



Our File No. 2021-02-01

January 27, 2022

THE HONOURABLE GEORGE HEYMAN

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To: The Honourable George Heyman, Minister of Environment and
Climate Change Strategy Chief Executive Assessment Officer Elenore Arend

**RE: REQUEST THAT THE MINISTER DESIGNATE THE WEST COAST OLEFINS LTD NATURAL GAS
LIQUID RECOVERY PROJECT (NGL PROJECT) AS A REVIEWABLE PROJECT, PURSUANT TO S. 11
OF THE ENVIRONMENTAL ASSESSMENT ACT (EAA)**

**REQUEST THAT THE CHIEF EXECUTIVE ASSESSMENT OFFICER AND THE MINISTER TAKE ACTION
TO ISSUE AN ORDER THAT THE ENVIRONMENTAL ASSESSMENT BE CONDUCTED BY AN
INDEPENDENT PANEL OF EXPERTS IN A PROCESS THAT INCLUDES PUBLIC HEARINGS,
PURSUANT TO S. 24 OF THE EAA**

We act on behalf of Too Close 2 Home (a Prince George-area community group with over 800 members) and member Zoe Meletis on this matter. Pursuant to section 11 of the *Environmental Assessment Act*, we hereby formally apply for a Ministerial designation that the above-noted project is a “reviewable project” and subject to full environmental assessment under the *EAA*. As Minister, you may make this designation if you conclude that such a designation is “in the public interest.”¹

¹ Section 11 states:

“... (2) A person may apply to the minister to have an eligible project designated as a reviewable project under this section... (5) Subject to subsections (6) and (7), after considering an application as required under subsection (4), the minister must, within 30 days of receiving the application, (a) designate the eligible project as a reviewable project, or (b) decline to make that designation....



This NGL Project should be designated as a reviewable project and made subject to an environmental assessment because:

1. The project's serious potential environmental, health, economic, social and agricultural impacts – including potentially grave impacts on climate – make it a matter of compelling public interest to conduct a full environmental assessment of the project.
2. The unprecedented level of public concern raised by citizens, organizations and local government about this particular project requires a fulsome environmental assessment, in the public interest.
3. Designation is necessary to fulfill the statutory purposes of environmental protection and meaningful public participation mandated in s. 11(4)(d) of the *Environmental Assessment Act*.²
4. The Lheidli T'enneh First Nation has repeatedly unequivocally opposed the proposed project on its territory, pointing out that the project would affect the Nation and its rights. Section 11(4)(b) of the *EAA* requires the Minister to seriously consider designation whenever a project could affect a Nation or Indigenous rights.³
5. The gas processing project has equivalent or greater potential effects compared to other natural gas processing plants that have been made "reviewable." Section 11(4)(c) of the *EAA* requires the Minister to seriously consider whether past projects of the same type have been made reviewable.⁴

(6) The minister may make a designation under subsection (5) respecting a project that is subject to a prescribed regulatory process only if the minister is satisfied that the designation is in the public interest." *Environmental Assessment Act*, SBC 2018 c 51.

² Section 11(4)(d) of the *EAA* reads: "(4)On receiving an application under subsection (2), the minister must consider the following: ... (d)whether an assessment of the eligible project is consistent with the purposes set out in section 2." The purposes set out in section 2 are: "(2)The purposes of the office are (a)to carry out its responsibilities under this Act, and (b)to do the following in carrying out the purpose referred to in paragraph (a): ... (i) promote sustainability by protecting the environment and fostering a sound economy and the well-being of British Columbians and their communities by (A) carrying out assessments in a thorough, timely, transparent and impartial way, considering the environmental, economic, social, cultural and health effects of assessed projects, (B) facilitating meaningful public participation throughout assessments, [continued on next page]... (C) using the best available science, Indigenous knowledge and local knowledge in decision making under the Act, and (D) coordinating assessments with other governments, where appropriate, including Indigenous nations, and with other provincial ministries and agencies;..."

³ Section 11(4)(b) of the *EAA* reads: "(4)On receiving an application under subsection (2), the minister must consider the following: ... (b)whether the eligible project could have effects on an Indigenous nation and the rights recognized and affirmed by section 35 of the [Constitution Act, 1982](#);"

⁴ Section 11(4)(c) of the *EAA* reads: "(4)On receiving an application under subsection (2), the minister must consider the following: ... (c)if the eligible project is in a category of projects described in a regulation under section 9, whether the potential effects of the eligible project will be equivalent to or greater than the potential effects of projects in that category that are reviewable projects;" where s.9 refers to the *Reviewable Projects Regulation*.

After designating the project as a “reviewable project,” we ask that you take the necessary steps to require that the environmental assessment be conducted by an independent panel of experts using a process that includes public hearings, pursuant to s. 24 of the *EAA*.⁵

In light of our application for a comprehensive environmental assessment, which is enclosed below, we request that:

- The Minister designate the West Coast Olefins Ltd. Natural Gas Liquids Recovery Project “reviewable” under the *Environmental Assessment Act*; and
- The Minister and the Chief Executive Assessment Officer take the necessary steps to order that the environmental assessment be conducted by an independent panel of experts, in a process that includes public hearings.

Sincerely,

“Calvin Sandborn”

Calvin Sandborn, QC, Barrister and Solicitor
Environmental Law Centre
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“Christa Croos”

Christa Croos, Former Environmental Law
Centre Articled Student

⁵ **Section 24 authorizes the Minister to** order the assessment be conducted by “a hearing panel, with a public hearing to be held by one or more individuals that the minister may appoint to the hearing panel...”; and empowers the Minister to delegate to the panel the power to set scope, procedures and methods of the assessment, and to exercise the powers of a commission of public inquiry.

APPLICATION FOR A COMPREHENSIVE ENVIRONMENTAL ASSESSMENT OF THE NATURAL GAS LIQUID RECOVERY PROJECT OF WEST COAST OLEFINS LTD.

BACKGROUND OF THE NGL PROJECT PROPOSAL	5
ENVIRONMENTAL ASSESSMENT OF THE NGL PROJECT IS “IN THE PUBLIC INTEREST”	9
UNPRECEDENTED PUBLIC CONCERN ABOUT THIS PROJECT	9
SUBSTANTIVE CONCERNS.....	10
Climate Change will Likely be Exacerbated by the NGL Project	10
OTHER IMPORTANT ISSUES THAT MUST BE ASSESSED	14
The potential damage to agricultural land in the ALR is a key concern.....	14
1. Concerns of Professor Paul Sanborn, Agrologist at University of Northern British Columbia	15
2. Concerns from the Ministry of Agriculture, Food, and Fisheries.....	15
3. Concerns from the Prince George Farmers’ Institute	15
4. Concerns of the Prince George Cattlemen’s Association	15
5. Agricultural concerns from Too Close 2 Home and Residents of Pineview.....	16
The NGL Project may negatively impact human health.....	17
The NGL Project may negatively impact both domestic animals and wildlife	17
The NGL Extraction Facility may disturb Western Toads and other Species at Risk in the adjacent wetlands	17
NGL Extraction Facility Noise may harm the health of livestock in the ALR	18
Noise and other disturbances may be a nuisance or pose health issues for local residents in Pineview	18
The influx of a construction workforce to build the NGL Project may cause negative social impacts that should be carefully assessed.....	19
The NGL Project poses potentially unacceptable risks of fire and explosions	20
Another Key Point: The NGL Project should be reviewable because its impacts are equal to or greater than other “reviewable” natural gas processing plants	20
1. Impacts on the surrounding agricultural land and natural environment:.....	21
2. Safety, Fire, and Explosion Risk Mitigation:	22
3. The additional impacts of the NGL Separation Plant:	22
4. Workforce:	22
The NGL Project should be reviewable because of its impacts on – and lack of consent from – the Lheidli T’enneh First Nation	23
CONCLUSION	25
APPENDICES.....	27
Appendix A: Map of Subject Site for NGL Extraction Plant	
Appendix B: Excerpt from Taylor Straddle Plant Application	
Appendix C: Letter of Dr. Steve Helle, Ph.D., P. Eng., Chemical Engineer and Associate Professor of Environmental Engineering	
Appendix D: Letter of Dr. Paul Sanborn, Ph.D., P. Ag., Associate Professor, University of Northern British Columbia	
Appendix E: FIGURES OF INTEREST	
Appendix F	

BACKGROUND OF THE NGL PROJECT PROPOSAL

The NGL Project is made up of two facilities – the NGL Extraction Plant and the NGL Separation Plant – with a pipeline connecting both plants.⁶

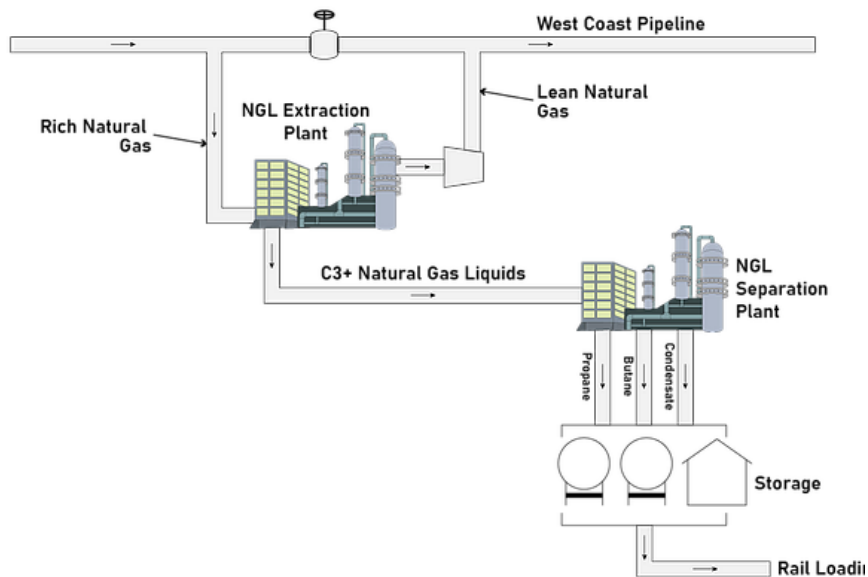


Figure 1: WCOL's Diagram of the proposed NGL Project and its constituent parts⁷

The NGL Extraction Plant will process rich natural gas from Enbridge's Westcoast Pipeline and remove a mixture of natural gas liquids (NGLs) such as propane, butane, and natural gas condensates.⁸ The NGLs will then be sent to the second facility, the NGL Separation Plant which will separate the constituent NGLs and store and transport them to the broader market.

The NGL Extraction Plant is proposed next to Enbridge's Westcoast Energy Pipeline on a property that is within the Agricultural Land Reserve (ALR) in the Pineview region.⁹ The NGL Separation Plant is located in

⁶ West Coast Olefins Ltd, *Prince George NGL Recovery Project* (2020), online: <<https://www.westcoastolefins.com/pg-ngl-recovery-plant>>.

⁷ West Coast Olefins Ltd, *Prince George NGL Recovery Project* (2020), online: <<https://www.westcoastolefins.com/pg-ngl-recovery-plant>>.

⁸ West Coast Olefins Ltd, "Prince George NGL Recovery Project" (2020), online: <<https://www.westcoastolefins.com/pg-ngl-recovery-plant>>.

⁹ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 1, online: *Regional District of Fraser-Fort George* <<https://pub-rdffc.escribemeetings.com/filestream.ashx?DocumentId=822>>.

the City of Prince George's BCR Industrial Area.¹⁰ An ~8km pipeline, high-vapour-pressure pipeline will connect the two proposed facilities that make up the "NGL Project."¹¹

The NGL Project is currently before the Oil and Gas Commission for assessment and permits. The core of our submission is that the Oil and Gas Commission process is insufficient for this project, and an *Environmental Assessment Act (EAA)* assessment is necessary.

It is important to note that we have asked for a proper *EAA* environmental assessment of this project before but have been thwarted in that effort. The NGL Project was initially part of a proposed multi-billion dollar, **three-project** petrochemical complex made up of:

1. The NGL Project;
2. An additional Ethylene Project to produce one million tonnes per year of ethylene;
3. An additional Polyethylene (plastics) Project to consume most of the ethylene produced.¹²

These three originally proposed projects were intimately interconnected, with the products of one provided the feedstock for the next. As stated by West Coast Olefin's CEO, Ken James, "You can't have the Ethylene Plant without the NGL Recovery Plant..."¹³

On August 25, 2021, we asked you to establish an independent panel of experts to conduct an *EAA* environmental assessment and public hearings regarding all three projects together.¹⁴ On September 20, Too Close 2 Home followed up by asking Prince George City Council to support that request for a joint regional environmental assessment – and Council asked staff to report back.¹⁵

¹⁰ British Columbia, City of Prince George, *BCR Industrial Area*

<https://www.princegeorge.ca/Business%20and%20Development/Economic%20Development%20Documents/IPG_Light-Industrial-Lands-BCR-City-Update.pdf>.

