PORT of vancouver

NON-ROAD DIESEL EMISSIONS FUEL EFFICIENCY PLAN GUIDELINE

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The Vancouver Fraser Port Authority (VFPA) is committed to being the world's most sustainable port, with a focus on economic prosperity through trade, thriving communities and a healthy environment. Reducing contributions to air quality and climate change from port operations through continuous improvement forms part of a healthy environment. In addition to this vision, since 2007 the VFPA in collaboration with the Ports of Seattle and Tacoma, and the Northwest Seaport Alliance, has committed to reduce emissions of diesel particulate matter and greenhouse gases through the Northwest Ports Clean Air Strategy (NWPCAS).

Ensuring efficient fuel use in port operations including reducing unnecessary idling, lowers emissions that contribute to both air quality and climate change, as well as reducing waste and costs.

1. Introduction and Applicability

These guidelines are intended to help tenants develop a Fuel Efficiency Plan (FEP), including an emphasis on idle reduction and opacity management. An FEP for port tenants is a requirement under the Non-Road Diesel Emissions (NRDE) Fee, as outlined in the Vancouver Fraser Port Authority Fee Document, in order to be eligible for a fee rebate. The Fee Document is available at http://www.portvancouver.com/about-us/port-fees/ . Information on the Non-Road Diesel Emissions Program overall can be found at http://www.portvancouver.com/environment/air-energy-climate-action/cargo-handling-equipment/nrde/ .

An FEP may also help to inform an Air Emission Management Plan which may be required:

- As an environmental condition of works authorized by the Vancouver Fraser Port Authority (VFPA);
- Through a project permit issued by the VFPA; and/or,
- As specified in lease terms or license agreement with the VFPA.

Furthermore, FEPs support VFPA's vision to be the world's most sustainable port, and are targets in the Northwest Ports Clean Air Strategy (NWPCAS) for both cargo handling equipment and trucks, in addition to being of interest to any tenant looking to reduce costs, waste and emissions. More information on the NWPCAS can be found at http://www.portvancouver.com/environment/air-energy-climate-action/clean-air-strategy/.

1.1 What is a Fuel Efficiency Plan?

A Fuel Efficiency Plan is designed to help reduce fuel consumption and associated emissions through improved efficiency, as well as reducing waste and costs. An FEP provides a single location in which to compile the various activities a tenant is undertaking that contribute to these goals.

2. Overview

The purpose of these guidelines is to identify typical components of an FEP and facilitate development of content for an effective FEP that can be used to help tenants meet the NRDE Fee rebate requirements. These guidelines will help ensure a consistent approach for fuel management, carried out to an appropriate standard.

3. Fuel Efficiency Plan Components

FEPs should include the following main components at a minimum, as they relate to fuel consumption and related activity, and are outlined in more detail in Section 4:

- Scope and objectives
- Site inventory of fuel consuming equipment and activities
- Strategies and actions
- Performance monitoring and tracking
- Review of performance and updates to the plan

4. Guidelines

FEPs may be reviewed as part of the NRDE audit process and/or when a request for fee rebate is made. Additionally, they may be requested for NWPCAS reporting or other purposes. Creation of a plan structured to include the following elements will support these processes.

4.1 Scope and objectives

Outline the context, intent and general approach of the plan including contact information for responsible individuals.

- The FEP scope should include at a minimum, all non-road diesel equipment operating onsite to which the NRDE Fee applies. It may be expanded in scope as appropriate and desired.
- Parties responsible for aspects of the FEP and their role in doing so should be identified.
- Objectives of the FEP should be measureable where possible, including an overall goal to reduce fuel consumption at a minimum on an intensity-basis, and where possible on an absolute-basis. Consideration should also be given to continuous improvement over time.

4.2 Site inventory of fuel consuming equipment and activities

Provide a description of operations, activities and equipment, and how they relate to the identified FEP scope.

- Include as appropriate site plans, process descriptions, flow diagrams or other diagrams or figures.
- Each emission source or source group as appropriate, should be provided in sufficient detail to allow for target setting and progress tracking. For each source/source group, include fuel consumption by type per year, throughput handled, hours of activity or other applicable metrics, against which to track progress.
- Assess the potential opportunity associated with each source, for example where large/small volumes of fuel are used and where greater or lesser opportunities for efficiency exist.

4.3 Strategies and actions

Identify and describe policies, operational procedures and plans used to improve efficiency and reduce fuel, as they relate to the FEP scope.

- Develop strategies/actions that take into account the site and activity inventory, to manage fuel consumption and improve related efficiency. Plans should include:
    - Idling reduction
    - Opacity monitoring and management
- Examples of additional useful components include:
    - Training and awareness
        - Drivers, operators and maintenance personnel

- Vehicle/equipment inventory
  - Purchasing
    - Rightsizing
    - Most fuel efficient
    - Electric and other alternative fuels
    - Alternative technologies
  - Matching operational needs to inventory
    - Eliminating underutilized equipment
    - Replacing old, inefficient equipment
- Operations and maintenance
  - Optimize usage
    - Fuel data management
    - Scheduling, load planning, utilization management
    - Minimize downtime
    - Tire pressure, alignment

4.4 Performance monitoring and tracking

Describe methods and procedures in place to track effectiveness of the FEP, as a whole and in relation to those objectives, strategies and actions outlined in sections 4.1 - through 4.3 above.

- Include identification of the person(s) responsible for tracking performance and the interval in which this should be undertaken.
- Describe how data and supporting records will be managed and stored.

4.5 Review of performance and updates to the plan

Describe the methods, process and frequency for reviewing FEP effectiveness, and incorporating updates to reflect changes in operations, or other actions to improve results. Include a description of what information will be reported and to whom, giving consideration to public availability, format, frequency, etc.

5. Contact information

If you require clarification, or assistance with respect to these guidelines, please contact James Hoffele with Environmental Programs as follows:

Phone: 604-665-9006

Email: NRDE@portvancouver.com

6. Updates

These guidelines are available for viewing and downloading from our website (http://www.portvancouver.com/environment/air-energy-climate-action/cargo-handling-equipment/). To ensure that you are referring to the most up-to-date document please reference the version date clearly indicated on the front page.