

Meeting Date: August 29, 2019

PNR Railworks on behalf of Vancouver Fraser Port Authority – Emergency retaining wall repair

- PNR Railworks, on behalf of Vancouver Fraser Port Authority's Engineering department (Maintenance), proposes to reinforce and repair two sections of lock-block wall at Roberts Bank (Category B project currently under review)
- The lock-block wall supports the railway line that services Westshore Terminals, and it is being eroded by wave action and is at risk of failure
- Some emergency repair works on the most damaged portion of wall was permitted on May 31, 2019
- All material will be brought in via rail and stockpiled in train carriages
- Works are anticipated to occur outside of the port authority's standard hours of construction as the timeline is contingent on the shutdown times of Westshore Terminals
- VFPA Maintenance will liaise with the terminal operator to keep them informed regarding ongoing works

Westshore Terminals Limited Partnership – Stockyard Road paving

- Westshore Terminals Ltd. is proposing to pave four existing internal stockyard roads. The paving will address vehicle dust in the summer and softening from rainfall in the winter
- The anticipated construction timeline is during the summer months (June to September) starting July 2019 and ending October 2022
- A permit was issued on August 8, 2019

Deltaport Truck Staging Facility – update

- Major works construction activities are ongoing with 14% progress achieved for this stage by end of July and with an overall 32% progress for the whole project. The facility is on track to be fully operational by end of 2020.
- As part of construction for the project, we will temporarily close the far right, westbound land of Highway 17 to allow for crews to complete ground remediation. This activity will begin September 9 and conclude on October 4. Stakeholders will be notified during the week of August 26, 2019. Additional updates can be found online at portvancouver.com/deltaporttruckstaging

Roberts Bank Terminal 2 Project

- The Roberts Bank Terminal 2 Project completed public hearings and the public hearing record closed on August 26. Now, the independent review panel will evaluate the information received throughout the environmental assessment and provide a report with recommendations that will be submitted to the minister of environment and climate change who will issue a decision regarding the project.

- Field studies will carry on as we continue to study the environment at Roberts Bank and gather information to inform our mitigation and offsetting measures and follow-up monitoring.

Fraser Grain Terminal Project (amendment to PER permit)

- An amendment to the Fraser Grain Terminal Project PER project permit was issued on August 12, 2019.
- The amendment includes additional out-of-hours electrical work to be undertaken on Sundays between the hours of 7:30 am and 4:00 pm between August 18, 2019 and February 29, 2020. This work is minor in nature, involving 4-10 staff utilizing hand tools and low noise machinery to install cable tray and cables at grade level and install wiring in electrical rooms and buildings on site.
- The amendment letter will be posted to our website [here](#). The project permit report and permit itself have not changed.
- Construction began in late 2018, and will take approximately 24 months to complete.

ECHO Program (2019 summer underwater noise reduction initiatives)

- After a lengthy absence, the southern resident killer whales came through the Strait of Juan de Fuca and back into the slowdown area on August 15 and have remained in the area for the last five days. Since the monitoring period began on June 1, humpbacks, porpoises, or transient killer whales have been observed nearly every day in the Boundary Pass slowdown area.
- The preliminary pilot-reported data for the 2019 voluntary ship slowdown trial shows 530 of 632 transits (84 per cent of ships) have slowed down in the slowdown area. (July 6 to August 16, 2019)
- The preliminary pilot-reported data for the 2019 voluntary inshore lateral displacement trial shows an average of 78 per cent of tug trips were able to shift south of the killer whale feeding area for more than 75 per cent of their transit. (June 17 to August 16)
- The marine industry continues to be an engaged participant in the ECHO Program's research to better understand the effects of shipping on whales. For more information on the research trials, please see www.portvancouver.com/echo/projects.

Habitat Enhancement Program (HEP) - annual post-construction monitoring events

- Consistent with past years, annual post-construction monitoring events are planned for summer 2019 and include biophysical monitoring to be completed at the Glenrose Tidal Marsh Project site (located just upstream of the Alex Fraser Bridge) and VFPA's Salt Marsh Restoration sites located at Boundary Bay and near Roberts Bank. Annual monitoring on all completed HEP sites is conducted by project biologists and engineers to check that the sites continue to function ecologically, as intended.

Deltaport shore power

- Construction of shore power facilities at the third berth at Deltaport was completed in fall 2018. Testing is now complete and opportunities are being identified for connection with a shore power enabled container ship.

