

To Mayor and Council of Prince George.

West Coast Olefins has an option to buy 320 acres of ALR land in Pineview, PG and is proposing to build a special heavy industry petrochemical straddle plant there. This is location of two 60 year old Enbridge gas pipelines.

Currently the natural gas being piped to Prince George is clean gas and does not contain significant amounts of Propane, Butane, Oil condensate or Ethane. To make the straddle plant work the gas line would have to be 'enriched' or rather 'dirtied', filled up upstream at Chetwynd, with these four products.

The natural gas currently used in Prince George's is diverted from the Enbridge gas lines around Summit Lake Area, North of the proposed straddle plant.

When the natural clean gas having been 'enriched/dirtied' up line, and before these products are extracted at Pineview; PG citizens would then be burning 'dirty gas', which would significantly increasing our carbon footprint significantly, and likely health consequences.

With regards to Pineview; this area, includes precious irreplaceable wetlands. It is an area that has been of intense interest to the Breeding Bird Survey which has been ongoing since the 1970's. This involves an annual count of the birds identified at each of 50 fixed stops once a year, during the breeding season (June). This is a Citizen Science project conducted jointly by the Canadian Wildlife Service, and Cornell University in the United States. Over decades local ornithologists have become very familiar with the rich biodiversity of the Pineview area. For the sake of the birds breeding here, this area must not be contaminated by a Petrochemical Plant with all of its air pollution as well as noise and light pollution. In addition, this good agricultural land and wetland area is part of an annual Christmas bird count; it is also where migratory waterfowl rest in the wet fields during the spring breakup.

You may be aware that back in 2019, WCO proposed to build a massive Ethylene petrochemical/plastics plant in the BCR site, located inside Prince George's very sensitive airshed. The request for the Ministry of the Environment to approve this Ethylene project has never been withdrawn by WCO, so it is still being actively worked on. I understand the City of PG attended an MOE working group regarding this project in March of 2021.

When WCO met stiff opposition from the concerned citizens of PG, they attempted to relocate their project to the MLIB territory at Summit Lake. There, yet again, concerned citizens and the First Nations rose up in opposition. In fact the MLIB and Lheidli T'enneh have very publicly and emphatically announced that they would never again work with WCO's on their traditional unceded lands.

After this, WCO headed to Kitimat where it was announced in the Interior Newspaper of October of 2020 , that WCO was proposing to build a 10-14 billion dollar petrochemical / plastics plant there. We have not heard anything further about this proposal.

Now WCO have returned to set up their Ethylene Project in PG. They have a brand new, very 'green washed' website. Reading the website superficially, one might be led to believe that their Ethylene project is a green project, instead of what it actually is; a polluting heavy special petrochemical/plastics industry.

The current Prince George OCP indicates that the BCR site is not zoned for special heavy industry, such as a petrochemical/plastics plant. I am not sure if by splitting their project between Pineview and the BCR site, WCO's has managed to skirt the proplems of an M6 zoning .

To build a straddle plant partly in Pineview with a new pipeline from there, down into the BCR site, where their proposed extraction plant will be; WCO will need to be allowed to use ALR land in Pineview and for it to be re-zoned for petrochemical special heavy industry through the Regional District of Fort Fraser and the ALR Commission. In a 2008 report of the RDFFG , listed only three areas designated for special heavy industrial development such as a petrochemical plant; Hart North, Isle Pierre and Clear Lake South.

The straddle project is actually three separate plants and will cost over 600 million dollars to construct. It is a big industrial project that threatens the surroundings farms and wild life in jeopardy. The local citizens are really worried about air pollution, as well as ground and surface water pollution, traffic noise, electrical generation noise from a 70 mega watt station there and light pollution. The massive 70 mega watt electrical station is primarily to be able to push all the products recovered in Pineview down the new pipeline into the BCR site to the extraction plant. Very shortly building the Separation plant in the BCR site, the proposed Ethylene Project and then an Ethylene Derivatives( plastics) plant will likely be build , to make use of the large amounts of Ethane extracted.

The three plants which constitute a 'straddle plant' are

An NGL Recovery Plant

An NGL Extraction Plant

An NGL Separation Plant.

In Pineview there will be two towers, a flare stack, a refrigeration unit, a 70 mega watt electrical station, and storage facilities.....and a settling pond. This settling pond will be situated close to precious wetland area. This plant also has the potential for seriously

polluting the ground and surface water in Pineview area, as well as destroying the bird breeding grounds and migratory pathways. WCO has indicated they will have core sampling wells in Pineview to check the quality of the ground water/ How often the Pineview drinking water would be tested was not mentioned by WCO, nor what would happen in the event of the ground water getting contaminated by carcinogenic petrochemicals.

