

November 6, 2019

ATTN: Meg Bommarito, Department of Ecology  
Amy Keenen, Whatcom County

**RE: Green Apple Renewable Fuels SEPA Threshold Determination**

To Whom it May Concern,

These comments are submitted on behalf of a coalition of environmental organizations in Washington State, advocating on behalf of our members for the protection of public health and ecosystems. We appreciate the opportunity for pre-threshold determination consultation on the Green Apple proposal. We are in agreement that the State Environmental Policy Act (SEPA) warrants a Determination of Significance (DS) for this project. This proposal poses significant, reasonably foreseeable, and adverse impacts.

The construction and operation of this facility onsite will cause direct impacts to air quality and wetlands. Additional and likely unavoidable cumulative impacts in the watershed of Whatcom County and the Salish Sea resulting from this project should be evaluated in the scope of an Environmental Impact Statement. An EIS is necessary to thoroughly study the direct and cumulative impacts, assess mitigation options, and compare alternatives. Consider the following areas that warrant additional study, as detailed below:

#### Air Pollution

It is our understanding that the co-leads are consulting with the Northwest Clean Air Agency (NWCAA) on air pollution impacts. However, the NWCAA only regulates stationary source emissions. Toxic air pollution including particulate matter from diesel locomotives and marine vessels is known to harm human health. Cumulative impacts to air quality from induced rail and vessel shipments should be assessed in an EIS.

#### Greenhouse Gas Emissions

Though there may be laudable benefits to air quality and climate from the increased production of renewable diesel as a substitute for petroleum diesel, the net impact to our climate from this project is complex and would be best evaluated through an EIS. There will be emissions arising from the production and shipment of feedstocks. Moreover, the project calls for 15,000 MMBTU/D of methane gas for production of hydrogen, which calls for a new pipeline to be separately owned and operated by Cascade Natural Gas.

The upstream impacts from the leakage of methane at the hydraulic fracturing extraction sites as well as in the transmission are not precisely known or measured, but best available science shows that the climate impacts from leaked ambient methane - a potent GHG- are far greater

than has been historically considered. This issue has drawn significant scrutiny to the EIS's and review processes for proposed projects in Tacoma and Kalama at present. Whatcom County can learn from these examples, and should use the current best available science, now and as it evolves. Moreover, the County should evaluate the need for any additional pipeline capacity within the context of what is currently available and expected, taking into account the broader policy context in which gas use is anticipated to decline in the near future due to the requirement for electric utilities to phase out the use of gas fired power plants. An EIS is needed to consider the utility of the pipeline, as well as its anticipated use once it is no longer needed.

We understand that the applicant will be accounting for a lifecycle greenhouse gas (GHG) analysis of their product for the California market under state rules. This does not replace the need for upfront assessment of impacts and mitigation. While we appreciate the commitment that we have heard from the project proponents to focus on low carbon feedstocks (and the commitment to avoid environmentally destructive feedstocks like palm oil), we believe that an EIS is necessary to independently evaluate the risks, identify alternative options, and evaluate options around binding commitments that would apply to this company and any future owners as well.

We also ask that the County contemplate that the hydrogen production facility could, in the future, be used to facilitate the refining of other, high carbon petrochemical products. Evaluation of this project should be premised on a binding commitment that the facility will only be used for biofuels. If such a commitment isn't made by the company in a way that the County can enforce, a conversion to petrochemical use alternative should be evaluated as part of an EIS.

For a new facility of this magnitude at an undeveloped site, anything short of a DS is untenable. Though relatively few projects in Whatcom County have been determined significant in the last forty years, examples of significant projects include residential condominiums, golf courses, marinas, and gas-fired power plants. This project clearly exceeds the threshold for significance. Moreover, under Whatcom County Zoning Code this project meets the criteria to require a Major Project Permit.

### Water Use

The SEPA checklist application lacks depth of information to determine the relative significance of water consumption for this facility in the context of overall constraints on adequate water supply for in stream flows as well as Whatcom County's farmers, residents and businesses. In-stream flow levels in the Nooksack River that have been ruled insufficient under state law. The co-leads should seek more information from the applicant and/or Whatcom Public Utility District to consider current and projected industrial water use, peak demands, and seasonality in demand. If water demands are highest during summer and early fall when water flows are lowest, what can be done to mitigate those impacts on salmon returning to spawn?

