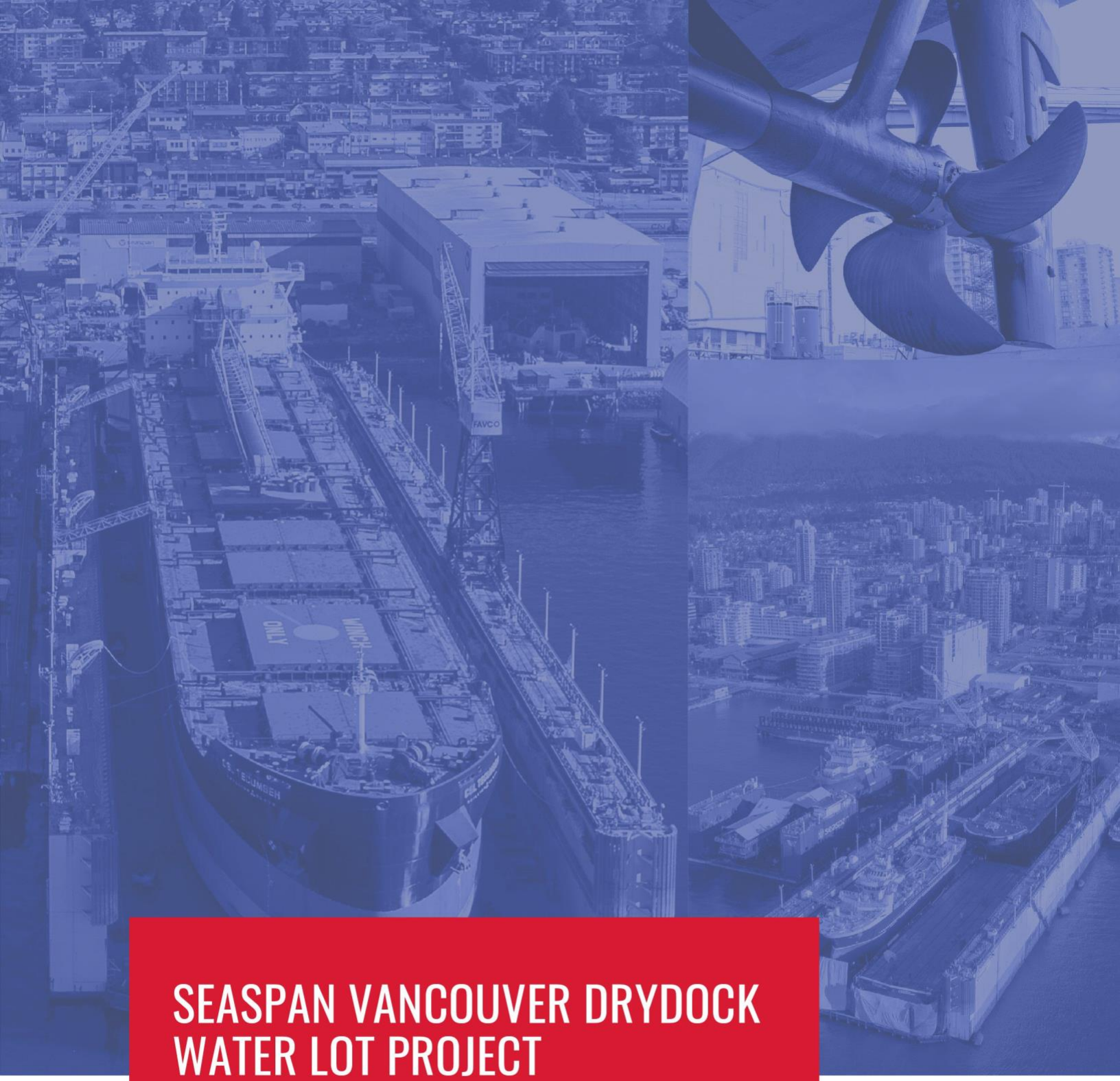


SEASPAN VANCOUVER DRYDOCK WATER LOT PROJECT

Supplementary Public Engagement Summary Report
Appendix B: 2022 Community Workshops
February 22, 2023

seaspan SHIPYARDS

APPENDIX B: 2022 COMMUNITY WORKSHOPS

Invitations to June 23 Workshop

June 23, 2022 Workshop Invitation to Stratas

Please circulate to all Trophy strata council members

Dear Trophy strata council member,

In July and August 2021, under the guidance and direction of the port authority, Seaspan undertook a number of public engagement activities to notify and seek feedback from the North Vancouver community on the proposed Vancouver Drydock Water Lot Project. We greatly appreciated the feedback offered by your strata council.

The Vancouver Drydock project team has now developed a package of proposed mitigations in response to what was heard. These mitigations are in addition to existing operational mitigations and to those originally included in the permit application. To get feedback on the proposed mitigation measures, we are planning to host a small group workshop. After input from the mitigation workshop, we will subsequently be seeking broad community feedback through an online community survey.

The 90-minute mitigation workshop will be facilitated by an independent facilitator and, given ongoing COVID considerations, will be held virtually. The objective of the mitigation workshop is to review the proposed mitigations, gather additional suggestions to shape solutions, and refine the mitigations for consideration by the port authority.

We have been advised by the independent facilitator that workshops such as the one proposed are most effective when the group size is small enough to enable engaged discussion and problem solving. For this mitigation workshop she has proposed a group of 12.

The feedback of your strata on the proposed mitigations is very important to us. We would like to invite two representatives of your strata council (or your designated alternates) to participate in the mitigation workshop.

Invitations will also be extended to two representatives from the Cascade and Atrium stratas. A further six participants will be drawn from the port authority's stakeholder list and the Seaspan project update sign-up list. This will give us a group of 12.

Once mitigation workshop participants are confirmed, each individual will receive more detailed information on the mitigation workshop agenda and the proposed mitigation measures so they can prepare for the session. We anticipate it will take 1.5 to 2 hours to review this information before the workshop, in addition to the 1.5 hours to 3 hours for the workshop(s).

We appreciate that you may wish to share the materials with other building residents to solicit their views in advance of the workshop.

We would like to ensure ample time for discussion. This may mean that we will benefit from a follow-up workshop. The need for a second session will be determined collectively

There are three proposed dates for the workshop: **June 23, 27 or 29 from 6:00 to 7:30pm**. We know how difficult it can be to schedule meetings, so will select the date that works for the majority.

Thank you for considering this invitation. Should you need additional information before confirming your participation, please let me know.

Please **RSVP by June 20, 2022** with confirmation of your strata council participation to **infodrydock@seaspan.com**. As you confirm the representatives from your strata council, we would also ask you please rank the proposed meeting dates in order of preference.

We look forward to your participation in the mitigation workshop.

Regards,

June 23, 2022 Workshop Invitation to Community Contact list

Dear Robert,

In July and August 2021, under the guidance and direction of the port authority, Seaspan undertook a number of public engagement activities to notify and seek feedback from the North Vancouver community on the proposed Vancouver Drydock Water Lot Project. We greatly appreciated the feedback offered by members of the community.

The Vancouver Drydock project team has now developed a package of proposed mitigations in response to what was heard. These mitigations are in addition to existing operational mitigations and to those originally included in the permit application. To get feedback on the proposed mitigation measures, we are planning to host a small group workshop. After input from the mitigation workshop, we will subsequently be seeking broad community feedback through an online community survey.

Would you like to participate in the mitigation workshop?
The 90-minute mitigation workshop will be facilitated by an independent facilitator and, given ongoing COVID considerations, will be held virtually. The objective of the mitigation workshop is to review the proposed mitigations, gather additional suggestions to shape solutions, and refine the mitigations for consideration by the port authority.

We have been advised by the independent facilitator that workshops such as the one proposed are most effective when the group size is small enough to enable engaged discussion and problem solving. For this workshop she has proposed a group of 12: six individuals to represent the community (recruited from those who signed up to receive updates about the proposed project) and two representatives from each of the three strata councils closest to Vancouver Drydock.

If you would like to participate in the mitigation workshop, please let us know.
As noted, there are six seats available for the community. Should more than six individuals wish to participate, we will reach out to all those who expressed interest to determine how the group would like to select the six delegates. Selection could be

To enable greater participation, a larger caucus group could attend the mitigation workshop as observers. Observers would be able to watch the session, but would not be able to comment or vote on the mitigation measures. A break out room could also be set up where observers and the six community delegates could meet to discuss the mitigation options before the six delegates report back to the other workshop delegates.

Once the mitigation workshop group is confirmed, each individual will receive more detailed information on the mitigation workshop agenda and the proposed mitigation measures so they can prepare for the session. We anticipate it will take 1.5 to 2 hours to review this information before the workshop, in addition to the 1.5 hours to 3 hours for the workshop(s).

We would like to ensure ample time for discussion. This may mean that we will benefit from a follow-up workshop. The need for a second session will be determined collectively in the first workshop, although we are requesting scheduling availability in advance.

There are three proposed dates for the workshop: **June 23, 27 or 29 from 6:00 to 7:30pm.** We know how difficult it can be to schedule meetings, so will select the date that works for the majority.

Your feedback is important. Thank you for considering this invitation. Should you need additional information before confirming your participation, please let me know.

Please **reply by June 20, 2022** to infodrydock@seaspan.com to confirm your interest in participating. Please also rank the proposed meeting dates in order of preference.

We look forward to your participation.
Regards,

Workshop Discussion Guide

MITIGATION WORKSHOP DISCUSSION GUIDE

Thank you for agreeing to participate in the upcoming workshop exploring mitigation measures for Seaspan's Vancouver Drydock Proposed Water Lot Project. You will be joined at the session on June 23 by 11 other community representatives.

This package contains information to support you as you prepare to attend the session, including:

We appreciate that you may not have time to consider all materials in detail, but ask you to please review the **Existing and Proposed Mitigations** information (pages 7 to 34). This section of the document will guide our mitigation workshop discussions. If your time is short, this is the section of the guide that we suggest is most important to review before we meet.

Additional information and resources that may be of interest to you are available on the Seaspan project website – **www.drydockprojects.com.** Technical assessments, planning documents and the fact sheets that have been shared with you can be found on the **Learn More** page of the project site.

Questions?

Should you have any questions or wish additional information before the mitigation workshop, please contact:

- Mitigation Workshop Facilitator Jocelyn Fraser jocelynfraser@shaw.ca
- Vancouver Drydock Community Relations Kris Neely at kris.neely@seaspan.com

seaspan SHIPYARDS

1. Project Overview: About the Vancouver Drydock Proposed Water Lot Project

Seaspan has completed a comprehensive assessment of its shipyard, drydock and marine transportation operations in North Vancouver. The objective was to optimize existing facilities, better meet the needs of its marine customers in the port, and facilitate the continued shipbuilding for the Royal Canadian Navy and Canadian Coast Guard at its Vancouver Shipyard.

As part of this assessment, Seaspan is consolidating ship repair activities at Vancouver Drydock. To meet growing demand for repair services, Seaspan has submitted a Project & Environmental Review (PER) permit application to the Vancouver Fraser Port Authority (port authority) to expand its facility west by approximately 40 metres to support the installation and operations of two additional floating drydocks and floating work pontoon.

The two drydocks will be used to service smaller vessels. The docks will be transported to Vancouver Drydock fully assembled and will be secured in place with pilings. Should the permit be approved, project construction is anticipated to take approximately six weeks, which will include site preparation and dock installation.

The proposed project includes:

- Shifting the existing careen floating drydock approximately 40m south, away from the shoreline, to accommodate a floating service pontoon.
- Installing a 100m floating drydock, a 55m floating drydock and a 110m work pontoon, in addition to installing approximately six support pilings and moorings to secure the docks in place.

While Seaspan is working to optimize operations within its existing water lot, Vancouver Drydock is looking to extend the size of our water lot west by approximately 40m (an additional 12,778m²) to accommodate one of the two floating docks. The proposed use of the water lot is consistent with the port authority's Land Use Plan and the existing terms of the lease agreement with the port authority which includes an option to request westward expansion. Please review the Land Use Plan fact sheet for more information on the port authority's Land Use Plan or click here to review the document.

2. The Mitigation Workshop

Objectives

- Provide the opportunity to discuss specific mitigation measures with our neighbours;
- Provide the opportunity for workshop participants to share input on proposed mitigations and leave space for suggestions that shape solutions;
- Strengthen relationships with community neighbours; and,
- Increase understanding of the project and proposed mitigations.

Representatives from Seaspan and the port authority will also be in attendance to hear the feedback and if needed confirm project details, but will not be taking questions.

Workshop Rules of Engagement

As with all meetings, respecting other voices and perspectives is paramount to open discussion.

- Respectful, inclusive dialogue to discuss mitigations for the proposed Vancouver Drydock Water Lot Project.
- Anyone who is unwilling to participate in a respectful and manner that is considerate of the other workshop participants, facilitator, the Seaspan or port authority teams will be cautioned by the facilitator and, if necessary, will be asked to leave.
- Other issues of importance will be noted, but not workshopped.
- The workshop discussions will aim for agreement, but accepting there may be places where we agree to disagree.
- The workshop will be recorded and shared online following the meeting(s). Videographers will be onsite and participants will be asked to use the provided microphones to accurately capture the dialogue and discussion

Date / Time

Thursday, June 23, 2022

6:00pm to 7:30pm PT

Pinnacle at the Pier Hotel
Pier 2 Meeting Room

Should the scheduled workshop time not be sufficient for the group to move through all of the mitigations, participants will be polled to determine interest in attending a follow up virtual mitigation workshop. This has been tentatively scheduled for June 29 from 6:00pm to 7;30pm PT and will be held using Zoom. To participate in the follow up workshop you will need access to a computer with internet access. The purpose of the second meeting will be to complete the assessment of the proposed mitigation measures.

