

Department of Environmental Quality

Northwest Region

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Response to Comments – Proposed Air Contaminant Discharge Permit (05-0023-ST-01) for Cascade Kelly Holdings LLC, dba Columbia Pacific Bio-Refinery

Background

Cascade Kelly Holdings, LLC, applied to DEQ for a new Standard Air Contaminant Discharge Permit for a bulk organic liquid products storage and marine vessel loading operation to be established at 81200 Kallunki Road, Clatskanie, Oregon. Cascade Kelly Holdings LLC, will do business as Columbia Pacific Bio-Refinery (CPBR or the permittee). Crude oil and ethanol will be received by rail, transferred to storage tanks and then dispensed to marine vessels. The maximum crude oil and ethanol throughput for the facility will be 1,839,600,000 gallons per year.

DEQ prepared a draft Air Contaminant Discharge Permit (the permit) and proposed it for public review and comment in a public comment period that began on February 28, 2014. The comment period was originally scheduled to end on April 11, 2014. DEQ held a public information meeting and public hearing for the proposed permit on April 3, 2014 at Clatskanie High School in Clatskanie, Oregon. During the hearing DEQ received multiple requests for an extension of the comment period. DEQ extended the public comment period until 5 p.m. on Monday, May 5, 2014, in consideration of the requests.

This report and Response to Comments provides DEQ's responses to the public comments submitted during the comment period and public hearing.

History

Cascade Kelly Holdings, LLC, dba Columbia Pacific Bio-Refinery owns an existing, permitted ethanol manufacturing facility (permitted under Standard ACDP 05-0006-ST-01) at the location of this proposed new source. Ethanol manufacturing is presently not being performed. The ethanol manufacturing facility includes equipment and activities common to Marine Vessel Petroleum Loading and Unloading (e.g., bulk product storage tanks, barge loadout operations, associated emission controls). On June 26, 2012 DEQ approved a modification of the ethanol plant permit allowing CPBR to receive and transload up to 50,000,000 gallons of crude oil per year. DEQ approved this request because the action resulted in de minimis emissions and could be performed with existing equipment and emission controls. In 2013 DEQ found the permittee was consistently performing crude oil transloading in annual quantities exceeding the 50,000,000 gallons per year DEQ had approved. Under DEQ rules this action resulted in CPBR establishing and operating a new "major source" of air contaminant emissions for the activity Marine Vessel Petroleum Loading and Unloading. On March 27th, 2014 DEQ issued the company a formal enforcement action (Notice of Civil Penalty and Order, Case No. AQ/AC-NWR-14-014) to address the violation. CPBR is contesting the enforcement action.

Public Comment

Comments received during the public comment period as well as comments received at the public hearing are summarized or stated below. DEQ responses follow each comment or group of comments. Most of the comments and the public input received by DEQ were focused around common concerns and perceptions.

Where similar comments were provided by multiple persons, DEQ has summarized or grouped the comments/concerns.

Comments are organized according to the following categories:

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1. Comments proposing DEQ actions that include or result in the regulation of trains and train activities associated with CPBR and its operations

Summarized Comment(s): DEQ received numerous comments requesting DEQ regulate trains and train activities associated with CPBR and its operations. The following are provided as examples, but are not an exhaustive list of such comments:

- Comment: Mike Seely, Seely Family Farm Incorporated They [trains] certainly drive slow enough around out there, so that part of it, they're very safe about. Our concern is... the trains sit there on Kallunki Road for 30 to 45 minutes. This directly impacts us significantly financially. We have farms on the other side of the railroad tracks. This is causing us a lot of duress and many, many thousands of dollars, because we cannot get to our farm in a timely manner. We need this resolved.
- Comment: The latest [Bakken crude oil related] disaster involved an oil-laden train occurred in Virginia recently. Oil tanker cars exploded, and oil spilled into a major river. These disasters keep happening. Expanding the oil terminal at Port Westward will bring more oil trains to this location. I urge you to spare the Pacific Northwest from certain oil spills and train derailings, and possible explosions. Deny any permits that allow for expansion of this oil terminal. Thank you.
- Comment: Miles Johnson, attorney with Columbia Riverkeeper Riverkeeper works to protect the Columbia and the Columbia River estuary and its people, its water quality, and its fish and wildlife. DEQ's regulations give it the responsibility and authority to look broadly at all the impacts of this crude oil terminal. DEQ's rules regarding air permits [at] OAR 430-216-0082 4(b), say that DEQ may revoke or refuse to issue a permit if there is, quote, "...a serious danger to public health, safety, or the environment, caused by the permittee's activities." That is, the permittee's activities, not the air permit or the air emissions, although those are serious -- serious problems here. There's clear danger to public health. Look at Quebec and North Dakota. DEQ has the responsibility to protect us by revoking and denying these permits.
- Comment: While this project may "create jobs," dividends for stockholders, and increase GDP, the disastrous long term ramifications far outweigh these transient and ephemeral gains for oil companies and their ilk. This is especially the case given the recent history of incidents of this same crude oil in North Dakota. This particular crude is particularly volatile and prone to exploding, killing many nearby. This has happened a number of times and there is little reason to believe it will not happen

- again esp. given the lack of oversight by ODOT. Considering that these trains literally pass within 150' of my house in Salem and the number of trains would only increase, were this permit issued, I would personally be put at greater risk.
- Comment: Marsha Denison, Director of Pacific Rainforest Wildlife Guardians I live in Rainier, Oregon. I'm against the air pollution permit and increase for Cascade Kelly Global Partners hauling -- I haven't had any sleep in two days -- Marathon Oil Company's oil... Starting with rail lines, these are part of the facility as much as the crumbling docks built in World War II. The trains most visible particulates, um, of all sizes, up to a third of an inch in diameter, wafts from engine exhaust pipes and flow in all directions. This already violates the permit. It would be exploded in size if the permit were approved.
- Comment: Ryan Rittenhouse I work for Friends of the Columbia Gorge. The Friends of the Columbia Gorge is very concerned with all of the many new oil terminals popping up, mostly because of the oil trains that would be transporting this Bakken oil crude to them. This Bakken oil crude is ... highly explosive. There have been a number of accidents in the last year alone. So we're very concerned about that and we're very concerned about the possibility of that happening in Gorge communities and the communities along the railroad route. That is our main concern and we do think that DEQ can consider that in this permit. The Portland ports have issued a moratorium until these safety concerns are addressed.
- Shared Comment: Northwest Environmental Defense Center, Columbia Riverkeeper, Neighbors for Clean Air, the Center for Biological Diversity, and the Sierra Club Global's [CPBR's permit] application fails to identify the type of volatile organic liquid it intends to receive and ship at the facility. Instead, Global [CPBR] notes that "crude oil will be received at the facility from various sources which may contain variable fractions of light-end hydrocarbons and sulfur compounds." Assays for crude oil as provided by suppliers fail to provide the detail necessary to ensure safe handling. Global [CPBR] defers in its additional information documents to the assays provided by suppliers. Reliance on the characterization from shippers is inadequate because when transported by rail, "it is likely that the temperature of the hazardous material loaded into the car is lower than the reference temperature," leading to overloaded tank cars, leaks from valve fittings or manway enroute, and insufficient outage as required for safe transport.

DEQ response: DEQ's permitting action is confined to the equipment and activities of the CPBR stationary source that emit air contaminants. The permit proposed for issuance to CPBR is an Air Contaminant Discharge Permit; its content is specific to the regulatory requirements of DEQ's stationary source air quality program. While public health and safety is an element of DEQ's authoritative concern, our ability to address this is confined to our ability to regulate air contaminant emissions from the source under our regulatory authority. DEQ's authority in this permitting action is defined within the Oregon Administrative Rules. DEQ reviewed the CPBR facility's operations and design in a manner consistent with this defined regulatory authority. Our review did not find the facility's current or proposed operation to present an imminent danger to human health or the environment.