If this straddle (three) plants were to get approved, then four by-products would be removed from the 'enriched/dirty' natural gas line.

Butane, propane, oil condensate and ETHANE.

WCO will need to build a new pipeline from Pineview down to their BCR site, in order to load these substances onto trains located there. My understanding is that the Propane and Butane will be loaded onto rail cars in the BCR site to be shipped elsewhere.....and the oil condensate will likely be refined at recently expanded TideWater (old Husky Oil) or transported out elsewhere for refining.

There is however, only one functional use for the ETHANE gas, and that is to turn it into Ethylene (the feedstock for plastics production). It is proposed by WCO that a third party will own and operate another project called the Ethylene Derivatives Plant, which will turn the Ethylene into raw plastic pellets for shipment to Asia. An Ethylene Derivatives plant needs to be located in very close proximity to an Ethylene Plant.

If the PineView/BCR straddle plant is built, the very next step would be for WCO to construct their Ethylene Project in the already polluted Bowl airshed of PG. They would not want to 'waste' all that ethane they will have extracted. This straddle plant maneuver, in my opinion, is a backdoor attempt by WCO to get into Prince George's airshed (BCR site)....against strong citizen opposition voiced against it. Currently the Pineview Citizens have a petition circulating to see who wants or does not want a straddle plant build. There are 1,200 signatures against the plant and 50 in favour of it.

WCO have secured 300 acres in the BCR site. This is a lot of land. Some of this land is also situated in the ALR. WCO has indicated that there will in addition, there would likely be a Polyethylene Plant and a Mono-ethylene-glycol plant, as well as a hydrocarbon storage plant built. In their submission to the MOE they have indicated they may have to use clean ground water for their plant to the amount of 650 cubic metres per hour, which equates to 1.75 swimming pools of water per hour.

Ken James, CEO of WCOs, publically stated at a Winston's Breakfast Club, that this would just be the beginning of such industrialization as there would then be a flurry of other related plants coming into the Prince George area. He mentioned the following heavy industries Propylene, Polypropylene, Styrene monomers, Ammonia, Urea and

Methanol plants as likely to follow.

The PG Bowl, will become significantly more polluted than it already is. Not just with the Ethylene Project and all the extra rail and truck/car traffic but also from the increased refining of the oil condensate at Tidewater (if this occurs.)

Research has also shown that up to 35 km around an Ethylene derivative plant there will be significant raw plastic pellet pollution of the water and land, which seriously affects the health of humans and wildlife alike. Such plastics contamination is carcinogenic, mutagenic and endocrine disruptors of mammals.

In their preliminary submission to the MOE, WCO indicated that they may eventually double their production of ethylene to 2,000,000 tonnes per annum.

In PG there will soon likely be other polluting industries contributing to the worsening of the Prince George airshed.....like the proposed expansion of Tidewater (Husky) to refine biofuel, and the proposed Arbios / Sustane project, in partnership with Canfor.

It is interesting to note that according to City By laws 12.6 Petrochemical Plants are designated M6 under bylaw 8256, and as such are not to be build in the sensitive prince George Airshed.

It is on all of these grounds, we strongly oppose allowing the building of a special heavy industrial petrochemical straddle plant in the Pineview area, which would be the first step toward the building an Ethylene Project in the BCR site of PG.

Some references and links of interest.

(1) Chemical exposure and plastics production: Issues for women's health | A Review of literature  
National Network on Environments and Women's Health

Prepared by Robert DeMatteo December 2011

(2) City of Prince George Zoning Bylaw 7850,2007---consolidated version.

Bylaw 8256: A Petrochemical plant is defined as Special Heavy Industry.

(3) PGArea\_Industrial\_Lands\_Profile.pdf

(4) New%20Solutions%20Article\_2.pdf

(5) The%20unaccountability%20case%20of%20plastic%20pellet%20pollution.pdf

(6) Nova%20Red%20Deer%20-%20chemicals%20released-1.pdf

(7)

<https://qz.com/1689529/nurdles-are-the-biggest-pollution-disaster-youve-never-heard-of/>

(8) <https://pubmed.ncbi.nlm.nih.gov/29680567/>

(9) <https://www.hindawi.com/journals/ijg/2017/7526592/>

(10)

<https://www.cnn.com/2021/02/20/health/baby-brain-damage-plastic-phthalates-wellness/index.html>

Yours sincerely,

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