Community and Strata Observers

Community and strata observers may be observing the workshop via Zoom, but will not be attendance at the workshop. All observers will be muted throughout the meeting, but will be supported to provide their input.

Agenda

10 minutes	Welcome, round table introductions Reminder of workshop rules of engagement Review of session objectives • Review proposed mitigation measures • Propose additional mitigation ideas • Rank mitigation priorities – divide ideas into those within and those outside of the port authority's permitting scope
10 minutes	Review of key themes identified during the 2021 public engagement activities • Any additional issues raised by participants not identified in the prior engagement activities
5 min	Personal reflection on proposed issues and mitigation • What is important? What is missing? What works? What doesn't? What new ideas could be considered?
15 min	Sticky note exercise • Each participant posts ideas for mitigation measures ○ These can be new ideas or ideas from the workshop materials • Facilitator works with the group to cluster similar ideas, probe ideas, clarify any questions and prompt discussion. Ideas not related to mitigations or outside the port authority's permitting scope will be moved to a separate board
5 minutes	Vote • Once the board has been populated with ideas, participants will be asked to vote on the top mitigation issues for discussion (9 votes each)
40 minutes	Diamond ranking (please see the explanation below) and discussion of mitigation measures
5 minutes	Summary, thanks, and closing comments • Vote on interest in/need for a second meeting

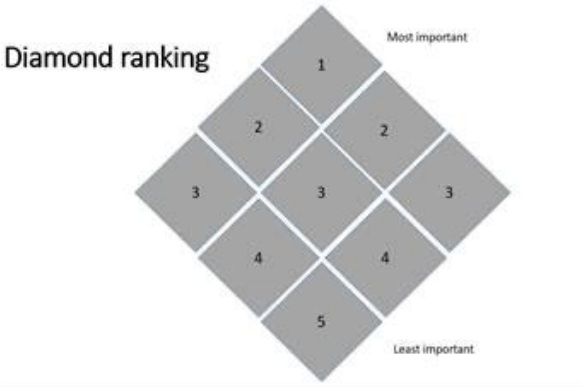
Mitigation Workshop Tools

DIAMOND RANKING is a tool to support building consensus while encouraging debate and discussion on the issues and related mitigations. Once mitigation ideas have been voted upon the facilitator will move the nine ideas with the most votes to a new board containing a blank diamond pyramid. The facilitator then will work to support the group as they determine where each idea belongs in the diamond pyramid.

Here's how the Diamond Ranking works:

One idea – the most important – sits at the top of the pyramid, two ideas sit on the second level of importance, three sit on middle layer followed by two ideas of lesser importance and one idea which is placed at the bottom of the diamond.

Ideas that are not considered amongst the top nine priorities for discussion will be still be fully documented, reviewed and considered as part of Seaspan's post-engagement submission.



ZOOM will be used for Community Observers and for the follow up workshop, should it be required. You are asked to login a few minutes prior to the meeting start time with cameras on, to allow sufficient time to resolve any potential issues. Please note, dial-in (phone only) participation will not accommodate the workshop collaboration tools that are a key part of the mitigation workshop.

If you are not familiar with Zoom, or are concerned about your connectivity, please contact us in advance and we'll do our best provide the support you may need.

During the workshop, all participants will have the opportunity to talk and will be asked for input and perspectives throughout, as moderated and guided by the facilitator; however, to ensure a respectful and safe space for everyone, you are asked to please mute your audio when not speaking.

3. Summary of Key Themes Identified During the 2021 Public Engagement

During the public engagement activities in 2021, feedback was received through online feedback forms, emails, voicemails, letters and hand-written communications, along with emails forwarded from the port authority and North Vancouver-based elected officials.

This feedback was summarized by key theme and are presented below in order of the number of comments received:

Key Themes	# Comments Received
Views, Shading and Drydock Siting	189
Noise	123
Air Quality*	108
Land Use and Zoning*	95
Project Support	74
Public Engagement Process	32
General Inquiries**	32
Marine Habitat	30
Lighting	20
Construction	14
Traffic	13

*Some aspects of these themes are outside of the scope of the port authority's project and environmental review process, yet are of interest to the Vancouver Drydock planning team. Those aspects within the permit review scope are addressed within the proposed mitigations.

**Note: General inquiries included questions regarding meeting start times, location of specific website information, acknowledgement of previous communications etc.

4. Key Feedback Themes and Existing and Proposed Mitigations

Below you will find mitigation tables for each of the key themes.

Each table is made up of two columns: feedback themes and input from the community (column one) and Seaspan's response, and existing and proposed mitigations (column two). The mitigation measures detailed in column two are the focus of the workshop. All mitigations are shown in bold.

Please note: the mitigation tables do not include any existing or proposed mitigations for the following themes which are outside of Seaspan's remit or are not required under the PER process: project support, the public engagement process and general inquiries.

We ask that you please review the proposed mitigation measures before the workshop to evaluate:

- What is important?
- What is missing?
- What works?
- What doesn't?
- What new ideas do you have that could be considered?

To help you navigate your mitigation review, the following table denotes the theme and relevant page number.

** As noted in Section 3 above, there are no proposed mitigations for this theme.

If you are looking for specific technical reports, or additional information on these topics, please visit the project website at https://drydockprojects.com/learn-more/.

Views, Shading and Drydock Siting

<table>
<tr><th>Feedback Themes/Input</th><th>Response, including Existing and Proposed Mitigations</th></tr>
<tr><td>Extending Vancouver Drydock's water lot as outlined within the existing lease with the port authority and siting the drydocks in this area is not the preferred siting location.</td><td rowspan="2">Seaspan looked at all the currently under-utilized areas within its existing water lot to identify potential locations for the new proposed drydocks and work pontoon. Seaspan identified six potential locations that were fully assessed for feasibility by the project team. The team determined that five of the six locations would be unsuitable because they did not meet both operational and community needs.

Specifically, the five other locations were deemed unsuitable because of:
1. Proximity to residential neighbours.
2. Lack of minimum water depth for drydock operations.
3. Proximity to the navigation channel.
4. The inability to provide direct access to the main operations service pier for people and supplies.

<u>Proposed Mitigation:</u> With this in mind, Seaspan has proposed to shift the existing Careen drydock 40 meters south of its current location and to align the new proposed drydocks in parallel, meeting operational needs and reducing potential noise, light and air quality impacts.</td></tr>
<tr><td>Siting the new proposed drydocks to the east of Vancouver Drydock's existing operations, within its existing water lot.</td></tr>
<tr><td>Siting the new proposed drydocks to the east of the existing operations - within the adjacent water lot that is currently leased by Vancouver Drydock's sister company, Seaspan Marine.</td><td>In preparing its project and environmental review (PER) application, Seaspan considered several potential locations for the new proposed drydocks, including the adjacent water lot directly to the east of its current operations.

This location was deemed to not adequately support operations because:
1. While the adjacent water lot leaseholder has a common parent company, the water lot is managed and operated by a different part of the Seaspan business and is already in use for other purposes.
2. The adjacent water lot pier does not provide direct access to Vancouver Drydock's main operations service pier for people or supplies.
3. The adjacent pier does not meet the structural requirements for drydock operations and would require significant upgrades, including several hundred new pilings (versus six in the proposed project), which would create much greater impact for a sustained period.
4. The adjacent water lot has operating requirements as a satellite shipbuilding site for direct water access, which restricts how far east the new proposed drydocks can be positioned.</td></tr>
</table>

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
Repositioning the existing Careen drydock to eliminate the need for either new pilings, the access pontoon or additional side-mounted cranes.	Positioning the Careen drydock and the new proposed drydocks any further south would require several additional pilings than what is currently being proposed because of increased wind and tidal impacts. It would not eliminate the need for the work pontoon or cranes on the new proposed drydocks, as equipment and people would still need direct access from the main service pier.
View impacts from the adjacent public pier and nearby Lonsdale Quay.	**<u>New Proposed Mitigation:</u> Seaspan recognizes the visual impacts and proposes to engage with the City of North Vancouver and local community, including Indigenous communities on what colour(s) would be preferred to best integrate the drydocks into the neighbourhood viewscape. This outreach would form part of broader enhanced community relations efforts that Seaspan intends to undertake moving forward.**
Vancouver Drydock ceasing operations in its current location and relocating to another coastal area of British Columbia. The use of the water lot extension area for shipbuilding-related activity is not acceptable use. North Vancouver industrial lands should be relocated elsewhere.	The terminals and service providers who operate within Canada's port authorities play a vital role in the Canadian economy – facilitating the export of Canadian products to global markets and import of goods in demand by Canadians. Drydock and vessel repair services are essential infrastructure in all ports. Drydock and shipbuilding operations have existed in this location of North Vancouver for over 100 years and provide important ship maintenance services. As the drydock operations must remain within the Port of Vancouver and other potential industrial sites are currently fully utilized, Seaspan does not have the ability to readily relocate to any other British Columbia location. Seaspan is proud to provide this essential infrastructure and services to enable Canada's economic well-being, and believes its facilities align with efforts to protect and maintain industrial lands.
The drydock activities should be shifted to Seaspan's shipbuilding site at the bottom of Pemberton Avenue.	The current and future shipbuilding activities at Seaspan's sister entity, Vancouver Shipyards, require all available space and cannot accommodate any drydock activity. Additionally, there is insufficient water depth at the Vancouver Shipyards to operate the drydocks.
The proposed project would be encroaching on park land.	The proposed water lot project is consistent with the port authority industrial designation. Port authority land use planning: https://www.portvancouver.com/land/land-use-planning/

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
The working harbour and marine activities at to Vancouver Drydock add to the vibrancy and enjoyment of Shipyards District.	Seaspan is proud to provide essential infrastructure and services to enable Canada's economic well-being and is equally proud to be the industrial part of the mixed-use Shipyards District neighbourhood, carrying out activities that have taken place on this site for over 100 years.
The active working shipyard of Vancouver Drydocks adds to the interesting views.	The Government of Canada recognizes the importance of robust ports to facilitate the export of Canadian products to global markets and to meet the demand for goods from elsewhere. Drydock and vessel repair services are essential infrastructure in all ports and have existed in this location of North Vancouver for over 100 years. Seaspan is proud to provide this essential infrastructure and services to enable Canada's economic well-being.
North Vancouver's waterfront industry is the heart of the community and should remain in place to provide good jobs and continued economic growth.	Seaspan is proud to have the ability to add a further 100 new family-supporting jobs to its existing workforce of 200 people today at Vancouver Drydock. In addition, Vancouver Drydock has 250 suppliers in the Lower Mainland including over 30 based on the North Shore. With two additional drydocks in operation, many of these businesses would see increased orders for goods and services which, in turn, contribute to business growth and increased economic activity in our region through the hiring of additional employees and investments in new equipment, office/workspace, and technology. Seaspan's economic contributions are local, regional and national. According to a study undertaken for Seaspan by Deloitte in August 2021, for every dollar spent on vessel repair and maintenance, Seaspan returns $1.10 in direct and indirect economic activity (GDP) to the Canadian economy.
Impacts on property values for adjacent residences due to the change in views.	As outlined within port authority communications, real estate values are not within the scope of the PER application review.

