



CITY OF VANCOUVER

POLICY REPORT TRANSIT AND TRAFFIC

Report Date: June 19, 2006
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Meeting Date: July 18, 2006

TO: Standing Committee on Transportation and Traffic

FROM: Manager of Sustainability Group

SUBJECT: Motor Vehicle Noise and Emission Abatement Bylaw

RECOMMENDATION

THAT the Motor Vehicle Noise Abatement Bylaw No. 4338 be repealed and the Motor Vehicle Noise and Emission Abatement Bylaw, incorporating expanded limits on vehicle idling, generally as set out in Appendix A be substituted for it; and

FURTHER THAT Council instruct the Director of Legal Services to bring forward for enactment the new Motor Vehicle Noise and Emission Abatement By-law generally as set out in Appendix A.

GENERAL MANAGER'S COMMENTS

The General Manager of Engineering Services supports the recommendations. This bylaw will more fully support the current City- and Federally-funded idle-free initiative. Education initiatives supported with a bylaw have a significantly higher success rate than those relying on education alone.

CITY MANAGER'S COMMENTS

The idle-free initiative benefits individuals and society by reducing greenhouse gases and air pollution while saving vehicle owners money. As the majority of vehicles only require 30 seconds to warm up and waste money after idling for more than 10 seconds, this measure is a simple area for the motoring public to reduce the environmental impact of the motor vehicle.

COUNCIL POLICY

On February 3, 2003, a memorandum on an anti-idling bylaw was provided for Council following a Council request for a bylaw. This indicated that a bylaw was dependent on an effective education and awareness campaign prior to any enactment of a bylaw.

On March 29, 2005, Council approved the Community Climate Change Action Plan, which included a recommendation to undertake a community idling awareness campaign.

On July, 19, 2005, Council approved and funded the Idle-Free awareness program with a bylaw to be presented to Council at a later date. A key element of this education and awareness campaign is an idling control bylaw which will strongly support the education and awareness campaign.

SUMMARY

Work by the Federal Government and other Canadian municipalities indicates that an idling control bylaw is a key element of a public awareness and education program to reduce unnecessary vehicle idling. The proposed bylaw, based on the model idling control bylaw the GVRD approved in 2004 and incorporating provisions for unattended vehicles, will help:

- Eliminate unnecessary idling;
- Reduce the amount of fuel consumed by vehicles;
- Reduce emissions of common air contaminants and greenhouse gases;
- Reduce the incidence of vehicle theft; and
- Reduce unnecessary vehicle noise.

The proposed by-law allows for all reasonable uses of a vehicle that would require the engine to be running while the vehicle is stopped.

In addition, behavioural research indicates that once people commit to taking a small action towards a given outcome, they are more likely to commit to taking additional related but more challenging actions. This idling control bylaw and its related public education campaign are clearly consistent with, and supportive of, the *"One Day"* community engagement initiative for Vancouver's Community Climate Change Action Plan. *"One Day"* encourages citizens to take small steps to make Vancouver the healthiest, cleanest, greenest, city in the world. Citizens that stop idling in order to help achieve this outcome are more likely to undertake additional actions such as purchasing a more fuel efficient vehicle, changing travel modes, or improving their home energy efficiency if they perceive these will also help.

PURPOSE

To seek Council approval to replace the existing Vehicle Noise Abatement Bylaw with one that includes provisions to prohibit unnecessary vehicle idling.

BACKGROUND

In response to strong Council and public interest, Engineering and the Health Board provided a Memorandum to Council (Anti Idling Program, February 3, 2003) outlining the issues of idling vehicles along with recommendations to initiate an anti idling (or Idle free) campaign making use of available federal funding supplemented by a City bylaw.

On July 19, 2005, Council approved an idling awareness program funded by Natural Resources Canada (NRCan), the City, and Better Environmentally Sound Transportation to provide a public education and awareness program on vehicle idling (<http://www.idlefree.ca>). This campaign is aimed at educating students, companies and the general public on the facts regarding idling of vehicle engines. The City's fleet is already participating in idling control measures and other fuel efficiency initiatives.

DISCUSSION

Unnecessary vehicle idling contributes to the unproductive use of non-renewable resources, increased noise pollution and the production of greenhouse gases. In addition, unnecessary vehicle idling contributes to air pollution causing health problems especially in young and elderly people with asthma, lung and heart conditions.

The average light duty vehicle in Canada consumes about 2 litres of fuel per hour of idling, and the typical heavy duty vehicle can consume almost 4 litres of fuel per hour of idling. If every Vancouver driver reduced their vehicle idling by 3 minutes each day, in one year fuel consumption would be reduced by over 5.7 million litres saving millions of dollars. The greenhouse gas emission reductions associated with this fuel saving would be approximately 13,400 tonnes.

