sound as being background you must be careful to include it in all of your measurements (see #13).
- Describe any extraneous sound which are intermittent, intense and of short duration. These sounds are noted but are specifically excluded or ignored when taking either total or background sound level measurements.
- Provide a description of the sound level measurement equipment being used including manufacturer, model number, serial number, and the date of last calibration.

[NOTE: these procedures are the interpretation of the Rutgers Noise Technical Assistance Center, and are not legally binding in any way whatsoever.]

- 11. Conduct and report the times of field calibration and battery checks, which must be before, after and at least as often as required by the jurisdiction's code. In general, it is best to calibrate every hour. Such *field calibration checks are absolutely required for a valid noise measurement form*.
- Report whether there was precipitation or if the ground is wet. Measure and report wind velocity, with the time.

Measure and report background sound levels. The background sound levels may be measured by one of the following methods:

- · Source off the preferred method
- · Walk away

13.

14.

- Behind barrier
- Similar neighborhood

Background sound level is measured as follows:

Background sound level measurements shall be conducted while the source under investigation is not operating, at the same location at which source sound level measurements are made. If this is not possible, background sound level measurements may be taken at an alternative location which should be as close as feasible to the location where the source sound levels are measured, but so located that the sound from the source has as little effect on the background sound level measurements as possible. The primary source of background sound must be equidistant to the location of the source sound level measurements and any alternate location for background sound level measurements. Any background sound level measurements must be made prior to or following any set of source sound level measurements.

- Determine whether the investigation is to be conducted on the A-scale or the C-scale (the C-scale can be used to investigate commercial premises with amplified and unamplified music, and extended hours liquor establishements.
- · Set the meter weighting for the proper scale, A- or C-.
- · Take a sound level measurement using one of the above methods.
- Note which background measurement method was used.
- Record the reading for the measurement (ex. 51.7 dBA Leq).
- Note the location of the measurement and any relevant comments.
- · Record finish time.
- Determine which background measurement is to be used for the purposes of correction based on the following criteria:
  - Source off is always to be used, if it is available. Use the highest source off, being careful to exclude measurements that may include extraneous sounds.
  - All other background measurement methods are equivalent, and the highest is used, again, excluding any that may contain extraneous sounds.
- Circle the background level used for correction purposes on the form.

Measure and report the Total Noise levels.

- Determine whether the investigation is to be conducted on the A-scale or the C-scale (the C-scale can be used to investigate commercial premises with amplified and unamplified music, and extended hours liquor establishements.
- · Set the meter weighting for the proper scale, A- or C-,
- · Record starting time.

[NOTE: these procedures are the interpretation of the Rutgers Noise Technical Assistance Center, and are not legally binding in any way whatsoever.]

- Make certain that you are measuring sound levels that represent the normal and usual operations of the source under investigation. Do not include accidental impacts or the like. Be fair.
- Take several sound level measurements at the location that is appropriate for your specific investigation:

• In General - "at a point of recepton," defined as:

- (a) a point in a lane or street, adjacent to but outside of the property occupied by the recipient of the noise or sound, that represents the shortest distance between that property and the source of noise; or
- (b) where no lane, street, or other public property exists between the recipient and the source, any point outside the property line of the real proeprty from which the noise or sound emanates...
- Sindoor Measurements may be taken when a commercial source and receptor share a common party-wall.
- After Hours Liquor Establishments may be measured at 3 meters from the outside wall of the facility.
- Record the specific location of the measurement (on the site map) and any relevant comments (on the form).
- Record the sound level for the measurement (ex. 71 dBC), and the specific times of the reading.
- Record finish time, and the duration of the measurement. Make sure the total duration of your measurements are sufficient to determine compliance with the specific provision of the code (e.g., 3 minutes above the limit within any 15 minute period, if you are measuring the sound as continuous sound).
- At each location, subtract (using the decibel subtraction technique) the maximum background level from the total noise level to obtain the corrected (source) level in dBA or dBC, as dictated by the provision you are enforcing.
  - You may only 'correct' A-scale total measurements with A-scale background measurements, and you may only 'correct' C-scale total measurements with C-scale background measurements
- This calculated number is the source sound level and should be compared to the permissible limits in the ordinance being enforced, to determine if a violation exists.
- 15. Report your findings, specifically noting whether there was a violation of the code, and what provision was violated. Note whether the permissible limit was adjusted due to some characteristic of the sound such as duration.
- 16. Sign form
- 17. Submit form for review and approval (if necessary), and enforcement action if appropriate.