Noise

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
The increased noise levels will have a detrimental effect on residents and nearby businesses. Concern about increased overall noise levels into the evening and on weekends. Noise levels should not increase at all with any additional dry dock equipment or related activities. There should be ongoing noise monitoring to ensure actual noise levels are as predicted within the noise study. The additional activities will result in louder, continual noise. Vancouver Drydock and other terminal operators as federal port authority tenants operate under port authority regulations and are therefore not subject to City of North Vancouver noise bylaws. Noise is currently discernible 24 hours a day and considered disruptive at current levels.	Seaspan's Environmental Noise Assessment was conducted by BKL Consultants Ltd (BKL), an independent engineering firm specializing in the field of acoustical consulting. The assessment was conducted to comply with the port authority's *Project & Environmental Review Guidelines - Environmental Noise Assessment*. The assessment compared the predicted post-project noise impacts against the PER Assessment Guideline indicators for consideration: • Post-project rated day-evening-night equivalent sound level (L_{Rden}) > 75 dBA • %HA (percent highly annoyed) • Low noise frequency > 70 dBA The assessment concluded the following: • The 3D model assessed noise levels at the Trophy, Cascade East and Cascade West developments. The model predicted that the LRden would increase one dBA at the Trophy (65 dBA to 66 dBA) development and three dBA at both the Cascade East (62 dBA to 65 dBA) and Cascade West (60 dBA to 63 dBA) development. The maximum predicted LRden does not exceed 75 dBA, which is acceptable under Health Canada guidelines at any of the residences. • The 3D model predicted an increase in %HA of 1.5% at the Trophy development, 3.4% at the Cascade East development and 3.8% at the Cascade West development. The predicted increase in %HA does not exceed the Health Canada guideline. • The assessment predicted an increase in the low frequency sound level (LLF) from 71 dBA to 75 dBA which suggests a slight likelihood of increased noise induced rattles. To date there have not been any reported incidences of rattles. Seaspan has considered the feedback and remains committed to minimizing the impact of our operations on the community. Seaspan will continue to engage with BKL during the proposed project design process to ensure a best practices approach. **<u>Existing Operational Mitigation:</u> While Seaspan has the ability to operate 24 hours per day, Seaspan recognizes that its industrial operations are adjacent to residences and, as such, makes best efforts to schedule activities with the highest potential noise impact during the daytime (from 7:00am to 7:00pm), where possible.** **<u>Proposed Mitigation:</u> Complete a post-project noise assessment to**

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	verify 3D model predictions and identify additional noise-reduction measure options, as required. Seaspan will collaborate with the adjacent stratas to identify the 'in community' location. Once complete, the report would be available for review on the project website. **<u>New Proposed Mitigation:</u> Seaspan is committing to trial the use of noise-reducing materials around the ultra-high pressure (UHP) pumps. Acoustical consultants will assess the noise sources (at the nozzle and structure-borne noise) to determine the highest-noise generating activity and identify the effectiveness of potential localized barriers. Noise levels will be measured before and after installation of the barriers to evaluate their effectiveness. The results of the trial will be posted on Seaspan's project website. The results of the trial will also be documented within the post-project noise assessment.** **<u>New Proposed Mitigation:</u> Seaspan will investigate the use of noise-reducing curtains on the drydocks, which is identified as a potential mitigation in the BKL report. As part of the investigation, the acoustical consultants will establish a baseline measurement at Vancouver Drydock, and in the community, to determine their effectiveness. Seaspan will collaborate with the adjacent Trophy and Cascade stratas to identify the 'in community' location. The results of the investigation and testing will also be documented within the post-project noise assessment.** Port authority noise assessment guidelines: https://www.portvancouver.com/wp-content/uploads/2015/05/PER-Noise-Assessment-Guidelines-FINAL-2015-07-09.pdf Seaspan Project Website – Learn More – Technical Assessments Noise Assessment: https://drydockprojects.com/learn-more/
Existing Careen operations exceed allowable noise levels.	**<u>Existing Operational Mitigation:</u> Seaspan recognizes that its industrial operations are adjacent to residences and, as such, makes best efforts to schedule activities with the highest potential noise impact during the during the daytime (from 7:00am to 7:00pm), where possible.**
Concerns about the accuracy and credibility of the BLK noise modeling study, including the assumptions and methodology that was used.	The Environmental Noise Assessment was conducted by BKL Consultants Ltd, an independent engineering firm specializing in the field of acoustical consulting. BKL generated a 3D computer model following the internationally recognized ISO 9613-2 (1996) standard for predicting exterior sound propagation. The assessment was conducted to comply with the Port Authority 2015 Noise Guidelines. The assessment was conducted and reviewed by two

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	professional engineers registered with Engineers & Geoscientists British Columbia. ISO 9613-2 Standards: https://www.iso.org/standard/20649.html Port authority noise assessment guidelines: https://www.portvancouver.com/wp-content/uploads/2015/05/PER-Noise-Assessment-Guidelines-FINAL-2015-07-09.pdf Seaspan Project Website – Learn More – Technical Assessments Noise Assessment: https://drydockprojects.com/learn-more/
The noise study did not include consultation with nearby residents.	The Environmental Noise Assessment was conducted by BKL Consultants Ltd (BKL), an independent engineering firm specializing in the field of acoustical consulting. The assessment was conducted to comply with the port authority's *Project & Environmental Review Guidelines - Environmental Noise Assessment* (Port Authority 2015 Noise Guidelines). Stakeholder consultation is not an element of the Guidelines. However, a list of noise-related complaints is included in Appendix D of the Assessment and stakeholder feedback was collected during the public engagement process. Port authority noise assessment guidelines: https://www.portvancouver.com/wp-content/uploads/2015/05/PER-Noise-Assessment-Guidelines-FINAL-2015-07-09.pdf Seaspan Project Website – Learn More – Technical Assessments Noise Assessment: https://drydockprojects.com/learn-more/
Seaspan Marine tugs idle adjacent to nearby residences and contributed to overall ambient noise levels	The Environmental Noise Assessment was conducted by BKL Consultants Ltd (BKL), an independent engineering firm specializing in the field of acoustical consulting. The assessment was conducted to comply with the port authority's *Project & Environmental Review Guidelines - Environmental Noise Assessment* (Port Authority 2015 Noise Guidelines). As per the port authority's *Project & Environmental Review Guidelines - Environmental Noise Assessment,* for completing the study ambient noise levels are included in the assessment. Port authority noise assessment guidelines: https://www.portvancouver.com/wp-content/uploads/2015/05/PER-Noise-Assessment-Guidelines-FINAL-2015-07-09.pdf Seaspan Project Website – Learn More – Technical Assessments Noise Assessment:

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	https://drydockprojects.com/learn-more/

Air Quality

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
Concern about effects on air quality with the additional drydock activity. The volatile organic compounds (VOCs) released during operations are toxic and damaging to human health. Concerns about dust from the drydock activities on nearby balconies.	As a long-standing certified member of Green Marine, Seaspan is committed to employing best practices and emerging technologies to reduce air emissions. Green Marine is a rigorous and transparent voluntary environmental certification program for the North American marine industry. Green Marine measures companies' performance above and beyond regulatory compliance, with performance assessed every two years by certified third-party verifiers. Key performance categories assessed include spill prevention, stormwater protection, air emissions and waste management. As part of the Green Marine enhancement efforts, Seaspan has previously completed the following air quality initiatives: • Transition from grit blasting to ultra-high pressure (UHP) water surface preparation, which is significantly more expensive but does not create any dust. • Low carbon electrification of on-site equipment to reduce greenhouse gases. • Application of low volatile organic compound (VOC) paints where practical. • Use of high efficiency paint spray nozzles. Seaspan has considered the feedback and is committed to minimizing the impact of our operations on the community. **Existing Operational Mitigation: Continue working with Metro Vancouver to gain an air quality management permit, which would make Vancouver Drydock the first ship repair yard in the region according to the Metro Vancouver's permit registry.** Metro Vancouver air quality permitting: http://www.metrovancouver.org/services/Permits-regulations-enforcement/air-quality/apply-permit/Pages/default.aspx **New Proposed Mitigation: Particulate emissions monitoring is anticipated to be part of the Metro Vancouver air quality permit, in development. Periodic sampling of dust from the neighbourhood will be included in the monitoring plan. An annual report will summarize**

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	results from the previous 12-month period compared against the permit criteria. The report will be available through Metro Vancouver and on the Vancouver Drydock website. **<u>New Proposed Mitigation:</u> Seaspan will conduct a feasibility study on the implementation of a solvent recycling system to reduce VOC emissions and will share the results with the port authority. The feasibility study will review the effectiveness of the system on reducing VOC emissions against current baseline conditions.** **<u>New Proposed Mitigation:</u> Seaspan will meet with industry experts to review trends in paint VOC content and non-solvent based alternatives in the marine coating industry. A VOC reduction report is anticipated to be part of the Metro Vancouver air quality management permit. The report will highlight VOC reductions in surface coatings, alternatives to solvent based coatings and new products investigated. The report will be available through Metro Vancouver and on the Vancouver Drydock website.**
A human health impact assessment should be part of the permit application. Seaspan and the port authority will be liable for the long-term health of nearby residents. The drydock activities will impact the health of children at the nearby playground.	Seaspan is required to provide a safe workplace for everyone on our site, taking care of employees, and, by extension, our neighbours around us. As Metro Vancouver is the regulator responsible for air quality, a human health impact assessment is not part of the port authority's PER process. The Metro Vancouver air quality management permit that is currently in development will require ongoing monitoring to ensure compliance with all air permit conditions and restriction. Metro Vancouver will determine if additional modeling and/or mitigations are required.
The permit application should include an air quality study.	As Metro Vancouver is the regulator responsible for air quality in the Lower Mainland, a human health impact assessment is not part of the port authority's PER process. The Metro Vancouver air quality management permit that is currently in development will require ongoing monitoring to ensure compliance with regional air quality and emission requirements.
The monitoring station at St. George's is too far away.	The monitoring station at St. Georges is a noise monitoring station managed by the port authority. The port authority maintains a noise monitoring network to track the source and intensity of port and urban noise. Locations were chosen in collaboration with noise experts, municipalities and community feedback.

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
Permanent air quality and noise monitoring of Vancouver Drydocks should be established with a dedicated community phone/email at the port authority to report on activities.	Seaspan complies with all regulatory requirements and will continue to do so moving forward. **New Proposed Mitigation: Seaspan has established a dedicated phone line and email (infodrydock@seaspan.com and 778-729-0288) for community inquiries and feedback. These channels will remain in place indefinitely to provide a means for ongoing communication with Vancouver Drydock.** **New Proposed Mitigation: Seaspan will summarize community complaints and responses on a quarterly basis and will make these reports available on the Vancouver Drydock website.**

Land Use and Zoning

(Including comments on port authority Land Use Plan; City of North Vancouver zoning and land use, and Shipyards District activities)

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
The drydock activities support local businesses and strengthen the community.	Seaspan is proud to work with many local service providers to enable these essential infrastructure and services.
The additional activities will add more welcome good paying long-term jobs to the local community.	Seaspan is proud to have the ability to add a further 100 new jobs to its existing workforce of 200 people at Vancouver Drydock today. Drydock services are in high demand with limited capacity within the Port of Vancouver. The new proposed drydocks will be used to service a range of smaller vessels, such as the SeaBus, smaller BC Ferries vessels, fishing boats and tugs.
The additional activities will increase the efficiency of the operations and increase the capacity and expertise of workers.	
The Port Authority should not contemplate any future commercial (industrial) activity along the North Vancouver waterfront.	This is not within Seaspan's influence as a leaseholder. The existing water lot and new proposed water lot extension are within the jurisdiction of the port authority and have an industrial designation within the port authority's Land Use Plan. Port authority land use planning: https://www.portvancouver.com/land/land-use-planning/
There was no buffer zone created by the City of North Vancouver and developers when building the new residences. We are a port city	The existing water lot and new proposed water lot extension are within the jurisdiction of the port authority and have an industrial designation within the port authority's Land Use Plan On-land zoning of the Shipyards District is within the responsibility of the

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
that needs drydocking space.	City of North Vancouver. Port authority land use planning: https://www.portvancouver.com/land/land-use-planning/
Industrial marine activity should be as far away as possible from the Shipyards District to preserve the desirability of the area.	The Shipyards District is a vibrant and diverse mixed-use neighbourhood that is a unique mix of commercial, residential and industrial spaces. Seaspan is proud to be the industrial part of this mixed-use community. Many individuals who live and visit the Shipyards District regularly contact Vancouver Drydock to learn more about the activities happening at the drydocks. Drydock and vessel repair services are essential infrastructure in all ports and have existed in this location of North Vancouver for over 100 years. Seaspan is proud to provide this essential infrastructure and services which contribute to Canada's economic viability and well-being. Seaspan is proud to work with many local service providers to enable this essential infrastructure and services. The port authority has a process for re-designating areas within its jurisdiction, under its Land Use Plan. The port authority has a Land Use Plan, which was updated in 2020. The shipyards area has an industrial designation, which did not see any change in designation or boundary during the plan update. While the update process did involve stakeholder and public consultation, there was no consultation about this area, as no changes were proposed. Port authority land use planning: https://www.portvancouver.com/land/land-use-planning/
The proposed additional drydocks are inconsistent with the current mixed residential, commercial and industrial activities within the Shipyard District.	
The proposed additional dry docks will impact the viability of the Shipyard District as a tourist attraction.	
The proposed drydocks would impact the livability of the Shipyards/North Vancouver.	
The additional drydocks will change the Shipyards District from a leisure destination to an industrial area.	
The current mixed-use composition of the Shipyards District is incompatible and industrial activity should be moved elsewhere.	
Vancouver Drydock supports made-in-BC shipbuilding and overall port activity.	
Lower Lonsdale has been a marine repair/shipyard for over 100 years, this work and the	

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
workers need to be protected from encroaching residences.	
Seaspan adding new drydock infrastructure would impact competitor dry dock operations.	While Seaspan does not have details of the operational demands at other drydocks, drydock services at Vancouver Drydock are in high demand with limited capacity within the Port of Vancouver.
Seaspan should create a community culture space to offset the project.	Seaspan is a longstanding supporter of the North Vancouver community, including providing funding and employee volunteer activities. These include support for programming at the Shipyards, funding for Lions Gate Hospital and collaboration with the City of North Vancouver and United Way on a container parklet at Chesterfield and 5th Street. **Existing Operational Mitigation: Seaspan will continue to publish a regular e-newsletter to update the community on activities at across Seaspan, including Vancouver Drydock and Vancouver Shipyards.** **New Proposed Mitigation: Seaspan has considered the feedback and will continue to work with community organizations and the City of North Vancouver on future initiatives, including a community amenity contribution to enhance the local community.** **New Proposed Mitigation: Once COVID-19 public health restrictions have eased, Seaspan will initiate a community tour program for Vancouver Drydock.**