Myths

There is a general misconception that idling is good for light and heavy duty vehicles. In fact, idling is harmful to engines and idling is a very ineffective way to "warm up" a vehicle. Natural Resources Canada (NRCan) states that no more than 30 seconds is necessary to "warm up" a vehicle before driving, and idling a vehicle for more than 10 seconds wastes more fuel than shutting down and restarting the vehicle. NRCan estimates that the added maintenance cost due to increased starting and stopping of the engine would be about \$10 per year over the life of a light duty vehicle, and these costs would easily be offset by annual fuel savings.

Many heavy duty vehicle operators believe that diesel engines need to be idled to maintain the engine temperature when stopped; in fact, the cooling systems in modern engines will reduce the engine temperature of an idling vehicle more quickly than if it was turned off. Under most situations in city driving, heavy duty vehicles do not need to idle in order to cool down their engine components. Vancouver's mild climate means that idling is generally not necessary to maintain a vehicle's passenger compartment temperature within safe limits.

Precedence

- Vancouver prohibits unnecessary bus idling under its Vehicle Noise Abatement Bylaw.
- A number of Canadian municipalities such as Toronto, Mississauga and London have implemented idling control bylaws supported by an educational component.
- The District of North Vancouver adopted an Anti-Idling provision in 2000.

- GVRD staff developed a model idling control bylaw based on other bylaws and consultations with municipal staff in the region. The intent was that this would allow a bylaw that is consistent across the region.

The bylaw proposed for Vancouver expands the existing noise abatement bylaw to incorporate the GVRD model idling control bylaw with some alterations for consistency with the requirements of the Vancouver Charter and to include special provisions for unlocked unattended vehicles. In order to be effective the bylaw would be applicable to private property and would be based on the health protection provisions of the Vancouver Charter.

Enforcement

The bylaw, which is not intended to be applied to vehicles in traffic, provides for idling of vehicles that require engine power for safety or work purposes. The intent of this bylaw is to support public awareness efforts. For the first six months following enactment, no payable fines would be levied to maximize education opportunities. It is the intention that generally, verbal or written warnings would precede firm enforcement.

The existing idling penalty for busses of \$100 would be expensive for a car and would likely make staff reluctant to do enforcement and may result in more ticket appeals. A penalty in line with a parking infraction of \$50 would be considered more appropriate for cars, while \$100 is appropriate for trucks and busses.

Currently, Parking Enforcement staff cannot enforce the Motor Vehicle Act prohibition on leaving unlocked vehicles idling. Adding the unlocked unattended provision to the City's proposed idling control bylaw would empower Parking Enforcement staff to address this problem and help reduce vehicle theft. This provision would have the strong support of the Police due the serious safety issues raised when a vehicle is stolen.

The Parking Enforcement branch currently enforces the diesel bus anti-idling bylaw and has confirmed their ability to take on the enforcement of an expanded idling control bylaw. The advantages of this approach are that Parking Enforcement staff have a strong presence in the City, already enforce the existing bylaw, and there are no identified additional resource requirements. The Police would also be able to enforce the bylaw.

Communications and Stakeholder Consultations

Experience from other municipalities across Canada indicates that an idling control bylaw that supports a comprehensive public awareness campaign is the most effective way to reduce unnecessary vehicle idling. On July 19th, 2005 Council committed City resources to leverage \$235,000 from NRCan to implement an idling awareness campaign. The Sustainability Group, Corporate Communications, and Equipment Services have all been very involved in awareness and communications work. The elements of this campaign, as well as the responses of stakeholders, are summarized here:

- **City of Vancouver** - City employees started to receive idling awareness information and surveys in 2004 and Equipment Services continued this work by including idling awareness and proposed bylaw discussions in crew talks throughout the spring of 2006.
- **Schools** - Better Environmentally Sound Transportation (BEST) worked with students at 13 Vancouver high schools to develop increased driver, family, and peer awareness about the impacts of idling and the benefits of stopping. Elementary school communities will be engaged on idling issues in the fall of 2006 as part of the One Day, One School program.