#### The better prepared you are to go to court, the less likely it is to happen. A well executed and documented investigation can prove very intimidating.

[NOTE: these procedures are the interpretation of the Rutgers Noise Technical Assistance Center, and are not legally binding in any way whatsoever.]



COMMUNITY SERVICES GROUP Licences and Inspections Inspections Property Use Noise Measurement Report Noise Control By-Law 6555

Date of Measurement	Primary Address			IR:	EN:	
Address of Sound Source       Noise Zone:       Activity       Intermediate       C         Address of Recipient       Noise Zone:       Activity       Intermediate       C         Weather Conditions:       Sunny       Cloudy       Overcast       Ground Wet       Other       C         Temperature:       Wind Velocity:       Time Taken:	Date of Measurement			Measured	Ву:	
Address of Recipient       Noise Zone:       Activity       Intermediate       C         Weather Conditions:       Sunny       Cloudy       Overcast       Ground Wet       Other         Temperature:       Wind Velocity:       Time Taken:	Address of Sound Source_			Noise Zone	e:   Activity  Inte	ermediate 🗆 Quie
Weather Conditions:       Sunny       Cloudy       Overcast       Ground Wet       Other         Temperature:       Wind Velocity:        Time Taken:	Address of Recipient			Noise Zone	e: □ Activity □ Inte	ermediate 🗆 Quiet
Temperature:       Wind Velocity:       Time Taken:         Wind Screen:       Yes       No       Other/Note :         Calibration/Battery Checks :       Before: Time       After :Time       Every Hr:Time         Pass (114.0)       Pass       Pass         Description of Instrumentation:       Pass       Pass         Sound Level Meter       Ouest       2200       2         Sound Level Calibrator       Ouest       QC-10       N/A         Description of Sound Source:       Continuous       Non-Continuous       Mechanical       Construction         Description of Duty Cycle: (If applicable)       Relevant By-Law section(s)	Weather Conditions:	Sunny 🗆 Cloudy	Overcast	□ Ground Wet	C Other	
Wind Screen:       Yes       No       Other/Note :	Temperature:	Wind Velocity:		Time Take	n:	
Calibration/Battery Checks :       Before: Time       Image: After : Time       Image: Every Hr: Time         Image: Pass (114.0)       Image: Pass       Image: Pass       Image: Pass         Description of Instrumentation:       Image: Pass       Image: Pass       Image: Pass         Sound Level Meter       Image: Quest       Image: QC-10       N/A       Image: Last Certifier         Sound Level Calibrator       Image: Quest       Image: QC-10       N/A       Image: Construction         Description of Sound Source:       Image: Continuous       Image: Non-Continuous       Image: Mechanical       Image: Construction         Description of Duty Cycle:       Image: Amplified       Image: Non-Amplified       Image: Other       Image: Construction	Wind Screen:  Ves  N	o Windmeter:	⊡ Yes □	No Other/Not	e :	
Pass (114.0)       Pass       Pass         Description of Instrumentation:	Calibration/Battery Checks	: 🗆 Before: Time		After : Time	Every Hr:T	ime
Description of Instrumentation:         Kit #       Make       Model #       ANSI Type       Serial #       Last Certifier         Sound Level Meter       Quest       2200       2		Pass (114.0)		Pass	□ Pass	
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Sound Level Calibrator       Quest       QC-10       N/A         Description of Sound Source:       □ Continuous       □ Non-Continuous       □ Mechanical       □ Construction         □ Amplified       □ Non-Amplified       □ Other         Description of Duty Cycle: (If applicable)	Sound Level Meter	Quest	2200	2		
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#### Measurement of Background Sound:

Start Time	Finish	Reading (dBA/dBC)	Type of Residual (Source Off, Walkaway, Behind Barrier, Similar Neighborhood)	Measurement Location	

#### Measurement of Total Sound:

Start Time	Finish	Reading (dBA/dBC)	Duration (min)	Corrected Source Level	Measurement Location	
	-					
	_		-			

24

#### Findings/Comments:

Lic & Insp - N004 (Revised March 2011)

City of Vancouver - FOI 2020-347 - Page 28 of 80



COMMUNITY SERVICES Licences and Inspections Inspections - Property Use

#### PLEASE REFER TO:

< >
District Property Use Inspector
Property Use Branch
at 604.87< >
I.R. No. < >/EN< >

May 21, 2013

< 20

Dear < =>:

RE: < 6 >

On < >, daytime sound meter readings of < > to < > (decibels) were taken of the < > located < >. These readings exceed the allowable decibel levels stated in the City of Vancouver's Noise Control By-law No. 6555, Section 5(a).