Public Engagement Process

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
Community notification did not reach all individuals within multi-unit residential buildings.	On June 24, 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 the port authority requires. Of note, unaddressed mail can be blocked – a resident may make that choice and tell Canada Post they do not want to receive unaddressed mail. Those addresses that have opted out were not included in the Canada Post counts, so the quantity Seaspan mailed would be the actual number delivered. In this case, 7,154 were delivered to homes and businesses, including the multi-family residences immediately adjacent to the Vancouver Drydock 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 stratas in the immediate vicinity of our operations via email, telephone and in person. When the engagement period was extended, Seaspan ran a third newspaper print ad, a digital newspaper ad and Facebook ads, as well as emailing anyone who had signed up for further updates to provide notice of the extension.
The public comment period was insufficient and should not have occurred in July or August, after easing of COVID-19 restrictions.	The port authority "Public engagement guidelines update in light of COVID-19" require a 25-business day public engagement period without any exclusions during the months of July or August. Seaspan complied with this requirement and, on request, extended the comment period a further eight business days through to August 12, 2021. Port authority public engagement guidelines: https://www.portvancouver.com/wp-content/uploads/2020/04/2020-04-29-Guidelines-Public-Engagement-during-COVID-19-1-1.pdf
Attendees at the community information meetings were not given an opportunity to speak	Seaspan submitted its proposed public engagement plan to the port authority for approval prior to commencing the public engagement activities, including a proposed public meeting plan to meet all provincial COVID-19 requirements and restrictions. Given the number of people attending the virtual community meetings and wanting to provide all those who attended the opportunity to ask questions, the Chat function was used for questions. All questions were documented and subsequently responses were provided on the project website. Seaspan Project Website – Community Engagement 2021 Public Engagement: https://drydockprojects.com/community-meetings/

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
In the meeting with strata councils, all residents were not invited to attend the meeting with Strata Council representatives.	In addition to the two community meetings open to all members of the public, Seaspan offered to meet with nearby strata council representatives to address questions specific to these neighbours. The intention of this meeting was not to host an additional open house, but to meet with strata representatives.
The renderings within the Project Information Guide did not consistently include vessels.	The renderings on the website, in the community meeting presentations, and within the project information guide, are illustrative of how the operations would appear, should the proposed project be approved. Seaspan included a range of photos and vessels to show the variety that would likely be at the Vancouver Drydock for service and repair following the installation of the proposed new drydocks Seaspan Project Website: https://drydockprojects.com

Marine Habitat

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
Concern about future possible oil spills (noting a recent spill on June 7, 2021).	Seaspan takes every precaution to avoid spills into the marine environment. Seaspan has well-established preventative maintenance programs, fuel and oil handling procedures, and robust spill response plans, equipment, and training at all our facilities and vessels. Any spills or releases which may occur are reported and tracked regardless of volume. All incidents or near misses are investigated to determine the cause, and corrective actions implemented to prevent future occurrences. On June 7, 2021, Seaspan experienced a fuel spill from the Seaspan *Commander* tugboat during operations in Burrard Inlet. The Seaspan *Commander* was assisting at Vancouver Drydock when the vessel had a fuel tank overflow, resulting in an estimated 20-30 litres of diesel fuel spilling to the vessel's deck and water. The vessel Emergency Spill Response Plan was immediately initiated by the crew. Authorities, including the Coast Guard, were notified and Western Canada Marine Response Corporation (WCMRC) responded to see if any of the fuel was recoverable. Absorbent pads and containment booms from on-board spill kits were deployed by the crew to clean up fuel on the deck of the tug, but the diesel fuel in the water had quickly dissipated. The Seaspan *Commander* was removed from service, returned to Seaspan Marine's main dock for investigation, inspection and clean up. The detailed investigation that followed identified that the release was a result of a faulty relay contact related to the vessel fuel system and day tank transfer pump. The corrective actions were to replace the relay and add in additional alarm notification systems to alert crew to potential issues. As this type of relay failure had not occurred before, similar systems equipment on other vessels in the fleet were also assessed, and modifications applied to prevent risk of future occurrences. Seaspan's Spill Response Plan will be in place for project construction, along with the Spill Prevention and Response Plan for ongoing operations, both of which align with the BC *Environmental Management Act*. BC *Environmental Management Act:* www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/03053_00 **Proposed Mitigation: During construction, the Spill Response Plan would be enhanced to recognize the potential increased spill risk associated with marine construction during the six week of pile driving and the total eight to 12 weeks of construction activity.** Seaspan Project Website – Learn More – Technical Assessments Construction Environmental Management Plan: https://drydockprojects.com/learn-more/

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
The expansion will interfere with the marine habitat.	Seaspan submitted a Project Review document to Fisheries and Oceans Canada (DFO). DFO agreed with the environmental consultant (Hatfield Consultants), who prepared the Project Review document, that there will be no negative effects of construction or operations on marine habitat. Seaspan conducted a habitat assessment of the seabed using scuba divers who recorded video. There was no marine habitat (e.g., seaweed or eelgrass) on the seabed in this area because the sediment is composed of silt (which cannot support seaweeds) and the water is too deep to support eelgrass. The addition of six piles provides a surface for marine invertebrates (e.g., mussels, anemones) to attach to, in a location where there is currently no hard surface to attach to. This is an example where there will actually be more marine habitat for these organisms should the proposed project be constructed. Seaspan Project Website – Learn More – Technical Assessments Marine Habitat Assessment: https://drydockprojects.com/learn-more/
The expansion will interfere with marine wildlife (marine mammals, fish, and birds).	Seaspan submitted a Project Review to Fisheries and Oceans Canada (DFO). DFO agreed with the environmental consultant (Hatfield Consultants), who prepared the Project Review document, that there will be no residual negative effects of construction or operations on marine wildlife. The presence of the proposed drydocks will not negatively affect sea life use of the area because the area (between Seaspan's service pier and the public pier) is already heavily used by vessels today. The addition of six piles will not hinder wildlife's current use of the area. In addition, new lights will be focused on the docks, with minimal light penetration into the marine environment. **Proposed Mitigation: During the construction activities (e.g., pile driving) environmental consultants will be on site to oversee activities, measure noise and observe wildlife use of the area to ensure that they are not negatively affected.** Seaspan Project Website – Learn More – Technical Assessments Marine Habitat Assessment: https://drydockprojects.com/learn-more/ Seaspan Project Website – Learn More – Technical Assessments Construction Environmental Management Plan: https://drydockprojects.com/learn-more/
A conservation zone should be created between Seaspan's Careen drydock and the public	This is not within Seaspan's influence as a leaseholder. The water lot is within the jurisdiction of the port authority. **Existing Operational Mitigation: Marine habitat protection and**

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
pier. The wetlands, watershed and coastline communities of British Columbia should be re-naturalized.	**restoration is a priority at Seaspan. Along with community and First Nation partners and advisors, Seaspan has helped implement several habitat restoration projects in the Mackay Creek estuary over the last 10 years. Seaspan supports habitat restoration efforts in Mosquito Creek and is an ongoing supporter of the Pacific Salmon Foundation and local hatcheries such as at Mossom Creek. Seaspan also supports efforts to improve water and sediment quality through projects like the removal of abandoned creosote piles with the Tsleil-Waututh Nation.** **Seaspan is currently building marine fish habitat east of its Vancouver Shipyards site, near the mouth of Mackay Creek. The rip rap shore has been removed to create a more natural, sloping shoreline with a variety of habitat types meant to attract marine vegetation and juvenile salmon out-migrating from the creek. Seaspan will be providing periodic updates to this project on its social media channels; the first video is available on YouTube.** Seaspan habitat enhancement project: www.youtube.com/watch?v=h-tdZ7rb3Qc
Concern about water pollution and water from operations entering the ocean.	Seaspan's three shipyard sites, including Vancouver Drydock, are certified under Green Marine, a rigorous and transparent voluntary environmental certification program for the North American marine industry. Green Marine measures companies' performance above and beyond regulatory compliance, with performance assessed every two years by certified third-party verifiers. Key performance categories assessed include spill prevention, stormwater protection, air emissions and waste management. **Existing Operational Mitigation: Seaspan operates under an Environmental Management System (EMS) certified to ISO 14001:2015, which is certified annually by Lloyd's Register. A requirement of the EMS is a commitment to pollution prevention, including verification of the effectiveness of controls to protect the environment encompassing engineering controls, operations, procedures and training. In addition, Seaspan Shipyards has robust emergency and spill response preparedness plans, equipment and capabilities.** **Existing Operational Mitigation: Like at all Seaspan Shipyards' sites, water used during operations at Vancouver Drydock does not drain into the ocean. When vessels are in the drydocks, vessel wash water and stormwater are collected and treated in a two-step process at the on-site wastewater treatment facility to remove contaminants. The water is then discharged to the sanitary sewer, as permitted by Metro Vancouver.** **Existing Operations Mitigation: All vessels operating in the harbour are responsible for understanding and operating within Transport Canada**

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	regulations and local requirements. Prior to a vessel arriving at Vancouver Drydock, owner representative(s) are advised of safety policies and procedures, environment and waste management regulations, docking requirements. **<u>Proposed Mitigation:</u> The proposed new drydocks would be connected to the existing wastewater treatment system. The water would be treated according to existing practices under Seaspan's Environmental Management System (EMS). The addition of the floating drydocks will not result in pollution to the harbour or impacts to marine life.** **<u>New Proposed Mitigation:</u> Seaspan has considered this feedback and in addition to following the port authority's Information Guide, which outlines practices and procedures to promote safe navigation and efforts to protect the marine environment, will also be providing customers with a link to the guide to further reinforce safe on-water operations.** Port authority port information guide: www.portvancouver.com/wp-content/uploads/2019/04/2019-05-01-PORT-INFORMATION-GUIDE-FINAL-1.pdf
Seaspan should have a robust spill prevention and emergency response plan.	**<u>Existing operational mitigation:</u> Seaspan's has a robust Spill Prevention and Response Plan aligns with the BC *Environmental Management Act*.** **While preventing spills is the priority for all of Seaspan's operations, all facilities, vessels and projects are prepared to respond effectively in the event of an environmental incident or emergency. The Spill Prevention and Response Plan details steps for risk assessment, spill prevention and response for both on-land and on-water spills. Two spill booms are strategically located on site for deployment and spill kits are located throughout Vancouver Drydock's site, including on the service pier and both floating drydocks. Vancouver Drydock personnel undergo regular training to be able to respond to spills in accordance with the plan.** **<u>Existing operational mitigation:</u> Seaspan has a robust Fire and Emergency Response Plan. This plan was developed to align with the BC Emergency Response Management System to ensure a coordinated, organized response to any emergency in the province.** **Fire prevention at Vancouver Drydock is a top priority and the responsibility of all workers, management, contractors and visitors. This includes permits for hot work being obtained prior to starting any work that could potentially cause a fire (e.g., welding, plasma cutting, grinding etc.), observing appropriate fire watch and cool down periods for all hot work and maintaining all electrical equipment in good repair.** **All workers and visitors to Vancouver Drydock are given a health and**

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	safety, environment and emergency program orientation before starting work, and training is updated regularly. **Fire and evacuation drills are conducted a minimum of once per year. Fire and emergency drills are followed by a debrief to review the drill and suggestions to continuously improve the fire and emergency plan.** **<u>Existing operational mitigation:</u> Recognizing the unique challenges faced by first responders to shipboard and drydock incidents, Seaspan has been working with all three North Shore fire departments for several years to develop comprehensive training to improve land-based marine firefighting and emergency response.** **Starting with a memorandum of understanding with the District of North Vancouver Fire & Rescue Services (which was later broadened to include the fire departments in the City of North Vancouver and District of West Vancouver), Seaspan has worked collaboratively to develop training and improved cooperation in support of improved marine firefighting capability and capacity at Seaspan's North Vancouver operations, including at Vancouver Drydock.** **Since early 2020, Seaspan has had regular, monthly meetings with the North Shore fire department Chiefs (and/or their alternates) to keep teams apprised of new developments at Seaspan's operations, including at Vancouver Drydock, and to ensure continuous improvement on emergency response. Seaspan is committed to this ongoing engagement with the departments, and the port authority, to support further training and improvement of fire prevention and emergency response at Vancouver Drydock.** **<u>Proposed mitigation:</u> Seaspan's Emergency Response Plan would be updated to include all components of the proposed project. The design of the new proposed drydocks and work pontoon include a fire detection and suppression system.** BC *Environmental Management Act:* www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/03053_00 BC Emergency Management System www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/bcems/bcems_guide.pdf