Under Question 3c1: Please update the stormwater guidance reference to the newly released 2019 Stormwater Management Manual for Western Washington.

### Vessel Traffic

The environmental review process needs to include a cumulative impacts analysis of all current and projected increases in vessel traffic along the proposed project's vessel traffic routes. The Transportation Study relies on data and analyses included in the VTRA [Vessel Traffic Risk Assessment] 2015 Final Report Updating the VTRA 2010<sup>1</sup>. This study provides excellent analyses of vessel traffic accident and oil spill risk for 2015 vessel traffic and the identified potential new and expanding projects at that time. However, this study is now outdated.

For example, the marine terminal immediately adjacent to the proposed project, which is owned by Petrogas, has increased vessel traffic associated with the export of liquid petroleum gas (LPG) since 2015. According to a June 21, 2017 RBN Energy blog post:

LPG export volumes out of Ferndale have risen sharply since Petrogas and its co-owners took over more than three years ago. In 2013, exports of propane and butane from Petroleum Administration for Defense District 5 (the U.S. West Coast) — with Ferndale being the only LPG export terminal in PADD 5 — averaged only 10 Mb/d, but they increased to 22 Mb/d in 2014, 32 Mb/d in 2015 and 41 Mb/d in 2016, according to EIA.<sup>2</sup>

Data from the US Energy Information Administration shows that the increase in exports from 32 Mb/d in 2015 to 41 Mb/d in 2016 have been maintained in 2017 and 2018 (assuming that Ferndale, WA still has the only LPG export terminal in PADD 5).<sup>3</sup> In addition, the VTRA 2015 states (on page 13):

The VTRA 2015 Model, however, does not contain a model for the potential consequences of an accident with an LNG Tanker. Thus, LNG Tankers for the purposes of the VTRA 2015 study are minimally modeled for traffic impact as cargo focus vessels only.

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<sup>1</sup> Van Dorp, Johan Rene and Jason Merrick (2016) VTRA 2015 Final Report Updating the VTRA 2010: A Potential Oil Loss Comparison of Scenario Analyses by four Spill Size Categories. Prepared for: Washington State Department of Ecology, 255 pp.

[http://www2.seas.gwu.edu/~dorpjr/VTRA\\_2015/REPORTS/VTRA%202015%20ECOLOGY%20FINAL%20REPORT%20-%2001\\_09\\_17.pdf](http://www2.seas.gwu.edu/~dorpjr/VTRA_2015/REPORTS/VTRA%202015%20ECOLOGY%20FINAL%20REPORT%20-%2001_09_17.pdf)

<sup>2</sup> Source: RBN Energy. June 21, 2017. Floating Bridge - West Coast Alternatives For Exporting LPG To Asian Markets.

<https://rbnenergy.com/floating-bridge-west-coast-alternatives-for-exporting-lpg-to-asian-markets>

Accessed 06/22/2017

<sup>3</sup> U.S. Energy Information Administration

<https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MLPEXP52&f=A>

A thorough analysis of project-related vessel traffic interactions with the neighboring Petrogas LPG export vessel traffic, and associated risks of accidents and accident consequences should be specifically addressed in the environmental review of this project. LPG carriers, like LNG carriers, could require additional naval architectural analyses to assess the consequences of vessel accidents.

Further, this study analyses the risk of accidents and oil spills from collisions, allisions and groundings, and does not address the risk of spills from oil transfer operations. The transportation study should be revised to include risk analyses using current data, including risk analyses for over water transfer operations, including project-related bunkering activities.

Section 3.3.1.2 Spill Risk focuses on large spills defined as greater than 15,725 barrels. The focus on the 2015 data on the probability of spills greater than 15,725 barrels negates the impacts that result from smaller spills. For example, the ConocoPhillips owned Polar Texas tanker that spilled over 1,000 gallons (23.8 barrels) of oil on October 13-14, 2004 resulted in the oiling of 21 miles of Puget Sound beaches and \$2.2 million in spill response costs.<sup>4</sup>) For the spill volume of 6.3 – 6,290 barrels, the VTRA 2015 shows an 85.8% likelihood of at least one spill in the VTRA 2015 study area in the next 25 years, 54.2% in the next 10 years and 7.5% in any single year.