¹¹ The final destination and use of the NGL products created by the NGL Project is unclear. However, proponents of similar NGL projects note that "NGLs have a wide variety of industrial and commercial uses in Canada... For example, ethane, propane, and butane are used as feedstock for the creation of value-added petrochemicals (such as, polypropylene which is used in a wide variety of consumer products, such as plastics). NGLs can also be used for residential and commercial heating, cooking fuel, blending with vehicle fuel, diluent for heavy oil and bitumen, or for the production of fertilizers..."

Enbridge Frontier Inc., "Frontier Project: Project Description" (August 2019) at 4, online (pdf): *Enbridge*

<<https://projects.eao.gov.bc.ca/api/public/document/5d712f44fa1745001ad6254b/download/Frontier%20-%20Initial%20Project%20Description%20-%202019-08-08.pdf>>

¹² Canadian Plastics, "New Canadian company wants to build \$5.6 billion petrochemical plant in B.C." (31 July 2019), online:

Canadian Plastics <<https://www.canplastics.com/canplastics/west-coast-olefins-seeks-to-build-5-6-billion-petrochemical-plant-in-b-c/1003450462/>>.

In 2019, WCOL stated it was negotiating with potential "third party partners", who would use their products to produce the polyethylene plastic pellets. See: Ken James, "Response from West Coast Olefins" (Statement of the CEO of the Project

Proponent) (11 September 2019), online: *Prince George Citizen* <<https://www.princegeorgecitizen.com/opinion/response-from-west-coast-olefins-3737817>>.

WCOL has stated that it hopes to see the polyethylene plastic pellet facility up and running by 2024. See: Mark Neilson,

"Petrochemical complex to head back to city" (16 December 2020) online: *Prince George Citizen* <

<https://www.princegeorgecitizen.com/local-news/petrochemical-complex-to-head-back-to-city-3742233>>.

¹³ BC Resources Coalition, "The BCRC Show Episode 21: CEO of the West Coast Olefins Ken James, President of BCRC Willy Manson" (19 December 2020) at 00h:41m:48s, online (video): *YouTube* <

<https://www.youtube.com/watch?v=B9WW2GLqJC8&t=2508s>>.

¹⁴ See the August 25 2021 letter addressed to you from the Environmental Law Centre, found at:

<https://elc.uvic.ca/wordpress/wp-content/uploads/2021/08/2021Aug25-Ethylene-Project-Regional-Assessment-Request-LTR.pdf>

¹⁵ CBC News, "Proposed \$5.6 billion petrochemical plant criticized by Prince George residents

Social Sharing," *CBC* (22 September 2021), online: <<https://www.cbc.ca/news/canada/british-columbia/proposed-5-6-billion-petrochemical-plant-criticized-by-prince-george-residents-1.6186167>>.

However, before those two requests were dealt with, WCOL acted. On October 26, 2021, WCOL formally withdrew from the BC Environmental Assessment process for the Ethylene Plant/Project – citing concerns that the Ethylene Project was “a key source of confusion within the local community” and that withdrawal will “allow the Company [WCOL] to focus its financial and human resources on [the] much less controversial project [the NGL Project].”¹⁶

Thus, at this time the Company proposes to proceed only with the NGL Project – which is being considered by the Oil and Gas Commission, and would not be subject to an EAA environmental assessment of any kind.

However, in light of the above history, if the NGL Project proceeds, there is a very real possibility – perhaps a likelihood – that the Ethylene Project will be re-proposed along with the Polyethylene (plastics) Project to follow. After all, it has long been contemplated that the Ethylene and Polyethylene Projects would be approved sometime *after* the NGL Project. Indeed, West Coast Olefins CEO once stated that the company planned to get faster and simpler approval of the NGL Project before getting approval of the other facilities. The CEO boasted that the company had “actually split... out” the NGL Project to be considered and approved earlier by the simpler, more rudimentary and faster Oil and Gas Commission permitting process.¹⁷ The CEO was quoted as saying:

*...The OGC process is actually a little simpler so we get through that regulatory process a little faster so it makes a lot of sense that we can actually split the projects out and have one lead by 6 months to a year.*¹⁸

As we pointed out in our August 25 submission to you,¹⁹ only a deeply flawed public policy could allow the three originally proposed interconnected projects – the NGL Project, the Ethylene Project and the Polyethylene Project – to go ahead *without the most stringent regional cumulative assessment*. The combined impacts of those three petrochemical projects would severely undermine BC Government commitments on climate change – the defining issue of our time. In an era when:

- an unprecedented “heat dome” summer razed the town of Lytton, felled hundreds of British Columbians with mortal heat stroke, and choked millions more with wildfire smoke,

¹⁶ Request from Christine Olsen 26 October 2021), *Re: West Coast Olefins Proposed Ethylene Project Withdrawal from the Environmental Assessment (EA) Process*, online:

<<https://projects.eao.gov.bc.ca/api/public/document/61772e89c3bd0e00238637c0/download/WCOL%20-%20Withdrawal%20from%20EA%20Process.pdf>>.

¹⁷ See the statement by CEO and president of WCOL, Ken James: “...The OGC process is actually a little simpler so we get through that regulatory process a little faster so it makes a lot of sense that we can actually split the projects out and have one lead by 6 months to a year.” See: BC Resources Coalition, “The BCRC Show Episode 21: CEO of the West Coast Olefins Ken James, President of BCRC Willy Manson” (2020 December 19) at 43m: 03s, online (video): *YouTube* <<https://www.youtube.com/watch?v=B9WW2GLqJC8&t=2583s>>.

¹⁸ See: BC Resources Coalition, “The BCRC Show Episode 21: CEO of the West Coast Olefins Ken James, President of BCRC Willy Manson” (19 December 2020) at 00h: 43m: 03s, online (video): *YouTube* <<https://www.youtube.com/watch?v=B9WW2GLqJC8&t=2583s>>.

¹⁹ See the August 25 2021 letter addressed to you from the Environmental Law Centre, found at: <https://elc.uvic.ca/wordpress/wp-content/uploads/2021/08/2021Aug25-Ethylene-Project-Regional-Assessment-Request-LTR.pdf>

- only to be followed shortly by floods that smashed key provincial highways like tenpins, drowned hundreds of cattle and thousands of poultry, and destroyed much of the City of Merritt,

fossil fuel projects pose a direct environmental and economic threat to all British Columbians.

As we pointed out in our August 25 submission, the combined three initial projects should never be built without a regional *EAA* environmental assessment – with a panel of independent experts and public hearings. We again commend for your consideration our detailed August 25 submission on the necessity to carefully assess all three inter-related projects.²⁰

Nevertheless, even if the NGL Project proceeds without the Ethylene and Polyethylene Projects, there are pressing concerns about **this NGL Project alone** that justify a comprehensive, rigorous, and transparent environmental assessment through the *EAA*.

The Minister clearly has the authority to exercise his discretion to establish such an environmental assessment for this “eligible project” alone, as explained in the footnote below.²¹

Therefore, we ask that the Minister designate the NGL Project as “reviewable,” and subject to the normal assessment process under the *EAA*.²² Furthermore, we ask that the assessment be conducted by an independent panel of experts, in a process involving public hearings.²³

²⁰ See the August 25, 2021 letter addressed to you from the Environmental Law Centre, found at:

<<https://elc.uvic.ca/wordpress/wp-content/uploads/2021/08/2021Aug25-Ethylene-Project-Regional-Assessment-Request-LTR.pdf>>.

²¹ Note that the NGL Project is an ‘eligible project’ that can be designated within the meaning of section 11 of the *EAA* because it is not substantially started and is not a reviewable project under the *Reviewable Projects Regulation*— as it does not exceed the listed impact threshold for its category under the Regulation.

Section 11(1) of the *EAA* reads: “In this section, “eligible project” means a project that is not substantially started and is not a reviewable project under a regulation under section 9.” Section 9 outlines the power of the Lieutenant Governor in Council to make regulations prescribing what constitutes a reviewable project under the *EAA* – i.e. the *Reviewable Projects Regulation*. The proposed project is not currently a reviewable project because the proponent reports that the project is not predicted to create any sulphur emissions, whereas the trigger for a natural gas processing plant to be reviewable under the *Reviewable Projects Regulation* is ≥ 2 tonnes/day of sulphur emissions. – see Table 8 in the *Reviewable Projects Regulations* and the three applications from the Oil and Gas Commission (obtained by FOI).

²² As per s. 11 of the *EAA* which gives the Minister the discretion to designate an eligible project as a reviewable project that is subject to an EA.

²³ As per s. 24 of the *EAA*. **Section 24 authorizes the Minister to** order the assessment be conducted by “a hearing panel, with a public hearing to be held by one or more individuals that the minister may appoint to the hearing panel...”; and empowers the Minister to delegate to the panel the power to set scope, procedures and methods of the assessment, and to exercise the powers of a commission of public inquiry.

ENVIRONMENTAL ASSESSMENT OF THE NGL PROJECT IS “IN THE PUBLIC INTEREST”²⁴

Under the law, the Minister must designate this project for an environmental assessment if he determines that designation would be “in the public interest.” Clearly, designation in this case is “in the public interest,” as contemplated by s. 11(6) of the EAA.²⁵ This project should not be approved behind closed doors, in an Oil and Gas Commission process that the proponent has chosen because it is “simpler” and “faster” than a formal environmental assessment.

The public interest would not be served by that faster and simpler process. Such a perfunctory process for this controversial and risky project would be contrary to the statutory purposes of the *Environmental Assessment Act* – which include “carrying out assessments in a thorough way” and “facilitating meaningful public participation.”²⁶ Below are the compelling reasons why a fulsome EAA environmental assessment is in the public interest.

UNPRECEDENTED PUBLIC CONCERN ABOUT THIS PROJECT

It is vital to note that this project has raised *unprecedented* public concern in the Prince George and Pineview areas.²⁷ In an informal survey/petition conducted by opponents, over 2,000 residents voted “no” to the project, with just 54 voting in favour.²⁸ In addition, Too Close 2 Home also opposes the project and has over 800 members on its Facebook page.²⁹

These concerned citizens are by no means a marginal voice in the community. The Fraser-Fort George Regional District Board recently received almost 200 submissions about whether or not this project should be approved to go ahead as a “non-farm use” of the land – with the vast majority opposed.³⁰

²⁴ And aligns with the purposes of the EAA.

²⁵ Section 11(6) of the EAA reads: “The minister may make a designation under subsection (5) respecting a project that is subject to a prescribed regulatory process only if the minister is satisfied that the designation is in the public interest.”

²⁶ EAA section 2 “purposes” include “protection of the environment”, “carrying out assessments in a thorough...way”, “facilitating meaningful public participation...”, and “using the best available science.” As you will see below, all of those purposes will be better served by a comprehensive environmental assessment process.

²⁷ For example, see: Caden Fanshaw, “‘This is not the right place for it,’ Pineview residents upset at possibility of new Westcoast Olefins plant” (28 July 2021), online: *CKPGToday* <<https://ckpgtoday.ca/2021/07/28/this-is-not-the-right-place-for-it-pineview-residents-upset-at-possibility-of-new-westcoast-olefins-plant/>>; Ted Clarke, “Not in my backyard! Pineview residents express concerns about proposed petrochemical project” (18 July 2021), online: *Prince George Citizen* <<https://www.princegeorgecitizen.com/local-news/not-in-my-backyard-pineview-residents-express-concerns-about-proposed-petrochemical-project-3965725>>; Oli Herrera, “Pineview residents still concerned following West Coast Olefins’ scrapped project” (21 October 2021), online: *CKPGToday* <<https://ckpgtoday.ca/2021/10/21/pineview-residents-still-concerned-following-west-coast-olefins-scrapped-project/>>.

²⁸ The Petition/Survey queried residents about whether residents were “for” or “against” the NGL Plant. 2,178 people voted against, and 54 in favour. Personal communication, Dr. Marie Hay.

²⁹ For more information on the many citizens that united against the NGL Project proposal and remain concerned about the proposal going forward, see this Letter to the Editor at: Annie Booth *et al*, “Letter to the editor: Opposition appreciated” (30 December 2021), online: *Prince George Citizen* <<https://www.princegeorgecitizen.com/opinion/letter-to-the-editor-opposition-appreciated-4904304>>.

