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James Verburg
Sr. Environmental Engineer
bp Cherry Point Refinery

November 16, 2021

Rachel Assink
Department of Ecology
Air Quality Program
P.O. Box 47600
Submitted via [Electronic Upload](#)

Re: bp Comments on Proposed Update to Chapter 173-441 WAC, Reporting of Emissions of Greenhouse Gases

Dear Ms. Assink:

On behalf of bp's Cherry Point Refinery ("bp" or "Cherry Point"), thank you for the opportunity to comment on the Washington Department of Ecology's ("DOE") proposed updates to the Reporting of Emissions of Greenhouse Gases ("GHG") regulations in Chapter 173-441 WAC ("Proposed Updates").

bp's ambition is to become a net zero company by 2050 or sooner, and to help the world reach net zero. Consistent with our ambition, we advocate around the world for policies addressing GHG emissions.

bp supported the enactment of the Climate Commitment Act ("CCA"), S.B. 5126., pursuant to which DOE published the Proposed Updates. The CCA is a ground-breaking rule that creates a comprehensive and market-based cap-and-invest program to curb emissions. The CCA will address climate change by providing the certainty businesses need to invest in the future and by incentivizing and rewarding low carbon innovation across the economy. Along with the complementary legislative efforts in Washington's new, comprehensive "360-degree" approach for achieving net zero—including the Clean Fuels Program, H.B. 1091, and the forthcoming Greenhouse Gas for Projects Assessment ("GAP") Rule—bp believes that the CCA can become a model for other states looking to accelerate their own low carbon transition.

bp believes that DOE's Proposed Updates are a solid first step towards establishing a workable framework for reporting GHG emissions under the CCA, but that there are multiple aspects of the Proposed Updates on which additional clarity is needed. In addition, bp believes that select provisions in the Proposed Updates require minor revisions to promote efficiency and consistency.

1. Suppliers of Carbon Dioxide

bp has multiple comments regarding how the Proposed Updates address suppliers of carbon dioxide:

- **Definitions & Applicability:** Proposed WAC 173-441-020(p)(ii) defines *supplier* as a “[s]upplier of carbon dioxide that produces, imports, or delivers a quantity of carbon dioxide in Washington that, if released, would result in emissions in Washington.” This definition does not establish a point of regulation. For example, Cherry Point supplies carbon dioxide to third-party distributors in Washington state. Cherry Point, however, has no knowledge, nor any way of knowing, if the carbon dioxide it supplies to these third-party distributors is ultimately released in Washington state or out of state.

Additional clarity is needed to provide certainty on how the Proposed Updates will be implemented. For example, Proposed WAC 173-441-120(5)(a) and Proposed WAC 173-441-122(1) would require Cherry Point to include supplier of carbon dioxide emissions as part of its facility report, if those emissions are released in Washington state. Cherry Point is uncertain whether or how to address carbon dioxide it supplies to third party distributors under this provision.

bp recommends that DOE consider adopting the definition of *supplier* used in the Federal GHG Reporting Rule, See 40 C.F.R. 98.428, which establishes clear points of regulation.

- **Responsible Reporter:** Proposed WAC 173-441-122(3)(b)(i) requires the reporting of production process units in Washington state that capture a carbon dioxide stream for purposes of supplying carbon dioxide to another entity or facility, or that capture the carbon dioxide stream to utilize it for geologic sequestration. This language does not specify whether the reporting obligation is imposed on the supplier or recipient of this carbon dioxide. bp recommends that DOE resolve this ambiguity by allowing suppliers to report this carbon dioxide as transferred to another state under 40 C.F.R. Part 98, similar to the provisions for natural gas suppliers at WAC 173-441-122(4)(b)(vi).
- **Expansion to Cover Additional Carbon Removal Projects:** To best encourage businesses to employ carbon removal technologies, bp believes that the current language in Proposed WAC 173-441-122(3)(b)(i) needs to be expanded to capture additional carbon removal technologies. In order to ensure that carbon removal efforts are adequately recognized, this language needs to include, at a minimum, direct air capture and carbon sequestration technologies.

2. Carbon Removal Credit:

It is unclear whether the Proposed Updates were intended to address whether or how facilities may receive credit for carbon dioxide exported from Washington state for purposes of carbon capture, utilization and sequestration (“CCUS”). bp requests that DOE clarify whether emissions export under this scenario may be designated under the Proposed Updates, or whether this issue will be addressed in DOE’s rulemaking on Chapter 173-446 WAC.