Northwest Ports Clean Air Strategy Renewal

- The Northwest Ports Clean Air Strategy (NWPCAS) is an over 10-year collaboration between the ports of Vancouver, Seattle and Tacoma and the Northwest Seaport Alliance, to reduce emissions that contribute to air quality and climate change in the shared Georgia Basin-Puget Sound air shed.

- The NWPCAS was first developed in 2007, at which time it included port sector-specific targets for 2010 and 2015 for diesel particulate matter and greenhouse gas emissions for each of: Ocean going vessels, Harbour vessels, Cargo handling equipment, Trucks, Rail and Administration.

The strategy was updated in 2013, with sector-specific targets for 2015 (updated) and 2020, as well as intensity-based air shed emission reduction targets (per tonne throughput) for diesel particulate matter and greenhouse gases.

- Much has changed since we started this strategic process both with respect to air quality e.g. fuel sulphur and engine emission limits, ambient air quality standards and objectives, and with respect to climate change e.g. international targets including through the Intergovernmental Panel on Climate Change (IPCC) and the International Maritime Organization, national, provincial/state as well as regional and local targets. And we have gained significant experience on the implementation of a cross-border collaboration to reduce emissions by competing ports.
- As the current 2013 strategy reaches maturity, we are looking to renew rather than update the strategy to allow us to better develop a strategy that reflects these advancements and experience. Stakeholder engagement will form an important part of the renewal process, and is expected to occur in three stages over the next year.
- Our project website, www.porttalk.ca/nwpcas, includes more information on the history of the Northwest Ports Clean Air Strategy, as well as the renewal process and round #1 engagement materials, and how to provide feedback.

Metro Vancouver Annacis Water Supply Tunnel (Underground Safe Haven within VFPA jurisdiction)

- See Attachment

Committee member enquiries

Field Studies Roberts Bank – Roger E.

Why is VFPA continuing field studies on Roberts Bank "To determine the physical conditions (e.g., temperature and salinity) influencing biofilm presence and distribution at Roberts Bank"?

Given that:

1. The RBT2 public hearing has concluded, no more evidence will be accepted by the Review Panel, and the Panel is now preparing its final report to the Minister, and:
2. Conditions regarding salinity and biofilm presence are totally different than in the April/May time period when biofilm is rich in Omega 3 resulting from the salinity trigger as confirmed and documented by Environment and Climate Change Canada in the RBT2 registry document # 1947, Undertaking #29, "Evidence for a "salinity trigger" linking diatom production of lipids in the exponential and stationary growth phase of microalgae."

What is it that VFPA expects to achieve by continuing to carry out these studies?

Certainly it cannot/should not be for "mitigation" purposes because evidence submitted at the public hearing has proven that RBT2 will result in significant adverse cumulative effects that cannot be mitigated.

[Requested agenda item for discussion]

VFPA response:

As you will have heard during public hearings, we are committed to ensuring that, if approved, the Roberts Bank Terminal 2 project will be built in a way that does not harm the environment. This means we will continue to study the environment at Roberts Bank and

gather information to inform our mitigation and offsetting measures and follow-up monitoring.

The abiotic parameters study has been running since 2016 and will continue into the future. The overall objective of the study is to further strengthen our understanding of the existing spatial and temporal variability of water column salinity and temperature in the upper and mid-intertidal zone at Roberts Bank.

As you have noted, the panel registry is closed and as a result we will not be submitting this information to the review panel. However, it's important to note that the work we undertake at Roberts Bank contributes to the scientific knowledge on the Fraser River estuary, biofilm and its importance to shorebirds. This is a benefit to everyone in the scientific community.

Thank you again for your participation in the environmental assessment process.

Best,

The Roberts Bank Terminal 2 Project team

Follow-up to PCLC June 10 re: port authority environmental programs – Robert M.

This follows my question, answered in part by Naomi Horsford, about VFPA's liaison with carriers regarding voluntary Haro Strait speed reductions.

She referred to the Port's "Blue Circle" incentives. The program's current, on-line pamphlet lists five proprietary methods below "underwater noise", but a simple search shows the owners of the technology advocate only the possible savings they offer in propulsion energy. This reduction comes about through improving flow through the propeller which probably reduces cavitation and therefore noise. I don't deny such energy savings are a good thing, but their capacity to reduce noise at a given speed is not stated, so I question their inclusion under the heading of noise.

I suspect all modern ships have one of those methods installed, so basing an award or reduced fees for them seems more of a give-away than the Port's recognition of a conscious effort to significantly reduce a given ship's marine footprint, such as by using shore power.

My second point is whether or not the Blue Circle EcoAction program offers rewards for speed reduction in Haro Strait, since it is not stated in the pamphlet. Has this addition been proposed to the Blue Circle advisory team?