The incidents in Quebec and North Dakota referred to by commenters were associated with oil train accidents. Although there are some Clean Air Act requirements related to emissions from the transportation sector, including in some instances, from trains, in general, DEQ does not have authority to regulate trains or railroad activities. Trains are regulated by the United States Department of Transportation Federal Railroad Administration and the Oregon Department of Transportation Rail Safety Division.

No applicable requirements associated with the Air Quality program pertain to the commenters' points of concern. The comments raise points and concerns outside of DEQ's authority and so, DEQ cannot act to deny or modify the permit as requested.

2. Comments endorsing DEQ's issuance of the proposed permit to CPBR

Summarized Comment: DEQ received numerous comments endorsing the issuance of the proposed permit to CPBR. Many of these comments identified various economic benefits associated with the facility and job creation.

DEQ response: None of the commenters endorsing DEQ's issuance of the proposed permit identified elements of the permit action that required change or re-evaluation. No further consideration by DEQ is necessary for this comment category.

3. Comments regarding the compliance status of CPBR and/or DEQ's enforcement action issued to CPBR on March 27th, 2014 (Notice of Civil Penalty and Order, Case No. AQ/AC-NWR-14-014)

Summarized Comment: DEQ received numerous comments associated with the compliance status of CPBR and/or DEQ's enforcement action issued to CPBR on March 27th, 2014. Many of the comments request DEQ deny the permit proposed for CPBR based on the company's compliance history and perceived disregard for the State's air pollution laws. Some commenters also requested DEQ shut down operations of the transloading facility and to additionally rescind the existing permit issued to CPBR for its ethanol manufacturing facility.

- Shared Comment: Northwest Environmental Defense Center, Columbia Riverkeeper, Neighbors for Clean Air, the Center for Biological Diversity, and the Sierra Club (the "Clean Air Groups") Global [CPBR] has operated and is operating without a permit in violation of the CAA, Oregon's SIP, and Oregon's regulations. Global [CPBR] cannot rely on the air permit that authorized discharges from ethanol manufacturing to cover air discharges from crude oil transloading activities.
- Shared Comment: the "Clean Air Groups" Based on Global's [CPBR's] blatant disregard for the requirements under the CAA, DEQ should revoke Global's [CPBR's] existing permit and refuse to issue the proposed permit.

DEQ response: On March 27, 2014, DEQ issued a formal enforcement action to CPBR for violations including establishing and operating a new air contaminant source without a permit. The enforcement action included a civil penalty of \$117,292. The penalty was calculated following DEQ's established procedures. CPBR disagrees with DEQ's findings and has requested a contested case hearing to challenge the violations and penalty. DEQ has considered its pending enforcement action in its review of this permit application and concluded that, even if DEQ's enforcement action is upheld, the penalties to be imposed through that action will be appropriate deterrence and such violations alone would not warrant the denial of this permit application.

DEQ reviewed the CPBR facility's operations and design in a manner consistent with DEQ's regulatory authority as defined within the Oregon Administrative Rules. DEQ's review determined the CPBR transloading terminal's physical and operational design is typical and consistent with the petroleum and volatile organic liquid terminaling industry. DEQ found no element of CPBR's physical or operational design that would compromise its ability to comply with applicable air quality regulations and standards.

In making a determination on whether or not to issue an order to cease operations DEQ must consider impacts related to air quality. This assessment does not include train or rail safety considerations. One commenter specifically cited OAR 340-216-0082 which provides DEQ the authority to "immediately revoke or refuse to renew the permit." The transloading facility is currently operating without a permit and DEQ's authority to require the facility to cease operations is based on Oregon Revised Statute 468.115 – "Enforcement in cases of emergency." DEQ reviewed the facility and the scope of the violations and determined that the facility was constructed and operating in a manner that would be in compliance with DEQ rules if the appropriate permit was in place. Our review did not find the facility's operation to present an imminent danger to human health or the environment. Therefore, DEQ did not act to seek an order requiring the facility to cease operations. DEQ's pending notice of violation states that the facility is currently operating without a permit. CPBR applied for the

appropriate permit and issuance of the proposed permit for the transloading facility will, in part, act to resolve the violations going forward. Consistent with Oregon statutes and rules, DEQ does not withhold issuance of a new air quality permit unless it is apparent that the facility, as built, will fail to comply with air quality regulatory requirements to which it is subject.

4. Comments associated with permit content, permit application adequacy or permitting procedures DEQ followed

Summarized Comment: Comments were received stating concerns that the application and permit did not address designs for local seismic issues.

DEQ response: A facility's seismic design is not a factor that DEQ considers as part of an air quality permitting decision. Seismic design considerations for this facility are generally addressed by Columbia County as part of its land use permitting and construction approval processes.

Summarized Comment: DEQ received numerous comments stating air pollution from the Port Westward [CPBR] crude oil terminal poses significant threats to public health and air quality. These comments requested DEQ examine and restrict all sources of dangerous air pollutants from the crude oil terminal's operations, including trains and marine vessels and requested DEQ to exercise its full authority to protect people, fish, and wildlife from pollution released at the rail and marine terminal and deny this air quality permit.

DEQ response: For this action, DEQ is charged with writing an Air Contaminant Discharge Permit that includes all applicable requirements associated with the facility. Permit requirements must have basis in rule; and DEQ cannot impose more or less stringent requirements on a facility without this regulatory basis. During preparation of the proposed permit for CPBR, DEQ examined the emission rates of regulated pollutants including hazardous air pollutants. The review report for the proposed permit outlines the emission units, processes and control devices that fall within DEQ's air quality authority and that were included in our review. The report identifies the maximum emissions allowed by the permit, which are established as plant site emissions limits (PSELs), and the maximum actual emissions expected for the facility. DEQ estimated the facility's maximum actual emissions based on its physical design and maximum crude oil throughput. The maximum expected emissions did not exceed the allowable PSELs, determined pursuant to DEQ rules, and were therefore approvable.

DEQ's Air Quality program issues permits for stationary sources of air contaminant emissions. Trains and marine vessels are mobile sources. Emissions from trains and marine vessels that come to or from the CPBR facility are defined in rule as "secondary emissions" (OAR 340-200-0020 (109)). Secondary emissions are not taken into consideration when assessing a facility's "potential to emit" (OAR 340-200-0020 (100)(c)) and are only considered as part of overall emissions for sources subject to the Major New Source review provisions of OAR Chapter 340, Division 224. As stated in the review report, the facility is not subject to the Major New Source Review provisions "because it is located in an area that is in attainment with all National Ambient Air Quality Standards and the requested VOC PSEL is less than the Federal Major Source threshold of 100 tons per year." (And all other regulated pollutant PSELs are also below the relevant threshold.) DEQ has written the proposed CPBR permit in accordance with the requirements of DEQ rules. As stated above, consistent with Oregon statutes and rules, DEQ does not withhold issuance of an air quality permit unless it is apparent that the facility, as built, will fail to comply with air quality regulatory requirements to which it is subject.

Comment: Paulette Lichatowich - Cascade Kelly Holdings, dba Columbia Pacific Bio-Refinery is applying for an air contaminant discharge permit for an oil terminal facility at Port Westward at Clatskanie, Oregon and is not a refinery as their name implies. Ethanol has not been refined there since 2008. Bakken crude oil is simply

pumped into tanks and stored and then later transferred onto marine vessels. Please clarify in the DEQ permit [application] documents that the facility is operating an oil terminal.

