

**Vancouver Drydock – Proposed Water Lot Project  
Community Information Meeting  
Response to questions not addressed during the meetings  
(as of July 21, 2021)**

Thank you to all those who posted questions during the community information meetings.

While we did our best to respond to all questions, some were inadvertently missed, and we were unable to get to all questions during the available time. Responses to these questions are provided below.

Please note, where questions are on a similar topic, the related questions have been grouped and one response provided. Additionally, some questions were directed to the port authority. This document will be updated with that additional information once it is available.

Questions on **community notification**

1	You were supposed to inform 7000 households and no one at 172 and 162 victory shipyard were notified. Why is that?
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258	Canada Post has affirmed that the flyers were not sent as direct mail, and therefore Canada Post is required to send Seaspan a report on how many flyers were delivered, as part of the contractual agreement. We have been told 12 flyers were delivered to Trophy and 7 to Cascade. Seaspan would have received this information from Canada Post. The larger question is what else does the report indicate about distribution of the 7000 flyers?
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122	Why no large billboard in the shipyards area like developers do. still time
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On June 23, 7,200 postcards were given to Canada Post for delivery via unaddressed ad mail to all addresses (single and multi-family homes and businesses) within a one-kilometre radius of Vancouver Drydock. This is above the minimum requirement of 500 metres.

Of note, unaddressed mail can be blocked – a resident may make that choice and tell Canada Post they don't want to receive neighbourhood mail. Those addresses that have opted out are not included in the Canada Post counts, so the quantity Seaspan mailed will be the actual number delivered which, in this case, 7,154 were delivered to homes and businesses, including the multi-family residences immediately adjacent to our operations.

In addition to the postcard, Vancouver Drydock ran two newspaper ads in the North Shore News announcing the public engagement period and community information meetings, had a Facebook ad for two weeks, and individually notified strata's via email and in person in the immediate vicinity of our operations. Billboards were not included as part of the public notification as these are typically posted on a perimeter fence and there is limited foot and vehicle traffic other than employees and suppliers at the Vancouver Drydock entrance.

Question on **notification and engagement with North Shore elected officials**

210	Have you received the support of any north shore municipal, provincial and federal politicians? If so can you provide their names.
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Vancouver Drydock has not requested support from any elected official; however, as part of our notification activities, we advised elected officials of our proposed project and port authority application and have subsequently responded to specific questions related to our project. Additionally, we have had communications with the City of North Vancouver with regards to emergency response protocols and processes.

Question on **Seaspan’s local economic contributions.**

27	How much additional tax revenue will this generate for the City of North Vancouver? How will the significant loss in property taxes due to declining values be offset?
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We are proud to be a fully contributing member of our local community. Vancouver Drydock alone contributes \$55 million in GDP annually and sustains close to 400 jobs annually, both direct jobs at its location and indirect jobs with suppliers, many of which are in North Vancouver and surrounding communities. With the additional proposed drydocks that will only increase, although the exact amount can only be determined, should the project be approved and once the drydocks are purchased, in place and operational.

In addition to tax payments and spending on goods and services in the local community, Seaspan is also proud to be long-time supporters of North Shore Neighbourhood House, Polygon Gallery, and during the COVID-19 pandemic funded three United Way Community Builder hubs in North Vancouver. Recently, we also donated \$2.65 million to Lions Gate Hospital, in addition to supporting many other worthwhile local organizations.

Question on **illustrative photos and renderings**

204	But why does the barge appear and disappear (in the renderings)
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The renderings on our website, in our community meeting presentation, and in our project information guide are illustrative of how the operations would appear, should the project be approved. We included a range of photos and vessels to show the variety that would likely be at the Vancouver Drydock for service and repair.

Question on **the normal operating hours**

62	We were told on Tuesday that work hours would be until 10pm. That same evening, work continued until at least midnight. Can you please clarify work hours for residents?
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The day shift starts at 6:45am, with a safety toolbox talk, with actual work commencing at 7:00am. The evening shift concludes at 10:45pm. On occasion there is some additional, urgent work required outside these hours.