Finally, will the Port publish (ie list on its website) ships or owners or operators which reduce (or have reduced) their speed through Haro Straits? I understand voluntary speed reductions would be sought only when orcas are likely to be present.

I haven't read the most current ECHO program report, maybe the above questions are answered there?

VFPA response:

Thank you for your comments and your interest in our port authority environmental programs. Your questions touch on two different port authority programs, EcoAction Program/Blue Circle Awards and the ECHO Program, so we will provide some information about both and how they are related.

As you may know, the Enhancing Cetacean Habitat and Observation (ECHO) Program is a port authority-led program that aims to quantifiably reduce threats from commercial ship

activities to endangered whales. Reducing underwater noise from ships is a focus area for the ECHO Program as this noise can interfere with whales' ability to hunt, navigate and communicate.

The ship slowdown trial and route alteration trial that take place in the summer months are the ECHO Program's two most well-known projects. The ECHO Program also undertakes various research studies to help understand the causes of underwater noise in the region and their effects on killer whales. One such study was undertaken in 2016 to understand what makes ships quieter, including understanding the available options at the time to reduce underwater noise from ships. Several factors were considered in the evaluation process including effectiveness of reducing underwater noise, cost to implement these technologies, feasibility of implementation, and availability. Another key factor was whether the option could be verified by the port authority. The full evaluation can be found in the last few pages of the study here: [Ship quieting options study](#)

The results of the ECHO Program study helped to inform the inclusion of the underwater noise criteria for the EcoAction Program, which as you know, is a program that provides reduced harbour dues to ships that go above and beyond environmental best practices. This discount is up to 47%, which can be a significant incentive for shipping companies to invest in new technologies that have positive environmental impacts. As you noted, a few propeller technologies are included in our criteria for underwater noise reduction. While some of these options may be marketed as energy savings, the options that were included in the EcoAction Program are those evaluated in the study and were shown to reduce cavitation which helps to reduce underwater noise from ships.

The EcoAction Program criteria is evaluated annually to ensure that the options included are those that go above and beyond environmental best practices. The criteria for underwater noise reduction was expanded further in 2019 to include new options that were not available in 2017 when the underwater noise category was first included in the program.

With respect to whether slowing ships in Haro Strait should be added to the EcoAction Program/Blue Circle Awards, we are not contemplating that at this time because we have found ship operators have very willingly participated in our slowdown trials to date, without an incentive. In 2018, 88% of ships transiting the Haro Strait slowed down during the trial period. The marine industry has been a valuable and engaged partner in the slowdown trials and we are expecting to see similar participation rates in this year's trial.

In regards to recognizing slowdown participants, we have published a list of participating organizations on our website and program reports, and recognized them publically through ads in major newspapers. To see this year's list of participants and for the links to the previous slowdown trial reports, see www.portvancouver.com/echo/slowdowns.

We are proud of the environmental leadership demonstrated by our industry, terminal, and shipping partners who have participated in our underwater noise reduction efforts, taken measures to use cleaner fuels and technologies, and employed practices that reduce underwater noise, among other things.

Regards,
ECHO Program team

Delta Community Office report

Events since the last PCLC meeting:

- June 21: *The Container Trail* tours for South Delta Probus Club
- June 22, 28: *The Container Trail* tours for the public
- June 26 - 29: Open house to showcase new office
- June 26: Speaker series: Vancouver: Canada's largest cruise port with Carmen Ortega, manager, trade development, VFPA
- July 5: *The Container Trail* tours for public

- July 13: *Port Adventure Tour* for families
- July 24: Speaker series: Reducing Shipping Effects on Local Whales with Krista Trounce, ECHO Program manager, VFPA
- July 31: Vancouver Aquarium's AquaVan
- August 2, 10: *The Container Trail* tours for the public
- August 16, 17: *Port Adventure Tour* for families
- August 28: Speaker series: Let's Talk Roberts Bank with Duncan Wilson, Vice President, Environment, Community and Government Affairs, VFPA

What's new:

- The Delta Community Office launched the *Delta Community Port Challenge*, a summer passport challenge. Visitors who collect nine stamps by attending events and completing activities will be invited to participate in a port-related Burrard Inlet tour. Number of participants: 152.

Upcoming events:

- September 28: World Maritime Day celebration

Recent media releases

[New mid-year record for container volumes through the Port of Vancouver](#) – August 15, 2019

[Restoration of five hectares of marine habitat on the North Shore soon underway](#) – August 8, 2019

[Vancouver to benefit from \\$100 million in federal funding to support trade-enabling infrastructure](#) – July 26, 2019