

June 7, 2016

Sent via email

Kitimat Clean Refinery Project
Canadian Environmental Assessment Agency
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Dear Sir/Madam:

Re: Kitimat Clean Refinery Project, Ref. No. 80125

I write to you on behalf of our client, Douglas Channel Watch, requesting that the Canadian Environmental Assessment Agency (the “Agency”) require an environmental assessment of the Kitimat Clean Refinery Project (the “Project”). In response to the Agency’s invitation for public comment on the Project and the potential effects on the environment¹, Douglas Channel Watch provides the following submissions in support of their position that the Project requires an environmental assessment.

Douglas Channel Watch was formed by seven local citizens in 2009 and became a society registered under the British Columbia *Society Act* in 2012. Douglas Channel Watch’s mission is to protect the environmental integrity of Douglas Channel and its watersheds for present and future generations. Douglas Channel Watch intervened in the Joint Review Panel hearings into the Enbridge Northern Gateway Project and has been involved in addressing proposals for liquefied natural gas terminals and other issues in the Douglas Channel watershed. Douglas Channel Watch currently has approximately 100 supporters and contacts.

A. Overview of the Project

Kitimat Clean Ltd. (“Kitimat Clean” or “Proponent”) is proposing to construct and operate an oil refinery and associated infrastructure in the Regional District of Kitimat-Stikine in northwest British Columbia. The proposed Project consists of an oil refinery, rail yard, tank farm, refined fuel delivery pipelines corridor, a marine terminal for product export and marine shipping.² The

¹ Canadian Environmental Assessment Agency, “Public Notice – Kitimat Clean Refinery Project – Public Comments Invited”, (17 May 2016), online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=114459>.

² Hatch Ltd., *Kitimat Clean Refinery Project Description*, (May 2016), at 1, 12, 30, 48-50 [*Project Description*].

Project would process 400,000 barrels per day of bitumen to produce approximately 460,000 barrels per day of fuel products including diesel, jet fuel, gasoline, butane and propane.³ The Project itself would produce approximately 11.1 million tonnes CO_{2e} in direct greenhouse gas emissions annually.⁴

B. The Requirement for Environmental Assessment

Recently, the Federal Court of Appeal described environmental assessment, and in particular the *Canadian Environmental Assessment Act*, S.C. 1992, c. 37, the precursor to the *Canadian Environmental Assessment Act, 2012*, S.C. 2012, c. 19, s. 52 (the “Act” or “CEAA, 2012”), as a “‘look before you leap’ statute that serves as ‘an integral component of sound decision making.’”⁵ This undergirding principle remains the same for the new Act, particularly in relation to designated projects. The importance of robust oversight and thorough environmental assessments was recently echoed by Prime Minister Trudeau in setting the mandate of the Minister of Environment and Climate Change.⁶

The Agency’s own statements on the guiding principles of environmental assessment echo this law, noting the precautionary nature of the exercise:

Environmental Assessment (EA) is a planning tool used to ensure that projects are considered in a careful and precautionary manner in order to avoid or mitigate possible environmental effects and to encourage decision makers to take actions that promote sustainable development.⁷

The Act applies to thousands of projects every year.⁸ However, Parliament has provided for the designation of certain types of activities that require heightened scrutiny and assurance as to the possibility of adverse environmental effects. Projects that involve such activities are “designated projects” as defined in subsection 2(1) of the Act and are listed in the Schedule to the *Regulations Designating Physical Activities (Regulations)*.⁹ As explained by the Agency in its guidance document “Screening Process under the *Canadian Environmental Assessment Act, 2012*” (“Screening Guide”), designated projects require heightened scrutiny because they “have the greatest potential for significant adverse environmental effects.”¹⁰

³ *Ibid*, at 51.

⁴ *Ibid*, at 96.

⁵ *Ontario Power Generation Inc. v. Greenpeace Canada*, 2015 FCA 186, at para 51, citing *Friends of the Oldman River Society v. Canada (Minister of Transport)*, 1992 CanLII 110 (SCC), [1992] 1 SCR 3, at para 95.

⁶ Minister of Environment and Climate Change Mandate Letter, Rt. Hon. Justin Trudeau, P.C., M.P, undated, available online: <http://pm.gc.ca/eng/minister-environment-and-climate-change-mandate-letter>.

⁷ CEAA, “Guidelines for the preparation of an environmental impact statement pursuant to the *Canadian Environmental Assessment Act, 2012* – Milton Logistics Hub Project” (July 2015), at 2.

⁸ Most projects are subject to assessment under s. 67 of the Act, while designated projects are subject to more rigorous assessment.

