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Mark Personius
Director

Memorandum

October 17, 2019

TO: The Whatcom County Planning Commission
FROM: Matt Aamot, Senior Planner *MA*
THROUGH: Mark Personius, Director *MP*
RE: Cherry Point Amendments (PLN2018-00009)

The County Council worked with the Cascadia Law Group to develop proposed Comprehensive Plan and Whatcom County Code (WCC) amendments primarily relating to fossil fuel and renewable fuel facilities in the Cherry Point Area (some of the amendments apply to various land uses on a countywide basis). The Council approved Resolution 2019-037 on August 7, 2019 forwarding the proposed amendments to the Planning Commission for review.

The Planning Commission hosted a Town Hall meeting on September 12, 2019 to listen to public comments on the proposal. The Planning Commission also held a work session on September 26, 2019 to consider the proposal, including discussion with a representative of Cascadia Law Group. At this meeting, the Planning Commission approved a motion requesting the Planning and Development Services Department to meet with industry representatives to obtain input. The Planning Commission also raised a number of policy issues and decided to continue with its deliberations on the Council's proposed amendments. The Planning Commission met again on October 10, 2019 at which time it heard from industry representatives, environmental group representatives, and the Northwest Clean Air Agency. The Commission reached consensus at this meeting to delete the proposed greenhouse gas (GHG) mitigation requirements for renewable fuel facilities that reduce lifecycle GHG emissions. This policy direction has been incorporated into proposed Exhibits A and B, which are attached along with the other Exhibits.

At the October 24, 2019 work session, the Planning and Development Services Department would like to request Planning Commission direction on several issues:

- Threshold for Requiring GHG Mitigation in the Zoning Code
- Local Mitigation of GHG Emissions
- Federal, State, Regional, and County Regulation of GHG Emissions
- Definition of "Expansion"
- Change of Use Provisions

1. Threshold for Requiring GHG Mitigation in the Zoning Code

The proposed Heavy Impact Industrial zoning regulations would require mitigation for fossil fuel facilities that increase GHG emissions above the baseline emissions (proposed WCC 20.68.801(3)). In a letter of September 25, 2019, the Northwest Clean Air Agency (NWCAA) stated:

. . . The NWCAA recognizes that currently there is no de minimus threshold for when the County will require local mitigation. So, it's unclear whether even 1 pound of increase in GHG emissions triggers an analysis. Technically, it may be difficult to calculate whether emissions increased by a pound or two from the baseline. . . GHGs are generally counted in tons of emissions. . . Given the large scope of these numbers, it could be helpful to establish a de minimus threshold in tons of GHG emitted. . . (p. 4).

As mentioned in the NWCAA letter, one pound of GHG emissions above the baseline levels would theoretically require mitigation under the proposal. For comparison, a U.S. EPA website states "A typical passenger vehicle emits about 4.6 metric tons of carbon dioxide per year. . ."

(<https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>).

GHG emissions from refineries vary from year to year based upon a variety of factors. Both the BP Cherry Point Refinery and the Phillips 66 Ferndale Refinery have reduced their GHG emissions since 2010. Past GHG emissions (in metric tons of carbon dioxide equivalents) are shown below:

Refinery	2010 GHG Emissions	2018 GHG Emissions	% Change 2010-2018
BP Cherry Point	2,538,364	2,140,426	-15.7%
Phillips 66	881,224	798,061	-9.4%

Source: US Environmental Protection Agency website:
<https://ghgdata.epa.gov/ghgp/main.do#>

It should be noted that the Washington State Department of Ecology adopted a "Clean Air Rule," which included GHG emission limits, in 2016 (WAC 173-442). In December 2017, the Department of Ecology issued *Clean Air Rule Baseline Establishment Orders* for the BP Cherry Point Refinery and the Phillips 66 Ferndale Refinery under the provisions of the Washington State Clean Air Act (RCW 70.94) and the Clean Air Rule (WAC 173-442). These orders set GHG emission limits (averaged over three year periods) for the refineries in the future. The *Baseline Establishment Order Support Documents* also set forth yearly "emission reduction pathways" to reach the emission limits. However, the Clean Air Rule was challenged and the Thurston County Superior Court issued a ruling in March 2018 that prevents Ecology from implementing the Clean Air Rule regulations. The Superior Court ruling was appealed to the Washington Supreme Court, which heard oral arguments on March 19, 2019, but has not yet issued a ruling on the matter (Case No. 95885-8).

Policy Question: A question for the Planning Commission is whether there should be a threshold established so that projects under the threshold do not require GHG mitigation. This could be achieved in one of several ways.

- a. Set a Metric Ton Threshold. The Washington Clean Air Act states:

The department [of Ecology] shall adopt rules requiring persons to report emissions of greenhouse gases as defined in RCW 70.235.010 where those emissions from a single facility, source, or site, or from fossil fuels sold in Washington by a single supplier meet or exceed ten thousand metric tons of carbon dioxide equivalent annually. . . (RCW 70.94.151(5)(a)).

