



PORT of  
**vancouver**

Vancouver Fraser  
Port Authority

# Non Road Diesel Emission Fee 2021 - 2030

*Prepared for industry engagement*

*July 2022*

Canada

# Welcome

This slide deck has been prepared to support industry engagement on the 2023 – 2030 Non Road Diesel Emissions (NRDE) Fee.

- Please visit our engagement website to learn more about the NRDE Fee and how to provide feedback:

<https://portvancouver.civilspace.io/en/projects/non-road-diesel-emissions-program>

- Please contact us if you have any questions or to schedule a video conference to learn more and discuss your feedback:

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# Background to Non Road Diesel Emissions

- Diesel particulate matter (“DPM”) emissions a known human carcinogen defined by the World Health Organization and Government of Canada
- Metro Vancouver identifies diesel engines as responsible for 67% of the lifetime cancer risks from air pollution in the region
- Port of Vancouver is currently largely dependent on diesel powered equipment and port-related diesel sources contribute approximately 20% of DPM emissions in the Lower Fraser Valley
- The Port of Vancouver, Non Road Diesel Emissions (NRDE) Fee was introduced in January 01, 2015, to promote phase-out of old, high-emitting diesel equipment, and established a fee schedule for operation of diesel engines through to December 31, 2022
- Metro Vancouver administers a similar bylaw in areas under provincial jurisdiction and will also introduce new fee schedule for 2022 - 2030

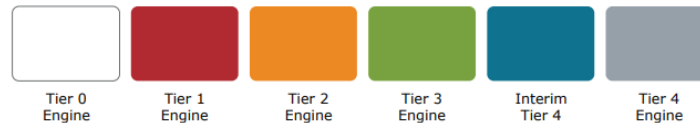
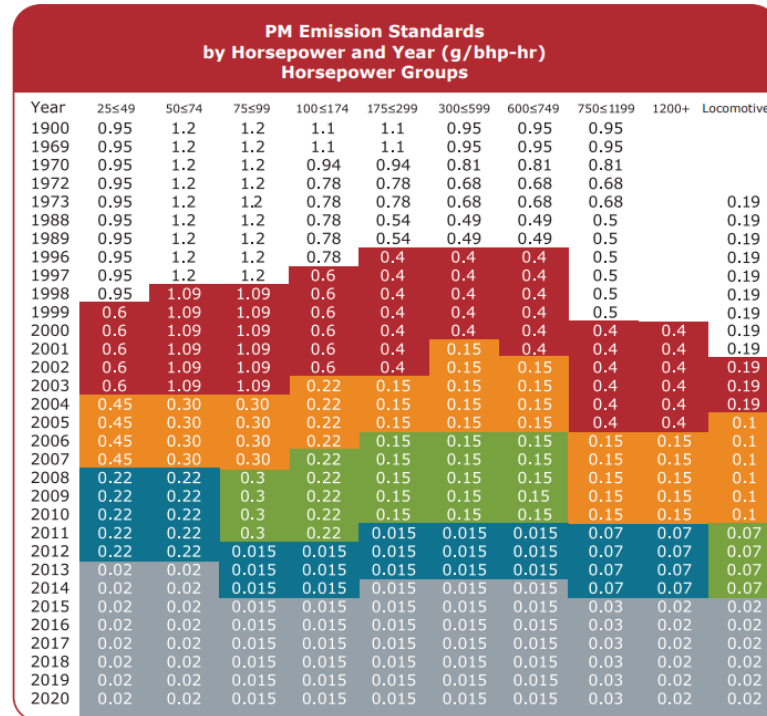
# Diesel engine classifications

- The aim of the NRDE Fee is to encourage the phase-out of diesel equipment that has limited or no emission controls in favour of equipment that meets Tier 4 engine standards or better
- Tier 4 engine standards were introduced in 2008 and as of 2015, all new non-road diesel equipment meets this standard which reduces PM and NOx emissions by up to 90%.
- The general implementation of the Tier 4 standard for non-road diesel equipment did not apply to locomotives which have a different timeline for emission controls and which may therefore require a different policy approach
- For more information on tier classification and emissions standards, please visit:  
<https://www.portvancouver.com/wp-content/uploads/2017/01/Fact-Sheet-Tier-Classification-and-Emissions-Standards.pdf>

# Diesel engine classifications

This chart provides an overview of diesel engine classifications and particulate matter emissions by horsepower and engine age.

