PORT METRO vancouver

Frequently Asked Questions:
Fraser Surrey Docks and Coal

August 2014

Fraser Surrey Docks

What is the status of the project review for Fraser Surrey Docks?
After a thorough project review, Port Metro Vancouver has issued a permit to Fraser Surrey Docks for the development of a Direct Transfer Coal Facility to handle up to four million metric tonnes of coal, subject to conditions. The decision to issue the permit was made taking into consideration environmental and technical information, as well as municipal, agency, community and First Nations input.

What is the conclusion of the Human Health Risk Assessment for this project?
The Human Health Risk Assessment concluded that there are no unacceptable health risks predicted for exposures to the project emissions in the study area. A copy of the assessment is available here.

Will there be an increase in train traffic through Lower Mainland communities as a result of this project?
The project will result in one extra train per day, along an existing rail corridor. Current traffic on the BNSF rail line is nine to 10 trains a day.

What is Port Metro Vancouver's role in the Fraser Surrey Docks proposal?
Port Metro Vancouver has mandated decision-making responsibilities for the proposal because it is located on federal lands managed by Port Metro Vancouver. To reach a decision, Port Metro Vancouver implements a Project Review Process to ensure all environmental, safety, and community impacts are appropriately identified and addressed. In general, project applications are reviewed based on the extent and nature of the development, the compatibility with Port Metro Vancouver's Land Use Plan, and potential impacts on the environment, local communities and First Nations. Depending on the nature of the proposal, the process includes varying degrees of municipal, agency, First Nations, and community consultation. The review process for the Fraser Surrey Docks proposal, conducted over a 26-month period, was thorough, and included a number of consultation activities.

As part of the project review process, Port Metro Vancouver conducted an environmental review. As a federal authority, in accordance with section 67 of the *Canadian Environmental Assessment Act, 2012 (CEAA 2012)*, Port Metro Vancouver must be satisfied that a projects does not result in significant adverse environmental effects. Port Metro Vancouver's environmental review has taken into account relevant information available on the proposed project, has considered the information and proposed mitigations provided by Fraser Surrey Docks and other information including third-party reviews of the human health and air quality components of the submissions. It has been concluded that with the implementation of proposed mitigation measures and conditions (included as Conditions of Approval in the permit), the project is not likely to cause significant adverse environmental effects.

Can Port Metro Vancouver restrict what is exported through the port?
Canadian port authorities cannot make international trade policies that control what can or cannot be exported – that's the role of the elected representatives in government. However, port authorities can assess whether these goods can be moved safely, with minimal impact to the environment and the surrounding community. More information

can be found in the Canada's Export Controls Guide on the Government of Canada website.

Why did Port Metro Vancouver conduct the environmental review?
The *Canadian Environmental Assesment Act, 2012 (CEAA 2012)* sets out when and how projects on federal lands must undergo an environmental review or assessment. The Fraser Surrey Docks project is not one that either the Government of Canada or the Government of British Columbia has deemed appropriate for a full environmental assessment under federal or provincial environmental assessment legislation. More specifically, the project does not require an environmental assessment under the federal Regulations Designating Physical Activities, or the B.C. Reviewable Projects Regulation. Both federal and provincial legislation make clear that this is not the type of project which requires a full scale environmental assessment.

Nevertheless, since the project site is on federal lands managed by Port Metro Vancouver, section 67 of CEAA 2012 applies. As such, the project is subject to environmental review through Port Metro Vancouver's Project Review Process.
In response to a request to designate the project, in December 2013 the federal Minister of the Environment indicated confidence that Port Metro Vancouver would undertake a thorough examination of the environmental effects of the project; and as a result confirmed there is no need under subsection 14(2) of CEAA 2012, to designate the project for an environmental assessment by the Canadian Environmental Assessment Agency.

Why was Port Metro Vancouver's review only limited to the terminal site and part of the Fraser River?
Section 66 of CEAA 2012 establishes that Port Metro Vancouver's environmental review is limited to the federal lands it manages. For the Fraser Surrey Docks proposal, this included the terminal site and the portion of the barge route that is in the Fraser River – it does not include the rail corridor from the Canada/U.S. border to the terminal site, nor the barge route in the Strait of Georgia to the receiving terminal at Texada Island.

What are the conditions that must be met by Fraser Surrey Docks?
The project permit includes a total of 81 conditions. These conditions relate to the following: general project conditions, general environmental conditions, specific conditions related to vegetation and wildlife protection, fish and wildlife habitat protection, concrete and cementitious materials, spill prevention and contingency, sediment and erosion control, operational water quality, soil and groundwater quality, air quality, lighting, noise, debris and waste materials, engineering, transportation, marine operations, and general construction.