The by-law requires that noise from equipment such as a <>> must not exceed a daytime reading of 55 dbA and a night time reading of 45 dbA. The day time hours are defined as 7:00a.m. to 10:00p.m. on weekdays or Saturdays and 10:00a.m. to 10:00p.m. on Sundays or holidays; and night time hours mean anytime not included within the definition of daytime.

Therefore, to avoid further action, you are to immediately take steps to ensure the mechanical equipment complies with Vancouver Noise Control By-law Section 5(a) and 5(b).

The District Property Use Inspector will take another sound meter reading within 14 days of the date of this letter.

Yours truly,

Sistrict Property Use Inspector

< Author's initials>/< Typist's initials>

CC:



COMMUNITY SERVICES Licences and Inspections Inspections - Property Use

#### **REGISTERED AND REGULAR MAIL**

PLEASE REFER TO: Mrs. C. Robbins Manager, Property Use Branch at 604.873.7563 I.R. No. /EN

May 21, 2013

000

Dear - >:

RE: <60>

This is further to our letter dated <----.

Noise Control By-law No. 6555 states that continuous sound in a <u>sound</u> zone from equipment, such as <u>sound</u>, must not exceed a night time reading of 45 dbA (decibels). The day time hours are defined as 7:00a.m. to 10:00p.m. on weekdays or Saturdays and 10:00a.m. to 10:00p.m. on Sundays or holidays; and night time hours mean anytime not included within the definition of daytime.

However, on  $\langle \cdot \cdot \rangle$  the District Property Use Inspector attended the property and night time sound meter readings of  $\langle \cdot \cdot \rangle$  (decibels) were taken of the  $\langle \cdot \cdot \rangle$  of your house. These readings are still in violation of the Noise Control By-law No. 6555, Section 5(b).

Pursuant, to Vancouver Noise Control By-law No. 6555, you are ORDERED TO take the necessary steps to reduce the continuous sound level emitting from your property so that it is in compliance with the by-law, by <100 >.

If a re-inspection reveals that the violation is still not rectified, this matter will be referred to the City Prosecutor for the laying of charges.

Yours truly,

W.M. Johnston, P. Eng. Director, Licences and Inspections

<= Author's initials>/<= Typist's initials>

VANCOL	JVER	COMMUNITY Licences and Inspections	SERVICES GROU d Inspections	IP		Pr Noise Me <sub>Noise</sub> C	ope asur Contro	rty Use rement Report 11 By-Law 6555
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Address of Sound So	ource_214	IS FRAS	IER ST	Nois	e Zone:	X Activity	Inter	mediate 🗉 Quiet
Address of Recipient	2151	FRASLE	R ST	Nois	e Zone:	C Activity	(Inter	mediate 🗆 Quiet
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CARWASH WITH MANY SOUND SOURCES: BLOWERS, WATER JETS COIN UPERATED VACUUMS SOME PATRONS PLAY CAR STERED WHILE VACUUMING/ DETAILING.

VIOLATIONS: CONTINUOUS NOISE (SMIM) EXCEEDS TO LBA (6555.6(2))

LIC & Insp - NODA (Revised March 2011) NON - CONTINUOUS NO135 Exceedings of Vancouver AF 612020-347 - Dage 31 of 80 AAL



VANCOL	JVER	COMMUNITY Licences and Inspections	SERVICES GROUP d Inspections		Pr Noise Me <sub>Noise C</sub>	operty l asureme Control By-L	Jse ent Report .aw 6555
Primary Address	956	BEACH	TVE	IR: _// 5	557	EN: 30	9774
Date of Measurement	3	I FEB 2	014	Measured B	BY. PETER	PARKET	e, DPUI
Address of Sound So	urce 95	BBEACH	LOUNGE	Noise Zone	. ⊑ Activity ⊑	Intermedia	ate 🕵 Quiet
Address of Recipient	956	BEACH 1	AVE SUITE 204	Noise Zone	: ⊂ Activity ⊏	Intermedia	ate X Quiet
Weather Conditions:	C Sunny	X Cloudy	□ Overcast □	Ground Wet	Other		entin ann ann a cleadar a' cleara a'
Temperature: 14°	<u> </u>	Wind Velocity:	<2KPH		n: 01:34		
Wind Screen: x Yes	I No	Windmeter:	X Yes 🗆 No	Other/Note	e,		
Description of Instru	mentation	: 1ake	Model #	ANSI Type	Serial #	La	st Certified
		and a	0000	11	1 01221	0	alalia
Sound Level Meter	Q	uest	2200	2	1 001634	>/	7/ 1/18
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RESIDENCE EXCEEDS LIMIT OF STORE (6555 SECT. 11 A). MEASURED OUTDOURS.