This chart is available on our website and was developed with support from Metro Vancouver.



## Consultation update

- In 2013-2014, VFPA conducted three rounds of consultation with industry and government which informed the design of the NRDE Fee and all of its components such as equipment reporting, labelling, and administration of fees and rebates
- VFPA initiated a new consultation process in the fall of 2019 that included a consultation website, an online survey and follow up discussions
- In the fall of 2020, VFPA consulted on the proposed changes to the NRDE program, this including an updated fee schedule; the proposed 2023-2030 updated NRDE fee schedule outlined in this slide deck is based on feedback obtained from consultation to-date and to improve alignment with Metro Vancouver's finalised fee schedule.
- This next round of consultation will run through Summer 2022

# NRDE program changes

- The following changes are proposed for the 2023 – 2030 NRDE program:
  - Increase fees for Tier 0 and Tier 1
  - Introduce fees for Tier 2 and Tier 3
  - Increase eligible rebate on fees paid from 80% to 90%, and offer additional flexibility in accessing rebates. Possibility of setting a time limit on collecting rebates starting in 2030.
  - Prohibit introduction of additional Tier 2 (2023) and Tier 3 (2025) engines onto port lands (does not apply to existing equipment)
- We have made the following changes from our previous engagement based on feedback we heard:
  - New fee schedule that includes incremental annual increases and a delay in the introduction of Tier 3 fees.

## 2023 – 2030 NRDE fee schedule

Proposed NRDE fee schedule (original left, revision right)

Year	Tier 0		Tier 1		Tier 2		Tier 3		Tier 4
2015	\$10		\$6		-	-	-	-	-
2016	\$14		\$8		-	-	-	-	-
2017	\$20		\$10		-	-	-	-	-
2018	\$20		\$10		-	-	-	-	-
2019	\$20		\$10		-	-	-	-	-
2020	\$20		\$10		-	-	-	-	-
2021	\$20		\$10		-	-	-	-	-
2022	\$20		\$10		-	-	-	-	-
<b>2023</b>	\$60	<b>\$30</b>	\$16	<b>\$14</b>	\$7	<b>\$4</b>	\$6	-	-
<b>2024</b>	\$60	<b>\$40</b>	\$16	<b>\$16</b>	\$7	<b>\$6</b>	\$6	-	-
<b>2025</b>	\$100	<b>\$50</b>	\$26	<b>\$18</b>	\$12	<b>\$8</b>	\$10	<b>\$2</b>	-
<b>2026</b>	\$100	<b>\$60</b>	\$26	<b>\$20</b>	\$12	<b>\$10</b>	\$10	<b>\$4</b>	-
<b>2027</b>	\$100	<b>\$70</b>	\$26	<b>\$22</b>	\$12	<b>\$12</b>	\$10	<b>\$6</b>	-
<b>2028</b>	\$100	<b>\$80</b>	\$26	<b>\$24</b>	\$12	<b>\$14</b>	\$10	<b>\$8</b>	-
<b>2029</b>	\$100	<b>\$90</b>	\$26	<b>\$26</b>	\$12	<b>\$16</b>	\$10	<b>\$10</b>	-
<b>2030</b>	\$100	<b>\$100</b>	\$26	<b>\$28</b>	\$12	<b>\$18</b>	\$10	<b>\$12</b>	-

# Rebates

The rebate on fees collected is provided when a tenant retires, repowers or replaces Tier 3 and lower engines with a Tier 4 engine or better (e.g. battery electric vehicle). We are proposing the following changes to rebates:

- The existing maximum fee rebate of 80% be increased to a maximum of 90%
- The administration of rebates be made more flexible. The current approach does not consider equivalency options, such as accessing rebates available for *multiple* pieces of equipment in order to help offset costs associated with transition to electric equipment or installation of anti-idling technology
- Currently there is no time limit on retiring engines and collecting rebates. In comparison, in the Metro Vancouver program, when a user retires an engine, they will be rebated the fees collected from the previous five years. We would like to introduce a time limit starting in 2030, noting that if a tenant transitions to low emission equipment, they can access rebates from multiple pieces of equipment.