- **Fleets and Employers** - City staff and BEST engaged 86 organisations and fleet operators in discussions about idling and the proposed bylaw. 27 of them, including Telus, the Vancouver Port Authority, Waste Management, the YWCA, as well as numerous courier and bus companies initiated their own idling awareness campaigns. Fleet operators were generally supportive of the proposed idling bylaw as it would provide additional support for their own efforts to engage their staff in decreasing fuel consumption.
- **Taxis and Trucks** - Staff met with the BC Trucking Association as well as the Vancouver Taxi Association to discuss the proposed bylaw and their concerns.
- **Media and Advertising** - A limited outdoor advertising campaign comprised of transit shelters and bus exteriors was conducted in June 2006 to start building general public idling awareness. This advertising and the YWCA's Idle Free Month (May 2006) stimulated a number of television and local print media stories about idling and the proposed bylaw. Idling awareness street signage will be installed at schools and other common idling locations in the summer of 2006. A comprehensive idling awareness advertising campaign is planned for late August/early September to coincide with the return to school and to educate drivers about the idling control bylaw (if passed).
- **Public** - Public feedback received as a result of the above efforts was almost universally favourable. To further test potential public response to an idling control bylaw, surveys were sent to 125 community groups. Of the 40 responses received, all but one were supportive or strongly supportive of an idling control bylaw. The one group that was opposed had concerns about new regulations in general and not specifically with regard to one about idling.

Four stakeholder groupings expressed concerns about an idling control bylaw:

Stakeholder Group	Bylaw Concerns	Staff Response
Armoured car operators	safety concerns while carrying money	exempt from the bylaw while carrying money
Refrigerated truck operators	some refrigeration units run off of engine power	acknowledge operational necessity and therefore exempt
Taxi Association	On cold/warm days, vehicles waiting for a customer may get uncomfortably warm or cold	For the first six months after enactment, no fines will be issued in order to provide taxi industry time to assess impacts and possible solutions
BC Trucking Association	<ul style="list-style-type: none"> • opposed to the higher fine proposed for trucks based on the improved diesel fuel and emissions standards; • some truckers occupy stationary vehicles for extended periods - during extreme weather conditions, cab temperatures may fall above or below required limits 	<ul style="list-style-type: none"> • under the new and incoming standards, diesel trucks are still expected to produce significantly more emissions than cars; • typically mild climate, and added enforcement challenges by including temperature qualifiers lead staff to recommend no exemption but use reasonable and discretionary enforcement

FINANCIAL IMPLICATIONS

Once in effect, there is likely to be a small revenue stream from bylaw infractions.

PERSONNEL IMPLICATIONS

No additional staff resources required for this bylaw.

ENVIRONMENTAL IMPLICATIONS

The Motor Vehicle Noise and Emission Abatement Bylaw will help maximize the effectiveness of the City's idle free awareness initiatives and thereby reduce unnecessary greenhouse gas and air contaminant emissions from motor vehicles. The Natural Resources Canada website indicates that if every Vancouver driver reduced their vehicle idling by three minutes per day, our community greenhouse gas emissions would be reduced by 13,400 tonnes annually. Citizens would also avoid using 5.7 million litres of fuel worth approximately \$6.2 million each year.

SOCIAL IMPLICATIONS

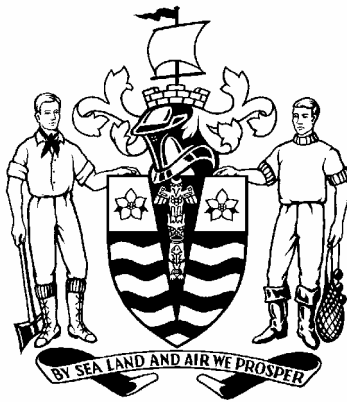
It is anticipated that this bylaw will help to reduce vehicle theft.

CONCLUSION

An idling control bylaw would complement the public education efforts currently and help to reduce greenhouse gas emissions, improve air quality, and decrease urban noise pollution without creating undue driver hardships.

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CITY OF VANCOUVER
BRITISH COLUMBIA



MOTOR VEHICLE NOISE AND EMISSION ABATEMENT BY-LAW NO. _____

MOTOR VEHICLE NOISE AND EMISSION ABATEMENT BY-LAW

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BY-LAW NO. _____

Motor Vehicle Noise and Emission Abatement By-law

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

**SECTION 1
INTERPRETATION**

Name of By-law

1.1 The name of this By-law, for citation, is the "Motor Vehicle Noise and Emission Abatement By-law".

Definitions

1.2 In this By-law:

"idle" or "idling" means the operation of the engine of a motor vehicle that is not in motion; and

"motor vehicle" means a vehicle which is self-propelled or propelled by electric power obtained from overhead wires but does not include a motorized wheelchair or a vehicle operated upon rails or tracks.

Table of contents

1.3 The table of contents for this By-law is for convenient reference only, and is not for use in interpreting or enforcing this By-law.

