



Cargill Terminal Rail Improvement Project

Engagement Summary Report and Input Consideration Memo

March 4, 2015



Cargill Terminal Rail Improvement Project

The Cargill North Vancouver Terminal rail improvement project involves the addition of a dedicated lead track from the CN yard, and reconfiguring the existing rail track with additional switches to increase average car unload capacity from 125 to 175 cars per day.

Public Engagement Activities

Cargill engaged in a number of consultative activities to inform residents, First Nations, municipal government, community groups and stakeholders about the terminal rail improvement project and the impacts on the surrounding area over the course of several months.

A summary of the activities is provided below:

Date	Activity
November 5, 2014	Letter to Chief Jacob, Squamish First Nation
December 10, 2014	Meeting with North Vancouver Mayor – Darrell Mussatto
December 11, 2014	Presentation to North Shore Waterfront Liaison Committee
December 11, 2014	Email to resident Cathy Lewis with project update, moss on terminal and Open House
December 11, 2014	Email to resident Graham Parkinson with project update and noise mitigation
Week of January 12, 2015	Project posted on Cargillag.ca
January 18, 2015	Ad for Open House in North Shore News
January 20, 2015	Mail Drop to area residents advertising

	Open House
January 20, 2015	Article in North Shore News “North Vancouver Rail Terminal to be Expanded”

Date	Activity
January 24, 2015	Article in Vancouver Sun “Grain terminal applies for expansion of rail system to allow more exports”
February 5, 2015	Open House (30 attendees)
February 13, 2015	Article in North Shore News “Port posts another record year”
February 17, 2015	Project factsheet, project feedback form, project boards added to Cargillag.ca
February 18, 2015	Presentation to Low Level Road and Port Area Community Liaison Committee
February 23, 2015	Presentation to Mayor and Council, City of North Vancouver

Materials

A wide array of materials were used to communicate the terminal rail improvement to residents and stakeholders to provide information on noise mitigation, project scope, safety improvements, operational improvements, track design, environmental improvements and lighting design.

These materials were made available at the Open House and are available online at www.cargillag.ca

A list of communication materials is detailed below:

- Terminal Rail Improvement Project overview brochure
- Project overview video
- Seven informational storyboards

- Draft Noise Impact Study
- Feedback form

Public Open House – February 5, 2015

A public open house was held on February 5, 2015, from 4pm – 8pm at the Pinnacle Hotel in North Vancouver to provide area residents and stakeholders with an opportunity to find out more about the project first-hand.

Representatives from Cargill were at the open house to provide answers to any questions that arose about the project scope, and representatives from Port Metro Vancouver attended to answer any questions around the permitting process.

Story boards detailing the scope of the project were positioned around the room with Cargill representatives stationed at each one to answer questions. Please refer to Appendix A for copy of the story boards. A project video was played on loop throughout the evening and a Terminal Rail Improvement project factsheet, as well as feedback form were distributed to attendees as they arrived. Please refer to Appendix B for copy of the factsheet and the feedback form. The Draft Noise Impact Study was also available at the open house. Please refer to Appendix C for this report.

A list of attendees was also collected at the registration desk for those interested in getting project updates. A total of 30 attendees came to the open house including residents, port neighbours (surrounding businesses) and City Councillors.

Open House Notification

To ensure stakeholders were aware of the open house, a number of steps were taken to notify the community about the meeting. The notification period was two weeks prior to the meeting. Please refer to Appendix D for copy of the brochure and the newspaper advertisement, including map of the notification area:

1. Direct Mail – January 20, 2015:
 - A one page brochure advertising the open house – dates, details and location – were distributed to approximately 300 area residents
2. Newspaper Advertisement – January 18, 2015:
 - An ad was placed in the Sunday edition of the North Shore News. This paper has a circulation of 62,636

Public Open House Feedback

Feedback forms were provided to all attendees at the open house. Attendees were encouraged to provide comments verbally and in writing either by completing a form at the event or by emailing Cargill's Communications and Community Relations Manager directly. This feedback form was also available on www.cargillag.ca

During the open house five feedback forms were returned and several questions were asked – and addressed at that time. Following the open house, two emails from the same resident were submitted.