## New engine tier prohibitions

It is proposed that the existing prohibition restricting introduction of Tier 0 and Tier 1 engines on port lands be extended to include Tier 2 on January 01, 2023, and Tier 3 on January 01, 2025.

- This means a tenant cannot introduce additional Tier 0, Tier 1, Tier 2 or Tier 3 equipment onto port lands after January 1 2025 *without written consent from the port authority*
- Exceptions may be granted, for example when servicing a terminal locomotive, an older locomotive may be rented to perform its work
- This prohibition ensures all equipment entering port lands after January 1 2025 is Tier 4 or better (i.e. 2015 or newer)

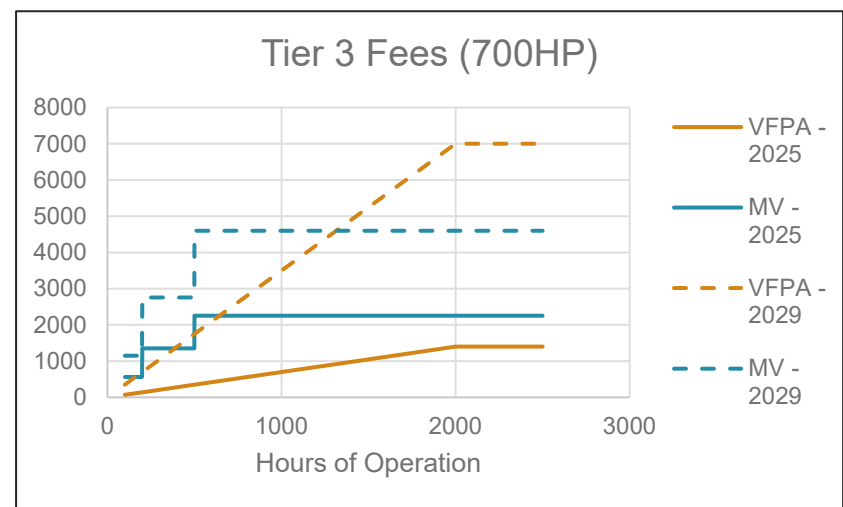
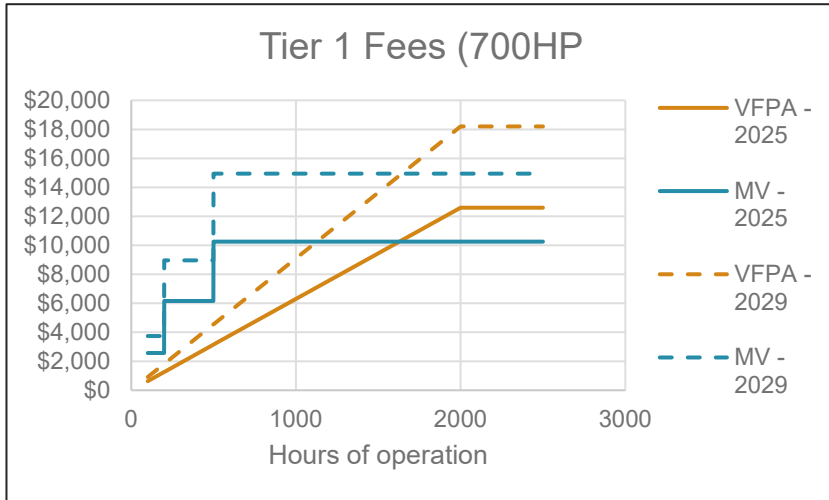
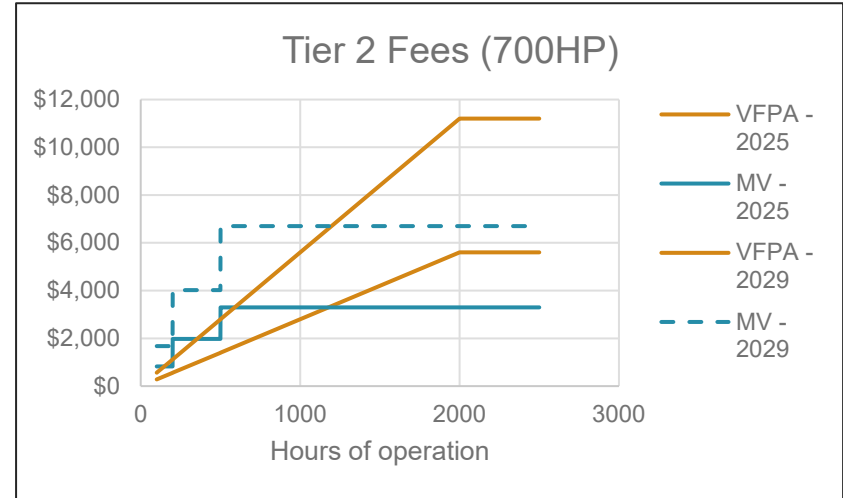
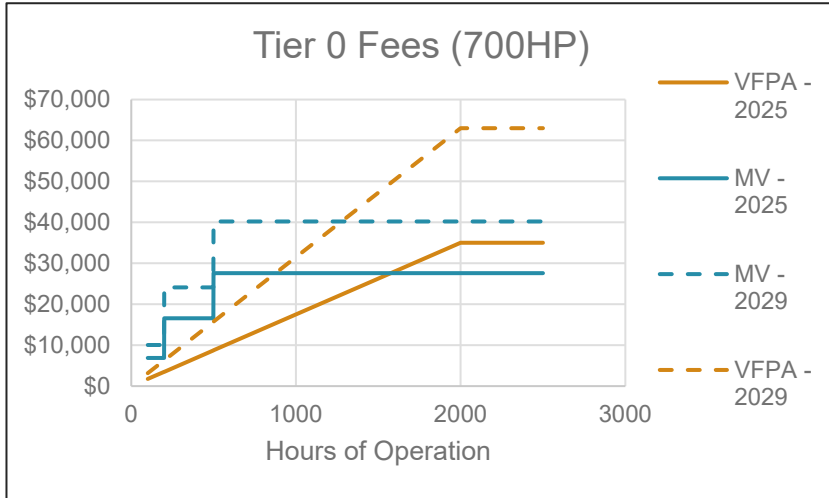
# Cost parity between MV and VFPA jurisdictions