Question on **June 7 on-water incident**

69	Speaking of the Coast Guard Vessel, in terms of the environmental impact, why was there no spill response in front of the residential buildings when there was an oil spill on June 7, 2021 at 8:30pm? I have pictures. How can the community be assured of environmental protections?
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On June 7, 2021, at approximately 5:30pm, the *Seaspan Commander* tugboat was assisting the Careen drydock at Vancouver Drydock when the tug had a diesel fuel tank overflow resulting in 20 to 30 litres of fuel being spilled on the tugboat deck and into water.

Authorities, including the Coast Guard, were advised of the incident and [Western Canada Marine Response Corporation](#) (WCMRC) responded to see if any of the fuel was recoverable. In line with incident response best practice, absorbent pads were used to mop up fuel on the deck of the tug, but fuel in the water quickly dissipated. The *Seaspan Commander* returned to the main tugboat dock for further investigation, inspection and clean up. Transport Canada subsequently cleared the *Seaspan Commander* to return to service.

Questions on **the proposed drydock siting and adjacent water lot to the east**

208	Seaspan suggest that the existing dock to the East isn't strong enough, so isn't suitable. However, you are willing to build new structures and install pilings to the West. Is the decision to go West a financial decision?
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235	what is the existing lease and water lot, the yellow lines on page 5 don't connect and are not showing the eastern border
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In our early planning, Vancouver Drydock’s operations and project teams considered several potential locations for the proposed drydocks. This included the adjacent water lot directly to the east of our current operations. After careful consideration, siting the new proposed drydocks in this adjacent water lot was not an option, because:

- The pier to the east does not provide direct access to our main operations service pier for people or supplies.
- The pier to the east does not meet the structural requirements for our operations.
- The adjacent water lot to the east is actively in use and has operating requirements for direct water access to the white, on-land W building, which restrict how far east we can go.

Within our existing operations, we considered how to incorporate the additional drydocks into our existing water lot. As noted in our project information guide and during the recent community meetings, we looked at six potential locations and ruled out all except one, because of:

- Proximity to residential neighbours
- Minimum water depth requirements for drydock operations
- Distance from the navigation channel
- Direct access to our main operations service pier for people and supplies

We then looked at expanding our existing water lot, as within our lease with the port authority, we have an option to expand westward.

For all of these reasons combined, we have submitted an application to the port authority to expand our water lot west by 40 meters and to install two new smaller drydocks and a work pontoon in our water lot and the additional water lot area. We are not considering any other configuration or location at this time.

The eastern boundary of Vancouver Drydock’s water lot extends approximately 30 meters east of the Panamax drydock.

Question on **siting locations within the existing Vancouver Drydock water lot**

45	Question4: The permit application indicates alternative sitting options, and it reaches a conclusion that option 3 NoGo is more expensive than Working Region 3. What is the basis for that conclusion? It doesn't provide any level of magnitude regarding capital costs for any of the options. Has an independent third-party engineer study been commissioned to quantify the capital cost assessment? If so, why this is not made publicly available?
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In this area, the water depths are much greater than in the proposed siting location. The reason the greater water depths lead to higher costs is because the piling and support structures would need to be bigger to address the increased cantilever effect from mooring loads. Higher stresses in mooring structures directly translate to higher cost, further compounded by the fact that larger pilings are more complex and costlier to install.

Using the monopile design as the comparative at mean water level, a five-metre increase in water depth would lead to an approximately 20% increase in design stress for the same design load. A 10m increase in water depth would lead to a 40% increase, approximately for this location. Increased design loads resulting from increased exposure would further increase these differences to higher stress levels. As a result, this is why Vancouver Drydock indicated that the NoGo region 3 is the most expensive location for the proposed drydocks.

Questions on the **environmental noise assessment**

79	You sound slide gave 1-3 db increase shows the min. value increased by 3 and the highest value increased by 1db. Why have both values increased by the largest expected increase?
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172	You said moving 40 meters south reduces noise. What decibel reduction would be achieved in moving 40 meters South? I presume you have an answer to this if you are making such a claim.
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179	Can we see the noise model for the Trophy?
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226	What is the noise impact of the acoustic effect between Cascade W and E in the beach area? It has a "U" shape if you add the Atrium buildings East and West at the back?
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231	Extrapolation of dB levels is not an accurate study. Will there be a more thorough independent study conducted?
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The Environmental Noise Assessment was conducted by BKL consultants, an independent engineering firm specializing in the field of acoustical consulting.