³⁰ Residents transmitted approximately 188 submissions of “unsolicited written comments” to the Regional District Board that was considering the WCOL application for change of the status of the NGL Project’s ALR land to a designation allowing a non-

Indeed, the Regional District was sensitive to the groundswell of opposition to this proposal. After hearing from the public, the Regional District Directors voted 9-5 to deny the proponent permission to proceed to the Agricultural Land Commission with the proposal.³¹

It would clearly be contrary to the public interest to deny the thousands of residents deeply concerned about this proposal a fulsome environmental assessment under the *EAA*.

[Note: If the vote of the Regional District is not reversed or countered, that may terminate the NGL Project at this particular Agricultural Land Reserve location. Locating the NGL Extraction Plant on the proposed ALR site will ultimately require Agricultural Land Commission approval of the proponent's application for industrial "non-farm use" – and by law the Regional District must first forward the application to the Commission for that Commission approval to take place.³²]

SUBSTANTIVE CONCERNS

Quite apart from the breadth and intensity of *public concern*, an assessment of the NGL Project is in the public interest due to a broad range of substantive concerns.

The substantive concerns of our clients, Too Close 2 Home, and concerned Pineview residents include the proposed NGL Project's³³:

- Potential exacerbation of climate change;
- Impacts on protected agricultural lands in the Agricultural Land Reserve;
- Potential negative impacts on human and animal health;
- Potential adverse impacts of the construction workforce; and
- Fire and explosion safety risks.

CLIMATE CHANGE WILL LIKELY BE EXACERBATED BY THE NGL PROJECT

The potential climate change impacts of this project pose important questions that can only be adequately assessed through an environmental assessment process. In particular, this project should be

farm use. The vast majority of submissions opposed the WCOL application. The submissions made can be found here:

<<https://pub-rdfftg.escrimemeetings.com/Meeting.aspx?Id=4342335e-21d7-4be3-9db2-3f5d14858f39&Agenda=Merged&lang=English&Item=11&Tab=attachments>>.

³¹ Arthur Williams, "Regional district votes down proposed West Coast Olefins project" (16 December 2021), online: *Prince George Citizen* <<https://www.princegeorgecitizen.com/local-news/regional-district-votes-down-proposed-west-coast-olefins-project-4873532>>.

Also see: The Environmental Law Centre Society, "Public Participation in Proposed Prince George Industrial Projects" (24 November 2021), online: *Environmental Law Centre* <<https://elc.uvic.ca/prince-george-industrial-projects/>>.

³² The proposed industrial use is not permitted by the ALR Use Regulations or ALR General Regulations. See: Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 6, online: *Regional District of Fraser-Fort George* <<https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=822>>.

³³ It's interesting to note that many of these concerns are recognized by WCOL's themselves in their letter to the RDTFG on November 4, 2021: "Of all the questions received on the project, the following are the areas of most concerns from people. 1) Air Emission Impact 2) Visual Impacts 3) Noise Impacts 4) Agricultural Land Reserve 5) Water Impacts 6) Safety / Flaring." Letter from Christine Olson, Regulatory Director of WCOL (4 November 2021), *Re: West Coast Olefins Proposed NGL Extraction Plant Application for Non-Farm Use* at 2, online: *Regional District of Fraser-Fort George*: <<https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=824>>.

designated as reviewable to assess WCOL's questionable claim that "the air emissions associated with the project provide provincial or global benefit."³⁴ A highly negative impact on greenhouse gas emissions may be more likely.

On its face, the quoted WCOL claim is questionable. The proposed project involves building **long-term fossil fuel supply infrastructure that entrenches future consumption of fossil fuels**. That fossil fuel infrastructure will be operating for decades to come, reinforcing a long-term future for an industry that is booby-trapping the earth's atmosphere. This stands in contradiction to mainstream experts, who now see the *elimination of new natural gas infrastructure* as essential, if the world is to avoid catastrophically exceeding a 1.5 degree rise in temperatures.

For example, this year the OECD's International Energy Agency (with over 30 member/Associate countries)³⁵ issued *Net Zero by 2050: A Road Map for the Global Energy Sector*. This intergovernmental report recommended that in order to meet climate targets there must be:

*...from today, no investment in new fossil fuel supply projects.*³⁶

Similarly, European Investment Bank President Werner Hoyer has warned against investments in building new natural gas infrastructure, because of its catastrophic impacts on climate:

*To put it mildly, gas is over. Without the end to the use of unabated fossil fuels, we will not be able to reach the climate targets.*³⁷

To counter such compelling reasons to stop all new investment in gas infrastructure, the proponent has boldly asserted that the new facility will actually reduce greenhouse gases.

For example, the proponent has asserted that:

- The proposed NGL Project "removes the highest carbon content from this gas, thus making the gas a leaner burner and lower GHG emitting fuel";³⁸
- "When propane, butane and natural gas condensate (collectively referred to as NGLs) are burned with natural gas the result is increased greenhouse gases. By removing these

³⁴ Letter from Christine Olson, Regulatory Director of WCOL (4 November 2021), *Re: West Coast Olefins Proposed NGL Extraction Plant Application for Non-Farm Use at 3*, online: *Regional District of Fraser-Fort George*: <<https://pub-rdfftg.escribemeetings.com/filestream.ashx?DocumentId=824>> [emphasis added].

³⁵ Almost all major industrialized countries are members of the International Energy Agency, including the members of the Organization for Economic Cooperation and Development, among others.

³⁶ IEA, "Pathway to critical and formidable goal of net-zero emissions by 2050 is narrow but brings huge benefits, according to IEA special report" (18 May 2021) at para 5, online: <<https://www.iea.org/news/pathway-to-critical-and-formidable-goal-of-net-zero-emissions-by-2050-is-narrow-but-brings-huge-benefits>>.

³⁷ Rachel Morrison, "Gas is the New Coal With Risk of 100 Billion in Stranded Assets", *Bloomberg News* (17 April 2021) at para 24, online: <<https://www.bnnbloomberg.ca/gas-is-the-new-coal-with-risk-of-100-billion-in-stranded-assets-1.1591499>>.

Note that Mark Carney, former governor of the Bank of Canada and the Bank of England has similarly warned that investments in fossil fuel infrastructure are likely to become "worthless" – and warned countries to avoid investing in such infrastructure that could become "stranded." – Andrew Sparrow, "Firms must justify investment in fossil fuels, warns Mark Carney," *The Guardian* (30 December 2019) at para 1, online: <<https://www.theguardian.com/business/2019/dec/30/firms-must-justify-investment-in-fossil-fuels-warns-mark-carney>>. This raises grave concerns about the *economic risks* that the province takes by approving investments into stranded assets.

³⁸ Letter from Christine Olson, Regulatory Director of WCOL (4 November 2021), *Re: West Coast Olefins Proposed NGL Extraction Plant Application for Non-Farm Use at 3*, online: *Regional District of Fraser-Fort George*: <<https://pub-rdfftg.escribemeetings.com/filestream.ashx?DocumentId=824>>.

commodities from the gas stream WCOL is significantly reducing BC's greenhouse gases";³⁹

- "The burning of lean gas produced by West Coast Olefins Ltd. (WCOL) in place of rich gas (gas which contains ethane, propane, butane, and condensate) will reduce greenhouse gas (GHG) emissions by 0.5 million tonnes of CO₂ per year (Mt/y). The NGL Recovery Project only emits 0.16 Mt/y of CO₂, making the project carbon negative and supporting the BC Climate Action Plan."⁴⁰

Yet Dr. Steve Helle – Ph.D., P. Eng., Chemical Engineer and Associate Professor of Environmental Engineering at University of Northern British Columbia – has examined the WCOL website claims of greenhouse gas benefits from the project and comes to a starkly different conclusion.

Dr. Helle has written:

I have completed a brief investigation of the greenhouse gas (GHG) emissions claims from West Coast Olefins with respect to their proposed Prince George NGL Recovery Project. There appears to be little publicly available information. My comments are based on information from the West Coast Olefins website (<https://www.westcoastolefins.com/environmental-stewardship>).

A major GHG emission claim on the website is the reduction in emissions from using electric motors in place of natural gas turbines. This is a valid claim. But it is not clear if this is definitely part of the plan, or if it is just an option being considered. Depending on subsidies, this option may be economically expensive: on an energy basis, natural gas is much cheaper compared to electricity.

Another GHG claim from the website is this: "The burning of lean gas produced by West Coast Olefins Ltd. (WCOL) in place of rich gas (gas which contains ethane, propane, butane, and condensate) will reduce greenhouse gas (GHG) emissions by 0.5 million tonnes of CO₂ per year (Mt/y). The NGL Recovery Project only emits 0.16 Mt/y of CO₂, making the project carbon negative and supporting the BC Climate Action Plan."

Ethane, propane and butane do have a higher carbon content per unit of energy compared to methane (the main natural gas component) and this claim is the right order of magnitude, although there is a lack of data to do proper calculations to verify the numbers. However, this claim involves creative drawing of project boundaries. The 'carbon negative' claim requires drawing the project impact boundary around the existing natural gas pipeline while ignoring additional product pathways from the NGL Recovery Project. For the claim to be valid, all of the ethane, propane and butane removed from the pipeline must not be combusted elsewhere. This seems to be a highly unlikely assumption: whoever buys the propane is going to burn it, and probably the same for whoever buys the butane. It is possible the ethane does not get burnt. The ethane may be processed into various chemicals (e.g., plastics), however these chemicals may end up being burnt at the end of their life (e.g., in a waste to

³⁹ Letter from Christine Olson, Regulatory Director of WCOL (23 June 2021) in *West Coast Olefins NGL Extraction Plant Consultation Letter* at 5, online: <<https://pub-rdfftg.escrimetings.com/filestream.ashx?DocumentId=825>>.

⁴⁰ West Coast Olefins Ltd, "A Great Environmental Story," online: <<https://www.westcoastolefins.com/environmental-stewardship>> [emphasis added].

energy facility). Therefore, removing the ethane, propane and butane may just result in a shifting of where the CO₂ is emitted. Without supporting evidence to the contrary, I don't think the claimed reduction of 0.5 million tonnes of CO₂ per year (Mt/y) is valid. Another minor factor to consider is that by removing the ethane, propane and butane, they are removing some of the energy in the pipeline which may be made up with additional natural gas, resulting in increased emissions associated with the additional natural gas extraction and processing. As a result of all of the above, the overall impact of this project may be to increase GHG emissions. Including a larger project boundary, the carbon negative claim is not valid unless the project removes carbon from the short-term carbon cycle and sequesters this carbon in the ground or in long-live products. This project has 0 carbon removal from the short-term carbon cycle (all of the carbon involved is from fossil fuel deposits). At best, the project can be considered carbon neutral if West Coast Olefins provides evidence that the majority of their products will not be burnt during the complete product lifecycle.

My biggest concern is that this facility is sized to the capacity of the natural gas pipeline and assumes continued use of natural gas: "The Project will be split between two physical facilities: the NGL Extraction Plant and the NGL Separation Plant. Both facilities will be designed with a nominal capacity of 59,500 Se3m3/d (2.1 Bscfd) to roughly match the capacity of the Westcoast Pipeline." Assuming a 30+ year project lifetime, the economic viability may depend on the continued use of natural gas for the next 30 years at the same rate we use it today. This is in contrast to Canada's GHG emission targets. Canada has committed to reducing GHG emissions by 40% in the next 8 years, and by 100% in the next 28 years. If we are serious about reaching these ambitious but necessary GHG emission targets, that means rapid widespread adoption of low carbon electricity generation, energy efficient buildings, electrified heating, etc., all replacing existing natural gas demand, and therefore resulting in shutting down natural gas infrastructure during this project's lifetime."

[See [Appendix C](#) for the original letter]

Clearly an environmental assessment is necessary to determine who is right about the actual greenhouse gas impact from this project – the proponent or Dr. Helle? Proper, diligent, and comprehensive accounting of future greenhouse gas emissions should be done through the provincial environmental assessment process. This stark disagreement about the critical question of what impact the project will have on greenhouse gases is the most compelling reason to designate the NGL Project as reviewable. An assessment is necessary, to objectively determine the actual greenhouse gas emissions associated with the NGL Project – and their impact on meeting government climate targets.