DEQ response: The name of the facility, as stated, is the legal name registered with the Secretary of State Corporation Division. In the current permit application for the transloading facility, CPBR identified its intent to terminal and transload ethanol as well as crude oil; and this is allowed under the proposed permit. DEQ evaluated a worst case emissions operating scenario for the transloading facility based on annual operations with 100% Bakken crude oil throughput. DEQ chose Bakken crude oil for the evaluation due to that crude oil's volatility being higher than the volatility of ethanol, which would result in higher calculated emissions.

CPBR's crude oil transloading activity is considered a new source under DEQ's air quality rules because: ethanol manufacturing and marine vessel petroleum loading and unloading have different SIC major groups (51 and 28), "Marine Vessel Petroleum Loading and Unloading" (SIC - 5171) is not a support activity of the ethanol manufacturing activity (SIC - 2869), and because "Marine Vessel Petroleum Loading and Unloading" is a unique source category referenced in Table 1 of OAR 340-216-0020. Therefore, a new, separate permit needs to be issued for CPBR to operate and expand the transloading facility. Therefore, the proposed permit for the transloading facility identifies it to be a new source, separate from the ethanol manufacturing facility. Once issued, the new permit will regulate all crude oil transloading related air contaminant emissions and related equipment and activities, as well as ethanol terminaling related emissions and activities. However, the proposed transloading facility permit only addresses the ethanol terminaling activities and associated emissions from ethanol product that originates from an outside source and is not manufactured by the "bio-refinery." Emissions from ethanol manufactured at the bio-refinery site, including loading of the manufactured ethanol product, will be addressed under the manufacturing plant's permit (05-0006-ST-01).

No further clarification of the application is needed.

Comment: Paulette Lichatowich - Significant discrepancies exist between the application and the document titled "Additional Information to Air Quality Permit Application." Page 1, paragraph 2 of the permit application states the two existing tanks "will be used for storage." But in their "Additional Information for Air Quality Permit Application" the answer to 2b states otherwise, "These two tanks are solely used for the transfer of material and not for storage." I request that DEQ evaluate the information presented in Appendix C of the additional information packet to determine if these two tanks meet the federal requirements [New Source Performance Standards] for use as storage tanks of Bakken crude oil.

New EPA rules effective August 2, 2013 say, "Storage tanks are used to temporarily hold liquids produced during the production and transmission of oil and natural gas. These storage tanks can emit ozone-forming volatile organic compounds (VOCs), along with several toxic air pollutants, including benzene. Storage tanks used in oil or natural gas production, and transmission are subject to EPA's 2012 New Source Performance Standards (NSPS) for VOCs if they have the potential to emit 6 or more tons of VOCs a year."

Questions: Did the applicant and DEQ use these updated EPA regulations? Is DEQ aware that benzene is a component of Bakken crude oil? Are there other components in Bakken crude oil that release atmospheric toxins that this DEQ permit should address?

DEQ response: DEQ evaluated CPBR's initial permit application and requested additional supplemental information on October 03, 2013. CPBR provided the requested information to DEQ on October 24, 2013. The document referenced by the commenter, "Additional Information to Air Quality Permit Application," is the requested information that CPBR supplied to DEQ on October 24, 2013. The permit application reference stating, "the two existing tanks will be used for storage," was a descriptive reference to the facility's two original 3.8 million gallon storage tanks (tanks TK6105 and TK6106). The additional information CPBR provided in the answer to 2b, identifying, "These two tanks are solely used for the transfer of material and not

for storage," is associated with two different tanks than those referenced above. The CPBR permit application proposed installation of two 36,000 gallon high pressure/process tanks (Railcar Unloading Tanks TK6151 and TK6152). DEQ requested additional information for these tanks as part of our NSPS applicability determination for the tanks. DEQ determined, as described below, the two tanks referred to above are not subject to the NSPS regulations [40 CFR Part 60, Subparts Kb and OOOO].

As described in DEQ's review report, the two process tanks (tanks TK6151 and TK6152) meet exemption criteria of NSPS Subpart Kb (40 CFR §60.110b (d)(2)) as they will serve as "process tanks" (surge control vessels) and are pressure vessels designed to operate in excess of 204.9 kPa [29.7 psi] without emissions to the atmosphere. Other tanks at the facility are subject to Subpart Kb and the proposed permit contains the necessary conditions to establish the applicable requirements of the federal rule.

The "New EPA rules effective August 2, 2013," noted by the commenter refers to NSPS Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution. DEQ does not currently have delegation of authority from EPA for this NSPS Subpart, so EPA is presently the implementing agency for the regulation. However, as described in the review report, DEQ reviewed the subpart for potential applicability and concluded that CPBR is not one of the affected facilities listed in 40 CFR §60.5365 (a) through (g) and is not subject to this regulation.

Crude oil is a mixture of many organic compounds and, as noted by the commenter, benzene is one of them. Benzene is one of 187 chemicals and chemical compounds that are regulated as hazardous air pollutants (HAPs). Benzene, and a number of other regulated HAPs, are present in the crude oil mixture in low concentrations. As part of the permit application DEQ required CPBR to submit information related to the HAP content of Bakken crude oil. DEQ reviewed this information to determine the potential emissions of both individual HAPs and total combined HAPs. DEQ used this evaluation to determine if the source would be a Major source of HAPs and require a Title V permit. As listed in the review report, CPBR's potential HAP emissions are below levels that would make the source a Major source of HAPs and require a Title V permit; the source is considered an "area source" of HAPS.

HAP emissions represent a fraction of the volatile organic compounds emitted by the CPBR facility. The company has in place, and will include in its new tanks and operations, emission controls to abate the HAP/volatile organic compound emissions. The emission controls include product storage tanks with internal floating roofs constructed to NSPS Subpart Kb standards and a vapor collection system ducted to a vapor recovery control device. The vapor recovery device is part of an interlocked system, meaning that loading activity will automatically shutdown in the event of a control device failure. The facility expansion includes new storage tanks that will be constructed to the NSPS standards and a vapor combustion device to replace the existing vapor recovery unit. The vapor combustion device will achieve a higher level of emission control efficiency than the current control.

The proposed permit contains the appropriate and necessary conditions to verify compliance with applicable NSPS Subparts, and DEQ has sufficiently addressed the applicability of both NSPS Subparts Kb and OOOO. No changes to the permit are necessary as a result of this comment.

Comment: Paulette Lichatowich - Please evaluate the applicant's use of an older manual for standard crude oil composition in Appendix A (application document), while their lab report in Appendix E (Additional Information document) reports results from samples taken in May 2013 which describe a different set of oil composition and measures.

Since this application was submitted in August 2013, research has shown that Bakken crude is more volatile and has different amounts of chemical components than generic crude oil. In fact, new rules are in place for testing each batch of crude that is shipped by rail. And, in February, 2014, The Wall Street Journal reported:

"The Transportation Department said the order is aimed at Bakken crude but will cover shipments from anywhere. While oil is classified as a hazardous material, it isn't generally linked to explosions. But Bakken crude is more volatile than other oils and is more likely to emit flammable gases....

The order will require companies to test each batch of crude for an array of characteristics, from the temperature at which it boils to the percentage of flammable gases trapped in the oil and the vapor pressure, which is created when crude emits gases that can build up inside railcars. Previously, federal rules didn't require that crude be tested as extensively; indeed it only required that crude be properly classified and didn't spell out in any detail how often to test the crude."

DEQ response: DEQ took the volatility characteristics of Bakken crude oil into consideration in preparing the proposed permit action. As described in the review report, DEQ presumed all crude oil handled by CPBR to have a Reid Vapor Pressure of 12.75 psi. This vapor pressure is conservatively representative of Bakken crude and its volatility (i.e., DEQ's analysis assumed all of the crude would have that higher vapor pressure) The proposed permit contains a provision that limits the allowable True Vapor Pressure of product received at the facility to < 11.12 psi (proposed permit condition 2.4). The proposed permit also requires the facility to document the True Vapor Pressure for all products received and stored in the facility's storage tanks (proposed permit condition 6.1.b and 6.3.k, respectively). The additional testing of Bakken crude oil the commenter referred to will take place prior to the crude being received by CPBR. It will provide the facility operator with batch specific information at time of receipt and improve the ability to characterize shipments and document emissions.

