



Terminal Infrastructure Reinvestment Project

Input Consideration Memorandum

December 30, 2013

Purpose

This Input Consideration Memorandum provides Westshore Terminal's response to questions received as part of the Terminal Infrastructure Reinvestment Project public engagement process. The information contained in this memorandum, in addition to technical and environmental information, is intended to assist Port Metro Vancouver in the project review process.

The Terminal Infrastructure Reinvestment Project

Westshore Terminals has handled coal at Roberts Bank for 43 years. To continue to support its existing customers and maintain current throughput levels, Westshore is investing \$230 million over the next five years into the Terminal Infrastructure Reinvestment Project to replace aging 30-40 year old equipment and modernize the 40 year old office and shop complex, which are currently dispersed through the terminal site.

The project includes replacing the Berth One shiploader and three stacker-reclaimers and related conveyors, as well as building a new office complex. All works will be carried out within the existing terminal footprint. The equipment upgrades will ensure Westshore continues to operate with the latest technology and environmental management systems, and will result in an overall reduction in operating emissions.

Public Engagement Program

Westshore Terminals undertook a series of consultation activities throughout 2013 to provide information about the Terminal Infrastructure Reinvestment Project to elected officials, the local community, First Nations and other important stakeholders.

Information was targeted to Westshore's adjacent communities of Tsawwassen, Tsawwassen First Nation and Ladner. It was also communicated to the broader public through Westshore's standard public disclosure of material information.

A summary of the activities is provided below:

Date	Activity
January 8	Terminal tour with Corporation of Delta Mayor and staff site tour
January 14	Presentation to Corporation of Delta Mayor and Council
January 29	Terminal tour with Adrian Dix, MLA Vancouver-Kingsway
February 14	News release on Terminal Infrastructure Reinvestment Project
March 30	Westshore Annual Report
March 30	Westshore Annual Information Form
May 3	Westshore First Quarter Report

Date	Activity
May 10	Meeting and terminal tour with Kids for Climate Action representatives
June 10	Global BC news story
June 17	Westshore Annual General Meeting
July 10	Delta Optimist advertisement
July 13, 14, 20, 21, 27, 28	Open House terminal tours with project presentation
July 29	Presentation and project briefing to the Corporation of Delta and approximately 200 members of the public
July 29	Presentation and project briefing to Tsawwassen First Nation elected and administrative officials
August 3 and 4	Attendance at Point Roberts Arts and Music Festival where project brochures were distributed to attendees
August 5	Attendance at Tsawwassen Sun Festival where project brochures were distributed to attendees
August 7	Westshore Second Quarter Report
August 10, 11, 17, 18, 24, 25	Open House terminal tours with project presentation (over 500 total attendees)
November 4	Presentation material circulated to the (Delta) Port Community Liaison Committee
November 6	Westshore Third Quarter Report
November 14	Public Open House
November 27	Presentation and discussion with Delta municipal staff

Information on these activities, as well as supporting materials was and continues to be available on Westshore’s website – www.westshore.com.

Feedback Results - Highlights

Local residents and businesses were overwhelmingly supportive of the project and proposed scope. A key theme that came through was the benefit of the project to the local economy and appreciation of Westshore as a valued contributor to the community. It was noted and Westshore was recognized for also having spent some \$14 million in 2013 for enhanced environmental systems on the terminal.

The public and interested stakeholders were asked to provide their feedback on the overall project and were also asked to provide feedback on the specific aspects of the projects, of which the vast majority were positive.

The one area of concern raised by a single individual during the consultations was around the potential for coal dust in the community. This item, as well as other considerations, is addressed in the section below.

Project Considerations

As part of the project assessment project, Westshore Terminals undertook a comprehensive Environmental Impact Assessment (EIA) of the Terminal Infrastructure Reinvestment project. The results of the study determined that the project is expected to create operational efficiencies, as well as improvements in emissions and dust control.

SNC-Lavalin's investigation into changes in air quality resulting from the project concluded that terminal upgrades will result in a net improvement in air quality as a result of a decrease in emissions from current levels.

SNC-Lavalin's review of measured concentrations of air emissions associated with fugitive dust and diesel/combustion emissions at BC Ferries Tsawwassen Terminal, the nearest and most significantly affected neighbor, are below the most stringent of the health-based international, Federal, Provincial and Municipal air quality objectives. As a result, there are no known health risks resulting from Westshore's project.