British Columbians have endured the last year of heat dome, wildfires, smoke and catastrophic flooding/landslides – and they need to know if this project is part of a solution or an exacerbation of the problem. An assessment of the climate impacts of this project is clearly necessary to fulfill the EAO's statutory purpose to "promote sustainability by protecting the environment and fostering a sound economy and the well-being of British Columbians and their communities..."⁴¹

⁴¹ *Environmental Assessment Act*, SBC 2018, c 51, s 2(b)(i).

More specifically, designation of the Project for assessment is necessary so that the assessment will be required to fulsomely consider, pursuant to section 25 of the EAA:

...the potential effects [of a proposed project] on the province being able to meet its targets under the Greenhouse Gas Reductions Targets Act (now called the Climate Change Accountability Act).⁴²

In this era of heat domes and wildfire smoke, of atmospheric rivers and biblical flooding, meticulous consideration of Greenhouse Gas impacts is essential. In light of the current climate change emergency, it would be the height of irresponsibility to not conduct the most thorough possible assessment of the Project's climate change impacts.

OTHER IMPORTANT ISSUES THAT MUST BE ASSESSED

THE POTENTIAL DAMAGE TO AGRICULTURAL LAND IN THE ALR IS A KEY CONCERN

The potential adverse effects of locating the NGL Extraction Plant on ~25 acres of Agricultural Land Reserve land is another reason for establishing an environmental assessment for the NGL Project.⁴³ Local residents are profoundly concerned about the range of impacts to the agricultural viability and continuity of the Project land and surrounding lands for agricultural purposes. This was dramatically demonstrated by 2,178 residents who voted “no” to the proposed NGL Project, compared to 54 voting “yes”⁴⁴ and by the almost 200 submissions made to the Regional District concerning the Project.

While the current ALR designation protects the proposed site by prioritizing “the protection and enhancement of the size, integrity and continuity of the ALR land base”⁴⁵ for farm use, the proponent recently sought an exemption to allow this new industrial, “non-farm use” to proceed. It is important to note that this industrial land use is not contemplated by the Regional District's Pineview Official Community Plan (OCP), nor is it supported by current local zoning.⁴⁶

During consideration of the WCOL application for “non-farm use” of the NGL Project land, concerns about the impacts of the NGL Project on agriculture were raised by at least five notable parties with expertise and experience related to agriculture, including: (1) UNBC Professor and Agrologist Paul

⁴² *Environmental Assessment Act*, SBC 2018, c 51, s 25(2) states: “The following matters must be considered in every assessment: ... (h) greenhouse gas emissions, including the potential effects on the province being able to meet its targets under the *Greenhouse Gas Reduction Targets Act*. Also see:

British Columbia, Environmental Assessment Office, *Effects Assessment Policy* (April 2020) at 9, online (pdf): https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/2018-act/effects_assessment_policy_v1_-_april_2020.pdf.

⁴³ One half of the NGL Project is proposed on ~25 acres of ALR land.

Provincial Agricultural Land Commission – Applicant Submission (8 September 2021) at 3 of pdf (no page number provided), online: *Regional District of Fraser-Fort George*:

<https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=823>.

⁴⁴ The Petition/Survey queried residents about whether residents were “for” or “against” the NGL Plant. 2178 people voted against, and 54 in favour. Personal communication, Dr. Marie Hay.

⁴⁵ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 2, online: *Regional District of Fraser-Fort George* <https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=822>.

⁴⁶ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 2, online: *Regional District of Fraser-Fort George* <https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=822>.

Sanborn, (2) Prince George Farmers' Institute, and (3) Prince George Cattlemen's Association, (4) British Columbia's Ministry of Agriculture, Food, and Fisheries, and (5) Too Close 2 Home members and Pineview residents:

1. Concerns of Professor Paul Sanborn, Agrologist at University of Northern British Columbia

Professor Sanborn points out that establishing heavy industry in the proposed Pineview NGL Project site would "constitute a new incursion into one of the largest continuous areas of agricultural land in central BC", and would be unwarranted because it would run counter to the statutory mandate to protect and enhance "the size, integrity and continuity of the land base of the Agricultural Land Reserve." See Dr. Sanborn's letter at [Appendix D](#) of this submission.

2. Concerns from the Ministry of Agriculture, Food, and Fisheries

The Ministry underscored the potential for greater conflict between incompatible land uses when industrial projects, such as the NGL Project, are located within the ALR. A noteworthy observation from other similar projects are that the "...typical concerns raised by agricultural communities are often related to the potential impacts from noise, light pollution, odour, as well as vibrations which can sometimes disturb livestock. Depending on the project, aboveground facilities may also run continuously and may bring considerable change to an area."⁴⁷ Finally, the Ministry stated that there are no noted "...buffering or edge planning measures that might help mitigate potential noise, odours and dust arising from the operation which may impact existing and future agricultural activities, both on, and adjacent to, the parcel."⁴⁸

3. Concerns from the Prince George Farmers' Institute

The Prince George Farmers' Institute opposed the proposed application for "non-farm use" because they found the information about the project that they received was insufficient. They were concerned with the precedent that may be set for ALR lands to be used for non-farm uses in this agricultural area.⁴⁹

4. Concerns of the Prince George Cattlemen's Association

The Prince George Cattlemen's Association highlighted several issues related to the NGL Project proposal. First, they pointed out that there are other sites that would avoid the Prince George airshed and would accommodate WCOL's needs.⁵⁰ Additionally they were concerned that prevailing winds would blow airborne problems into the nearby populated area of Pineview.⁵¹ And finally, they stressed that the development of the Boundary Road Industrial Park excluded

⁴⁷ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 10, online: *Regional District of Fraser-Fort George* <<https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=822>>.

⁴⁸ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 10, online: *Regional District of Fraser-Fort George* <<https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=822>>.

⁴⁹ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 11, online: *Regional District of Fraser-Fort George* <<https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=822>>.

⁵⁰ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 10-11, online: *Regional District of Fraser-Fort George* <<https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=822>>.

⁵¹ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 10-11, online: *Regional District of Fraser-Fort George* <<https://pub-rdfftg.escrimemeetings.com/filestream.ashx?DocumentId=822>>.

ALR lands with the intent that those lands be reserved for agricultural use⁵² – implicitly questioning why this proposed industrial use should then be permitted on ALR anyway.

5. Agricultural concerns from Too Close 2 Home and Residents of Pineview

Our clients Too Close 2 Home, as well as many residents of Pineview, have highlighted a range of agricultural concerns that should be considered in a comprehensive environmental assessment.

First, the proposed site is ‘landlocked’ in the centre of the ALR regions (see map on [Appendix A](#)).⁵³ This means that an access road must be built and any additional traffic generated by the NGL Project, will traverse right through to the middle of largely undisturbed ALR.⁵⁴

Second, there are concerns about the permanent loss of the only farmland in the area and the proximity of the project to other farmland. As noted in our submission to the RDFFG, there is little information outlining the reclamation of the land after the proposed industrial use.⁵⁵

Finally, the irreversible impacts to agricultural livelihoods and the agricultural character of the area may lead to long-term loss of the viability of agricultural income. The concerns about the potential changes to the character of this rural area is put best by Lheidli T’enneh Chief, Dolleen Logan: “[Pineview residents] build their lives in Pineview so they can have a country life. Who wants any kind of plant up there?”⁵⁶ If approved, this project may significantly change the character of the area, detrimentally affecting the ability to attract the next generation of farmers to Pineview.⁵⁷ There may also be a loss of value and enjoyment of homes and property within the ALR, where they are proximate to the proposed site.

Clearly, there are profound concerns regarding the NGL Project’s impact on the future and viability of agriculture in the area. These concerns should be addressed by a comprehensive environmental assessment.

⁵² Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 10-11, online: *Regional District of Fraser-Fort George* <<https://pub-rdffc.escribemeetings.com/filestream.ashx?DocumentId=822>>.

⁵³ See [Appendix A](#), taken from: Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 7 online: *Regional District of Fraser-Fort George* <<https://pub-rdffc.escribemeetings.com/filestream.ashx?DocumentId=822>>.

⁵⁴ Roads and other built infrastructure related to the NGL Project will fragment and take up agricultural lands for non-agricultural purposes. In fact, there is a non-farm use application presently before the ALC for the ‘Transportation and Utility Use’ – Application ID: 63865, which may be accessed through the ALC Application Portal here: <<http://a100.gov.bc.ca/pub/oatsp/list?execution=e1s1>>.

⁵⁵ Letter to Directors of the Regional District of Fraser Fort George Planning Department (4 November 2021), *Re: Regional District of Fraser Fort George’s Consideration of West Coast Olefin’s Current ALC Non-Farm Use Application* at 8 and following, online: *Environmental Law Centre* <https://elc.uvic.ca/wordpress/wp-content/uploads/2021/11/2021-02-01-Submission-ALC-Application_04-Nov-2021-SENT.pdf>.

⁵⁶ Hanna Petersen, “It should’ve been a hard no’: Lheidli T’enneh Chief upset over West Coast Olefins postponement” (19 November 2021), online: *Prince George Citizen* <<https://www.princegeorgecitizen.com/local-news/it-shouldve-been-a-hard-no-lheidli-tenneh-chief-upset-over-west-coast-olefins-postponement-4779364>>.

⁵⁷ This is especially true considering a context where the average age of BC farmers is over 50 years old and BC and federal governments have expressed concern about recruiting the new generation of food producers and processors. See Glenda Luymes, “News - B.C.’s farmers the oldest in Canada and getting older, says Stats Can” (13 June 2016), online: *The Province* <<https://theprovince.com/news/local-news/news-b-c-s-farmers-the-oldest-in-canada-and-getting-older-says-stats-can>>.

THE NGL PROJECT MAY NEGATIVELY IMPACT HUMAN HEALTH

As we pointed out in our previous correspondence, stringent assessment is necessary to determine potential pollution impacts on human health.⁵⁸ The Canadian Association of Physicians for the Environment (CAPE) has launched a campaign called “Unnatural Gas” to draw attention to the negative health impacts of the natural gas industry due to the many pollutants released through the extraction, transmission, and use.⁵⁹ To what extent could there be human health effects from this last remaining WCOL project? Could the proposed facilities create a new “Cancer Alley”? A careful assessment is necessary to seriously consider cancer and other risks that may be associated with pollution from the proposed NGL Project. In addition, the noise, light, and other disturbance arising from the construction and operation of the proposed Project may pose a risk to human health that should be carefully examined.

THE NGL PROJECT MAY NEGATIVELY IMPACT BOTH DOMESTIC ANIMALS AND WILDLIFE

In addition, the noise, light, and other disturbance and potential pollution arising from the operation and construction of the proposed NGL Project may pose a risk to domestic and wild animals – especially related to the NGL Extraction Facility proposed in the Pineview area. Notably, the proposed location is adjacent to a wetland and in the centre of an area of otherwise relatively undisturbed ALR which supports livestock. This context suggests that a number of unique potential impacts should be examined through an environmental assessment process.

THE NGL EXTRACTION FACILITY MAY DISTURB WESTERN TOADS AND OTHER SPECIES AT RISK IN THE ADJACENT WETLANDS

The NGL Project may have serious impacts on wildlife. For example, Western Toads, a Species at Risk of “special concern,”⁶⁰ are likely found in the area around the proposed Project.⁶¹ Significant clusters of the Western Toad have been spotted and documented within the region around the proposed NGL Extraction facility site.⁶² Special care must be taken to protect the habitat of this species because “it is

⁵⁸ See the August 25 2021 letter addressed to you from the Environmental Law Centre, found at: <https://elc.uvic.ca/wordpress/wp-content/uploads/2021/08/2021Aug25-Ethylene-Project-Regional-Assessment-Request-LTR.pdf>.

⁵⁹ Canadian Association of Physicians for the Environment & Canadian Association of Nurses for the Environment, “How Healthy is Natural Gas?,” online:

https://www.unnaturalgas.org/?utm_source=coast%20reporter&utm_campaign=coast%20reporter&utm_medium=referral.

⁶⁰ See: *Species at Risk Act*, Schedule 1. This species was added to the SARA in 2005, most recently assessed by COSEWIC in 2012 who still say it should be special concern. – Government of Canada, Species at Risk Public Registry, *Western Toad (Anaxyrus boreas)*, *Non-calling population*, online: <https://species-registry.canada.ca/index-en.html#/species/1214-886>.

⁶¹ Personal Communication with Mark Thompson, MSc, Med, RPBio, CPESC, who has informed us that Western Toads, a SARA Species of Special Concern, should be present in Pineview. One can use iNaturalist or BC iMap to search Western Toads and all listed species.