The proposed zoning code amendments could exempt a project from mitigation if GHG emissions are under a certain tonnage threshold, such as emitting less than 10,000 metric tons of carbon dioxide equivalents per year. Such an approach may require additional review by legal counsel (e.g. Cascadia Law Group) to ensure that any threshold chosen is legally defensible.

- b. Exempt Permitted Uses - Modify the proposal so that permitted uses don't require GHG mitigation under the zoning regulations. The proposed zoning amendments currently do not require GHG mitigation for certain permitted uses (such as accessory buildings, office space, parking lots, etc.) under WCC 20.68.802(1). However, other permitted uses (such as replacement, safety upgrades, and environmental improvements) are subject to GHG evaluation and, potentially, mitigation under WCC 20.68.802(2).

An option would be to simply exempt all permitted uses from GHG analysis and mitigation under the zoning provisions (proposed WCC 20.68.801), and require GHG analysis and mitigation for proposals that require a conditional use permit (e.g. expansions).

In this scenario, permitted uses such as equipment replacement, safety upgrades, and environmental improvements would still be subject to SEPA review (unless categorically exempt) and NWCAA permitting requirements (if applicable) just as they are today. Mitigation for GHG emissions can be required if the SEPA lead agency determined the level of emissions would create a significant adverse environmental impact. However, under the zoning code, mitigation would not automatically be required for emission increases.

- c. Rely on SEPA and Potential State Regulation - Modify the proposal so that GHG emissions from existing fossil fuel facilities and expansions of existing facilities are regulated by SEPA rather than by the County Zoning Code (proposed WCC 20.68.801). As previously mentioned, projects may be conditioned to mitigate significant adverse environmental impacts under SEPA. In this scenario, SEPA could be used to mitigate GHG emissions but the County Zoning Code would not include GHG mitigation requirements.

Additionally, at some point, the Washington State Supreme Court will issue a decision relating the validity of Ecology's Clean Air Rule (WAC 173-442). If the Clean Air Rule is upheld, the County could consider whether this state rule is adequate to address GHG emissions.

2. Local Mitigation of GHG Emissions

The proposed Heavy Impact Industrial Zoning regulations require that "Local mitigation of greenhouse gas emissions shall be required, whenever calculated greenhouse gas emissions increase above the baseline for a 3-year average . . ." (proposed WCC 20.68.801(3)). The proposal also states that "The County may, upon request by the Applicant, approve a fee in-lieu of providing a local mitigation project. The County shall use collected fees in-lieu of mitigation for local greenhouse gas mitigation projects . . ." (proposed WCC 20.68.801(3)(b)). In either case, the mitigation must be "local," which is not defined.

The Northwest Clean Air Agency (NWCAA), in a letter dated September 25, 2019, stated:

. . . The NWCAA questions whether the mitigation required is actually possible to achieve locally. If the County's mitigation is required under SEPA, it's unclear whether such conditions are reasonable and capable of being accomplished. GHG emissions are a global concern, and there may be more cost-effective mitigation projects outside of Whatcom County. There are also existing GHG credit markets that could provide an alternative mitigation strategy. It may be useful to consider other strategies beyond mitigation projects locally. . . (pp. 3 and 4).

State law requires that any mitigation measures imposed pursuant to SEPA authority must be "reasonable and capable of being accomplished" (RCW 43.21.C.060). Additionally, state law generally prohibits counties from imposing ". . . any tax, fee, or charge, either direct or indirect, on the construction or reconstruction of residential buildings, commercial buildings, industrial buildings. . ." (RCW 82.02.020). There are some exceptions, one of which requires the funding to be used to "mitigate the identified, direct impact" of the project within a five year time period. There may be legal arguments about the application of these statutes, and we will defer to the legal experts on questions about the law. However, there are also practical issues relating to the proposed zoning code's "local" mitigation language.

NWCAA's September 25, 2019 letter references GHG mitigation fees it received for a hydrogen plant at Cherry Point, which was estimated to create 438,537 tons/year of CO₂ equivalents (p. 4). In 2012, NWCAA received a one-time payment of \$4 million in GHG mitigation fees for this project. NWCAA has been looking for mitigation projects in their three-county jurisdiction (Whatcom, Skagit, and Island counties) and "have found it difficult to find projects with significant GHG offsets." They have \$500,000 of the mitigation fees left and are searching for mitigation projects (seven years later).

