



# A Guide to the Non-Road Diesel Engine Emission Regulation

BYLAW NO. 1161, 2012

Last updated November 2018



**CALL US DIRECTLY: 604-451-6655**

## How do I get more information?

### Metro Vancouver:

Visit: [www.metrovancover.org/nonroaddiesel](http://www.metrovancover.org/nonroaddiesel)

Call the Metro Vancouver Information Centre at **604-432-6200** and ask for information regarding Bylaw No. 1161, 2012 or the Non-Road Diesel Engine Emission Regulation.

Fax: 604-436-6707

Email: [nonroaddiesel@metrovancover.org](mailto:nonroaddiesel@metrovancover.org)

Mail: Metro Vancouver  
4730 Kingsway  
Burnaby, BC V5H 0C6

### Who we are:

Metro Vancouver is a political body and corporate entity operating under provincial legislation as a 'regional district' and 'greater boards' that deliver regional services, policy and political leadership on behalf of 23 members.

This pamphlet is provided for general information purposes only. For a complete list of requirements, please refer to Bylaw No. 1161, 2012. If there is any discrepancy between the information contained in this pamphlet and the Bylaw, the Bylaw shall prevail.

## Why a non-road diesel emission regulation?

- Emissions of diesel soot are responsible for 67% of the lifetime cancer risk from air pollution in Metro Vancouver
- Reducing diesel emissions is the most important step the regional district can take to improve air quality and public health in Metro Vancouver
- The regulation will promote the reduction of these emissions from older diesel powered machines that are often operated close to where people live, work and play

## What if I operate in Metro Vancouver and don't register my Tier 0 or Tier 1 powered machine?

Failure to comply with the regulation is an offence and may result in:

- tickets (\$1,000 max) or
- fines (\$200,000 max)

### Tier 0 Prohibition

Tier 0 engines cannot be operated in Metro Vancouver after January 1, 2015 unless they have been registered and had a valid operating period of at least 90 days purchased by December 31, 2014.

The same prohibition will apply to Tier 1 engines January 31, 2020.



## Where is Metro Vancouver?

Metro Vancouver consists of 23 local authorities spanning an area from Lions Bay and Bowen Island to Maple Ridge and the Township of Langley (Aldergrove), and includes the Tsawwassen First Nation.



## What is a non-road diesel engine?

Non-road diesel engines are used in construction, industrial, commercial or stationary machines not used or intended for transportation on public roads. Examples include:

- excavators
- backhoes
- forklifts
- grinders
- generators
- welding equipment
- graders
- skid steers
- cranes
- compressors
- light towers
- man lifts

## Does this regulation apply to you?

Yes – If you own or operate a non-road diesel engine in Metro Vancouver that is 25hp (19kW) or greater. The regulation focuses on older (Tier 0 and Tier 1) engines but also restricts the exhaust opacity and idling of all non-road diesel engines.

## Are there any exceptions?

Yes – The regulation does not apply to:

- Engines less than 25hp (19kW)
- Machines used in agricultural operations conducted on a farm
- Personal recreational machines
- Emergency generators or other stationary machines operated only in the case of emergency

## What is an engine tier and how do I determine it?

Tier 0 engines are older engines that do not have any emission controls. Tier 1 engines have slightly lower emissions through improved air and fuel delivery systems but do not use emission controls found on newer Tier 2, Tier 3 and Tier 4 engines. Engine tiers are specified in the regulation and the following table may be used to help you determine the emission tier of your engine.\*

HORSEPOWER RANGE	YEAR OF MANUFACTURING											
	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06
25≤hp<50												
50≤hp<75												
75≤hp<100												
100≤hp<175	TIER 0					TIER 1					TIER 2	
175≤hp<300												
300≤hp<600												
600≤hp<750												
750≤hp<1200												

\* Engines manufactured for markets other than North America or the European Union are assumed to be Tier 0 unless demonstrated otherwise.

## What are the Registration Requirements?

In order to operate in Metro Vancouver, owners and operators of Tier 0 and Tier 1 engines 25hp or greater must:

- Provide registration information
- Pay fees (up to 80% recoverable)
- Label machines

Owners and operators of all engines must comply with:

- Emission opacity limits (20%)
- Idling restrictions (5 minutes)

## What information is required for registration?

- Engine serial number
- Engine year, manufacturer, and model
- Maximum horsepower
- Machine type, manufacturer, model, and VIN
- Engine family name (for Tier 1 only)

## How do I register?

An online registration and payment system is available at the non-road diesel website: [www.metrovancouver.org/nonroaddiesel](http://www.metrovancouver.org/nonroaddiesel)

Labels will be mailed to you after you complete the online engine registration. Additional information on labelling requirements is provided on the non-road diesel website.

## How much are the fees and what are my registration options?

There are options to purchase daily, monthly, annual and annual low use (200 hours) operating periods. Annual fees are based on the engine tier and horsepower as shown below.

ANNUAL FEE RATES (\$/HP)		
YEAR	TIER 0	TIER 1
2012	\$4	-
2013	\$6	-
2014	\$8	\$4
2015	\$10	\$6
2016	\$14	\$8
2017	\$20	\$10

A rising fee structure is used to encourage engine upgrades or retirements. Fees paid into the program can be reduced, eliminated or even recovered (up to 80%).

A tier and fee calculator is available on the non-road diesel website: [www.metrovancouver.org/nonroaddiesel](http://www.metrovancouver.org/nonroaddiesel)

## How do I reduce or eliminate Fees?

Fees can be reduced or eliminated by reducing diesel soot (particulate matter) emissions. Fees would be reduced proportionate to the reduction of soot emissions and even eliminated if Tier 2 emission standards are met.

## How do I recover fees?

80% of fees paid over the previous 3 years may be refunded if an engine is:

- Retired from use in Metro Vancouver, or
- Upgraded to Tier 2 or better.

Get more information about engine retirements and upgrades at: [www.metrovancouver.org/nonroaddiesel](http://www.metrovancouver.org/nonroaddiesel)