⁶² See the following GeoTIFF image from the British Columbia Conservation Data Centre depicting populations of Western Toad around the proposed site: <https://tinyurl.com/y5a5sdy8>.

Government of BC, “CDC iMap,” online: <http://maps.gov.bc.ca/ess/hm/cdc/>.

See also the following map from iNaturalist.ca documenting sightings of Western Toad around the city of Prince George: <https://inaturalist.ca/observations/103973086>.

relatively intolerant of urban expansion, conversion of habitat for agricultural use, and habitat fragmentation resulting from resource extraction and road networks."⁶³

While the proponent is cautious to clarify that “[the] WCOL extraction plant is not being proposed on a wetland,” it is planned to be located just outside the Riparian Management Zone (a mere 50m from the wetland). Yet development around, even if not within, the wetlands can still destroy or isolate populations of Western Toads.⁶⁴ Clearly, potential adverse impacts of this proposal on Western Toads and other wetland species need to be addressed in an environmental assessment.

Potential harms to other local and migratory wildlife species⁶⁵ should also be examined.

NGL EXTRACTION FACILITY NOISE MAY HARM THE HEALTH OF LIVESTOCK IN THE ALR

Noise disturbance has been documented to have detrimental impacts on the performance, stress, and behaviour of farm animals.⁶⁶ Potential impacts of the NGL Project on neighbouring livestock should be carefully assessed, utilizing the noise-impact radius already identified by the proponent’s consultant.⁶⁷

NOISE AND OTHER DISTURBANCES MAY BE A NUISANCE OR POSE HEALTH ISSUES FOR LOCAL RESIDENTS IN PINEVIEW

Noise from a major industrial facility can also cause significant potential health issues for nearby local residents. There are 25 residences located within 1,500 m of the subject facility,⁶⁸ and such industrial noise is of paramount importance in a rural area such as Pineview. The magnitude of impact on local residents and the mitigations currently proposed by the proponent⁶⁹ should also be assessed.

⁶³ Government of Canada, Species at Risk Public Registry, *Western Toad (Anaxyrus boreas)*, *Non-calling population*, online: <<https://species-registry.canada.ca/index-en.html#/species/1214-886>>.

⁶⁴ BC Frogwatch, “Factsheet: Western Toad” at para 6, online (pdf): <<https://www.env.gov.bc.ca/wld/documents/westerntoad.pdf>>.

⁶⁵ For example, will this project impact migratory sandhill cranes that move through the region?

⁶⁶ See: J Brouček, “Effect of Noise on Performance, Stress, and Behaviour of Animals” (2014) 47: 2 *Slovak J Anim Sci* at 112, online: <http://www.cvzv.sk/slju/14_2/8_Broucek.pdf> [noise impacts to farm animals are species dependant, with cattle hearing high-frequency sounds better than humans and lower pitched sounds better than other farm species. Sheep’s most sensitive frequency is a little higher than cattle and pigs. Pigs have a hearing range similar to humans.]; J Brouček, “Effect of Noise on Performance, Stress, and Behaviour of Animals” (2014) 47: 2 *Slovak J Anim Sci* at 114, online: <http://www.cvzv.sk/slju/14_2/8_Broucek.pdf> [a 2014 study on the effects of noise on farm animals concludes that: “... *noise in farm animal environments is a detrimental factor to animal health. Especially longer lasting sounds can affect the health of animals. Noise directly affects reproductive physiology or energy consumption (Escribano et al., 2013). Noise may also have indirect effects on population dynamics through changes in habitat use, courtship and mating, reproduction and parental care (Rabin et al., 2003).*” [emphasis added] The potential adverse impacts to animal health and the magnitude of noise impacts that may result from the NGL Project should be assessed through an environmental assessment.)

⁶⁷ Letter from Christine Olson, Regulatory Director of WCOL (23 June 2021) in *West Coast Olefins NGL Extraction Plant Consultation Letter* at 10, online: <<https://pub-rdfftg.escribemeetings.com/filestream.ashx?DocumentId=825>>.

⁶⁸ Letter from Christine Olson, Regulatory Director of WCOL (23 June 2021) in *West Coast Olefins NGL Extraction Plant Consultation Letter* at 7-12, online: <<https://pub-rdfftg.escribemeetings.com/filestream.ashx?DocumentId=825>>.

⁶⁹ Letter from Christine Olson, Regulatory Director of WCOL (23 June 2021) in *West Coast Olefins NGL Extraction Plant Consultation Letter*, online: <<https://pub-rdfftg.escribemeetings.com/filestream.ashx?DocumentId=825>>.

THE INFLUX OF A CONSTRUCTION WORKFORCE TO BUILD THE NGL PROJECT MAY CAUSE NEGATIVE SOCIAL IMPACTS THAT SHOULD BE CAREFULLY ASSESSED.

A sudden influx of a large construction workforce and “man camps” can create significant negative impacts and disturbance in a small rural community such as Pineview. See our August 25 letter for a discussion of potential negative social impacts of a temporary influx of a large number of workers and of “man camps.”⁷⁰

Careful examination of the number of workers that will actually be employed in this project – and their social impact – is clearly needed. In promotional materials, West Coast Olefins Ltd’s has claimed that there will be up to 1,000 construction jobs at the peak of construction.⁷¹ (See [Appendix E.](#)) Additionally, West Coast Olefins CEO Ken James has been quoted as saying that the NGL Project “is going to be a 1.5 billion dollar project and it is still going to lead to ... thousands of construction jobs.”⁷² Other news reports have quoted that there may be up to 2000 constructions jobs associated with the NGL Project, at the peak of construction.⁷³ At our request, the Environmental Assessment Office has inquired into these job numbers – investigating why the company had not filed the mandatory Notification that must be filed with the EAO if a project will create more than 250 full-time jobs at peak construction or operations.⁷⁴

(Companies are required to file “Notification” of a project with a large number of workers so that the EAO can knowledgeably consider whether to recommend an environmental assessment – or open a public comment period regarding the project.⁷⁵)

⁷⁰ See: Email from the Environmental Law Centre to Elenore Arend and The Honourable George Heyman (25 August 2021), at 14-15, online: *Environmental Law Centre* <<https://elc.uvic.ca/wordpress/wp-content/uploads/2021/08/2021Aug25-Ethylene-Project-Regional-Assessment-Request-LTR.pdf>>.

⁷¹ West Coast Olefins Ltd, “Economic and Social Benefits”, online: *West Coast Olefins* <<https://www.westcoastolefins.com/economic-and-social-benefits>>.

⁷² Brendan Pawliw, “West Coast Olefins scraps 5/6 billion dollar petrochemical plant in PG” (20 October 2021), online: *MyPGNow* <<https://www.myprincegeorgenow.com/149671/west-coast-olefins-scraps-5-6-billion-dollar-petrochemical-plant-in-pg/>> [emphasis added].

⁷³ Oli Herrera, “Proposed Pineview WCO project could create indirect jobs” (22 October 2021), online: *CKPG Today* <<https://ckpgtoday.ca/2021/10/22/proposed-pineview-wco-project-could-create-indirect-jobs/>>.

⁷⁴ Subsection 5(1)(c) of the *Reviewable Projects Regulation* requires that a proponent file a Project Notification with the Chief Executive Assessment Officer for “...projects that would result, at the peak of construction or operations, in the employment by the proponent of 250 or more employees or contractors who work more than 30 hours per week on an annual basis at the project facilities.”

Reviewable Projects Regulation, BC Reg 67/2020, s. 5(5)(a) specifically outlines that proponents of applicable projects are required to submit a Project Notification to the EAO no later than 15 days after applying for an applicable approval listed in the *Reviewable Project Transition Regulation*. In this case, it appeared that the NGL Project fell within the category of ‘natural gas processing plants’ and thus this notification obligation appeared applicable upon application for a permit under section 25 of the *Oil and Gas Activities Act*. West Coast Olefins Ltd.’s wholly owned subsidiary, 1219812 B.C. LTD., had submitted permitting applications to the OGC on November 15th, 2021 and yet, as of December 7, 2021, a Project Notification had not been received. Personal communication with EAO on December 7, 2021 confirmed that West Coast Olefins had not submitted a Project Notification to that date. The EAO made no comment about whether the proponent was in or out of compliance but noted that they were “looking into the matter.”

⁷⁵ See *Environmental Assessment Act*, SBC 2018, c 51, ss 10(4) and 11. Also see: British Columbia, Environmental Assessment Office Project Information Centre (EPIC), online: <<https://www.projects.eao.gov.bc.ca/project-notifications>> for examples of project notifications with comment periods.

Upon investigation of our request, an EAO Compliance and Enforcement Officer now reports:

West Coast Olefins has clarified that the project has an anticipated peak construction employment of 80-120 full time jobs and that the news and project website employment projections of ‘thousands of construction jobs’ are for the entire supply chain of the project, not direct employment at the project facilities.

[See [Appendix F](#)]

An environmental assessment is required to examine the seemingly striking disparity in job numbers postulated for this project – and the potential social impacts of an influx of workers, whatever the accurate numbers of workers turns out to be.

THE NGL PROJECT POSES POTENTIALLY UNACCEPTABLE RISKS OF FIRE AND EXPLOSIONS

Fire and safety risks associated with this project are a concern that needs to be assessed and addressed. Local residents are acutely aware of the fire and explosion risk related to natural gas(es), in the wake of the 2018 explosion in Shelley.⁷⁶ This explosion occurred along Enbridge’s Westcoast Pipeline and led to over 100 Lheidli T’enneh residents being evacuated.⁷⁷

When Regional District of Fraser-Fort George Community Services was solicited for their views about this project’s Pineview facility, Community Services expressed concerns from a public-safety perspective.⁷⁸ They stressed that the Pineview Fire Protection Service area and the volunteer fire department that serves it, “may not have the capacity to deal with potential hazardous incidents or fire events that could occur at this development.”⁷⁹

Is this a suitable industrial proposal for this context, with regards to fire and explosion safety? This is a crucial question that residents need addressed through an environmental assessment process.

ANOTHER KEY POINT: THE NGL PROJECT SHOULD BE REVIEWABLE BECAUSE ITS IMPACTS ARE EQUAL TO OR GREATER THAN OTHER “REVIEWABLE” NATURAL GAS PROCESSING PLANTS

To designate a project as reviewable, the Minister must consider whether the potential effects of the eligible project is “equivalent to or greater” than the potential effects of projects in the same category that were deemed “reviewable.”⁸⁰ In other words, the Minister must consider whether the effects of a

⁷⁶ Andrew Kurjata, “A year after Prince George pipeline blast, B.C. First Nation wants answers” (9 October 2019), online: *CBC News* <<https://www.cbc.ca/news/canada/british-columbia/enbridge-pipeline-prince-george-one-year-1.5313608>>.

⁷⁷ Andrew Kurjata, “A year after Prince George pipeline blast, B.C. First Nation wants answers” (9 October 2019), online: *CBC News* <<https://www.cbc.ca/news/canada/british-columbia/enbridge-pipeline-prince-george-one-year-1.5313608>>.

⁷⁸ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 11, online: *Regional District of Fraser-Fort George* <<https://pub-rdfftg.escribemeetings.com/filestream.ashx?DocumentId=822>>.

⁷⁹ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 11, online: *Regional District of Fraser-Fort George* <<https://pub-rdfftg.escribemeetings.com/filestream.ashx?DocumentId=822>>.

They go on to say: “The current budget and capacity of the PVFD supports a service level that has limitations around the volunteer firefighting personnel availability and operational response capacity. The current budget would not be able to support additional service enhancements to address a development-specific hazards.”

⁸⁰ *Environmental Assessment Act*, SBC 2018, c 51, s 11(4)(c) mandates that when a Minister is considering an application to designate a project as reviewable, they must consider: “if the eligible project is in a category of projects described in a regulation under section 9, whether the potential effects of the eligible project will be equivalent to or greater than the potential effects of projects in that category that are reviewable projects;”

particular project will be as great as other projects of the same “category” that have been subjected to environmental assessment.