These questions and subsequent answers/actions are detailed in the Consideration Memo section of this report.

The feedback was predominantly neutral with a few residents who expressed concerns over lighting and noise. There were also several questions about vegetation.

General Feedback

- The Low Level Road expansion was a sore spot with the residents but they did appreciate the noise mitigation efforts Cargill completed in the middle of the project
- Residents were pleased to know Cargill is not building an additional silo and appreciated efforts to mitigate noise
- Multiple people commented, "Is that all you are doing? And you are going through this process? Thanks for taking the time to clarify so we feel more comfortable with the project."

Consideration Memo – Resident Feedback / Cargill Response

The following feedback/questions were posed by residents verbally at the open house and via feedback forms.

Note: a majority of the questions were asked verbally at the open house and addressed by Cargill onsite. Questions posed in the Feedback forms are directly quoted.

Questions/Comments	Response
<p>“Light at the West End have to be lowered”</p> <p>“A non-negotiable for our neighbourhood is for you to lower the lights at the far west end/annex of silos. This must be completed and designed to mitigate homeowners in close proximity.”</p>	<p>Tentative plan for replacing those units with low angle LED fixtures. Parts and fabricate mounting solutions for the fixtures are being ordered. In the meantime, we are adjusting the angle of the existing lights down roughly 10 degrees</p>
<p>“Start showing respect for the neighbourhood and pressure wash every year. Filthy to look at.”</p>	<p>The north side grows moss and the roots get through the paint. Previous washings compromised the protective coating on the terminal, so we are exploring other alternatives such as painting. We have recently received a quote to pressure wash the exterior of the facility. This proposal is currently under review</p>
<p>“I Am concerned about more trains, bigger engines, more noise, sleeplessness from noise and the environmental impact. It is very unfortunate this project is so very close to residential.”</p>	<p>This is out of scope of the Cargill rail improvement project. Questions pertaining to CN/CP should be directed to the rail companies for response</p>
<p>Clarity on shunting process and what it means</p>	<p>Process explained in conversations with residents during Open House</p>
<p>“Please keep new LED lights on west end annex directed beams downwards and use barn-door shields. Be pro-active as opposed to Richardson who are reactive”</p>	<p>We are currently revising our project plans to lower the lights and its impact to local residents</p>
<p>Is CN going to be adding more lines</p>	<p>CN project is not affiliated with the Cargill project. The Cargill project involves adding a line within our property</p>

Comment/Questions	Response
Does Cargill still plan to move forward with Phase II of its noise mitigation plan	Phase II of the noise mitigation plan is in progress
Is Cargill going to plant any trees in the area and if so, when	We are currently working with the City of North Vancouver to identify the species and location to plant some trees. A possible location identified is along the Spirit Trail through the Park & Tilford area next year
Are the catwalks being installed for pedestrians	The catwalks installed as part of the project are for employees to ensure they can safely cross the rail tracks on the Cargill terminal site
"It was nice chatting with you at the Pinnacle Hotel yesterday. This is a small video (https://www.youtube.com/watch?v=EfGsb6vm7io) of a silo that turned something ugly into a "tourist attraction". Wouldn't that be nice. Please pass this on to your superiors"	Email forwarded to project team
Will the improvement project involve using LED lights	The lights being installed as part of the improvement will be LED
Is Cargill building any new silos	The building of new silos is not part of this project. There are no plans to build new silos

Operational Improvements



- Expand rail yard and car loading/receiving capacity
- Automation upgrades to increase efficiency
- Reduced vessel dwell time due to decrease in car unload times
- Dedicated lead from CN will eliminate the blocking of main line tracks



Noise Mitigation and Environmental Impacts



- Projected to eliminate car banging noise from gravity roll out by always having the car string connected*
- Significant reduction in noise and service from CN by new process for moving cars in/out*
- Cargill is working with the City of North Vancouver to plant additional native species trees

*A comprehensive noise assessment that takes into account community impacts is currently being completed by Cargill



Construction Overview



Addition of a new rail track on the east side of our track shed and a new rail lead that does not cross the main line. This will allow a full train spot resulting in improved service by CN through increased car velocity and increased supply chain capacity. Completing this project will improve the terminal's rail car unloading efficiency allowing the terminal to increase annual volume from 3.4 to 5 million MT.



