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Port Metro Vancouver 100 The Pointe, 999 Canada Place Vancouver, BC V6C 3T4

December 17, 2013

RE: SUNSHINE COAST CONSERVATION ASSOCIATION'S PUBLIC COMMENT ON FRASER SURREY DOCKS' "ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DIRECT TRANSFER COAL FACILITY" (NOVEMBER 2013)

The Sunshine Coast Conservation Association (SCCA) is a registered charity (1997) whose mandate is to protect biodiversity values within the Sunshine Coast Forest District and adjoining marine waters. Our membership is broadly based consisting not only of individuals and families but also of local conservation and community groups. Currently, with respect to the marine environment, the SCCA has received federal funding to participate in the Canadian Environmental Assessment Agency transitional comprehensive study for the Burnco Aggregate Mine Project. In addition, the SCCA is actively working with a stakeholder group seeking protection for the globally unique glass sponge reefs recently discovered in the Strait of Georgia.

The Sunshine Coast Conservation Association has grave concerns regarding the climate change implications of the Direct Transfer Coal Facility (Project). We will however restrict our comments to our mandate and hence to the Strait of Georgia portion of the Project as identified in the scope of the Environmental Impact Assessment for the Project: the barge transport of coal from the Project site to Texada Island (page ii, Volume I).

Transhipping the coal from barge to freighter at Lafarge Canada's site on Texada Island was first brought to the SCCA's attention in June 2013 during a public presentation on the Canadian Environmental Assessment Act 2012 hosted by the SCCA. A letter requesting an extension of the review period for Texada Quarries (Lafarge Canada) application for an amendment to Permit M-66, File ref. no.14745-20, was subsequently sent to the Ministry of Mines in August 2013. The letter further identified environmental concerns, not only with the Texada Quarries, but with the transportation of the coal both by barge and by ship in the Strait of Georgia. The appropriate transportation concerns are reiterated below.

In reviewing the *Environmental Impact Assessment for the Direct Transfer Coal Facility, November 2013* (EIA), the SCCA commends Fraser Surrey Docks (FSD) for so quickly, since June 2013, implementing enhanced risk mitigation measures.

Specific to this submission is the measure for dust suppression of barged coal in which dust suppression agents will be added to the coal surface immediately prior to barge transfer.

However, the SCCA is both disappointed and alarmed that the barging of the coal along the Strait of Georgia has not received a similar level of assessment as the FSD facility and the Fraser River portions of the Project.

The SCCA believes that an environmental assessment must be conducted for the Sunshine Coast portion of the Project as there will be coal dust released during the life of the Project and to provide for a more effective emergency response to an unexpected greater loss of either dust or of the coal itself.

It is understood that FSD will, with its barge partner Lafarge, mitigate fugitive dust during marine transit by profiling the coal so as to reduce wind erosion and turbulence, the barges will only be filled to 85% capacity and will not be operated in winds that are greater than 40 km per hour that are sustained for more than five minutes. Due to variable wind conditions this will present some difficulties. It is further stated that the coal will be coated with both a binding and a surfactant during loading; and if required, additional suppressing. However, there is no documentation that the chemicals have been tested on barges in the marine environment. The supplier, General Electric, states in a letter dated November, 2013 that their products were 90% effective on train cars.¹ Will the addition of salt water spray during transport diminish the effectiveness of the treatment. The barges, once unloaded will still likely contain significant amounts of residual coal. How will this be prevented from entering the environment during transport as the empty barges are neither covered or treated for dust control?

Without testing for the loss of coal dust in actual marine conditions with uncovered barges, and based on the experience of train transport, it would not be unreasonable to assume that there will be losses with each loaded barge movement. This amount could be significant over the lifetime of the Project. The Project, as described, is expected by Year 2 to be transporting 4 million metric tonnes of coal per year, with the potential of 8 million tonnes per year being barged by Year 6.2 The corresponding loaded barge movements in the Strait of Georgia would likely increase from 2 per day to 4 per day (640/year to 1280/year).

Documentation appears to be lacking for how the treated coal dust might be dispersed in the air and marine waters and how once settled it might interact with the local ecosystems.