⁹ *Regulations Designating Physical Activities*, SOR/2012-147 [Regulations].

¹⁰ CEAA, “Screening Process under the Canadian Environmental Assessment Act, 2012” (March 2015), online: <https://www.ceaa-acee.gc.ca/default.asp?lang=en&n=1BBF802A-1>. [Screening Guide]

Section 10 of the *Act* sets out a non-exhaustive list of four factors the Agency must consider in determining whether an environmental assessment of the Project is required:

- (i) the description of the designated project provided by the proponent;
- (ii) the possibility that the carrying out of the designated project may cause adverse environmental effects;
- (iii) any comments received from the public within 20 days after the posting of the notice; and
- (iv) the results of any relevant study conducted by a committee established under section 73 or 74.¹¹

The Agency's Screening Guide provides a broader list of matters the Agency is to consider in making a screening determination:

In determining whether an environmental assessment is required, the Agency considers matters that include:

- the information provided in the proponent's project description;
- the potential for adverse environmental effects taking into account the views of expert federal departments, Aboriginal groups and the public;
- the potential nature and extent of the anticipated adverse environmental effects;
- the location and environmental setting of the project;
- the potential for cumulative effects from the project and other existing and proposed activities in the same region;
- potential impacts to Aboriginal peoples and to potential and established Aboriginal and Treaty rights;
- the ability of regulatory or permitting processes to address potential adverse environmental effects; and
- the results of any relevant regional study conducted under *CEAA 2012*.

Ultimately, the full scope of factors the Agency must consider in its screening determinations are informed by the purposes of the *Act*, the environmental effects to be considered and the underlying principles of environmental assessment law. This means the Agency must consider whether the Project is being pursued in a precautionary manner that avoids and/or mitigates adverse environmental effects and that contributes to a sustainable economy.

If the Agency determines a designated project must undergo an environmental assessment then the proponent will have to produce an environmental impact statement demonstrating a precautionary approach to developing the Project. The statement must demonstrate "that all aspects of the project have been examined and planned in a careful and precautionary manner in order to avoid significant adverse environmental effects."¹² The environmental impact statement

¹¹ *Canadian Environmental Assessment Act, 2012*, s 10 [*CEAA 2012*].

¹² *Screening Guide*, *supra* note 10, at 3.

serves as a basis for the environmental assessment of the Project. The factors to be considered in that assessment include the environmental effects of accidents or malfunctions in relation to the project, cumulative environmental effects, the purposes of the project, and alternative means of carrying out the project and the environmental effects of those alternative means.

C. The Project is a Designated Physical Activity

The Agency must make a screening determination on all designated projects. The Agency's Screening Guide states that "the majority of these designated projects will warrant an environmental assessment."¹³

As stated in the *Project Description*, several components of the Project are designated activities under the Schedule to the *Regulations*:

2. The construction, operation, decommissioning and abandonment of
 - (a) A new fossil fuel-fired electrical generating facility with a production capacity of 200 MW or more.

14. The construction, operation, decommissioning and abandonment of a new
 - (a) oil refinery, including a heavy oil upgrader, with an input capacity of 10 000 m³/day or more;...

 - (e) petroleum storage facility with a storage capacity of 500 000 m³ or more.

24. The construction, operation, decommissioning and abandonment of a new
 - (c) marine terminal designed to handle ships larger than 25 000 DWT unless the terminal is located on lands that are routinely and have been historically used as a marine terminal or that are designated for such use in a land-use plan that has been the subject of public consultation.

Douglas Channel Watch submits that a project that involves several designated activities should presumptively be subject to an environmental assessment. Given that the Project involves several large scale industrial activities that have been listed in the *Regulations*, the Project requires an environmental assessment.

D. Similar Projects have been subject to Environmental Assessments

Recent pipeline projects involving marine terminals, including the Northern Gateway Pipeline Project and the Trans Mountain Pipeline Expansion Project have been subject to federal environmental assessments pursuant to *CEAA 2012*. The proposed Energy East pipeline and marine terminal will also be subject to a federal environmental assessment.

¹³ *Screening Guide*, *supra* note 10.

In addition, the Agency has determined that a number of liquefied natural gas (“LNG”) facilities and marine terminals require environmental assessments under *CEAA 2012*.¹⁴

While there have been no environmental assessments of oil refinery projects under *CEAA 2012*, similar projects were subject to comprehensive studies under the former *Canadian Environmental Assessment Act*:

Southern Head Marine Terminal and Refinery: A project proposing a 300,000 barrel per day oil refinery, a marine terminal and related works required a comprehensive study.¹⁵

Shell Refinery Development, Courtright Site: A project involving an expansion of an existing refinery, storage tank farm, cogeneration plant and related facilities required a comprehensive study.¹⁶ The project application was withdrawn before the comprehensive study was completed.