The proposed NGL Project falls under the category of a “natural gas processing plant.”⁸¹

In this case, certain aspects of the NGL Project clearly make it equal or greater in potential impact to another “natural gas processing plant” – *i.e.*, the similar Novagas Taylor Straddle Plant that was made “reviewable” and subject to environmental assessment.⁸²

The Taylor Straddle Plant is a natural gas processing plant that straddles a major gas line and removes Natural Gas Liquids (NGLs) such as propane and butane from the natural gas. One half of the proposed NGL Project – the ‘Extraction Plant’ located in Pineview – is analogous to the Taylor Straddle Plant. WCOL’s Extraction Plant is a straddle plant similarly designed to remove NGLs from natural gas.⁸³

It is important to note that the impacts arising from the Taylor Straddle Plant were studied and assessed comprehensively through a formal environmental assessment in 1997. At that time, the impacts were found to be acceptable and the Taylor Straddle Plant was granted an Environmental Assessment certificate under the 1996 *Environmental Assessment Act*. It is important to note that this similar plant was subjected to a full environmental assessment process – the type of process we are seeking.

There are several aspects of the current proposed NGL Project that are equal or greater in potential impact when compared to the Taylor Straddle Plant:

1. Impacts on the surrounding agricultural land and natural environment:

There are numerous potential adverse impacts to the wildlife and agriculture associated with WCOL’s proposal on ALR land, discussed above. In fact, the NGL Project requires amendments to both a zoning bylaw and the Official Community Plan to proceed. On the face of it, the Pineview Extraction Plant portion of the NGL Project is inconsistent with the land use envisioned by local law and policy makers.

In contrast, the Taylor Straddle Plant was constructed on land that was already zoned as ‘Heavy Industrial’ and “[e]xcept for the residential area bordering the west side of the proposed site, adjacent land uses are not incompatible with the proposed development.”⁸⁴ The site of the Taylor Straddle Plant was already “...surrounded by residential and industrial development”⁸⁵ and was part of the reason that the Minister found that “[t]here are no anticipated negative effects on wildlife, soils, and/or vegetation.”⁸⁶

⁸¹ *Reviewable Projects Regulation*, BC Reg 67/2020, table 8, column 1.

⁸² British Columbia, Environmental Assessment Office Project Information Centre (EPIC), online: <<https://projects.eao.gov.bc.ca/p/5d49e9ef4cb2c7001b13ce23/documents>>.

⁸³ And then send the extracted material to the facility in Prince George.

⁸⁴ Novagas Clearinghouse Ltd, “Application for a Project Approval Certificate: Taylor Straddle Plant” (1997) at 70, online (pdf): <<https://projects.eao.gov.bc.ca/api/public/document/5886a869eed3c0016f855d0a/download/Application%20for%20a%20Project%20Approval%20Certificate%20-%20Taylor%20Straddle%20Plant.pdf>>.

⁸⁵ Novagas Clearinghouse Ltd, “Application for a Project Approval Certificate: Taylor Straddle Plant” (1997) at 61, online (pdf): <<https://projects.eao.gov.bc.ca/api/public/document/5886a869eed3c0016f855d0a/download/Application%20for%20a%20Project%20Approval%20Certificate%20-%20Taylor%20Straddle%20Plant.pdf>>.

⁸⁶ Novagas Clearinghouse Ltd, “Application for a Project Approval Certificate: Taylor Straddle Plant” (1997) at 2, online (pdf): <<https://projects.eao.gov.bc.ca/api/public/document/5886a869eed3c0016f855d0a/download/Application%20for%20a%20Project%20Approval%20Certificate%20-%20Taylor%20Straddle%20Plant.pdf>>.

Notably, environmental issues related to vegetation and wildlife were not a significant concern for the Taylor Straddle Plant, both at the construction and operation phase.⁸⁷ On the other hand, WCOL's proposal raises significant concerns about the impacts to agricultural land, natural lands and wetlands – and potential impacts to a species listed under the *Species at Risk Act* (as elaborated above).

2. Safety, Fire, and Explosion Risk Mitigation:

As noted above, Regional District of Fraser-Fort George's Community Services noted that they do not have the capacity to deal with fire risks associated with WCOL's proposal. In contrast, "[t]he District of Taylor and NCL [had] the appropriate resources (personnel and equipment) to deal with most fire-related incidents [associated with the Taylor Straddle Plant]."⁸⁸

3. The additional impacts of the NGL Separation Plant:

While the Taylor Straddle Plant is analogous only to WCOL's Extraction Facility in Pineview, it should be noted that the NGL Project includes an additional second facility: an NGL Separation Plant in the City of Prince George. The additional impacts associated with the Separation Plant likely make the potential impact of the NGL Project equivalent or greater than the Taylor Straddle Plant.

4. Workforce:

The workforce for the WCOL plant is equal to, or potentially even greater than, the Taylor Straddle Plant workforce. For the Taylor Plant it was estimated that only "...an average of 70 people are expected to work on the project during the nine-month construction period with a labour force peaking to 120...."⁸⁹ WCOL claims an anticipated peak construction employment of 80-120 full time jobs, with employment projections of "thousands of construction jobs" for the entire supply chain of the project.⁹⁰

Thus, numerous aspects of the proposed NGL Extraction Project may have "equivalent to or greater" impacts than the Taylor Straddle Plant. Since the similar Taylor Plant was made reviewable and subject to a comprehensive review in 1997, it is arguable that WCOL's NGL Project should be reviewable as well. (Pursuant to s. 11(4)(c) of the EAA.)

⁸⁷ See [Appendix B](#).

⁸⁸ Novagas Clearinghouse Ltd, "Application for a Project Approval Certificate: Taylor Straddle Plant" (1997) at 70, online (pdf): <<https://projects.eao.gov.bc.ca/api/public/document/5886a869eed3c0016f855d0a/download/Application%20for%20a%20Project%20Approval%20Certificate%20-%20Taylor%20Straddle%20Plant.pdf>>.

Additionally from same source: "Depending on the magnitude of the hazard, the fire department in Fort St. John and Dawson Creek could be called in for back-up. To ensure the safety of the public and plant personnel, NCL will develop an emergency response plan in consultation with local stakeholders (Section 2.5). The effects of the Taylor Straddle Plant on fire protection are expected to be local in scope, nil to low in magnitude, and short-term in duration."

⁸⁹ Novagas Clearinghouse Ltd, "Application for a Project Approval Certificate: Taylor Straddle Plant" (1997) at 68, online (pdf): <<https://projects.eao.gov.bc.ca/api/public/document/5886a869eed3c0016f855d0a/download/Application%20for%20a%20Project%20Approval%20Certificate%20-%20Taylor%20Straddle%20Plant.pdf>>.

⁹⁰ See the discussion of the construction workforce above, and [Appendix F](#).

THE NGL PROJECT SHOULD BE REVIEWABLE BECAUSE OF ITS IMPACTS ON – AND LACK OF CONSENT FROM – THE LHEIDLI T’ENNEH FIRST NATION

Finally, in assessing whether a project should be designated as reviewable, the Minister must consider whether there may be:

...effects on an Indigenous nation and the rights recognized and affirmed by section 35 of the Constitution Act, 1982.⁹¹ [s. 11(4)(b)]

Indeed, the EAA states that one of the statutory purposes of the Act and the Environmental Assessment Office is to:

...support reconciliation with Indigenous peoples in British Columbia...by “recognizing the inherent jurisdiction of Indigenous nations and their right to participate in decision making in matters that would affect their rights.”⁹²

In light of this, any review of a proposed project must seriously accept the views and concerns of the local First Nation whose territory the project would occupy. In this case, the NGL Project would take place entirely within the unceded territory of the Lheidli T’enneh First Nation.⁹³

The Lheidli T’enneh Nation have repeatedly publicly opposed the initially proposed WCOL petrochemical complex. The Lheidli T’enneh Nation has unequivocally stated their position about the proposed NGL Project on their unceded territory:

WCOL is not welcome in LTFN territory and on unceded ancestral lands.⁹⁴

That should be the end of the matter. At the very least, First Nations must be fully involved in all decision making going forward and their views should be prioritized in an environmental assessment process. As it stands, it seems that the regulatory regime that applies to this project – through the OGC and the ALR non-farm use process – do not adequately take into account the views of the host First Nation. In fact, the Lheidli T’enneh Chief, Dolleen Logan says that she is “extremely upset” that the NGL project is proceeding despite their opposition of the project.⁹⁵ The Chief stresses that the Regional District’s consideration of the non-farm use application:

⁹¹ *Environmental Assessment Act*, SBC 2018, c 51, s 11(4)(b).

⁹² *Environmental Assessment Act*, SBC 2018, c 51, s 2(2)(b)(ii) outlines that a purpose of the EAA is to: “(ii) support reconciliation with Indigenous peoples in British Columbia by:

(A) supporting the implementation of the United Nations Declaration on the Rights of Indigenous Peoples,

(B) recognizing the inherent jurisdiction of Indigenous nations and their right to participate in decision making in matters that would affect their rights, through representatives chosen by themselves,

(C) collaborating with Indigenous nations in relation to reviewable projects, consistent with the United Nations Declaration on the Rights of Indigenous Peoples, and

(D) acknowledging Indigenous peoples’ rights recognized and affirmed by section 35 of the Constitution Act, 1982 in the course of assessments and decision making under this Act.”

⁹³ See: Lheidli T’enneh First Nation, “Natural Resources,” online: *Lheidli T’enneh* <<https://www.lheidli.ca/departments/natural-resources/>>; Lheidli T’enneh First Nation, “Our Story,” online: *Lheidli T’enneh* <<https://www.lheidli.ca/about/our-story/>>.

⁹⁴ Lheidli T’enneh First Nation, News Release, “West Coast Olefins Ltd NOT Welcome in LTFN Territory” (4 August 2021), online: <<https://www.lheidli.ca/west-coast-olefins-ltd-not-welcome-in-ltfn-territory/>>.

⁹⁵ Hanna Petersen, “It should’ve been a hard no’: Lheidli T’enneh Chief upset over West Coast Olefins postponement” (19 November 2021) at para 3, online: *Prince George Citizen* <<https://www.princegeorgecitizen.com/local-news/it-shouldve-been-a-hard-no-lheidli-tenneh-chief-upset-over-west-coast-olefins-postponement-4779364>>.

*...should have been a hard 'no'. ... We have kicked them out and we don't want anything to do with them.*⁹⁶

A *status quo* rush to approval at the Oil and Gas Commission is simply not acceptable in these circumstances. Subsections 11(4)(b) and 2(2)(b)(ii) of the *EAA* require Government to respect the views of the Nation. At a minimum, an environmental assessment process is necessary for the views of the Lheidli T'enneh to be seriously and adequately taken into account, consistent with the *Declaration on the Rights of Indigenous Peoples Act*.

⁹⁶ Hanna Petersen, "'It should've been a hard no': Lheidli T'enneh Chief upset over West Coast Olefins postponement" (19 November 2021) at para 2, online: *Prince George Citizen* <<https://www.princegeorgecitizen.com/local-news/it-shouldve-been-a-hard-no-lheidli-tenneh-chief-upset-over-west-coast-olefins-postponement-4779364>>.

CONCLUSION

In light of the above, we request that:

- The Minister designate the West Coast Olefins Ltd. Natural Gas Liquids Recovery Project “reviewable” under the *Environmental Assessment Act*; and
- The Minister and the Chief Executive Assessment Officer take the necessary steps to order that the environmental assessment be conducted by an independent panel of experts, in a process that includes public hearings.

These measures are necessary to restore public trust that this project is proceeding in a way that is consistent with the provisions and purposes of the *Environmental Assessment Act* – in a way that serves the public interest and truly “promote[s] sustainability by protecting the environment and fostering a sound economy and the well-being of British Columbians and their communities.”⁹⁷

⁹⁷ *Environmental Assessment Act*, SBC 2018, c 51, ss 2 and 11(6).

APPENDICES

⁹⁸ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 7, online: *Regional District of Fraser-Fort George* <<https://pub-rdffc.escribemeetings.com/filestream.ashx?DocumentId=822>>.

⁹⁸ Report for Committee Consideration (18 November 2021), *Application for Non-Farm Use in the Agricultural Land Reserve* at 7, online: *Regional District of Fraser-Fort George* <<https://pub-rdffc.escribemeetings.com/filestream.ashx?DocumentId=822>>.

APPENDIX B: EXCERPT FROM TAYLOR STRADDLE PLANT APPLICATION

Table 4-1. Environmental issues identified for the Taylor Straddle Plant.