Comment: Paulette Lichatowich - "Storage tanks emissions are some of the most complicated air emissions calculations to determine. They are highly dependent on atmospheric conditions, the liquid stored in the tank, and the individual properties of the physical tank. Set a standard for CPBR to collect data and report its emissions to Oregon DEQ. The applicant uses the atmospheric pressure at Astoria for calculating its emission rate. DEQ must research the atmospheric pressure for Port Westward and then calculate the contaminant discharge at the facility. I propose that CPBR be required to hire a qualified engineer who will establish the atmospheric pressure, monitor and then report directly to the state on a monthly basis the emissions from pumping operations.

DEQ response: The commenter correctly identifies that many variables effect storage tank emissions. The permit application used TANKS 4.0.9d to estimate emissions from the facility's tanks. This software represents standard methodology for estimating storage tank emissions and is available for free on the EPA website. DEQ used the same software to review and verify the accuracy of the emission estimates. The proposed permit requires CPBR to use this program or the calculation methodology stated in EPA's AP-42 (emission estimation document) to calculate ongoing emissions from the storage tanks. The atmospheric conditions in Astoria are slightly different from the site specific atmospheric conditions at the facility. Based on historical climate data, the average monthly high temperatures of the two areas are within 7 degrees and the average annual temperatures are within 0.5 degrees of each other. The temperature variability of the two areas is small enough that the difference in estimated emissions will be negligible; it is therefore appropriate to use the Astoria meteorological data in calculations for estimating the facility's storage tank emissions. The larger factors in accounting for facility emissions will be throughput and volatility of the product stored. No revision of the permit application or proposed permit is necessary.

Comment: Paulette Lichatowich - DEQ staff have a difficult task in evaluating this permit because the agency is a member of Oregon's Regional Solutions Team. DEQ's web page describes its job as this: "The Regional Solutions Team at DEQ brings together people and resources to solve local problems. They collaborate. They remove roadblocks. They leverage resources to make the money go farther. They work directly with business and industry to create new jobs and retain old ones."

I don't believe DEQ's responsibility is to create or retain jobs, but is to enforce Oregon's environmental law. Additionally, it is important that you use the latest science in your management policies. As stated your role on the Regional Solutions Team and your duty to protect the environment set up a condition for a conflict of interest. Where do DEQ's priorities lie? Is DEQ following the state laws as required?

DEQ response: DEQ's purpose is to protect, maintain and enhance the environment. The goal of our Regional Solutions Team is to help business community members navigate our programs and requirements in an efficient manner, not to help them circumvent laws and regulations. Providing this technical assistance to the regulated community helps new and modified facilities, constructed under this collaboration, start operation in compliance with Oregon's environmental laws.

A primary responsibility of DEQ's Air Quality program is to make sure facilities are in compliance with our laws and regulations. To accomplish this DEQ consistently issues permits that contain the appropriate regulations, assesses ongoing compliance through inspections and reviews, and takes enforcement actions when sources violate. To knowingly relax or circumvent our requirements would itself be a violation of state law, and public trust. The assistance provided by DEQ's Regional Solutions Team members often results in a positive outcome for business, Oregon's citizens and DEQ through better understanding of our regulations, greater compliance and coordinated government services.

Comment: Mary Duvall – The [CPBR] facility is 2.5 miles outside the Portland-Vancouver [Air Quality Maintenance Area] and should be held to the same requirements as facilities located within the Maintenance Area.

DEQ response: As the commenter states, the CPBR facility is located outside the Portland-Vancouver Ozone Maintenance Area. As described in the review report, the facility's proximity to the maintenance area made it subject to the provisions of OAR 340-225-0090. As required by those rules, CPBR's permit application included an Ozone Precursor Distance evaluation (OAR 340-225-0020(10)) based on the facility's requested VOC emissions rate and its distance from the Portland – Vancouver Ozone Maintenance Area. VOC emissions are a precursor of ozone. The Ozone Precursor Distance evaluation determines if a subject facility must obtain emission offsets for its ozone precursors to prevent it from having an associated impact on the Maintenance Area. The CPBR facility is approximately 61.2 km (38.0 miles) from the boundary of the Portland – Vancouver Ozone Maintenance Area, not 2.5 miles as asserted by the commenter. DEQ reviewed CPBR's evaluation and concluded it sufficiently demonstrated the facility to be located outside the Ozone Precursor Distance, so emission offsets were not required. No revision of the permit application or proposed permit is necessary.

Shared Comment: Northwest Environmental Defense Center, Columbia Riverkeeper, Neighbors for Clean Air, the Center for Biological Diversity, and the Sierra Club (the "Clean Air Groups") - Pursuant to its own regulations, DEQ must deny the proposed permit application as incomplete. Global's [CPBR's permit] fails to provide sufficient information to calculate the emission rate of air contaminants. Global [CPBR] admits in its application materials that it currently loads water-borne vessels with crude oil. Yet the proposed permit fails to quantify the emissions from existing operations. The materials only identify projected emissions. Without a calculation of the current emission rates, it is impossible for DEQ or the public to quantify the proposed increase in emissions at the facility.

DEQ response: As described in the review report, DEQ evaluated the emission rate calculations for the proposed transloading facility and concluded they were appropriately accounted for in CPBR's permit application. The plant site emission limits contained in the proposed permit represent the maximum permitted emissions of the transloading facility and will limit emissions from all crude oil transloading operations as well as emissions from all ethanol transloading operations for ethanol product that was not manufactured on site. The PSELs of the permit were established in accordance with OAR 340-222. CPBR will have two active

permits for this site—the new transloading permit, being issued at this time, and ACDP 05-0006-ST-01 for the ethanol manufacturing facility's related activities and emissions. The emissions from crude oil and ethanol transloading operations referenced in the two permits are not cumulative. Given that CPBR has established a new transloading source of air contaminant emissions, which is being permitted by this action, all emissions from such transloading activities will be regulated under the new transloading permit, rendering provisions for transloading under ACDP 05-0006-ST-01 moot.

Shared Comment: the "Clean Air Groups" - Global's [CPBR's permit] application fails to identify the type of volatile organic liquid it intends to receive and ship at the facility. Instead, Global [CPBR] notes that "crude oil will be received at the facility from various sources which may contain variable fractions of light-end hydrocarbons and sulfur compounds." The type of volatile organic liquid received and shipped predetermines the outcomes of Global's [CPBR's] emissions calculations. This is true as between Bakken crude oil and tar sands oils, but also as between different types of Bakken crude oil. For example, in its application to construct and operate a crude oil transloading facility at the Port of Vancouver, Tesoro Savage provided emissions calculations for six different crude oils with Reid Vapor Pressures ranging from 0.98 to 8.41, and four Bakken crudes (413, 413-light, 423, and 430). See Tesoro Savage Vancouver Energy Distribution Terminal, Part 5 Applications for Permits and Authorizations (Aug. 2013), page 5-473 and Attachment 2 (attached as Exhibit 12). The resulting emissions calculations for the crude oil storage tanks varied widely depending on the particular type of crude oil. DEQ currently requires Global to record the crude oil received into storage (recorded upon each receipt) and quantity of crude oil loaded onto barges (recorded monthly) under the existing permit. DEQ can and should require Global to report this information, and also monitor and report the classification and characterization of that volatile organic liquid.