If the identified method of barging proceeds, the SCCA requests that a detailed environmental assessment be conducted similar to that granted to the other portions of the Project. Such an assessment would include, but not be limited to, effects including

10ne test was conducted on one train in 2009. Letter to FSD Ltd Partnership, November 2013, Volume II

² Offloading track and barge loading for PRB coal, Environmental Management Plan, FSD, June 2013 v6, page 5; Volume II

cumulative, mitigation, residual effects and proposed monitoring for air quality, marine sediments, including shoreline; fish and fish habitat, vegetation and wildlife including marine and shoreline ecosystems. Cumulative effects need especially to consider the existing coal operation at Texada Quarries. In addition bio-accumulation and bio-magnification of the heavy metals (e.g. mercury) and particulate matter associated with the source Powder River Basin coal on receiving ecosystems must be evaluated.

The Vananda Creek Stickleback Pairs (*Gasterosteus* spp. 16 & 17) residing on the Sunshine Coast were identified in the EIA as "Species of Concern". Many other species of plants, animals and ecosystems of the Sunshine Coast and Strait of Georgia were not. For example: among federally identified animals Northern Abalone (*Haliotis kamtschatkana*), Olympia Oyster (*Ostrea lurida*), Marbled Murrelet (*Brachyramphus marmoratus*), *Great Blue Heron supspecies fannini (Ardea herodias fannini)* and the Killer Whale Northeast Pacific West Coast Transient population and Southern Resident populations (*Orcinus orca*). It is recommended that the South Coast Conservation Program and the BC Conservation Data Centre, be contacted to obtain a complete list of species and ecosystems, both flora and fauna, marine and terrestrial of the Sunshine Coast/Georgia Strait region which are identified federally and/or provincially.

The route as indicated in the EIA (page 5, Volume I) shows the tugs and barges travelling between the west side of Texada Island and east side of Lasqueti Island through Sabine Channel. Areas of special concern in this region are Jedediah Island Provincial Park, South Texada Island Provincial Park, Squitty Bay Provincial Park and Sabine Channel Marine Park.

Further special areas recognized in other legislation such as Rockfish Conservation Areas and others not yet specifically protected such as the world unique Glass Sponge Reefs must be identified, mapped and assessed in the Strait of Georgia.

In addition, coastal ecosystems, such as estuaries are recognized as one of the most productive ecosystems on earth and must especially be protected to preserve their function as barriers against the effects of climate change. For example, eelgrass meadows excel in sequestering organic carbon especially in sediments below the meadows. Such ecosystems must be identified, assessed, monitored and plans made for ensuring that any accidents and or malfunctions involving the barging of coal be quickly contained to avoid potential damage and destruction.

The EIA states "... the effects of and on climate change have been excluded from the scope of this assessment" (page ii, Volume I). If Port Metro Vancouver does give approval to the project as described the effects of climate change on the Project must be identified and planned for. Specific to the concerns of the SCCA is the phenomenon of storminess. Aside from the predicted sea level rise of 1 meter in the near future; it is understood that the weather patterns themselves will become more unpredictable and severe. It is likely that winds will more frequently reach beyond the 40 km/hr mark in the Strait of Georgia. The winds and the waves generated from them will at the very least have an impact on the barging schedules. Operating procedures

must be developed that reassures the public that towing speeds and wind levels will not be increased to make up for lost delivery times.

The concern on the Sunshine Coast for marine accidents involving barges is based on the recent experiences. In July 2009, a tug towing equipment within the Skookumchuk Rapids of Sechelt Inlet was flipped over and in May, 2005, a barge containing limestone from Texada Island was accidently beached on the community beach at Davis Bay near Sechelt. Both of these incidents represent the potential for an environmental marine disaster.

In spite of a lack of consultation with the public and major stakeholder the shishálh Nation by FSD, interest in this Project is growing on the Sunshine Coast. On November 23, 2013 the SCCA, the Council of Senior Citizens' Organizations – Sunshine Coast Branch and Alliance 4 Democracy - Sunshine Coast co-hosted a panel forum on coal and this Project at the Sechelt Indian Band Hall. Invited speakers included a medical doctor, scientist, professor, provincial politician, researcher and community activists. The media reported 150-200 participants.

With such interest in the Project and lack of information on the possible impacts on the the Strait of Georgia and nearby coastline ecosystems, the Sunshine Coast Conservation Association recommends that Port Metro Vancouver not approve the current version of the Fraser Surrey Docks *Environmental Impact Assessment for the Direct Transfer Coal Facility (November 2013)*.

To assist in communicating with our members and local citizens, we request that a copy of Port Metro Vancouver's decision and rationale be sent to office@thescca.ca

Sincerely,

Jason Herz Chair

Сс

realporthearings.com

SIB

MLA

MP

SCRD

CEO of Fraser Surrey Docks

Minister of Transport, Infrastructure and Communitities

Chief Medical Health Officer

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