BKL generated a 3D computer model following the international recommended ISO 9613-2 (1996) standard for predicting exterior sound propagation. The study area included the area bounded by Burrard Dry Dock Pier, Esplanade E and St. Andrews Ave. The Environmental Noise Assessment is available on the Project and Environmental Review webpage.

The 3D model assessed noise levels at the Trophy, Cascade East and Cascade West developments. The model predicted that the  $L_{Rden}$  (rated day-evening-night equivalent sound level) would increase one dBa at the Trophy development and three dBa at both the Cascade East and Cascade West development. The maximum predicted  $L_{Rden}$  does not exceed the Port of Vancouver’s criterion at any of the residences.

The assessment that was conducted was based on the proposed location , which is 40 metres south of current location of the Careen.

The Environmental Noise Assessment is available on the project website under Learn More.

Questions on the **noise screening assessment**

169	<p>Question9. There is a Noise Assessment Screening Worksheet. Why there is not any input from a third party? Please also comment who provided the weights when calculated the total Weighted Project Score? There is a category called: Population Exposed to Project Noise. It has more than 100 residents as indicated in the worksheet (which is the highest). Surprisingly, the weight in importance is only 1.0. This is lowest weight if compared to all the attribute criteria. The Reflections and Shading category has a weight of 1.8. So, Reflections is more important that People based on your assessment? There is a self-assessment bias here. How do the weightings vary if you rate this project on an industrial area exclusively as opposed to a project that has exposure to a large residential zone? What is the feedback from the City of North Vancouver and the Port of Vancouver regarding this self-noise assessment? How does Port Vancouver determine an objective way to score this Screening Worksheet? I can a</p>
182	<p>Question9. There is a Noise Assessment Screening Worksheet. Please also comment who provided the weights when calculated the total Weighted Project Score? There is a category called: Population Exposed to Project Noise. It has more than 100 residents as indicated in the worksheet (which is the highest). Surprisingly, the weight in importance is only 1.0. This is lowest weight if compared to all the attribute criteria. The Reflections and Shading category has a weight of 1.8. So, Reflections is more important that People based on your weighting?</p>
216	<p>Question 12. In the Noise Assessment Screening Worksheet, how would you describe the answers: very low, low, moderate, high or very high noise in terms of decibels?</p>
266	<p>The weight for people is 1. The weight for Reflections is 1.8.?? (SOUND)</p>

A requirement of the application is the completion of the Port of Vancouver’s Noise Assessment Screening Worksheet. The worksheet is used to assess all Category C and D applications to ensure consistency between project applications. The worksheet was completed by BKL Consultants who are an independent engineering firm specializing in the field of acoustical consulting.



Question on **current noise levels**

76	We live in the trophy on front unit and need to shut the patio door due to current noise from the ongoing work. What is the current noise level right now?
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The Port of Vancouver operates a network of noise monitors to understand and track the source and intensity of port and urban noise. Locations of the noise monitors were chosen based on community feedback in collaboration with noise experts and municipal partners. The closest Port of Vancouver noise monitor to Vancouver Drydock is located at the foot of St. Georges street.

Real-time data, which includes noise levels, temperature, pressure, wind speed & direction and humidity is accessible through the Port of Vancouver noise monitoring web portal.

Question on **air quality**

222	The 2017 estimated emissions were 77 tonnes/year of volatile organic compound, 22 tones/year of particulates and 3 tonnes/year of metals. Will these numbers change with the expansion? What were your last actual reported emissions results? How do we know this estimate is still valid?
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As part of the Metro Vancouver permit application process, an engineering consultant estimated annual emissions for volatile organic compounds (VOC's), particulate and metals. The Water Lot Project will not require an amendment to the estimated emissions in the Metro Vancouver permit application.