Lighting

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
The lighting on the new proposed drydocks and work pontoon will create light pollution.	**<u>Proposed Mitigation:</u> The lighting used to illuminate the work pontoon will be dark-sky-friendly, which is specifically designed to eliminate light outside of the required circulation and work areas.** **To be considered dark-sky-friendly, the design will follow the International Dark-Sky Association recommendations to minimize light pollution. These recommendations are that lighting should:** • **Only be on when needed (photocell and dimmer controlled).** • **Only light the area that needs it (dark sky friendly).** • **Be no brighter than necessary (illuminated to appropriate code requirements for safety and operation).** • **Minimize blue light emissions (by using 3000degK (warm) colour temperature rather than 4000degK (cool) colour temperature).** • **Be fully shielded (dark sky friendly).** **The lighting design for the work pontoon follows all the above recommendations:** • **The lights will be turned on and off via a photocell so that they are only on at night, and they incorporate sensors to dim the lights when no activity is detected in the area.** • **The dark sky friendly fixtures are specifically designed to eliminate light pollution and glare by focusing light on the work area; in other words, it only projects light downward from a horizontal lens structure.** • **The proposed lighting levels meet the minimum maintained average illuminance in accordance with Occupational Safety and Health Administration safe light practices and the Illuminating Engineering Society's recommended lighting level for shipyards and docks.** • **To minimize blue light emissions, the colour temperature of the light fixtures has been reduced from 4000degK (cool white) to 3000degK (warm white).** **<u>New Proposed Mitigation:</u> A house-side shield will be added to the work pontoon main light fixtures. A house-side shield on a light fixture is used to reduce to a minimum the light spread on the side of the fixture facing a residential area. With this shield added the lighting level is reduced to zero at 11m/35ft from the work pontoon (as opposed to 28m/92ft without a shield). When the drydocks are delivered, Seaspan will also investigate the application of shielding to limit light throw towards the**

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	residential areas.
Concerns about the assumptions and methodology, accuracy and credibility of the lighting study.	The lighting study was undertaken by a certified professional electrical engineer. The study makes no assumptions. The methodology used incorporates an internationally recognized computer software program ('Visual Lighting') to determine lighting levels using source data obtained from the light fixture manufacturer. Neither the software program nor the light fixture source data can be manipulated to produce inaccurate lighting levels.
The light pole height and light temperature should be reduced and shielded fixtures used.	**<u>New Proposed Mitigation:</u> Seaspan has considered the feedback and has amended the lighting design as follows:** • **On the new work pontoon, the height of the poles has been reduced from 10.7m (35ft) to 7.5m (25ft) to minimize the visual impact of the lighting installation.** • **As per International Dark-Sky Association recommendations, to minimize blue light emissions, the colour temperature of the light fixtures has be reduced from 4000degK (cool white) to 3000degK (warm white).** • **A house-side shield will be added to the work pontoon main light fixtures. A house-side shield on a light fixture is used to reduce to a minimum the light spread on the side of the fixture facing a residential area. With this shield added the lighting level is reduced to zero at 11m/35ft from the work pontoon (as opposed to 28m/92ft without a shield). When the drydocks are delivered, Seaspan will also investigate the application of shielding to limit light throw towards the residential areas.**
Existing lighting levels are disruptive to nearby residences.	**<u>New Proposed Mitigation:</u> While existing operations are outside the of the scope of this PER application, Seaspan has considered this feedback and initiated design work for the replacement of existing light pole and building mounted lights with dark sky friendly lighting incorporating 'House-Side Shields' where appropriate.** **The design will follow the International Dark-Sky Association recommendations to minimize light pollution. These recommendations are that lighting should:** • **Only be on when needed (photocell and dimmer controlled).**

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	• **Only light the area that needs it (dark sky friendly).** • **Be no brighter than necessary (illuminated to appropriate code requirements for safety and operation).** • **Minimize blue light emissions (by using 3000degK (warm) colour temperature rather than 4000degK (cool) colour temperature).** • **Be fully shielded (dark sky friendly).**

Construction

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
Pile driving and related vibrations will undermine the foundations of nearby buildings.	The pile driving will incorporate primarily vibro-installation techniques and drilling, which reduce the overall effects of pile driving on the local environment. Significant research has been undertaken over the last 50 years recognizing that pile driving-related ground vibrations can have an effect on nearby structures. Typically, when this is a concern the owner/contractor measures peak particle velocities at the ground surface to establish the level of concern. There have been numerous data produced identifying "distance from pile driving" and "potential for damage" relationships. The point at which damage to a residential structure becomes a concern is when piling is occurring within 50 feet of a nearby structure. At distances of over 150 feet to 250 feet away, the ground vibrations are considered perceptible, but not harmful. The Trophy at the Pier, the residential building closest to the pile driving activities, has its foundation a minimum distance of 520 feet from the nearest pile location. At distances of over 500 feet away, which is where the proposed project is in relation to the nearest building, the measured ground vibrations would be classified as barely perceptible and therefore unlikely to cause damage to any building, as outlined within the National Highway Institute, publication FHWA-NHI-16-009. U.S. Department of Transportation – National Highway Institute: https://www.fhwa.dot.gov/engineering/geotech/pubs/gec12/nhi16009_v1.pdf
The construction period will be disruptive and increased marine traffic will affect marine and aviary wildlife.	Efforts have been made to minimize both the construction size and duration. The piling installation has been reduced to six piles total and the length of time for this activity is expected to be less than six weeks. The timing of the installation is set to meet DFO requirements for minimum impact to fish and fish habitat. We are not aware of any bird habitat located near this industrial zoned site, nor are we aware of any bird wildlife which will need protecting during the construction period. Consequently, mitigation measures during pile driving focus primarily on marine wildlife and subaquatic noise levels. **Proposed Mitigation: Two marine rigs are expected to be required on site during the pile installation and they will be mostly stationary for the duration of the construction. Small skiffs will be present on site to move workers around the water as required. These skiffs have small engines and generate minimal noise.** Seaspan Project Website – Learn More – Technical Assessments Construction Environmental Management Plan:

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Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	https://drydockprojects.com/learn-more/
Construction activity will generate dust and impact air quality at nearby residents and businesses.	The construction activities being undertaken for this installation are not of a nature to generate dust, particularly given the pile driving is in the water. The drilling out of the piles, in preparation for concrete infill, will be a wet activity which makes it easier to contain the construction soil waste. The concrete pours are also a wet activity and DFO has strict requirements that no spill over is permitted into the marine environment. Displaced water within the pile is captured and treated before being disposed of. The power to run the construction equipment is typically provided by diesel fuel and the burning of this product (as with all carbon fuels) does produce emissions, which can affect air quality. **Proposed Mitigation: Seaspan will ensure the engines on all construction equipment are running efficiently and only when required. This is outlined in the Construction Environmental Management Plan (CEMP).** Seaspan Project Website – Learn More – Technical Assessments Construction Environmental Management Plan: https://drydockprojects.com/learn-more/
Pile driving noise will negatively impact marine life and mitigations should be put in place prior to construction getting underway.	**Proposed Mitigation: The impact to marine wildlife is strictly controlled by DFO and safe (least impact) practices will be implemented at this site in accordance with the port authority permit requirements laid out to perform the construction work.** **An Environmental Professional Engineer will be onsite during the piling activities to ensure the practices employed are appropriate and do not result in harm to marine mammals.** **The use of a bubble curtain is one of those practices which may be employed, and its effectiveness at this site will also be monitored and assessed.** **Underwater sound attenuation and visual monitoring are two practices used to determine the effectiveness of any of the pile installation techniques being employed.** **The environmental professionals at DFO (those that set the requirements) and present at this site (those that monitor the requirements) will provide the necessary input and feedback on the installation to ensure the least harm methods are employed and functioning.** **If mammals get too close to the construction works and a condition arises which threatens their safety, the work will be halted until the safety of the mammals can be demonstrated.**

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	Section 8 On-site Environmental Monitoring of the CEMP document addresses mitigative measures in place during construction with section 8.1.1 Acoustic Monitoring and Marine Mammal Observation Plan specifically addressing measures in place to protect marine mammals. An Environmental Monitor (EM) will be on-site throughout the duration of construction to oversee all environmental aspects of the project. This is outlined in the CEMP. Seaspan Project Website – Learn More – Technical Assessments Construction Environmental Management Plan: https://drydockprojects.com/learn-more/
There is no assessment of noise during construction	Engaging an independent third-party consultant for the noise assessment during construction is not required by the port authority's permitting process, however, Seaspan recognizes that construction of marine works, like the construction of buildings, and most other infrastructure, will generate noise. **<u>Proposed Mitigation:</u> Efforts will be made to minimize the impact of noise by muffling engines, timing operations within daylight hours, adopting quieter installation techniques for pile driving, installing bubble curtains, using soft start procedures, and ensuring operations are generally advancing the pile to minimize the duration of the installation.** **Soft start procedures involve the gradual increase in hammer energy at the start of pile driving with the intention of keeping marine mammals away from the activity before the full volume of underwater noise is reached. This method reduces noise exposure and therefore risk of injury by activating an avoidance response in the mammals and giving them time to clear the area.** **Three to six days have been allotted for each of the six pile installations, recognizing the efforts defined above require changeout of equipment and daylight work windows. All six piles are expected to be completed within a six-week period.** **The pile driving activity is the only work that will generate significant noise levels and specifically only the act of driving itself. There is significant set up time and other break periods during the pile installation that will not generate disruptive noise levels. Additionally, all the other activities required to attach the drydocks and other peripheral components are lower noise-level activities.** Seaspan Project Website – Learn More – Technical Assessments Construction Environmental Management Plan: https://drydockprojects.com/learn-more/
The geologic profile below the	Seaspan's dive survey of the seabed indicated that the top/superficial layer is

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
seabed is unclear and may impact the duration of pile driving activity.	mostly composed of silt. Additional information is found on the original construction drawings for the pier. The geotechnical investigation at that time revealed that the seabed comprised of the following general soil layers: • The top 2 ft is soft silt or fine sand. • The next layer extends 10 ft to 20 ft below the silt and comprises medium dense to dense sands and gravels with some silt, shells and cobbles. • Next is a dense till layer which starts below the layer described above and is approximately 15 ft to 20 ft in thickness. • Below this till layer is coarse gravel or very dense sand with boulders identified throughout and/or additional layers of till. The design pile embedment depth is expected to be up to 60 ft into the seabed. The pile driving will use the preferred method of vibro-hammer installation to reduce potential impacts to marine mammals. This method is expected to be successful through to the till layer, however, it is uncertain if vibro techniques will be successful through the till and beyond. Consequently, drilling from inside the pile may be required to advance the pile to deeper depths. Cuttings will be collected and discharged to a scow for off-site disposal. Recognizing that pile cleanout is also required to significant depth for the design to allow concrete infill, drilling is to be expected at some point during the installation. Impact driving is to be avoided unless necessary to get past obstructions which inhibit advancing the pile. In the event of impact driving, additional measures will be implemented to mitigate aquatic noise levels as identified in the CEMP document and the letter of advice from DFO. Three to six days have been allotted for each of the six pile installations recognizing the efforts defined above require changeout of equipment and daylight work windows. All six piles are expected to be completed within a six-week period. Note that installation of similar piles into only sand-like soils would require less than one day. Seaspan Project Website – Learn More – Technical Assessments Construction Environmental Management Plan: https://drydockprojects.com/learn-more/
Noise levels will be disruptive during construction.	Noise levels during construction are primarily centered around the pile installation. Six piles are proposed to be installed. The total duration of noise levels associated with this activity will be approximately six weeks.

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
	<u>Proposed Mitigations:</u> Mitigation measures in place to reduce noise levels during construction, include: • **Pile driving only during daylight hours.** • **Implementing vibro-hammer installation and drilling, where required, to advance the pile. Drilling reduces noise levels during driving by easing or eliminating otherwise hard driving conditions.** • **Only incorporating impact driving, if necessary, to advance the pile. If impact driving becomes necessary, additional measures will be put in place to reduce aquatic noise levels, including bubble curtains and soft start procedures.** **Soft start procedures involve the gradual increase in hammer energy at the start of pile driving with the intention of keeping marine mammals away from the activity before the full volume of underwater noise is reached. This method is thought to reduce noise exposure and therefore risk of injury by activating an avoidance response in the mammals and giving them time to clear the area.** Seaspan Project Website – Learn More – Technical Assessments Construction Environmental Management Plan: https://drydockprojects.com/learn-more/

Traffic

Feedback Themes/Input	Response, including Existing and Proposed Mitigations
Concern about an increase in vehicle traffic on Victory Ship Way and impacts on what is an already busy three-way intersection at Victory Ship Way/St. Georges Avenue/East Esplanade.	Consulting engineering firm Tetra Tech Canada undertook a traffic impact study of two intersections nearest to Vancouver Drydock – St. Georges Avenue & Victory Ship Way, and St. George's Avenue & Esplanade Avenue. This study found that no capacity improvements to either intersection would be required as a result of the anticipated increase in employees to the site. It also found that existing on-site parking at Vancouver Drydock is sufficient to accommodate the increase in employees. At Seaspan's busiest times, the additional 100 new employees will be distributed over two shifts. The additional 50 people per shift on site would travel via vehicle, bicycle and public transit, consistent with many others who live in or frequent the Shipyards District. Seaspan endorses the efforts of North Vancouver municipalities and Indigenous governments to improve transit access to the North Shore through the North Shore Connects initiative, especially to bring rapid transit to North Vancouver which would make public transit a viable alternative for more employees. **Existing Operational Mitigation: Employees are encouraged to use active transportation modes, including walking, biking and public transit to get to work.** **Proposed Mitigation: Anyone arriving by private vehicle will be accommodated within the existing parking lot and therefore will not affect the adjacent residential community. Suppliers servicing the new proposed drydocks are anticipated to increase delivery quantities for each delivery, as opposed to increasing the frequency of deliveries.** **New Proposed Mitigation: Seaspan's traffic generation is primarily restricted to facility shift changes, which are limited to a couple of hours over the course of a 24-hour period. Seaspan actively encourages active transportation modes to reduce employee vehicle travel to the site, and instead using the nearby convenient transit services. The City of North Vancouver has indicated an interest to complete a traffic study of this intersection, and Seaspan will provide data to support this proposed work.**

June 23, 2022 Workshop Agenda

Mitigations Workshop Agenda – June 23, 2022

In person with virtual caucus or virtual with caucus members as muted observers.