Under the County Council's proposed code amendments, if the fee in-lieu option was used, the mitigation fee (\$60/ton of carbon) for the above

referenced hydrogen plant would be \$26.3 million per year for the life of the project (e.g. over any given seven year period, this would equate to \$184 million). As mentioned, NWCAA received a one-time payment of \$4 million in GHG mitigation fees and is still looking for projects in the three-county region seven years after receiving the fee. Given this experience, Planning Commission should consider whether the County required mitigation would be “capable of being accomplished” (if imposed under SEPA) or could be expended within five years (if imposed under RCW 82.02.020) if such fees could only be used for “local” projects.

Policy Question: A question for the Planning Commission is whether the term “local” should be removed from the proposed code (or replaced with a larger geography). This issue may require additional review by legal counsel (e.g. Cascadia Law Group).

3. **Federal, State, Regional, and County Regulation of GHG Emissions**

The Northwest Clean Air Agency (NWCAA) letter of September 25, 2019 summarizes State Department of Ecology and NWCAA regulation of GHG emissions as follows:

. . . Ecology regulates GHG emissions when a project triggers the requirement for a Prevention of Significant Deterioration permit for another regulated air pollutant and the GHG emissions exceed 75K tons per year. WAC 173-400-110(5)(b). In such instances, Ecology establishes the Best Available Control Technology (BACT) for the GHG emissions.

Historically, if the amount of GHG emissions have been between 75K tons and 25K tons per year, NWCAA has required mitigation for GHG emissions relying on its SEPA authority – implemented and enforced through a NWCAA issued permit. If the amount of GHG emissions is less than 25K tons, the NWCAA has not historically required mitigation under its SEPA authority. . . (p. 1).

There are a number of provisions in the proposal, shown below, that address the relationship between Department of Ecology, NWCAA, and County regulation of GHG emissions (the text below is from the County Council proposal with previous PDS additions shown with underlining):

Proposed WCC 16.08.160.E (SEPA provisions)

Many of the environmental impacts addressed by these SEPA policies are also the subject of federal, state and regional regulations. In deciding whether these regulations provide sufficient impact mitigation, the County shall consult orally or in writing with the responsible federal, state or other agency with jurisdiction and environmental expertise and may expressly defer to that agency. The County shall base or condition its project decision on compliance with these other existing regulations, rules, laws, or adopted enforceable plans. The County shall not so defer if such regulations did not anticipate or are otherwise inadequate to address a particular impact of a project.

Staff Comment: What constitutes “inadequate” regulation under federal, state, and/or regional regulations? If State Department of Ecology and/or NWCAA require an air quality permit for an industrial project in the Cherry Point area, and require Best Available Control Technology to bring down potential emissions but does not require mitigation of the remaining emissions, is that a situation of “inadequate” regulation where the County would step in to require GHG mitigation?

Proposed WCC 16.08.160.F.1.a (SEPA provisions)

. . . Mitigation of criteria pollutant impacts will normally be the subject of air permits required by the Northwest Clean Air Agency (NWCAA) and/or State Department of Ecology (DOE) and no further mitigation by the County shall be required. However, where a project being reviewed by the County generates public nuisance impacts, odors or greenhouse gas emissions impacts not addressed through the regulations of NWCAA or DOE, the County may require mitigation under SEPA.

Staff Comment: The NWCAA indicated, in an e-mail of September 30, 2019, that EPA’s definition of criteria pollutants does not include the entire group of greenhouse gases (for example, carbon dioxide and methane are not criteria pollutants, while nitrous oxide is a criteria pollutant).

This proposed SEPA provision states that mitigation of *criteria pollutants* would “normally” be subject of Department of Ecology or NWCAA permits and, therefore, no further mitigation by the County will be required for *criteria pollutants* (which include nitrous oxide, a GHG). However, this proposed SEPA provision could potentially require County mitigation for other GHG emissions (carbon dioxide and methane). Additionally, the Heavy Impact Industrial Zoning provisions require mitigation for projects that increase GHG emissions (which include carbon dioxide, methane, and nitrous oxide) above baseline. The focus of the subject amendments is GHG emissions. Is it necessary to have a provision specifically relating to “criteria pollutants” or are the more general provisions relating to air quality and/or GHG emissions sufficient?

Proposed WCC 16.08.160.F.1.b (SEPA provisions)

. . . Mitigation may be achieved through the provisions contained in County zoning regulations or through the State Environmental Policy Act where zoning code provisions do not address mitigation of greenhouse gas emissions impacts.

Staff Comment: The SEPA provisions default to/rely upon the Zoning GHG mitigation requirements when applicable. As currently proposed, the Zoning regulations would require GHG mitigation for fossil fuel projects that cause any increase in GHG emissions over the baseline emissions.

Proposed WCC 16.08.160.F.1.b.i(c) (SEPA provisions)

Greenhouse gas emissions impacts may be offset for proposals subject to WCC 20.68.801 through either code requirements or, if not addressed through code requirements, through mitigation projects that provide real, additional and quantifiable greenhouse gas mitigation. Such mitigation must not be required by any other regulatory mechanism and there shall be no double counting of emission reductions where identified as mitigation of greenhouse gas emissions impacts for permits subject to WCC 20.68.801.

