

## Non-Road Diesel Emissions Program (NRDE) Fee Reductions and Rebates

### Fees

Starting in 2015, the Vancouver Fraser Port Authority Non-Road Diesel Emissions (NRDE) Program has charged fees for use of older, higher emission equipment based on engine tier, horse power and hours of use as follows:

Year	Tier 0 - \$/hp	Tier 1 - \$/hp
2015	\$10.00	\$6.00
2016	\$14.00	\$8.00
2017	\$20.00	\$10.00
2018	\$20.00	\$10.00
2019	\$20.00	\$10.00
2020	\$20.00	\$10.00

Fees for the operation of Tier 0 and Tier 1 equipment are calculated as follows:

#### Engines operating $\geq$ 2,000 hours per year:

$$[\text{engine maximum horsepower}] \times [\text{fee rate}]$$

#### Engines operating < 2,000 hours per year:

$$[\text{engine maximum horsepower}] \times [\text{fee rate}] \times [\text{hours operated in calendar year}] / 2,000 \text{ hours}$$

### Fee Reductions and Rebates

Fee rates may be reduced by moving from Tier 0 to Tier 1 particulate matter emission levels by:

- Installation and use of an eligible Emission Reduction Measure (ERM), that makes the particular matter emissions meet those of a Tier 1 engine. Please see the NRDE ERM Guide for more information at [www.portvancouver.com/NRDE](http://www.portvancouver.com/NRDE).

Fees paid may be rebated up to 80% by upgrading a Tier 0 or Tier 1 engine to Tier 2 or better particulate matter emission levels through:

- Retirement and/or replacement of equipment and engine ("removal from service");
- Engine replacement with Tier 2 or better; or,
- Installation and use of an eligible ERM. Please see the NRDE ERM Guide for more information at [www.portvancouver.com/NRDE](http://www.portvancouver.com/NRDE).

Additional requirements to be eligible for a fee rebate include:

- Submitting a complete annual report tool;

- Labelling of all equipment;
- Provision and demonstration of a Fuel Efficiency Plan, including an Idle Reduction Policy and Opacity Management, in accordance with the NRDE Fuel Efficiency Plan Guideline at [www.portvancouver.com/NRDE](http://www.portvancouver.com/NRDE) ; and,
- Provision of all assistance and access reasonably required by the port authority to confirm any aspect of NRDE requirements.

### Obtaining a Fee Reduction or Rebate:

The table below provides direction for obtaining a fee reduction or rebate, based on demonstration of removal from service, engine replacement, or meeting specified criteria for an ERM. Tenants are encouraged to discuss with the port authority, details of ERMs being considered prior to purchase.

Action	Removal from service	Upgrade - Engine Replacement	Upgrade - ERM
<b>At any time: Updating Annual Report Tool</b>	Under "Emission Reduction Measure" (column "R") of "2. Equipment List" tab, select "Engine retired" option	Under "Emission Reduction Measure" (column "R") of "2. Equipment List" tab, select applicable "Engine replaced" option (on-road or non-road engine)	Under "Emission Reduction Measure" (column "R") of "2. Equipment List" tab, select applicable fuel or retrofit
	Include the date the engine was retired under "Effective date of Emission Reduction Measure" (column "S")	Include the date the engine was replaced under "Effective date of Emission Reduction Measure" (column "S")	Include the date the ERM went into effect under "Effective date of Emission Reduction Measure" (column "S")
	Under "Comments and Additional Information" (column "T") include details about the equipment retirement and the hour-meter reading at time of retirement	Under "Comments and Additional Information" (column "T") include details about the engine replacement and the hour-meter reading at the time of replacement	Under "Comments and Additional Information" (column "T") include details about the ERM, such as type, manufacturer/supplier, and model
	If equipment was replaced, enter new equipment and details in a new row	Re-enter the equipment in a new row, including details of the replacement engine	
<b>By January 31</b>	Update all equipment and hour meter reading information as of January 1 and submit completed Annual Report Tool to <a href="mailto:NRDE@portvancouver.com">NRDE@portvancouver.com</a>  <u>Where a fee rebate is being sought, provide the port authority with a copy of the facility's Fuel Efficiency Plan in accordance with the guidance document available at <a href="http://www.portvancouver.com/NRDE">www.portvancouver.com/NRDE</a></u>		
<b>By February 28</b>	Vancouver Fraser Port Authority will evaluate if requirements for a fee reduction and/or rebate have been met, as outlined in the Fee Document. If additional information is required, the Environmental Programs department will provide feedback to assist tenant in meeting requirements.		

<b>By March 31</b>	Vancouver Fraser Port Authority will review the Annual Report Tool and assess fees for previous calendar year taking into account any equipment meeting requirements for fee reduction and/or rebate.		
<b>April 30</b>	Where approved, the port authority will rebate 80% of fees paid to date on equipment removed from service	Where approved, the port authority will rebate 80% of fees paid to date on equipment where Tier 0 or 1 engine has been replaced with Tier 2 or better	Where approved, the port authority will rebate 80% of fees paid to date on equipment where ERM upgrades operation of engine to Tier 2 particulate matter emission limit or better.

### Fee Reduction/Rebate Examples:

#### Example 1:

- 160 hp Tier 0 forklift
- 2,000 hours/yr for 2015-2017
- Engine replaced with Tier 2 or better

$$\begin{aligned} \text{Total fees paid (2015-2017):} &= (160 \times 10) + (160 \times 14) + (160 \times 20) \\ &= \$7,040 \end{aligned}$$

$$\begin{aligned} \text{80\% rebate:} &= \$7,040 \times 0.80 \\ &= \mathbf{\$5,632} \end{aligned}$$

#### Example 2:

- 600 hp Tier 0 RTG
- 2,500 hours/yr for 2015-2017
- Engine replaced with Tier 2 or better

$$\begin{aligned} \text{Total fees paid (2015-2017)} &= (600 \times 10) + (600 \times 14) + (600 \times 20) \\ &= \$26,400 \end{aligned}$$

$$\begin{aligned} \text{80\% rebate} &= \$26,400 \times 0.80 \\ &= \mathbf{\$21,120} \end{aligned}$$

#### Example 3:

- 174 hp Tier 0 yard truck
- 500 hours/yr for 2015-2017
- Engine upgraded to Tier 1

$$\begin{aligned} \text{Fees paid without upgrade (2017-2019):} &= (174 \times 20) + (174 \times 20) + (174 \times 20) \\ &= \$10,440 \end{aligned}$$

$$\begin{aligned} \text{Fees paid with upgrade (2017-2019):} &= (174 \times 10) + (174 \times 10) + (174 \times 10) \\ &= \$5,220 \end{aligned}$$

$$\text{Total savings with upgrade (2017-2019):} = \mathbf{\$5,220}$$