10 minutes — Zoom call opened for caucus members and observers.

Welcome, round table introductions

Session objectives

- Review proposed mitigation measures
- Propose additional mitigation ideas.
- Rank mitigation priorities
    - Divided ideas into those within and outside of the port authority's permitting authority
- Document and share how mitigation measures have been further refined based on input received.

Rules of engagement

- Respectful, inclusive dialogue to discuss mitigations for the proposed Vancouver Dry Dock Water Lot Project
- Other issues of importance will be noted but not workshopped
- Aiming for agreement but accept there may be places where we agree to disagree

10 minutes — Review of key themes identified during the 2021 public engagement activities (slide from chart in pre-read package)

- Any additional issues raised by participants during pre-workshop planning calls will be noted

5 min — Personal reflection on proposed issues and mitigation: What is important? What is missing? What works? What doesn't? What new ideas could be considered?

15 min — Sticky note exercise in person or PADLET exercise virtually

- Each participant posts ideas for mitigation measures
    - These can be new ideas or ideas from the workshop materials
- Facilitator works with the group to cluster similar ideas, probe ideas, clarify any questions and prompt discussion
    - In person – ideas not related to mitigations or outside the port's permitting authority will be moved to a separate board
    - Virtually - Ideas will be colour coded to reflect mitigation ideas for discussion (green) those not related to mitigations or outside the port's permitting authority (blue)

5 minutes	Vote
	• Once the board has been populated with ideas, participants will be asked to vote on the top mitigation issues for discussion (9 votes each via sticker) • In person –dotmocracy/ On Padlet - vote
40 minutes	Diamond ranking and discussion of mitigation measures
5 minutes	Summary, thanks, and closing comments
	• Vote on interest in/need for a second meeting

June 23, 2022 Workshop Meeting Report

JUNE 23, 2022 MITIGATIONS WORKSHOP MEETING REPORT

To:	Chris Thorson, Darlene Hilden, Dennis LaPierre, Liz Olkovick, Jose Andino, , Susan Kvarnstrom, Nilusha Alibhai, Hans Stripp, Lynn Swanson, Leo Megaro, Tom Tournier, Tony Neumeyer, Caroline Roberts, Gary Williams, Phillip Hurst, Al Parsons – Community Representatives Kris Neely, Paul Hebson – Seaspan Kate Grossman, Tim Blair – Vancouver Fraser Port Authority
CC	Zoe Capps, Bryan Walsh, Melanie Ptashynski (community representatives participating via Zoom)
Regrets	Atrium Strata
Prepared by:	Jocelyn Fraser
Re:	June 23 Mitigations Workshop

MEETING REPORT

Thank you for participating in the June 23 workshop. The objective of the small group facilitated workshop was to explore the proposed mitigations for the Seaspan Vancouver Drydock Water Lot Project drydock project: Which are important? Which would work? Which will not work? What has been missed –new ideas and suggestions?

Opening remarks from the 14 in-person participants, as well as comments from the three people attending virtually via Zoom, made it clear that participants were not in favour of the proposal to expand the drydocks west. The group wished it to be stated that participation in the workshop must not be characterized as an endorsement of the current project proposal. Any discussion of mitigations should be viewed as mitigation to current operations only.

During opening remarks, participants raised a number of issues of interest, summarized below. The full workshop recording is now available on line https://drydockprojects.com/community-meetings/

- Eastward expansion is the preferred option.
  - What is the financial impediment? Why hasn't move information been shared with the community regarding this option? Want to see back-up for the site selection.
  - Worried about increased marine traffic if the westward expansion goes ahead.
  - Comment made that there is encroachment by ships at the drydock into the public waters.
- Trust is lacking. David and Goliath situation. Why was there such as long delay (12 months) in responding to community issues?
  - Unclear who the community is meant to contact at Seaspan.

- What is the status of the air quality permit?
- Should the expansion be permitted when there are outstanding issues?
- Lighting – intrusive at night (several participants shared photos)
- What enforcement action is taken by the Port if regulated sites are in non-compliance with permit conditions?

Workshop Summary

In the first portion of the workshop, participants were invited to use post it notes (or to add their ideas via the chat function in Zoom) to present ideas for mitigations. Ideas were clustered according to theme and in person participants were then given nine votes to indicate which issues would be considered as part of a ranking exercise. The notes with the largest number of votes were:

1. Favour east expansion (50 votes)
2. Air quality (17 votes)
3. Noise (15 votes)
4. Lighting (8 votes)
5. Work hours (8 votes)
6. Communications/engagement (4 votes)

In addition, there were a series of notes posted, and comments collected from the Zoom chat, pointing to specific mitigation requests. These are transcribed verbatim below.

- "Review operations to ensure best practices regarding environment, noise etc. are utilized"
- "Liability insurance – during construction add stratas as the beneficiaries"
- "Severe penalties for missed commitments"
- "Acoustic wall on north side of access pontoon"
- "Walls (gates) on north sides of drydock to reduce noise and dust"
- "Permanent noise monitoring station in the community"
- "Do a noise assessment using Nord method and Cnossos. Both methods are more accurate than ISO 9013"
- "Get air quality permits before Port of Vancouver approvals"
- "Movement to show air quality NOW before any project start"
- "Monitoring at the shipyard not Mahon Park"
- "Community involvement in air quality reporting and emergency text system"
- "Properly conducted feasibility study of taking the project east. Complete transparency."
- "Engage an independent third party sound engineer selected by the community"
- "Turn off lights at night"

- “Move the careen south in a way that the south end of the platform aligns with the south end of the Panamax”

These specific mitigation ideas, as well as questions on the issues of interest raised are proposed to form the basis of a second workshop with the June 23 group. Proposed dates for the next session, a facilitated Q&A with Seaspan and Port representatives are July 7 or during the week of July 18. Should you wish to attend, please RSVP to jocelynfraser@shaw.ca

Attach: Philip Hurst statement

od evening my name is Phillip Hurst and I'm a member of the Trophy strata. Thank you for holding this meeting in person. However I'm not speaking as a resident but for our wider community.

Nothing, again nothing has changed from 12 months ago. We, our north shore community gave an overwhelming answer to this proposal.

Go East.

The Port Authority asked you to mitigate this concern and there has been no effort to consider the East location. We don't need to discuss proposed and new mitigations. If Seaspan go east there would be no need for them. We have only a small slither of waterfront left. Maybe less than 200 meters of public space and Seaspan want to take another 40 metres and increase the traffic in the remaining waters around our pier.

We cannot support this project and as a result the discussions around mitigation. Due to the limited time available I've written down my reasons and I politely ask that these be entered into the minutes and added to our community response file.

In conclusion I would like to add one more theme for this workshop.

Respect.

Respect the voice of our community.

Respect the integrity of this shared space. Respect the only fair and right decision

GO East.

Thank you

Phillip Hurst

...y is this application different.

Please include this statement in the minutes and as part of the community response package.

.....

I'm going to start with an emotion and emotion I believed is shared by many

I'm disappointed with the:

Lack of transparency

I'm disappointed with the:

Communication from Seaspan and the limited time we were given to respond. This amounted to 3 days!
The Draconian manner in which participants were selected.

I'm disappointed with the:

Impact on residents, visitors, commercial and business activities taking place
With the current level of noise that often extends way beyond reasonable work times and the pointing of high intensity lights into residential condos.
The unsightly buildings, careens, equipment and the dock in front of the Trophy building.

I'm disappointed with the:

Pollution, not only in our neighbouring waters but the air born particulate we breath, that lands on our walkways, on our playground, on our decks and on our restaurant

I'm disappointed with:

The lack of checks and balances to monitor all this activity. The absence of environment assessments along with monitoring devices
that are poorly located away from where the "action" is taking place

I'm disappointed with:

The increasing impact on the already disappearing water lots and tethered barges to the west. If this proposals is granted our small slither of waterfront will disappear....forever.

However I'm not disappointed with our response last year.

Our community acted quickly

We spent many days collecting responses from our community. Local north shore residents and visitors from across the lower mainland commented on why would Seaspan intrude further into this area and negatively impact this "Jewel of the North Shore" that provides festivals, arts and music.

I was not disappointed with the response from our local MLA, MP and City Mayor. They are all shaking their heads and wondering why after all the thought, planning and tax payers dollars that have been invested would Seaspan make this proposal which truly amounts to small part of their overall activities.

I'm not disappointed with generous donations and jobs that Seaspan provides but this does not allow them the right to ignore the community in which they reside. When industry, community and residential collide it is even more important that the tax paying public and industry recognize that all interests should be fairly considered.

This is a unique set circumstances. It's not container or freight installation, it's not a purely industrial landscape.
The community lives here and it's visited by people from all over the Lower Mainland.
We all know why.
For example, last year at a city council meeting Mayor Buchanan acknowledge that The Shipyards received top honours in the recent "Excellence on the Waterfront Awards Program"
You may know that this award considers the following and the pertinent question is did Seaspan give this attention to their proposal?

1. Sensitivity of the design to the water
2. Quality and harmony of design
3. Civic contribution
4. Environmental values
5. Degree of difficulty

This area has been described as unique, interactive, a year round public space of over 85,000 square feet.
Furthermore, it features restaurants, cafes, shops and services, two hotels, the largest outdoor skating rink in the Lower Mainland during the winter season and a splash park in the summer.
Let's not also forget the many cultural and music events that take place.

This summer people from all over the Lower Mainland will flock, yes flock to this location.
After last years September Festival there were Seabus waits and line ups extending beyond the bus terminal.

That's how unique this area is and how this current Seaspan application is different from all the rest.

The role of the Port Authority is to develop and create prosperity. But prosperity comes in many forms and it needs to recognize diversity and worth of all kinds.

Last year in the North Shore News our local MP and Minister, Jonathan Wilkinson rightly pointed out that environmental stewardship, sustainability, industry, residential and business activities are the heads and tails of the same coin.
We have a responsibility to work together, understand and respect each other's opinion and needs. We are all stakeholders, we need to build relationships based on trust and respect. Everything we do has a cause and consequence..... no one is above that.
We all need to be listened to even those in our waters that have no voice.

This is not about east, west, north, or south, it's a question of yes or no. The Port should say no and ask Seaspan to go back and reconsider their proposal yet again.

As this is such a unique and important decision we respectfully ask that you once again send this application to the Board of the Port Authority for them to review and comment before a decision is made.

Finally, we all live and work in this beautiful and vibrant city.

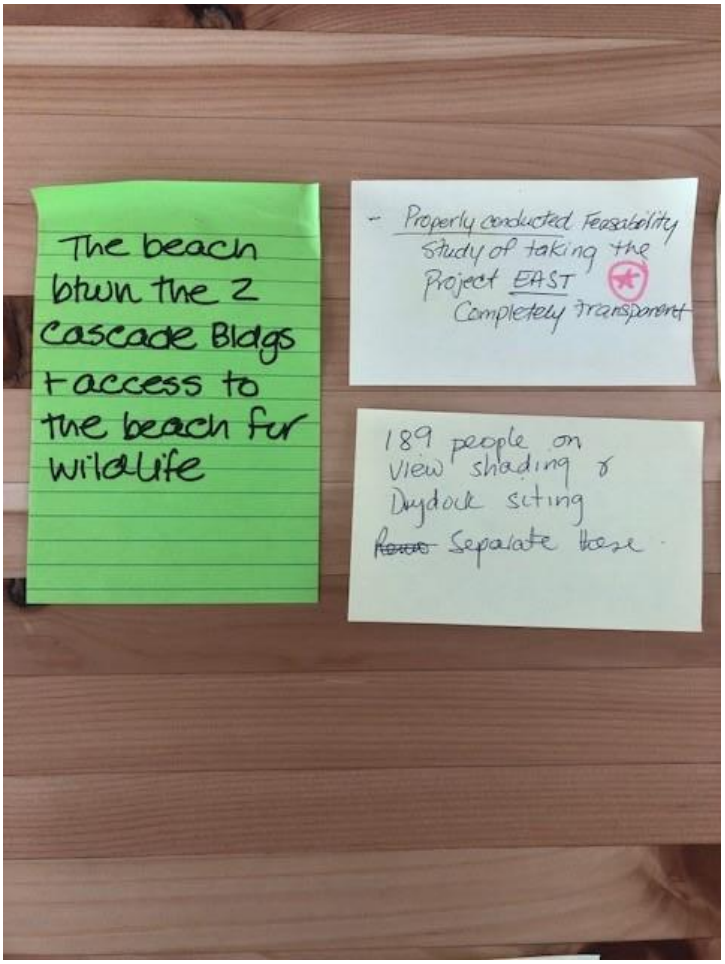
This my home, your home and everyone's home. Let's work together and protect it together.