Staff Comment: The double counting language should be clarified. It seems to indicate that, if mitigation is required by a different agency, then the mitigation under the County Code will be different and additional. How does this fit with the concept that, if another agency requires adequate mitigation, County mitigation is not required?

Proposed WCC 16.08.160.F.1.c (SEPA provisions)

. . . Federal, state, regional, and county regulations and programs cannot always anticipate or adequately mitigate adverse air quality impacts. If the decision-maker makes a written finding that the applicable federal, state, regional, and/or County regulations did not anticipate or are inadequate to address the particular impact(s) of the project, the decision-maker may condition the proposal to mitigate its adverse impacts or, if impacts cannot be mitigated, may deny a project under the provisions of the State Environmental Policy Act.

Staff Comment: This provision addresses air quality in general, which includes GHG emissions and other emissions.

Proposed WCC 20.68.801(3)(a) (Zoning Provisions)

. . . Greenhouse gas mitigation proposed by the applicant shall be additional, real and quantifiable and shall not be required under any other regulatory mechanism.

Staff Comment: This is similar to the SEPA language in proposed WCC 16.08.160.F.1.b.i(c). See comment above.

Proposed WCC 20.68.801(3)(c) (Zoning Provisions)

Should a national or state greenhouse gas mitigation requirement be adopted that pre-empts or would cause duplication through local greenhouse gas mitigation, the County shall defer to the national or state program.

Staff Comment: Staff assumes that the federal Clean Air Act and the Washington Clean Air Act (RCW 70.94) are not considered existing national or state GHG mitigation programs under the proposed County Code above. If they were, then the County's proposed GHG provisions would be unnecessary. Therefore, this provision preventing duplicative mitigation would not be operative at the current time (but could be at a future date).

Policy Question: In summary, there are a number of questions relating to how the various governmental rules and regulations relate to one another. Should the provisions outlining the relationship between federal, state, regional, and County GHG emission rules be clarified and/or simplified? One step towards simplification could be to address GHG emissions only through SEPA, rather than through both SEPA and the County Zoning Code.

4. Definition of "Expansion"

The Council proposal requires a conditional use permit for "expansion" of existing fossil fuel refineries, fossil fuel transshipment facilities, renewable fuel refineries, and renewable fuel transshipment facilities (proposed WCC 20.68.153 and .159). The proposal also uses the term "expansion" in a number of other provisions, including the SEPA provisions (proposed WCC 16.08.090) and the GHG provisions (proposed WCC 20.68.801). However, "expansion" is not defined.

Policy Question: A question for the Planning Commission is whether the term "expansion" should be defined or clarified. Uses set forth in proposed WCC 20.68.802(1) and (2) are permitted uses (do not require a conditional use permit). One option would be to state that any improvement not permitted outright (e.g. not included in WCC 20.68.802(1) and (2)) is an "expansion" that requires a conditional use permit.

5. Change of Use Provisions

The Council proposal includes new "Change of Use" provisions in the Cherry Point Industrial District (proposed WCC 20.74.110). Some of the public comment letters have expressed concern about changing existing transshipment facilities associated with the refineries to crude oil export facilities. This concern has arisen because, in December 2015, the US Congress lifted a ban on exporting most crude oil. The export ban had been in place since 1975. In any event, there are several ways the zoning provisions could be interpreted for this scenario:

- Would it be considered a "new fossil fuel transshipment facility" that is prohibited under proposed WCC 20.68.205?
- Would it be an "expansion" of an existing transshipment facility that requires a conditional use permit under proposed WCC 20.68.153?
- Would it simply be a "change of use" that requires only a Type I permit, administratively approved by staff under proposed WCC 20.74.110 and WCC 22.05.020(1)?

The "change of use" zoning provisions would be unique to the Cherry Point area, as such provisions do not exist in other zoning districts. In other zoning districts, when a change of use is proposed, staff would review the zoning regulations to determine if the new use is a permitted use, an accessory use, allowed as an administrative approval use, allowed with a conditional use permit, or prohibited. The proposed change of use provisions create an added

degree of uncertainty over how the regulations would be applied to the Cherry Point area.

Policy Question: A question for the Planning Commission is whether the change of use provisions in proposed WCC 20.74.110 should be clarified or deleted? If the Planning Commission recommends keeping the “change of use” provisions, but clarifying the language, additional review by legal counsel (e.g. Cascadia Law Group) may be needed to address potential legal issues regarding the extent to which the County may regulate exports. If the “change of use” provisions are deleted, staff would rely on the underlying provisions of the zoning code to regulate change of use, as described above for the other zoning districts.

Thank you for considering these issues. We look forward to discussing them with you.