

**From:** [Albornoz, Angeles \(NRCan/RNCan\)](#)  
**To:** [Leung, Quincy \[CEAA\]](#)  
**Cc:** [Coulson, Jessica \(NRCan/RNCan\)](#)  
**Subject:** RE: Kitimat Clean Refinery Project - Notice of Commencement of an Environmental Assessment  
**Date:** August 31, 2016 4:19:47 PM  
**Attachments:** [Kitimat Clean Refinery Project - draft EIS Guidelines - NRCan comments - Aug 2016.docx](#)

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Hello Quincy,

Please find attached NRCan's comments on the draft EIS Guidelines for the Kitimat Clean Refinery Project.

If you have questions please contact me.

Regards,

Angeles.

### **Angeles Albornoz**

A/Environmental Assessment Officer / Agente d'évaluation environnementale  
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**From:** Albornoz, Angeles (NRCan/RNCan)  
**Sent:** August 31, 2016 12:41  
**To:** Leung, Quincy (EC)  
**Subject:** RE: Kitimat Clean Refinery Project - Notice of Commencement of an Environmental Assessment

Great, thanks Quincy.

Will be sending our comments soon.

Angeles.

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**From:** Leung, Quincy (EC)  
**Sent:** August 31, 2016 12:38  
**To:** Albornoz, Angeles (NRCan/RNCan)  
**Subject:** RE: Kitimat Clean Refinery Project - Notice of Commencement of an Environmental Assessment

Hi Angeles,

It'll be fine if you put it in an email. We do not have any particular forms for this round.

Thanks,  
Quincy

Quincy Leung

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**From:** Albornoz, Angeles (NRCan/RNCan) [<mailto:angeles.albornoz@canada.ca>]  
**Sent:** August 31, 2016 9:37 AM  
**To:** Leung, Quincy [CEAA]  
**Subject:** RE: Kitimat Clean Refinery Project - Notice of Commencement of an Environmental Assessment

Hello Quincy,

I'm preparing NRCan's comments on the draft EIS Guidelines.

I was wondering if you have a template where we can provide our comments?

Thank you,

Angeles.

**Angeles Albornoz**

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**From:** Leung, Quincy (EC)  
**Sent:** July 14, 2016 17:49  
**To:** Lukey, Lucille (HC/SC); Setton, Eleanor (HC/SC); Engelsjord, Michael; Albornoz, Angeles

(NRCan/RNCan); [Paula.Doucette@tc.gc.ca](mailto:Paula.Doucette@tc.gc.ca); Parker, Nadine (EC)

**Cc:** Cooper, Garrett (EC)

**Subject:** RE: Kitimat Clean Refinery Project - Notice of Commencement of an Environmental Assessment

Dear federal colleagues,

Further to my previous email, the Canadian Environmental Assessment Agency (the Agency) would like to invite the federal review team to provide comments on the [draft Environmental Impact Statement \(EIS\) Guidelines](#).

Following a 45-day screening period, on June 30, 2016, the Agency determined that an Environmental Assessment (EA) is required for this Project. The federal EA process started on July 12, 2016. The next step of the process is to finalize the EIS Guidelines. The purpose of the EIS Guidelines is to identify the information the proponent will be required to provide in its EIS, and the nature, scope and extent of the information required. The Agency invites you to provide comments on the draft EIS Guidelines, particularly in relation to any environmental effects related to your departmental mandate and described in section 5 of CEAA 2012,

Your response by August 12, 2016 would be appreciated.

After the comment period on the draft EIS Guidelines, the Agency will finalize the document and provide it to the proponent. Within 60 days of the start of the environmental assessment, the Minister of Environment and Climate Change may decide to refer the Project to a review panel. A referral to review panel is considered if the Project is likely to cause significant adverse environmental effects, or if Indigenous communities or the public have raised concerns related to the potential for significant adverse environmental effects.