The proposed NRDE fees are intended to provide parity with the cost for an annual permit under the MV Bylaw.

The VFPA *fee rates* are greater than Metro Vancouver's *fee rates*, however as VFPA charges per hour of use, the actual cost for use of the equipment may be lower, depending on number of hours used

Year	Tier 0		Tier 1		Tier 2		Tier 3		Tier 4	
	MV	VFPA	MV	VFPA	MV	VFPA	MV	VFPA	MV	VFPA
2022	\$20.00	\$20.00	\$10.00	\$10.00	\$1.55	-	-	-	-	-
2023	\$20.00	\$30.00	\$10.00	\$14.00	\$2.45	\$4.00	\$1.65	-	-	-
2024	\$33.79	\$40.00	\$12.56	\$16.00	\$4.71	\$6.00	\$3.22	-	-	-
2025	\$39.42	\$50.00	\$14.65	\$18.00	\$5.38	\$8.00	\$3.68	2.00	-	-
2026	\$45.05	\$60.00	\$16.74	\$20.00	\$8.44	\$10.00	\$5.80	4.00	-	-
2027	\$50.69	\$70.00	\$18.83	\$22.00	\$9.38	\$12.00	\$6.44	6.00	-	-
2028	\$56.32	\$80.00	\$20.92	\$24.00	\$9.57	\$14.00	\$6.57	8.00	0.94	-
2029	\$57.44	\$90.00	\$21.35	\$26.00	\$9.57	\$16.00	\$6.57	10.00	0.94	-
2030	\$57.44	\$100.00	\$21.35	\$28.00	\$9.57	\$18.00	\$6.57	12.00	0.94	-

# Cost comparison between MV and VFPA jurisdictions



# Next Steps

It is important to us that tenants have the opportunity to review the proposed 2023 – 2030 NRDE program in detail to assess impact on business operations and provide feedback.

- We have developed a fee calculator to assist tenants in assessing future fees and rebates
- We encourage your feedback by the end of July 2022, either during one of our scheduled meetings or by email ([megan.mccann@portvancouver.com](mailto:megan.mccann@portvancouver.com)).

In Mid-October 2022 we will publish our amended fee schedule to go into effect 1 January 2023.



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Thank you for your time and  
consideration.

For more information or to discuss  
feedback please contact:

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