The environmental review process needs to include a cumulative impacts analysis of all current and projected increases in vessel traffic along the proposed project's vessel traffic routes. This is especially true for projects that would increase vessel traffic at the same marine terminal that would be used by the Green Apple project.

The recent revised MDNS issued by Whatcom County to the Phillips 66 Ferndale Refinery for the proposed Logistics Flexibility Project to construct a new 300,000 crude oil storage tank and a new 80,000 fuel storage tank would provide additional operating flexibility to manufacture low-sulfur marine fuels in compliance with regulatory requirements from the International Maritime Association ("IMO"), which go into effect in 2020.

This proposed project requires the Refinery to be able to completely segregate low-sulfur fuel oil (and the low-sulfur crude oil used in its production) from higher sulfur fuel oil and crude oil. The project would introduce a new product line; IMO 2020-compliant fuels. The Phillips 66 Ferndale Refinery clearly states that this project will increase vessel traffic in a September 23, 2019 letter

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<sup>4</sup> Source: Seattle Times. Originally published October 13, 2006 at 12:00 am and updated October 14, 2006 at 12:08 am. *Oil company to pay fine for Puget Sound spill: ConocoPhillips will pay a \$540,000 fine to the state, stemming from a 2004 oil spill into Puget Sound between Tacoma and Vashon Island that was linked to a company oil tanker.* <https://www.seattletimes.com/seattle-news/oil-company-to-pay-fine-for-puget-sound-spill/> Accessed 11-5-2019.

from Jolie Rhinehart, Phillips 66 Ferndale Refinery Manager, to the US Department of Transportation:

Because SB5579 has forced Phillips 66 to drastically reduce the volume of Bakken crude oil it can receive via rail, Phillips 66 intends to obtain crude oil from other sources that can be substituted for low-sulfur Bakken crude oil in the production of IMO 2020-compliant fuel. Presently, the only crude oils that have similar low-sulfur quality comparable to Bakken crude oil are from Russia, Saudi Arabia, and West Africa, which are received by the Ferndale Refinery at its marine terminal. In addition, although these foreign crude oils are of similar quality in terms of sulfur content, their relatively significant distance from the Ferndale Refinery will likely result in (as compared to Bakken crude oil): increased transportation emissions; increased vessel traffic in the Salish Sea; increased transportation costs; and crude oil input interruptions for the refinery. (Source: September 23, 2019 letter from Jolie Rhinehart, Phillips 66 Ferndale Refinery Manager, to the US Department of Transportation re: the Pipeline and Hazardous Materials Safety Administration (PHMSA) Notice: Hazardous Materials: Washington Crude Oil By Rail-Vapor Pressure Requirements (PHMSA-2019-0149-4120))

A cumulative impacts analysis is needed for the Green Apple project-related vessel traffic and the vessel traffic associated with the Phillips 66 Ferndale Refinery's new Logistics Flexibility Project to manufacture the new IMO 2020-compliant fuels, given that both new projects use the same marine terminal. Even if (as Phillips 66 Ferndale Refinery representatives have stated in contradiction to the letter above) there is no increase in vessel traffic associated with the manufacture of the new IMO 2020-compliant fuels, the change in the tank vessels transporting crude oil to the refinery should be addressed in a cumulative impacts analysis. For example, the tankers that would be used to transport low-sulfur crude oil from Russia, Saudi Arabia and West Africa would not be the same US flagged tankers that transport Alaska North Slope crude.