3. Complexity-Weighted Production Data & the California Air Resources Board's ("CARB") Mandatory GHG Reporting Regulation

Proposed WAC 173-441-050(3)(n)(i), at Table 050-1, incorporates Section 95513(l)(3) of the CARB's Mandatory Greenhouse Gas Reporting Regulation ("MMR") in defining a production metric for petroleum refineries and specifying how supporting data must be submitted to DOE. Section 95513(l)(3)(E) provides that "[a]ll throughputs must follow the accuracy requirements outlined in [CARB MMR] section 95103(k)(1)-(10)."

bp believes that a reasonable implementation period is needed to assure these requirements. Cherry Point has never had to comply with this California-specific requirement, and the requirements appear complex. Implementing and calibrating the meters and equipment necessary to ensure compliance with these requirements likely will be a significant undertaking. If the Proposed Updates are enacted in their current form, bp does not believe 11 months is adequate to ensure that all of the required facilities are in place and properly functioning in order to meet this new requirement. bp requests that it be afforded the opportunity to implement the new requirements over a longer time period considering the potential need for unit shutdowns. We would welcome the opportunity to work with you and other refinery operators in the state to discuss an appropriate timeline.

4. Data Substitution Provisions:

bp has multiple comments regarding how the Proposed Updates address data substitution:

- **Analytical Data Capture Rate:** Proposed WAC 173-441-050(8)(h)(i)(A) provides that "[i]f the analytical data capture rate is at least 90 percent for the data year, the person must substitute for each missing value using the best available estimate of the parameter, based on all available process data." The term *analytical data capture rate*, however, is not defined, and, as a result, this provision raises several questions. For instance:
 - How will the facility be required to document the data availability for each flow meter?
 - Does this term include laboratory analyses?
 - Does this term include meter repair provisions or impose required timelines for repair?
 - Is this provision limited to continuing emissions monitoring systems ("CEMS"), fuel flow meters, custody transfer meters, and major components of any Tier 3 or 4 Part 98 meters?

bp requests that DOE provide a definition for the term *analytical data capture rate* and address the above questions. In addition, bp requests that DOE clarify whether an extension can be obtained for facilities that have not already installed the necessary meters.

- **DOE Should Adopt Data Substitution Provisions that Can Provide “Best Available Information”:** bp notes that the data substitution provisions outlined in Proposed WAC 173-441-050(8)(h)(i)(A) through (C)(ii) will result in two sets of numbers, which can lead to data inaccuracy. One of these numbers will be calculated pursuant to the missing data provisions in Title 40 C.F.R. Part 98, while the other set will be established pursuant to WAC 173-441-050. In bp’s view, of the latter of these calculation methodologies has the potential to overstate or under-state emissions, as they may not be appropriate for use with metering instrumentation subject to less frequent calibrations and inspections than CEMS. Given that CEMS undergo daily drift checks and calibrations, data invalidation due to excess drift typically results in small blocks of “missing data” subject to data substitution lasting no more than 24 or 48 hours. Conversely, for other measurement devices that are calibrated annually or less frequently, excess drift could result in very large blocks of invalidated data lasting months or years. bp suggests that DOE adopt data substitution provisions subject to DOE approval that can provide “best available information” (*see* WAC 173-441-050(8)) based on engineering estimates, average values between the first and last good data points, or other means that will be subject to third party verification. In bp’s view, this alternative methodology will provide more robust data and more accurate data substitutions and will best reflect the nature of operating conditions, which change over time. Alternatively, DOE could adopt the CARB MMR regulation addressing alternative methodologies and temporary methodologies for conventional metering or methods that are not feasible. *See* Cal. Code Regs., tit. 17, § 95103(m).
- **Highest Quality Assured Value Recorded & Best Available Estimate:** Proposed WAC 173-441-050(8)(h)(i)(B) provides that “[i]f the analytical data capture rate is at least 80 percent but not at least 90 percent for the data year, the person must substitute for each missing value with the highest quality assured value recorded for the parameter during the given year, as well as the two previous data years.” Proposed WAC 173-441-050(8)(h)(i)(C)(iii) provides that if the analytical data capture rate is less than 80 percent for the data year, then the person must substitute for each missing value “by using the best available estimate of the parameter based on all available data.”

As used in these provisions, neither “*highest quality assured value recorded*” nor “*best available estimate*” are defined terms. As such, the Proposed Updates are unclear as to what specific data should be collected. For example, should data be collected for the current reporting year, or should all available data be collected? bp requests that DOE define these terms.

- **Incongruity with Federal MMR Reporting Requirements:** bp notes that the Proposed Updates’ missing data provision is inconsistent with the federal missing data provisions found at 40 C.F.R. § 98.425. This inconsistency will require that missing data be reported in two different quantities. bp recommends that DOE align the Proposed Updates’ reporting requirements with the federal MMR requirements.

- **Verification of Missing Data:** Proposed WAC 173-441-085(4)(b)(ix)(F) provides that third-party verifiers must “[a]ssess conformance with measurement accuracy, data capture, and missing data substitution requirements.” bp believes that providing additional clarity on the missing data requirements, as discussed above, is necessary for third-party verifiers to conduct this analysis in a consistent matter.

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We hope these comments and questions are helpful in your deliberations. Please feel free to contact me at james.verburg@bp.com or 360-526-3901 if you would like to discuss further.

Sincerely,

A handwritten signature in blue ink, appearing to read "James Verburg", with a stylized, flowing script.

James Verburg
Senior Environmental Engineer