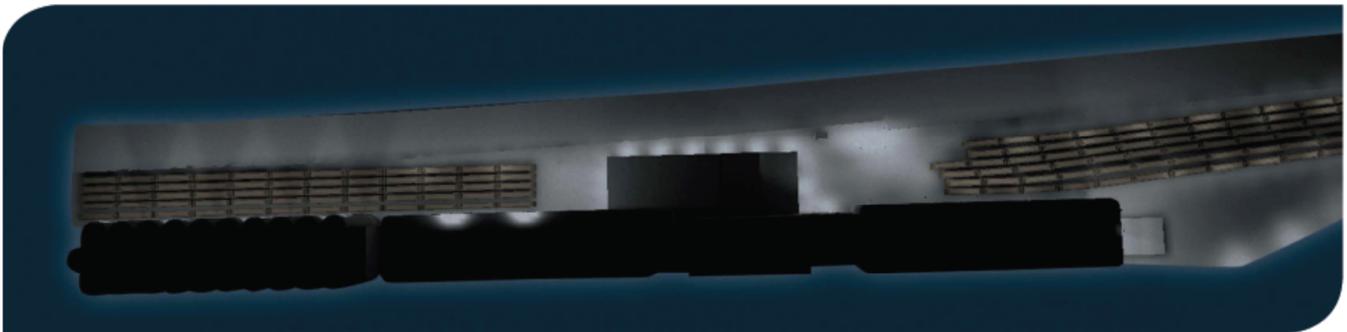
Track Design



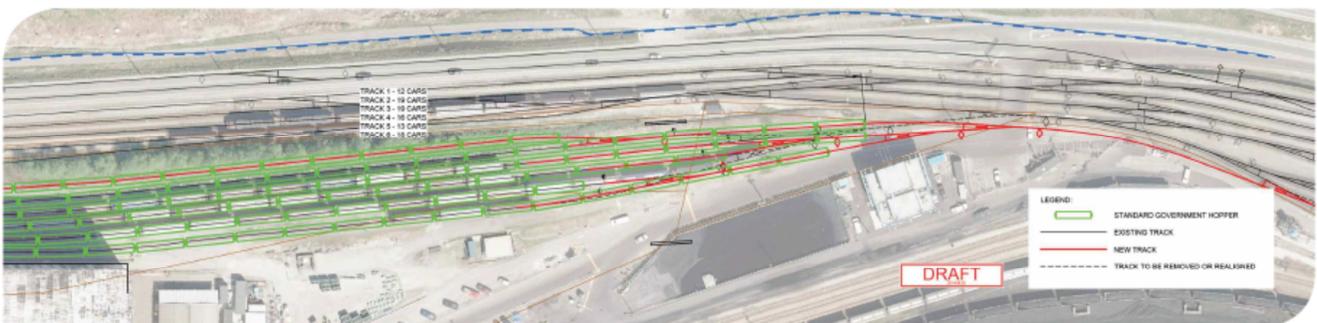
- Addition of a dedicated lead track from the CN yard, and reconfiguration of existing rail track with additional switches to increase average car unload capacity from 125 to 175 cars per day
- Replace two unidirectional car indexers with bidirectional indexers for car movement and unloading from both directions
- Car spot modified and expanded to 120 cars via bi-directional unloading and one additional track



Lighting Improvements



Future Track Layout



Safety Improvements



- LED lights at ground level will be installed to reduce lighting to the local community
- Upgrade track yard and rail shed illumination with LED lights to meet COSH Industry Standard Regulations
- Install catwalk near the track shed to avoid ground level crossing of the rail tracks, improving safety for employees



Cargill Terminal Rail Improvement



The Cargill North Vancouver Terminal rail improvement project involves the addition of a dedicated lead track from the CN yard, and reconfiguring the existing rail track with additional switches to increase average car unload capacity from 125 to 175 cars per day.