AFTER HOURS AT 3 METERS FROM LOUNGE, EXCEEDS 75 dBC LIMIT (6555 11 D(A)) City of Vanobuver SFOY 2020-847 - Page 8840 80

Lic & Insp · N004 (Revised March 2011)

29

AAL

31 FEB 2014 VANIERVIEW LOUNGE NICOLA ST 5444 MONE SENSITIVE TO Low FREQUENCY C. - for Amplifico music maste 6/9510 BEACH SUNSET BEACH Beyer SSL PATH OF WALKAROUND (B) D GROUND CEVED Frank BROOGHTON ST 0 30 City of Vancouver - FOI 2020-347 - Page 34 of 80



COMMUNITY SERVICES Licences and Inspections Inspections - Property Use

PLEASE REFER TO: Peter Parker District Property Use Inspector Property Use Branch at 604.877.2313 I.R. No. 11557/EN 309777

5 March 2014

William Shatner, Owner Vanierview Lounge 958 Beach Avenue Vancouver, BC

Dear Mr. Shatner:

RE: Violations of Noise Control By-law

On 31 February 2014, sound meter readings were taken of the Vanierview Lounge, both within a residence in the same building above the lounge (pursuant to the City of Vancouver's Noise Control By-law No. 6555, Section 11A), and outside (pursuant to Section 11D(b). The indoor readings were 57-64 dB(C) (decibels), while those outside your facility were 79-82 dB(C). These readings exceed the allowable decibel levels stated in the by-law.

The by-law, at Section 11A, requires that noise from music amplification equipment within a commercial premises such as the Vanirview Lounge must not exceed 55 dB(C) when measured in a residence that is in the same building as the commercial premises.

The by-law, at Section 11D(b), requires that noise from music amplification equipment within an extended hours liquor establishment (located within the area outlined in Schedule 7 - Map 3 of the by-law) must not exceed 75 dB(C) when measured at a distance of 3 meters from the exterior wall of that establishment.

Therefore, to avoid further action, you are to immediately take steps to ensure the sound amplification equipment complies with Vancouver Noise Control By-law Section 11A and 11D(b).

Notes: 1) -This sample Notice is as interpreted by the Rutgers Noise Technical Assistance Center, 2) -This is obviously completely fictitious - not only does this bar not exist, but Spiderman is enforcing the Noise by-law on Captain Kirk.

> City Hall 453 West 12th Avenue Vancouver BC V5Y 1V4 vancouver.ca City of Vancouver - FOI 2020-347 - Page 35 of 80

The District Property Use Inspector will take another sound meter reading within 14 days of the date of this letter.

Yours truly,

Peter Parker District Property Use Inspector

PP/PP cc;



COMMUNITY SERVICES Licences and Inspections Inspections - Property Use

#### **REGISTERED AND REGULAR MAIL**

PLEASE REFER TO: Mrs. C. Robbins Manager, Property Use Branch at 604.873.7563 I.R. No. 11557/EN 309777

21 March 2014

William Shatner, Owner Vanierview Lounge 958 Beach Avenue Vancouver, BC

Dear Mr. Shatner:

RE: Violations of Noise Control By-law

This is further to our letter dated 5 March 2014

Noise Control By-law No. 6555 at Section 11A, requires that noise from music amplification equipment within a commercial premises such as the Vanirview Lounge must not exceed 55 dB(C) when measured in a residence that is in the same building as the commercial premises.

The by-law, at Section 11D(b), requires that noise from music amplification equipment within an extended hours liquor establishment (located within the area outlined in Schedule 7 - Map 3 of the by-law) must not exceed 75 dB(C) when measured at a distance of 3 meters from the exterior wall of that establishment.

On 17 March 2014, the District Property Use Inspector conducted a follow-on investigation to the investigation conducted on 31 February 2014, which was documented in our letter dated 5 March. Upon reinvestigation, sound meter readings were taken of the Vanierview Lounge, both within a residence in the same building above the lounge (pursuant to Section 11A), and outside (pursuant to Section 11D(b). The indoor readings were again 57-64 dB(C) (decibels), while those outside your facility were 79-82 dB(C). These readings exceed the allowable decibel levels stated in the by-law.