DEQ response: CPBR's permit application adequately identifies the company's intentions to receive and transload the volatile organic liquids crude oil and ethanol. In a letter to DEQ dated May 21, 2014, Brien Flanagan, attorney for CPBR, provided the company's response to the public comments, submitted as provided for by OAR 340-209-0080(3). In the letter CPBR stated that "CPBR does not object to DEQ adding a definition to Condition 2.3 in the proposed permit indicating that 'volatile organic liquid products allowed under this permit are crude oil and ethanol."

As noted by the commenters, crude oils are not all the same and the physical characteristics displayed between different crude oils may vary tremendously. CPBR's permit application uses a worst case operating scenario that bases all emission rate calculations on the assumption that 100% of the facility's annual volatile organic liquid throughput is crude oil with the Reid Vapor Pressure (RVP) of 12.75; an assumed RVP that is substantially greater than the maximum RVP the commenters noted from the Tesoro Savage application. The assumed 12.75 RVP therefore effectively overstated projected maximum annual emissions for the facility.

Volatile organic liquids (crude oil and ethanol) are and will be stored in above ground internal floating roof storage tanks. As described above and in the review report, each storage tank is or will be designed and equipped to meet the standards of 40 CFR 60 Subpart Kb - *Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels* so storage tank related emissions are controlled to the maximum extent required by current rule. Emission rates from the storage tanks will fluctuate due to the varying physical characteristics of the stored liquids as well as product storage temperature which will seasonally fluctuate. Emissions from the tanks will be determined using the emission rate estimation software TANKS 4.0.9d or the calculation methodology stated in EPA's AP-42 (emission estimation document). These tank emission estimation methods represent the industry's standard methodology for estimating storage tank emissions.

It is DEQ's responsibility to write the proposed permit to address all Air Quality regulatory requirements that are applicable to the CPBR facility. To properly do so, the proposed permit must include appropriate and sufficient monitoring, recordkeeping and reporting requirements to allow CPBR and DEQ to verify the company's compliance status. The commenters did not identify an aspect of the proposed permit where compliance cannot adequately be documented and therefore no revision to the monitoring or reporting

requirements of the permit is necessary. Based on statements made by CPBR in its May 21, 2014 letter, DEQ will revise Condition 2.3 of the permit with the following or similar language to limit approved volatile organic liquids: "volatile organic liquid products allowed under this permit are crude oil and ethanol."

Shared Comment: the "Clean Air Groups" – DEQ must deny Global's [CPBR's permit] application for the proposed new Air Contaminant Discharge Permit. Lacking a proper basis for Global's [CPBR's] emissions calculations or a way to identify the type of crude oil being received at the facility, DEQ and the public are unable to properly analyze the increased emissions that will result from the proposed construction and operation. DEQ's own rules [OAR 340-216-0040(11)] state that "applications that are obviously incomplete... or lacking the required exhibits... will be rejected by the Department and returned to the applicant for completion." DEQ has the authority to request additional information from Global [CPBR] - see OAR 340-216-0040(12)-(13).

DEQ response: As mentioned above, this permit action is a new permit for a currently unpermitted facility. Each plant site emission limit (PSEL) contained in the proposed permit represents the maximum allowed emission rate increase for the respective pollutant that will result from the proposed construction and operation of an ethanol and crude oil transloading facility. As described in the review report, all PSELs were established in accordance with the PSEL rules of the Oregon Air Quality program (OAR 340 Division 222). DEQ found that CPBR used common and appropriate methods to estimate the maximum annual emissions for the facility (see DEQ response to the previous comment). CPBR's requested PSEL for VOC emissions was greater than the rule defined significant emission rate for that pollutant thereby requiring an Ozone Precursor Distance analysis be performed as an air quality analysis. This analysis was required to determine if the requested emission rate increase would impact the Portland – Vancouver Ozone Maintenance Area. CPBR's permit application includes the Ozone Precursor Distance analysis and was included in DEQ's review of the application. The Ozone Precursor Distance analysis demonstrates the facility to be located outside the determined Ozone Precursor Distance, so emission offsets were not required of the company. All other PSELs of the proposed permit were set at the "Generic PSEL" for each respective pollutant. In accordance with rule, no additional air quality analysis is performed for pollutants with Generic PSELs.

DEQ evaluated CPBR's initial permit application and requested additional supplemental information on October 03, 2013. CPBR provided the requested information to DEQ on October 24, 2013. DEQ's information request included a request for CPBR to supply assay information related to the Bakken crude oil being transloaded. CPBR supplied six assays, each from a different Bakken crude oil well field or area. The assays included the measured Reid vapor pressures for each assayed sample. The Reid vapor pressures of the assayed crude oil samples ranged between 9.28 psi and 11.95 psi. The assay information was used in DEQ's review of CPBR's permit application for validation of the estimated potential maximum emissions from the facility (DEQ assumed an RVP of 12.75 to conservatively estimate maximum facility emissions), determination of regulatory applicability and establishing associated permit conditions. Following DEQ's review of CPBR's October 24, 2013 information submittal, DEQ determined CPBR had provided all the necessary information for assessing air quality regulatory applicability and concluded CPBR's permit application was complete. The completeness determination allowed DEQ to proceed with the permit action. The commenters have not identified justifiable cause for DEQ to reject CPBR's permit application.

Shared Comment: the "Clean Air Groups" - DEQ may not issue the proposed permit because the crude oil transport facility is a federal major source that requires a preconstruction permit. A proper calculation of the facility's emissions and proposed increased operational capacity will demonstrate that Global [CPBR] is a new federal major source. Global's [CPBR's] potential to emit, and status as a federal major source, depends on its operational capacity. A major stationary source is "any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant." 42 U.S.C. § 7602(j); see also OAR 340-200-0020(55) (defining "Federal Major Source" as "a source with potential to emit any individual regulated pollutant... greater than or equal to 100 tons per year" and "for

greenhouse gases, a federal major source must also have the potential to emit CO2e greater than or equal to 100,000 tons per year" including fugitive emissions and insignificant activity emissions). Global's [CPBR's] permit application lacks the information critical [for] calculating the facility's maximum operating capacity. In Global's [CPBR's] permit application, the annual, unrestricted, throughput is 219,000,000 barrels or 9.189 billion gallons per year. This is significantly higher than the proposed restricted throughput of 43,800,000 barrels or 1.8396 billion gallons per year used to calculate Global's [CPBR's] PTE. While the emissions may not scale exactly with the increased capacity, the restricted emissions of 78 tons per year of VOCs is close enough to the 100 tons per year threshold for federal major new sources that it makes little difference. Therefore it is likely that the existing Global [CPBR] crude oil transloading facility is a federal major new source of VOCs and therefore also a major source for ozone. 40 CFR § 51.166(b)(2)(ii). Plus, the restricted emissions of 68,814.11 tons per year of GHG [stated in CPBR's permit application] is close enough to the major source threshold of 75,000 tons per year (when triggering as major for another criteria pollutant; here, VOCs) that the existing source is also likely a new federal major source for GHGs. Based on this analysis, Global's [CPBR's] crude oil transloading operation is, at the very least, a new federal major source for VOCs and GHGs that must be subjected to New Source Review (NSR).

DEQ response: The CPBR facility is subject to review under Oregon's Air Quality program which includes OAR 340-224, Major New Source Review. OAR 340-200-0020(55) defines "Federal Major Source," in relevant part, as any facility with the potential to emit more than 250 tons per year of any regulated pollutant (excluding HAPs) or any petroleum storage and transfer facility with a total storage capacity exceeding 300,000 barrels with the potential to emit more than 100 tons per year of any regulated pollutant (excluding HAPs) (and 100,000 tons per year of GHG emissions). The facility covered under the proposed permit will have a storage capacity greater than 300,000 barrels. Therefore, the question is whether the facility will have the potential to emit more than 100 tons per year of any regulated pollutant (excluding HAPs).