The full list of conditions is attached to the permit.

How has the issue of coal dust and air quality at the terminal been addressed?
The project permit includes conditions related to air quality:

- A requirement that dust and air emissions associated with the project be managed to avoid adverse health and safety effects and prevent impacts to regional and local air quality.

- A requirement that Fraser Surrey Docks prepare and submit an Air Quality Management Plan, and fully implement the plan prior to commencement of operations.
- The Air Quality Management Plan is to include monitoring and comparing of the data to the assumptions made in the Human Health Risk Assessment, with updates if necessary.
- A requirement for Fraser Surrey Docks to prepare and submit an Operations Management Plan detailing practices and procedures for dust mitigation, barge loading profiles, and the loading and towing of barges during periods of high winds.
- A number of requirements to ensure that dust from construction activities are kept to a mimimum.

Why hasn't Port Metro Vancouver included a condition in the permit requiring Fraser Surrey Docks to obtain a Metro Vancouver air quality permit?
A standard condition included in all Port Metro Vancouver project permits requires proponents to comply with and abide by all applicable laws, authorizations, and regulations. It is outside of Port Metro Vancouver's legislative purview to require Fraser Surrey Docks to specifically obtain a Metro Vancouver air quality permit as a condition of the project permit.

How has the issue of potential dust migration from rail cars been addressed?
Although the rail corridor is outside the scope of Port Metro Vancouver's environmental review; in May 2014, BNSF Railway confirmed that it is committed to building a re-spray facility along its rail line at the mid-point between the mine site and the Fraser Surrey Docks terminal. The re-spray facility is to be located at its Pasco, Washington Rail Yard and construction is already underway. BNSF Railway has indicated the facility will be operational by early 2015.

What is a Human Health Risk Assessment?
A Human Health Risk Assessment is a process that follows a structured and transparent framework for objectively evaluating a scenario of the release or historic release of specific contaminants, the degree of exposure to those contaminants by people and the extent to which there may be adverse health effects from that exposure.

The Fraser Surey Docks assessment was conducted using methods and guidance set out by Health Canada, and using conservative assumptions that will tend to over predict exposures. The assessment concludes there are no unacceptable health risks predicted for exposures to the project emissions.

What is involved in a Human Health Risk Assessment?
The assessment of the potential impacts of the project on human health includes:
- an updated air quality assessment;
- an analysis of coal composition, including metals and hydrocarbons;
- a background soil assessment;
- a review of dust palliatives (binding and suppressing agents that will be used to control dust);
- an assessment of the risks to human health for components in coal dust and diesel emissions;

The assessment evaluates the potential effects of any fugitive dust and diesel emissions on sensitive populations such as children. The assessment also considers how fugitive dust and diesel emissions may potentially impact people, directly or indirectly (such as the food they eat).

Did the assessment include the rail corridor and the barge route?
The scope of the assessment included the terminal footprint and the barge route from Fraser Surrey Docks to the mouth of the Fraser River. Although the rail corridor is outside of Port Metro Vancouver's area of responsibility, Fraser Surrey Docks expanded the air quality assessment and Human Health Risk Assessment to include representative sections along the railway from White Rock to the terminal, including three additional track sections: two in agricultural areas to evaluate potential impacts to agricultural land and one in White Rock.

How can the public be sure the Human Health Risk Assessment was done correctly?
Well-respected environmental experts Golder Associates Ltd. (Golder) assisted Port Metro Vancouver with the review of elements of the Environmental Impact Assessment submitted by Fraser Surrey Docks in November 2013, and with the review of the Human Health Risk Assessment submitted by Fraser Surrey Docks in July 2014. Technical advice from Golder has been taken into consideration, along with all the available project information, and Port Metro Vancouver has determined that with the application of the project mitigations and the required conditions, the project is not likely to result in significant adverse effects.

Port Metro Vancouver takes its *Canada Marine Act* responsibility to ensure a high level of environmental protection very seriously — and this includes potential impacts on human health. It is for this reason we retained Golder Associates Ltd. as our third-party reviewer and advisor on human health risk assessment, air quality modeling and aquatic toxicology for this project.