Benefits

This project is a positive investment in the facility and the community by decreasing noise, improving safety and increasing plant efficiency.

- Implementing new process for moving cars – will reduce/eliminate noise from gravity feeding cars banging together by controlling the cars during the unload process at all times. A comprehensive noise assessment that takes into account community impacts is currently being completed by Cargill
- Install LED lights – will reduce lighting to local community
- Install catwalk near the track shed – will avoid ground level crossing of the rail tracks, improving safety for employees
- Local employment opportunities – project will create up to 50 construction positions



Our Community Support Commitment

- Low Level Road tree planting. Cargill is working with the City of North Vancouver to plant additional native species trees
- Ongoing support to Harvest Project through donations and volunteer efforts
- Over \$131,000 donated to the United Way Lower Mainland
- Ongoing support to school education programs about the Port and waterfront



Cargill's Investment in North Vancouver

Cargill is invested in the long-term growth and stability of North Vancouver. Since 2007, Cargill has invested over \$30M in facility improvements, created over 150 unionized and management positions and made a positive impact in the community.

Terminal Overview

Cargill's North Vancouver Terminal was built in 1968 by Saskatchewan Wheat Pool and purchased by Cargill in 2007. Total storage capacity is 210,000 MT with a load out capacity of 2,200 MT/hour. Products handled: wheat, barley, canola and peas.

Project Background

The scope of this project will involve adding a new rail track on the east side of our track shed and a new rail lead that does not cross the main line. There will be three dumping areas and bi-directional indexing systems to move the cars to allow dumping from either side. This will allow a full train spot resulting in improved service by CN through increased car velocity and increased supply chain capacity.

Completing this project will improve the terminal's rail car unloading efficiency allowing the terminal to increase annual volume from 3.4 to 5 million MT.

Project Scope

- Convert rail receiving from conventional single direction (west to east) to bi-directional unloading
- Projected annual increase in vessel calls at the terminal is projected from an average of 88 up to 132 trips per year
- Truck traffic will increase on average from 8 to 10 per day
- Train trips will increase on average from 325 to 500 per year
- Expand rail yard and receiving
 - o Third dump grain receiving pit, dust aspiration, receiving conveyors, new indexer and gate opener
 - o Replace 2 existing unidirectional rail car indexers with bi-directional indexers
 - o Car spot modified/expanded to 120 cars via bi-directional unloading and one additional track
 - o New dedicated lead track to adjacent CN rail yard
- Automation upgrades to increase efficiency
 - o Automated switch control in rail yard for CN railroad and Cargill employees to control the movement of the cars
- Safety upgrades
 - o Upgrade track yard and rail shed illumination with LED lights to meet COSH Industry Standard Regulations

Estimated Project timeline: Anticipated construction to begin May 2015 with completion in June 2016*

* Timelines dependent on permit approval by Port Metro Vancouver and equipment delivery timelines

For more information on Cargill's rail expansion project visit www.cargillag.ca





FEEDBACK

Cargill North Vancouver Terminal Rail Improvement Project

We want to hear from you!

If you have questions or concerns regarding the Cargill North Vancouver Terminal rail improvement project, please fill out the form below.

Name*

Address*

Phone*

Email*

*optional

Project Comments/Questions:

Cargill appreciates your feedback on our terminal rail improvement project. Input received will be summarized in an Engagement Summary Report. A Consideration Memo will also address how input was considered. These reports will be available on Port Metro Vancouver website.

Completed forms can be placed in Feedback Box or sent through fax or email by February 19, 2015 to:

Connie Tamoto
Communications &
Community Relations Manager
Cargill Ltd.
F: 204-947-6198
E: connie_tamoto@cargill.com



CARGILL RAIL EXPANSION PROJECT

PRELIMINARY ENVIRONMENTAL NOISE ASSESSMENT

PREPARED FOR:



CARGILL

JANUARY 2015

REVISION A

DRAFT

PREPARED BY:

BKL CONSULTANTS LTD

acoustics • noise • vibration

#308-1200 LYNN VALLEY ROAD, NORTH VANCOUVER, BC, CANADA V7J 2A2

T: 604-988-2508 F: 604-988-7457

sound@bkl.ca

www.bkl.ca



EXECUTIVE SUMMARY

BKL Consultants Ltd. (BKL) has conducted an environmental noise assessment for the proposed Cargill Rail Expansion Project (the Project) in Port Metro Vancouver's (PMV) North Shore Trade Area. The Project includes the expansion of Cargill's existing facility to increase capacity from 3.4 to 5.0 million metric tonnes per annum (mmpa). The Project will include the following key improvements:

- New rail car indexers and wheel grippers;
- Redesigned west and east yard trackwork; and
- Decommissioned shuttle wagon and re-railers.

This report documents existing community noise levels near the Project and the predicted noise climate following completion of the Project.

The objectives of this study were to review existing conditions at nearby residential receptors, perform site measurements of significant Cargill rail yard noise sources, construct a noise model to predict community noise levels in the existing noise environment and the future noise environment with the Project, and to provide mitigation options where applicable. This study does not address potential short-term construction noise effects.

It is understood that PMV's goal for tenant-led projects such as this is to demonstrate that annual average future noise levels will not be higher than existing noise levels and that terminal operators incorporate continuous improvements to reduce noise impacts to the community. Furthermore, adjustments should be made to decibel levels to account for more annoying characteristics such as tones, impulses or low frequency noise to better assess human annoyance to noise. The adjusted annual average Day-Evening-Night Level (L_{den} Rating) metric has been used to carry out the assessment.

Existing community noise levels were assessed using noise measurement data collected by a nearby PMV permanent noise monitoring terminal (NMT) located at Queensbury Avenue and East 2nd Street, North Vancouver. Noise data from the entire month of December 2014 was used to characterize the existing annual average community noise environment and assist in establishing the existing noise levels at potentially affected receptors. The measured L_{den} was 67 dBA on weekdays (Monday to Friday) and 68 dBA on weekends (Saturday to Sunday).

A Cadna/A computer noise model was developed to assess existing and future noise levels at all nearby residences. The model includes noise sources from Cargill, Low Level Road, East 3rd Street, CN railway, Richardson Terminal and Neptune Terminals.

The Project noise predictions were based on the following main assumptions:

- Empty cars will no longer roll down the hill and impact stationary cars.
- The shuttle wagon will be decommissioned.
- CN servicing noise (spotting and pulling cars) should be considered Cargill-generated noise.
- CN service efficiency will improve since they will be able to deliver and retrieve a larger amount of cars at a time, resulting in fewer shunting impacts per car serviced.

- A 12 decibel impulsive noise penalty should be applied to existing empty car impact noise.
- A 12 decibel impulsive noise penalty should be applied to CN servicing noise due to shunting impacts.
- Track shed and shipboard generator noise emissions will increase in proportion to the proposed throughput increase.
- Fixed equipment noise above the track shed (e.g., blower noise) will not change as a result of the Project.

Based on these assumptions, a net decrease in the noise rating has been predicted throughout the surrounding community. Figure 1 and Figure 2 show the predicted existing and future Cargill noise rating contours. The predicted decrease ranges from 1 to 3 dBA. The Total Noise is predicted to remain unchanged or decrease, ranging from 0 to 1 dBA decreases.

