

Metro Vancouver

Greater Vancouver Regional District * Greater Vancouver Water District
Greater Vancouver Sewerage and Drainage District * Metro Vancouver Housing Corporation

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February 14, 2011

File No.: AQ-07-03-053

Mr. Pierre Marin
Director General, Environmental Policy
Transport Canada
330 Sparks Street
Place de Ville, Tower C
Ottawa, ON K1A 0N5

Dear Mr. Pierre Marin:

Re: Preliminary Consultation on the Proposed Federal Locomotive Emission Regulation

Rail transportation is a significant source of diesel emissions in the Metro Vancouver region, currently accounting for approximately 8% of the diesel particulate emissions in Metro Vancouver. As noted in the news release on locomotive emissions regulations, actions are being developed for other transportation sectors, including on- and off-road vehicles and engines and marine vessels. Metro Vancouver supports these actions, but one consequence of them is that the relative contribution of the rail sector is anticipated to increase as emissions from other transportation sectors are reduced. Furthermore, locomotive emissions from rail yards can lead to degraded local air quality since rail yards are often located near populated neighbourhoods, and this can potentially result in higher exposures and increased health risks for the residents of the Metro Vancouver region.

As identified in the consultation paper, the current Memorandum of Understanding for rail emissions expires in 2010. To help bridge the gap for locomotive emissions that are not addressed by the MOU and the proposed new federal locomotive emission regulation, Metro Vancouver worked with Environment Canada and other regulatory agencies, port authorities and the rail industry to form a BC Locomotive and Rail Air Quality Working Group in July 2008. The working group is intended to provide a forum for collaboration between industry and government on technical studies, policy matters, best practices, guidelines, and regulations relevant to air quality improvement or emissions reduction from locomotives, as well as to identify and promote sources of funding for emissions reduction opportunities. Metro Vancouver has previously commented to Transport

Canada on the need to increase the engagement of national rail companies on this working group.

Metro Vancouver would like to offer the following comments in response to the presentation and materials presented by Transport Canada (TC) as part of the preliminary consultation on the proposed *Federal Locomotive Emission Regulation* in Vancouver on January 11, 2011.

Anti-Idling Provisions

TC proposes that new locomotives (including remanufactured and upgraded locomotives) must be equipped with automatic engine stop-start systems and that these systems must shut off the main engine after 30 minutes of idling unless one of the exceptions stated in the regulation applies. Based on a recent study completed by Metro Vancouver in partnership with Environment Canada to assess idling of locomotives in Metro Vancouver rail yards (attached)¹, many of the locomotives operating in the region already have automatic stop-start systems; however based on resident complaints received by various regulatory agencies, extended periods of locomotive idling continue to occur. Also, some of these railway companies have idle reduction policies in place that are more stringent than the 30 minute idling limit. We recommend that the idling thresholds of time and temperature for the stop-start systems should be more stringent than what is proposed and that the anti-idling provisions should apply to all locomotives, regardless of whether or not the locomotive has been remanufactured or upgraded and specifically for locomotives operating in urban areas such as Metro Vancouver.

Fleet Renewal

The idling assessment study found that in most cases, the older, lower powered locomotive models are used for switch yard and localized activities which often occur in close proximity to populated neighbourhoods; this can potentially result in higher exposure to locomotive emissions and increased health risks. Metro Vancouver recommends that the regulations include mandatory retirement of pre-Tier 0 locomotives by 2015 and Tier 0 locomotives by 2020 from the national railway fleet, when the locomotive has not been remanufactured or upgraded. Also, there needs to be a mechanism in place to ensure that locomotives retired from the national fleet would no longer be in service and would not cascade to the non-regulated provincial railway sector.

Remanufacture and Upgraded Locomotive Engines

The proposed requirements apply to “new locomotives” which have been defined as:

- a freshly manufactured locomotive;
- a remanufactured locomotive that was originally manufactured after January 1, 1973 (Tier 0 and higher);
- an upgraded locomotive; and
- an imported locomotive.

¹ Assessment of Locomotive Activities and Mitigation of Idling Within the Metro Vancouver Region, April 20, 2010

The proposed requirements are silent on when an in-service locomotive is required to either go through a remanufacture or an upgrade process. In Metro Vancouver, there are numerous older (e.g. pre-Tier 0) in-service locomotives that operate regularly and that have not been remanufactured or upgraded. These locomotives could continue to operate at pre-Tier 0, Tier 0 and Tier 1 levels for many years in the future. The proposed regulation should contain provisions for scheduled mandatory remanufacture and upgrades based on the age or hours of use of the locomotive engine. Also, there is a risk that railway operators may not meet the minimum used parts threshold requirement of 50% for remanufacture and 25%-50% for upgrades; hence resulting in the proposed regulation not being applicable to these locomotives. This issue can be addressed by including Metro Vancouver's proposed provisions for scheduled mandatory requirements for remanufacture and upgrades.

Federal Incentive Funding

Reductions in harmful emissions from existing locomotive engines can be realized much sooner through implementation of regulatory instruments in combination with financial incentives to replace, remanufacture or upgrade existing polluting diesel locomotive engines. Government funded economic incentives to address locomotive diesel emissions make sense as the U.S. EPA's National Clean Diesel Campaign reports that, on average, thirteen dollars of health care benefits can be realized for every dollar spent reducing emissions from existing diesel engines. Incentive funding programs like the Carl Moyer fund in California and the US federal Diesel Emission Reduction Act have shown that industry is responsive to such incentive funding programs.

Provincial Railway Operators

The proposed *Locomotive Emission Regulation* under the *Railway Safety Act* will only apply to federally regulated railway companies. Some of the railway companies operating in Metro Vancouver are provincially regulated and will not be required to comply with the proposed federal regulations. Transport Canada should work with BC provincial counterparts to encourage adoption of the proposed federal regulation under the provincial *Railway Safety Act*.

Regulations to Limit Greenhouse Gases

We note that the focus of the preliminary consultations is on the development of criteria air contaminant emissions regulations. However, the intent to develop greenhouse gas regulations for the rail sector in step with the U.S. EPA does not provide any certainty. The Federal government should consider including provisions for the development of Canadian regulations for greenhouse gas emissions from the rail sector if the development of U.S. regulations does not occur within a specified time frame.

Metro Vancouver would thank you for the opportunity to comment on the preliminary consultation materials and we look forward to further engagement as the consultation process continues. If you have any questions, please contact Shelina Sidi at (604) 436-6750.

Yours truly,

Roger Quan
Division Manager, Air Quality Policy & Management

RQ/DJ/sms

ENCL: Assessment of Locomotive Activities and Mitigation of Idling Within the Metro
Vancouver Region, SNC-Lavalin Environment, April 30, 2010

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