Golder's specialists have experience in the disciplines of human health toxicology assessment, human health exposure and risk modeling, amongst other relevant technical expertise. Golder has significant human health risk assessment experience across the globe and across numerous types of projects, including but not limited to port development. Golder specialists also developed risk assessment guidance documents for Health Canada, International Finance Corporation, Canadian Council of Ministers of the Environment and B.C. Ministry of Environment. Port Metro Vancouver instructed Golder to act as a third-party reviewer and to interact with Fraser Surrey Docks' consultants as necessary throughout their provision of a Human Health Risk Assessment.

What was Golder's findings of the Human Health Risk Assessment?
Golder's review of the Human Health Risk Assessment found that the risk assessment followed recognized human health risk assessment frameworks (in particular Health Canada's), provided an appropriate selection of receptors (i.e. those populations who could potentially be exposed), a conservative and comprehensive selection of contaminants of potential concern, and an appropriate selection of exposure pathways (i.e. the ways in which people could come into contact with potential contaminants).

Golder agreed that the Human Health Risk Assessment's conclusions were generally reasonable and appropriate, but noted that some of the risk estimates are near the thresholds where a potential for risk appear to be indicated. Golder noted that this approach towards certain thresholds is likely the result of a series of conservative assumptions (not unusual in an Human Health Risk Assessment), but recommended that any uncertainty be resolved through air quality monitoring. In the event that monitoring identifies conditions that are worse than expected, Golder recommends that the Human Health Risk Assessment be updated with the new data and appropriate actions be taken as needed. Port Metro Vancouver included conditions in the project permit to address these recommendations from Golder.

How did Port Metro Vancouver involve local health authorities throughout the review?
Port Metro Vancouver received detailed comments from local health authorities at several points in the review process. All comments that were within the scope of the Fraser Surrey Docks project were considered in the project review, and specifically in the Human Health Risk Assessment.

How did Fraser Surrey Docks consult with local communities on the proposed project?
The project has been the subject of a Port Metro Vancouver project review since June 2012. Fraser Surrey Docks went through a thorough public consultation process undertaken in three phases. Fraser Surrey Docks led specific public consultation activities throughout the first two phases, and Port Metro Vancouver led the public consultation for the third phase, which was the review of the Environmental Impact Assessment. Details of the consultation are available here.

Were public hearings held for this project?
Fraser Surrey Docks is a marine terminal operating within an existing footprint in an area of the port designated for industrial activity under Port Metro Vancouver's Land Use Plan. The commodity Fraser Surrey Docks proposes to handle, coal, is one that is already handled in the port, and has been handled safely for over 40 years. In addition, the proposal was not a "designated" project under the *Canadian Environmental Assessment Act (CEAA) 2012*, and therefore did not require a federal environmental assessment or public hearings.

However, recognizing the public interest in the project, Port Metro Vancouver required Fraser Surrey Docks to conduct environmental and health impact assessments, which were further reviewed by third-party experts.

How has Port Metro Vancouver considered public comments received?
A summary of all public feedback and how it was considered is available here.

What is an Environmental Impact Assessment?
In September 2013, Port Metro Vancouver required Fraser Surrey Docks to conduct an Environmental Impact Assessment. The 30-day public comment period on the assessment started on November 18, 2013 and closed on December 17, 2013. The assessment commissioned by Fraser Surrey Docks is available here. The assessment summarizes the environmental effects of the project, including the effects of the project on human and ecological health, and includes information on mitigation measures that

will be applied to the project. Upon review of the Environmental Impact Assessment, Port Metro Vancouver required Fraser Surrey Docks to conduct additional analysis of the human health effects of the proposal.

How do the proposed new coal facilities in the United States differ from the Fraser Surrey Docks project?
The proposals in the U.S. are very different because they involve building four entirely new terminals in Oregon and Washington. The largest would be the Pacific Gateway Terminal in Cherry Point, which would handle up to 48 million tonnes of coal a year. The total proposed new coal exports from the U.S. totals 130 million tonnes. Because these are entirely new terminals, the approval process is extensive, involving multiple levels of review and far-reaching consultation over many years.

On the other hand, the proposal at Fraser Surrey Docks is for an existing terminal to handle a new commodity, within its existing footprint. The Fraser Surrey Docks proposal is for four million tonnes of coal annually resulting in one additional train and two barges to move the coal to Texada Island per day.

Will Fraser Surrey Docks be permitted to increase the amount of coal it exports beyond this project?
Any increase of capacity beyond four million metric tonnes of coal per year will be subject to a new Port Metro Vancouver project and environmental review.

Will there be additional vessel traffic through Port Metro Vancouver?
Port Metro Vancouver required Fraser Surrey Docks to conduct a Marine Risk Assessment to study potential traffic and safety impacts due to the proposal. No deep-sea vessel movements are proposed for this project. The coal is proposed to be moved by barge down the Fraser River.