"Potential to emit" is defined by rule to mean a stationary source's capacity or "the maximum allowable emissions taking into consideration any physical or operational limitation," if the limitation is enforceable. (OAR 340-200-0020(100)) PSELs are recognized as enforceable limitations on the potential to emit. Here, the PSELs being established in this permit in accordance with the PSEL rules in OAR 340 Division 222, are enforceable and establish that the facility will emit less than 100 tons per year of any regulated pollutant, and less than 100,000 tons per year of GHG. Therefore, the facility does not trigger NSR permitting requirements as a new federal major source.

To the extent that commenters' are also raising questions about emissions from the current, unpermitted oil transloading activities at the facility, DEQ also analyzed that issue as part of our determination of the appropriate enforcement action to pursue for that violation (which, as noted, is being contested by CPBR). DEQ issued a formal enforcement action to CPBR on March 27, 2014 for violations including establishing and operating a new air contaminant source without a permit. In assessing potential violations for the enforcement action DEQ evaluated the potential to emit for CPBR's existing transloading facility (i.e. the emissions if the current infrastructure were used for oil transloading at full capacity). DEQ evaluated CPBR's potential to emit based on it terminaling exclusively Bakken crude oil with RVP of 12.75. OAR 340-200-0020(100)(a) defines a facility's potential to emit as "the capacity of a stationary source." While CPBR is presently unpermitted, there are operationally limiting factors that affect CPBR's oil transloading operational capacity and potential to emit. The current marine terminal used by CPBR consists of a single berth, so only one vessel can be loaded at a time. Based on equipment capacity, the maximum vessel loading rate CPBR can achieve is 5,000 barrels (210,000 gallons) per hour. Unadjusted, this equals 1.84 billion gallons annually. Each loading event includes activities during which loading cannot occur. These activities include, but are not limited to, vessel docking, set-up and connection, disassembly and departure activities. Based on information provided by CPBR it was estimated 30% of operational time is associated with non-loading activities, reducing the maximum potential throughput to 1.29 billion gallons. CPBR uses existing, regulated equipment shared with a separate permitted facility (CPBR's ethanol plant ACDP 05-0006-ST-01). During product receipt all crude oil is transferred from rail tank cars into tanks TK6105 and TK6106; two 3.8 million gallon storage tanks. Crude oil is pumped to the two storage tanks via tank TK6104, a 248,300 gallon tank. The purpose of tank TK6104 is to add head

pressure when pumping liquid product to the target storage tanks. All tanks comply with NSPS Subpart Kb standards (40 CFR Part 60 Subpart Kb). DEQ estimated annual tank emissions using TANKS 4.0.9d software. DEQ estimated the potential to emit for each 3.8 million gallon storage tank to be approximately 14,756 pounds of VOC emissions annually. Tank TK6104 does not function as a storage tank, so its internal floating roof does not experience the same significant movement associated with product additions and withdrawals in relation to total product throughput. For the potential to emit calculation DEO assumed tank TK6104 experienced the same number of turnovers as each of tanks TK6105 and TK6106. Emissions for the 248,300 gallon storage tank would be approximately 3,708 pounds of VOC emissions annually. All barges that load at the CPBR facility are ocean going barges that service refineries in Washington and California. The refineries are subject to NESHAP Subpart Y (40 CFR Part 63 Subpart Y). To service the refineries each barge must comply with the "vapor tight" certification requirements of Subpart Y as well as California's regulatory requirements and Coast Guard requirements. The marine terminal used by CPBR is currently equipped with a John Zink vapor recovery unit. Coast Guard regulations require compatible vessel and vapor recovery connection systems and use of the vapor recovery system. The John Zink vapor recovery unit is interlocked with the loading operation and automatic shutdown of operations occurs if the vapor control system fails or a drop in pipeline pressure is registered. The system interlock is required by Coast Guard regulations. The John Zink vapor recovery unit was designed (and permitted under separate permit) to not exceed an emission rate of 0.0835 pounds of VOC emissions per thousand gallons loaded. For the potential to emit evaluation DEQ assumed all barges loaded to be vapor tight and all vapors produced by vessel loading controlled by the John Zink vapor recovery unit (100% capture efficiency) at 0.0835 lb VOC/1000 gallons loaded. Emissions from loading were estimated to be 107,715 pounds of VOC emissions annually. Miscellaneous equipment leaks (valves, flanges, etc.) were estimated to be negligible and assigned 1 ton per year (the application for the proposed permit identified 300 pounds of VOC emissions annually from equipment leaks). The combined emission estimates result in a potential to emit total of 71 tons per year. In summary, for the purposes of the enforcement action, DEQ concluded CPBR did not establish a new federal major source by initiating operation of an unpermitted crude oil transloading facility and the current CPBR facility was not subject to NSR.

Shared Comment: the "Clean Air Groups" - Under Oregon law, and consistent with federal policy, emissions from the locomotives and barges while engaged as part of Global's [CPBR's] facility must be included in the primary stationary source emissions calculation, Global [CPBR] failed to consider emissions from locomotive and marine vessels when engaged in active loading and unloading operations in support of its crude oil facility's primary purpose in its potential to emit calculation. In Oregon "stationary source means any building, structure, facility, or installation at a source that emits or may emit any regulated air pollutant." OAR 340-200-0020(141). When vessels dock and trains idle at a stationary source in order to further the purpose of the stationary source, the emissions from the vessels are attributed to the docking facility. A source's potential to emit does not include all emissions associated with the facility. Oregon's regulations exclude secondary emissions. OAR 340-200-0020(91)(c). They are instead included in PSD emissions calculations only once the "major source" threshold has been met by primary emissions. OAR 340-224-0100. Secondary emissions are defined as "emissions that are a result of the construction and/or operation of a source or modification, but that do not come from the source itself." OAR 340-200-0020(100). They may include, but are not limited to emissions from ships and trains coming to or from the facility. Id. If Oregon wished to characterize emissions from onsite ships and trains as secondary, it could have done so by not expressly limiting the definition of secondary emissions to emissions from ships and trains coming to or from the facility. This omission is significant in that it indicates that emissions from onsite ships and trains are not secondary but rather must be attributed to the stationary source itself. Thus in Oregon, emissions from trains and vessels at the proposed vessel loading operation are not secondary emissions and must be included in the stationary source's potential to emit calculation. DEO itself has embraced this interpretation of its regulations. On January 17, 2008, DEO determined that: emissions from LNG carriers that are directly associated with terminal activities are part of the stationary source's emissions. "Emissions from the LNG carriers that are directly associated with terminal activities include, but are not limited to: emissions attributable to providing power for the ship-board LNG transfer system, including pumps used to transfer liquid or vapor LNG to or from the carrier; fugitive emissions from ship-board LNG piping and pumping

systems; and any other emissions that can be directly attributed to terminal activities." - [See Jordan Cove Energy and Pacific Connector Gas Pipeline Project, Final Environmental Impact Statement: Volume I 4.11-9 (excerpt attached as Exhibit 3).]

DEQ response: As stated above, DEQ considers the emissions from ships and trains as secondary emissions. There are two ways that secondary emissions would be considered in this permitting action. The first would be based on the source meeting the definition of a "major source" or a "federal major source" and being subject to the Major New Source Review provisions of OAR 340-224 based on its primary emissions. The second would be if DEQ determined that the ships and trains are part of the "source" (as defined in OAR 340-216-0020 (136)).