The addition of a potential three million tonnes per year throughput could result in approximately one additional train arriving at the terminal every two days and one additional ship every two weeks, based on current vessel and train sizes. If the average train car count and vessel sizes continue to gradually increase, as they have over the last several years, the incremental trains and ships will be even less. Lighting, noise and traffic impacts are either predicted to decrease marginally or remain the same.

Westshore recently completed replacement of the wastewater treatment facility with a new facility meeting current discharge requirements. In-water activities will be limited to the relocation of an existing waste water outfall, consequentially there are predicted to be no impacts to the environment surrounding the terminal.

In addition to the EIA, the following table outlines the measures Westshore will undertake to address and mitigate specific community concerns related to the project provided in writing to Westshore and/or communicated in discussions with company representatives:

Project Specific Issue	Community Input	Mitigation – Response and Action
<p>Air Quality</p>	<p>One attendee at the public open house expressed concern about ensuring appropriate dust suppression at the terminal and along the rail corridor.</p>	<p>Westshore has found that the most effective method to reduce dust emissions during wind events is to ensure that the top layer of coal in the stockpiles is kept wet, binding the smaller potential dust particles to larger particles.</p> <p>Recently Westshore made an \$8.5-million upgrade to its environmental management systems, including a dust suppression system providing site-wide water spray capability. The new system includes 12 new 130-foot high water spray towers to go with five existing units, the complete replacement of the original 77 ground level sprays with 94 new water sprays.</p> <p>While outside the scope of Westshore’s operations, in response to community concerns, Westshore has built a monitoring station at the 80th Street Overpass in Delta to remotely monitor coal train movements into and out of Roberts Bank. All trains traveling to Westshore are also coated with a latex spray to reduce to the potential for coal to leave the railcars while in transit.</p> <p>Results from a recent coal dustfall study carried out by Delta shows that less than 5% of the low levels of dust in Tsawwassen were identified as coal particles. Dustfall sampling was conducted during a very dry period and not necessarily indicative of year-round conditions. Efforts are already underway to reduce the occurrences of dusting coal trains and Westshore is continuing to study dustfall along the rail corridor.</p>

Project Specific Issue	Community Input	Mitigation – Response and Action
		<p>Two Mobile Air Monitoring Units (MAMUs) are in operation in the community to monitor air quality and guide future improvements to Westshore’s dust suppression strategy.</p> <p>BNSF Railway recently announced that it will be building a re-spray station along the rail line for coal shipments bound for Vancouver. The re-spray centre will be built approximately halfway between the Powder River Basin mines and Vancouver and be complete by summer 2014. Once operational, all coal transported to Vancouver will be treated at the facility.</p>
Light	No specific questions	<p>Westshore is one of the largest single participants in the BC Hydro Power Smart program. The \$2.1 million project will convert all terminal lighting to LED (a total of 1,900 lights), which will be designed to prevent unnecessary light spillage and reduce the terminal’s energy consumption by an estimated 747 MWh per year.</p>
Noise	No specific questions	<p>The proposed project is expected to result in a net reduction in noise levels at the terminal as existing equipment will be replaced with new, quieter equipment.</p> <p>The new stacker-reclaimers will operate at a noise level threshold of 85dB at one metre, an improvement over current aging machines that have noise levels in excess of 95dB. The project will also see the conversion to quieter conveyor equipment. Switching from steel idler rollers to composite versions, as components fail and equipment is upgraded, will lessen operational noise even further.</p> <p>Studies commissioned by Port Metro Vancouver have shown that current ambient noise levels from Westshore’s operations remain below all government guidelines.</p>

Project Specific Issue	Community Input	Mitigation – Response and Action
Water	No specific questions	<p>Westshore has invested \$5.5-million in the replacement of the existing wastewater treatment plant. Westshore will continue to meet current discharge regulations, while reducing impact on the marine environment</p> <p>All tower sprays use fresh water, but as that water runs off the piles it is collected in a new water processing plant. After its initial use, water is collected and returned for treatment to remove coal solids. The treated water is then recycled through the ground level sprays.</p>
Roads	No specific questions	<p>Westshore does not receive or ship coal by road and as such there are no anticipated changes to traffic associated with the project once complete.</p>
Construction	No specific questions	<p>The construction of the office and workshop is not anticipated to create noise in the community as the new buildings will be located on the northwest corner of the site a further 500 meters away from our nearest neighbours.</p> <p>The stacker-reclaimers and shiploader are expected to arrive by barge, but smaller components and materials for the office and shop complex will arrive by truck. Westshore will work with construction contractors to develop construction mitigation procedures and will undertake ongoing monitoring as part of the construction oversight.</p>