Phillip Hurst (Trophy Strata Member)

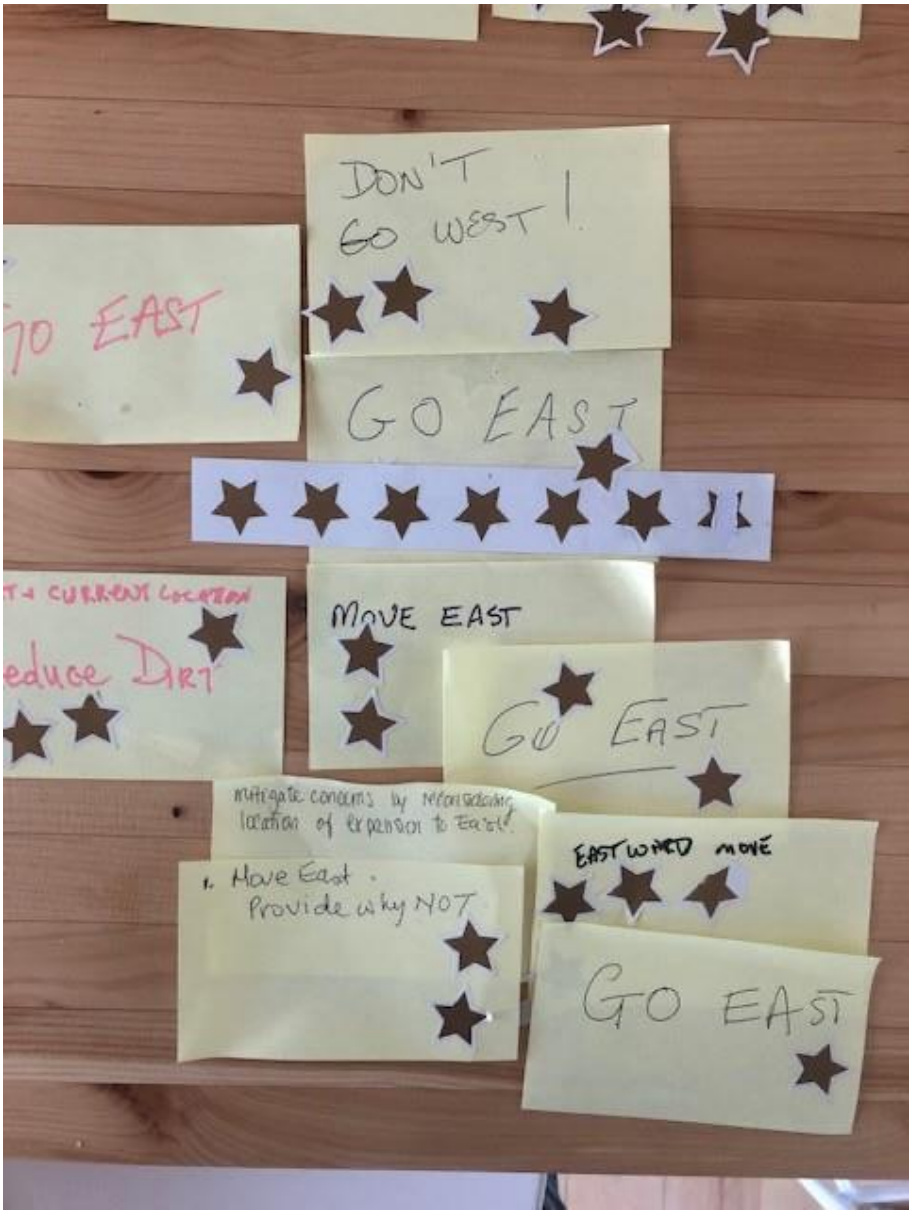
Issues Ranking Exercise (photo record)

Participant Post It Notes (grouped by topic)

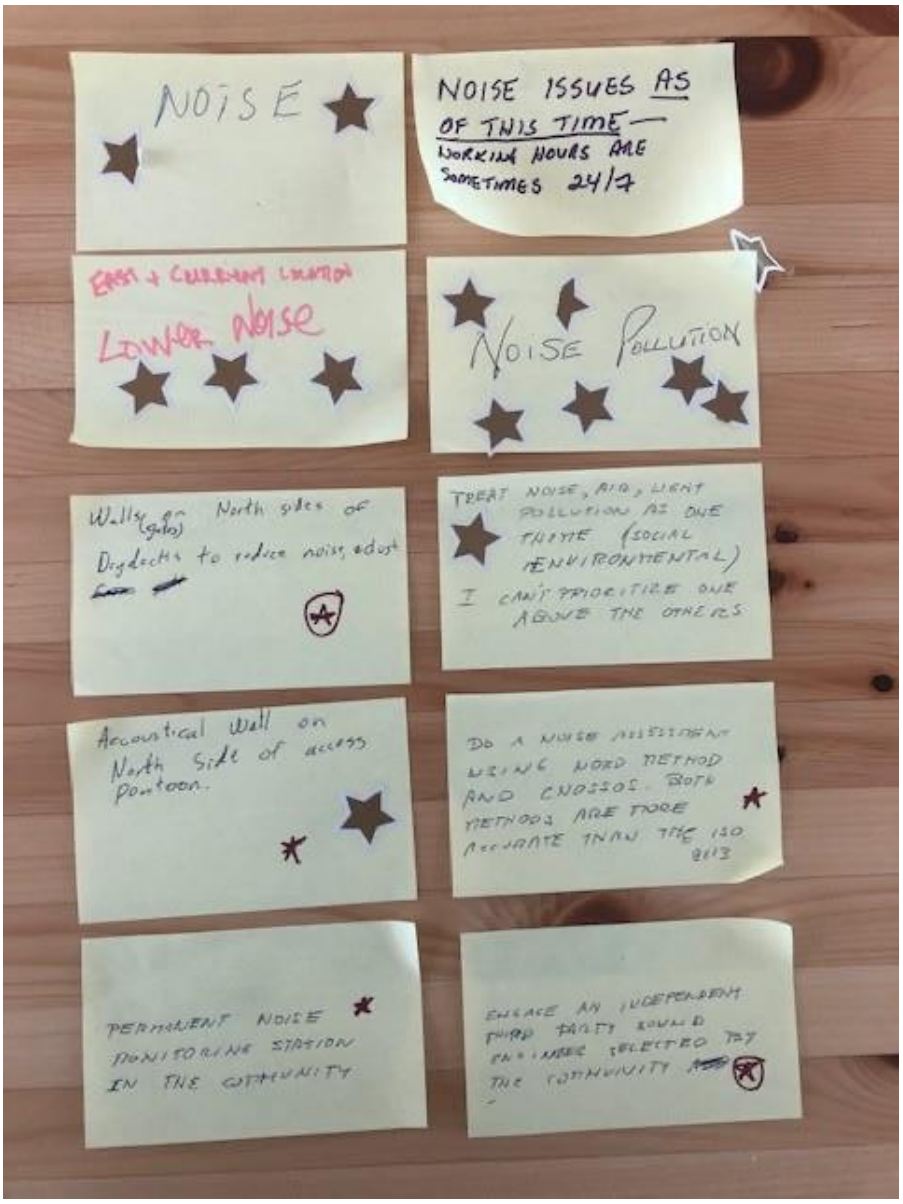
- Green notes provided by Zoom participants
- Star stickers reflected the outcome of the ranking exercise. Each participant was provided with nine stickers and invited to place them on the issues of most importance. The intention was to use the top nine issues for the diamond ranking exercise described in the June 23, 2022 workshop discussion guide.



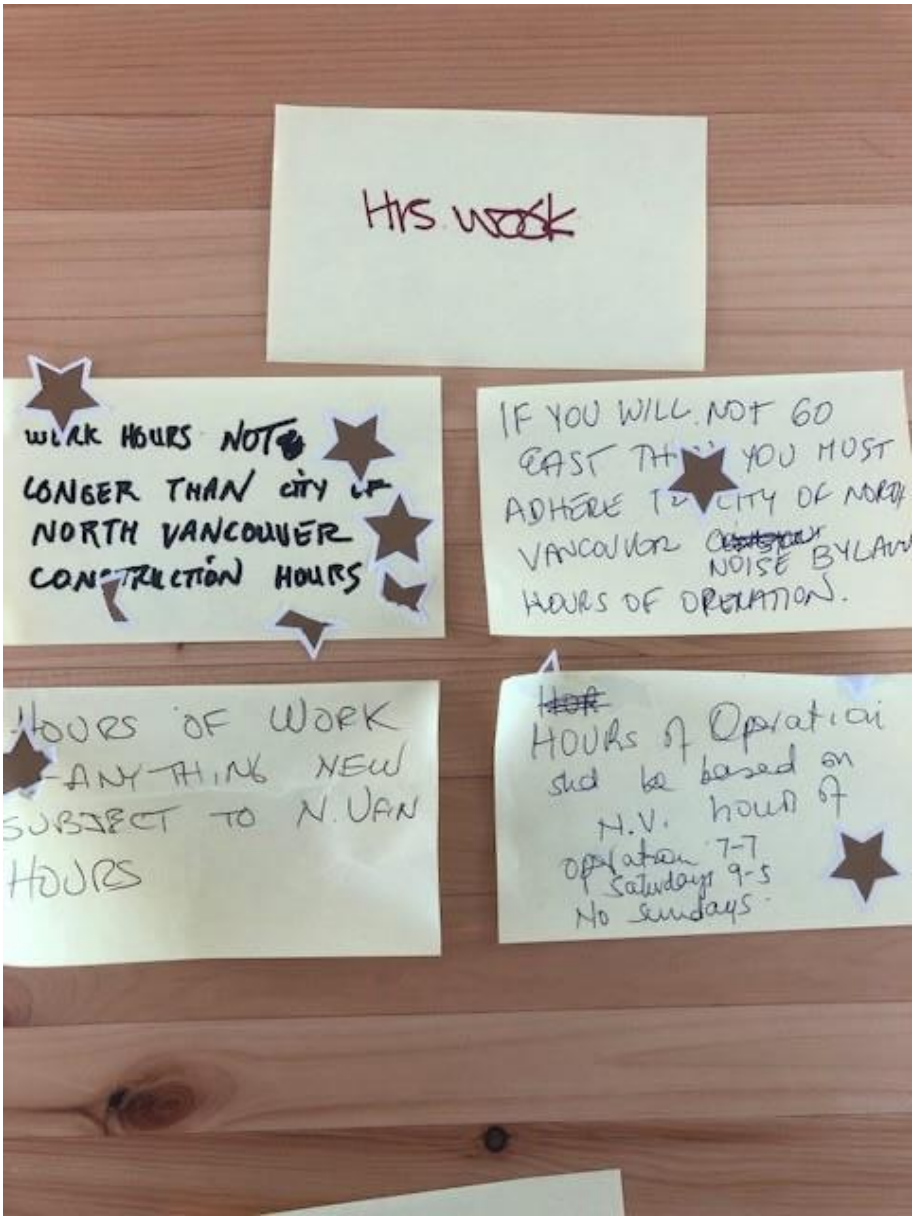

AIR QUALITY
AIR POLLUTION
Concern about industrial air pollutants + lack of monitoring. What ongoing monitoring
DUST ISSUES – WHAT ARE OPTIONS TO REDUCE?
AIR QUALITY PERMIT BEFORE CONSIDER EXPANDING EAST. IF NOT GO EAST
PARTICULATE Reduction
POLLUTION
MONITORING AT THE SHIPYARD NOT AT MANOR PARK
Community involvement in air quality reporting + emergency text system
Making improvements to current levels of various pollutions (noise, air, water)
Movement to show air quality monitoring NOW before any project start
AIR QUALITY – MUST COMPLETE 2017 REPORT FIRST


DON'T
GO WEST!
GO EAST
MOVE EAST
GO EAST
mitigate concerns by reconsidering
location of expansion to East!
1. Move East.
Provide why NOT
EAST WARD MOVE
GO EAST