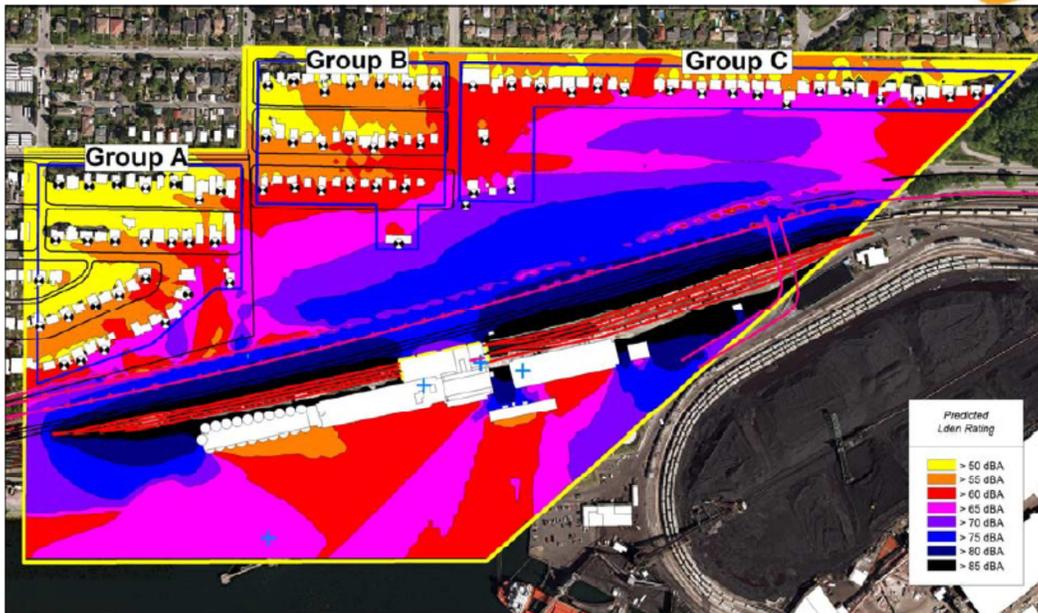


Figure 1 Predicted Existing Cargill Noise Rating

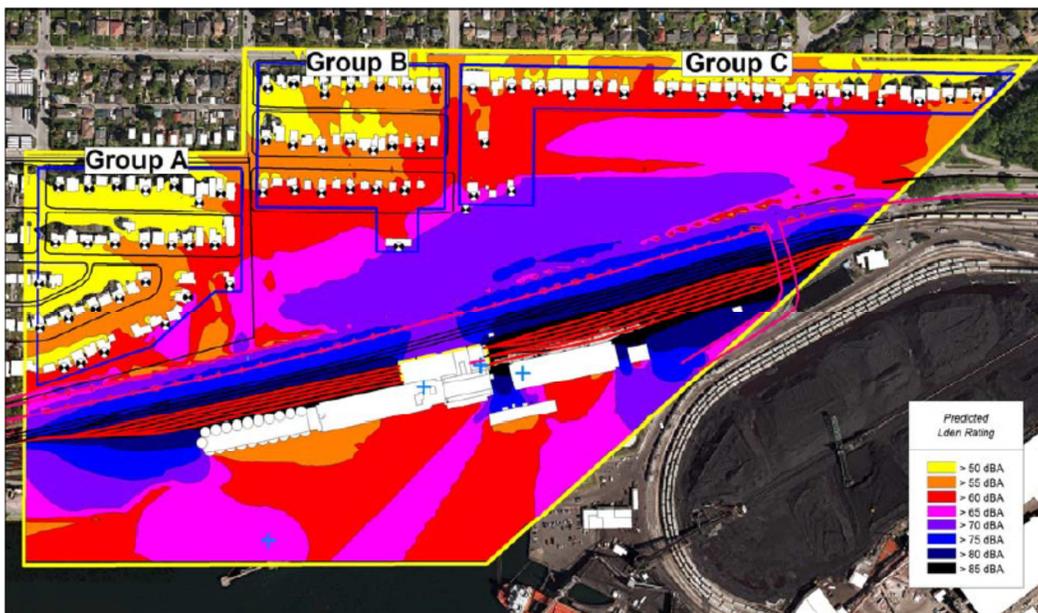


Figure 2 Predicted Future Cargill Noise Rating With Project



**We're improving our
rail infrastructure**

Attend our Open House to learn more about the project.

To keep up with the global demand for Canadian grains while providing the best service to our farm customers, we need to enhance our rail infrastructure at our North Vancouver grain terminal. Attend our Open House to learn more about this project and how it will reduce noise, enhance safety and improve efficiency at the facility.

For more information visit: www.cargillag.ca/my-community/projects/4638.

February 5, 2015, 4 – 8 p.m.
Pinnacle Hotel at the Pier, Pier Two Room
138 Victory Ship Way
North Vancouver, BC V7L 0A7

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