Eider Rock Project: A project involving a marine terminal, crude oil transfer facilities, future transfer facilities for finished petroleum products and a pipeline to an existing refinery required a comprehensive study.¹⁷

These projects suggest that the Project, involving a refinery, marine terminal, marine shipping, electrical generating facility, tank farm and related works, should require an environmental assessment.

E. The Project has the potential for adverse environmental effects

Douglas Channel Watch submits, based on the *Project Description*, that the Project poses the following possible adverse environmental effects.

¹⁴ See for example, Aurora LNG Project, online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=99825>; Grassy Point LNG Project, online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=100557>; Pacific Northwest LNG project, online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=87622>; Prince Rupert LNG Project, online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=90171>; WCC LNG Project, online: <http://www.ceaa.gc.ca/050/document-eng.cfm?document=101194>.

¹⁵ Transport Canada and Fisheries and Oceans Canada, *Comprehensive Study Report: Southern Head Marine Terminal and Associated Works Related to the Crude Oil Refinery Development Proposal*, (December 2007) Newfoundland and Labrador Refining Corporation, CEAR Reference Number: 07-03-24726; See also, Canadian Environmental Assessment Agency, “Archived – Southern Head Marine Terminal and Associated Works Related to a Crude Oil Refinery Development Project”, online: <http://www.ceaa.gc.ca/052/details-eng.cfm?pid=24726>.

¹⁶ Canadian Environmental Assessment Agency, “Archived – Proposed Refinery Development (Courtright Site_ - Shell)”, CEAR Reference Number: 08-03-27137, online: <http://www.ceaa.gc.ca/052/details-eng.cfm?pid=27137>.

¹⁷ Jacques Whitford Stantec Limited, *Comprehensive Study Report, Eider Rock Project, Marine Terminal, Saint John Harbour*, (10 September 2009), Irving Oil Company, Limited, CEAR Reference Number: 07-03-28779 ; See also Canadian Environmental Assessment Agency, “Archived – Eider Rock project, Marine Terminal, Saint John Harbour” online: <http://www.ceaa.gc.ca/052/details-eng.cfm?pid=28779>.

Greenhouse gas emissions

The Government of Canada has recognized the urgent need for action on climate change.¹⁸ Canada has committed to a target of a 30 percent reduction in greenhouse gas emissions from 2005 levels by 2030.¹⁹ In July 2015, Canadian provincial premiers committed to a transition to a lower carbon economy.²⁰

In January 2016, the Minister of Environment and Climate Change and the Minister of Natural Resources announced that upstream greenhouse gas emissions associated with projects would be included in the environmental assessment of those projects.²¹ In March 2016, the Department of Environment and Climate Change issued a proposed methodology for estimating upstream greenhouse gas emissions associated with major oil and gas projects undergoing federal environmental assessments.²²

The proposed Project will directly produce approximately 11.1 million tonnes of CO_{2e} emissions annually, not including related upstream and downstream emissions.²³ Compared to facilities reporting greenhouse gas emissions in 2014, the Project would be the third largest point source emitter of greenhouse gases in Canada.²⁴ The Project's direct emissions alone would produce over 2 percent of Canada's 2030 annual greenhouse gas emission target.²⁵

The environmental assessment of the Project must also consider the upstream greenhouse gas emissions related to the Project consistent with the Government of Canada's intent to include upstream greenhouse gas emissions in federal environmental assessments and consistent with the proposed methodology for estimating upstream greenhouse gas emissions associated with major oil and gas projects.

The environmental assessment of the Project must also include an environmental assessment of the downstream use of the refined fuel products. The Proponent claims the downstream replacement of fuels with cleaner diesel from the Project as a benefit of the Project.²⁶ Since the Proponent has claimed the benefit of this replacement, that assertion must be tested and consideration of the substitution and relative impacts of the use of the fuels downstream must be included in the environmental assessment.

¹⁸ Government of Canada, *Canada's Second Biennial Report on Climate Change*, Report to the United Nations Framework Convention on Climate Change (2016) at 1 [*Biennial Report*].

¹⁹ *Ibid*, at 2.

²⁰ The Council of the Federation, *Canadian Energy Strategy*, (July 2015) at 16.