#### Potential project-related impacts to Southern Resident Killer Whales (SRKW)

It is unclear whether appropriate SRKW-specific whale scientists participated in the drafting of the Vessel Traffic study and/or the Biological Assessment. Project-related potential impacts to SRKW should be thoroughly evaluated. The potential mitigation measure listed on pdf page 30, "All Project vessels would be required to follow the speed and distance requirements of revised RCW 77.15.740" would not apply to project-related vessels. See RCW 77.15.740 (2)(b):

- (2) A person is exempt from subsection (1) of this section if that person is:
- (b) Operating a vessel in conjunction with a vessel traffic service established under 33 C.F.R. and following a traffic separation scheme, or complying with a vessel traffic service measure of direction. This also includes support vessels escorting ships in the traffic lanes, such as tug boats;

Rail data in the study only goes up to 2015 which precedes the June 3, 2016 oil train derailment along the Columbia River in Mosier, OR and also precedes the major changes in the oil supply markets that have occurred as global and regional oil prices have fluctuated dramatically over the past three years. Additional analysis of the impacts is clearly warranted.

At best this transportation study is a starting point for a much needed thorough, accurate, and up-to-date evaluation of the risks and potential impacts that would be imposed by this project's vessel traffic. The County and Ecology need to conduct an independent analysis that fully answers these questions.

### Rail Traffic

Induced rail shipments pose significant threats to public safety from explosions, leaks or spills. Washington State agencies have recently produced EIS's for the Shell oil by rail project and the Vancouver Energy project. Rail shipments of new feedstocks should be similarly assessed in an EIS.

### Treaty Fishing Rights

Induced vessel traffic from this project unavoidably poses impacts to the Usual & Accustomed Fishing Areas of numerous treaty tribes. The review and permitting of this proposed facility must respect treaty rights and include formal consultation with all affected treaty tribes, including those with Usual & Accustomed Fishing Areas.

### Endangered Species

This project will foreseeably induce cumulative impacts from ocean-going ships on federally listed endangered and threatened species including the Southern Resident Killer Whales, Chinook salmon, Chum salmon, Puget Sound steelhead, and Yelloweye rockfish.

### Cherry Point Aquatic Reserve (CPAR)

Presumably the co-lead agencies are consulting with the Washington State Department of Natural Resources (DNR) for compliance with the Cherry Point Aquatic Reserve Management Plan. This unique aquatic ecosystem is bounded on the north by the southern boundary of Birch Bay State Park, and on the south by the northern boundary of the Lummi Nation Reservation. The reserve encompasses 3050 acres, including tidelands and bed lands out to a depth of 70 feet. The existing three marine terminal areas at Cherry Point are exempt from the reserve designation. New activities authorized on state-owned aquatic lands within or adjacent to the reserve must support desired future conditions described in the Cherry Point Aquatic Reserve Management Plan of 2010, amended in 2017 through avoiding and minimizing adverse impacts to habitats and species.

The CPAR Citizens Stewardship Committee, co-signed on this letter, is a volunteer group whose mission is to conserve the unique habitats, plants, and animals of the Cherry Point Aquatic Reserve through citizen science, community education, local stewardship and cooperation with both governmental and non governmental agencies. There are three main categories of regulatory tools the Committee looks to comment on: land use management programs, development construction permits, and guiding environmental laws. Stewards meet once a month and actively participate in citizen science such as bird counts, intertidal species surveys, and starfish counts. The committee sponsors a yearly science forum where scientists present study results to any interested citizens, and co-sponsors a yearly low tide educational event at the Point Whitehorn county park. We are also members of the CPAR Implementation Committee which meets twice a year and brings together state, local, and tribal government agencies, Cherry Point industry representatives, and concerned citizens to discuss projects and challenges that affect the Aquatic Reserve.

As you can imagine the ecosystems within the Aquatic Reserve are directly impacted by what happens in the surrounding uplands. Wastewater effluents, air pollution, light pollution, manufacturing noise, ground water runoff, and boat traffic with its noise and potential for spills are some of the activities with potentially negative cumulative effects. We have seen a 90% drop in herring spawn within the Reserve in the past 30+ years. The loss of this unique feeder fish stock has had a ripple effect throughout the ecosystem. The lack of Chinook fry has contributed to the woes of the Southern Resident Killer Whales.

Direct and cumulative impacts to the habitat of the Aquatic Reserve should be studied in an Environmental Impact Statement.

Thank you for considering our input. We look forward to continued public participation in this SEPA review process following the threshold determination.

Sincerely,

Eddy Ury  
RE Sources for Sustainable Communities

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Friends of the San Juans

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