Schedules

1.4 Schedules attached to this By-law form part of this By-law.

Severability

1.5 A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

**SECTION 2
MOTOR VEHICLE NOISE AND EMISSION ABATEMENT**

Disturbing noises

2.1 The following noises are, in the opinion of Council, objectionable or liable to disturb the quiet, peace, rest, enjoyment, comfort, or convenience of individuals or the public:

- (a) the squeal of a tire, made by a motor vehicle that is accelerating or changing direction;
- (b) a loud, roaring, or explosive sound emitted by a motor vehicle;
- (c) the amplified sound of a radio, television, player, or other sound playback device or amplification equipment, or the sound of a musical instrument, that emanates from a motor vehicle and that someone outside the motor vehicle can easily hear;
- (d) the sound from vehicle-mounted sound amplification equipment made continuously for more than two minutes at the same location;
- (e) the sound of an automobile security system made, either continuously or intermittently, for a period exceeding one minute, or the sound of an automobile security system, not including its activation status signal, made more than three times in a 24 hour period; and
- (f) the sound of a motor vehicle that is idling in contravention of section 2.7 of this By-law except as exempted by section 2.8.

Prohibition against disturbing noises

2.2 A person must not make or cause to be made any objectionable noise set out in section 2.1 of this By-law.

Noise from motor vehicle

2.3 A person must not operate a motor vehicle so as to cause a nuisance by noise from the motor vehicle.

Motor vehicle horn or warning device

2.4 A person must not use or operate a horn or other warning device on a motor vehicle for any purpose other than as an audible warning incidental to the safe operation of the motor vehicle.

Approved motor vehicle race or parade

2.5 The prohibitions set out in sections 2.2, 2.3, and 2.4 are not to apply to participants in a motor vehicle race or a parade which Council has approved.

Engine brake

2.6 A person must not use or operate a "Jacobs" brake or other type of engine brake on a motor vehicle for any purpose other than as an emergency braking device incidental to the safe operation of the motor vehicle.

Idling

2.7 A person must not cause or permit a motor vehicle to idle:

- (a) for more than three consecutive minutes in a 60 minute period; or
- (b) while unattended and unlocked.

Idling exception

2.8 Section 2.7(a) does not apply to a:

- (a) motor vehicle that contains or has attached to it equipment requiring power from the engine to operate in the course of the operation of such equipment for a commercial or public purpose;
- (b) police, fire, ambulance, or other emergency motor vehicle in the course of the performance of police, fire, ambulance, or other emergency duties including training activities;
- (c) motor vehicle in the course of assistance in an emergency;
- (d) armoured motor vehicle, used to transport money or valuables, in which a person remains to guard the contents, in the course of the loading or unloading of such money or valuables;
- (e) motor vehicle in the course of a race or parade Council has approved; or
- (f) bus while its passengers are in the course of embarking or disembarking.

Impounding

2.9 For the purposes of the Impounding By-law, Council deems a motor vehicle that:

- (a) has an automobile security system operating in contravention of this By-law; or
- (b) is idling while unattended and unlocked or insecure;

to be a vehicle unlawfully left upon a street.

SECTION 3 ENFORCEMENT

Offences under By-law

3.1 A person who:

- (a) violates any provision of this By-law, or does any act or thing which violates any provision of this By-law, or suffers or allows any other person to do any act or thing which violates any provision of this By-law;
- (b) neglects to do or refrains from doing anything required to be done by any provision of this By-law; or
- (c) fails to comply with an order, direction, or notice given under any provision of this By-law, or suffers or allows any other person to fail to comply with an order, direction, or notice given under any provision of this By-law;

is guilty of an offence against this By-law, and liable to the penalties imposed under this Section 3.

Fine for offence

3.2 Every person who commits an offence against this By-law is punishable on conviction by a fine of not less than \$100.00 and not more than \$2,000.00 for each offence, except that the fine under section 2.7 is not to be less than \$50.00 for a person operating a motor vehicle other than a bus, being a motor vehicle having a seating capacity of more than 12 persons, including the driver, operated for hire or for public transportation, or a truck, being a motor vehicle or combination of motor vehicles having a gross vehicle weight in excess of 10,000 kilograms.

Fine for continuing offence

3.3 Every person who commits an offence of a continuing nature against this By-law is liable to a fine not exceeding \$50.00 for each day such offence continues.

SECTION 4 EFFECT OF BY-LAW, REPEAL, AND ENACTMENT

Effect of this By-law

4.1 The provisions of this By-law are in addition to, and not in substitution for, the provisions of the Noise Control By-law.

Repeal

4.2 This By-law repeals By-law No. 4338.