Vancouver Drydock reports annual emissions to the National Pollutant Release Inventory (NPRI). The most recent publicly available information is from 2019 and the reported emissions were 30.5 T of VOC's and 7.6 T of particulate.

Question on **sampling stations**

225	Walking the area there are two air sampling stations that appear to be on Seaspan land area. Why have these stations not been used for sampling?
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There are two sampling stations within the Vancouver Drydock site. The station on the western edge of the wharf is a meteorological station measuring windspeed and direction and the station in the north parking lot is the Port of Vancouver noise monitor.

Question on **access to the navigation channel**

251	When a ship is anchored in Bravo and laying stern to the north it is very tight and sometimes dangerous for an inbound ship to get up the North Shore to berths on the North Shore. Will Moving Caren 40 meter south impact this situation more?
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The Caren would continue to be within the southern boundary of our water lot and would not extend as far south as our Panamax drydock, nor would it interfere with the navigation channel.

Question on **water quality**

231	how polluted are the waters around the docks
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Burrard Inlet is a dynamic body of water with a very high mixing rate (this is evident when looking at the water near the first and second narrows). Thus, the water around the drydocks is likely similar to the water in the rest of the central harbour.

As with the existing drydocks, the new structures will be self-contained, with any collected water from all (existing and new) drydocks discharged to the sewer when vessels are onboard. Existing Seaspan stormwater management procedures will be followed during the operation of the drydock. Stormwater will be treated as follows:

- While a vessel is dry docked on the new structures, stormwater and vessel washwater will flow north into a collection tank and will be pumped into a holding tank. The water is then processed through a two-step treatment plant where particulates are first filtered out using sand then metals are filtered using activated charcoal. The water is then pumped to the sewer under a Metro Vancouver permit.
- Once work is completed on a vessel, the vessel and drydock are washed down (wash water flows to the sewer, as described above), and the uncontaminated vessel and drydock are lowered into the sea to allow the vessel to depart.

Question on **bubble curtain technology**

206	You talk about bubble curtains to soften noise' why not use them now cut down noise during water blasting
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Bubble curtains are used to dampen underwater noise during very noisy activities like impact pile driving, and are not used above water. The way they work is to sink a hose (like a garden hose) with tiny holes, on the seabed, and pump air through it. The air escapes through the tiny holes creating a curtain of bubbles that rises to the surface of the water. When you say 'water blasting' - I assume you are referring to the ultra high pressure washing of ships that takes place above water. This technology would not work above water.

Question on **lighting**

219	If there is no work being done, why is there light on dawn to dusk.
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Our operating practice is to turn off the lights when work finishes for the shift; however, there are occasions when a crew may be on board the vessels and some lighting is required for safe access. As noted in our application, the new drydocks will use dark sky certified lighting and we are currently in the process of beginning a retrofit of our full operations.

Questions on **additional technical studies**

238	Question 17. The Port of Vancouver and Seaspan expressed that they are open to the idea of engaging a third-party consultant selected by the residents to undertake an environmental impact study. What would be the steps to do so (question for both Seaspan and Port of Vancouver? A committee among residents, Seaspan, City of North Vancouver and Port of Vancouver would be a good path to start doing so. Who would the decision making for this proposal (question for Seaspan and Port of Vancouver? I don't know if anyone from the City of North Vancouver is attending the meeting but same question for them).
190	Is it possible to do a study of the emission and noise over the next 30 days?
215	Noise measurements taken from Esplanade near the rail yards has nothing to do with dB measurements taken in the community, and at the location of the residences. Will new studies be done (paid for by the Port / Seaspan) and conducted by independent consultants chosen by the community?

As part of the port authority's project and environmental review (PER) application process for a category C project, Vancouver Drydock was required to complete a number of technical studies and assessments. These are available on our project website under Learn More - [www.drydockprojects.com](http://www.drydockprojects.com). At this point, Vancouver Drydock is not undertaking any additional technical studies.

As Vancouver Drydock operates within the Vancouver Fraser Port Authority, they are responsible for review and consideration of our permit application.