

# Long term noise monitoring program

Questions and answers January 2015

1. What is the purpose of the long term noise monitoring program?

The purpose of the noise monitoring program is to:

- monitor port noise and track trends over time;
- determine, given technology and resource constraints, how much noise is attributed to port operations compared with other community noise sources; and
- document, given technology and resource constraints, the location, volume, timing and type of noises within the vicinity of the noise terminal locations.

# 2. Why is Port Metro Vancouver doing this?

Port Metro Vancouver is Canada's largest and most diversified port, a dynamic gateway for domestic and international trade and tourism, and a major economic force that strengthens the Canadian economy. We understand that our operations can sometimes have an impact on our neighbours, and we strive to better understand and, where possible, reduce our impact.

Many complaints we receive are in relation to noise, and in order to gain a better understanding of the existing noise environment, Port Metro Vancouver has developed the Noise Monitoring Program that will allow us to obtain and record existing noise levels and to monitor port-related noise trends in the community over time. We have installed noise monitoring terminals that stream data 24 hours a day, seven days a week. In the interest of transparency, Port Metro Vancouver has made data from noise monitors available in real time online at <a href="http://portmetrovancouver.pmv.noisesentinel.com/">http://portmetrovancouver.pmv.noisesentinel.com/</a>

3. How were the noise monitoring terminal locations selected?

Locations for the noise monitors were chosen on the recommendation of noise and acoustics experts, and based on feedback that we received from the community. Consideration was given to:

- Land ownership and accessibility
- Access to power and service
- Coverage area of port activities

### 4. Where are the locations?



In total, 10 long term noise monitoring stations have been installed, with four on the North Shore, four on the South Shore (see diagram to the left), and two in Delta (the location for a third unit is still being determined). The Delta monitors are not being streamed live at this time, but will come online in the near future.



### 5. What do the noise monitors look like?

The deployed noise monitors are a globally standard system. Monitors include a microphone to measure and record noise, solar power panel with back up battery or direct connection to power, an instrumentation enclosure and secure wireless data transmission.

## 6. What is Port Metro Vancouver doing about noise coming from the terminals and railway?

Based on an increasing number of noise complaints since 2009, and to gain a better understanding of the existing noise environment, Port Metro Vancouver installed noise monitors to obtain and record existing noise levels. Data from these noise monitors is available in real time online. The program will help to identify where there might be a noise concern.

Port Metro Vancouver's role is that of a federal "landlord" to its private terminal operators; however, we do work with our terminal operators wherever possible to ensure that impacts on the community are minimized (including impacts from noise). Operational noise is one of the biggest challenges we face when trying to reduce impacts on residential communities. The challenge with all of our terminal operators is that they must have basic safety protocols to ensure worker safety and much of the noise falls into this category.

Port Metro Vancouver understands and recognizes that communities do not want existing noise levels to be made any worse by port operations. Port Metro Vancouver is committed to working with the local community and tenants to minimize impacts on neighbours. In addition, the port's municipal and community engagement team is developing a process for community feedback about noise.

## 7. What do I do if I have a noise complaint?

Please contact community feedback by telephone at 604-665-9004; or email at: community.feedback@portmetrovancouver.com.

# 8. How will this impact my privacy?

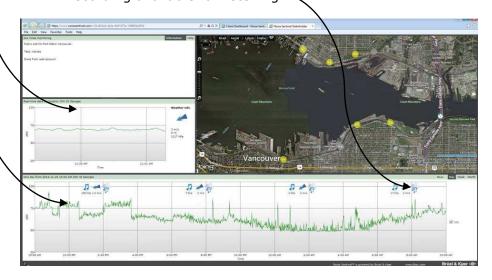
The recorded raw data will only be accessed by qualified individuals within Port Metro Vancouver. Clips of raw data will be publicly available, but only for the purposes of helping to understand noise impacts.

# 9. What will I see when I go online?

The noise monitoring terminals are streaming data 24 hours a day, seven days a week. Data from the noise monitors is streamed to the Brüel & Kjær Noise Sentinel system and data is displayed on the webpage <a href="http://portmetrovancouver.pmv.noisesentinel.com/">http://portmetrovancouver.pmv.noisesentinel.com/</a>.

When users go to Port Metro Vancouver's Noise Sentinel webpage, three pieces of data will be available:

- 1. Real time noise levels as recorded by the monitors and shown in decibels (dBA, a standard measure for noise).
- 2. A graph that allows the user to select various time scales hourly, daily, weekly, and monthly to show trends over that time.
- 3. Sound Clip Events show up as musical notes in the bottom graph and represent a sound recording available for listening.



By hovering over one of the locations, shown as a coloured circle, users will see what the noise level is at that moment. Colours represent the range in noise levels on a gradient from green to red. See diagram below.