Regards,

Quincy Leung

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**From:** Leung,Quincy [CEAA]

**Sent:** July 13, 2016 11:40 AM

**To:** Lukey, Lucille (HC/SC); Setton, Eleanor (HC/SC); Engelsjord, Michael; Albornoz, Angeles (NRCan/RNCan); [Paula.Doucette@tc.gc.ca](mailto:Paula.Doucette@tc.gc.ca); [nadine.parker@canada.ca](mailto:nadine.parker@canada.ca)

**Subject:** Kitimat Clean Refinery Project - Notice of Commencement of an Environmental Assessment

Dear Federal Colleagues,

The Canadian Environmental Assessment Agency (the Agency) has posted a [Notice of Commencement of an Environmental Assessment](#) on the Agency's website. Public comments on the draft EIS Guidelines are invited until August 12, 2016. The [Public Notice](#) and the [News Release](#) can also be viewed on the Agency's website.

Regards,

Quincy Leung

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NRCan has conducted a review of the Kitimat Clean Refinery Project's draft EIS Guidelines. The following are our expert's recommendations/suggestions:

### **Section 3. Project Description (page 16)**

#### **3.1 Project components**

##### **- Pipelines**

Please provide any documentation/information related to the design, materials, construction, operation, maintenance and abandonment of the pipelines. Specific subject-matters of interest include, but not limited to, pipeline design considerations and calculations, geohazard susceptibility along the proposed route and any consideration for adopting strain-based design, pipe steels categories (both above- and below-ground), welding and non-destructive testing procedure, fracture toughness requirements of pipe steels and welds, engineering critical assessment, hydro-testing, water-course crossings considerations (e.g. horizontal directional drilling), corrosion, coating, cathodic protection, stress corrosion cracking, in-line inspection, quantitative risk assessment, leak detection, and emergency preparedness and response.

##### **- Storage areas for explosives and hazardous waste**

Please provide information on explosives in a separate sub-section (hazardous waste is not related to explosives). Within the Explosives sub-section please describe what type of explosives will be stored and/or manufactured on site, as well as the location of the related infrastructure. This information will help determine whether NRCan will have a regulatory role (issue a Licence).

#### **3.2. Project activities (page 17)**

##### **3.2.2. Operation**

##### **- Air quality management, including carbon capture, power generation and flaring**

Please describe in sufficient detail the technologies and management systems that will be used to minimize or eliminate planned emissions, fugitive emissions, and flaring.

### **Section 6. Effects Assessment**

#### **6.1.2. Geology and geochemistry (page 23)**

This sub-section could be improved to reflect the nature of the project. The first point of this sub-section applies to a mining project. Instead of "the bedrock and host rock geology of the deposit, including a table of geologic descriptions, geological maps and cross-sections of appropriate scale" the text could be changed to: "the bedrock of the regional project area including maps of appropriate scale".

Furthermore, this section should include a point about the surficial geology. NRCan suggests adding: “distribution of surficial sediment types including a map of appropriate scale of the surficial deposits and landforms”. Mapping of landforms is mentioned in section 6.1.3 Topography and soil, but for information completeness, NRCan suggests that landforms need to be mapped with surficial sediments.

Fourth bullet indicates: “Baseline concentrations of contaminants of concern within the local, regional and downstream receiving environments”. NRCan suggests including information on the acid generating potential of the crushed rocks or sediments that will be used as construction material.

## **6.6. Other effects to consider**

### **6.6.1. Effects of potential accidents or malfunctions (page 36)**

First paragraph: “exceptional natural events (e.g., flooding, earthquake, forest fire)” should be expanded to “exceptional natural events (e.g., flooding, earthquake, tsunami, forest fire, and volcanic eruption).”

### **6.6.2. Effects of the environment on the project (page 37)**

Third line: “(...outflow conditions and seismic events)” should be expanded to “outflow conditions, strong ground shaking due to onshore or offshore earthquakes, and tsunami events”.

Fifth line: “These events will be considered in different probability patterns (e.g., 5-year flood vs. 100-year flood).” How seismic and tsunami hazards are assessed should be described here.

Several types of hazards are given as examples, but tsunamis are not listed in this sub-section. Tsunamis are mentioned in section 6.1.2, but it should be considered as a potential effect on the marine terminal and the shipping route as there is a serious history of submarine slide generated tsunamis in Kitimat.

## **Suggestion for Project Description**

### **Seismicity**

Sec. 6.4.1: “a severe earthquake” should be expanded to “a significant onshore or offshore earthquake event and/or tsunami”.

Sec. 8.15: “risks related to ... and earthquakes.” should be expanded to “risks related to ..., earthquakes and tsunamis.”