Environmental Issue	Project Phase	
	Construction	Operation
Air Resources <ul style="list-style-type: none"> Effect on local and airshed ambient air quality Fugitive odours from liquids Local impact of noise 	X	X X X
Waste Management <ul style="list-style-type: none"> Quantities and types of wastes Measures to reduce, reuse and recycle Management of solid and landfillable wastes 	X X X	X X X
Soils and Groundwater <ul style="list-style-type: none"> Effect of existing site contamination during and following operations 	X	X
Vegetation and Wildlife <ul style="list-style-type: none"> None 		
Aquatic Resources <ul style="list-style-type: none"> Management of lease runoff 	X	X
Resource Use <ul style="list-style-type: none"> Effect on future land use Abandonment and reclamation plan 	X X	X X

Table 4-1 from the "Application for a Project Approval Certificate – Taylor Straddle Plant" – submitted to the EAO by the proponent, Novagas Clearinghouse Ltd. in 1997.⁹⁹

⁹⁹ Novagas Clearinghouse Ltd, "Application for a Project Approval Certificate: Taylor Straddle Plant" (1997) at 39, Table 4-1 obtained from EAO by request, online (pdf):
<https://projects.eao.gov.bc.ca/api/public/document/5886a869eed3c0016f855d0a/download/Application%20for%20a%20Project%20Approval%20Certificate%20-%20Taylor%20Straddle%20Plant.pdf>.

**APPENDIX C: LETTER OF DR. STEVE HELLE, PH.D., P. ENG., CHEMICAL ENGINEER AND
ASSOCIATE PROFESSOR OF ENVIRONMENTAL ENGINEERING**

December 15th, 2021

Steve Helle, Ph.D., P. Eng.
Chemical Engineer
Associate Professor, Environmental Engineering, UNBC
3333 University Way
Prince George, BC Canada V2N 4Z9

Calvin Sandborn
Director, Environmental Law Centre, University of Victoria
P.O. Box 1700 STN CSC
Victoria, BC, Canada, V8W 2Y2

Dear Calvin Sandborn,

By request of some local stakeholders, I have completed a brief investigation of the greenhouse gas (GHG) emissions claims from West Coast Olefins with respect to their proposed Prince George NGL Recovery Project. There appears to be little publicly available information. My comments are based on information from the West Coast Olefins website (<https://www.westcoastolefins.com/environmental-stewardship>).


A major GHG emission claim on the website is the reduction in emissions from using electric motors in place of natural gas turbines. This is a valid claim. But it is not clear if this is definitely part of the plan, or if it is just an option being considered. Depending on subsidies, this option may be economically expensive: on an energy basis, natural gas is much cheaper compared to electricity.

Another GHG claim from the website is this: "The burning of lean gas produced by West Coast Olefins Ltd. (WCOL) in place of rich gas (gas which contains ethane, propane, butane, and condensate) will reduce greenhouse gas (GHG) emissions by 0.5 million tonnes of CO₂ per year (Mt/y). The NGL Recovery Project only emits 0.16 Mt/y of CO₂, making the project carbon negative and supporting the BC Climate Action Plan." Ethane, propane and butane do have a higher carbon content per unit of energy compared to methane (the main natural gas component) and this claim is the right order of magnitude, although there is a lack of data to do proper calculations to verify the numbers. However, this claim involves creative drawing of project boundaries. The 'carbon negative' claim requires drawing the project impact boundary around the existing natural gas pipeline while ignoring additional product pathways from the NGL Recovery Project. For the claim to be valid, all of the ethane, propane and butane removed from the pipeline must not be combusted elsewhere. This seems to be a highly unlikely assumption: whoever buys the propane is going to burn it, and probably the same for whoever buys the butane. It is possible the ethane does not get burnt. The ethane may be processed into various chemicals (e.g., plastics), however these chemicals may end up being burnt at the end of their life (e.g., in a waste to energy facility). Therefore, removing the ethane, propane and butane may just result in a shifting of where the CO₂ is emitted. Without supporting evidence to the contrary, I don't think the claimed reduction of 0.5 million tonnes of CO₂ per year (Mt/y) is valid. Another minor factor to consider is that by removing the ethane, propane and butane, they are removing some of the energy in the pipeline which may be made up with additional natural gas, resulting in increased emissions associated with the additional natural

gas extraction and processing. As a result of all of the above, the overall impact of this project may be to increase GHG emissions. Including a larger project boundary, the carbon negative claim is not valid unless the project removes carbon from the short-term carbon cycle and sequesters this carbon in the ground or in long-live products. This project has 0 carbon removal from the short-term carbon cycle (all of the carbon involved is from fossil fuel deposits). At best, the project can be considered carbon neutral if West Coast Olefins provides evidence that the majority of their products will not be burnt during the complete product lifecycle.

My biggest concern is that this facility is sized to the capacity of the natural gas pipeline and assumes continued use of natural gas: "The Project will be split between two physical facilities: the NGL Extraction Plant and the NGL Separation Plant. Both facilities will be designed with a nominal capacity of 59,500 Se3m3/d (2.1 Bscfd) to roughly match the capacity of the Westcoast Pipeline." Assuming a 30+ year project lifetime, the economic viability may depend on the continued use of natural gas for the next 30 years at the same rate we use it today. This is in contrast to Canada's GHG emission targets. Canada has committed to reducing GHG emissions by 40% in the next 8 years, and by 100% in the next 28 years. If we are serious about reaching these ambitious but necessary GHG emission targets, that means rapid widespread adoption of low carbon electricity generation, energy efficient buildings, electrified heating, etc., all replacing existing natural gas demand, and therefore resulting in shutting down natural gas infrastructure during this project's lifetime.

Sincerely,

A handwritten signature in dark ink, reading "Steve Helle". The signature is written in a cursive, flowing style.

Steve Helle

**APPENDIX D: LETTER OF DR. PAUL SANBORN, PH.D., P. AG., ASSOCIATE PROFESSOR,
UNIVERSITY OF NORTHERN BRITISH COLUMBIA**

Ecosystem Science & Management Department
3333 University Way
Prince George, BC V2N 4Z9

November 4, 2021

Development Services
Regional District of Fraser – Fort George

Re: WCOL ALR Application

I, Paul Sanborn, consent to comments contained in or attached to this email becoming public information. I understand that this means the comments may be placed on a public meeting agenda of the Regional District and may be forwarded to the Agricultural Land Commission (ALC) for their use.

I have been a Professional Agrologist since the early 1980s, practicing as a soil scientist, with advanced degrees in soil science from UBC (Ph.D. – 1987) and University of Alberta (M.Sc. – 1981). Since 2002, I have been a faculty member at UNBC, where I teach and do research primarily in the field of soil science. My first job in BC (1980-82) was with the provincial Ministry of Agriculture, and my principal project was a detailed soil survey of the eastern Vancouver Island coastal plain (Jungen et al. 1985). This was a re-survey intended to provide the Agricultural Land Commission with better information to support refinement of Agricultural Land Reserve (ALR) boundaries in that region. So I am familiar with the basis for, and application of, the Agricultural Land Capability classification system used in BC. I am also familiar with fine-textured soils similar to those affected by this application, and have local experience with implementing rehabilitation treatments where such soils have been degraded by industrial activity in a forestry setting (Sanborn et al. 2014).

Therefore, my comments will concentrate on the implications of WCOL's application for the protection and integrity of the ALR in the Prince George area.

While I was waiting to obtain the full details of WCOL's proposed project, I examined publicly-available information:

- ALR and Agricultural Capability maps (downloaded from ALC web site)
- Soil survey maps and their accompanying report (Dawson 1989)

When I was able to view the company's submission, I noted that information from these same sources had been incorporated in the report prepared by their consulting agrologists. I have reviewed this report and am satisfied that it meets the standards set out by the ALC (2017) in its Policy P-10 – *Criteria for Agricultural Capability Assessment*.

The consultants noted that the existing mapping for the project area had demarcated polygons that were complexes of both Class 4 and 5 capability areas, as well of subclasses of Class 4. However, their field inspection concluded that for the proposed project footprint, there was a smaller range of capability classes and subclasses:

Based on the results of the field assessment, it is the report authors' professional opinion that the

proposed project falls within land that exhibits characteristics similar to areas that were assigned an unimproved agricultural classification of 4b as no limitations other than low permeability due to heavy clays were observed during the assessment. Please note that these statements are not intended to disprove publicly available mapping products for agricultural capability ratings, but rather represent the much finer scale of assessment used for this project. (p. 6)

This is an important finding, because it means that there is no doubt that the parcel in question meets the primary criterion for inclusion in the ALR at the time of its establishment: an agricultural capability class of 1 – 4 inclusive (Provincial Agricultural Land Commission 1979). And, in all such discussions, it's my responsibility to remind planners and decision-makers that lands with those capability classes comprise only 2.7% of BC's area (Agricultural Land Commission 2013).

Although this application is for approval of non-farm use, rather than exclusion from the ALR, and the consultants provide some basic recommendations for reclamation of the site after closure, this is a distinction which is unlikely to matter much in the long run. It would take a remarkable level of optimism about the long-term financial health of fossil fuel firms to be confident that, decades hence, the necessary resources could be mobilized by a declining or dead industry. **Therefore, what this planning decision centres on is whether this particular bite out of the ALR is acceptable or not. Pretending that this application merely involves a temporary repurposing of land use is just that: pretending.**

I was therefore intrigued that the applicant in their September 2021 *NGL Recovery Project ALC Application – Extraction Plant and Access Road: Non-Farm Use Status* should cite the relevant legislation which actually addresses the real issue here, and that's the central responsibility of the ALC. Specifically, (2) in Section 6 of the *Agricultural Land Commission Act* states that:

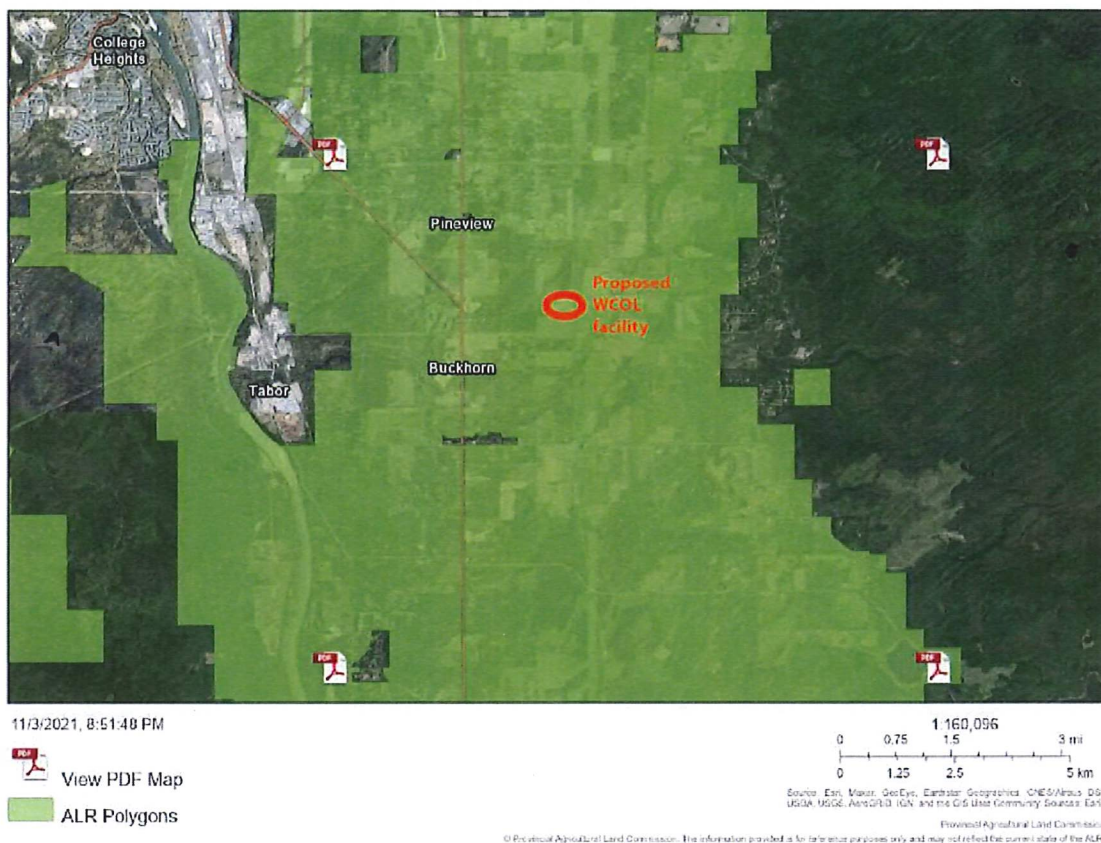
*(2) The commission, to fulfill its purposes under subsection (1), **must give priority to protecting and enhancing all of the following** in exercising its powers and performing its duties under this Act:*

*(a) **The size, integrity and continuity of the land base of the agricultural land reserve;***

*(b) **The use of the agricultural land reserve for farm use.** [emphasis mine]*

The Commission's decision on this application surely will rest on the criteria of "integrity and continuity". Examination of the ALR map for the Pineview area (p. 3) shows that the proposed site would be a new island of industrial activity separated by approximately 5 km from the BCR industrial area along the Fraser River. **This would constitute a new incursion into one of the largest continuous areas of agricultural land in central BC. Based on its legislated mandate, the Commission cannot possibly do anything else but turn down this application, and the Regional District can assist and expedite this outcome by doing the same.**

ALR Property and Map Finder



ALR extent in Pineview area, with proposed WCOL location indicated.