- 1. Major New Source Review: As described in the review report, the source meets the definition of "major source" (OAR 340-200-0020(72)) because its potential primary emissions of VOC will be 78 tons per year which is above the Significant Emission Rate for that pollutant (per Table 2 OAR 340-200-0020, VOC significant emission rate equals 40 tons per year). Despite being recognized as a major source, the facility is not subject to the Major New Source Review provisions of OAR 340-224 because it is not "located in an area designated as nonattainment or maintenance for the regulated pollutant" (in this case, ozone, and VOCs as precursors)(OAR 340-224-0010(1)). And, as described above, the source does not meet the definition of "federal major source" for purposes of the PSD program.
- 2. Including trains and ships as part of the "source": OAR 340-200-0020(109) defines secondary emissions as "emissions that are a result of the construction and/or operation of a source ..., but that do not come from the source itself. [...] Secondary emissions may include, but are not limited to:
- (a) Emissions from ships and trains coming to or from a facility." As the commenters noted, secondary emissions are not considered when assessing the potential to emit (OAR 340-200-0020(100)(c)).

This definition of "secondary emissions" provides examples of emissions that are considered secondary. The examples expressly do not limit the application and interpretation of what emissions should be considered secondary. DEQ's interpretation is that emissions from ships and trains are secondary except when they directly and integrally support the source's operations.

The commenters cite a determination made by DEQ in the permitting action for the Jordan Cove Liquefied Natural Gas facility which included some emissions from ship operations as part of the source's emissions. In the Jordan Cove LNG carrier operating scenario the ships used a LNG transfer system with an associated power system for its pump operation. Power was supplied from the ship to operate pumping systems located at the source; because the shipboard power was supporting the operation of the source, the emissions from shipboard power generation were considered part of the source's emissions. The system was also recognized to have had potential fugitive emissions from shipboard LNG piping and pumping systems. In these cases the identified emitting components or activities were deemed to be integrally and directly associated with terminal activities, so their emissions were not defined to be secondary emissions. It was therefore appropriate to include the respective emissions with the source's potential to emit. All other emissions from the LNG carriers were deemed necessary for operational support of the LNG carriers themselves, as opposed to the operations of the source, and were treated as secondary emissions.

In the case of the CPBR terminal, locomotive and marine vessels do not supply direct support to the terminaling operations (i.e. by providing power to the source's pumps). In reviewing the source potential to emit DEQ considered emissions from piping and product transfer operations at the terminal and point of transfer but, in accordance with DEQ rules, appropriately defined emissions from ship and train operations to be secondary emissions, supportive only of their respective train or ship operations. This is consistent with the determinations made in the Jordan Cove LNG permitting action.

Shared Comment: "Clean Air Groups" - In its permit application, Global [CPBR] states that because it is not a major source, it is not subject to the requirements of 40 CFR 63 Subpart Y, the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for Marine Tank Vessel Loading Operations. In the permit review report DEQ parrots [CPBR's] analysis by stating Subpart Y "is not applicable to the proposed source because the standard is only applicable to major sources." [Complexities in the] language of the NESHAP would seem to severely undercut Global's [CPBR's] and DEQ's analysis of the applicability of Subpart Y. The MACT standards in Subpart Y do apply to only major sources. However, DEQ fails to properly analyze whether or not the crude oil transloading facility is located at a major source. Both Global [CPBR] and DEQ fail to analyze whether, when combined with the ethanol facility, the entire terminal constitutes a major source of HAPs. The "Clean Air Groups" are disappointed that DEQ did not take the time to explain how a source could be a major source for HAP emissions but emit less than the 10/25 threshold that is the definition of major source for NESHAP purposes. Perhaps if they did, DEQ would have recognized that their analysis—that the "proposed source" is not a major source—was lacking.

Before a permit may be issued, DEQ must provide the public with proper analysis of the applicability of Subpart Y, instead of focusing solely on the crude oil transloading facility. In addition, the potential of this facility to emit is significantly higher than the proposed permit limits because neither the limits in the proposed permit nor the limits in the ethanol facility permit act as enforceable limitations on the crude oil transloading facility. Therefore, DEQ must calculate HAP emissions at the maximum operating capacity of the crude oil transloading facility and add it to the capacity of the ethanol manufacturing facility in order to truly analyze the applicability of Subpart Y. The public has a right to review and critique this analysis since it was not done as part of this public comment period. DEQ therefore must withdraw this proposed permit for failing to fully analyze all applicable requirements.

DEO response: On March 27, 2014, DEO issued a formal enforcement action to CPBR for violations including establishing and operating a new air contaminant source without a permit. To determine the violated requirements for that enforcement action DEQ evaluated the potential to emit for CPBR's existing, unpermitted and unregulated transloading facility. DEQ's evaluation determined CPBR was not a major source of HAP emissions, either as a standalone facility or when potential HAP emissions from the proposed transloading facility and the ethanol facility were combined. A "major source" is defined as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit *considering controls*, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants." OAR 340-244-0030(15) (in relevant part, emphasis added). An "area source" is defined as "any stationary source which has the potential to emit hazardous air pollutants but is not a major source of hazardous air pollutants." OAR 340-244-0030(3). CPBR remains an area source of HAP emissions under the proposed permit—it will emit less than 10 tons per year of all individual HAPs and less than 25 tons per year of all HAPs combined. In Subpart Y, Table 1 to 40 CFR § 63.560 - General Provisions Applicability to Subpart Y, EPA's reference for 63.1(c)(2) states, "Subpart Y is not applicable to area sources." Since the CPBR facility is not a major source of HAP emissions and since it will not have annual throughput of 10 million barrels (420 million gallons) of gasoline or 200 million barrels (8.4 billion gallons) of crude oil, it does not meet the affected facility criteria of NESHAP Subpart Y, 40 CFR § 63.561.

DEQ's statement in the proposed permit's review report stating [Subpart Y], "is not applicable to the proposed source because the standard is only applicable to major sources," remains correct and withdrawing the proposed permit as proposed by the commenters is not justified. However, the applicability language of NESHAP Subpart Y is quite complex as pointed out by the commenters. DEQ has revised the review report language to include a more detailed explanation of the applicability determination. The review report section addressing this determination now reads:

40 CFR Part 63, Subpart Y – "National Emission Standards for Marine Tank Vessel Loading Operations," is not applicable to the proposed source because the facility does not meet the applicability criteria of the federal

regulation to be recognized as an affected facility. Subpart Y includes MACT standards that are applicable to major sources of hazardous air pollutants. Subpart Y also contains RACT standards that are applicable at facilities with actual annual throughput of ≥ 10 million barrels (420 million gallons) of gasoline or ≥ 200 million barrels (8.4 billion gallons) of crude oil. The proposed facility is an area source of hazardous air pollutants as a standalone facility and when HAP emissions from the transloading facility and the neighboring ethanol facility are combined. The proposed facility's annual crude oil throughput will be less than the RACT threshold of the federal regulation.

5. Greenhouse gas, climate change and fossil fuel related comments

Summarized Comments: DEQ received numerous comments requesting DEQ take actions that would result in it regulating fossil fuel extraction, shipment or end-use [post-CPBR] related activities. The primary intentions of these comments were to promote climate change abatement, pollution prevention and conservation of natural resources.

- Comment: Ryan Rittenhouse, Friends of the Columbia Gorge [Energy Facility Site Evaluation Council] in Vancouver [Washington] just yesterday released their scoping report on the Vancouver oil terminal, and they will be looking at all the cumulative impacts, even the carbon dioxide emissions when the oil ends up being burned, and the impact that this will have on global warming. That is very important and should be considered. It is disturbing for me to think that Washington regulatory agencies are going to be doing more to protect Oregonians than the Department of Environmental Quality. So we are not asking that you regulate the trains. We know that's not your job. What we're asking you to do is to acknowledge the existence of the trains and to use that when you take it into account whether you grant this permit or not.
- Comment: H J Dezotell It is utterly unconscionable to aid and abet the planetary destruction occurring during the extraction, transport and use of fossil fuels by obediently conferring permission on the profiting corporations to do as they wish. I do not understand how anyone can confine an air quality question to a single state, conveniently eliminating North Dakota or any of the communities where this stuff is being mined to the detriment of the established social order. YOU [DEQ] have a responsibility to conserve our planet and I wish you would do so. Please use Washington State's model of casting your eyes on a wide scope, because the quality of our environment is truly being degraded as I write this.