6

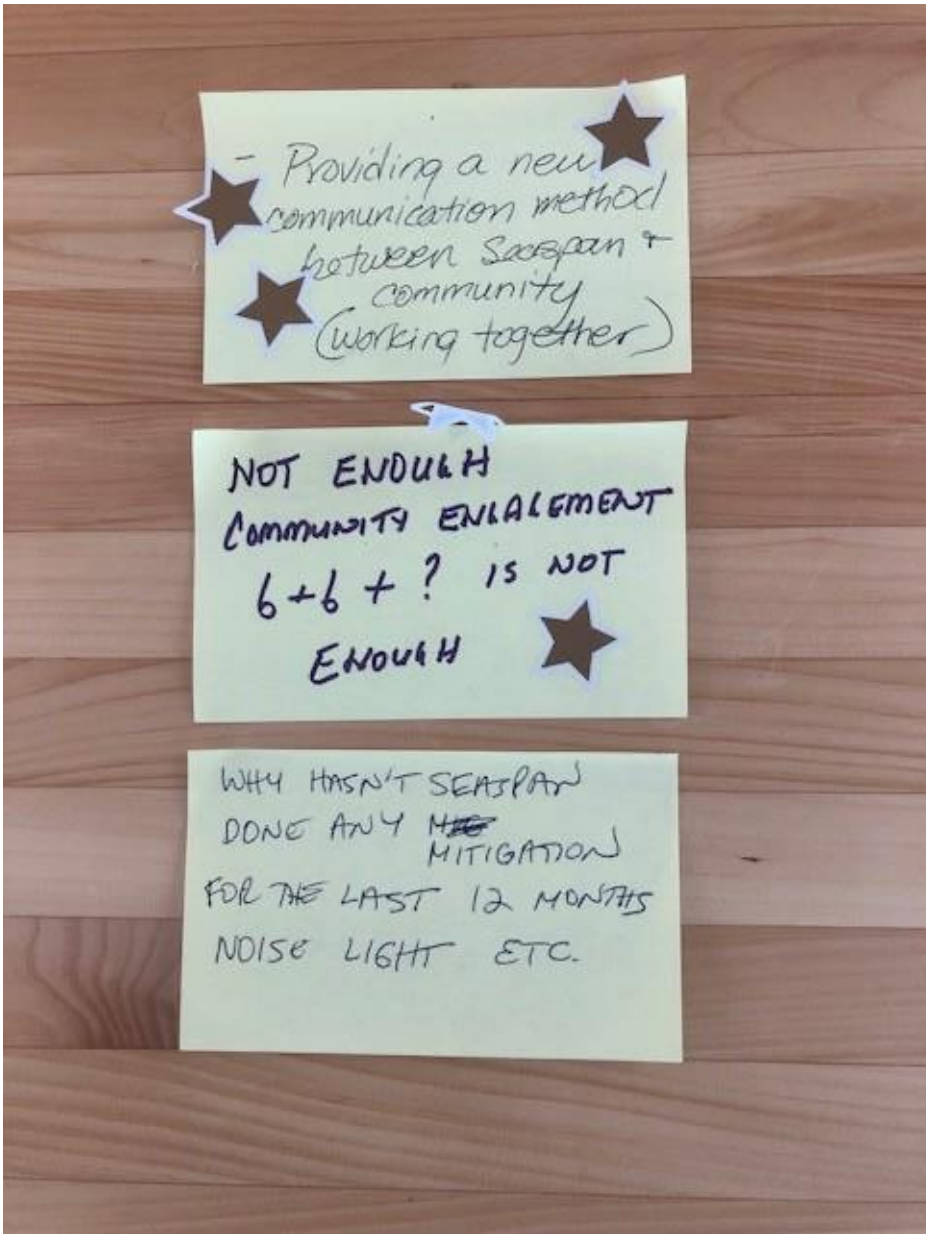

NOISE
NOISE ISSUES AS OF THIS TIME — WORKING HOURS ARE SOMETIMES 24/7
EAST + CURRENT LOCATION
Lower noise
NOISE POLLUTION
Wall (gabs) North sides of Digdeths to reduce noise, adust
TREAT NOISE, AIR, LIGHT POLLUTION AS ONE THEME (SOCIAL ENVIRONMENTAL)
I CAN'T PRIORITIZE ONE ABOVE THE OTHERS
Acoustical Wall on North Side of access Pontoon.
DO A NOISE ASSESSMENT USING NORD METHOD AND CNOSSOS. BOTH METHODS ARE MORE ACCURATE THAN THE ISO 9613
PERMANENT NOISE MONITORING STATION IN THE COMMUNITY
ENGAGE AN INDEPENDENT THIRD PARTY SOUND ENGINEER SELECTED BY THE COMMUNITY

7


HRS WORK
WORK HOURS NOT LONGER THAN CITY OF NORTH VANCOUVER CONSTRUCTION HOURS
IF YOU WILL NOT GO EAST TH YOU MUST ADHERE TO CITY OF NORTH VANCOUVER NOISE BYLAW HOURS OF OPERATION.
HOURS OF WORK - ANYTHING NEW SUBJECT TO N. VAN HOURS
HOURS of Operation should be based on N.V. hours of operation 7-7 Saturdays 9-5 No Sundays.


LIGHTS!
Lighting = it's a problem now e.g. the ship in dock = all lights on last night
REDUCE LIGHTING ON ENTIRE PROPERTY
TURN OFF THE LIGHTS AT NIGHT

9


- Providing a new communication method between Seaspan & community (working together)
NOT ENOUGH COMMUNITY ENGAGEMENT
6+6+? IS NOT ENOUGH
WHY HASN'T SEASPAN DONE ANY MITIGATION FOR THE LAST 12 MONTHS
NOISE LIGHT ETC.

August 22, 2022 Workshop Agenda

VANCOUVER DRYDOCK WORKSHOP AGENDA

FACILITATED Q&A AUGUST 22, 2022

1730 – 1745	Meet on the bridge in the shipyards to view the drydock
1745 – 1800	Meet at the North Shore Neighbourhood House 225 East 2nd Street, North Vancouver
1800 – 1810	Welcome and introductions
1810 – 1820	Meeting objective: Address key questions raised in the June 23 session Review of questions from the June 23 session (listed below) Call for additional questions
1820 – 1825	Vote/agreement on order of discussion
1825 – 1915	Facilitated Q&A
1915- 1930	Thanks, next steps and closing remarks

Note: Upon assembling at the meeting venue, the group advised the facilitator that they did not wish to follow the proposed agenda. Rather than participating in a facilitated question and answer session, the community representatives advised they had prepared statements reflecting their perspectives on the drydock proposal, which they wished to share with Seaspan and the port.

August 22, 2022 Workshop Meeting Report

AUGUST 22, 2022 FACILITATED QUESTION AND ANSWER SESSION MEETING REPORT

TO: Jose Andino, Phillip Hurst, Chris Thorson, Tom Tournier, Darlene Hilson, Nilusha Alibhai, Hans Stripp, Al Parsons, Liz Olkovick, Leo Megaro – Community Representatives
Kris Neely, Paul Hebson –Seaspan
Kate Grossman, Tim Blair –Vancouver Fraser Port Authority
PREPARED BY: Jocelyn Fraser
DATE CIRCULATED: August 26, 2022

Introduction

On August 22, 2022, the second half of a workshop designed to discuss mitigations for the proposed Vancouver Drydock expansion was held at the North Shore Neighbourhood House (NSNH).

The meeting was attended by 10 people[1] representing the residents and strata councils of the Cascade and Trophy condominium towers and concerned citizens.

- Two people who attended the June 23 workshop sent regrets.
- Four people who participated in the June 23 workshop did not reply to the meeting invitation.
- One person withdrew from the process.
- An Atrium strata representative was confirmed but did not attend.
- Two representatives of both Seaspan and the port were in attendance to answer questions as requested by the group at the June 23 meeting.

Following the June 23, 2022 meeting, the format for the August 22, 2022 session was changed at the request of the community group. Rather than reviewing the proposed mitigations, the group indicated they preferred to have a question and answer session with Seaspan and port representatives. Issues and questions raised during the June 23 meeting were therefore included in the draft agenda prepared for the August 22 meeting and circulated for comment July 7 (Appendix A).

Pre-Meetings/Orientation

A tour of Vancouver Drydock was conducted by Seaspan on August 17, 2022. A group of seven community members and two port representatives attended the tour, which was hosted by two Seaspan personnel.

Prior to meeting at the NSNH on August 22, 2022, the community group requested that Seaspan and port representatives meet in the shipyards, on the bridge above Caffé Artigiano, to view the drydock from the neighbourhood's perspective. A group of eight community representatives, two port personnel and one Seaspan representatives attended the viewing.

[1] Nine people attended in person. One person joined via Zoom.

Themes and Questions from the June 23, 2022 meeting

Topic: East expansion
What is the financial impediment? Why hasn't move information been shared with the community regarding this option? Want to see back-up for the site selection.
Topic: Air Quality
What is the status of the air quality permit? Should the expansion be permitted when there are outstanding issues/permits?
Topic: Noise
Has Seaspan run a noise model using either the Cnossos or Nort Method? If so, what are the results they obtained and why haven't been shared with the community? If not, why not?
Topic: Lighting
What can be done to lessen the impact to neighbours?
Topic: Work Hours
This topic was ranked as an important issue for many of the June 23 participants. No specific questions were raised.
Topic: Communications/engagement
Why was there such as long delay (12 months) in responding to community issues? Who is the community contact at Seaspan?
Other:
What enforcement action is taken by the Port if regulated sites are in non-compliance with permit conditions? How much will marine traffic increase if the westward expansion goes ahead?

AUGUST 22, 2022 FACILITATED QUESTION AND ANSWER SESSION MEETING REPORT

MEETING REPORT

Upon assembling at the meeting venue, the group advised the facilitator that they did not wish to follow the proposed agenda. Rather than participating in a facilitated question and answer session, the community representatives advised they had prepared statements reflecting their perspectives on the drydock proposal, which they wished to share with Seaspan and the port.

The issues and ideas presented in the various statements are summarized in the meeting report below. Responses are included when those were requested. The overall theme of the presentations was that opposition could be resolved by relocating the proposed drydock expansion to the east.

- **East option**: The community group feels that all issues could be mitigated by moving the proposed expansion to the east of the existing drydock operations. They stress the issue is not the potential impact to the views of condo owners but rather the impact to the community as a whole. They do not accept operational constraints as an acceptable rationale for not pursuing the eastern option.
- **Noise:** Monitoring is requested. Concerns were raised about the accuracy of the noise monitoring methods used by acoustical engineering firm BKL and BKL's status as an independent third party. Specific questions raised included: Has Seaspan run a noise model using either the Cnossos or Nort Method? If so, what are the results they obtained and why haven't been shared with the community? If not, why not? The community representatives suggest a baseline noise measure is required, noting that they are currently using their phones to measure noise levels and find those levels are frequently elevated, especially during hydro washing/hydro blasting.
    - In response, the port noted that the noise study was conducted according to industry standards and that it is in Seaspan's interest to provide an accurate reading. If noise levels are underestimated, those levels may be embedded into permits making future compliance more difficult.

  Questions were raised about why hydro blasting can not be done on the east side of the site? Information on the standard process for use of noise curtains was also requested.
    - In response, Seaspan explained that there are operational issues to consider when thinking about hydroblasting. For example, the space to the east is not dedicated to hydroblasting and therefore might be occupied. In addition, moving hydro blasting to the east would add two to three days to each vessel service time. Vessel owners – Seaspan's customers – would be reluctant to carry the additional cost and inconvenience of out of service time.
    - Noise blankets have been purchased. There are some logistical issues to sort out the best approach for hanging the noise equipment given the weight of the curtains.
- **Engagement:** Questions were raised about how Indigenous Nations were consulted on the drydock proposal

- Port representatives advised that Indigenous consultation is done by the port (representing the federal government) with First Nations. There are separate streams for Indigenous engagement and community engagement. Questions on the process can be best answered by the port's Indigenous consultation advisor.
- The port authority advised it has a guideline document developed for applicants that provides an overview of the Indigenous consultation process[2]

The port was also asked to clarify its review process to help the group understand the role of public input as a decision criteria. The question asked was how much opposition is required to see a permit application denied.

- Port representatives that community input is one of several factors considered when reviewing permit applications. Applications are reviewed on a case-by-case basis. Information on the project and environmental review process can be found on the port authority's website.

- **Air quality permit:** The group feels the air quality permit should be in place before the drydock expansion permit is issued.
  - In response, Seaspan noted that the air quality permit remains a work in progress. Metro Vancouver made changes to the process two years ago which meant the application process had to be restarted. A challenge facing both Seaspan and the regulator is how to assess the air quality impacts of a single business within a multi-business environment. The target for securing the permit is the end of 2022. Air quality monitoring is expected to be a condition of the permit. Action taken to date to minimize emissions includes replacing diesel-driven compressors with electrical powered units, switching from grit blasting to hydro blasting, and purchase of a solvent recycling unit to reduce VOC emissions.
- **Construction:** Concern that pile driving will adversely impact the structural integrity of the condominium towers adjacent to the drydock.
  - In response, Seaspan noted that the probability of impact was assessed during project planning and, as detailed in the project report, the probability of impact to adjacent condominium towers was rated as zero. It was also noted that there is a high degree of probability that drilling will be used instead of pile driving.

Community Proposed Action Items

- Seaspan: Install a noise monitoring station at the playground now so that baseline data can be collected before the expansion project begins.
- Seaspan: Hire an independent third-party engineer to review the noise and siting plans
- Seaspan: Install an air quality monitoring station in advance of any permit for the drydock expansion

[2] he following link is included for your convenience – Project and environmental review Indigenous consultation: information for applicants

- Seaspan: Provide liability insurance to cover risk of structural damage to condo towers from pile driving
- Seaspan: Follow up with community group on their proposal for an eastern option
  - P. Hebson to follow-up with H. Stripp
- Seaspan: Consider a community liaison group for on-going dialogue
- Port: Provide additional detail on Indigenous consultation/engagement process directly to the community member posing these question.
  - Agreed.
- Port: Provide guidance on the permit decision review criteria.
  - The port has advised that information on the project and environmental review process can be found on the port authority's website. Please see the initial paragraphs for information on how the port considers projects in their jurisdiction.

Next steps

The community group advised they will host their own meeting on September 9, 2022 at 7:00pm. Invited to date is the Mayor of the City of North Vancouver, the local Member of Parliament and the local member of the Legislative Assembly of British Columbia.