²¹ Natural Resources Canada, News Release, "Government of Canada Moves to Restore Trust in Environmental Assessment", (27 January 2016) online: <http://news.gc.ca/web/article-en.do?nid=1029999>.

²² Notice (Estimating upstream GHG emissions), C Gaz, Vol 150, No 12 (19 March 2016).

²³ *Project Description*, *supra* note 2 at 96.

²⁴ Environment Canada, "GHG Facilities Data Search", online: http://www.ec.gc.ca/ges-ghg/donnees-data/index.cfm?do=results&lang=en&year=2014&gas=all&fac_name=&prov=all&city=&naics=all&submit=Submit&order_field=data_rowtotal&order=DESC (accessed 1 June 2016).

²⁵ *Biennial Report*, *supra* note 17, at 6.

²⁶ *Project Description*, *supra* note 2, at 6.

The direct greenhouse gas emissions from the Project alone will put Canada's greenhouse gas reduction targets at risk and would be contrary to Canada's intent to transition to a lower carbon economy. When the related upstream and downstream greenhouse emissions are included, the Project would be a significant contributor, not just to Canadian greenhouse gas emissions, but also to global greenhouse gas emissions. Given the potential serious adverse environmental impacts of continued emissions of greenhouse gases at this scale, the Project must be subject to an assessment of the environmental effects of those emissions.

Fish and Fish Habitat

The *Project Description* states that the Project has the potential to adversely affect Aboriginal, Commercial, or Recreational fish and fish habitat and other aquatic resources.²⁷ The potential impacts include:

- (a) physical loss, alteration or disturbance to fish habitat from site preparation, clearing, fish salvage, and crossings (bridge upgrades, pipeline and transmission line crossings);
- (b) increased or decreased stream flows with the potential to affect fish habitat productivity (e.g., flooding, scouring);
- (c) surface water degradation (high turbidity, total suspended solids, nitrogen residues, accidental spills, lake acidification); and
- (d) sedimentation and erosion of fish habitat.²⁸

The Proponent has conducted only a preliminary assessment of these impacts and states that a detailed assessment of potential adverse effects to fish and fish habitat and aquatic resources will be undertaken during the environmental assessment process.²⁹ Therefore, an environmental assessment is required to complete this assessment.

Marine Species and Marine Environment

The marine shipping route from the proposed marine terminal to the Triple Islands Pilotage Station passes through Humpback Whale critical habitat and potential Killer Whale critical habitat.³⁰ The marine shipping route also passes in the vicinity of a number of bird colonies, commercial fishing areas, and marine protected areas.³¹ The *Project Description* states that the construction and operation activities of the Project have the potential to adversely affect marine plants, fish and marine mammals through site preparations, clearing, blasting and dredging, piling activities associated with the marine structures and marine shipping activities.³²

²⁷ *Ibid*, at 91.

²⁸ *Ibid*.

²⁹ *Ibid*,

³⁰ *Ibid*, at 72.

³¹ *Ibid*.

³² *Ibid*, at 92.

The Proponent has conducted only a preliminary assessment of the potential impacts on marine species and the marine environment and states that a detailed assessment will be undertaken during the environmental assessment process.³³ Therefore, an environmental assessment is required to complete this assessment, including an assessment on marine species at risk and their critical habitat.

Migratory Birds

A number of migratory bird species potentially occur in the Project area, including Canada goose, western sandpiper, greater white-fronted goose, mallard, mew gull, herring gull, California gull, and common merganser.³⁴ The marbled murrelet is a threatened species under the federal *Species at Risk Act* and potential marbled murrelet critical habitat is distributed widely across the Project area.³⁵ Potential Project effects on migratory birds include changes in habitat availability (including habitat loss and habitat alteration), sensory disturbance, mortality and injury.³⁶

The Proponent has conducted only a preliminary assessment of the potential impacts on migratory birds and states that a detailed assessment of the adverse effects on wildlife and wildlife habitat, including migratory birds, will be undertaken during the environmental assessment process.³⁷ Therefore, an environmental assessment is required to complete this assessment.

F. Conclusion

Douglas Channel Watch submits that as a designated project and in light of the numerous possible adverse environmental effects described above, an environmental assessment of the Project is required. It is only through a thorough and comprehensive environmental assessment that the Agency can fully determine the environmental effects of the Project.

Sincerely,

<Original signed by>

Barry Robinson
Staff Lawyer

CC: Cheryl Brown, Douglas Channel Watch

³³ *Ibid*,

³⁴ *Ibid*, at 82.

³⁵ *Ibid*.

³⁶ *Ibid*, at 92.

³⁷ *Ibid*,