

Emission Reduction Measure Application Requirements

The [Non-Road Diesel Engine Emission Regulation Bylaw No. 1161, 2012](#) (the Bylaw) provides fee reductions and refunds when a Tier 0 or Tier 1 engine is upgraded or retrofitted using an approved Emission Reduction Measure (ERM). Currently, ERMs verified by the [US Environmental Protection Agency](#) (EPA) or the [California Air Resources Board](#) (CARB) qualify for fee reductions or refunds. It is recommended that the EPA Verification Letter or CARB Executive Order be reviewed to ensure that the ERM is verified for your engine.

How to apply for an ERM approval

1. Log in to the Non-Road Diesel Engine [online registration system](#)
2. Select the applicable engine
3. Click on the “Apply for an Emission Reduction Measure” link on the Engine Details page
4. Follow the on screen instructions for submitting your ERM application

The following information and supporting documents need to be submitted with your online application. Please ensure the documents are in proper format for uploading (PDF, GIF, JPG, JPEG, BMP, TIFF, PNG).

Required Information and ERM Supporting Documents

- Metro Vancouver Engine Registration Number,
- Engine make and model,
- EPA Family Name (applicable to Tier 1 engines only),
- EPA verification letter or CARB Executive order for selected ERM,
- Engine pre-assessment results as conducted by authorized ERM installer,
- Letter of assurance for PM reduction from ERM manufacturer,
- Receipt for the ERM and installation by authorized installer,
- Photograph of the ERM installed on the engine,
- Written Statement of Compatibility from the installer, confirming that the ERM was installed in accordance with the EPA Verification Letter or CARB Executive Order, and the manufacturer’s pre-installation instructions.

Metro Vancouver may request additional information



Executive orders for verified ERMs can be found on EPA and CARB webpages (see web resources below). Installation of unverified, unapproved, and previously used ERMs may not qualify for the fee reductions and/or refunds. Please contact Metro Vancouver with any questions regarding ERM qualifications.

Written Statement of Compatibility

Before installing an ERM, the ERM manufacturer, or authorized installer, must be able to demonstrate the engine is in a proper state of maintenance and is compatible with the ERM. An engine pre-assessment is required for all engines and will be submitted to Metro Vancouver as part of the ERM application package.

Basic engine pre-assessment requires the installer to, at a minimum:

- Review oil consumption and engine maintenance records
- Visually inspect a fuel sample from the fuel tank for contamination (i.e., engine oil)
- Inspect the engine for signs of poor maintenance including oil leaks
- Inspect the tailpipe for signs of oil contamination
- Inspect the exhaust plume for signs of high PM emissions and oil burning (opacity test)

Other criteria may also be required to determine if the candidate engine is in a proper state of maintenance, and within in the engine manufacturer's specification. Exhaust temperature data may be required for specific types of ERMs.

Please contact us if you have any questions at nonroaddiesel@metrovancover.org or 604-451-6655.

Resources

1. [Metro Vancouver Emission Reduction Measure \(ERM\) Fact Sheet](#)
2. [EPA verified technology list](#)
3. [CARB verified technology list](#)