DEQ response: DEQ's authority is defined within Oregon's Air Quality programmatic rules, most of which are contained in the EPA-approved State of Oregon Clean Air Act Implementation Plan (SIP) which defines how the Clean Air Act is implemented in Oregon. Different states have different regulations and DEQ derives no authority from Washington State's programs. Our air quality permitting action is confined to the CPBR stationary source's air contaminant emissions. When DEQ writes an Air Contaminant Discharge Permit it must include all applicable requirements of Oregon's Air Quality program in the respective permit. At the time of this permit action, as it pertains to these comments, CPBR is subject only to greenhouse gas monitoring and reporting requirements under the greenhouse gas program. The permit includes a Generic PSEL for greenhouse gas emissions in accordance with OARs 340-216-0066(3)(b) and 340-222-0040. DEQ does not have authority to influence or regulate fossil fuel extraction, shipment or end-use [post-CPBR] related activities in this permit action. Any future new applicable GHG regulations adopted by the Environmental Quality Commission will be applied to this facility in the appropriate manner and as defined by rule. DEQ has written the CPBR permit to appropriately address all applicable requirements to which it is subject and has made no changes to the permit in response to this comment.

6. Comments associated with air quality monitoring in Columbia County

Comment: Mary Duvall – There currently is no air quality monitoring station in all of Columbia County or in all of Cowlitz County. Despite that fact, both counties already have heavy industrial areas. DEQ has no data on the cumulative air degradation of the airshed in the lower Columbia area. According to an e-mail from Greg Grunow of DEQ, Columbia County was arbitrarily designated as an attainment area sometime in the 1970s. I am unclear that any current testing or monitoring has verified that assumption or arbitrary designation. In the same e-mail letter Mr. Grunow states that the air quality of Columbia County has always been considered "good." But without any monitoring how is this verified?

DEQ response: No classification for any area in Oregon has ever been made arbitrarily. As mentioned above, DEQ implements the Clean Air Act in Oregon under an EPA approved State Implementation Plan (approved in 40 CFR 52, Subpart MM). Under the EPA approved SIP DEQ determines the compliance status of areas of the state with the National Ambient Air Quality Standards (determines "attainment" and "nonattainment" areas) (OARs 340-202 and 204). To make these determinations DEQ uses EPA approved methods that are identical or similar to methods used nationwide. DEQ attainment designations look at more than just industrial sources; DEQ analysts compile and review large volumes of pollution related data that include reported emissions rates, monitored emissions data (when available), emission estimates from population data, traffic data and other sources allowing the information to be modeled for an overall estimate of air quality for a defined geographic area.

DEQ operates the State and Local Air Monitoring network which must be designed and operated in accordance with the requirements of 40 CFR Part 58, Appendix D. It's required that the network be designed to meet a minimum of three basic monitoring objectives: provide air pollution data to the public in a timely manner, support compliance with the National Ambient Air Quality Standards, and support air pollution research. Each monitored site has a relatively high operational cost related to equipment, site, operation and maintenance, and data evaluation and storage expenses. Monitoring sites are chosen based on federal regulation requirements, strategic need, budget and staffing. There are many areas in Oregon including cities and counties that presently do not have a monitored site because based on available data and geographic conditions DEQ has determined a monitor is presently not necessary to determine the area's attainment status with the ambient air quality standards.

Regarding Columbia County, DEQ monitors ozone and $PM_{2.5}$ in Columbia County at a rural monitoring site on Sauvie Island. The monitored pollutants are well below their respective ambient air quality standards. In 2010, DEQ required PGE to do Prevention of Significant Deterioration monitoring in Rainier for ozone, PM_{10} , and nitrogen dioxide. The results showed that these pollutants were significantly below the ambient air quality standards. Southwest Clean Air Agency in Washington monitors for PM2.5 in Longview and demonstrates that this area is below the standard and in attainment.

7. Comments associated with the emission factor for particulate matter

Comment: CPBR – The PM/PM₁₀/PM_{2.5} emission factor for the marine vessel loading emission unit (EP01) is listed in the draft permit as 0.1 pound per 1,000 gallons VOL loaded. This is a typographical error. The emission factor, based on the calculations provided in the ACDP application, is 0.001 pound per 1,000 gallons VOL loaded.

DEQ response: As indicated in the comment, the stated emission factor in the proposed permit is a typographical error and is incorrect. The factor will be corrected and revised in the issued permit.

8. Comments associated with the violation discussion in the proposed review report

Comment: CPBR – [CPBR] strongly disagrees with information contained in... two sections of the proposed ACDP Review Report. Section 6 of the Review Report references DEQ's view that its issuance of a June 2012 modification to CPBR's ethanol plant ACDP resulted in limiting transloading of crude oil at the facility to no

more than 50 million gallons per year. Section 9 of the Review Report also contains DEQ's allegations that CPBR has been operating its facility in violation of the June 2012 permit modification and other Oregon air quality rules. CPBR vigorously contests the claims made by DEQ. In light of the current dispute between the parties, CPBR regarding the proper interpretation of the existing ACDP and Oregon's air permitting rules, CPBR asks that DEQ modify Sections 6 and 9 to clarify that CPBR has contested the agency's interpretation and that the matter is, [at the time of this permit action], before the Administrative Hearings Office for resolution.

DEQ response: DEQ recognizes that the applicant has contested DEQ's notices of violation that are referenced in the proposed Review Report, that the applicant will have the opportunity to defend itself against such allegations in a contested case hearing, and that such process could result in the violations being affirmed, modified, withdrawn, repealed, found to be unsupported, or otherwise rendered null and void. The compliance summary in Section 9 accurately identifies the enforcement action is being contested. No change to the proposed Review report language is necessary; the language of Sections 6 and 9 will remain as originally proposed.

9. Conclusion

None of the comments that were submitted during the public review process identified applicable regulatory limitations that were omitted or design elements of the facility that would prevent it from complying with the air quality regulatory requirements that are in effect and enforceable by DEQ. Therefore, DEQ intends to issue the CPBR permit with the following noted modifications:

- 1. As identified in the response to comments above, DEQ will revise Condition 2.3 of the permit with the following or similar language to limit approved volatile organic liquids: "volatile organic liquid products allowed under this permit are crude oil and ethanol."
- 2. As identified in the response to comments above, DEQ will revise the language of the permit review report to provide a more detailed explanation for the non-applicability determination for NESHAP Subpart Y.
- 3. The PM/PM₁₀/PM_{2.5} emission factor for the marine vessel loading emission unit as stated in the proposed permit was stated in error and will be corrected to read 0.001 lbs/10³ gal loaded.
- 4. DEQ noted in the permit review report and explained in response to comments above that CPBR is not an affected source under NESHAP Subpart Y and is therefore not subject to that federal regulation. Consequently, DEQ did not include applicable requirements of Subpart Y in the proposed permit for CPBR. DEQ identified in our summary of CPBR's potential to emit that CPBR inherently performs or experiences some elements of Subpart Y requirements as part of normal operations, specifically its receipt of vapor tight vessels for loading. DEQ has reevaluated this issue and determined that, while Subpart Y remains to be inapplicable to the facility, it is not unreasonable for DEQ to require CPBR to perform the elements of Subpart Y that it does or experiences under normal operation as allowed under the Operating and Maintenance Requirements of OAR 340-226-0120. The permit will be modified to include the requirements for CPBR to document and maintain records of vessel vapor tightness and/or negative pressure loading events.

DEQ would like to thank all individuals who took the time to review the proposed CPBR permit as well as those who attended the public hearing and/or submitted comments.