(<https://governmentofbc.maps.arcgis.com/apps/webappviewer/index.html?id=87dee902dc5e443fbff8ca7b4311b407>)

The bulk of the application document consists of what can only be characterized as the applicant's sob stories as to why other potential sites were unacceptable or unavailable, making the present proposal the default choice. Quite simply, finding a location for this proposed facility is nobody else's problem! **The Regional District must put the integrity and continuity of the ALR first, and if it doesn't, the Commission will. This is not a difficult decision.**

Paul Sanborn, Ph.D., P.Ag.

Associate Professor

Paul.Sanborn@unbc.ca

Phone: (250) 960-6661

References:

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https://www.env.gov.bc.ca/esd/distdata/ecosystems/Soils_Reports/bc23_report.pdf

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https://sis.agr.gc.ca/cansis/publications/surveys/bc/bc57/bc57_report.pdf

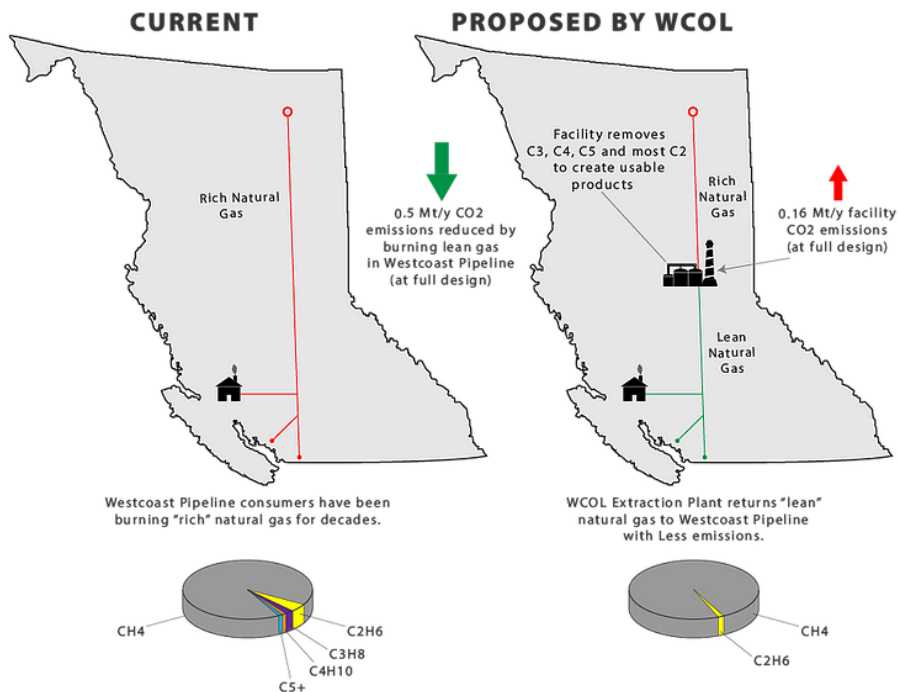
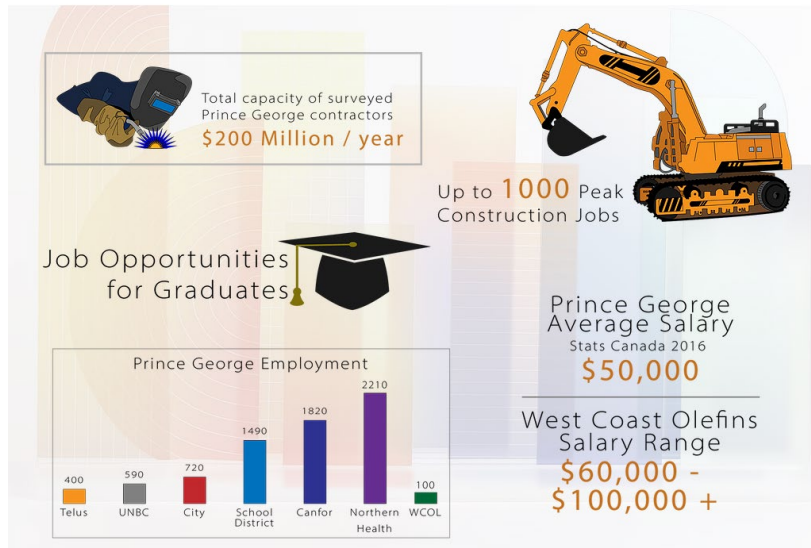
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https://www.alc.gov.bc.ca/assets/alc/assets/library/living-in-the-alr-information/protecting_bc_farmland_booklet.pdf

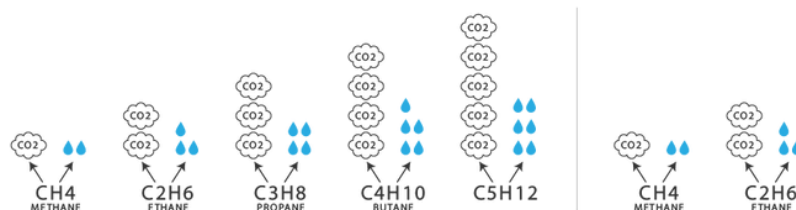
Sanborn, P., C. Bulmer, and D. Coopersmith. 2004. Use of wood waste in rehabilitation of landings constructed on fine-textured soils, central interior British Columbia, Canada. *Western Journal of Applied Forestry* 19: 175-183.

APPENDIX E: FIGURES OF INTEREST

\$1.3 BILLION INVESTMENT



Air emissions from combustion of different hydrocarbons



APPENDIX F

From: Lombardi, Christie EAO:EX <Christie.Lombardi@gov.bc.ca>
Sent: January 12, 2022 3:13 PM
To: ELC.ArticledStudent <ELC.ArticledStudent@uvic.ca>
Cc: Calvin Sandborn <csandbor@uvic.ca>; EAO Compliance EAO:EX <eao.compliance@gov.bc.ca>
Subject: RE: West Coast Olefins Notification Receipt - NGL Recovery Plant

Good Afternoon Christa,

I'm a Compliance and Enforcement Officer at the BC Environmental Assessment Office. I have followed up on your email queries in relation the proposed West Coast Olefins NGL Recovery Plant Project Notification requirements under section 10 of the Environmental Assessment Act and wanted to share my findings with you. After reviewing the project documentation, including the news article you provided and the project application materials to the BC Oil and Gas Commission, and through my direct communications with West Coast Olefins on the matter, I am satisfied that the lack of a section 10 Project Notification for the NGL Recovery Project does not present a compliance concern. **Over the course of my review, West Coast Olefins has clarified that the project has an anticipated peak construction employment of 80-120 full time jobs and that the news and project website employment projections of "thousands of construction jobs" are for the entire supply chain of the project, not direct employment at the project facilities.** As such, the project does not currently meet the Project Notification threshold of 250 or more employees or contractors who work more than 30 hours per week on an annual basis at the project facilities that is specified in section 5(1)(c) of the Reviewable Projects Regulation.

Thank you for your interest in this matter. If there's any additional clarity I can provide please don't hesitate to contact me.

[emphasis added by authors of this submission]

Best,
CHRISTIE LOMBARDI
Compliance and Enforcement Officer
Environmental Assessment Office
Government of British Columbia
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The EAO respectfully acknowledges that it carries out its work on the traditional territories of Indigenous nations throughout British Columbia.

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From: Hoyle, Meaghan EAO:EX <Meaghan.Hoyle@gov.bc.ca>

Sent: December 7, 2021 4:07 PM

To: ELC.ArticledStudent <ELC.ArticledStudent@uvic.ca>

Cc: Calvin Sandborn <csandbor@uvic.ca>; Stockman, Fern P EAO:EX <Fern.Stockman@gov.bc.ca>;

Thede, Amy EAO:EX <Amy.Thede@gov.bc.ca>; Parks, Chris EAO:EX <Chris.Parks@gov.bc.ca>

Subject: RE: West Coast Olefins Notification Receipt - NGL Recovery Plant

Hello Christa,

Not a problem, I hope all is well.

Confirming that the EAO has not received a Project Notification regarding the NGL Recovery Project proposed by West Coast Olefins Ltd. or a subsidiary. We are looking into the matter.

Thank you,
Meaghan

From: ELC.ArticledStudent <ELC.ArticledStudent@uvic.ca>

Sent: December 4, 2021 7:46 PM

To: Hoyle, Meaghan EAO:EX <Meaghan.Hoyle@gov.bc.ca>

Cc: Calvin Sandborn <csandbor@uvic.ca>; Stockman, Fern P EAO:EX <Fern.Stockman@gov.bc.ca>;

Thede, Amy EAO:EX <Amy.Thede@gov.bc.ca>; Garvin, Alisha EAO:EX <Alisha.Garvin@gov.bc.ca>

Subject: RE: West Coast Olefins Notification Receipt - NGL Recovery Plant

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Good evening Meaghan,

Thank you very much for your initial response and my apologies for this belated follow-up.

It has come to our attention that West Coast Olefins Ltd.'s wholly owned subsidiary, 1219812 B.C. LTD., has submitted permitting applications to the OGC on November 15th, 2021. We understand this to have started the clock on when they need to potentially submit a Project Notification.

Can you share whether a Project Notification has been received by the EAO with regards to the NGL Recovery Project proposed by West Coast Olefins Ltd. or its subsidiary?

We are grateful for your assistance!

Take care,

Christa Croos (she/hers)

JD (Environmental Law Specialization), MA, BSc

Articled Student

Environmental Law Centre

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I acknowledge and respect the ləkʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

From: Hoyle, Meaghan EAO:EX <Meaghan.Hoyle@gov.bc.ca>
Sent: Friday, October 29, 2021 3:42 PM
To: ELC.ArticledStudent <ELC.ArticledStudent@uvic.ca>
Cc: Calvin Sandborn <csandbor@uvic.ca>; Stockman, Fern P EAO:EX <Fern.Stockman@gov.bc.ca>; Thede, Amy EAO:EX <Amy.Thede@gov.bc.ca>; Garvin, Alisha EAO:EX <Alisha.Garvin@gov.bc.ca>
Subject: RE: West Coast Olefins Notification Receipt - NGL Recovery Plant

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Good afternoon Christa,

Alisha passed along your email and I am happy to respond. Thank you for reaching out regarding the West Coast Olefins Ltd. NGL Recovery Project. The EAO has not received a Project Notification for this project. It is the proponent's responsibility to comply with all relevant legislation and regulations. You are correct that workforce is one notification threshold in the Reviewable Projects Regulation.

Thanks again for your email,
Meaghan

MEAGHAN HOYLE (she/her)
Project Assessment Director
Environmental Assessment Office

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The EAO respectfully acknowledges that it carries out its work on the traditional territories of Indigenous nations throughout British Columbia.

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From: ELC.ArticledStudent <ELC.ArticledStudent@uvic.ca>
Sent: October 26, 2021 11:58 AM
To: Garvin, Alisha EAO:EX <Alisha.Garvin@gov.bc.ca>
Cc: Calvin Sandborn <csandbor@uvic.ca>
Subject: West Coast Olefins Notification Receipt - NGL Recovery Plant

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Good afternoon Ms. Garvin,

I was hoping you may be able to advise whether the Chief Executive Assessment Officer, Ms. Elenore Arend, has received a Project Notification from West Coast Olefins Ltd. regarding the NGL Recovery Project proposed in the Regional District of Fraser Fort George. This proposal is distinct from the Ethylene Project also proposed by West Coast Olefins which is presently going through the BC EA process – though they are interconnected.

We noticed that there were recent news reports of West Coast Olefins CEO Ken James sharing that there would be “thousands of construction jobs” associated with the NGL Recovery project and our understanding is that more than 250 employees or contractors at the peak of construction is a trigger for submitting a project notification (under section 5(1)(c) of the Reviewable Projects Notifications). Is this correct?

We look forward to hearing from you and thank you,

Christa Croos (she/hers)
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