The project will require approximately two barge tows every day from Fraser Surrey Docks to the mouth of the Fraser River. Approximately one tandem tow (two barges together) will run from the mouth of the Fraser River to Texada Island every day. Empty barges would come back to Fraser Surrey Docks in a similar way.

Can you provide information on Texada Quarrying Ltd's facility expansion on Texada Island?
Texada Quarrying Ltd. is outside Port Metro Vancouver's jurisdiction and has received a permit to handle additional coal (such as coal from Fraser Surrey Docks) from the Provincial Ministry of Energy, Mines & Natural Gas. For additional information on this permit, please contact the Provincial Ministry of Energy, Mines & Natural Gas at the following email: SouthwestMinesDivision@gov.bc.ca

What is Port Metro Vancouver doing to address climate change?
Port Metro Vancouver is committed to long-term sustainability. Reducing our emissions now, and as we grow, will help to maintain air quality and reduce the impacts of climate change for future generations. Port Metro Vancouver as an organization has been carbon neutral since 2010 through the reduction of emissions from our operations and the purchase of high-value, locally-based carbon offsets where reductions are not possible. We report on this annually in our sustainability report, which is independently verified by third-party auditors.

As part of our Air Action Program, we have been working to reduce air emissions of criteria air contaminants, air toxins and greenhouse gases from port activities. In addition to operating a carbon neutral head office, we're the first port in Canada to have an environmental programs department, the first in North America to implement a mid-ocean ballast water exchange program, the first in Canada to install shore power for cruise ships, and one of only two ports in the world to issue a Global Reporting Initiative accredited B+ Sustainability Report.

We have also developed programs and partnerships that extend beyond our jurisdiction. An example of this collaboration is the Northwest Ports Clean Air Strategy. In partnership with the Port of Seattle and Port of Tacoma, the strategy was developed to address emission-reduction performance goals from port-related sources. The strategy improves air quality and reduces contributions to climate change in the shared Georgia Basin Puget Sound air shed.

More information about our environmental initiatives.

Coal General

How much coal does Canada use every year?
In 2011, Canada used over 47 million tonnes of coal, of which more than 10 million tonnes were imported. Much of the coal that Canada imports is thermal coal and is almost all consumed domestically for electricity generation in central and eastern Canada.

In B.C., the coal industry generates $5 billion in economic activity annually. The coal supply chain is responsible for more than 26,000 jobs in the province (from mining to terminal jobs). The average job in the coal industry pays $107,000 a year, making it one of the highest-paying sectors in the province.

How much coal already moves through Port Metro Vancouver annually?
Coal has long been the port's principal export, and accounts for more than one-quarter of the port's total volume each year. In 2013, Port Metro Vancouver handled more than 135 million metric tonnes of cargo, including more than 38.1 million metric tonnes of coal. Of that, 68 per cent of the exported coal exported was metallurgical (25.9 million metric tonnes) and 31 per cent was thermal (11.9 million metric tonnes).

What is done to suppress coal dust along the railways?
Rail service providers, such as BNSF Railway, take significant steps to minimize fugitive coal dust, such as spraying each rail car at the mine site with a dust suppressant designed to create a crust on top of the coal. Transport Canada regulates the safe movement of trains along federally-regulated rail corridors in accordance with the *Railway Safety Act*.

What is the difference between Westshore Terminals, Neptune Terminals, and Fraser Surrey Docks?
Westshore Terminals is an existing terminal in Delta handling metallurgical and thermal coal. It has been in operation since 1970. On January 31, 2014, Port Metro Vancouver

issued a Project Permit to Westshore Terminals to replace equipment and a variety of improvements that will increase terminal capacity by three million metric tonnes per year, for a total handling capacity of 36 million metric tonnes per year.
Neptune Bulk Terminals is an existing terminal in North Vancouver that has handled coal and other bulk commodities since 1970. On January 23, 2013, Port Metro Vancouver issued permits to expand the coal handling capacity at the Neptune Terminals site that will increase terminal capacity by 10.5 million metric tonnes per annum, for a total handling capacity of 18.5 million metric tonnes per year.
Fraser Surrey Docks is an existing terminal in Surrey that handles containers and other bulk commodities. The approval of this project will allow FSD to handle four million metric tonnes per year.

With the approval of the Fraser Surrey Docks project, and when all the projects are completed within the three terminals authorized to handle coal, the port's coal handling capacity will be 58.5 million metric tonnes per year.