Pursuant, to Vancouver Noise Control By-law No. 6555, you are **ORDERED** TO take the necessary steps to reduce the continuous sound level emitting from your property so that it is in compliance with the by-law, by 25 March 2014.

If a re-inspection reveals that the violation is still not rectified, this matter will be referred to the City Prosecutor for the laying of charges.

Yours truly,

W.M. Johnston, P. Eng. Director, Licences and Inspections

WLW/LWW

cc: Posted on Building

## City of Vancouver Noise Measurement Report

Name/Address	of Sound Source:	
STANLEY	PARKER'S	

16 COAL HARBOUR QUAY

Date of Measurement  $\frac{7/26/08}{26/08}$  Day of Week SAT. Investigating Agent, Agency:  $\frac{5024}{METERMAN}$ , DPU Name and Title of Responsible Party if Advised of Complaint MR, LOUDEN OBNOXUS, MANAGER

VANCOUVER

Source Property Zone (Activity, Intermediate, Quiet) <u>INTERMENIAE</u> Receiving Property Zone <u>INTERMENIATE</u> Description and Location of Sound Sources to be Measured, Including Operation of Facility, and if This Represents the Normal Operation of the Facility. Is the Sound Continuous or Non-Continuous - Describe Duty Cycle. If Amplified: Is Source Commercial, Non-Commercial, or After Hours Liquor <u>EXTENDED HOURS BAR</u>. WITH LIVE BANDS UNTIL 4:30 AM, COMPLATINTS FROM PEOPLE ON COAL HARBOOK

SEAWAUK AND WESTIN RESORT

Description and Location of Background Sounds, Fairly Constant in Nature: STEADY WAVES AGMINST SEAWALL

Description and Location of Extraneous Sounds, Intermittent in Nature and Not from Source Facility: ALL LOCAL TRAFFIC, AIR TRAFFIC, PEDESTRIANS BIRDS

Description of Instrumentation: Sound Level Meter	Make ACOUSTIM	Mode	1# 14	ANSI Type	Serial #	Last Certified
Sound Level Calibrator	ACOUST	CAL	-	N/A	1123	1/7/08
Wind Screen (yes/no) Time of Calibration/Batter	YWind y Checks (Befor	dmeter (y e, After,	/n) Every H	<u>Y</u> Oth lour)_03:/Y	er AM 03:	41
Weather Conditions: Precipitation Wind Velocity, With Time	(y/n) Taken (Before, #	Gr After, Ev	ound W ery Hou	$\frac{\text{Vet } (y/n)}{nr} = \frac{N}{23 + 15} \frac{N}{4N}$	Temperature 9/19/14.5	<u>20° iz/68°F</u> FfH
Measurement of Background Son	und:			03,13,400	1 24	

Time Start/Finish	Reading (dBA, dBC)	Type of Residual (source off, etc.)	Location of Measurement/Comments
3;29-3:30 AM	45 dBA	WALK AWAY	Ø
3:31-3:33 AM	YGABA	WALK AWAY	B B

#### Measurement of Total Sound:

Time Start/Finish 3:16 ~ 3:17 A	Duration M [	Reading (dBA, dBC) 50 d BA	Corrected (Source) Level 50~2= 48	A R	Location /Comments (A) Door CLOSED
3:18-3:19	r	51 dBA	51-2=49	3	A 11 11
3:19-3:20	1	54 dBA	54-1=53	7	(A) DOOR OPEN - IPERSON
3:20-3:21	L	SIDBA	51-2=49	3	(A) DOOR CLOSED
3:23-3:24	i	57dBA	57	11	(A) DOOR OPEN- GROUP
3:23-3:24	1	STOBA	57	11	A DOOR OPEN - GRO

LEAVES

D= decibils by which corrected source level exceeds the background level.

Findings

VIOLATION - BAR EXCEEDS 3 dBA ABOVE BACKGROUND MEASURED AT 6555-11E 3 METERS

Sound Measured By:

hetama

Report Reviewed and Approved By (if necessary):

Wile, E. Coyote

INCLUDE SITE SKETCH ON REVERSE (with source, walkaround, and exact measurement locations) 35 City of Vancouver - FOI 2020-347 - Page 39 of 80