

U.S. OIL & REFINING CO.

November 18, 2021

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Linda Kildahl
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PO Box 47600
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Subject: U.S. Oil & Refining Co. Comments on Draft Second Regional Haze Plan State Implementation Plan Revision

Reference: (a) Letter Dated February 15, 2021 from Ty Gaub (U.S. Oil) to Colleen Stinson (Ecology) Providing Comments on Ecology's Proposed Regional Haze Revisions to the State Implementation Plan

Dear Ms. Kildahl:

U.S. Oil & Refining Co. (USOR) provides the following comments on the Department of Ecology's State Implementation Plan (SIP) revision for Washington's Regional Haze plan for the second planning period for the years 2018-2028.

I. Regional Haze Emission Reductions at USOR Are Not Cost Effective

In the draft Regional Haze SIP Ecology concluded that "...additional controls are likely not cost effective..." at USOR, since the calculated cost effectiveness exceeded \$15,000/ton for nitrogen oxides (NOx) emissions. USOR concurs with this conclusion.

Ecology goes on to state that it will do a reasonability analysis "...to develop more robust and defensible cost data" for its economic feasibility assessment in the final SIP. USOR believes that this additional work is not necessary. As Ecology pointed out in the draft SIP, the cost effectiveness calculations prepared by Ecology and USOR are very similar, and both estimates are based on the U.S. Environmental Protection Agency's Cost Control Manual (which Ecology accepts as a credible methodology). As shown in Table 7-22 of the draft SIP, the only material difference between Ecology's cost calculations and those developed by USOR are in the annualized cost category -- USOR calculated the annual cost of installing selective catalytic reduction (SCR) controls on Heater H-11 at \$522,175 while Ecology's calculation for that element is \$437,150. Both calculations assumed a 20-year service life for the control device.

While not shown in the draft SIP, USOR suspects that this difference in calculated cost stems from the interest rate that Ecology used for calculating financing costs associated with the control's capital investment. In Appendix J to the draft SIP, Ecology's cost calculation sheet shows that an interest rate of 3.25% was used for the paper mill source category when calculating annualized costs. We infer that same interest rate was used to calculate the annualized control cost for USOR.

Per reference (a), USOR commented to Ecology on February 15, 2021 during the "informal" comment period offered to stakeholders for the Regional Haze SIP that using a 3.25% interest rate is not consistent with either the federal Regional Haze guidance or the EPA Cost Control Manual. The 3.25% interest rate also does not reflect realistic borrowing rates for a

small company like USOR. Please refer to Comment III in USOR's February 15, 2021 letter for a full explanation of why we believe the correct interest rate for making the cost effectiveness calculation should be 7%. We reiterate that comment here and urge Ecology to consult the references cited in our February 15th letter, along with the information provided in USOR's 4-Factor Analysis document describing our company's historical borrowing rates. If the 7% interest rate had been used in Ecology's cost effectiveness calculation the agency's calculation would have exceeded \$19,000/ton, making this control cost even more unreasonable than the estimate Ecology presented in the draft SIP.

In summary, we do not believe that it is necessary for Ecology to develop additional cost data for controlling NOx emissions from USOR's small emission source. The estimates that have already been developed by both Ecology and USOR adequately demonstrate that installing NOx emission controls on Heater H-11 would be dramatically higher than any reasonable Regional Haze control cost threshold. There is no reason for Ecology to devote more of its limited resources to additional cost analysis for USOR.

II. USOR is an Insignificant Contributor to Regional Haze Impacts

Even though the best available information already indicates that additional emission controls at USOR do not meet the cost-effectiveness test established for the Regional Haze regulation, USOR's Tacoma refinery should have been deferred from Ecology's Regional Haze analysis due to its insignificant impact on Class I Area visibility.

As shown in Table 7-5 of the draft SIP, USOR's crude oil processing capacity is less than 30% of the average capacity of the other four Washington petroleum refineries. In terms of the metric that is the predominant factor for determining a source's potential impact on Regional Haze (Q/d , where "Q" is the annual pollutant emission rate and "d" is the distance to the nearest Class I area) USOR's visibility impact value is less than 9% of the average Q/d from the other four Washington refineries. *In fact, at a value of 3.2, USOR's Q/d metric is nearly 70% lower than the screening threshold of 10 that Ecology applied to select the facilities that were evaluated for Regional Haze emission reductions in this planning period.* By all objective measures, USOR's impact on Class I Area visibility is not comparable to the other sources that Ecology evaluated for potential emission reductions in the draft SIP. We therefore reiterate our objection to being included in the draft SIP analysis for the second planning period.

The draft SIP recognizes three viable methods for implementing necessary Regional Haze emission controls for sources that materially affect Class I Area visibility:

- Permit modifications
- Agreed Orders
- Reasonably Available Control Technology (RACT) regulations promulgated under RCW 70A.15.2230

The draft SIP states that due to "limited resources" Ecology has chosen to apply the RACT rulemaking process to the petroleum refining sector. USOR reiterates its comment provided in the February 15, 2021 correspondence on this matter. Specifically, when the RACT process is triggered, controls deemed to be reasonably available are applied to all sources within that industry category after accounting for the impact of the control on air quality, the availability of controls, the emission reduction to be achieved, and the costs of those controls. In light of USOR's immaterial impact on visibility in Class I Areas, the draft SIP makes it clear that the only reason the USOR Tacoma refinery is evaluated for potential emission reductions is its existence within an industry source category for which a RACT regulation is planned. Thus, using the RACT process for driving Regional Haze emission reductions inappropriately captures the USOR facility. Any emission control applied at USOR's refinery would provide a negligible improvement to air quality. Were it not for the uniform application of RACT requirements across the entire petroleum

refining source category, USOR would not have been considered for Regional Haze controls for this planning period, just like dozens of other Washington sources that have a Q/d value less than the screening threshold of 10.

USOR therefore requests that Ecology revise its plan to use the RACT process as the enforcement mechanism for Regional Haze emission reductions from Washington petroleum refineries. Ecology's draft SIP acknowledges that other regulatory mechanisms are available to achieve the agency's objective for reasonable progress toward the Regional Haze goal. Using permit modifications or Agreed Orders would allow Ecology to appropriately tailor its enforcement approach to meet that objective without incorrectly capturing sources that would produce insignificant visibility benefit.

Conclusion

Applying established regulatory criteria should exclude USOR's Tacoma refinery from mandated emission reductions in the current Regional Haze planning period for two primary reasons:

- The cost of the identified potential emission control is not reasonable, and
- The USOR facility was inappropriately captured within the group of facilities evaluated in the draft Regional Haze SIP despite having an insignificant impact on Class I Area visibility.

Thank you for considering these comments. Please contact Mike Brygger or myself at 253-383-1651 or via email. Mike's email is mbrygger@parpacific.com and mine is tgaub@parpacific.com if questions arise following your review of this material.

Sincerely,

U.S. OIL & REFINING CO.



Ty J. Gaub
Environmental Manager

Cc: AJT, RLG, DKN, MHB, AAJ, DEB, BDM

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